Final Report - - Executive Summary
Phase Two of an
Audit of the Affiliated Transactions and a
Management Audit of
Jersey Central Power & Light Company
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Executive Summary

A. Chapter I: Introduction

This report summarizes the results of the examination undertaken in connection with Phase Two of a *Management Audit and Audit of Affiliated Transactions*, phase of an audit of Jersey Central Power & Light Company conducted by The Liberty Consulting Group (Liberty) on behalf of the New Jersey Board of Public Utilities (Board or BPU). An accompanying, previously completed report addressed Phase One of the audit. The scope of that phase included treatment of a focused series of topics grouped together to comprise a "Utility Operations" component comprised of reviews transmission and distribution systems topics, customer service, external affairs, financial impacts to JCP&L of its relationship with FirstEnergy and other affiliates, and matters related to "the DOJ investigation" of FirstEnergy. This report provides subsequent treatment of functions addressed as part of a comprehensive management audit of JCP&L and an audit of the affiliated transactions among JCP&L, FirstEnergy, and its affiliates.

We completed audit field work on the topics summarized in this report largely by March 31, 2022 but continued to incorporate some subsequently provided information including responses to audit data requests received through mid-June 2022. Management's comments on a draft of this report, received in October 2022, indicated changes it made (after the drafting of this report) in how it managed and staffed the some of the functions this report addressed. These changes fell outside our audit period and data collection efforts. This report acknowledges management's statements regarding a number of them, but we have not "audited" these changes nor did we make conclusions or recommendations that rely on them. Key changes at the very highest levels of FirstEnergy executive management occurred after the drafting of this report, including the departure of the company's Chief Executive Officer. We learned of this change though public sources, and were not tasked with exploring the reasons for this change or its intended consequences. This report also identifies continued uncertainties regarding both internal and external investigations of FirstEnergy known at the time of this report's drafting, as well as potentially newer ones. We note that the full scale, scope, and ramifications of these investigations continued to remain unknown, as our Phase One report noted.

Our Phase Two report has reinforced the observations from our accompanying Phase One report that the nature of the uncertainties surrounding the known investigations, the emergence of potential new ones, and management's refusal to provide information we requested to assess and evaluate them leave open key questions this audit sought to answer. We release this report in a situation we find unique in our 35 years of experience, which includes the conduct of over 400 utility management and operations examinations of many types. Regular audits of this type comprise a key mechanism for New Jersey stakeholders to evaluate the service provided to New Jersey customers and the costs those customers pay through utility rates.

As we observed in our Phase One Final Report, we appreciate the opportunity to be of service for the BPU, we thank the BPU Staff for its strong support and understanding, and we appreciate the efforts of the JCP&L-assigned personnel for their attempts to assist in overcoming the problems that FirstEnergy has caused for the completion of our work.

B. Chapter II: Organization and Executive Management

This chapter describes our examination of the overall structure and senior leadership under which JCP&L operates. The FirstEnergy structure makes JCP&L very heavily reliant on direction, services, and oversight from central sources, particularly those operating through FirstEnergy Service Company (FirstEnergy SC). A sound overall approach to centralization serves JCP&L needs. We address particular functions performed (*e.g.*, operations support, information technology) or activities conducted (*e.g.*, planning, budgeting, compensation and benefits) in other chapters. Those chapters do identify some opportunities for improvements in some cases. The broader examination here focused on top-level organization and executive management.

The executive structure and its leadership must meet overall corporate needs while responding to the specific circumstances of each subsidiary. That structure and leadership has had to do so recently under particularly challenging circumstances. An unsettling bankruptcy, elimination of a major business segment, recovery from severe financial stresses at the parent level, and actions that led to the Deferred Prosecution Agreement with federal criminal authorities exemplify them.

Departure of its commercial power and energy businesses in early 2020 substantially narrowed FirstEnergy's operations scope. Management continues a now multi-year process of restructuring common service organizations now serving a narrower customer base - - 10 electricity delivery utilities and a transmission business. Operation of this unusually large number makes its challenges still significant. Other large electric holding companies typically operate half or fewer numbers of electricity delivery operations.

We found the transition through the bankruptcy suitably executed and controlled overall. Agreements continued the obligation of the bankrupt entities to share in service costs as before under clear procedures for service continuation and discontinuance. FirstEnergy made large economic concessions to bankruptcy creditors (*e.g.*, a $112.5 million credit on service costs and payments of $978 million upon emergence from bankruptcy), but retained their costs without allocation to JCP&L. We did find a concern about allocating depreciation costs, expressed in the *Affiliate Relationships and Cost Allocation* chapter of this Phase Two report.

FirstEnergy has placed well-experienced individuals in leadership positions vacated due to circumstances addressed by the federal criminal investigation and ensuing internal examinations. Changes included realigning certain executive roles. Our review found sound means for ensuring effective communication and coordination among executive leadership. Changes in ethics and responsibility emphasis, organization, leadership, and programs and practices have proven particularly significant, with some still in progress. Their advancement is notable, but it remains important to emphasize implementation completion and dedication to sustaining them. The still open nature of the Deferred Prosecution Agreement and pendency of examinations by other authorities underscore that importance. FirstEnergy should provide the BPU with periodic reports about internal developments and other examinations until the BPU decides to suspend them.

Given the changes, executive leadership stability takes on substantial importance in completing implementation proceeding through early execution, highlighted by Deferred Prosecution Agreement commitments and initiatives like FE Forward, encompassing major process and resource changes. A recent settlement agreement to resolve certain federal and state civil proceedings presents a source of risk to leadership stability. It requires completion of a scope-undefined review of the executive management team by September 2022, under a special board committee all of whose members have served less than two years as directors. We do not judge its value in putting an end to major litigation, but we do question its contribution from a management and operations perspective. From that view, it does not appear designed to value institutional knowledge of executive positions and those who currently serve in them commensurate with its potential for disruption to the structure of the executive team or those who fill its positions.

Our Phase One report found overall an effective division of responsibilities between FirstEnergy SC's central services and the JCP&L groups who conduct the planning, engineering, design, asset management, operations and maintenance, and operations support needed for the New Jersey delivery system. That division enabled efficiency, innovation, consistency of standards and methods, and development of a common set of tools and systems for use among all ten operating companies, while leaving to local management the authority, responsibility and dedicated resources to conduct activities performed for the local network, systems, and customers. Management has, however, continued plans to increase centralization of matters formerly left day-to-day to JCP&L's executive team.

FirstEnergy has eliminated the position of JCP&L Vice President, Operations and moved some engineering, asset management, operations and maintenance, and operations support functions formerly under that executive under common services groups. The resulting fractionalization of roles, responsibilities, and resources under JCP&L leadership direction presents a risk of degradation of service effectiveness and efficiency significantly greater than whatever benefits might accrue from changes recently made.

Keeping local control of some operating responsibilities while removing others diffuses JCP&L direction of all resources needed to manage performance. Moreover, removing those performing local HR support activities from day-to-day JCP&L direction deprives local management of the more direct links it had in engaging HR resources needed to deal with the human factors that have a bearing on the performance of those personnel that remain directed at the local level.

Our examination disclosed an unusually poor state of relations between management and bargaining unit representatives. The need for restoration of a sounder relationship further underscores the risk in further dividing responsibilities for resolution of JCP&L-specific HR and labor relations matters. Apart from relationship restoration, critical in its own right, matters raised by bargaining unit representatives exemplify directly the value in keeping local leadership sufficiently empowered (and accountable) to address local issues. These issues include a number that address local leadership engagement and responsiveness to bargaining unit concerns (*e.g.*, resolving individual employee benefits issues and slowness in responding to concerns about a customer service practice's conformity with JCP&L's retail tariff). Our scope did not include investigation and resolution of each specific issue raised, but they have resonance in at least this respect, if not more - - the relationship needs prompt repair.

We do, however, consider the matter involving compliance with a JCP&L retail tariff provision of concern. Management implemented a temporary policy not to perform such adjustment to an over-estimated final bill on the basis of the actual service provided as established by the next actual meter read. The language of JCP&L's retail tariff does not explicitly exempt the requirement to reconcile final bills, nor does it do so in cases where estimated bills extend into the period of service to new customers. If not exempted, open questions remain about the duration of the practice and the amounts by which the adjustments called for by the tariff provision would cause refunds or retroactive charges to customers, who include final-billed ones no longer taking service from JCP&L at other locations. The Covid-19 pandemic did result in less frequent customer premise visits (*e.g.*, to perform manual meter reads), but the issue here does not involve any more reads, but rather in the use for billing of usage data from actual reads whenever eventually made at the premises involved.

Moreover, some of the issues raised do correspond to a number of areas that our work had previously already identified as issues warranting attention (*e.g.*, staffing levels and overtime and its effects on productivity).

Local management should retain the scope of authority and responsibility it had before the recent changes, have clear accountability tied to consequences, and most importantly the resources to address holistically New Jersey operational and related human resources needs. The same principles of authority and responsibility apply for the regional external affairs resources that interact with regional and local New Jersey officials, agencies, institutions, thought leaders, and other stakeholders. Moving their direction to a central organization clearly weakens the ability of local leadership to take their input, understand their concerns and address them. Finally in regard to local management direction, JCP&L leadership should also have under its direction a small team for budgeting, cost reporting, and cost analysis - - all material to assisting in identifying gaps from current expectations and their drivers, and for identifying reasonable expectations for setting future budgets employing realistic, closely analyzed cost performance levels.

Our *Organization and Executive Management* recommendations include:

1. **Provide to the BPU a full report explaining the purpose, scope, and methods employed in the C-suite review, a full description of and justification for any personnel or position changes made as a result, and a clear and comprehensive description of how they change the nature or level of service, support, or other assistance in the provision of service by the operating companies generally and by JCP&L specifically.**
2. **Provide for JCP&L an organization structure and executive responsibilities necessary for promoting local responsibility and accountability for New Jersey distribution planning, engineering, asset management, operations, and operations support and for regional external affairs.**
3. **Upon the settling of responsibility, process, methods, and other changes associated with initiatives like FE Forward, assess opportunities for position restructuring and consolidation.**
4. **Provide twice-yearly reports regarding ethics and compliance progress for so long as the BPU requires them.**

C. Chapter III: Governance

In 25 years, FirstEnergy has grown through consolidation with two other holding companies, expanding from three Ohio electric utilities to a 10-company family extending across five states. The Ohio and Pennsylvania companies each account for about a third of total customers served. JCP&L, operating as FirstEnergy's lone New Jersey electric distribution company, remains the largest single one. It comprises about 20 percent of the total and has about double the average size of the remaining operating companies. Only one other operating company has more than three quarters of a million customers; JCP&L has 1.15 million. FirstEnergy operates an uncommonly large number of electric delivery companies - - nearly twice or more the number of other large electric utility holding companies. Responsibility for so many individual operations greatly complicates the challenges governance faces in providing the same degree, extent, and depth of focus on New Jersey operations, circumstances, needs, and issues that JCP&L would get in a less expansive holding company or on a stand-alone basis.

We examined parent (FirstEnergy Corp.) and JCP&L roles, board and committee structure, membership nature and continuity, policies and other documents that guide governance, how engagement between boards and leadership focuses attention on JCP&L needs, board access to and focus on utility performance drivers, engagement in ensuring financial and operational separation and insulation, goals and key performance indicators regularly visible to and addressed by the board, and other objective performance measures. We also examined board engagement in response to disruptions from the major financial, operational, and personnel performance issues that FirstEnergy has faced. We also considered director backgrounds and experience as a group in light of industry norms and particular FirstEnergy needs as they concern the effective and efficient delivery of service to New Jersey customers.

At the parent level, we found a board consisting of predominantly (10 of the current 12) independent members, recently reduced to a more normal size, and comprised of members with sufficiently strong individual backgrounds and experience. Parent board membership grew to 16 in 2021, in response to negotiations with Ichan Enterprises, and to establish and support a committee structure designed to address major, related civil litigation before several federal and state courts. The board returned to a more typical size of 12 at the May 2022 annual shareholder meeting, but with an extraordinarily short tenure overall and among a large majority of its members. Six of the most tenured directors did not stand for re-election in 2022 under an agreement to settle shareholder litigation. The changes may reflect necessary response to highly threatening litigation, but they have reinforced a need for the parent board, over the long term, to seek to return to membership reflecting a diversity of business, professional, and institutional balance typical of large utility holding companies.

The parent board committees responsible for audit, nominating, and compensation oversight consist entirely of independent members. We found overall governance policies and committee charters clear, comprehensive, and typical in the powers granted and responsibilities assigned to committees. Significant changes in documentation, particularly with respect to the now termed Corporate Governance, Corporate Responsibility and Political Oversight Committee respond strongly to circumstances exposed by and in the aftermath of the federal criminal investigation and to which FirstEnergy has committed as part of the resulting Deferred Prosecution Agreement and to resolve certain major, related federal and state civil litigation.

The parent board's Operations and Safety Oversight Committee operates under a charter giving it sound focus on ensuring operating effectiveness and efficiency. Nevertheless, that committee should regularly secure a much broader range of operating performance metrics and analysis at the individual level (*i.e.,* measurements and analysis of JCP&L specific data and performance). Presentations for JCP&L should occur at committee meetings at least quarterly, not on the current cycle that approaches once every two years. The full board should also receive information that addresses individual performance measures, accompanied by Operations and Safety Oversight Committee reports at each meeting. The JCP&L president should make presentations at each committee meeting.

Moreover, the parent board's Operations and Safety Oversight Committee and full board should engage in regular, structured engagement with the independent members of the JCP&L board, with whom no interaction currently takes place.

The JCP&L board's two independent members meet the independence and New Jersey connection requirements of N.J.A.C. 14:4-4.6. We found them qualified, capable, and engaged. The number of independent JCP&L board members should expand by two, one of them having substantial and senior electric utility executive leadership experience. Management directors can remain the majority by adding FirstEnergy executives from disciplines (*e.g.*, distribution and customer service) not all in the direct hierarchical line that now characterizes management JCP&L board members. The JCP&L board should engage directly and substantively in the planning and budgeting activities under JCP&L executive direction and they should regularly receive and address a significantly expanded range of key drivers (including metrics that objectively assess performance regarding them) of operational success in New Jersey. The independent members of the JCP&L board should regularly meet in the absence of the management members, with their option to include the JCP&L president. At least twice per year, the independent JCP&L board members should conduct a session with the independent members of the FirstEnergy Corp. Operations and Safety Oversight Committee.

Our *Governance* recommendations include:

1. **Restructure the JCP&L board and expand the scope and depth of its engagement in operations and customer service performance oversight.**
2. **Expand the operations and customer service metrics and trends regularly reported to and addressed by the JCP&L board of directors and by the FirstEnergy Corp. Safety and Operations Oversight Committee.**
3. **Embark upon a longer range plan to diversify the professional, business, and institutional backgrounds of the FirstEnergy Corp. board directors.**

D. Chapter IV: Finance and Cash Management

The review reported here followed the examination reported in Chapter Eleven: *Financial Risks and Consequences of Parent and Affiliate Operations* of our accompanying Phase One report. Utility holding company financial management forms a central element in providing the financial structure, policies, liquidity systems, resource allocation and funding required for utility subsidiaries to meet service requirements effectively and efficiently. Separation of the utility from the finances and risks of holding companies and unregulated affiliates requires effective ring-fencing protections for the utility. This dynamic has proven particularly important at FirstEnergy and JCP&L, where years of financial losses in its now-departed commercial power and energy business operations and the holding company's group approach to financial management have caused credit rating and financial damage for the FirstEnergy operating companies, including JCP&L. These issues became acute in late 2020, with FirstEnergy's severe credit rating downgrades spreading to JCP&L and other operating companies.

Foundational JCP&L's financial drivers, such as dividend policy, equity maintenance, credit ratings, cash management operations, joint revolving credit facilities, money pools and the cost of long-term debt issuances, have all experienced negative impacts from issues not of the local utility's making but from approaches, circumstances, and actions involving the parent and its non-utility business operations.

We found dividend policies and equity capital management since 2011, managed centrally by FirstEnergy, to be particularly outlying - - JCP&L operated with insufficient equity capital. That circumstance came in significant part from removal of $760 million of equity from 2011 to 2013, during an equity-constrained time for FirstEnergy. Shortly thereafter, the holding company found need to inject $2 billion of equity capital into its struggling commercial power and energy business operations now gone. JCP&L continued to operate with insufficient levels of regulatory equity capital into 2018, across a period extending at least seven years.

JCP&L has also suffered diminishment of its credit ratings with resultant impacts on the utility company's financing costs that remain today. JCP&L issued long-term debt in 2013, 2015, 2019 and 2021, with each issuance coming under credit ratings lowered by credit linkage with FirstEnergy. JCP&L incurred from that linkage higher interest costs on over 75 percent of its long-term debt that remains outstanding today.

The rating agencies have long identified FirstEnergy's central operation of all of the liquidity facilities for its operating companies, the holding company and its non-utility businesses as a source for transferring material levels of risk to JCP&L and other operating utilities. Money pools and joint revolving credit facilities create financial operations and interties that can cause cross-subsidization by utility subsidiaries with stronger credit ratings. Central management and operation of liquidity facilities have proven detrimental to consistent JCP&L access to capital, which suffered unacceptable risks and threats in late 2020 and 2021.

Our *Finance and Cash Management* recommendations include:

1. **Adopt for JCP&L ring fencing that includes new, strong "Equity Maintenance" provisions requiring ratemaking capital structure equity level not to fall below that informing the basis for New Jersey rates. 4)**
2. **Provide for JCP&L ring fencing that will produce for its credit ratings on a stand-alone basis, in order to eliminate debt interest cost premiums like those of the past decade.**

3. **Provide improved ring fencing for JCP&L to enhance protection of its money pool positions and access to its new revolving credit facility, and stand prepared to consider a commercial paper program under improved credit ratings.**

E. Chapter V: Planning and Budgeting

We examined FirstEnergy planning responsibilities, processes, results, and their implications for JCP&L. Our review encompassed:

- Strategic planning that sets missions, core values, and objectives
- Long-term plans that set financial goals, capital allocations, and financial targets
- Processes for establishing them and the resulting budgets that support monthly, quarterly and annual plans, financial results and analysis addressing JCP&L
- Capital planning and management that provides important input into long-term plans and budgets, crucial in the capital-intensive utilities industry.

FirstEnergy planning functions and responsibilities have evolved since its 2016 start of efforts to exit wholesale generation and electric commodity businesses. FirstEnergy structurally separated these businesses from its utility businesses, diminished capital provided to them, and began exploration of divestiture options. The March 2018 entry of the subsidiaries into bankruptcy changed the course of their direction. The fundamental separation process continued with common services still provided to them through bankruptcy and for several months past their early 2020 exit from bankruptcy under a new ownership structure formed by the creditors.

FirstEnergy strategic planning follows a generally qualitative path, driving towards expressions of mission, core values, and high-level goals for each of those values. Goals set for those core values guide the process for producing financial forecasts. These forecasts set horizons of five years at the FirstEnergy level and three years for the more tactically oriented plans prepared at the overall FE Utilities level, setting financial targets, establishing capital plans, and producing capital and O&M budgets for the operating company and transmission businesses. These traditionally termed FE Utilities plans also address each operating company's targets individually. However, following 2019, separate plans have not existed for JCP&L. The same financial forecasts and data driving them have underlain plans at the FirstEnergy level, at the consolidated operating company and transmission business level, and at the individual operating company level.

FirstEnergy produced a strategic plan for 2019, but for no other year from 2016 through 2020. A plan for 2021 exists - - delayed in its completion. The gaps that have existed in planning and in key related activities (such as enterprise risk management) call for a focused, immediate term effort to review planning purposes, especially linkages among strategy expression, risk management, long-term plans, capital planning, budget formation and management, and capital allocation. We consider consolidation of resources responsible for these activities a likely outcome of that process as well, considering needs for those linkages and for streamlining of the many reports that FirstEnergy produces from a variety of organizations. The changes in executive organization and changes in board membership (particularly those made in May 2022 pursuant to litigation settlement and producing changes in tenure, variety of experience, and business perspective) underscore the need for a holistic review of what planning needs to do, how to link key contributors to and outputs from planning, what new executive and changed board leadership need and expect, and who should be engaged and how. Existential circumstances and threats have disrupted leadership composition and focus. It would be rash to expect self-healing of planning functions as those circumstances pass.

The FirstEnergy five-year, long-term plans express the results of the highest level of FirstEnergy financial planning, following multi-month development at the management and executive level, and approval from the FirstEnergy Executive Council, comprised of the top FirstEnergy officers. These officers include the CEO, the Senior Vice President, CFO & Strategy (CFO), Senior Vice President, Chief Human Resources Officer & Corporate Services, FEU President (now Senior Vice President, Operations), Chief Information Officer (CIO), Senior Vice President for Strategy, Controller and Chief Accounting Officer, Vice President for Investor Relations & Communications, and Vice President for Rates & Regulatory Affairs.

The FirstEnergy Corp. board approves these plans, which contain high-level parent financial goals; *e.g.,* compound earnings-per-share growth rate, strategic investment plans, financial results goals, and key financial metrics. The plans also set forth an overall FirstEnergy capital allocation plan, which provides context and parameters for JCP&L funding of core distribution and transmission investments. The Long-Term Plans make clear a preference for investments in transmission assets and in distribution assets whose costs secure recovery through rider mechanisms. The bias introduced through the top-level goal of increasing FirstEnergy's share of investment recovered under methods considered more favorable is not consistent with ensuring an optimally balanced way for addressing JCP&L base distribution needs.

We found substantial indication of another negative influence on capital planning. FirstEnergy, as utility holding companies commonly do, begins formation of development of capital plans under guidance that sets spending targets. Our review of capital plan formation over the past five years found reason to conclude that overly strict adherence to those guidelines may well have been restrained robust development of plans at the JCP&L level to meet all identified needs. FirstEnergy appropriately engages operating company technical personnel in developing bottom-up capital plans for each operating company. Those guidelines should not unduly limit that foundational work through application of the starting spending targets. The need for FirstEnergy to coordinate the capital needs of all its operations and to produce an overall plan consistent with capital limitations and goals is understandable. However, those efforts should be informed by JCP&L input that does not rule out work considered useful because it will not survive eventual cuts imposed due to enterprise-level factors.

FirstEnergy undertakes budgeting and analysis, like development of the Long-Term Plan, on a centralized basis, but under different groups. FirstEnergy has spread strategic planning, long-term planning and budgeting processes across multiple organizations operating at the corporate level, at FE Utilities and the operating companies. This split of responsibility impairs planning effectiveness. We recommend full integration of these processes under a single organization.

We found JCP&L performance against budgets problematic over the past five years, producing actual costs having extremely large variances from budgeted capital and O&M expense budgets. Storm damage has proven the primary cause for variances in both categories, with FirstEnergy's inability to effectively budget for and manage storm expenditures another significant contributor.

Perhaps most significantly, our work disclosed the existence of in-process efforts that have the potential for producing large savings in JCP&L costs, as estimated by FirstEnergy itself. An FE Forward initiative initiated in late 2020 includes several initiatives aimed at improving the FirstEnergy planning functions. One set of changes now in the implementation stage seeks to improve effectiveness of long-term planning through re-alignments, reducing the number of employees and organizations involved, and greatly reducing the number of planning reports produced. A separate group of changes resulting from FE Forward seeks significant alteration of the capital portfolio development processes. Combined examinations of efficiency and effectiveness have produced expectations that changes can reduce capital expenditures, including those at JCP&L, by 10 to 15 percent.

Our *Planning and Budgeting* recommendations include:

1. **Continue to develop FirstEnergy strategic and long-range planning development participants and processes.**
2. **Mitigate pressures that starting capital spending targets and a preference for "formula rate" recovery have applied on optimization of JCP&L capital spending.**
3. **Develop realistic budgets for capital costs and O&M expenditures related to storm costs.**
4. **Complete The FE Forward Phase 3 work required to support achievement of the capital cost savings, reporting status, actions remaining, and results achieved every six months.**
5. **Reinstitute JCP&L strategic plans and give its board and leadership meaningful roles developing and overseeing performance in executing them.**

F. Chapter VI: Staffing

First Energy (FE) continues, as it has for a long time, to provide a broad range of corporate and support services to its operating companies, including JCP&L. It does the same for the extensive services (described more fully in Chapter Two, *Operations Organization*), largely under overall direction from FirstEnergy's Vice President, Utility Operations, who reports to the Senior Vice President, who reports to the FirstEnergy CEO.

This chapter describes overall staffing changes, generally over the past five years, their initiating factors, and their results. It addresses how JCP&L needs get addressed in determining, providing, maintaining, and supporting staffing of bargaining unit and other personnel. It addresses a number of activities and factors related to staffing; *e.g.*, productivity and utilization, overtime, succession planning, training and development, and diversity and inclusion.

Total FirstEnergy staffing has fallen from about 15,600 as 2018 began to some 12,400 at 2021 year end. The 2018 bankruptcy of a series of FirstEnergy entities (referred to by FirstEnergy in 10-K reports and in this chapter as FES Debtors) produced the largest change. Those entities engaged principally in commercial power and energy businesses, supported by a large fleet of fossil and nuclear generating stations and about 3,200 employees. Those entities emerged from bankruptcy in early 2020 under a series of entities owned by Energy Harbor Corp. which creditors in the bankruptcy formed. Employee numbers at FESC have fallen moderately over the same period, by about 150 from the roughly 12,550 in place as 2018 was set to begin. Staffing provided by third-party firms to fill staff and operating positions also fell, by about 800 from the approximately 1,800 so provided in 2018.

We did not find direct and significant links between forecasts of work levels and staffing needs. For example, JCP&L staffing forecasts remain flat. However, staffing structure, numbers, and effectiveness have remained strong focuses for FirstEnergy since initiation of an "FE Tomorrow" initiative, which began in 2018. FirstEnergy Tomorrow sought to restructure and resize corporate support functions in anticipation of emergence from bankruptcy of the FES Debtors under new, third-party ownership. Benchmarking by an outside firm supported this initiative.

A Shared Service Support Agreement governed the continuing provision of services to the operations in bankruptcy through June 2020. A voluntary early retirement program provided the primary source of departures associated with the streamlining of corporate services. Efforts to restructure common services appear successful in producing the overall reductions in resources targeted by FE Tomorrow, when considering the drops in the staffing-firm-provided persons and reassignment of operating company personnel to common service organizations as part of related consolidations.

Staffing at JCP&L has fallen by three percent since 2017 (four percent in bargaining unit positions, counting both JCP&L and New Jersey-located FESC employees), while it has grown (ignoring personnel operating the remaining generating stations) by five percent at the other operating companies. Management cited plans for new positions, and comments to a draft of this report indicates that new hires have occurred. JCP&L also makes the highest percentage use of contractors among the operating companies. Its levels of overtime have also consistently been comparatively very high. At the same time, it has operated with staffing levels below its authorized complement since 2018, and at a vacancy rate that has grown from 3.9 percent to 5.5 percent since that year.

FirstEnergy has continued to address its organizations, resources, practices, and performance through an FE Forward initiative begun in late 2020. The planning portion of that process ended as its execution stage began in mid-2021. At completion of the institution of literally hundreds of changes by the end of 2023, FirstEnergy expects major changes in capital planning and costs (addressed in the *Planning and Budgeting* chapter of this Phase Two report). It also expects more than $100 million in distribution and transmission (predominately in distribution work performed by operating companies, including JCP&L). In fact, the last segregated estimates provided to us identified an opportunity to reduce O&M costs for labor at JCP&L alone at between and $26 and $35 million - - or about one third of the low- and high-end total opportunity measures across all FE operating companies. By comparison, JCP&L represents about 20 percent of the total operating company size by a number of measures. The historical duration of outlying performance indicators at JCP&L and the long time remaining until expected 2023 completion of planned FE Forward initiatives affecting labor O&M costs already suggests a long-delayed opportunity to have reduced JCP&L costs materially.

The eventual introduction of planned revisions to performance metrics abandoned in 2021 will better answer this opportunity question. A more compelling one, however, involves the degree to which measures designed for a group of operating companies will resolve performance-affecting issues (*e.g.*, staffing, overtime levels, and productivity) showing JCP&L as an outlier among them. Management should place a high priority on determining the answer, through assembly and analysis of the performance data it can produce, which is presumably considerable even if improvable, now. Doing so will enable it to determine any JCP&L-specific actions needed to complement those of FE Forward, which we anticipate will in themselves be material, based on the considerable work that has gone into developing them. The gaps between performance at JCP&L and the other operating companies have been too large and persistent to assume that the new standard measures to be introduced will fully fit JCP&L circumstances.

We also have a concern about growth in resources dedicated at the central FirstEnergy level to planning, design, construction, and other transmission activities. Those resources have grown by about 100 employees in recent years, likely entailing costs at or above $10million annually across FirstEnergy. That growth has not remained in proportion to measures of the size (particularly its change over the same period that the growth occurred) of the transmission business. Our inquiries about the apparent anomaly have not produced convincing answers, which we believe management should provide after a more careful and complete analysis, in order to provide comfort that the growth in costs has been accompanied by commensurate value. The recent FERC audit (described in the *Accounting and Property Records* chapter of this Phase Two report has recommended review of how costs that include the groups involved here get allocated, for example between capital and expense. We have recommended that the examinations recommended by FERC extend to costs allocated to JCP&L for retail ratemaking as well. That expanded review should consider the information we recommend be developed and submitted here.

FESC works with JCP&L and the other operating companies to produce sound capture and analysis of data affecting likely attrition rates. Currently available data shows no apparent critical losses looming, based on historical departure data. FirstEnergy also operates an effective robust succession planning process, which includes JCP&L positions, and which has produced a well-populated list of replacement candidates for critical, unexpected vacancies. FirstEnergy operates a Power Systems Institute that has provided the operating companies a robust pipeline of new employees already possessing skills and training. COVID-19 circumstances had placed severe limits on its operation, but participation has substantially recovered in more recent months.

We found an effective approach to labor relations, relying on a central organization, but engaging JCP&L leadership and management appropriately. However, particularly with reliance on a central organization, FESC should develop and apply a set of metrics that will give greater visibility to effectiveness at the New Jersey level. A new labor agreement with the bargaining unit representing JCP&L and New Jersey-based FESC personnel became effective on November 1, 2021. It provides for three individual wage increases of three percent each, effective at specified dates occurring during the agreement's term, which ends in October 2024.

FE has developed and communicated a commitment supportive of diversity, equity, and inclusion (DEI). FE has also planned, structured, and communicated efforts to meet that commitment appropriately and in tangible and transparent ways. It has improved performance in meeting goals and targets recently, and it has achieved recognition for its DEI performance and transparency in communicating values, goals, achievements, and barriers. It has recently adopted a goal to increase racial and ethnic work force diversity by 30 percent from current levels. We found sufficient attention to federal DEI requirements.

Our *Staffing* recommendations include:

1. **Examine the reasons underlying outlying JCP&L measures of productivity and resource utilization and identify measures other than those contemplated by FE Forward to improve them where practicable.**
2. **Re-examine the resource levels dedicated to transmission and large substation planning, design, and operation; change their alignment and number as appropriate; examine any such changes in connection with the recommendations of the FERC audit.**
3. **Track New Jersey performance in comparison to the other operating companies across a range of measures used in the industry for labor management performance.**

G. Chapter VII: Compensation and Benefits

FirstEnergy manages compensation centrally through the FirstEnergy Service Company HR organization. FirstEnergy has adopted the common practice of targeting compensation at market medians. It makes appropriately balanced use of base compensation, a short-term, cash-based incentive program (STIP), and a long-term incentive program (LTIP) tied to stock value and changes in that value. FirstEnergy makes STIP participation broadly available and has placed typical limits on the higher-end positions eligible for LTIP participation. We found the escalating portions of compensation tied to the STIP and LTIP at higher job positions typical and appropriate. The STIP uses quantified targets and includes utility operations measures, including several specific to JCP&L, for its participating employees.

The LTIP portion employs two metrics that measure value provided for shareowners and exclude direct measures of utility performance effectiveness at either the JCP&L or total operating company levels. Some jurisdictions have restricted the amounts of such awards includable as above-the-line utility costs. The compensation of the parent board's vice chair, who also fills an executive management role raises a separate question about qualification as reasonably necessary utility costs. FirstEnergy created the position to address financial circumstances and the aftermath of the Deferred Prosecution Agreement whose underlying circumstances produced extreme executive-level disruption at FirstEnergy. An already large board and a full complement of executives already existing make it sound to consider the costs created by the incumbent's compensation as below the line.

HR's two compensation units comprehensively and regularly match the company positions for which they are responsible to market comparators and measures how compensation compares to market medians by matched position. That matching uses multiple and widely accepted source of market compensation data. It applies appropriate practices to ensure sound review of compensation decisions and to provide regularly for sound means to calibrate compensation, ensuring common treatment and consistent results.

Overall, compensation levels within FirstEnergy, FirstEnergy Service Company, and JCP&L compare favorably (at or around 100 percent) when compared to market. However, the highest level positions (those qualifying for LTIP participation) overall have exceeded the 100 percent level and the gap has grown since 2019. We recommended a detailed analysis of the reasons for that gap. Recent-year circumstances at FirstEnergy have included financial performance problems, "human performance" circumstances, such as those underlying the Deferred Prosecution Agreement described in Chapter Twelve, *External Affairs – The "DOJ Investigation"* of our Phase One report, and a wide-scale voluntary early retirement program. At the least, the pay gap from market, when compared with performance at JCP&L, call into question the connection between compensation (particularly the LTIP portion) and performance that matters to customers.

The range of benefits that FirstEnergy provides includes medical, dental and vision coverages, life insurance, time off with pay, and retirement income. FirstEnergy targets the total benefits package provided at the average of an index comprised of utility and general industry companies it considers as peers. A third-party consulting organization benchmarks FirstEnergy benefits. We found the range of benefits reasonably typical. Management regularly assesses their costs, their value to employees, and their market competitiveness. The changes it has made from year to year evidence sound attention to managing the costs of benefits provided, while ensuring that they continue to provide employee value commensurate with the market. Management informs its decisions about benefits through recourse to leading firms who consult in the utility and other industries with whom FirstEnergy competes for talent.

FirstEnergy provides a largely common set of benefits programs across all entities, with two unique programs for JCP&L programs. Management regularly tests their components, value to employees, and costs to JCP&L for competitiveness. Programs have remained fairly stable, with moderate changes commensurate with changing market offerings and costs. Costs have remained in line with other comparable enterprises.

Our *Compensation and Benefits* recommendations include:

1. **Determine the reasons for the large gap in performance ratings between corporate service groups versus FE Utilities and Operating Company performance levels and for high compa-ratios for the higher-level employees who participate in the LTIP.**
2. **Treat LTIP costs as indicated by BPU policy regarding incentive compensation awarded strictly based on shareowner-focused factors.**
3. **Recognize the compensation of the FirstEnergy Vice Chair and Executive Director as shareowner, not customer costs.**

H. Chapter VIII: Accounting and Property Records

This chapter deals with accounting and property record topics including accounting systems, work order management processes, policies and procedures, related internal controls and internal audits, continuing property records, the monthly books close process, the process of placing assets in service, overheads, and financial reporting to the Board of Public Utilities (BPU).

FirstEnergy keeps books and records for its entities, including JCP&L, in accord with Generally Accepted Accounting Principles (GAAP) and with the Securities and Exchange Act and FERC requirements. Widely used SAP-based systems provide the foundation for FirstEnergy accounting. PowerPlan, another industry standard system, supports property accounting, including continuing property records. A 2014 Financial Transformation Project brought a number of changes to the systems and their interaction, resulting in a faster closing process, easier access to detailed data for analysis, and interaction among systems. SAP incorporates methods for ensuring the ability to maintain separate books and records for FirstEnergy entities and for supporting the application of measures to charge, assign, and allocate costs by entity.

A comprehensive and sufficiently documented monthly close process exists. Our examination of accounting policies and procedures found them comprehensive and sound, but not subject to periodic updating. A number of them bear dates well more than a decade old. Our review of accounting controls found them suitable in producing a sound control environment, and the six whose application we chose for testing disclosed no concerns. Accounting matters have comprised frequent and regular subjects of examinations by Internal Audit. The sample of resulting reports we selected showed no material negative findings. We examined annual and quarterly financial reports filed with the BPU, finding no apparent gaps. Our comparison tests of report content and information otherwise available to us as part of our work in this engagement found them sufficiently tied and consistent.

Use of industry-standard PowerPlan and supporting procedures provide an appropriate method for keeping continuing property records. We found the expected information present in our review of year-end reports. Appropriate procedures guide moving assets through construction and into service, with correct calculation of depreciation. Management has reduced but not yet eliminated a long-standing backlog in assets awaiting the final steps in that process. Management expects that a PowerPlan update underway will bring further improvement.

Our review of overheads assigned to direct costs (consisting of adders to payroll and to direct costs of capital projects) found generally accepted approaches and methods, subject to a FERC audit recently finding compliance concerns about how and how much costs management allocates to capital projects. Final resolution by the FERC of the audit findings and recommendations remains pending. JCP&L should, upon that resolution, provide details regarding the audit findings, support, recommendations, final implementation plans, and FERC resolution of any matters not yet subject to agreement. This reporting should include calculation of the retail revenue requirements (both rate base and operating expenses) associated with past practices changed as a result of the FERC audit findings and recommendations.

Our Phase One report already raised major concerns regarding the ability to corroborate company assurances that its internally-initiated examinations have thoroughly examined sources of improperly incurred or allocated costs to operating companies - - including JCP&L. We very recently learned of new internally-initiated reviews still under way, underscoring the inability, absent significantly greater transparency than has been offered, to place substantial confidence in those assurances.

Generally, we found all examined areas adequately structured and administered, with no significant policy or procedure control failures or errors. We did make recommendations addressing three areas. The first two, procedural in nature, call for periodic review of policies and procedures to ensure continued applicability, and a more formalized process and timetable to eliminate a backlog of assets ready for service but not yet unitized to the proper account and depreciation class. The third recommendation deals with the overlap between a FERC audit report released in February 2022 with this audit.

JCP&L performs estimates of electric usage for inclusion in base rate cases, basing estimates on the usage of test years (in 2016, and most recently in 2020). Management has historically based electric usage on actual usage for the rate case test year, adjusted for normalized weather. JCP&L electric usage for 2017 through 2019 tended to be representative of the amounts included in rates, but usage changes due to the COVID-19 pandemic in 2020 and 2021 caused significant variances in those years.

Our *Accounting and Property Records* recommendations include:

1. **Complete the planned, full review of all corporate accounting policies by June 2023 and set a schedule calling for periodic, continuing reviews.**
2. **Establish a reasonable timetable for elimination of the Account 106 backlog, and implement a process established for preventing backlog recurrence.**
3. **Make a full accounting of resolution of the issues raised in the FERC audit for the BPU and account for the impacts on current revenue requirements related to ratebase and O&M from the practices eventually changed.**

I. Chapter IX: Controls, SOX, Auditing, and Listing Requirements

This chapter addresses a number of controls-related subjects, which include the FE Control Framework, the process for managing Sarbanes-Oxley (SOX) requirements, Internal Auditing and the governance role played by the Audit Committee. This chapter also addresses compliance with New York Stock Exchange (NYSE) listing requirements.

We generally found internal controls, including risk assessment, meeting SOX requirements, the structure and operation of the Internal Auditing department and the role of the Audit Committee adequate. We found compliance with NYSE listing requirements.

However, we found an extraordinary lack of transparency in response to requests for information about internal audits and other controls-related data request responses. We experienced a high number of claims of attorney-client privilege and unusually extensive redaction of what appears as substantive content in documents provided to the audit committee. This lack of transparency well exceeds what we have seen across three decades of similar inquiries, and it hindered our ability to address significant aspects of our engagement scope. We found the circumstances particularly notable from an enterprise reportedly dedicated to transparency and engaged in remedying what federal criminal prosecution and external auditor actions and statements have shown as a major failure in setting a sound "Tone at the Top." Top level failures have extended well past just the tone that leadership sets.

Our *Controls, SOX, Auditing, and Listing Requirements* recommendations include:

1. **Adopt a more expansive conception and means of expression for addressing profound failings like those that produced the Deferred Prosecution Agreement for what federal criminal authorities consider wire fraud and that produced a payment of $230 million.**

2. **Move administrative reporting of FirstEnergy's top internal audit officer from the chief legal officer to the CEO.**
3. **Place greater weight on work identified through the risk assessment process in final audit plans.**
4. **End the predisposition to find ways to inhibit the flow of information (protected as required by legitimate needs for confidentiality) to the BPU.**

J. Chapter X: Affiliate Relationships and Cost Allocation

This chapter addresses the relationships and transactions among FirstEnergy affiliates as they directly and indirectly affect JCP&L and its customers. Verifying complete and sound methods and practices for charging affiliate costs (principally through allocations) accurately, objectively, and without producing cross subsidization formed an important focus of our work. We examined governing documents and guidance defining cost charging and the development of factors used to charge, assign, and allocate costs. We examined application of those factors, considering good practice, objective dealing, and the requirements of the New Jersey Board of Public Utilities (Board or BPU).

We also examined the controls applicable to affiliate cost charging, the flow of charges to and from JCP&L and to and from other FirstEnergy affiliates, billing of affiliate costs, time reporting and charging, training and communication related to cost allocation, impacts of the separation of the commercial power and energy business operations and entities from FirstEnergy, and the cost allocation implications of circumstances and actions arising from and following the conduct that played a major role in initiation of the criminal investigation by the Office of the U.S. Attorney for the Southern District of Ohio. That investigation, as described in Chapter Twelve, *External Affairs - - The "DOJ Investigation"* of the accompanying Phase One report led to the Deferred Prosecution Agreement and a number of related matters, including the vendor invoice examination also described in that Phase One report chapter.

We generally found the basic processes of cost collection, calculation of allocation factors, their application, and full allocation of service company costs adequately administered and controlled. However, we found variances between approved costing methods contained in the applicable Cost Allocation Manual (CAM) and Service Agreement and actual practice. We recommend a number of improvements to the current cost allocation process. We also found needs for improvements in affiliate billing processes, treatment of depreciation and carrying charges related to the matters surrounding and following the U.S. Attorney's office investigation.

Our scope also included certain transmission and generation items with affiliate relationship and cost allocation implications. PJM plays a primary role in transmission planning, with direct authority over projects that address reliability criteria violations, operational performance issues, and congestion constraints. It also coordinates an M-3 process promoting stakeholder engagement that extends as well to "Supplemental" transmission projects. The M-3 process expanded in late 2020 to include transmission activities classifiable as asset management.

PJM has included supplemental projects in its Regional Transmission Expansion Plan but does not approve them. Supplemental project costs are entirely allocated to the zone where facilities are located. A substantial increase in the portion of JCP&L's transmission capital budgets has occurred with expansion of the M-3 process. The central Transmission Planning and Protection organization that identifies and analyzes transmission projects employed clear and appropriate criteria. PJM implemented the M-3 process in 2018. A review of the list of JCP&L projects proposed showed need statements consistent with typical criteria. Management reported that JCP&L has not participated in joint-site projects and that it has full ownership of and cost responsibility for its transmission assets, with no allocation of transmission costs for the facilities of affiliates.

Our *Affiliate Relationships and Cost Allocation* recommendations include:

1. **Update the CAM to match the factors currently in use and conduct an annual review thereafter to ensure continued applicability.**
2. **Update the Service Agreement and Mutual Assistance Agreement to be consistent with the CAM and the annual cost center review process.**
3. **Explore what changes must occur to enhance SAP configuration to allow for the production of a monthly summary of transactions from one affiliate to another.**
4. **As part of the revision of the CAM, undertake, a thorough review to determine the most logical and cost causative factors for each cost center.**
5. **Revise allocation factor calculation worksheets to align with other changes in methods or language in the CAM and Service Agreement.**
6. **Implement the enhancements committed to in the 2011 Management Audit regarding the identification of triggering events that would require a mid-cycle change to the allocation factors.**
7. **Create a time reporting policy document that emphasizes the policy of direct charging and the reasons why it is the most appropriate way to charge time when possible and establish a formal, recurring training and communications program.**
8. **Employ in the annual review of allocation factors a sampling selection method that ensures broader coverage of different allocation methods.**
9. **Following a thorough review and modification of the CAM, strengthen the cost center review process to ensure that cost centers use only allocations detailed in the CAM.**
10. **There should be a review of the development and application of cost allocation factors and the resultant changes to JCP&L by someone whose focus is JCP&L costs and protection of New Jersey customers.**
11. **Consider holding the depreciation and carrying charges associated with the portion of FirstEnergy SC assets previously charged to FES and FENOC at the parent company, rather than increasing the allocation to the regulated entities.**
12. **Capture and hold all remediation costs and current management audit costs related to the DOJ, SEC, FERC, and internal investigations at the parent company.**
13. **Defer consideration of the need for a detailed, comprehensive examination of allocations pending the results of current internally initiated examinations and the ultimate transparency FirstEnergy provides about them and previous ones.**

K. Chapter XI: Cost Deferrals

This chapter provides the result of our examination of recording and accounting for regulatory assets and regulatory liabilities. It addresses the accounting for storm damage related costs and adherence to BPU orders. It also describes our similar review of other Regulatory Asset and Regulatory Liability accounts whose costs base rates include. For each subaccount we examined activity from January 1, 2011, or the inception of the cost deferred if the initial activity occurred after January 1, 2011.

We found that JCP&L appropriately classified storm damage and other costs deferred for future recovery. A thorough process underlies the classification of costs as regulatory assets and liabilities. We traced activity to financial statements, BPU orders and company accounting records, finding no exceptions. Our examination of accounting record conformity with BPU orders, company policies and procedures, and accounting rules found well documented and administered processes and knowledgeable staff responsible for them.

We encountered in our examination of cost deferrals the unusually frequent barrier we have described in other chapters - - Internal Auditing work claimed as subject to attorney-client privilege. The work here involved two audit reports germane to the accounting for storm damage costs.

We have no recommendations in the *Cost Deferrals* area.

L. Chapter XII: EDECA

The New Jersey Board of Public Utilities adopted affiliate standards (the Standards) that enforce the New Jersey Electric Discount and Energy Competition Act, N.J.S.A. 48:3-49 *et seq*. (the Act or EDECA). The Audit Period for this portion of our review included January 1, 2010, through December 31, 2020 (EDECA audit period).

A small number of FirstEnergy affiliates have operated as Related Competitive Business Segments (RCBS) during the EDECA audit period. Relationships with and transactions between and among utilities, their public utility holding company (PUHC), and any PUHC RCBS comprise a key focus areas of the Standards. The most significantly sized non-utility affiliate, and a FirstEnergy RCBS, FirstEnergy Solutions (FES), entered bankruptcy during the period we reviewed, emerging therefrom in early 2020 under entities formed by creditors in the bankruptcy proceedings. The Standards incorporate a wide scope of provisions covering a very broad set of topics and transactions. Examples include transactions with affiliated Third Party Suppliers (TPS) such as FES. We audited, to the extent possible, through records available regarding transferred entities and operations, relevant portions of the JCP&L-FES relationship and transactions for the portion of the EDECA audit period during which FES operated as a JCP&L affiliate. We also reviewed similar relations and transactions with affiliates and RCBSs that have also ceased to exist as members of the FirstEnergy family. These affiliates included, for example, FirstEnergy Telecom Services and FirstEnergy Generation. (The latter operated under FES).

At the close of 2020, only Suvon, LLC existed as an active FirstEnergy RCBS, operating businesses under the trade names of FirstEnergy Home and FirstEnergy Advisors. FirstEnergy Home, but not FirstEnergy Advisors offered services to New Jersey customers. Small in scale and scope, those services produced New Jersey revenues of less than $500,000 in 2020.

FirstEnergy's classification of employees performing Suvon work as FirstEnergy Service Company (FESC) employees created issues regarding the Standards' guidance and training and physical separation requirements and the application of obligations to report employee transfers.

Management's reported post-audit period changes included dedication of all those who work on "Suvon matters" to Suvon only, which we interpreted as precluding work on JCP&L utility matters. While positive, management's change leaves open the question of whether a transfer of responsibilities from utility to Suvon-only matters comprises a reportable transfer under Section 14:4-3.5(r), when the transferred person remains an FESC employee. If it does not, then the provisions of the section become readily avoidable despite potentially producing the harm that the Standards seek to avoid by making such transfers transparent. Management appears to have made the very recent changes based on an internal examination it refused to provide on the basis of legal privilege claims.

This claim burdens the ability to gauge the risk that activity prohibited by the Standards occurred before the very recent changes made to isolate the work of FESC personnel acting for Suvon on Suvon matters only. A January 14, 2022 request for information (answered about four months later on May 11, during the drafting of this report) noted the existence of an as yet incomplete review that includes how management included FE Products and FE Home costs in customer rates. EDECA compliance during the audit period with respect to Suvon remains an open question.

We found JCP&L's current Compliance Plan (Plan) and its predecessors we reviewed generally compliant with and responsive to the Standards. However, subsequent versions require moderate changes to ensure that all sections of the Plan consistently achieve the same level of responsiveness, and provide the type of employee guidance which we found most areas of the Plans to contain. Updates should include explicit statements of management's understanding of and intent to comply with transactions with its PUHC (FirstEnergy) and also with FERC rules. They share much in common with the Standards without aligning completely with them. It appears that such alignment reflects management's intent, but we found explicit recognition of that intent warranted.

The first eight versions of the Plan we reviewed indicated that "no substantive changes have been made to the provisions of that Plan" and the changes to subsequent versions mainly reflected minor changes to account for changes in FirstEnergy's roster of affiliates. Management only recently assigned responsibility for Standards compliance and the Compliance Plan to a senior executive, moving it from former assignment to legal and regulatory groups. The recent changes in FirstEnergy's roster of affiliates, combined with this new Vice President, Compliance and Regulated Services, along with management's admitted need to clarify elements of Suvon and its staffing/employees, presents an opportunity to refresh the Compliance Plan.

The Plan does not indicate the officers or work groups with specific oversight and responsibility for each section and sub-section of the Standards. We consider doing so an important element of ensuring that Compliance Plans effectively communicate to employees the "who" and the "how" enforcement will occur, especially since the broad scope of the Standards requires an array of company departments, resources, and governing documents to maintain compliance. Standards compliance requires the resources of a number of work groups and functions; *e.g.*, Information Technology, Customer Services, Accounting, Facilities Management, and others. Further, the broad responsibilities of the new vice president for FERC and PJM duties and state-level compliance in multiple state jurisdictions, further highlights the need for establishment of guidance and accountability within the Plan itself to ensure the understanding of roles and responsibilities across individuals, groups, and functions at JCP&L, FirstEnergy, and FESC.

Internal audits during the EDECA audit period included reviews of some elements of the Standards - - chiefly cost allocations and FERC rules. We recommended that additional, periodic reviews of specific areas implicated by the Standards complement them. Other elements of the Standards warrant similar internal review, to produce a more robust roster of topics and ensure the effectiveness of the policies and procedures and enforcement activities applied to the Standards.

Section 14:4-3.3 of the Standards prohibits a number of forms of preference or discrimination in relationships between utilities and their holding company RCBSs. We found JCP&L's written and electronic communications and the print, television ads, and other written customer communications of FirstEnergy entities free of preference stated for an RCBS or RCBS customers. Management, however, has not maintained the applicable materials for the entire audit period materials. It should do so, in order to permit full review of compliance going forward.

Our examination found no cases of transaction types prohibited by the Standards. Restrictions on energy and capacity sales involving affiliates did not apply. We found none, with power supply activity for JCP&L customers through the stateside BGS auction process. We found no evidence that JCP&L offered discounts or waivers on services provided to affiliates, or that it discriminated in favor of affiliates in applying tariffs. We found no direct or indirect evidence of tying service from an affiliate to JCP&L utility services or of any assignment of customers. Our examination disclosed no indication that JCP&L provided its retail affiliates with customer enrollment, marketing, or business development assistance; however, management's disclosure statement that information potentially responsive to our requests in this area was subject to legal privilege raises questions.

EDECA Section 14:4-3.4 imposes Information Disclosure Standards. We found adequate procedures to support limitations on the potential disclosure of customer information to affiliates. Management did not maintain all records of all TPS lists it provided to customers either though its website or in response to requests from customers. This lack of records totaled 37 out of 132 months, including a portion of time when an affiliate and RCBS (FES) provided retail energy service to New Jersey customers. Our work in this area did disclose the potential release of Customer Proprietary Information on two occasions, with neither raising affiliates or Standards-related issues or concerns. They stemmed from tax-form preparation errors, which potentially disclosed customer information, including social security numbers.

EDECA Section 14:4-3.5 imposes a variety of separation standards. Our work confirmed the required separation of corporate entities and books and records. We found books and records to conform with accounting requirements; management made all accounting records and information we requested available. However, we did not secure material amounts of information requested. Faced with various investigations and lawsuits, management did not provide everything we asked for. Further, management appears to have conducted internal audits at the direction of counsel, which, in their opinion, justified declining to provide them for our review.

We also found compliance with space sharing and information system access requirements. JCP&L made no joint product or service offerings with affiliates during the audit period, and complied with the restrictions on shared services and joint purchasing with affiliates. We also found compliance with provisions seeking to protect confidential and market information, to limit use of the JCP&L name and logo, joint marketing with affiliates, and affiliate access to JCP&L advertising space. We concluded, however, that better tracking of joint appearances at events would ensure management compliance with relevant provisions in the Standards and produce documentation evidencing compliance.

Section 14:4-3.5 of the Standards limits employee sharing; we found no instances of non-compliance with applicable requirements during the EDECA audit period. We found no violation of restrictions on common directors, but did find a single, very brief instance of a common officer servicing JCP&L and a FirstEnergy RCBS early in the period. We found no indication of non-compliance with service or asset transfer pricing. Management provided documentation and records regarding numerous JCP&L transactions with FirstEnergy and various affiliates, though in several important areas of this audit's scope it declined to provide us with requested information, citing attorney-client privilege, redacted materials, or otherwise presented a general unwillingness to provide items related to the investigations summarized in Chapter Twelve of our Phase One Report, External Affairs - - "The DOJ Investigation." Some of this material took the form of Internal Audits, which management reported as performed at the direction of counsel, which we described in more detail in the *Internal Control Framework, SOX, Internal Auditing, Audit Governance, and NYSE Requirements* chapter of this report.

Section 14:4-3.6 of the Standards applies to any competitive services offered by the utility or an RCBS of the utility. Some JCP&L customers take a competitive service through its Consumer Protection Service offering, which it closed to additional customers over 20 years ago. JCP&L should confirm with the BPU its responsibility for reporting and other requirements related to this service and establish a plan for conforming to them, as we observed gaps in JCP&L's annual reporting to the BPU on these matters. JCP&L has failed on a number of occasions to provide annual reporting to the BPU and should institute measures to secure regular, timely filing of EDECA reports and undertake a review designed to determine its root causes, to identify any gaps in compliance measures or rigor in executing them.

Our *EDECA* recommendations include:

1. **Include in the next version of the Compliance Plan information stating where oversight, responsibility, and enforcement for each section of the Standards lie.**
2. **Make additional elements of the Standards subject to Internal Audit review.**
3. **Institute measures to secure regular, timely filing of EDECA reports and undertake a review designed to determine the root causes of failure to timely file reports, and to identify any gaps in compliance measures or rigor in executing them.**
4. **Provide to the BPU a full report of the findings and conclusions made in connection with all reviews and evaluations (regardless of the specific jurisdiction or operating company involved) of Suvon structural separation, common work assignments, and sharing of utility information, and address their implications for historical compliance with Section 14:4-3.3(o) and any other applicable standards.**

5. **Update the next version of the Compliance Plan to include discussion of the potential for FERC rules records conformity as included in 14:4-3.3(s) of the Standards.**
6. **Ensure the archiving of all supplier lists to permit future reviews for compliance with Section 14:4-3.4(c) of the Standards.**
7. **Change the Plan to align the reference to Section 14:4-3.4(e) to where the Plan provides a summation of and guidance regarding this provision.**
8. **Update the next version of the Plan to make clear management's understanding of the PUHC requirements included in Sections 14:4-3.3(h), (i), (j), and (k) of the Standards.**
9. **Update the next version of the Compliance Plan to include acknowledge management's understanding of the PUHC requirements included in Sections 14:4-3.4(d) of the Standards.**
10. **Deep-seated, corporate cultural barriers have prevented conformity to levels of transparency typical of other holding company/utility cases we have witnessed - - our interaction with FirstEnergy throughout this audit shows that major efforts remain to eliminate those barriers.**
11. **Update the next version of the Compliance Plan to acknowledge management's understanding of the PUHC requirements included in Sections 14:4-3.5(f) regarding joint product and joint services offerings.**
12. **Update the next version of the Compliance Plan to include direct discussion of the Section 14:4-3.5(m) of the Standards.**
13. **Create a plan to log and track joint JCP&L and RCBS attendance at the types of events described in Section 14:4-3.5(o) of the Standards.**
14. **Increase diligence in ensuring full conformity with Section 14:4-3.5(q) of the Standards.**
15. **Institute measures for ensuring the timely public posting of employee transfers covered by Section 14:4-3.5(r) of the Standards.**
16. **Treat all employees working on or for Suvon, except those providing Standards-permitted shared services functions, as Suvon employees - - either organizationally or for Standards tracking and compliance purposes; apply similar treatment to any future RBCS which FirstEnergy may have.**

M. Chapter XIII: Human Resources Organization

This chapter addresses the overall structure, resources, and costs of the groups that perform human resources (HR) functions at and for JCP&L. It complements the more specific treatment of certain HR functions that other report chapters address; *e.g.*, compensation, benefits, recruiting, training, development, evaluation, and diversity and inclusion.

FirstEnergy manages HR functions and activities largely through centralized systems, goals, objectives, policies, procedures, and practices that support the needs of JCP&L and the other operating companies commonly. FirstEnergy has acted affirmatively to reduce HR resources as its business scope has come to focus predominately on electricity transmission and distribution following the departure of its former commercial power and energy entities and operations. Those actions have resulted from initiatives such as FE Forward, which has also led to efforts, now underway, to transition to a new Human Resources Information solution that will enhance data capture and consistency and improve data and information reporting and analysis. The transition also presents an overdue opportunity for expanding what is a comparatively very small list of performance metrics. We recommended efforts to ensure that management does not lose this opportunity for overdue expansion of performance measure scope and use.

Despite the large degree of centralization of HR functions, FirstEnergy has left to local (in this case JCP&L) leadership day-to-day direction of the HR "Partners" - - specialists who support local management and the workforce, very many of them bargaining unit members at JCP&L. They engage in "transactional" activities or information provision (*e.g.*, benefits application or changes by employees) or routine, repeat tasks involving HR administration. Projecting what are only nominal cost savings, FirstEnergy has proposed centralizing the resources engaged in Partner activities.

We consider that change a negative one; it will separate responsibility for managing and directing the work of local employees under the direction of JCP&L leadership from providing the support needed to ensure effective day-to-day delivery of the HR support those employees require. We believe that even normal circumstances warrant placing both direction and that support under local leadership. However, another situation we encountered adds another, hopefully temporary reason for avoiding change at this time.

We learned of that situation through engagement with leadership of the bargaining unit representing covered JCP&L employees. That engagement disclosed a fundamentally unsound relationship under which those chosen to speak for bargaining unit members have fundamentally lost confidence in not only management's positions on issues of importance to members, but in its willingness to actively engage on them.

We are not in a position to judge the merits of all of the many issues raised. However, their number, the breadth of subjects they cover, and their consistency with some of our own conclusions (reached before engagement with bargaining unit leadership) make clear that management needs to and should take ownership of a critical need to bring confidence and trust back to levels consistent even a minimally sound ongoing relationship. Even were it not clear that giving day-to-day direction of HR Partners to JCP&L leadership makes the greater sense, now is certainly not the time to risk making HR functioning more remote from New Jersey.

Our *Human Resources Organization* recommendations include:

1. **Give local leadership continuing direction of the HR Partner resources assigned to supporting JCP&L operations.**
2. **Develop commensurate with the transition to new HRIS capabilities a much more comprehensive set of performance measures for gauging HR performance and attainment of workforce characteristics and expectations.**

N. Chapter XIV: Corporate Services

FirstEnergy provides common real estate, administrative services, and flight operations through the FirstEnergy SC Corporate Services group. Resources and costs applied to the real estate and administrative services functions have fallen in recent years preceding 2022, during which continued centralization has reportedly affected real estate and administrative services. Facility management operates under documented practices that promote efficiency and effectiveness and provide for the control of costs incurred by outside resources and in prioritizing and executing capital and other work associated with facility occupancy and use. Costs for facilities leased and owned by JCP&L have not substantially increased. Changes in costs allocated to JCP&L for facilities used by FirstEnergy SC groups who serve it have remained stable, outside of those associated with what appear to have been major facility additions or reconfigurations.

We have no recommendations in the *Corporate Services* area.

O. Chapter XV: Information Technology

FirstEnergy provides Information Technology (IT) services on a common basis for all its operating companies and the FirstEnergy Service Company who serve those operating companies. It does so through an organization that has produced declining resources and costs. The IT organization divides responsibility in a manner that focuses attention on and enables the application of attention and expertise specific to areas of operation (for example, distribution, versus customer services, versus finance and accounting) that have differing needs.

Specialists assigned to those who use IT assets and capabilities work with those users to identify needs, design potential solutions, compare them with alternatives, and develop optimum solutions, where they exist. A logical and comprehensive process identifies all IT needs, categorizes them, and provides for an analysis of them as part of producing comprehensive spending plans. Proper systems support these plans, enabling preparation of sound budgets, cost forecasts, controls, project management techniques, and cost reporting.

While performing effectively what it does do, the IT department has operated under what management describes as a prolonged period of austerity. Strict economy has kept IT costs low but creates significant risk that management has foregone access that may enhance performance effectiveness or efficiency, particularly from newer applications of developing technology. Efforts are underway to enhance IT effectiveness, better direct its expenditures, and provide for focused review of ways to move FirstEnergy toward new and innovative technology applications.

We prepared this report with optimism about the commitment to these efforts, but without an ability to provide the BPU a clear sense of what tangible outcomes will likely result, given the state of change initiatives intended to produce them. With recognition of prior constraints, the full range of goals the State has set for matters affected by electricity delivery, and the value of early transparency about likely costs, benefits, and risks, we believe that merit exists in providing the BPU a comprehensive report on progress, plans, forecasts, and other information regarding planned and potential enhancements to FirstEnergy use of IT in serving New Jersey customers at or around the end of the first quarter of 2023. More narrowly, we also found a new set of metrics used to gauge IT performance substantially improved, yet new enough in implementation to warrant emphasis on ensuring their continued use during efforts to enhance the contribution of information technology to successful operations.

Our *Information Technology* recommendations include:

1. Provide progress reporting to the BPU on IT-related plans made and progress achieved resulting from FE Forward or other programs, initiatives, or activities affecting IT plans, forecasts, and budgets.

P. Chapter XVI: Insurance and Risk Management

This chapter addresses Enterprise Risk Management (ERM) design, structure, and operation and the management and operation of commercial insurance and credit risk activities. FirstEnergy uses a common, central organization to address both these areas. Staffing directly engaged in ERM and corporate insurance activities has remained largely the same. However, significant staffing reductions have occurred from reducing the resources required to conduct risk control activities following the end of FirstEnergy's engagement in the commercial power and energy business and credit and transactional risks that typify the controls needs of such businesses. The consolidation of ERM, corporate insurance, and credit risk under the recently created Chief Risk Officer position comprises a material advancement of FirstEnergy's efforts to manage risk.

Overall oversight of risk programs under the FirstEnergy Corp.'s Board of Directors Audit Committee reflects best industry practice. The employment of a senior-executive Enterprise Risk management Committee (ERM Committee) does the same, but its operations through mid-2021, as the transition to new executive leadership (with the new Chief Risk Officer position as yet unfilled) did not reflect those of a mature, stable organization. Significant elements of program guidance remained under development and attendance at meetings of the ERM Committee, whose predecessor did not meet at all in 2020, remained substantially incomplete through the middle of 2021. One key element that remained missing was a formal expression of "risk appetite," a strong contributor to effective setting of broad objectives, strategies, and plans, and for guiding more detailed aspects of risk management (*e.g.*, commercial insurance products and deductibles/retentions). This chapter recommends more focused efforts and senior executive attention in bringing ERM activities and operations from development to steady state operation.

The FirstEnergy approach to managing enterprise risk appropriately assigns specific responsibilities to operating units, including JCP&L, for design of specific procedures, identification and measurement, and planning of mitigation measures for risks specific to their business operations, as well as for communications and training required to ensure a culture of robust risk management and application of consistent methods in providing such management. We found semi-annual meetings with the JCP&L, coordinated by corporate ERM personnel a strength. The documentation of them shows a reasonably complete and candid addressing of JCP&L risks. We also found the register of risks specific to JCP&L extensive, broad in risk-type coverage, reasonably detailed in assessing risk likelihood and consequence, and responsive in identifying avoidance and mitigation measures.

Analysis of commercial insurance use occurs regularly and makes effective use of outside expertise, benchmarks coverages and costs. Corporate insurance routinely makes insurance purchases on a competitive basis, employing leading brokers to assist it. Management has also made use of an insurance captive (in which it participates with others similarly situated) to provide for certain insurance products costs more effective than those available from traditional commercial insurance providers.

Recent analyses by an outside firm identified a number of insurance product lines where greater efficiency might result from lower coverage or higher retentions. However, only directors & officers (D&O) insurance among those lines generates significant costs for JCP&L.

A much bigger concern about such insurance, however, arises from the very high premiums that FirstEnergy must pay to obtain D&O insurance. Large, publicly owned U.S. enterprises generally have experienced significant increases in the costs for such insurance in recent years. However, FirstEnergy's recent increases far outpace those of others. The general allocator used to charge JCP&L its share of D&O insurance costs fails to recognize the circumstances that have faced FirstEnergy in recent years, as it has experienced the bankruptcy of its commercial power and energy businesses and suffered significant financial stress, compounded more recently by highly publicized events, circumstances, and legal proceedings following extensive public knowledge of the criminal investigation by the U.S. Attorney's Office for the Southern District of Ohio and the Deferred Prosecution Agreement it produced.

Applying to FirstEnergy the same rates of D&O premium increases experienced more generally over the past two years suggests that JCP&L's share of 2021 D&O insurance costs could have amounted to only [redacted] of what it was charged. That percentage would have saved JCP&L [redacted] in that year. JCP&L should not bear D&O insurance costs that exceed those attributable to utility operating company risks. FirstEnergy should not charge JCP&L costs exceeding the New Jersey utility's percentage of the D&O premium costs that would arise from a business both consisting overwhelmingly of utility energy delivery operations and unencumbered by the factors extraneous to those operations that affect the insurance market's perception of overall FirstEnergy risks.

Our *Insurance and Risk Management* recommendations include:

1. **Adopt and continuously employ a structured approach to determining appetite for risk and use it to guide the establishment of objectives, the identification of and selection from among strategies to meet those objectives, and monitor performance and the external business environment to identify the need for strategy revision.**
2. **Restructure the basis for allocating D&O insurance costs to JCP&L to avoid charging it amounts arising from risks to which it does not contribute.**

Q. Chapter XVII: Legal Services

A central organization provides legal services for JCP&L and the other FirstEnergy entities. These services include legal resource's engagement in rates and regulatory matters, including those before or involving the BPU. It also includes the full range of functions required to support the operations of other large utility operations; *e.g.*, labor and employment, financing, contracting, commercial, business and tort litigation, corporate secretarial, environmental, and licensing, to name some. This central FE Legal organization has changed significantly in the past several years. Its operation in 2016 came under an Executive Vice President, Markets & Chief Legal Officer whose more than 550-person organization also had responsibility for responsible for FirstEnergy Solutions, External Affairs, Strategy, corporate security, and ethics.

Now operating under a Senior Vice President & Chief Legal Officer brought in from the outside at the start of 2021, the organization numbered about 90, but has reportedly grown very substantially in 2022, and has responsibilities for legal services, internal auditing, and ethics and compliance. Personnel located regionally across the FirstEnergy operating company footprint, but supported by a centralized group formerly in Operations at the FE level handled smaller claims. Those individuals recently moved under the senior managing attorney responsible for handling the legal aspects of claims work as part of the centralized FirstEnergy legal department.

Ethics & Compliance also operates the Chief Legal Officer's organization. The *Executive Management and Governance* chapter of this Phase Two report addresses the management and operation of that function. The Vice President of Internal Auditing reports administratively to the Chief Legal Officer, but functional oversight of Internal Auditing comes from the FirstEnergy Board of Directors acting through the board's Audit Committee. The *Internal Controls, SOX, and Auditing* chapter of this Phase Two report addresses Internal Auditing. Among that chapter's recommendations is a transfer of its administrative reporting to the FirstEnergy Corp. CEO, while retaining the important functional oversight role from the board.

Legal services align functionally under five senior managing attorneys, one of them a Lead Counsel at the time of the drafting of this report and now reportedly named an Associate General Counsel. Her group of 15 (now reportedly expanded to 21 persons) handles the legal needs associated with state rate and regulatory matters. The five-member group under this Lead Counsel handling New Jersey and Pennsylvania rate and regulatory matters has reportedly grown to include seven attorneys and two paralegals, with New Jersey work taking the time of roughly half of the group. Chapter XII, *External Affairs Organizations* of our Phase One report recommends combining the legal, technical, and liaison groups responsible for regulatory affairs, now dispersed among many FirstEnergy groups. Those groups, as that chapter explains, should come together under a senior executive reporting directly to the FirstEnergy Corp. CEO.

A significant source of concern about legal and regulatory services arose following profound failures of top executive management of FirstEnergy Corp. and its legal and regulatory functions. The aftermath of those failures has plagued the company since the mid-2020 disclosure of a criminal investigation by the U.S. Attorney's Office for the Southern District of Ohio. The actions involved display a massive failure to respect the role that regulation plays for companies like those FirstEnergy Corp. owns - - failures that compromise the regulatory agency and stakeholder trust and confidence as essential for success from a shareholder perspective as it is from the viewpoint of customers and the public. Conformity to best practice generally and to FirstEnergy's particular needs for restoration of that trust call independently and equally for the consolidated and elevated focus on leading and conducting regulatory affairs that Chapter XII, *External Affairs Organizations* of the Phase One report recommends.

Subject to this overriding issue regarding regulatory affairs and to the movement of Internal Auditing's administrative reporting, we found the central approach to managing legal functions appropriate, and it has proven responsive to the changes in needs occasioned by elimination of FirstEnergy Services' needs following post-bankruptcy transfer from FirstEnergy Corp. We found due attention to the legal needs of JCP&L, given near-term plans for added resources to address state regulatory issues. Costs for internal resources and outside counsel (and the experts and other support they employ) have dropped since that transfer and JCP&L has experienced reasonably stable legal costs in recent years. We tested charges assigned and allocated for these resources, finding them reasonably well justified and associated with clear JCP&L interests and implications.

Sound systems and methods, regularly applied control the recording, reporting, and analysis of internal time. Outside counsel retention, budgeting, billing, document management, and other important aspects of managing the relationships through in-house personnel also proceed under well-documented and monitored means, again using systems and tools commensurate with the practices of other large utility legal organizations.

We did find a need for some specific improvements, making recommendations for creation and regular use of structured processes for soliciting from client businesses (specifically meaning JCP&L and its senor leadership) feedback on completed engagements, important matters in progress, and satisfaction with the timeliness and quality of legal work. JCP&L personnel should also engage for planning purposes directly in determining the New Jersey company's legal and regulatory needs and means for meeting them. Management should also establish a process for confirming that a senior lawyer has specifically concluded in a documented way that common legal representation of JCP&L and other FirstEnergy entities in civil and regulatory proceedings creates no risk of compromising the separate and distinct interest of the New Jersey utility in serving its customers reliably and economically.

Our *Legal Services* recommendations include:

1. **Establish structured and regular means for engaging JCP&L, Legal, and Rates and Regulatory in reviews of prior performance, status and needs for current matters, and forward-looking needs and resources.**
2. **Provide for system notation reflecting an in-house counsel opinion concluding that no conflict exists between the interests of JCP&L and any other FirstEnergy entity with whom JCP&L has common legal representation in any civil or regulatory proceeding.**
3. **See Recommendation #2 from the Internal Controls, SOX, and Auditing Chapter of this Phase Two report regarding the change in administrative reporting of Internal Auditing from the Chief Legal Officer to the FirstEnergy Corp. CEO.**
4. **See Recommendation #3 from Chapter XIII, External Affairs Organizations of the Phase One report regarding the creation of a senior executive position to head a regulatory affairs department reporting to the FirstEnergy Corp. CEO and combining FE Legal resources now dedicated to state regulatory affairs and technical and liaison persons with state and local agencies now dispersed among a number of FirstEnergy senior executives.**

R. Chapter XVIII: Physical Security

FirstEnergy provides for physical security at the facilities of all its operations through a central organization. A Vice President, Cyber & Physical Security managed a 26-person Corporate Security group responsible for physical security and a 38-person group responsible for cyber security and the Transmission Security Operations Center. Elimination of the vice presidential position has returned direct reporting of the Director of the Corporate Security group to FirstEnergy's Chief Information Officer - - where management reports was the case historically. [redacted]

[redacted] Recent company benchmarking found Corporate Security's staffing and its performance in ensuring physical security comparable to those of peers. Comprehensive procedures and policies address physical security. Internal Auditing proved active in 2021 in testing important controls applicable to physical security.

Management uses typical systems and equipment technology to support identification and mitigation of threats and responses to those that arise. Its adoption of a more structured and regularly scheduled program of facility risk assessments, which employ annual inspections for occupied and transmission facilities comprises a strong step forward in ensuring personal and critical facility security. Security incident rates show a favorable trend, with the data presenting no indication of recurring threat sources that have gone insufficiently attended. Unfortunately, personal threats against employees comprise a large portion of logged incidents. Internal Auditing's 2021 review found generally an appropriate response to those incidents by Corporate Security, making a number of recommendations to improve documentation and notifications to those involved in the underlying incidents.

We made no recommendations for change as a result of our examination of physical security. However, sustained improvement in the areas identified in Internal Auditing's work addressing personal threats is in order.

We have no recommendations in the *Physical Security* area.

S. Chapter XIX: Records and Information Management

We inquired into the organizations, practices, systems, and procedures governing retention of, access to, and destruction of records and the management of information subject to public requirements and business needs. FirstEnergy conducts records and information management through a proper organization structure that provides specialists who serve all FirstEnergy businesses and operations centrally. Resources have remained stable in the past five years and management secures outside services (*e.g.*, for controlled document destruction) competitively. An effort underway to digitize records over time further promotes economy and will facilitate control over document storage, access, and eventual destruction as well. Clear and comprehensive procedures and regular training serve to support employee actions and behaviors consistent with document creation and retention expectations. Management has created and annually verifies requirements of the BPU (and other state and federal agencies) regarding document retention, and provides systems that ensure their retention for required periods and controls access to them.

We have no recommendations in the *Records and Information Management* area.

T. Chapter XX: Supply Chain

FirstEnergy recently consolidated under a newly created Vice President, Supply Chain purchasing, warehousing, and delivery of materials and equipment. Significant reductions in personnel engaged in these activities occurred following transfer of commercial power and energy assets and operations in bankruptcy. Those reductions have continued since, with corresponding decreases in costs for operating supply chain functions.

Procurement and materials management (receipt, warehousing, requisitioning, and disbursement) operate under sound procedures, supported by appropriate systems for identifying, procuring, warehousing, requisitioning, and replenishing materials and equipment. Management uses a reasonable range of metrics to gauge performance. These metrics have generally shown effective performance. Inventory levels did run above target through 2020 and order filling rates showed a one-year drop in 2020. Data for 2021, however, shows improvement in measures, now operating under the consolidated organization. Previously, Materials Operations, including the personnel and facilities serving JCP&L had fallen under a FirstEnergy operating company president.

An appropriate hierarchy and limits apply to required procurement approvals. Procurements have made proper use of competition, limiting non-competitive purchases to a reasonably small number, supported by required justification, documentation, and review by authorized approvers. Warehousing for materials used at JCP&L directly came from a reasonably proximate location, provided resource efficiency (serving some Pennsylvania operations as well), and operated effectively. JCP&L has sufficient role in identifying local needs and local management has a direct and sufficient role in requisitioning and securing needed materials and equipment.

FirstEnergy has recently performed well in meeting goals for percentages of spending involving diverse suppliers and has increased those targets yearly. However, only a single, FirstEnergy-wide goal exists, and management's regular reporting does not include spend by operating company or state, with one exception. It tracks Maryland spend and compares it to a state-specific goal. Maryland spend rate has exceeded the measured rate for all of FirstEnergy, indicating a lower overall rate among the remaining jurisdictions. Management should track the New Jersey rate regularly, to identify any significant disparity, thus allowing plans to bring any recurring New Jersey divergence that might arise to realistically achievable levels in relation to the overall corporate target. Company comments on a draft of this report stated that the JCP&L President reports diverse spend to the BPU "via periodic meetings."

Many of our report chapters examine management and operations in particular functional areas. Our examinations of those functional areas considered the effectiveness of outside resource use. This chapter addresses our more general examination of how FirstEnergy provides oversight of "make/buy" decisions that determine whether to use internal or external resources. FirstEnergy has undertaken reviews of the roles, structures, and resources of its common service organizations following elimination of commercial power and energy assets and operations. Examples include FE Forward and FE Tomorrow. Such efforts have addressed resource alignment and numbers. Thus, there has been recent attention to outside resource use. Going forward, however, we believe that good practice promotes periodic re-examination of how best to balance internal and external resources operating under a group that provides coordination, scheduling, and common methods.

Our *Supply Chain* recommendations include:

1. **Provide for clear New Jersey-specific diversity spend targets, report against them regularly and in a documented manner, and develop and execute plans for bringing it to realistically achievable state levels, should it show persistent gaps from overall measures.**

2. **Assign to the Business Service Groups responsible for the corporate, utility, and transmission sourcing the responsibility for ensuring periodic make/buy reviews by common service providers.**

U. Chapter XXI: Surface and Air Fleet Management

As it does for many corporate and technical services, FirstEnergy manages its vehicle fleet on a centralized basis. FESC Fleet Services manages the acquisition and disposal of vehicles across the enterprise. This organization also provides direction over a group of regionally based Fleet Services organizations, including one for JCP&L, that provides vehicle maintenance and garages and parking. JCP&L manages a fleet of more than 1,300 vehicles, with its size increasing moderately in recent years. A separate Flight Services organization manages and operates a small air fleet consisting of two fixed wing aircraft and two helicopters. Resources dedicated to and costs for fleet acquisition and management have remained fairly stable in recent years.

FESC Fleet Service's administration of an annual planning process and its control over vehicle acquisition, replacement, and disposal promotes vehicle cost economy. The central group has exercised that role in a manner appearing responsive to JCP&L's needs to maintain a fleet of surface vehicles in sufficient number, of reasonable age, and at high levels of availability. We found the procedures, fleet management system, and performance metrics supporting vehicle acquisition, disposal, maintenance, and repair sound. However, management should address the absence of structured methods for securing user feedback about vehicle performance, availability, and suitability by adopting a simple, direct process for post-use comment and provide for regular surveying of a broader spectrum of vehicle users.

Assignment of local (*i.e.*, within JCP&L) responsibility for planning and performing maintenance and repair activities keeps principal responsibility for ensuring availability close to those who must rely on vehicles. JCP&L vehicle availability has remained high, but performance metrics raise significant concerns about the costs incurred at JCP&L Fleet Services. Measures of costs (*e.g.*, dollars per vehicle or per repair) have since 2017 run consistently much higher than those experienced by the other FirstEnergy companies. Correspondingly, measures of work efficiency (*e.g.*, numbers of vehicle units or repairs performed per personnel numbers) have run well below average, indicating significantly lower efficiency in work performance. Overdue maintenance levels have been particularly high comparatively. Routinely since 2017 (but with occasional exceptions on some measures in a given year), JCP&L measures of cost and overdue maintenance have been the highest and measures of productivity the lowest of all the operating companies.

Nevertheless, management believes that the JCP&L metrics disclose nothing out of line. Management needs promptly to design and complete a detailed analysis of JCP&L surface fleet costs and performance, and include within it a candid and objective assessment of the use of outside providers for designated areas of service. Comparative cost data suggest the possibility of savings at or above $1 million per year.

The air fleet consists of two fixed-wing jet aircraft and two helicopters - - all owned. FirstEnergy-wide costs have grown significantly since 2017. Management performed a 2013 analysis of alternatives to full ownership as a means for securing access to private air transport. That work, performed in response to a 2011 management audit recommendation, appears not to have compared private versus commercial options. FirstEnergy's 2018 benchmarking found that the majority of comparator companies did not maintain an in-house air fleet Management recently began its first analysis of air fleet costs since the 2013 work. Management needs to include in this current study a comparison with commercial air options, not just differing ways to support private transport. The $1.6 million that JCP&L bore as its share of flight operations costs in 2020 make it important to ensure that private air transport remains cost effective

Our *Surface and Air Fleet Management* recommendations include:

1. **Conduct a focused examination of the reasons why JCP&L Fleet Services cost and performance metrics compare unfavorably with those of the other operating companies, accounting for differences among the operating companies.**
2. **Include in the examination reportedly underway the option of reducing or eliminating the current air fleet.**
3. **The absence of a structured system for user feedback about vehicle performance, availability, and suitability for intended use misses an opportunity to manage the fleet more effectively.**

V. Chapter XXII: Power Supply and Market Conditions

This chapter provides the results of our examination of a group of power supply and market condition topics, including power supply, PJM participation, the Basic Generation Service (BGS) process, third-party supplier penetration and communications, market conditions in which the BGS auctions operate and as reflected in retail competition, and any remaining capacity contracts and operating agreements that may remain, given JCP&L's recent transfer of its last significant supply resource and the satisfaction by BGS of supply needs for customers who do not elect to take service from a third party supplier.

FirstEnergy manages the principal elements of power supply, PJM market participation, and compliance with the FERC's transmission requirements through a central organization within its Operations organization, which serves each of the operating companies. A vice president heads this FirstEnergy Service Company Compliance & Regulated Services organization, which contains five groups. Compliance & Regulated Services has responsibility for conducting competitive power and renewables competitions and any required non-utility purchase power agreements. The group also provides PJM information for wholesale market settlements, handles monthly BGS supplier invoices, validates operating company PJM invoices, and provides PJM- and FERC-related technical services and agreement negotiation and filing support. The group addresses needs and issues raised by requests to interconnect third-party power supplies. It develops policies on and supports advocacy of FirstEnergy positions at PJM and before the FERC. The group also has responsibility for Bulk Electric System standards and requirements oversight.

The interests of power suppliers, transmitters, and distributors are distinct. FirstEnergy does not give to any JCP&L person a direct role in PJM matters. Others in a like position do, and we believe FirstEnergy should as well. We have recommended formal procedures documenting and a structured approach providing JCP&L personnel a formal role in pre-policy/position formulation on PJM- and FERC-related matters.

BGS auctions provide supply for those JCP&L customers that do not take service from third party suppliers. Participation in PJM largely defines market conditions affecting those auctions (which comprise one of many outlets that market suppliers have for their power and energy). PJM markets and FERC requirements largely guide transmission planning, availability, and pricing. FirstEnergy participated in the supply, transmission, and distribution markets through the end of its commercial power and energy operations with the early 2018 transfer to a third party of the entities and assets involved, as a means of bringing them out of bankruptcy proceedings. FirstEnergy Solutions (FES) reportedly participated in four BGS auctions from 2013 through 2016 and none thereafter. FES did not secure any supply contract in those auctions.

We found consistency between market conditions and BGS results, with BGS Auction prices consistent with market conditions over the past 10 years. Prices for both groups of JCP&L BGS customers have moved with and generally at the magnitudes seen for other New Jersey EDCs. Prices for JCP&L customers have generally proven the state's lowest under BGS auctions. JCP&L provides third party suppliers (TPS Companies) with an appropriate range of information and support, using clear and effective means for doing so. We found no reason to doubt that the company takes an appropriately indifferent stance on whether or not customers elect alternative supply to that offered through BGS.

No other material supply arrangements, such as capacity and operating agreements or disposition of JCP&L generation or NUG contracts in the marketplace exist anymore. The last NUG contract obligation had ended by February 2017 and the sale of Yards Creek occurred in 2021. JCP&L's non-utility generation cost (NGC) rider addressed recovery of costs associated with those sources.

Our *Power Supply and Market Conditions* recommendations include:

1. **Establish a formal process, supported by clear procedures, that gives JCP&L a forum for addressing its circumstances, issues, concerns, and recommendations on Market, PJM, and FERC matters on which FirstEnergy may or will take positions, whether publicly or in formal proceedings on matters in which PJM solicits member input.**

W. Chapter XXIII: MGP Remediation

JCP&L and predecessor companies acquired, owned, or operated manufactured-gas plants (MGPs) at 19 sites throughout New Jersey. Federal legislation from 1980 made owners and operators of such facilities financially responsible for cleaning up hazardous substances produced by those facilities.

By the end of 2020, JCP&L had spent $218.8 million on required activities and another $7.5 million for program management. Expenditures for remediation peaked in 2017-2018. Management expects major activity and expenditures to conclude by 2024 or 2025. At year-end 2020, management estimated remaining expenditures at $67 million.

Insurance proceeds have provided $36.1 million toward these costs. The BPU has allowed jurisdictional companies to recover the remaining remediation costs, including carrying costs on unrecovered balances, since the early 1990s. JCP&L now presents each year's costs to the BPU for consideration as part of its Societal Benefits Charge. The balance remaining for recovery at year-end 2020 totaled $67 million.

This year marks the 40th since JCP&L began addressing MGP remediation liability. The organization and staffing of the Remediation Program has shown striking constancy. As a consequence of this lengthy history and organizational stability, JCP&L's Remediation Program exhibits considerable maturity, now progressing steadily through its remaining tasks.

JCP&L's Remediation Program met all our criteria for successfully managing and operating programs of this type.

Our MGP *Remediation* recommendations include:

1. **Consider changing the budget/actual comparisons to match the periods covered by each.**

X. Chapter XXIV: Non-Rate-Related Revenues

This chapter describes the results of our examination of revenues produced from non-rate-related activities, which, for JCP&L, consist largely of gains on the sale of utility assets. JCP&L's sale in 2021 of the Yards Creek pumped store hydro generation facility for about $109 million was a major activity that was included in the 2020 base rate case calculations, utilized to offset deferred storm costs. We found that management accurately recorded and accounted for the transactions and activities underlying these revenues and reported them properly. We also found benefits produced for customers and accounted for in the last rate case proper, but we did not review transaction costs for reasonableness.

We have no recommendations in the *Non-Rate-Related Revenues* area.

Y. Chapter XXV: Recommendations Made in Previous Examinations

The BPU identified three previous analyses of JCP&L as relevant for our evaluation in the conduct of this audit. Those included:

- A 2011 BPU-sponsored *Audit of the Affiliated Transactions between Jersey Central Power and Light Company, First Energy Corporation and its Affiliates and a Comprehensive Management Audit of Jersey Central Power and Light Company* in Docket No. EA09110943
- A 2016 company-sponsored, though scoped with input from the BPU Staff, *Financial and Operational Review of JCP&L's Distribution System*
- A 2015 company-commissioned ring-fencing study that, based on consultation with BPU Staff at this audit's commencement, we performed as part of our Phase One review (see Chapter Eleven, *Financial Risks and Consequences of Parent and Affiliate Operations*).

Our baseline review of the first, 2011 report, consisted of examining recommendation closeout logs and, given its age, continuing viability of the recommendations. That report presented 86 recommendations. Implementing them came under a process that included review and verification by the New Jersey Board of Public Utilities (BPU) Staff. Management provided tracking documentation and support materials, which provided implementation dates and BPU Staff sign off on each recommendation. Given the significant commonality in scope with this engagement, we also made the list of recommendations available to each team member for consideration in forming their inquiries. We also reviewed that list again, as they completed their drafts in this engagement, in order to assure no gaps existed in the subject areas addressed by those recommendations. That review disclosed no such gaps.

The 2016 audit's 53 recommendations included 11 the auditor deemed "major" as measured by potential impact and magnitude of potential improvements through implementation. Management provided brief summaries of its views regarding implementation. The 2016 report also showed significant commonality between the subjects it addressed and those of our examination in this engagement. We believe that implementation of the recommendations of this engagement will leave no material issues regarding those recommendations that have current and likely future material import open, except for a very small number that concern broad new BPU reporting requirements or changes in core ratemaking practice and precedent.

We have no recommendations in the *Recommendations Made in Previous Examinations* area.

Final Report
Phase Two of an
Audit of the Affiliated Transactions and a
Management Audit of
Jersey Central Power & Light Company
Request for Proposal 13-X-22139
Docket No. EA20110733

Public Version: Confidential Materials are Redacted

Presented to:	**Presented by:**
Board of Public Utilities	***The***
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February 7, 2023

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Chapter I: Introduction

A. Background

This report summarizes the results of the examination undertaken in connection with Phase Two of a *Management Audit and Audit of Affiliated Transactions*, phase of an audit of Jersey Central Power & Light Company conducted by The Liberty Consulting Group (Liberty) on behalf of the New Jersey Board of Public Utilities (Board or BPU). An accompanying, previously completed report addressed Phase One of the audit. The scope of that phase included treatment of a focused series of topics grouped together to comprise a "Utility Operations" component comprised of reviews transmission and distribution systems topics, customer service, external affairs, financial impacts to JCP&L of its relationship with FirstEnergy and other affiliates, and matters related to "the DOJ investigation" of FirstEnergy. This report provides subsequent treatment of functions addressed as part of a comprehensive management audit of JCP&L and an audit of the affiliated transactions among JCP&L, FirstEnergy, and its affiliates.

We completed audit field work on the topics summarized in this report largely by March 31, 2022 but continued to incorporate some subsequently provided information including responses to audit data requests received through mid-June 2022. Management's comments on a draft of this report, received in October 2022, indicated changes it made (after the drafting of this report) in how it managed and staffed the some of the functions this report addressed. These changes fell outside our audit period and data collection efforts. This report acknowledges management's statements regarding a number of them, but we have not "audited" these changes nor did we make conclusions or recommendations that rely on them. Key changes at the very highest levels of FirstEnergy executive management occurred after the drafting of this report, including the departure of the company's Chief Executive Officer. We learned of this change though public sources, and were not tasked with exploring the reasons for this change or its intended consequences. This report also identifies continued uncertainties regarding both internal and external investigations of FirstEnergy known at the time of this report's drafting, as well as potentially newer ones. We note that the full scale, scope, and ramifications of these investigations continued to remain unknown, as our Phase One report noted.

Our Phase Two report has reinforced the observations from our accompanying Phase One report that the nature of the uncertainties surrounding the known investigations, the emergence of potential new ones, and management's refusal to provide information we requested to assess and evaluate them leave open key questions this audit sought to answer. We release this report in a situation we find unique in our 35 years of experience, which includes the conduct of over 400 utility management and operations examinations of many types. Regular audits of this type comprise a key mechanism for New Jersey stakeholders to evaluate the service provided to New Jersey customers and the costs those customers pay through utility rates.

As we observed in our Phase One Final Report, we appreciate the opportunity to be of service for the BPU, we thank the BPU Staff for its strong support and understanding, and we appreciate the efforts of the JCP&L-assigned personnel for their attempts to assist in overcoming the problems that FirstEnergy has caused for the completion of our work.

B. Structure of This Report

This report combines the chapters that describe the findings, conclusions, and recommendations that we have reached in the "Management Audit" and "Audit of Affiliated Transactions" scope comprising Phase Two of our engagement. This report's structure employs the following outline:

- Chapter I: *Introduction*
- Organization, Executive Management, and Governance
  - Chapter II: *Organization and Executive Management*
  - Chapter III: *Governance*
- Finance, Cash Management, Planning, and Budgeting
  - Chapter IV: *Finance and Cash Management*
  - Chapter V: *Planning and Budgeting*
- Staffing and Compensation
  - Chapter VI: *Staffing*
  - Chapter VII: *Compensation and Benefits*
- Accounting, Controls, and Affiliate Relationships
  - Chapter VIII: *Accounting and Property Records*
  - Chapter IX: *Controls, SOX, Auditing, and Listing Requirements*
  - Chapter X: *Affiliate Relationships and Cost Allocation*
  - Chapter XI: *Cost Deferrals*
  - Chapter XII: *EDECA*
- Chapter XIII: *Human Resources Organization*
- Support Services
  - Chapter XIV: *Corporate Services*
  - Chapter XV: *Information Technology*
  - Chapter XVI: *Insurance and Risk Management*
  - Chapter XVII: *Legal Services*
  - Chapter XVIII: *Physical Security*
  - Chapter XIX: *Records and Information Management*
  - Chapter XX: *Supply Chain*
  - Chapter XXI: *Surface and Air Fleet Management*
  - Chapter XXII: *Power Supply and Market Conditions*
- Chapter XXIII: *MGP Remediation*
- Chapter XXIV: *Non-Rate-Related Revenues*
- Chapter XXV: *Recommendations Made in Previous Examinations*.

Chapter II: Organization and Executive Management Table of Contents

Chapter II: Organization and Executive Management

A. Background

We examined the overall corporate structure in which JCP&L operates and the focus that structure provides for ensuring safe, continuous, reliable, and cost-effective service for New Jersey customers, in accord with requirements and stakeholder expectations. We examined the overall division of responsibilities among those performed at and within JCP&L, on the one hand, and those performed at affiliates, primarily FirstEnergy Service Company (FirstEnergy SC), on the other hand. Our examination addressed the degree to which the structure and division support the management and operation of JCP&L in accord with its individual public service responsibilities. Operating ten distinct electric distribution companies presents significant challenges for FirstEnergy in ensuring proper attention to and resources for each, recognizing their distinct circumstances, needs, regulatory structures, and addressing the many other factors their operating environments entail.

Other chapters of this Phase Two and the accompanying Phase One report address these issues in the context of particular functions (*e.g.*, operations support, human resources, information technology) or activities (*e.g.*, planning, budgeting, compensation and benefits). As those chapters reflect, the overall approach to deciding which services and activities to centralize has proven sound. Service and activity scope, size, and nature support providing JCP&L with greater effectiveness and efficiency than it could achieve by serving the needs involved alone. The examinations in chapters addressing those specific functions and activities did disclose opportunities for improvements and in some cases redistribution of responsibility in the direction of greater JCP&L engagement.

The broader examination here focuses more on how top level organizational and executive management ensure that they give due attention and resources to the needs of JCP&L as they manage FirstEnergy's business operations in a way that reflects overall coherence and balance. An important focus of this review was to verify that executive and senior management operates under a structure and in ways that promote anticipation and timely response to utility issues, considering JCP&L's own utility and customer interests. Making sure that FirstEnergy leaves an appropriate scope of responsibility accompanied by accountability within JCP&L formed a central part of this verification process.

The structure, composition, and focus of the executive structure and its members need not only to consider overall corporate needs, but also uniquely to identify and respond to the specific needs of all subsidiaries, including JCP&L. Moreover, at FirstEnergy the framework these three elements create has had to meet those needs in the face of an unusually unsettling bankruptcy, elimination of a major business segment, recovery from severe financial stresses at the parent level, and in the face of great executive dislocation occasioned by actions that led to the Deferred Prosecution agreement with federal criminal authorities.

Whether in these disruptive circumstances or in more normal ones, the important public service responsibilities and monopoly franchises of enterprises like JCP&L make recognizing and responding to their circumstances, needs, obligations, and public expectations interests a critical element of success. This proposition has equal validity whether considering shareowner or customer and broader public interests. We conducted our examination with full regard for the importance of sustaining interest in providing capital to enterprises like FirstEnergy and JCP&L. The framework under which FirstEnergy structures its organization and executive resources should respond appropriately to the service quality, reliability, safety, continuity, and price requirements and expectations legitimately imposed on a family of enterprises devoted to the provision of utility service. Doing so not only remains consistent with shareowner interests, but is necessary to sustain them over time.

Standards we applied in undertaking this examination included:

- How overall executive structure, division of responsibilities, and executive team membership reflect the primacy of utility operations, respond to the unique public service responsibilities of JCP&L, and keep JCP&L sufficiently visible and served in planning, providing, and measuring the performance of financial, human, and other resources.
- How the same quality, level, and independence of senior executive management oversight in serving JCP&L needs compare to what one would expect in a stand-alone utility (recognizing that means for delivering them will differ).
- Senior executive leadership understanding and addressing of the potential for tension among a large group of in-house business entities with competing needs and of means for addressing them without compromise to public service responsibilities.
- Senior leadership performance in anticipating and responding to strategic issues.
- Senior leadership support for a culture of compliance and ethics and creation and maintenance of specific and comprehensive guidance, requirements, and accountability and consequences.
- Consistency of scope, functions, authority, responsibility, and accountability of internal JCP&L personnel with electric distribution company operations needs.
- How the executive framework and composition provide means for surfacing utility planning, resource commitment, or performance concerns, as for timely and effective methods to resolve them consistently with public service requirements and expectations.
- Existence of any present or looming conflicts in plans, goals, resource commitments, or performance capabilities should secure timely and appropriate resolution.
- How effectively management of the transition of FirstEnergy's entities engaged in commercial power and energy businesses through bankruptcy and eventual disposition avoided negative impact on JCP&L and its customers.
- Methods for ensuring that decisions about affiliate use have reflected what would best serve the interests of JCP&L and its utility customers.
- Avoidance of relationships with affiliates that constrain the ability to make JCP&L-affecting decisions that best serve its and its customers' interests.
- Development of JCP&L goals and objectives from processes that reflect values independent of affiliate interests and strictly focused on optimizing cost and service quality for customers.
- Scope, breadth, depth, and use of tangible, objective, and (where possible) quantified metrics or KPIs (Key Performance Indicators) that provide a clear and robust depiction of performance in meeting goals and objectives.

- Quality and regularity of dialogue between senior leadership of JCP&L and FirstEnergy to ensure effective resource allocation and emphasis on correcting gaps in performance.

While this chapter addresses organization and executive management generally, the scope of our engagement references organization structure, functions, processes, procedures, and workings of groups performing specific JCP&L and affiliate groups and functions contributing to the provision of service in New Jersey. We address those groups and functions in the following noted chapters of our report:

- Corporate governance in the *Governance* Chapter of this Phase Two report
- Strategic planning in the *Planning and Budgeting* Chapter of this Phase Two report
- Finance in Chapter Twelve, *Financial Risks and Consequences of Parent and Affiliate Operations* of the accompanying Phase One report and in the *Finance and Cash Management* Chapter of this Phase Two report
- Accounting and Property Records in the *Accounting and Property Records* Chapter of this Phase Two report
- Distribution and operations management in Chapters Two through Nine of the accompanying Phase One report
- Human resources in the *Human Resources Organization*, *Staffing*, and *Compensation and Benefits* Chapters of this Phase Two Report
- Customer Service in Chapter Ten, *Customer Service* of the accompanying Phase One report
- External Relations in Chapter Twelve and Thirteen of the accompanying Phase One report
- Cyber Security in Chapter Nine, *Cyber Security and System Vulnerability* of the accompanying Phase One report
- Support Services in multiple Chapters of this Phase Two Report:
    - *Records and Information Management*
    - *Corporate Services*
    - *Surface and Air Fleet Management*
    - *Insurance and Risk Management*
    - *Information Technology*
    - *Physical Security*
    - *Legal Services*
    - *Supply Chain*

Designing and managing the transactions and controls that apply to affiliate relationships comprise important elements in ensuring effective and arms'-length operation of an organization that, like FirstEnergy, depends heavily on common services. This chapter addresses the overall structure that produces those relationships, and the *Affiliate Relationships and Cost Allocation* Chapter of this Phase Two report addresses policies, procedures, methods, and activities defining the contractual and internal procedural foundations (*e.g.*, the cost allocation manual) that guide the execution of those affiliate relationships and the transactions they produce. Establishing effective controls over affiliate relationships has similar importance. The *Governance* Chapter noted above and the *Controls, Sox, Auditing, and Listing Requirements* Chapter of this Phase Two report address controls, supplemented in the case of those applicable to affiliate relationships by the *Affiliate Relationships and Cost Allocation* Chapter of this Phase Two report.

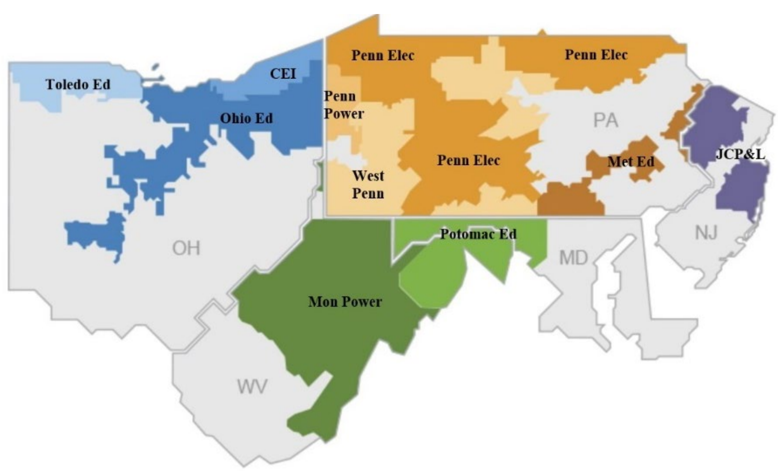
That chapter addressing affiliate relationships describes policies and procedures designed to ensure adherence to legal, regulatory, and contractual requirements. It addresses the degree to which such factors contribute to "arms'-length" dealing that remains free of cross subsidy and, where required, competitive with alternate (market-supplied) alternatives. The *Staffing* Chapter of this Phase Two report also addresses efforts to compare internally-provided services with those available from market sources. The *Power Supply and Market Conditions* Chapter of this Phase Two report addresses market sources of power and energy available to and employed by JCP&L, another element of our work scope.

In addition, some of the more specific scope elements of our engagement covered in those chapters include, for example:

- Conduct of procurement activities at arm's length and in compliance with affiliate-relationship standards (see the *Supply Chain* chapter)
- Whether affiliate contracts and relationships promote the best interests of and prevent harm to JCP&L and its customers (see the *Affiliate Relationships and Cost Allocation* chapter)
- Responsiveness of planning and resource allocation decisions to JCP&L transmission and distribution system needs (see the *Affiliate Relationships and Cost Allocation* chapter)
- Methods and processes for approvals of JCP&L reliability and supplemental transmission projects (see the *Affiliate Relationships and Cost Allocation* chapter)
- Adequacy of internal controls to protect against improper transactions (see the *Controls, Sox, Auditing, and Listing Requirements* chapter)
- JCP&L participation in BGS activities (see the *Power Supply and Market Conditions* chapter)
- Consistency between personnel and other resource-allocation policies, practices, and actions and full, effective meeting of utility service obligations (see the *Staffing and Compensation* chapter)
- Consideration of JCP&L customer interests in its positions before FERC, with respect to capacity and energy markets, transmission cost allocation, and regarding the PJM Tariff (see the *Power Supply and Market Conditions* chapter).

B. Findings

1. FirstEnergy's Electric Operating Companies



A 1997 merger of Ohio Edison Company and Centerior Energy Corporation resulted in formation of FirstEnergy Corp. (FirstEnergy), combining four operating utilities serving a combined 2.2 million customers: Ohio Edison, Pennsylvania Power Company (a subsidiary of Ohio Edison Company), The Cleveland Electric Illuminating Company, and The Toledo Edison Company. A 2001 merger brought Morristown, New Jersey-based GPU, Inc. and its then 2.1 million customers into FirstEnergy. A 2011 merger with Pennsylvania-based Allegheny Energy, brought another 1.6 million customers in Pennsylvania, West Virginia, Maryland, and Virginia. FirstEnergy owned and operated a substantial generation fleet operating largely in restructured markets. Announcing an intention to exit that market in 2016, FirstEnergy completed that plan in February 2020. Today, FirstEnergy's 10 distribution companies serve some six million customers in the Midwest and Mid-Atlantic regions. Those companies and the state of their principal operations comprise:

- ***Jersey Central Power & Light Company*** (*JCP&L*): 1.15 million customers in *central* and northern New *Jersey*
- ***Ohio Edison Company*** (*Ohio Edison*): 1.06 million customers in central and northeast Ohio
- ***Cleveland Electric Illuminating Company*** (*CEI*): 756,000 customers in northeast *Ohio*
- ***West Penn Power Company*** (*West Penn*): 735,000 customers in western, south-central and northern Pennsylvania
- ***Pennsylvania Electric Company*** (*Penelec)*: 589,000 customers in Pennsylvania (and New York pending divestiture approval)
- ***Metropolitan Edison Company*** (*Met-Ed*): 583,000 customers in eastern Pennsylvania
- ***The Potomac Edison Company*** (*Potomac Edison*):432,000 customers in western Maryland and eastern West Virginia
- ***Monongahela Power Company*** (*Mon Power*): 396,000 customers in northern, central and southeastern *West Virginia*
- ***The Toledo Edison Company*** (*Toledo Edison*): 315,000 customers in northwest Ohio
- ***Pennsylvania Power Company*** (*Penn Power*): more than 160,000 customers in western Pennsylvania.

The Ohio and Pennsylvania companies form the largest FirstEnergy utility operating sectors, each comprising about a third in terms of total customer numbers. The Pennsylvania companies number four and Ohio three. New Jersey accounts for a smaller number of customers (about 20 percent), but concentrated in a single entity. JCP&L therefore comprises the largest single operating company, about 10 percent larger than the nearest (Ohio Edison) and nearly twice (1.8 times) the average size as measured by customer numbers. JCP&L also stands as the largest of the operating companies as measured by electricity demand and employee numbers as well, exhibiting about the same ratio when compared to average operating company size.

FirstEnergy operates a much larger number of operating electric utilities (10) when measured against other large holding companies, whose operating electric utilities include:

• *Exelon: 6*	• *National Grid: 6*	• *Duke Energy: 6*
• *Entergy: 5*	• *Avangrid: 4*	• *Southern Co.: 3*

The terms "FirstEnergy Corp." and "FE Corp." as used by management in providing information for the conduct of this engagement refer to the entity that legally owns the equity of:

- Electric distribution companies that provide retail electric service and transmission companies to portions of New Jersey, Ohio, Pennsylvania, West Virginia, Maryland, and New York
- Transmission companies operating some 24,000 miles of transmission lines in the Midwest and Mid-Atlantic regions.

The trademarked term "FirstEnergy" and "FE" refer collectively to FirstEnergy Corp. and its subsidiaries.

2. *Other FirstEnergy Entities*

FirstEnergy Corp. directly owns 21 enterprises, which include the nine utility operating companies and a tenth (Penn Power) owned by one of the nine (Ohio Edison). FirstEnergy SC, another principal direct holding of FirstEnergy Corp., provides a broad range of services to the operating companies and to the other business units and operations of FirstEnergy Corp. The parent also owns another entity engaged in significant electricity industry operations - - FirstEnergy Transmission, LLC. This subsidiary's six direct holdings have interests in transmission projects in development or operating in five states served by the utility operating companies. FirstEnergy Corp. reported more than $1.3 billion in revenues from its transmission subsidiaries for 2020.

The other FirstEnergy Corp. direct holdings include:

- Allegheny Energy Service Corporation, the legacy service company of Allegheny Energy (acquired by FirstEnergy Corp. in 2010), which continues to provide, through FirstEnergy SC, administrative support and services to other subsidiaries
- Allegheny Energy Supply Company, LLC, former owner of the 1,300MW Pleasants electricity generating facilities until transfer of FirstEnergy Corp. generation assets and operations in bankruptcy, now holder of a 67 MW interest in generating capacity of Ohio Valley Electric Corporation, formed to provide electricity service in the Ohio River Valley and a number of its own subsidiaries
- Allegheny Ventures, Inc., a subsidiary formed to pursue investment opportunities, with a number of its own subsidiaries
- FirstEnergy Ventures Corp., whose principal business takes the form of stock investments in unregulated businesses and ventures
- FELCH, Inc., the licensee on all FE companies' FCC radio licenses
- FirstEnergy Fiber Holdings Corp., organized to offer fiber capacity to telecommunications services providers
- FirstEnergy Properties, Inc., which holds non-utility land and coal rights, and rents office buildings to affiliates and third parties
- Green Valley Hydro, LLC., owner of four hydro generating stations located in Virginia
- Suvon, LLC, which does business as FirstEnergy Home and as FirstEnergy Advisors (see the *EDECA* Chapter of this Phase Two Report, which addresses compliance with the affiliate standards that enforce the New Jersey Electric Discount and Energy Competition Act requirements).

Another FirstEnergy entity, GPU Nuclear, Inc., held the Nuclear Regulatory Commission operating license for non-operational Three Mile Island Unit 2. The U.S. Nuclear Regulatory Commission Staff acknowledged a December 18, 2020 conforming amendment reflecting the Three Mile Island Nuclear Station, Unit No. 2 Possession Only License (No. DPR-73) from GPU Nuclear, Inc Metropolitan Edison Company, JCP&L, and FirstEnergy operating companies, Metropolitan Edison and Pennsylvania Electric Company to third party TMI-2 Solutions, LLC.

This unrelated third party now holds unit ownership, operating NRC licenses, and decommissioning and remediation trusts, and related liabilities.

Inquiries into specifics about ventures reported as FirstEnergy-owned showed most of them without either significant assets or revenues, as illustrated by the following table. Appendix One to this chapter summarizes the FirstEnergy entities that have at some point since 2013 had revenues of more than $1 million in any year since 2016. A similar number of other, no-revenue or nominal entities have existed at some time since 2013.

Other FirstEnergy Interests

Entity Name	Formed	Summary of Business Operations	2018 $		2019 $		2020 $		2021 $	
			Assets	Revenues	Total Assets	Revenues	Total Assets	Revenues	Total Assets	Revenues
FirstEnergy Properties, Inc.	1929	Holds land & coal right, leases offices to affiliates/others, holds econ dev. investments	53,627,966	2,049,067	51,656,244	2,842,616	54,461,771	2,706,048	53,118,611	3,441,682
FirstEnergy Ventures Corp.	1971	Owns stock investments in non-reg enterprises & ventures	(92,256,971)	(11)	(68,228,786)	(45)	(66,929,823)	183	(42,268,276)	(416)
Allegheny Ventures, Inc.	1994	Energy-related consulting, engineering and construction services.	37,346,246	0	35,389,628	0	35,006,561	0	33,810,315	0
Buchanan Energy Company of Virginia, LLC	2002	50% interest in (small methane-fired merchant generator (Buchanan) operating since 2002	21,902,699	0	22,052,861	0	22,062,273	0	22,100,804	0
AE Supply Renaissance Southwest, LLC	2006	Facilitate swap giving MonPower 100% Ft. Martin gen. ownership (no active business)	10,331,911	0	10,316,908	0	10,326,110	0	10,334,529	0
Bay Shore Power Company	1998	Petroleum coke disposal facility (assets sold July 2018).	14,234,446	0	9,150,081	0	9,186,860	0	7,629,256	0
FirstEnergy Fiber Holdings Corp.	1996	Organized to offer fiber capacity to telecommunications providers	1,607,555	0	1,643,137	0	1,658,989	0	1,667,101	0
APS Constellation, L.L.C.	1995	Energy conservation services (sold December 2021)	0	0	0	0	0	0	0	0
Global Mining Holding Company, LLC	2011	Owns mine, land, rail spur, & power line associated with a coal minel markets its coal	0	0	0	0	0	0	0	0
Mon Synfuel, LLC	2000	Joint venture formerly providing fuel treatment for Harrison Station (2.4% interest)	0	0	0	0	0	0	0	0
NYC Energy LLC	1998	Formed to develop 79MW Brooklyn Navy Yard gas-fired generator	0	0	0	0	0	0	0	0
Utility Associates, Inc.	2000	Develops & implements utility industry field data collection solutions	0	0	0	0	0	0	0	0
Warrenton River Terminal, Ltd.	1996	Coal and bulk material, Ohio River transloading, blending, storage facility (sold Dece. 2018)	3,448,150	2,476,424	2,402,340	(60)	1,802,340	0	1,201,029	0

3. *Bankruptcy of the FirstEnergy Commercial Power and Energy Businesses*

An August 26, 2018 settlement agreement between debtors and creditors, filed with the United States Bankruptcy Court for the Northern District of Ohio in Case No. 18-50757, produced resolution of a material aspect of the reorganization of the FirstEnergy entities in bankruptcy. It established "the cornerstone on which the Debtors and their stakeholders can build a reorganization plan and eventually exit from chapter 11." The agreement resolved potential claims of creditors of the bankrupt FirstEnergy entities against other FirstEnergy entities. It established obligations and covenants that the creditors accepted in exchange for releases of those potential claims, disentangling the remaining FirstEnergy entities from important aspects of the affiliates in bankruptcy. Benefits the creditors received in exchange for those releases included:

- Continued provision of shared services
- A credit of up to $112.5 million in costs for such services incurred following the bankruptcy petition (FirstEnergy Corp. made additional payments of $978 million upon emergence from bankruptcy)
- $225 million in cash
- $628 million in new unsecured notes issued by FirstEnergy Corp.
- The value of the Pleasants generating station (estimated at approximately $70 million), obtained through transferring ownership or through the proceeds of a plant sale
- Payment of up to $18 million in costs of a then-upcoming Pleasants maintenance outage
- Payment of certain employee and retiree obligations otherwise payable by the bankruptcy debtors
- Continuing performance by FirstEnergy's non-debtor entities under the tax allocation agreement
- Purchase of at least $66 million of the debtor companies' 2018 tax year attributes, waiver of overpayments to those debtors for the 2017 tax year, and reversal of a 2018 prepayment for debtors' tax attributes (offsetting the debtors' balance in the Non-Utility Money Pool)

- Waiver of all prepetition claims and certain post-petition administrative expenses by the non-debtor affiliates.

A Separation Agreement addressed the transition to an eventual removal of the bankrupt entities from FirstEnergy, managing their continuing interactions (for example, continuing to provide common services) during the transition to eventual emergence from bankruptcy. A Business Separation Committee comprised of equal numbers of FirstEnergy and creditor representatives had responsibility for administering agreement provisions.

Section 2.5 of the Settlement Agreement called for the entry of an amendment to the Service Agreement under which the bankruptcy debtors had continued to receive services in common with other FirstEnergy entities. A September 27, 2018 Amended and Restated Service Agreement met this requirement, setting forth a process for the entities in bankruptcy to choose which administrative, management, and other services to purchase at cost going forward.

The Amended and Restated Shared Service Agreement detailed services, pricing, and changes to those services. It generally maintained the pricing basis for continuing services (cost centers and allocations) that had applied, using the cost allocation manual as a reference. The agreement listed the services available for choice by function, including for each a description of services available, the basis for charging (allocating) their costs if selected, and a listing of the cost centers whose costs would go into the charging calculation. The types of functions and activities listed included:

• *Communications*	• *Facilities*	• *Laboratory*	• *Risk Management*
• *Controller*	• *FEU/FET Services*	• *Labor Relations*	• *Real Estate*
• *Corporate Strategy*	• *Flight Ops*	• *Legal*	• *Sales & Marketing*
• *Depreciation*	• *Fuel Procurement*	• *Mobile Maintenance*	• *Security*
• *Engineering/Technical*	• *Generation*	• *Rates & Regulatory*	• *Supply Chain*
• *Environmental*	• *Human Resources*	• *Records Management*	• *Tax*
• *Executive*	• *Internal Audit*	• *Recruiting*	• *Treasury*
• *External Affairs*	• *IT*	• *Outage Support*	• *Unit Dispatch*

The service recipients could employ “step-down notices” to cause the cessation of particular services through the June 30, 2020 term of the agreement. These notices provided a controlled basis for closing cost centers or adding or changing them. None were added or changed, except for the elimination of those for which no remaining FirstEnergy user existed upon service cessation by the entities in bankruptcy. Six such notices came through the term of the agreement, the last on September 30, 2019. Each provided a listing of the services at issue.

We reviewed the list of several hundred activities having defined allocation methods. Each showed a date of service cessation (the latest being July 1, 2020), the allocation method before and after cessation, and the change upon cessation of JCP&L’s percentage share for each activity. The methods either remained the same or ended in cases where no remaining FirstEnergy entity user remained after cessation.

The next table summarizes charges for the period (April 2018 through June 2020) during which FirstEnergy continued service. The agreement provided a base credit of $112.5 million against service costs and excluded charges related to certain events and circumstances - - primarily costs to execute a VERP (voluntary early retirement program). FirstEnergy Corp. also made additional payments of $978 million upon emergence of the affected entities from bankruptcy. FirstEnergy undertook this program to accommodate departures of its employees through a service-organization restructuring under an initiative (termed FE Tomorrow) to support streamlining and realignment of service functions in anticipation of the departure of the entities engaged in commercial power and energy businesses.

No charges came to JCP&L for the base credit or other exclusions. Payment delays by the service recipients also did not produce costs for JCP&L. The monthly intercompany settlement process and money pool structure did not allow for interest or other money cost adders associated with late payments by the bankruptcy debtors before or after their transfer to a third party. Services continued through June 2020 following the emergence of Energy Harbor, the creditor-formed entity that emerged from bankruptcy on February 27, 2020.

Costs for FE Services to Bankruptcy Debtors

2018		**2019**		**2020**	
Charged	**Paid**	**Charged**	**Paid**	**Charged**	**Paid**
169,104,807	1,017,967	97,974,568	99,588,760	25,251,358	43,338,340
Total		**Beginning Balance**	**Base Credit**	**VERP & Other**	**Ending Balance**
Charged	**Paid**				
292,330,732	143,945,067	148,385,665	112,500,000	35,885,665	0

4. *Affiliate Roles at FirstEnergy*

Four agreements provide the overall structure for managing transactions among affiliates. Those four and the recently replaced December 2016 Credit Agreement comprise:

- The Shared Services agreement, described principally in the *Affiliate Relationships and Cost Allocation* chapter of this Phase Two Report, and addressing services and goods
- The Mutual Assistance Agreement, providing for services from one operating company to another experiencing system impacting events
- December 2016 Credit Agreement, described principally in Chapter Eleven, *Financial Risks and Consequences of Parent and Affiliate Operations* of the accompanying Phase One Report, among FirstEnergy Corp. and the operating companies as borrowers and Mizuho Bank, Ltd., as administrative agent, and a number of lenders
- October 2021 Credit Facilities, replacing the December 2016 Credit Agreement, described principally in Chapter Eleven, *Financial Risks and Consequences of Parent and Affiliate Operations*, consisting of six separate senior unsecured revolving credit facilities (for FE, FET, the utilities, and the transmission companies, engaging multiple lenders)
- Second Revised and Restated Utility Money Pool Agreement, (January 31, 2017) described principally in Chapter Eleven, *Financial Risks and Consequences of Parent and Affiliate Operations*.

The next table captures overall magnitudes of payments between JCP&L and affiliates. It lists all affiliates with whom net payments exceeded $500,000 in any year since 2012. It shows net payments (to and by JCP&L combined). The *Affiliate Relationships and Cost Alloca*tion Chapter of this Phase Two report addresses the underlying transactions in more detail. Net payments among the nine additional transactors with JCP&L produced no or nominal values in each year since 2012.

Net JCP&L/Affiliate Payments Since 2012

Affiliate	2012 $	2013 $	2014 $	2015 $	2016 $	2017 $	2018 $	2019 $	2020 $	2021 $
FE Corp.	(189,917,926)	(69,949,253)	(290,878)	34,539	249,183,777	244,859,572	149,339,229	(90,385,972)	(124,489)	(70,567,271)
FE Service Company	(265,646,834)	211,234,990	190,631,188	106,043,673	121,184,205	283,779,892	(112,910,161)	128,305,757	(214,565,247)	223,117,971
FE Solutions	(158,806)	772,430	3,459	729,891	(1,780)	13,605	1,246	1,344	(3,612)	-
FE Generation	(12,360,019)	(6,696,158)	(15,649,905)	(9,015,197)	(8,777,736)	(7,812,054)	(8,617,526)	(18,081,873)	(6,003,642)	-
FE Nuc Generation	19,037	15,085	17,219	17,930	18,485	17,863	17,807	17,807	(42,201)	-
Green Valley Hydro	19	25	6	-	-	-	-	-	-	-
Allegheny Energy Supply	12,294	16,392	14,958	16,701	9,186	6,851	6,687	4,103	(16,285)	-
FE Nuclear Oper Co	(174,920)	(176,483)	(110,116)	(162,455)	(97,782)	(67,176)	1,827	2,533	(5,721)	-
GPU Nuclear, Inc	(966,478)	(838,522)	(141,995)	(586,771)	(685,366)	(499,434)	216,555	(2,071,357)	(2,659,570)	5,314
American Transmission Systems	10,927	290,983	(1,322,749)	(1,950,411)	(2,024,869)	(2,084,412)	590,318	(1,123,349)	(1,594,661)	(5,449,803)
FE Transmission	-	-	-	-	-	(768,472)	5,500	-	-	(1,388,142)
Trans-Allegheny Interstate	(22,224)	30,952	2,130	(22,538)	6,684	3,249	1,006,404	294,207	(196,203)	(701,895)
Mid-Atlantic Interstate	-	-	-	-	-	(3,496,054)	(3,071,158)	(3,540,923)	(3,722,351)	(3,754,090)
FE Ventures	1,537	1,584	1,450	1,406	1,344	157	49	49	185	798
FE Properties	(221,332)	(127,743)	(111,476)	(108,420)	(108,432)	(114,411)	(118,395)	(222,648)	(333,246)	(557,451)
FE Fiber Holdings	(4,636)	(4,636)	(2,461)	-	-	-	-	-	-	-
Cleveland Electric Illuminating	(232,091)	(15,139)	95,403	(93,716)	(21,019)	2,745,550	(15,232)	1,811,875	(310,158)	(1,197,212)
JCP&L Transitn Fund	371,019	(156,640)	(663,022)	434,378	143,066	4,924,721	1,999	-	-	-
JCP&L Trans. Fund II	226,504	136,446	(237,223)	200,516	(277)	(471,320)	(1,707,028)	367,050	31,376	4,006,958
Metropolitan Edison	(5,041,290)	(5,038,265)	(4,955,995)	(7,848,136)	(4,684,988)	(1,387,454)	(1,099,917)	(1,058,951)	(1,051,159)	(1,016,060)
Monongahela Power	(495,481)	(632,989)	(424,623)	(465,548)	(490,760)	(578,312)	(731,139)	(657,698)	(719,073)	(746,210)
Ohio Edison	663,318	17,778	(100,980)	(2,005,378)	(176,073)	(151,411)	(149,883)	(170,902)	(59,489)	143,480
Pennsylvania Electric	478,658	740,340	365,405	584,832	1,866,963	208,949	275,393	13,966	(361,574)	(1,024,667)
Toledo Edison	8,533	(40,960)	7,572	(1,639,105)	11,070	51,076	9,275	10,503	20,471	47,784
West Penn Power	(482,541)	(593,281)	(569,083)	(815,369)	(762,476)	(905,601)	(808,030)	(805,515)	(925,066)	(868,792)
Total	**(473,932,733)**	**128,986,936**	**166,558,285**	**83,350,822**	**354,593,224**	**518,275,375**	**22,243,820**	**12,710,005**	**(232,641,713)**	**140,050,711**

The FirstEnergy Corp. line item in the preceding table consists primarily of dividends paid by JCP&L to FirstEnergy Corp. or equity contributions from FirstEnergy Corp to JCP&L, in the following amounts shown in the next table.

JCP&L/FE Corp. Dividends & Equity Contributions

Year	Dividends	Equity
2012	$190 million	
2013	$70 million	
2016		$250 million
2017		$245 million
2018		$ 150 million
2019	$90 million	
2021	$70 million	

The FirstEnergy SC line item's net value includes JCP&L cash receipts from customers and PJM reduced by invoices paid by FirstEnergy SC on behalf of JCP&L. Those invoices paid consist primarily of purchased power, payroll, tree trimming, insurance, taxes, storm costs, and cost allocations from FirstEnergy SC (inter-company billing and cost settlements). The net payments to FE Generation relate primarily to Yards Creek. Transmission charges under the power pooling agreement with JCP&L drove net payments to Mid-Atlantic Interstate Transmission. They began in 2017; MetEd served as the counterparty earlier. This agreement drove payments to MetEd in that earlier period. MetEd also charged facilities rent for the Pottsville Pike and the Bethel Warehouse.

5. *Executive Level Committees*

FirstEnergy has employed an Executive Council since before 2017 to provide for twice monthly meetings (with weekly updates more recently) of key senior executives. The council sessions operate as executive staff meetings that permit discussion of emergent issues and strategic priorities. In addition, twice yearly meetings of what FirstEnergy terms Leadership Council/Expanded Staff offer updates on company programs, initiatives and developments.

FirstEnergy has also operated three formal executive level committees since before 2017. A ***Disclosure Committee*** evaluates controls and procedures involving disclosure of operational and financial information to securityholders and the investment community, considers timeliness and accuracy of such information, verifies that processes and procedures ensure them, and ensures compliance with financial statement and related disclosure requirements. It meets quarterly in connection with preparation of Securities and Exchange Commission filings and otherwise as needed. A Risk Policy Committee, recently renamed the ***Enterprise Risk Management (ERM) Committee****,* meets monthly. The ERM Committee monitors the FirstEnergy enterprise-level risk function, oversees Chief Risk Officer ERM program activities, facilitates risk reporting to the board of directors, and assists the board's Audit Committee in overseeing the ERM program and Corporate Risk Management Policy. An ***Investment Committee***, meeting six or so times per year, monitors safekeeping of assets, establishes investment objectives and policies, manages outside resources, and assesses allocation of assets held in corporate trusts that FirstEnergy funds. The next table lists the required membership of the three committees, all of which operate under a charter setting forth purpose, membership, responsibilities and duties, and meetings.

FE Executive-Level Committee Membership

Committee	Disclosure	Enterprise Risk	Investment
Chair	Chief Accounting Officer	Chief Risk Officer	*at least four members selected by the CFO*
Members	Corporate Secretary	Chief Legal Officer	
	General Counsel	Senior VP, Operations	
	Chief Business Development Executive	Chief Financial Officer	
	Chief Communications Executive	Chief, Ethics & Compliance	
	Chief Internal Audit Executive	Chief Internal Audit Executive	
	Chief Investor Relations Executive	Chief Investor Relations Executive	
	Chief Risk Officer	Chief HR Officer	
	Competitie Segment Executive	SR VP, Customer Experience	
	Regulated Segment Executive	VP, Rates & Regulatory Affairs	
		Chief Inormation Officer	

Other regular committees operating without formal charters include:

- An Executive Safety Council comprised of executive FE Utilities Leadership and the director of FE Utilities Safety created in 2020 meets monthly to direct, set expectations, and drive accountability for safety programs and initiatives
- A JCP&L Safety Governance Committee comprised of JCP&L labor and management leaders has, since before 2017, planned direction and objectives, identified trends, directed corrective actions, and verified progress against goals and on initiatives, operating through monthly meetings
- A JCP&L Labor Management Committee comprised of JCP&L and IBEW Local 1289 leadership has addressed labor/management questions and concerns since before 2017

- JCP&L Financial Review meetings held bi-weekly and engaging JCP&L Operations, Operations Services, Operations Support, and Regional Operations Support leadership and members of FE Utilities Business Services have reviewed JCP&L budgets, expenditures, and the financial metrics since before 2017
- A JCP&L Reliability Working Group comprised of Operations Services and Operations Support leadership has since before 2017 reviewed key reliability performance indicators and metrics and reliability projects.

6. FirstEnergy Executives and Officers

The next table lists the positions that FirstEnergy describes as its senior officers.

Senior FirstEnergy Officers

Vice Chair & Executive Director	VP, Supply Chain	VP, Transformation
President & Chief Executive Officer	VP, Corporate Services	VP, State & Local Gov't Affairs & EconDev
Sr.VP & President FE Utilities	VP, Talent Management	President, PA Operations
Sr.VP, Chief Legal Officer	VP, Products & Marketing	President, WV Operations
Sr.VP, Chief Human Resources Officer	VP, Sales	President, Maryland Operations
Sr.VP, Chief Financial Officer & Strategy	VP, Corp. Affairs & Community Involv.	President, Ohio Operations
Sr.VP, Customer Experience	VP, Compliance & Regulated Services	President, JCP&L
VP, Controller & Chief Acctg. Officer	VP, Transmission	Regional President, Met-Ed
VP, Internal Auditing	VP, Utility Operations	Regional President, Penelec
VP, Chief Risk Officer	VP, External Affairs	Regional President, West Penn Power
VP, Chief Ethics & Compliance Officer	VP, Distribution Support	Regional President, Ohio Edison
VP, Investor Relations & Communications	VP, FE Fleet Operations	Regional President, Illuminating Company
VP & Treasurer	VP, Utility Services	Regional President, Toledo Edison
VP, Rates & Regulatory Affairs	VP, Construction & Design Services	VP, JCP&L External Affairs
VP, Strategy, Long Term Plng, & Bus. Perf.	VP & Chief Information Officer	VP, JCP&L Operations

7. Top-Level Performance Reporting

We asked for all key performance indicators (KPIs) regularly provided to boards of directors or senior executive management to the extent they measured performance at the JCP&L department and corporate levels for JCP&L and the other operating companies, and for FirstEnergy SC, or FirstEnergy corporate departments and organizations regularly serving JCP&L. The response provided a list of the measures used to calculate annual incentive compensation under the FirstEnergy Short-Term Incentive Program, noting that employees receive an annual announcement and quarterly updates on performance against the measures included. The same set of measures applied to each operating company, with unique values for certain of them (*e.g.*, SAIDI, regulated generation forced outage rates, percent of diverse hires). Each measure included minimum (Threshold), nominal (Target) and aggressive (Stretch) values for each KPI. The 2020 KPIs consisted of the following measures, all of which, except for the first, applied common values to the operating companies:

- SAIDI: average total duration of the year's outage minutes for each customer served, with adjustment for major storms (unique values applied to each operating company, including JCP&L)
- Systemwide Life Changing Events: number of system-wide life-threatening events requiring immediate rescue action or that produce permanent change to or disablement of normal life activity

- Operating company DART rate: Work-related injuries or illnesses resulting in one or more days of lost time, transfer or work restriction
- Operating company CMVAR: Chargeable motor vehicle accidents in the period per million miles driven
- Operating Earnings (non-GAAP)
- Systemwide O&M
- System-wide Distribution SAIDI
- Transmission Outage Frequency (TOF)
- Troubles resolved on first call
- Environmental excursions and notices of violations
- Regulated Generation Equivalent Forced Outage Rate
- Number of diverse succession plan candidates
- Percentage of diverse professional hires
- Improvement on diversity and inclusion employee survey.

A similar set of KPIs with the same threshold, target, and stretch values applied in 2020 for applying the Short-Term Incentive Program to FirstEnergy's shared services and FE Utilities support groups, with the following changes from those applicable to the operating companies:

- DART measured system-wide
- No operating company SAIDI measure
- No vehicle accident metric (operating company CMVAR).

FirstEnergy SC leadership receives two regular monthly reports addressing operating company financial and operational results. A Monthly Financial Results presentation from FE Utilities' Finance Organization provides seven slides, the first two of which separately summarize financial results for the operating utilities on a consolidated basis and for the transmission business. A separate slide for each of the two businesses compares budgeted versus wires revenues, regulated generation margins, overall expenses, FirstEnergy SC billings, financing and post-retirement costs, net income, and earnings per share. These two sheets also quantify the principal drivers of pre-tax earnings. The last sheet provides a projection versus budget at the overall FE Utilities level. The remaining four charts provide by state monthly versus budgeted O&M costs, capital costs, deferred and non-deferred storm costs, and headcount. Brief discussions of the drivers of variances address them at the combined utility level.

The second of the two monthly reports addresses operating utility results separately. A 19-page ELT Operational Results slide deck we reviewed provides:

- A list and details of life changing events by cause and by entity (*e.g.*, Operating Company, Regulated Generation, Warehouse, FE Utilities Support)
- DART Rate by entity with a description of incidents
- Chargeable Motor Vehicle Accident Rate by entity with a description of incidents
- SAIDI performance against target by operating company year to date, showing operating companies failing to meet target and providing each operating company's five-year average blue sky SAIDI and trends over that period

- Notes on variances from target at the combined operating company level
- Forecasted year-end SAIDI by operating company based on application of a risk model
- Annual SAIDI goals (KPIs) with expected probability of attaining Threshold, Target, and Stretch values
- Outages on transmission facilities ≥100kV by operating company compared to target, including system-wide frequency for five years, provides current year-to date results and a forecast for the remainder of the year, and a system-wide comparison of assigned outage cost codes for the current and prior year
- High-priority repairs and inoperable equipment overdue on transmission equipment by operating company
- Actual versus benchmark inventory balances and turnover ratios measured system-wide
- Customer service comparisons to budget (system-wide) for O&M, uncollectible, >30-day arrears, average speed of answer, justified complaints, and first-call resolution, with notes on variances
- Regulated Generation performance against targets on forced outages, availability, and environmental reportable incidents and notices of violations
- Capital and non-deferred O&M costs against target by operating company
- Comparison of planned and unplanned overtime to budget by operating company.

Reports regularly provided to parent executives specifically addressing FirstEnergy SC department plans, resources, results, and operations have been limited to monthly reports of financial performance on a budgeted, actual to-date, and forecasted basis. These reports breakdown the costs of major departments (*e.g.*, Finance) into major groups (*e.g.*, Controller, Treasury, etc.). The data separates total amounts into labor and benefits, other-than-labor, and other revenue and income categories. The monthly reports provide for the full function and its constituent groups the month's actual costs and their variance from budgeted amounts, with a brief note addressing variance sources. The report also shows year to date actuals and variance from budgeted amounts. The December versions of the reports provide a 12-month forecast that adds estimates for the next four months. The reports include actual costs for the past eight months plus a forecast for the next four months.

A 2016 Financial and Operational Review of JCP&L's Distribution System recommended (Recommendation B.1.10-1):

> *Document assumptions related to the metrics established as targets if assumptions related to the basis for target levels change from year to year. Comparisons of certain metrics from year to year, and the basis for the color coding of metric achievement is unclear in some cases.*

Management responded by explaining the basis for setting targets and the documentation of their measures but did not address the question of how yearly changes in underlying factors (whether external circumstances affecting performance or internal changes in adjusting performance expectations) affected each year's quantitative performance target ranges.

8. JCP&L Business Unit Goals

JCP&L and the other FirstEnergy operating utilities have operated since at least 2017 under a fairly consistent set of business unit goals subject to a series of targets. Operating company reports provide monthly tracking and year-to-date performance against a series of metrics, reviewed by the FE Utilities President. These reports show performance generally ranked against an established, "Target" having a quantified range, surrounded by a lower, "Threshold" range and a higher, "Stretch" range. Each month's report codes performance against each measure:

- *Green-- at or above Stretch value*
- *White - - within the Target range*
- *Yellow -- above Threshold but below Target*
- *Red - - beneath Threshold*

The reports show year-to date performance, performance direction (improving, declining, stable) across the year, and an overall coding to date (for the whole year in the report for December). The reports provide for each metric:

- An analysis of important monthly events or circumstances
- A "Gap Closure Plan" that:
  - Identifies specific tasks planned to address each gap identified
  - Assigns organizational responsibility for executing those task
  - Describes anticipated results from completing the tasks
  - Sets target dates for task completion
- Charts statistical information pertinent to measurements against Target.

The next table summarizes these reports for year-end 2019 and 2020 and May 2021, using the color coding noted above. The following symbols show the trend in performance as the year ended:

- *Stable performance ↔*
- *Improving Performance ↑*
- *Declining Performance ↓*

JCP&L Monthly Metrics

Category	Metric	2017	2018	2019	2020	2021
Safety	OSHA reportable incidents per 100 employees	↓	↓	↑	↓	↓
	DART - Days away, restricted, transferred incidents per 100 employees	↓	↓	↑	↓	↔
	Chargeable vehicle accidents/1mm miles driven	↑	↑	↑	↑	↑
Reliability Operations	SAIDI - System Average Interruption Duration Index	↓	↓	↓	↓	↓
	CAIDI - Customer Average Interruption Duration Index	↔	↔	↑	↔	↓
	SAIFI - System Average Interruption Frequency Index	↓	↓	↓	↓	↓
	Average number of outages on ≥100kV transmissioncircuits	↓	↓	↓	↓	↓
	Distribution circuits thermally inspected	↑	↑	↑	↑	↔
	Infrared Distribution Hotspot repairs past required completion date	↔	↔	↔	↔	↔
	Pending preventive maintenance orders for ≥100kV substations > 6 months old	↔	↔	↔	↔	↔
	Pending preventive maintenance orders for ≤100kV substations > 6 months old	↔	↔	↔	↔	↑
	Overdue Priority 1 and 2 repairs on ≥ 69kv transmission circuits	↔	↔	↔	↔	↔
	Overdue Inoperable Priority 1 and Priority 2transmission equipment repairs	↑	↑	↑	↑	↓
	Overdue Priority 3 repairs on ≥ 69kv transmission circuits	↔	↔	↔	↔	↑
Customer Satisfaction	Streetlight outage orders field assessed within 3 days	↔	↔	↑	↔	↑
	Qualifying orders for which Global Estimated Times to Restore were applied	↔	↔	↑	↑	↔
	Readings obtained from meters available for read	↔	↑	↑	↓	↑
	Number of meters with consecutively estimated planned readings per 100,000 customers	↓	↑	↓	↔	↑
	Number of errors per 100,000 reads obtained by readers with <1 year of service	↓	↓	↓	↑	↑
	Number of errors per 100,000 reads obtained by readers with ≥1 year of service	↓	↑	↓	↔	↑
Financial	Direct overtime dollars	↓	↓	↓	↓	↓
	Capital costs as a % of forecast	↔	↓	↓	↓	↓
	O&M costs as a percent of original budget	↓	↓	↓	↓	↔
	Lost vendor discounts	↓	n/a	n/a	n/a	
Workforce	Total Staffing					
	Absenteeism hours per full time equivalent employee	↔	↓	↓	↑	↑
Claims	Customer contacts achieved within 3 business days of damage claim notification	↔	↔	↑	↔	↔
	Claims open over target	↓	↓	↑	↔	↔
Work Management	Lines Operational Excellence Index	↔	n/a	↓	↔	
	Substations Operational Excellence Index	↔	n/a	↔	↔	

9. JCP&L Feedback on Services from Affiliates

Structured processes do not exist to provide feedback from JCP&L on the quality, costs, and other aspects of services that FirstEnergy SC provides using internal employees or contracted sources. Such feedback as does occur comes during normal interaction between utility and service company providers. After-Action Reports follow major events during which operating companies receive/provide mutual assistance, to identify successes and improvement opportunities. They do not, however, appear to require assessments of service quality or timeliness by affiliates, but again, exchanging such information can occur through normal interaction.

The FirstEnergy SC Business Services department periodically undertakes benchmarking to meet the requirements of N.J.A.C. 14:4-4.5, completing the most recent version in 2021. That benchmarking does not engage JCP&L personnel in providing formal input, nor does FirstEnergy SC otherwise engage JCP&L formally "in assessing affiliate service quality, timeliness, effectiveness, and economy, relying on day-to-day interactions to all utility personnel an opportunity for sharing information about such matters."

10. Ethics and Compliance

The FirstEnergy Office of Ethics and Compliance operates under a charter, approved by the FirstEnergy Corp. board's Audit Committee October 11, 2021 and available to all employees. The charter describes company ethics and compliance policies, processes, controls, and practices. The overall program that they comprise seeks to prevent, detect, and respond to non-compliance incidents and to promote a culture of ethical conduct and a commitment to compliance with law. The program relies on the commitment and participation of all employees, with the Office of Ethics and Compliance serving to coordinate program activities, under coordination and leadership of management. The program elements and requirements apply to all subsidiaries. The Chief Ethics and Compliance Officer has overall day-to-day responsibility for managing the Program and overseeing a comprehensive approach to promoting a culture of accountability, ethical conduct, and compliance at FirstEnergy.

Subject to full board oversight, the Audit Committee has direct responsibility for:

- Approving changes to the program, which requires review at least every two years
- Approving the Chief Ethics and Compliance Officers' performance evaluation, appointment, and replacement and reviewing this officer's compensation
- Meeting with this Officer regularly
- Supporting the full board in assuring ethical and lawful business conduct

The charter gives duties to other FirstEnergy executives as well:

- The CEO:
  - Setting an "appropriate tone from the top" to align with company values and obligations (working with the board and Audit Committee)
  - Requiring senior leadership team to demonstrate personally and expect their organizations to show commitment to ethics and compliance and to behaviors supporting these values
  - Providing ongoing support to senior leadership, including the Chief Ethics and Compliance Officer, in promoting a strong ethics and compliance culture.
- The Chief Legal Officer:
  - Managing the ethics and compliance officer day to day
  - Ensuring that the program meets legal and regulatory requirements for effectiveness
  - Periodically reviewing ethics and compliance officer performance and overall program effectiveness
  - Establishing, with the ethics and compliance officer, Program goals and objectives
  - Addressing and escalating, with the ethics and compliance officer, violations or criminal misconduct by company officers
  - Overseeing the Internal Audit function and ensuring its collaboration with the ethics and compliance officer on relevant program, compliance, and controls audits.
- The Chief Financial Officer:
  - Establishing and maintaining financial reporting, effective internal controls and ensuring sound financial statements and books and records
  - Overseeing internal accounting controls related to the program
  - Overseeing the Enterprise Risk Management function and ensuring its coordination with the ethics and compliance officer regarding compliance risks.

An Ethics and Compliance Committee has overall responsibility for program design, implementation, and effectiveness. Its membership consists of:

- Vice President, Chief Ethics and Compliance Officer (Chair)
- Vice Chair & Executive Director
- President & Chief Executive Officer
- Senior Vice President & President FirstEnergy Utilities
- Senior Vice President, Chief Legal Officer
- Senior Vice President, Chief Human Resources Officer
- Senior Vice President, Chief Financial Officer & Strategy
- Senior Vice President, Customer Experience
- Vice President, Controller & Chief Accounting Officer
- Vice President, Internal Auditing
- Vice President, Chief Risk Officer.

This committee, which must meet at least quarterly, exists to ensure:

- Coordination of ethics and compliance activities FirstEnergy-wide
- Consistent code enforcement, detection, prevention, and fostering a culture of compliance
- At least bi-annual program and culture effectiveness reviews
- Allocation of adequate resources to fulfill program objectives.
- Periodic ethics and compliance assessment, monitoring, and auditing to meet statutes, regulations, and guidelines
- Program revision as necessary to reduce risk of wrongdoing and improve effectiveness

Responsibilities assigned to the ethics and compliance officer include:

- At least annual reporting to the Audit Committee on program status and effectiveness
- Periodic reporting to the Ethics and Compliance Committee as well
- Leading the OEC's efforts to support the business units and other corporate functions by advising where necessary and bringing ethics- and compliance- related knowledge and insights, including but not limited to insights on patterns, trends or correlations being observed
- Providing support and advice, as necessary, to other functions that are responsible for managing compliance-related issues
- Reporting no less than annually to the Board on the Program's implementation, continuous improvement, and overall effectiveness
- Coordinating with leadership of other departments on program matters
- Ensuring sufficient Program implementation, resourcing, functioning, and effectiveness monitoring
- Managing investigation and resolution of "significant" violations
- Ensuring steps to respond to potentially significant misconduct or violations
- Ensuring periodic assessment and prioritization of significant compliance risks
- Sharing risk assessments and corrective actions to strengthen control environment

- Adapting policies, practices, and standards as necessary
- Recommending program changes to address identified weaknesses.

The Chief Ethics and Compliance Officer chairs Ethics and Compliance Committee meetings and must report at those meetings on key activities, pending and completed investigations, monitoring, external circumstances, and other matters as directed by the committee.

The Chief Ethics and Compliance Officer must inform the CEO and board of any material compliance violations, with an exception permitting notification only to the board of "violations that may involve the CEO."

FirstEnergy has plans to establish an Integrity Council with representation determined by business heads. Its representatives will provide a resource for identifying risks, for addressing compliance questions and issues in the business units, for providing an understanding to Ethics and Compliance of business operations and developments, and for providing a more general liaison function. The recently adopted program also provides for the naming of employees to serve as Ethics & Compliance Ambassadors, to serve as sources of ethics and compliance knowledge and assistance at locations where they perform their already existing responsibilities and to serve as liaisons with the Office of Ethics and Compliance. Management expects this program aspect to begin before the end 2022. Company comments on a draft of this report appear to have retitled the ambassador positions as Integrity Liaisons.

The program also calls for maintenance of a Code of Conduct (termed "The Power of Integrity") approved by the parent board and periodic communication addressing the Code and other program aspects. Code compliance is a condition of continuing company service for all employees. Board members and non-bargaining unit employees must file annual certifications acknowledging understanding of the Code, self-assessing their compliance, and reporting compliance exceptions by themselves or by others. Onboarding of new employees includes imparting knowledge of the Code and continuing certification of their ongoing compliance with it. The program charter also calls for establishment of a Supplier Code of Conduct. The program also requires the availability of internal telephone, email, and external toll-free telephone 24/7/365 access to report concerns and violations, allowing anonymity through the external telephone link. All contacts require reporting to Ethics & Compliance for logging, review, and response. The program charter prohibits retaliation for raising questions or for reporting concerns or violations.

A formal logging and investigation process applies to concerns raised or violations reported. The Chief Ethics and Compliance Officer has sole discretion to determine what reported matters to investigate and by whom. The program charter calls for at least annual assessments of compliance and ethics risks, and independent assessments by an outside expert firm or legal counsel at intervals no greater than two years.

FirstEnergy named a new Vice President and Chief Ethics and Compliance Officer effective in April of 2021. He functionally reports to the parent board's Audit Committee and administratively to FirstEnergy's Senior Vice President & Chief Legal Officer. He succeeded the chief ethics officer (titled as vice president, general counsel and chief ethics officer) separated from the company involuntarily in November 2020 following federal indictments that included circumstances underlying the Deferred Prosecution Agreement. This separated executive had worked for FirstEnergy since 2007, engaged for some time on state and federal regulatory affairs, and took the chief ethics officer position in 2018. FirstEnergy's chief legal officer (titled senior vice president and chief legal officer) who began in that role in 2018, became involuntarily separated as well at the same November 2020 date.

The Chief Ethics Officer and Compliance Officer, whose organization included 16 persons at the time of this report's preparation, reports to FirstEnergy's Chief Legal Officer, but the FirstEnergy Corp. Board's Audit Committee holds primary responsibility over key aspects of his relationship with the company. He presents work plans to the committee and reports to it at each of its meetings. The committee will have input into his performance reviews and must consent to his involuntary dismissal. Unlike the separated predecessor, who also had substantial legal duties as FirstEnergy's general counsel, the new incumbent's responsibilities include only ethics and compliance. Company comments on a draft of this report indicate staffing now of 21. The next listing of positions shows in parentheses the numbers the company reports as in place now.

The three (now reportedly four, with the addition of an administrative assistant) direct reports to the Chief Ethics & Compliance officer consist of:

- Manager, Ethics & Compliance Training & Communications with a staff of two Compliance Instructors for training and one Communications Representative
- Manager, Ethics & Compliance, and Assurance with a staff of three Ethics & Compliance Specialists
- Director, Ethics & Compliance, with a staff of seven (now reportedly nine, with the filling of two positions already approved but not filled at the time of preparation of this report)
    - Manager Ethics & Compliance responsible for investigations, with a staff of three (now reportedly five) Ethics & Compliance Specialists assigned to that role
    - Ethics & Compliance Specialist, responsible for reporting, analytics, and systems
    - A Senior Advisor and Ethics & Compliance Specialist, responsible for public engagement compliance (now reported as the Political Compliance Advisor).

The organization prior to the separations described above included only one direct report to the chief ethics and compliance officer. Circumstances, events, and actions requiring additional support came on a matrix basis, from HR, Finance, and other corporate support groups on an as-needed basis.

No designated ethics and compliance organization exists at any of the operating utilities, nor has the FirstEnergy-level group assigned formal roles to any personnel at JCP&L. However, the approach employed does give important roles to local personnel. The new Chief Ethics and Compliance Officer describes that approach as employing the "three lines of defense" model outlined by COSO (the Committee of Sponsoring Organizations of the Treadway Commission) for an integrated internal control framework. COSO's approach to internal control is authoritative and widely respected. Those three lines as relevant here include:

- The actions of the operating companies, facilitated by the programmatic, communications, and reinforcement provided by the central ethics and compliance organization

- Oversight of performance provided by the central organization's governance and assurance programs and activities
- The creation of local (*e.g.*, operating at the New Jersey level) "compliance ambassadors" (now reportedly termed integrity liaisons) in each line of business, including some operating in and from New Jersey.

In lieu of "embedding" ethics and compliance organization personnel within the operating companies, the approach seeks to make the now reportedly termed "integrity liaisons" respected for in their normal work and conduct, trusted sources for ethics and compliance questions and consultation as well. They can serve in both an outreach function for what those at the central organization want employees to know and feel comfortable about, as well as a source for incoming information important in addressing specific concerns, issues, or possible violations and about gaps in employee knowledge and comfort that may need addressing. Plans call for the now-termed Integrity Liaison program to start functioning in 2023 - - a year or somewhat more from when we learned of its planned implementation. Numbers, roles, selection, and training remain under development.

We learned of the retention of outside resources (prior to bringing in the then new and still incumbent Chief Ethics & Compliance organization) to address changes to that organization. We asked for a description of work objectives, scope, and status and for reports by outsiders retained to assist with ethics and compliance organization benchmarking organization, resources, scope, policies, procedures, programs, tools, systems, or resources. Management replied that FirstEnergy has engaged a number of firms to assist it with ethics and compliance organization matters. These firms include those employed by the board and by management in connection with the investigations initiated in response to the Ohio legislative and regulatory irregularities (described in the accompanying Phase One Report). Management cited the retention as well of two non-legal firms:

- One for its expertise in ethics and compliance policy and organization
- The other expert in developing ethics and compliance training materials.

Management responded to our request without providing any information from outside parties, noting only that no "*consultant engaged by the Office of Ethics and Compliance*" [emphasis added] has provided any responsive reports or recommendations. Our request did not limit itself to entities or persons engaged only by that office. The response did cite FirstEnergy's engagement of two law firms in connection with ethics and compliance organization matters. The Office of Ethics & Compliance engaged Deloitte & Touche, LLP and LRN Corporation, a developer of ethics and compliance training materials, but did not provide any reporting from that engagement, noting that no engagement by the Office had produced a report responsive to our request for:

- Consultant reports benchmarking Ethics and Compliance organization, resources, and scope
- Recommendations with respect to FirstEnergy E&C organization, resources, scope, policies, procedures, programs, tools, systems, or resources.

Management has cited other engagements (both by leading firms) as having implications for the responsibilities of the Office of Ethics and Compliance:

- A March 2021 organizational health index measuring results in "cultivating a health[y], high-performing organization."
- Early-to-mid 2021 surveying of employees (not provided due to a claim of legal privilege) designed to assist the FirstEnergy Corp's Sub-Committee for Compliance Oversight (formed in November 2020) in enhancing the FirstEnergy compliance environment and its ethics and integrity environment and culture.

The tools used to manage concerns and complaints and to ensure effective, anonymous reporting of concerns remain the same as before the management changes described above. However, changes made limit those who receive knowledge and information about concerns or issues reported or under examination. Moreover, as noted above, the new organization has dedicated significant staffing to investigations. Company comments on a draft of this report indicate current efforts to move to a new tool for managing concerns.

11. Organizational Health Index

The Organizational Health Index asked employees to respond to a detailed list of statements addressing topics that included:

- *Direction*
- *Work environment*
- *Accountability*
- *Coordination & Control*
- *Capabilities*
- *Motivation*
- *Innovation & Learning*
- *External orientation*
- *Leadership*

The survey presented employees with an extensive categorized list of statements asking them to:

- Select their level of agreement or disagreement about outcomes related to organizational health
- Describe the frequency with which practices contributing to organizational health occur.

The attachment to this chapter provides that list of statements. As that attachment shows, the responses provide a clearly relevant measure of management and operations performance effectiveness.

The survey went to JCP&L employees and to other FirstEnergy employees who directly serve JCP&L and for whose services JCP&L pays. FirstEnergy has refused access to many items of information on the grounds of legal privilege. The company uses to a degree we have not seen elsewhere attorney- versus management-performed engagements and inquiries, then asserting privilege to refuse to disclose the information. Management refused a direct request to provide the results of the indexing performed here but did not cite legal privilege. It stated that:

> *JCP&L is not in a position to produce further information or documentation regarding the OHI survey conducted by McKinsey because that information is uniquely within the possession of FirstEnergy Corp. and McKinsey.*

Management did provide a chart - - reproduced below - - summarizing results for JCP&L. The results show how "Operations JCP&L" results compared against the other organizations in the database of the outside firm providing the survey instrument. The value of "10" in the upper left box appears to indicate that 90 percent of those organizations exhibited a healthier organizational index value. The pervasive bottom-quartile results evidence a dim employee view of organizational health. The numbers shown in the category boxes and those shown for each line item indicate the percentages of employees who responded "often" or "almost always" to the statements shown in Appendix Two to this chapter. The extremely poor relative performance at JCP&L begs important questions about how other FirstEnergy corporate and support organizations and the other operating companies fared.

JCP&L Results
(chart is confidential)

[redacted]

12. Transparency

Chapter XII, *External Affairs - - "The DOJ Investigation* of the accompanying Phase One report explains disturbing failures of a broad range of senior FirstEnergy personnel with responsibility for JCP&L and other FirstEnergy business units to act in accord with these behaviors, in each of the five areas claimed as important by the company. That chapter also described major, continuing failures to exhibit openness needed to examine effectively how well actions since mid-2020 have succeeded in addressing the root causes of those failures. Our work in this second audit phase has disclosed more instances of this lack of openness, or what FirstEnergy has called "transparency." The FirstEnergy Corp. board Audit Committee commissioned a survey and analysis termed a "Culture Fitness Diagnostic" addressing both non-bargaining unit and bargaining unit personnel. We asked for information about it; management responded by stating that a mission apparently given to the Audit Committee and carried out by third-party (not a law firm) took place "at the direction of Board Counsel." For this reason, management declined to provide the requested information.

Management also failed to provide a requested organizational health survey. An outside consultant prepared in January 2021 an "Organizational Health Index" that sought employee responses to specific questions in categories relevant to addressing employee views of performance. Seventy-three percent of non-bargaining unit employees responded. The areas subject to inquiry included:

- *Direction*
- *Work environment*
- *Accountability*
- *Coordination & Control*
- *Capabilities*
- *Motivation*
- *Innovation & Learning*
- *External orientation*
- *Leadership*

While failing to provide the requested results, management did observe that one area of "improvement" disclosed was to:

Create an inclusive leadership culture built on unwavering commitment to our core values

13. Top-Level FirstEnergy Executive Costs

The next table summarizes the costs charged by the FirstEnergy President & CEO cost center - - showing the CEO as a FirstEnergy SC position. The payroll costs shown use target percentages (of base compensation) averaged among all participants in short- and long-term incentive programs (STIP and LTIP, as explained in the *Compensation and Benefits* chapter of this Phase Two report). Thus, this line shows only a portion of the compensation of the FirstEnergy CEO, whose STIP and LTIP targets well exceed that average.

FE CEO Cost Center History

Cost Source		Year						2017-2020 Change	
		2017	2018	2019	2020	2021 Q3	2021 Est.	$	%
Payroll, Overheads, Benefits		$1,715,172	$1,729,087	$1,764,896	$2,367,487	$1,847,415	$2,463,221	$652,315	38.0%
Charges t/f Others (FESC & non-FESC)		($397,199)	($641,069)	($712,773)	$88,934	$3,948,894	$5,265,193	$486,133	-122.4%
Dues, Fees, Licenses		$91	$170	$174	$334	$2,449	$3,265	$243	268.2%
General Business and Travel		$1,565,812	$1,381,283	$1,767,562	$1,018,054	$314,625	$419,500	($547,759)	-35.0%
Materials and Equipment		$751	$1,432	$2,814	$5,184	$2,592	$3,456	$4,433	590.3%
Other Non-Labor		$290,251	$318,117	$108,699	$227,085	$11,353	$15,137	($63,166)	-21.8%
Professional and Contractor		$25,488	$157,404	$181,974	$2,174,628	$12,924,130	$10,754,579	$2,149,140	8431.9%
Total		**$3,200,366**	**$2,946,424**	**$3,113,345**	**$5,881,705**	**$19,051,458**	**$18,924,350**	$2,681,339	83.8%
Change from Prior Year	*$*		**($253,942)**	**$166,922**	**$2,768,359**		**$13,042,645**		
	%		**-7.9%**	**5.7%**	**88.9%**		**221.7%**		
JCP&L Share	*$*	**$317,799**	**$306,415**	**$308,124**	**$773,776**	**$2,773,284**	**$3,697,712**	**$455,977**	**143.5%**
	%	**9.9%**	**10.4%**	**9.9%**	**13.2%**	**14.6%**	**19.5%**		**9.6%**
Change from Prior Year	*$*		**($11,384)**	**$1,709**	**$465,652**		**$2,923,936**		
	%		**-3.6%**	**0.6%**	**151.1%**		**377.9%**		

The cost tables used in this and the accompanying Phase Two report generally annualize 2021 costs based on actual costs incurred through the third quarter. Here, the large relative size of the *Professional and Contractor* category caused us to inquire into actual costs by source for the year. The 2021 Est. entry for this category adds actual fourth quarter costs to the third quarter entry. The next table details larger (greater than $100,000) sources of professional and contractor services costs for this cost center.

FE CEO Professional and Contractor Costs

Year	Services Initiator	Total EF Cost	JCP&L		Description
			%	$	
2020	FE Forward initiative	$400,000	13.2%	$52,800	Restructure, enhance services after power business exit
	Executive Search - Recruitment	$621,167	13.2%	$81,994	Recruiting of FE Executive Leadership
	Root Development Fees - D&I	$370,823	13.2%	$48,949	Diversity & Inclusion initiative to benefitall FE
	Executive Search - Recruitment	$533,060	13.2%	$70,364	Recruiting of FE Executive Leadership
	Executive Development	$188,522	13.2%	$24,885	FE Executive Training
	2020 Total	***$2,113,572***	***13.2%***	***$278,991***	
2021	FE Forward Initiative	$6,225,801	15.6%	$972,470	Restructure, enhance services after power business exit
	Executive Search - Recruitment	$173,892	15.6%	$27,162	Recruiting of FE Executive Leadership
	Executive Development	$225,890	15.6%	$35,284	FE Executive Training
	2021 Total	***$6,625,583***	***15.6%***	***$1,034,916***	

The large increases in professional and contractor costs drove the overall increase in this cost center. New executives resulting from departures and organizational changes in the aftermath of the criminal investigation by the Office of the U.S. Attorney for the Southern District of Ohio appear to have caused most of the executive and recruiting costs. Moreover, the FE Forward initiative appears in part a continuation of efforts to restructure services to reflect the elimination of the need to serve non-utility businesses exited earlier, but still requiring ongoing services for several years. FE Forward, however, did seek streamlining and service enhancement of direct benefit to the operating companies. Management used the standard allocators applicable to JCP&L to charge all the costs shown in the preceding table.

We tested other professional and contractor costs associated with top executives and the organizations responsible for legislative affairs for the years 2017 through 2021. We sought details for providers, in descending order, representing at least 75 percent of the costs in the years selected for the cost centers identified as for the FirstEnergy President and CEO, the FE Utilities President, Federal Affairs & Energy Policy, and State Affairs. In all, our sample produced total costs for the selected years and centers of $23,299,613. The next table summarizes the sampled costs. The table shows that, apart from consulting services related to FE Forward and Safety Training, JCP&L charges remained at nominal annual amounts. Moreover, the last two groups, responsible for legislative liaison and lobbying charged, with one exception, none of their costs to JCP&L. That exception came in the form of a payment of $175,000, all charged to JCP&L for consulting services provided in a year (2018) that included the provider's service as a member of the BPU.

Professional and Contractor Cost Sample Results

Year	Provider	Services	Total	JCP&L Share	
			$	%	$
FirstEnergy President & CEO ($12,426,246)					
2021	Provider 2	FE Forward	10,365,845	15.6%	1,617,072
2020	Provider 3	Exedcutive Recruitment	621,167	13.2%	81,994
	Provider 4	Exedcutive Recruitment	533,060	13.2%	70,364
	Provider 5	Diversity & Inclusion	370,823	13.2%	48,949
	Provider 6	Exedcutive Development	188,522	13.2%	24,885
2019	Provider 6	Exedcutive Development	104,459	9.9%	10,341
	Provider 7	Consulting Services	60,000	9.9%	5,940
2018	Provider 8	Stategic Consulting	157,370	9.7%	15,265
2017	Donee 1	Donation	25,000	10.3%	2,575
FEUtilities President ($3,625,689)					
2020	Provider 1	Safety Training	3,625,689	15.5%	561,982
Federal Governmental Affairs ($2,085,282)					
2018	Eight Total		1,144,188	0.0%	0
2017	Ten Total		938,095	0.0%	0
State Legislative Affairs ($5,165,396)					
2019	Five Total		1,201,009	0.0%	0
2018	Provider 9	JCP&L-Related Consulting	175,000	100.0%	175,000
2018	Ten Total		1,885,624	0.0%	0
2017	Nine Total		1,903,764	0.0%	0

The next table summarizes recent costs for the FE Utilities President cost center. They show a large increase in 2020 as well, but a drop in 2021 back to levels consistent with a stable trend from 2017 through 2019. That increase also came largely in the Professional and Contractor category.

FE Utilities President Cost History

Cost Source		Year						2017-2020 Change	
		2017	2018	2019	2020	2021 Q3	2021 Est.	$	%
Payroll, Overheads, Benefits		$1,790,746	$2,566,251	$2,442,639	$2,820,463	$1,929,959	$2,573,279	$1,029,718	57.5%
Charges t/f Others (FESC & non-FESC)		$402,453	$619,410	$713,566	($1,637)	$6,577	$8,769	($404,090)	-100.4%
Dues, Fees, Licenses		$65,328	$65,289	$66,520	$561	$0	$0	($64,767)	-99.1%
General Business and Travel		$348,597	$362,379	$516,507	$547,768	$483,324	$644,433	$199,171	57.1%
Materials and Equipment		$5,766	$13,922	$107,502	$333,382	$228	$304	$327,617	5682.3%
Other Other than Labor		$364,545	$429,993	$295,969	$275,619	$194,548	$259,397	($88,926)	-24.4%
Professional and Contractor		$626,388	$1,332,844	$349,283	$3,548,147	$1,170,331	$1,560,441	$2,921,759	466.4%
Total		**$3,603,821**	**$5,390,088**	**$4,491,987**	**$7,524,303**	**$3,784,966**	**$5,046,622**	$3,920,481	108.8%
Change from Prior Year	$		**$1,786,267**	**($898,102)**	**$3,032,316**		**($2,477,681)**		
	%		**49.6%**	**-16.7%**	**67.5%**		**-32.9%**		
JCP&L Share	$	**$523,981**	**$832,328**	**$743,835**	**$1,163,257**	**$591,212**	**$788,282**	**$639,276**	**122.0%**
	%	**14.5%**	**15.4%**	**16.6%**	**15.5%**	**15.6%**	**15.6%**		**1.1%**
Change from Prior Year	$		**$308,347**	**($88,493)**	**$419,422**		**($374,975)**		
	%		**58.8%**	**-10.6%**	**56.4%**		**-32.2%**		

Management has also used FE Generation & CNO and Generation Related Support Costs centers to capture costs of the central organizations incurred in supporting both commercial power and energy and operating company generation (*e.g.*, Yards Creek in the case of JCP&L). As the entities responsible for those commercial power and energy operations proceeded through bankruptcy proceedings initiated in March 2018 and for a short time following their emergence under ownership by third-party, creditor-organized Safe Harbor entities, FirstEnergy SC continued to support their operations through June 2020. The next table summarizes the costs of centers operating under these names.

Generation Support Cost History

Cost Source		Year					2018-2020 Change	
		2017	2018	2019	2020	2021 Q3	$	%
Payroll, Overheads, Benefits		$62,128,596	$72,120,195	$48,478,289	$21,071,263	$13,267,014	($51,048,933)	-82.2%
Charges t/f Others (FESC & non-FESC)		($392,391)	($552,814)	($2,087,951)	($1,371,697)	($543,275)	($818,883)	208.7%
Dues, Fees, Licenses		$110,607	$79,095	$111,429	$84,060	$98,022	$4,966	4.5%
General Business and Travel		$1,061,230	$1,101,310	$481,511	$247,877	$112,666	($853,432)	-80.4%
Materials and Equipment		$926,462	$1,748,776	$422,349	$307,524	$249,671	($1,441,253)	-155.6%
Lease & Rental Payments		$8,868	$18,199	$35,738	$93,163	$88,599	$74,964	845.4%
Other Non-Labor		$5,382	$281,172	$171,736	$123,074	$95,083	($158,098)	-2937.3%
Professional and Contractor		$1,053,623	$1,889,430	$1,343,936	$1,262,633	$837,310	($626,797)	-59.5%
Total		**$64,902,376**	**$76,685,362**	**$48,957,037**	**$21,817,896**	**$14,205,090**	**($54,867,466)**	**-84.5%**
Change from Prior Year	$		**$11,782,986**	**($27,728,325)**	**($27,139,141)**			
	%		**18.2%**	**-36.2%**	**-55.4%**			
JCP&L Share	$	**$279,171**	**$1,509,833**	**$2,770,776**	**$1,661,668**	**$211,770**	$151,834	**10.1%**
	%	**0.4%**	**2.0%**	**5.7%**	**7.6%**	**1.5%**		**-11.9%**
Change from Prior Year	$		**1,230,662**	**1,260,943**				
	%		**440.8%**	**83.5%**				

The increase shown in JCP&L costs between 2017 and 2018 resulted from change in responsibility for charging to JCP&L Yards Creek related costs from another FirstEnergy entity to FirstEnergy SC, without a material change in their amount. Thus, there was no material net change in costs charged to JCP&L for Yards Creek in 2018. However, JCP&L experienced a real 2019 over 2018 increase of about $1.26 million due to direct charges for that year. The costs in 2020 returned to roughly historical levels. Those charges ended upon the 2021 sale of JCP&L's interest in Yards Creek. No charges from the FirstEnergy organizations who continue to support generation owned by the operating companies continued following the sale of Yards Creek. The 2021 Q3 entry in the preceding table thus capture all costs to JCP&L for 2021.

14. Lawsuits

We catalogued the list of suits brought to board or executive attention over recent years, to determine what, if any, executive or governance issues they raised. Management reported the following list of civil, criminal, and federal regulatory authority investigations and other proceedings opened, pending, or resolved since January 1, 2019 relating to securities litigation, shareowner claims, class actions, retaliation against employees or contractors and their personnel, fraud or misrepresentation, or executive or board malfeasance, misfeasance, or other failure to exercise duties through negligence or intent.

a. Federal Criminal Proceedings

On July 21, 2020, the same day that the U.S. Attorney's Office for the Southern District of Ohio unsealed a complaint against certain individuals associated with the Ohio legislature, (Docket No. 1:20-cr-00077 (S.D. Ohio)), FirstEnergy Corp. received subpoenas for records from the same federal office. FirstEnergy entered on July 21, 2021 a three-year Deferred Prosecution Agreement with that office (*United States v. FirstEnergy Corp.* No. 1:21-cr-00086 (S.D. Ohio)). *Chapter Twelve* of the accompanying Phase One report addresses this investigation and the Deferred Prosecution Agreement.

b. Related Federal Civil Proceedings

Two filings of two shareholder class actions came almost immediately after the July 2020 unsealing of the complaint filed by the U.S. Attorney's Office (*Owens v. FirstEnergy Corp., et al.*, Case No. 2:20-cv-03785 (S.D. Ohio) and *Frand v. FirstEnergy Corp., et al.*, Case No. 2:20-cv-04287 (S.D. Ohio), and have been consolidated. The consolidated complaint filed in February 2021 (*In re FirstEnergy Corp. Securities Litigation*, Case No. 2:20-cv-03785, ECF No. 72 (S.D. Ohio Feb. 26 2021) alleges company and officer misrepresentations about FirstEnergy's business and results of operations in violation of federal securities law. The complaint also alleges misrepresentations or omissions in connection with senior note offerings by the company, officers, and others. FirstEnergy considered a loss from the disposition of this case probable, but had not placed a reserve value on it.

A December 17, 2021 complaint docketed at *MFS Series Trust I, et al. v. FirstEnergy Corp., et al.*, Case No. 2:21-cv-05839 (S.D. Ohio) also alleges misrepresentations or omissions by FirstEnergy Corp., officers, and others in violation of federal securities law and seeking the same relief requested in the consolidated action described immediately above.

A series of shareholder derivative cases consolidated under *Employees Retirement System of the City of St. Louis v. Jones, et al.*, No. 2:20- cv-04813 (S.D. Ohio) alleges, on behalf of FirstEnergy Corp. breach of fiduciary duty, unjust enrichment, corporate waste, contribution and indemnification, and violation of the Securities Exchange Act by certain current and former officers and directors. The relief sought includes damages, equitable or injunctive relief, restitution, an accounting, and corporate governance reforms. This chapter addresses the executive composition actions incorporated in settlement terms, as approved by the United States District Court for the Southern District of Ohio on August 23, 2022. The *Governance* chapter of this Phase Two report addresses governance changes called for by those terms. The cases consolidated include *Bloom, et al. v. Anderson, et al.*, Case No. 2:20-cv-04534- ALM-KAJ (filed Sept. 1, 2020);

Stavely v. Anderson, et al., Case No. 2:20-CV- 04598-ALM-KAJ (filed Sept. 3, 2020); *Employees Retirement System of the City of St. Louis v. Jones, et al.*, Case No. 2:20-CV-04813-ALM-KAJ (filed Sept. 9, 2020); *Beck v. Anderson, et al.*, Case No. 2:20-CV-05020-ALM-KAJ (filed Sept. 24, 2020); *Electrical Workers Pension Fund, Local 103, I.B.E.W. v. Anderson, et al.*, Case No. 2:20-CV-05128-ALM-KAJ (filed Sept. 30, 2020); *Sarnelli v. Anderson, et al.*, Case No. 2:20-CV-05192-ALM-KAJ (filed Oct. 2, 2020); *Massachusetts Laborers Pension Fund v. Jones, et al.*, Case No. 2:20- CV-05237-ALM-KAJ (filed Oct. 5, 2020); *The City of Philadelphia Board of Pensions and Retirement v. Anderson, et al.*, Case No. 2:20-CV-05529-ALM- KAJ (filed Oct. 21, 2020); *Atherton v. Dowling, et al.*, Case No. 2:20-CV- 05529-ALM-CMV (filed Oct. 27, 2020); *Behar v. Anderson, et al.,* (Case No. 2:20-cv-05876) (filed Nov. 11, 2020).

The operative shareholder derivative complaint in a separate, August 7, 2020-filed derivative action captioned as *Miller v. Anderson, et al.*, Case No. 2:20-cv-01743-JRA (N.D. Ohio) also raises claims about the Ohio legislative matters and alleges proxy statement misstatements or omissions about business and controls relating to political contributions. It also seeks both monetary damages and governance reforms. It is subject to the global settlement terms applicable in the immediately preceding consolidated proceeding in Ohio's Southern District. The Northern District judge responsible for this case denied a motion to stay proceedings pending the Southern District Court's review of the settlement, leaving in place an order to complete paper discovery by January 17, 2022 and depositions (including those of former FirstEnergy officers) by April 30, 2022. The judge sought additional information about the identity of those responsible for the payments related to the Ohio legislative matters and made statements observing a lack of transparency surrounding the conduct alleged by the plaintiffs.

Three lawsuits, filed between July 27 and August 5, 2020 and all alleging civil Racketeer Influenced and Corrupt Organizations Act and related state law violations have been consolidated in proceedings before the Southern District of Ohio (*Smith v. FirstEnergy Corp., et. al.*, Case No. 2020-cv-3755 (S.D. Ohio); *Buldas v. FirstEnergy Corp., et al.*, Case No. 1:20-cv-00593 (S.D. Ohio); and *Hudock and Cameo Countertops, Inc. v. FirstEnergy Corp., et al.*, Case No. 2:20-cv-03954 (S.D. Ohio). With settlement discussions pending final approval from the Southern District of Ohio, FirstEnergy considers a loss from these proceedings probable, recognizing a pre-tax reserve of $37.5 million in aggregate for these consolidated proceedings and the *Emmons* lawsuit described under the *Related State Civil Proceedings* subsection below.

c. <u>Related U.S. SEC and FERC Matters</u>

The SEC's Division of Enforcement issued an August 10, 2020 order directing an investigation of possible securities laws violations by FirstEnergy Corp. The SEC has captioned this matter as *In the Matter of FirstEnergy Corp.*, C-08716. Subpoenas have been issued to the company and certain officers and the docket remains open. It appears to relate to matters that include those arising through the actions of the U.S. Attorney's Office for the Southern District of Ohio, which *Chapter Twelve: External Affairs - - The "DOJ Investigation"* of the accompanying Phase One report addresses and to which this accompanying Phase Two refers in a number of instances.

Staff of FERC Division of Investigations notified FirstEnergy on January 26, and February 22, 2021 of the conduct of an investigation (*In the Matter of FirstEnergy Corp.*) into lobbying and governmental affairs activities involving Ohio legislation addressed by the U.S. Attorney's Office for the Southern District of Ohio. The FERC division has directed the preservation and maintenance of related documents and information. The investigation remains ongoing.

The FERC Division of Audits and Accounting initiated a nonpublic audit of FirstEnergy Service Company in February 2019 (*Docket No. FA19-1-000*) including an evaluation of FirstEnergy compliance with the agency's accounting and reporting requirements. We address the final, February 4, 2022, FERC audit report for the January 1, 2015 through September 30, 2021 audit period in the *Affiliate Relationships and Cost Allocation* chapter of this Phase Two report. The final reports findings and recommendations addressed accounting of overhead costs assigned to CWIP, vegetation management costs, amortization of regulatory assets; lobbying costs, donations, costs lacking documentation; allowance for funds used during construction; service company billing procedures; and fuel.

d. Related State Civil Proceedings

Two Ohio state civil derivative actions have been consolidated under a matter captioned *Gendrich v. Anderson, et al.*, Case No. CV-2020-07-2107 before the Summit County Court of Common Pleas. The court entered an order dismissing this action, per the parties' joint motion, following the Southern District Court's approval of the settlement in the related federal matter.

A July 26, 2020 stockholder claim (docketed as *Katz v. FirstEnergy Corp.*, Case No. CV-2020-10-2973 (Ct. Comm. Pl., Summit Cty., Ohio) alleged improper denial of access to FirstEnergy documents related to the Ohio legislative matters. The court dismissed the complaint on March 17, 2021, also denying the request for an injunction directing production of the documents. Three other actions produced dismissal and a failure to require document production as well. (*Vanek v. FirstEnergy Corp.*, Case No. CV-2021-01-0152 (Ct. Comm. Pl., Summit Cty., Ohio), commenced January 14, 2021, *Pilch v. FirstEnergy Corp.*, Case No. CV-2021-01-0287 (Ct. Comm. Pl., Summit Cty., Ohio), commenced January 26, 2021, and *Hauser v. FirstEnergy Corp.*, Case No. CV 21 944833 (Ct. Comm. Pl., Cuyahoga Cty., Ohio), commenced March 5, 2021).

A customer filed an August 4, 2020 class action suit in an Ohio Common Pleas court (*Emmons v. FirstEnergy Corp. et al.*, Case No. CV 20 935557) (Common Pleas Court, Cuyahoga County, OH) Allegations in the proceeding include negligence, gross negligence, unjust enrichment, unfair or deceptive consumer acts, civil violation of the Ohio Corrupt Activity Act and civil conspiracy. Settlement final approval is pending before the United States District Court for the Southern District, as noted above in the discussion of federal civil proceedings above, with FirstEnergy considering a loss probable and establishing the $37.5 million reserve to address this action and the federal actions alleging civil Racketeer Influenced and Corrupt Organizations Act violations.

The Ohio Attorney General on September 23, 2020 and the cities of Cincinnati and Columbus on October 27, 2020 filed now consolidated complaints alleging civil violations of the Ohio Corrupt Activity Act in connection with the Ohio legislative activities (*State of Ohio ex rel. Dave Yost, Ohio Attorney General v. FirstEnergy Corp., et al.*, Case No. 20-CV-006281 (Common Pleas Court, Franklin County, OH); *City of Cincinnati and City of Columbus v. FirstEnergy Corp. et al.*, Case No. 20-cv-007005 (Common Pleas Court, Franklin County, OH). Following the Attorney General's motion for a temporary restraining order and preliminary injunction the granting of which would prevent FirstEnergy's Ohio utility companies from collecting revenues under a decoupling rider, the Public Utilities Commission of Ohio, on application of those utility companies, reset their decoupling riders to zero on February 2, 2021. The action by the cities has, on agreement, been dismissed, while an Attorney General motion to lift a stay on the other action pending resolution of criminal proceedings against persons with Ohio legislative connections remains pending.

C. Conclusions

1. FirstEnergy substantially narrowed the scope of its operations with the departure of its commercial power and energy businesses, but unusual challenges remain, given the number of electric utilities it operates and the number of jurisdictions in which it does so.

The FirstEnergy organization faced the need to address the substantial and complex challenges of operating a large, generation-fleet-based commercial power and energy business. Moreover, it had to contend for a prolonged period across which that business moved from increasing financial difficulty, to bankruptcy, and ultimately to transfer to a third party. Difficulties associated with that business also served as primary contributors to a financial crisis and to actions eventually leading to the Deferred Prosecution Agreement intended to resolve a federal criminal wire charge.

FirstEnergy has now restructured its organization to reflect the loss of departed business. It has done so with a focus now centered on electricity transmission and distribution. It has sought to grow the commercial sector of its transmission business (*i.e.*, investing in, owning, and operating facilities outside those directly associated with getting energy delivered to its electric operating companies), but that group of 10 remain the predominant source of revenue, investment, employment, and focus.

However, the simplification that the departure of the commercial power and energy business brought to organization and executive structure still leaves FirstEnergy in unusual circumstances. Among larger U.S. utility holding companies, it operates an unusually large number of utilities - - generally about twice as many as its counterparts. Moreover, it faces the need to operate them in five separate state regulatory jurisdictions - - each of them with separate regulatory and ratemaking structures, not to mention the differences in state energy policies and goals, population concentration and makeup, territorial dispersion, system conditions, and needs, to mention some of the factors that leadership must address. Its counterparts include those where metropolitan areas contribute a dominant share of utility customers, holding company ownership is offshore, core utility holdings have been together for a century, for example.

These other factors all have bearing on organization and executive structure, but none so significantly as the number of utilities and jurisdictions. These factors, in turn, have special significance for JCP&L. Combined operations in Ohio and Pennsylvania each separately account for a third of the total as measured by customer numbers. However, JCP&L alone accounts for about 20 percent and comprises the largest of all 10 operating companies. It operates on the eastern edge of a FirstEnergy territory first created by a combination of Ohio-based Ohio Edison (also owner of the still smallest operating company, Penn Power) and Centerior (owner of CEI and Toledo Edison) in 1997. Four years later, a 2001 merger brought GPU and JCP&L into the

FirstEnergy fold, with Allegheny Energy and its Pennsylvania, West Virginia, and Maryland operating companies joining in 2011.

FirstEnergy thus grew greatly in size and scope in a period of less than fifteen years, and during a time characterized by large scale movement of power and energy supply to competitive markets. JCP&L remained at the eastern perimeter of operations. Even with consolidation of central services, the sometimes new or expanding central operations remained at legacy Allegheny and GPU locations in Pennsylvania locations, and, most largely in Ohio as well.

2. The bankruptcy of the commercial power and energy entities produced a properly controlled transition to their eventual departure from FirstEnergy and provided protection to the remaining FirstEnergy subsidiaries, including JCP&L.

The agreements that governed the continuation of services through bankruptcy continued the obligation of the bankrupt entities to share in the costs of services they elected in a manner like that existing earlier. A logical process subjected to clear procedures covered their elections to discontinue services. The obligation to continue services availability following emergence from bankruptcy under third-party unaffiliated ownership covered a reasonably limited time and continued to be managed and controlled with respect to service election and cost responsibility.

The bankruptcy court approved concessions by FirstEnergy to resolve potential claims by creditors in the bankruptcy proceedings against the parent and remainder of its other subsidiaries. FirstEnergy took appropriate measures to ensure no allocation of their costs in a manner that required JCP&L to bear any of them.

Generally, therefore, we did not find material direct economic harm to JCP&L from the provision of continuing services to the bankrupt entities or from the means for determining the service costs charged to them. The same is true of the monetary concessions made to the creditors, predominantly in the form of the $112.5 million credit against service costs made by FirstEnergy Corp. which also made additional payments of $978 million upon emergence from bankruptcy, which were held at the parent level, without charge-out or allocation to JCP&L. We did find, however, a concern about the charging of depreciation costs no longer borne by the bankrupt entities after their emergence from bankruptcy under third-party ownership. The *Affiliate Relationships and Cost Allocation* chapter of this Phase Two report addresses that concern (See its Conclusion #18).

3. FirstEnergy has acted to restabilize its leadership team following the large dislocation occasioned by circumstances connected to the Deferred Prosecution Agreement.

FirstEnergy has reported confidence in having identified the full scope of executive and leadership changes warranted by two circumstances in its judgement: conduct directly engaged in by individuals and indirect involvement in such conduct (*e.g.,* non-reporting of reportable incidents or concerns about the conduct of others). Chapter Twelve, *External Affairs- - The "DOJ Investigation"* of the accompanying Phase Two report addresses those changes and describes the lack of transparency provided with respect to internal examinations leading to those changes.

We cannot independently validate the conclusions management has expressed regarding the scope of its changes. However, their extent reflects a serious level of change. Additionally, positions they have filled involve individuals with solid experience and credentials. Moreover, changes in responsibility and escalations in senior management/executive hierarchy have responded to evident needs, and again filled by individuals exhibiting strong qualifications for the positions and for demonstrating first steps to restore confidence in the commitment of the executive team to ethics and compliance.

We found a reasonably typical use of executive councils and leadership groups designed to promote communication and consensus among top executives. Moreover, FirstEnergy includes state-level presidents among its list of senior officers.

4. **A recent litigation settlement poses uncertainty for an executive structure composition and structure that would benefit at the present time from stability.** (*See Recommendation #1*)

The *Governance* chapter of this Phase Two report addresses an agreement reached to settle significant portions of federal and state litigation underway since disclosure of the U.S. Attorney's Office investigation and ensuing Deferred Prosecution Agreement. That agreement awaited final court approval at the time of this report's preparation, but Company comments on a draft of this report state that it has received approval. The agreement contains a term that states in full that, "The Board shall implement a process to review the current c-suite executives." That agreement required a special board committee, limited to sitting members who joined the board on or after 2019, to conduct this review. Following completion of that review, expected by September 2022, the special committee was to make recommendations to the full FirstEnergy Corp. board which had authority to make the final determinations. Board members at the time of the preparation of this report did not know whether this review would remain limited to the most senior executives or whether it will address only who fills positions or position number and structure as well.

The review may help satisfy those who have brought action against FirstEnergy and/or its directors and present or former officers, but its value remains unclear to us, while its potential for disruption is material. First, directors whose engagement with executives has an unusually short duration will conduct it, calling into question the degree to which they have the familiarity needed to judge the capabilities, performance, and potentially even the roles of executives who perform a broad array of functions requiring a commensurately broad range of capabilities and experience. The review appears inherently questioning of the normal view of the board versus executive management in assembling a proper executive team. Moreover, to the extent the seeds of its origin may lie in lingering concern about ethics and compliance matters, it would appear to call into question a matter with which our engagement has struggled. That matter concerns the confidence one should place in assertions made to us that, in effect, no stone has been left unturned in identifying the sources (individual and otherwise) of ethics and compliance concerns of the recent past.

How well a new and restructured executive team will eventually perform certainly remains to be seen. The durations the Deferred Prosecution Agreement sets for key activities and changes show that federal criminal authorities agree from their perspective as well. In the absence of clear reason for a concern about the ability of top leadership as it now exists to form and manage an executive team, it seems self-evident that leadership stability should form a first priority, to give changes (in people values, commitments, processes, and methods) an opportunity to mature into full operation over a period of time that permits a properly reflective assessment of their pace and effectiveness.

We do not see how a review consigned to directors, none of whom has been a member for as long as two years, serves interests other than in ending litigation. Any changes resulting from the review will require full board approval. However, the board now lacks every former member who had as much as five years of experience. Only three of 12 current members have more than two years' experience. Deprived of the benefit of members departing in May of this year and of those remaining but ineligible for special committee membership, the board members who do qualify for membership lack important perspective - - that provided by long-term engagement with executives as they have progressed and performed over the long term.

We consider the review called for by the settlement agreement as a potentially disruptive and uncertainty-generating event not helpful for any purpose related to the effective operation of FirstEnergy's executive team, whatever its utility may be in ending ongoing litigation.

Moreover, and perhaps most significantly, its reflection of how far from the norm recent events have moved FirstEnergy from expected norms underscore the importance of the recommendations of the Governance chapter of this Phase Two report and of recommendations in this chapter, regarding the scope of authority, responsibility, and accountability placed directly under JCP&L leadership.

5. We found the executive structure for providing common services sound overall, with the exceptions addressed in our Phase One Report.

Throughout this Phase Two and the accompanying Phase One Report, we have addressed needs, priorities, responsibilities, functions, and structures (executive and management level) and resources that provide common functions. The two chapters addressing external affairs in the accompanying Phase One report present important recommendations for change. The *Controls, Sox, Auditing, and Listing Requirements* Chapter of this Phase Two Report also addresses the reporting of the head of Internal Audit. Apart from those changes, we found the organizational division and executive structure associated with the provision of common services sound.

6. Reductions in the authority of and resources directed by JCP&L executive leadership diminish the effectiveness of responsibilities important to keep at the local level. (*See Recommendation #2*)

FirstEnergy has recently removed three sets of resources all directly reporting to the JCP&L President, significantly changing the executive structure in New Jersey:

- Transferring to a FirstEnergy SC vice president of a team of eight persons responsible for regional affairs in New Jersey (this executive already had responsibility for the regional external affairs teams operating in the other jurisdictions)
- Eliminating the position of JCP&L Vice President, Operations, making the JCP&L President now directly responsible for supervising the detailed day-to-day activities of four regionally based directors
- The eliminated New Jersey vice presidential position formerly oversaw an approximately 1,200-person organization led by three functionally based directors responsible for engineering, design, construction, maintenance, asset management, and operations (see the Chapters Two through Ten of the accompanying Phase One report)

- Beyond elimination of the vice president position, consolidation of a number of engineering and operations functions that had operated under this former JCP&L executive position
- Moving daily direction of the four-person, New Jersey-assigned HR Partners organization to the FirstEnergy SC HR department.

We consider these changes a step backward from circumstances existing when we completed the accompanying Phase One report. We believe the changes appear more likely to work against rather than in support of performance effectiveness and efficiency enhancement, both of which other chapters of this report have found warranted. Of concern under normal circumstances, the absence of the senior JCP&L operations executive may prove particularly significant during widespread weather events and other emergencies requiring major response in more than one region at a time.

We also did not find convincing the proposition that further consolidation of resources under service company versus JCP&L direction will enhance performance driver transparency and accountability in New Jersey operations or enhance the ability to produce common standards, or innovative methods and practices. The prior structure, as others using similar ones have found, provides ample opportunity to do so. Taking advantage of current opportunities, rather than fractionalizing direction of JCP&L resources offers the better course.

JCP&L needs to address a number of issues, as suggested by the work efficiency and cost performance data of this chapter and of the *Staffing*, *Compensation and Benefits*, and *Surface and Air Fleet Management* chapters of this Phase Two Report. The poor relationship with bargaining unit representatives (raised in the *Human Resources Organization* Chapter of this Phase Two Report) also requires strong and prompt attention, and consideration with respect to the merits of fractionalizing the responsibility that JCP&L leadership has had for local operations and for HR functions supporting the workforce employed in New Jersey.

Concerns raised by bargaining unit representatives have a broad scope, extending to substantive resource and personnel management concerns (in common with those raised in the chapters listed above) and either inattention or unresponsiveness on the part of management to resolving important business and regulatory issues extending to operations efficiency, compliance with tariff requirements, and local HR matters. The relationship here exhibits uncommonly great strain in our experience.

One specific matter raised by bargaining unit representatives concerns compliance with a JCP&L retail tariff provision that states:

> *3.05 Estimated Bills: Where the Company has not obtained a reading of the meter it may submit a bill for the minimum charge, or estimate the amount of Service provided and submit an estimated bill. Such bill is subject to adjustment on the basis of the actual Service provided as established by the next actual meter reading, or for any unusual circumstances known to have affected the amount of Service provided.*

Citing COVID-related circumstances, management implemented a temporary procedure in April 2021 to not perform such adjustment on final bills to customers who ended service after JCP&L took a first meter reading for the new customer at the premises involved. Bargaining unit personnel raised with management the concern of the temporary procedure's conformity with the tariff's requirements to a number of JCP&L and FirstEnergy groups, including the FirstEnergy Ethics and Compliance organization.

With bargaining unit leadership making continuing requests about the procedure, management appears to have advised in January 2022 that it had changed the procedure in June 2021 without officially "posting" it. Responding to continuing bargaining unit leadership interest in the procedure and its conformity to tariff requirements, management appears to have first provided in writing the procedure as changed in February 2022, noting that while still unposted, management would post it immediately.

At the least, these circumstances show a long duration for responding to expressed concerns about a JCP&L retail tariff compliance issue. Management continues to express confidence that neither the temporary procedures nor its reported June 2021 revision called for billing actions in contravention to the tariff. It has therefore not undertaken an examination of the number of final-billed customers involved or any warranted billing adjustments had they done so. Management reported that the June 2021 process revision remains in effect at present.

Circumstances that include these underscore the challenges of providing from a single, centralized staff keeping sufficient focus on the separate needs of each of an unusually large body of 10 different operating companies. The recent changes come as part of a move to a consolidated "five state model" under which management states that:

> *the Company expects to begin to see greater collaboration, engagement and innovation across the organization. Teams will have a greater opportunity to address inefficiencies, develop solutions, enhance the customer experience, and implement tools and technologies that streamline efforts and remove barriers.*

Unlike operations in Ohio and Pennsylvania, New Jersey has no need for consolidation to bring together multiple operating companies within a single state jurisdiction - - it already stands alone. Moreover, by itself it already comprises about 20 percent of combined operating company size, not the less than 10 percent that the others contribute on average. Moreover, the removal of barriers to efficiency and the application of collaboration, engagement, innovation, solution development, customer experience enhancement, tool and technology innovation, do not, or at least certainly should not, require centralization. They can all exist as they do now with development and execution of sound standards, methods, procedures, tools, and performance measures, overseen through transparent, regular reporting against metrics to central support and control groups.

The further diminishment of local responsibility and accountability for operations performance in New Jersey recently accomplished through changes made following our Phase One report does not appear either necessary or useful. Management has cited efficiency gains, which we find difficult to see in the field from this measure. It may be that some marginal gains are possible in certain office-performed functions. However, unless FirstEnergy can demonstrate their materiality, we think it is clear that the better means for addressing the effectiveness and efficiency opportunities we have observed lies in making local executive leadership and locally directed resources responsible and accountable supported by adequate resources, while bound to provide comprehensive and transparent performance reporting to Akron-based management, and while operating in accord with standards, practices, methods, tools, and systems designed and applied commonly where useful.

Regional external affairs should also remain under JCP&L executive day-to-day direction, again recognizing the value of transparent reporting to a central source and ensuring that activities occur under centrally established values, goals, objectives, and behavioral and other controls. The direct connection that those resources have with local stakeholders of all types makes their relationship with the executive responsible for operational performance and the input they bring on both operational and other issues of stakeholders essential to successful New Jersey performance.

Another important source of support for New Jersey management and operations has come from under the FirstEnergy SC in the form of an eight-person business services group assigned to New Jersey, West Virginia, and Maryland operating company matters. The JCP&L executive structure should not have to depend upon centrally managed resources shared with others in addressing budgeting and cost reporting and analysis. It takes a continual and complete linking of operating and cost performance metrics to provide those responsible for operations the information they need to determine how well performance is meeting expectations, what can be done to improve it, and how cost experience should be driving not only remediation plans and actions, but also what resources will be required to meet coming year plans and performance standards and objectives.

7. **The high number of first level executive and of director positions indicates likely opportunities for position consolidation in common service areas.** (*See Recommendation #3*)

FirstEnergy is engaged in the execution phase of FE Forward activities to change processes and resources to promote effectiveness and efficiency. While we do not see sound justification for elimination of the JCP&L Vice President, Operations position, our review of FirstEnergy SC reporting relationships down to the director level and those reporting to that level showed a number of organizations (with fairly small resource numbers overall) with positions having small number of direct reports (four or fewer reports to one lead). We found about forty for which titles involved did not disclose an evident reason for small ratios observed, over half of which were one to one or one to two. The numbers suggest a potential for small economies from consolidation, but significant enough to pursue.

8. **FirstEnergy has substantially expanded and enhanced oversight, organization, resources, guidance documents, and practices related to ethics and compliance, yet material steps along a course that has been notable remain.** (*See Recommendation #4*)

The changes came in the wake of the Deferred Prosecution Agreement, under which FirstEnergy Corp. has made substantial commitments to programmatic and other changes. They have also come in response to internally initiated reviews and, most recently to the requirements of the settlement agreement resolving a number of federal and state court shareholder proceedings. The agreement, described more fully in the *Governance* chapter of this Phase Two report gives the FirstEnergy Corp. board substantial new duties and powers regarding political contributions and activities. The changes made include a new, experienced executive to head the ethics and compliance organization. Staffing of the organization has substantially expanded, and it has been engaged in substantially revising guidance, procedures, and practices, along with seeking to promote a stronger ethics and compliance culture and understanding and “ownership” of responsibilities, expectations, and consequences at all levels of FirstEnergy. The changes include measures to give local employees who engender trust and respect a role in developing that ownership and in being available as a source of consultation and assistance.

The program as planned will take FirstEnergy in many respects to leading edge performance when fully implemented. A number of aspects remain to be completed. Progress to date has been strong and, combined with the continuing, open nature of the Deferred Prosecution Agreement with respect to finally closing the federal criminal charge, gives a basis for confidence that completion will occur reasonably promptly.

D. Recommendations

1. **Provide to the BPU a full report explaining the purpose, scope, and methods employed in the C-suite review, a full description of and justification for any personnel or position changes made as a result, and a clear and comprehensive description of how they change the nature or level of service, support, or other assistance in the provision of service by the operating companies generally and by JCP&L specifically.** (*See Conclusion #3*)

The scope establishment reflects the importance of executive organization in assuring that JCP&L meets New Jersey-specific public service responsibilities and expectations. It does the same for governance, which the matter of the C-suite review implicates. We have provided here directly and in other chapters less so findings, conclusions, and recommendations about these matters. The review scheduled for completion may not end up changing them substantially, but that remains unclear. Our schedule and resources do not accommodate waiting for the outcome, but a full reporting as recommended will provide the BPU with substantial information about the review and any changes it makes that have implications for what we have reported.

2. **Provide for JCP&L an organization structure and executive responsibilities necessary for promoting local responsibility and accountability for New Jersey distribution planning, engineering, asset management, operations, and operations support and for regional external affairs.** (*See Conclusion #6*)

Changes include:
- Restoration of the New Jersey vice president for operations position
- Restoration of the New Jersey vice president for regional external affairs, responsible for directing the regional affairs team in New Jersey
- Return of day-to-day direction of HR Partner resources responsible for New Jersey matters to the JCP&L president, employing the previously provided direction from FirstEnergy HR
- Assignment of a small, locally dedicated team under JCP&L executive direction for the performance of budgeting and of cost reporting and analysis, subject to direction from the FirstEnergy Chief Accounting Officer's organization to assure performance per corporate standards, methods, and formats, and with the full transparency necessary to permit corporate cost and performance oversight of and control.

This recommendation contemplates no change in the use of centrally developed standards, practices, methods, goals, objectives, and controls or in the provision of complete, objective, and transparent performance reporting to FirstEnergy from the various operating companies. Nor does it intend to restrict the ability of central sources to participate in reviews of organizational or individual performance and rewards in New Jersey-based organizations that operate under such commonly developed sources of performance guidance and support.

The change to what management has described as a state-based organization, accompanied as well by centralization of a number of functions that will diminish locally directed activities will impose what appear to be significant transition needs for Ohio and Pennsylvania, which require combining the resources of multiple operating companies, as well as moving some of them from out of local control altogether. The needs those recommendations address can better be met by not including JCP&L in plans that will diminish the scope of responsibility and accountability of local executive leadership.

Retaining local reporting in these ways does not threaten ensuring conformity to enterprise-wide standards, methods, and practices or to providing visibility sufficient to support central assessment of JCP&L effectiveness and efficiency and the need to give local leadership efficient tools or to hold it accountable for performance. Keeping at JCP&L day-to-day direction of activities closely related to optimum performance of its operational role still permits full ability for innovation. Management also cited potential economy as a reason for further centralization. Our examination of operations addressed in the accompanying Phase One Report does not lend credence, absent clear, analytically founded justification for specific activities, where material JCP&L resource reductions can occur without harm to performance levels. Greater focus on how well JCP&L performs internally appears more likely to have benefit than examining what functions to move away from it. Finally, avoiding further fractionalization of the functions and activities at issue here will also prove more directly relevant to addressing what clearly has become an increasingly ineffective labor relations climate and relationship with bargaining unit representatives.

3. **Upon the settling of responsibility, process, methods, and other changes associated with initiatives like FE Forward, assess opportunities for position restructuring and consolidation.** (*See Conclusion #7*)

Continuing efforts to reassess and redefine practices and methods, while extending well past the departure of the commercial power and energy businesses, are clearly useful, productive, and appropriately emphasized at present. The resulting changes will have consequence for organization design and resources, making it important to ensure that organization and structure properly recognize them and support their optimum execution. As functions complete the process and practice changes, management should ensure that the resulting alignment of positions matches them. Ensuring proper alignment should include a re-examination of reporting structures to identify places where realigning responsibilities can eliminate senior management, and possibly even a minimal number of executive positions without sacrificing performance effectiveness or efficiency.

We directly observed in smaller organizations about 40 positions with small numbers of direct reports not having evident bases. Postulating another 40 in the much larger organizations produces a pool of 80. Finding 25 percent of them amenable to consolidation after completion of the process and methods changes and examination of their implications for the management structure, would generate savings in the range of $500,000 or so for JCP&L. The process and methods changes overall have much higher potential value, and in any event should precede decisions about more marginal changes in spans of control.

4. Provide twice-yearly reports regarding ethics and compliance progress for so long as the BPU requires them. (*See Conclusion #8*)

Ethics and compliance matters have caused profound disruption, concern, and loss of trust in and at FirstEnergy. The board, senior leadership, and management have engaged in very substantial efforts to address ethics and compliance needs and gaps at all levels. However, its own base plans for providing a stronger culture and program, including detailed actions under the ethics and compliance organization, remain in progress. Moreover, the Deferred Prosecution Agreement's open state makes the area a source of emphasis and risk, as well as opportunity. Not all litigation, some of it already generating significant ethics and compliance commitments, is resolved. As noted in other locations of this report, further reviews of the allocation and perhaps the propriety of costs remain to be completed. Finally, it is not clear that all other federal or state regulatory proceedings of relevance are completed, and perhaps not even yet commenced.

These factors all give reason for the BPU to remain interested in developments in completing the changes contemplated already, plans for additional ones, and what emerges from continuing or further investigations, examinations, oversight, and judgements about performance by other authorities.

Therefore, FirstEnergy Corp. should provide for itself and for all of its entities reports regarding these subjects at six-month intervals, until the BPU decides that they are no longer required.

Appendix One: FirstEnergy Entities with Revenues <$1 Million/Year

Entity Name	2016	2017	2018	2019	2020	
AET PATH Company, LLC	$11,940,613	$15,444,983	-$686,726	$750,288	$1,018,124	
Allegheny Energy Service Corporation	$798,849	$707,002	$5,967,620	$3,068,637	$5,187,444	
Allegheny Energy Supply Company, LLC	$610,138,240	$548,916,952	$30,965,431	$12,786,437	$7,535,603	
FirstEnergy Corp.	$2,697,950	-$2,701,719	$0	$253	$0	Corporate
FirstEnergy Service Company	$854,088,462	$964,034,589	$911,980,565	$828,679,476	$828,075,050	
Jersey Central Power & Light Company	$1,833,155,579	$1,826,807,141	$1,864,229,349	$1,837,443,025	$1,782,461,880	
Metropolitan Edison Company	$865,505,038	$837,704,031	$846,758,842	$823,905,240	$810,880,758	
Monongahela Power Company	$1,644,017,920	$1,619,899,796	$1,692,850,707	$1,554,308,161	$1,396,791,930	
Ohio Edison Company	$1,654,288,484	$1,644,935,242	$1,652,126,534	$1,594,086,772	$1,601,721,730	
Pennsylvania Electric Company	$904,901,435	$894,324,287	$914,862,414	$880,912,402	$825,925,300	Utility
Pennsylvania Power Company	$251,254,698	$243,955,813	$256,536,100	$241,566,763	$245,486,925	
The Cleveland Electric Illuminating Company	$952,653,220	$1,014,555,024	$1,062,236,573	$1,025,609,663	$1,035,287,605	
The Potomac Edison Company	$878,683,082	$864,771,287	$904,336,009	$845,019,333	$828,064,324	
The Toledo Edison Company	$487,136,005	$477,243,136	$469,311,397	$453,552,521	$455,035,350	
West Penn Power Company	1,020,754,878	1,009,957,022	1,040,756,227	1,055,521,533	988,707,069	
American Transmission Systems, Incorporated	$540,070,255	$656,659,788	$667,154,084	$757,583,772	$809,223,046	
AYE Series, Pot.-App. Transmission Highline, LLC	$11,940,786	$15,444,888	-$686,631	$750,288	$1,018,180	
FirstEnergy Transmission, LLC	$803,118,362	$1,050,836,797	$1,064,340,083	$1,234,388,927	$1,315,889,050	
Mid-Atlantic Interstate Transmission, LLC	$0	$99,829,440	$153,920,867	$227,306,248	$253,583,528	Transmnission
PATH Allegheny Maryland Transmission Co., LLC	$6,232,764	$5,763,198	$601,982	$441,017	-$2,149	
PATH Allegheny Transmission Company, LLC	$11,940,786	$15,444,888	-$686,631	$750,288	$1,018,180	
PATH Allegheny Virginia Transmission Corp.	$2,759,417	$2,619,547	$381,005	$498,508	$292,951	
Trans-Allegheny Interstate Line Company	$251,803,513	$280,993,251	$245,981,830	$250,741,049	$254,924,743	
CEI Funding LLC	$24,442,309	$22,972,399	$23,256,812	$22,542,703	$25,188,047	
FE Aircraft Leasing Corp.	$3,022,750	$3,204,000	$1,578,886	$0	$0	
JCP&L Transition Funding LLC	$30,038,181	$8,078,967	$0	$0	$0	
JCP&L Transition Funding II LLC	$15,718,305	$17,477,236	$21,713,710	$17,550,063	$14,962,983	
MP Environmental Funding LLC	$30,325,046	$29,735,093	$31,720,158	$30,896,916	$36,315,893	Funding & Leasing
MP Renaissance Funding, LLC	$30,325,046	$29,735,093	$31,720,158	$30,896,916	$36,315,893	
OE Funding LLC	$8,293,025	$8,414,548	$7,941,182	$7,853,535	$8,616,321	
PE Environmental Funding LLC	$10,470,302	$9,491,195	$10,818,678	$10,697,217	$11,435,220	
PE Renaissance Funding, LLC	$10,470,302	$9,491,195	$10,818,678	$10,697,217	$11,435,220	
TE Funding LLC	$2,808,780	$2,639,276	$2,468,941	$2,655,838	$3,030,746	
Allegheny Generating Company	$54,508,000	$47,782,000	$24,917,334	$22,884,104	$24,227,942	
Bay Shore Power Company	$29,640,403	$32,641,856	$0	$0	$0	
FirstEnergy Generation Mansfield Unit 1 Corp.	$225,061,613	$191,363,891	$88,127,650	$47,815,470	$7,944,514	
FirstEnergy Generation, LLC	$1,738,470,574	$1,061,516,372	$767,724,132	$444,004,801	$91,440,832	Power & Energy
FirstEnergy Nuclear Generation, LLC	$2,004,191,035	$1,361,931,632	$1,209,498,109	$920,484,124	$569,030,162	
FirstEnergy Nuclear Operating Company	$668,876,029	$660,857,956	$433,492	$859,175	$30,165	
FirstEnergy Solutions Corp.	$4,398,199,794	$3,098,395,089	$2,620,236,723	$1,970,988,605	$648,618,348	
GPU Nuclear, Inc.	$1,999,813	$2,370,527	-$653,930	$8,154,107	$10,666,671	
FirstEnergy Properties, Inc.	$2,045,974	$2,050,108	$2,049,067	$2,842,616	$2,706,048	
FirstEnergy Ventures Corp.	$31,127,398	$34,909,867	$2,476,413	-$105	$183	Other Ventures
Warrenton River Terminal, Ltd.	1,486,996	2,268,011	2,476,424	-60	0	

Appendix Two: Organizational Health Assessment Statements

Organizational Health Assessment Statements

Direction *Outcomes*	The company has a vision for the future that is both easy to understand and meaningful to employees
	The company's strategy is aligned with its vision
	Across the company, employees' day-to-day behaviors are guided by the company's vision and strategy
Direction *Practices*	Please indicate how often FirstEnergy engages in the following activities.
	The company's vision is clearly communicated throughout the organization
	The company translates its vision into specific strategic goals and milestones
	The company develops clear strategic plans
	Managers actively solicit employee involvement in setting the company's direction
	Managers align the company's goals with the personal goals of employees
Work Environment *Outcomes*	People want to work here because of the culture and work environment
	The company's culture positively influences the way people behave
Work Environment *Practices*	Managers in the company build trust
	Managers consult with employees on issues that affect them
	Managers encourage honesty, transparency, and candid, open dialogue
	The company's incentive and recognition systems promote healthy competition among employees
	Results are made internally transparent to help motivate employees to perform
	Managers emphasize the importance of efficiency and productivity
	The company communicates clear standards of work
	Day-to-day work is performed according to clear standards and objectives
	The company protects creative activities and improvement initiatives from day-to-day pressures
	Managers encourage employees to experiment with new ideas to improve performance
Accountability *Outcomes*	Employees clearly understand what is expected of them
	Employees are held accountable for the results they are expected to deliver
	Employees within the company have sufficient authority to make decisions
Accountability *Practices*	Jobs in the company are designed to have clear objectives and accountabilities for results
	The company's organizational structure helps create clear accountability
	The company sets performance goals for individuals that are challenging
	Employees have written performance goals that clearly define what they are expected to deliver
	The company has created clear links between performance and consequences
	The company provides attractive incentives to high performing employees
	Managers encourage employees to take a personal stake in their jobs
	Managers create a sense of belonging to the company
Coordination and Control *Outcomes*	The company effectively measures the performance of core business activities
	Reviews of business performance lead to corrective, follow-up action
	The company is able to minimize unexpected performance results
Coordination and Control *Practices*	The company systematically tracks employees´ performance over time
	The company's performance feedback and review processes collect accurate information about employees´ strengths, weaknesses and potential
	The company has clear operating goals and metrics at all levels
	Each business unit has explicit targets for its operating performance
	The company has clear oversight and control of its finances at all levels
	The company's financial measures are good indicators of its true economic performance
	The company communicates clear standards for employee conduct
	The company uses standard operating procedures to influence the way employees conduct their work
	The company uses formal policies to discourage employees from engaging in inappropriate activities
	The company rewards employees who behave according to standards
	The company is able to identify potential performance issues and threats before they become major problems
	The company encourages employees to identify risk issues and escalate them to the right level

Organizational Health Assessment Statements *(continued)*

Capabilities *Outcomes*	The company has the capability and knowledge to achieve its goals The company has employees with the right skills to deliver its strategy
Capabilities *Practices*	The company hires from outside to fill open positions The company uses rigorous selection procedures to ensure the hiring of the best external candidates The company identifies and hires the best external candidates The company hires external candidates that are capable of performing the job Employees receive the training and development they need to be effective in their jobs Managers in the company provide helpful coaching The company documents knowledge and ideas The company regularly develops and updates its procedures, manuals, and training guides The company outsources functions or activities that can be better done by others The company uses external contractors and consultants to fill capability gaps The company forms alliances with others to fill capability gaps
Motivation *Outcomes*	The company's employees are highly motivated In the company, employees are generally enthusiastic about their jobs
Motivation *Practices*	Senior leaders clearly communicate a set of values and behaviors that are personally meaningful to employees The company evaluates employees in part on whether they follow company values and behaviors in their daily activities Managers in the company find ways to make work more meaningful to their employees Managers in the company provide praise, thanks, or other forms of recognition Promotions in the company are based on merit The company offers top performers the most attractive career opportunities within the company The company provides attractive financial incentives to motivate employees The company rewards high performance with interesting opportunities or additional responsibilities The company provides meaningful non-financial rewards and recognition to those who deliver an outstanding contribution
Innovation and Learning *Outcomes*	The company effectively adapts to changes in its external environment The company consistently implements new and better ways of doing things The company makes the changes necessary to compete effectively
Innovation and Learning *Practices*	Senior leaders devote sufficient attention to doing things differently Senior leaders drive innovation in the organization The company has clear processes and systems for employees to contribute improvement ideas Employees participate in improvement activities The company holds events to share knowledge and ideas across the organization Management encourages different parts of the company to work together to make improvements The company brings in 'best practices' from outside the company
External Orientation *Outcomes*	The company has developed high levels of public approval The company effectively manages external relationships with constituents, partners, and stakeholders The company effectively responds to what other utilities are doing
External Orientation *Practices*	The company identifies and targets specific groups of customers with tailored offerings The company solicits feedback from its customers to improve its ability to meet customer needs The company considers industry best practices when making decisions The company considers the strengths of its services and solutions compared to other utilities The company maintains a network of external business partners The company works with external partners to help them perform well The company invests significant resources to build and maintain strong relationships with the community The company invests in relationships with government, regulatory, and consumer groups
Leadership *Outcomes*	Leaders in the company (including my boss) steer the company toward success Leaders in the company (including my boss) role model the values and behaviors of the company Leaders in the company (including my boss) make high quality decisions
Leadership *Practices*	Leaders in the company (including my boss) use authority to get things done Leaders in the company (including my boss) provide continual pressure and influence Leaders in the company (including my boss) ask the opinions of others before making important decisions Leaders in the company (including my boss) give employees the autonomy to make their own decisions Leaders in the company (including my boss) create a sense of teamwork and mutual support throughout the company Leaders in the company (including my boss) demonstrate concern for the welfare of employees Leaders in the company (including my boss) challenge employees to do more than they thought was possible Leaders in the company (including my boss) urge people to identify and address the tough issues

Chapter III: Governance Table of Contents

Chapter III: Governance

A. Background

Section B of the Organization and Executive Management Chapter of this Phase Two report describes the organization and structure of FirstEnergy and includes comparisons to other large, multi-state utility holding companies. Factors we considered in examining governance for and at JCP&L included:

- FirstEnergy Corp. board and committee structure, membership, and continuity
- Composition, roles, and use of the JCP&L board
- Supporting board independence in providing oversight of utility operations
- Completeness and content of board and committee governance and operating documents
- Ensuring that non-utility operations do not jeopardize the interests of JCP&L
- How engagement between boards and leadership focuses attention on JCP&L needs
- Board access to and focus on utility performance drivers
- Structure and operation in support of controls addressing utility financial and operational separation and insulation
- Cycle, content, and use of reports on goal, KPI, and other objective performance measures to engage board in addressing gaps
- Board engagement in response to disruptions from major financial, operational, and personal performance issues
- Predominance of independent directors; means for determining, verifying independence
- Audit, nominating, and compensation committee member independence
- Review and approval of director candidates for nomination
- Employment of independent-member-only director sessions
- Approval of CEO compensation by independent directors
- Director backgrounds and experience as a group, consist with utility needs.

B. Findings

1. FirstEnergy Corp. Board Structure

FirstEnergy Corp.'s Amended and Restated Articles of Incorporation, its Second Amended and Restated Code of Regulations, and a set of Corporate Governance Policies provides the framework for FirstEnergy Corp.'s board structure, size, and operation, setting forth a range of elements that typify those normally encountered and address board and committee structure and composition, membership and qualifications, and roles and authorities including as they relate to those of executive leadership, substantive and administrative procedures, and perspectives applicable in exercising the board's roles. Appendix One to this Chapter provides a more detailed summary of their content.

Those policies and the Second Amended and Restated Code of Regulations call for membership of the FirstEnergy Corp. board to remain between 9 and 16, fluctuating in accord with consideration of qualifications and experience, opportunities to add outstanding candidates, and maintenance of continuity. Independent members must comprise at least two-thirds of members, subject to annual confirmation by the board. New York Stock Exchange listing standards set minimum requirements for directors and persons and organizations with whom directors are affiliated that govern independence determinations.

Board members must tender their resignations upon reaching age 72 or upon major change in other employment, directorships, or geographical location, with the board determining whether to accept them. No term limits exist.

2. Other Directorships

The next table summarizes recent FirstEnergy Corp. member seats on boards of other commercial enterprises. The members also generally sit on the boards of a number of civic, charitable, technical, educational, medical, foundation, and other institutional entities. Overlap among those other boards is not material. The Corporate Governance Policies require board approval for:

- Board members to sit on the boards of more than three other public companies
- Audit Committee members to sit on such committees of more than two other public companies
- Board members who are executive officers of a public company to sit on the boards of more than two other public companies.

Board Member Seats on Boards of Other Commercial Enterprises

Director	Other Boards	Director	Other Board	Director	Other Boards	Director	Other Boards
O'Neil	CUI Global Hennessey Capital NAPEC Natl. Trench & Safety NRC Group Quanta Services Sachs Electric Spark Power Services Sterling Lumber	***Misheff***	Aleris Corp Ancora Investment Advisors Assurant The House of LaRose SGS/Tool/Wahu Mgmt TimkenSteel Trinseo S.A.	***Johnson***	American Water Works Innovative Energy Solutions MasTec NetEnergy Inc Northwestern Corp	***Teno***	Cheniere Energy Eco-Stim Energy Herc Holdings
						Reyes	Coqui RadioPharma NuScale Power
				Somerhalder	Centerpoint Energy Crestwood Equity Partners Enable Midstream Partners Gulfport Energy	***Hicks***	MV Transportation
						Turner	CJP-IKON
						Katela	SERC Consulting
						Anderson	The Andersons, Inc.
Pappas	Rohm GmbH Trinseo S.A. Univar ICP Group	***Lynn***	Cloudera Inc Conduent Inc Herbalife Nutrition Xerox Holdings			***Mitchell***	Ontario Power Gen
				Demetriou	Jacobs Engineering Group C5 Acquisition Corp Kraton Corp.	***Strah***	None
						Williams	None

A $120,000 threshold applies for reporting of transactions in which a director has a material interest in another board of another commercial enterprise, whether direct or indirect. Management responded to our request for information about all such transactions from 2019 through 2021 by stating that no qualifying transactions took place.

3. Top Executive Board Role

FirstEnergy Corp. had a history of electing an independent member as board chair. A single director served in that position from 2004 through 2018. The successor chosen at that time served until the May 2022 annual meeting. Board structure changes began following the October 2020 terminations of the FirstEnergy Corp. CEO, its Senior Vice President of Product Development, Marketing, and Branding, and its Senior Vice President of External Affairs. These terminations culminated in the selection of a non-independent director, but not the CEO, as board chair.

The FirstEnergy Corp. board established an Independent Review Committee, which had independent representation from independent counsel, to oversee an ongoing internal investigation and monitor resulting regulatory matters. This committee announced the immediate termination of the three senior executives on October 29, 2020. A transitional board change accompanied this announcement - - naming an existing, independent director as Executive Director. This director remained independent, not reporting to management, but instead to another independent director, already serving and remaining as board chair. A subsequent, February 18, 2021 change brought a new, combined executive/director role with the naming of an outside individual to serve as the vice chair of the FirstEnergy Corp. board and as an executive director. The *Organization and Executive Management* chapter of this Phase Two report describes that transitional role, reporting directly to the board, rather than to the new CEO named the preceding October. FirstEnergy described this new executive role as “to support the senior leadership team's efforts to achieve its priorities and strengthen the company's governance and compliance functions during this time of unprecedented change.” This new executive and director had worked with other utility holding companies in turbulent circumstances.

The same independent director continued to serve as board chair, and the independent director named as executive director the preceding October returned to a normal director’s role. This dual role continued through March 2021, at which time the executive role ended

4. *Audit Committee*

The Audit Committee’s primary responsibilities lie in assisting the full board in overseeing:

- Financial statement integrity
- Compliance with legal, risk management, and regulatory requirements
- Performance of the internal audit function
- Systems of internal control addressing financial records accuracy, adherence to policies, and legal and regulatory requirements compliance
- Major financial risk exposures, including those related to cybersecurity
- Appointment of an independent registered public accounting firm, direction of that firm’s compensation, control of its retention or dismissal, oversight of its work, and pre-approval of all its services.

Prior to the May 2022 shareholder meeting, the Audit committees’ four members, all independent and financially literate (as required by the committee charter), included two certified public accountants. Committee membership fell to three, the minimum number required, following the May 2022 shareholder meeting. Two members newly appointed at that time replaced the two former certified public accountant members - - both of them barred from standing for board membership under the terms of the Settlement Agreement (described later in this chapter). That agreement seeks to resolve litigation before two federal district courts and an Ohio state court, all addressing claims arising from or following circumstances associated with the Deferred Prosecution Agreement addressing a federal criminal charge associated with conduct and circumstances arising out of efforts that FirstEnergy Corp. has acknowledged as designed to influence state legislative and utility regulatory officials in matters of interest to FirstEnergy.

Chapter Twelve, *External Affairs- - The "DOJ Investigation"* of the accompanying Phase One report addresses those matters.

The committee's three members at the time of this report's preparation included two of the three directors who have served on the board since before 2021. One of them, already serving on the committee became its chair in May 2022. This member, having a legal education, has served in a variety of government and corporate legal roles, culminating as general counsel for a large U.S. corporation, until retiring from that position. The board named in May 2022 another pre-2021 board member to serve on the Audit Committee. This member, an engineer by education, has served in CEO and operations executive roles in energy contracting and consulting enterprises, and has had executive responsibility for auditing. The third committee member, first elected to the board at the May 2022 shareholder meeting, holds an M.B.A. degree and has served in financial positions with electric and natural gas utilities, and now serves as CFO of a publicly traded company.

The charter limits members to a maximum of three other public company board audit committees. None of the current members exceed that limit. The charter limits other compensation of members in a reasonably typical manner. It prohibits members from receiving consulting, advisory, or other fees from any FirstEnergy entity, or one qualifying as an affiliated person under the Exchange Act.

The Audit Committee has the power, at company expense, to retain, replace, and terminate independent counsel and to conduct or authorize investigations within the scope of its responsibilities. The Committee also has sole power to appoint, compensate, retain, and oversee the work of all services performed by the independent auditor. The Audit Committee also has the power to pre-approve all independent auditor work and the responsibility to ensure that, without its permission, the independent auditor does not perform non-audit services of listed types. The listed types have an appropriate scope.

The Audit Committee must annually review and approve Internal Audit's charter and audit plan. The charter also tasks the committee with reviewing internal audit's budget, resources, activities, objectivity, and structure. The Vice President, Internal Audit functionally reports to the Committee and administratively to the Senior Vice President & Chief Legal Officer. The Audit Committee reviews the performance of the Vice President, Internal Audit and provides input on that executive's compensation. The Audit Committee plays a similar oversight role regarding the Chief Ethics & Compliance Officer. The charter requires consultation with the committee regarding the appointment or removal of these Internal Audit and Ethics & Compliance executives. The charter also gives the Audit Committee oversight responsibilities for risk management (addressed in the Enterprise Risk Management Section of the *Organization and Executive Management* Chapter of this Phase Two report).

All Audit Committee members have secured designation as independent, and three of them have been designated as financial experts as defined by the Securities and Exchange Commission. The board has deemed all as financially literate.

5. *Compliance Oversight Sub-Committee*

In the fourth quarter 2020, the Board created a Compliance Oversight Sub-Committee of the Audit Committee, supported by independent counsel and outside compliance advisors, to assess and implement appropriate changes to the FirstEnergy compliance program, following disclosure of the investigations addressing circumstances first disclosed in connection with efforts to influence Ohio nuclear support legislation and operating company interests subject to regulation by the Public Utility Commission of Ohio. Its membership originally included two Audit Committee members and three other, longer-serving directors.

6. *Compensation Committee*

The Compensation Committee has primary responsibility for:

- Carrying out board responsibilities for the compensation of leading executive officers
- Approving a compensation philosophy and objectives supporting competitive pay for performance and consistent with corporate strategy
- Establishing incentive compensation and equity based plans for senior officers
- Reviewing with management Compensation Discussion and Analysis disclosures and making recommendations to the board about their disclosure in public filings
- Producing the Compensation Committee Report included in the Annual Report, Form 10-K and Proxy Statement
- Reviewing and making recommendations about director compensation to the board.

7. *Corporate Governance, Corporate Responsibility and Political Oversight Committee*

The Corporate Governance, Corporate Responsibility and Political Oversight Committee has responsibility for:

- Board succession, including ensuring balance among attribute diversity, experience and skills, ethnicity, and gender
- Recommending director nominees
- Developing and periodically reviewing corporate governance policies
- Overseeing political activities and practices
- Overseeing corporate citizenship practices, including sustainability, environmental and corporate social responsibility.

This committee has responsibility for developing and assessing qualifications for membership and for identifying qualified individuals, with "direct input from" the board's Chair and company's CEO. This committee also has the responsibility to recommend to the Board nominees for director for election at the next annual shareholders meeting. The Corporate Governance Policies call for approval by the committee prior to extension of an invitation to a candidate to join the board. Management reports that policy "contemplates, but does not require" a recommendation from the committee. The minutes of meetings for 2021 show, however, recommendations for all seven members added to the board that year.

The Settlement Agreement, discussed in a later section of this chapter, required a change in the responsibilities, power, and composition of Corporate Governance, Corporate Responsibility, and

Political Oversight Committee. The revised charter assigns the following duties and responsibilities to this committee:

- Governance and Responsibility
  - Annually reviewing Corporate Governance Policies and committee charters
  - Annually reviewing management-prepared political and lobbying action plan
  - Overseeing management's implementation of that plan, with quarterly reports to the full board
  - Retaining an independent party to audit management's plan implementation annually
  - Reporting plan violations to the board for immediate investigation and remediation under committee oversight
  - Providing direct Chief Legal Officer and Chief Ethics & Compliance Officer access to the committee
  - Receiving reports by those officers, together with senior executives directly responsible for implementing the plan
  - Annually reviewing the Corporate Political and Public Policy Engagement Policy and Political and Public Policy Engagement Practice
  - Overseeing and reporting to the board regarding corporate citizenship practices, environmental, social and governance ("ESG") strategy, initiatives and policies
  - Conducting prior review of related party transactions for potential conflicts of interest
  - Reviewing and approving Related Person Transactions
  - Reviewing director and CEO resignation letters tendered in accordance with Corporate Governance Policies
  - Reviewing with management disclosure of corporate governance practices, operation of board committees, and director independence and nominations
  - Recommending related proxy, Annual Report, and other disclosures
  - Reviewing with management shareholder votes on governance matters
  - Reviewing shareholder proposals relating to governance and other matters.
- Board and Committee Membership
  - Annually assessing board and committee sizes, structures, and compositions
  - Periodically reviewing board and committee membership qualifications
  - Assessing prospective board and committee candidates for diversity, age, background and training, business experience and skills, dedication and commitment, business judgment, analytical skills, problem-solving abilities and familiarity with regulatory environment
  - Defining independence criteria in manners consistent with Corporate Governance Policies and NYSE and Securities and Exchange Commission ("SEC") requirements
  - Making findings regarding independence and literacy to the board
  - Making recommendations to the Board regarding membership on and removal from committees
  - Investigating any suggestions made for director nominations and annually making nomination recommendations to the full board
  - Searching for, recruiting, screening, interviewing, and recommending prospective directors

  - Identifying and recommending candidates to fill board vacancies
  - Developing and overseeing new director orientation.
- Facilitating and overseeing annual evaluations of the board, committees, and directors
- Evaluating quality, sufficiency and currency of information management provides to directors.

8. *Finance Committee*

The Finance Committee has responsibility for monitoring and overseeing financial resources and strategies, emphasizing those with long-term implications. Specific duties and authorities under its charter include:

- Reviewing dividend policy, securities issuances, interest rate fluctuation exposure, share repurchases, credit risk, liquidity, and commodity market risks
- Approving terms of company securities sales, where delegated by the full board
- Reviewing financial forecasts, operations and maintenance budgets, capital budgets, and any variances
- Annually critiquing post-project reviews required by policy
- Reviewing membership of the Company's Investment Committee
- Reviewing corporate insurance coverage with management
- Reviewing major financial commitments, strategic acquisitions and investments, and non-core asset divestiture plans
- Approving required major financial transactions, contractual commitments, and
- Ensuring evaluation and oversight of risk assessment and management associated with financial resources and strategies.

9. *Committees to Address Operations and Safety*

The FirstEnergy Corp. board had included a Nuclear Oversight Committee, which it formed to monitor and oversee operation of nuclear units in which FirstEnergy entities held interests. That committee regularly reviewed and discussed site-specific circumstances, and focused on key performance indicators at each station involved. The February 27, 2020 transfer of nuclear generating facilities to Energy Harbor Corp. as part of bankruptcy proceedings left a Three Mile Island unit (TMI-2) as the only FirstEnergy nuclear facility. TMI-2 suffered catastrophic damage in 1979 and has not operated since. The board restructured the committee at that time, adding electric utility operations, and renaming the committee as the Operations, Safety, and Nuclear Oversight Committee. A third party (TMI-2 Solutions, a subsidiary of EnergySolutions) on December 18, 2020 acquired TMI-2, taking responsibility for continuing activities and monitoring required to ensure its safety and stability.

With all nuclear operations now gone from FirstEnergy, the former Nuclear Oversight Committee of the parent board became the Operations and Safety Oversight Committee. This board committee has responsibility for monitoring and overseeing operations and safety matters associated with distribution and transmission facilities and with remaining electric power generation (now operated as part of regulated utility operations, principally in West Virginia), following FirstEnergy's exit from the commercial power and energy businesses.

The current committee charter gives the Operations and Safety Oversight Committee responsibility to "periodically visit the Company's facilities and meet with appropriate personnel." Specific duties and authorities set forth in the charter include monitoring and review of:

- Programs and policies for providing a healthy and safe environment for employees, customers, contractors and the public
- Laws, regulations and standards relating to health, safety, generation, transmission, distribution, reliability, and security
- Strategies for addressing catastrophic business interruption from outages and property damage from disasters, cyberattacks, or terrorism
- Results of regulatory or oversight group operational or safety inspections and evaluations and management's response
- Transmission, distribution, regulated generation, and other operating events (*e.g.*, facility licensing and construction, facility planning, decommissioning, and costs)
- Generation, transmission, and distribution long-term strategies and plans
- Execution of major generation, transmission, and distribution capital projects
- Customer service and marketing enhancements (*e.g.*, new products, service initiatives, technology)
- Operating performance (*e.g.*, safety, labor and human relations, key performance indicator results)
- Environmental strategy, initiatives and policies (*e.g.*, climate change, environmental protection, sustainability) working with the Corporate Governance, Corporate Responsibility, and Political Oversight Committee
- Matters relating to prior nuclear generation operations
- Measures to ensure evaluation and oversight risk assessment and management related to generation, transmission, and distribution facilities.

10. Other Special Committees

At the time FirstEnergy faced shareowner litigation risks, including those associated with ongoing government investigations, a Demand Review Committee was formed to consider shareholder demands and to advise the Board and make recommendations. It was dissolved effective July 1, 2021, and a Special Litigation Committee followed. This second committee's members included an independent member as chair, three other independent directors, and the Executive Director. The Board also dissolved at the same time the initial Independent Review Committee that had directed an internal investigation related to ongoing government investigations. This committee had 11 independent members, with the board chair also serving as the committee's chair.

The "Governance" portion of the FirstEnergy website provides committee charters for the other board committees, but not for the Special Litigation Committee. An SEC filing describes it and its membership as follows:

> *Effective as of July 1, 2021, the Board has established a Special Litigation Committee of the Board. The Special Litigation Committee has been delegated full authority to take all actions as the Special Litigation Committee deems advisable, appropriate, and in the best*

> *interests of the Company and its shareholders with respect to pending shareholder derivative litigation and demands. The determinations made by the Special Litigation Committee with respect to the matters delegated to it shall not be subject to review by the Board, and shall in all respects be binding upon the Company and the Board. Each of Ms. Lisa Winston Hicks and Messrs. Paul Kaleta, Jesse A. Lynn and Melvin Williams was appointed to serve on the Special Litigation Committee.*

11. Corrective Measures under Board Consideration

The May 2022 changes that the Settlement Agreement produced regarding political activity brought specificity and structure to a number of efforts under consideration at the board level in preceding months. FirstEnergy Corp. board committees responsible for corporate governance had received general, periodic updates about political contributions. However, management has stated its understanding that the payments cited in the Statement of Facts underlying the Deferred Prosecution Agreement did not undergo board review before they were made, nor did management report them thereafter. It appears that board knowledge of them came as part of company investigation and review undertaken following the criminal complaint by the U.S. Attorney's Office against a senior Ohio legislator and other political figures in July 2020. It also appears that no specific policy, procedure, or other requirement obliged leadership to make such payments known to the board.

In September 2021, the board added to its Corporate Governance Policies the following statement:

> *The Board should review the Company's policies and procedures regarding political contributions. Corporate contributions to any political group or activity should be reviewed annually with the Board.*

Moreover, other policies and measures under development included:

- Ongoing board review of a policy addressing signing authority and approval for contracts, commitments, and payments, citing for example, "non-core" activities above $10 million, if determined needed by chief executive, legal, or ethics and compliance officers
- Formal protocols to bring board attention to high-risk issues that include political contributions and ethics or conduct violations by senior management, for example
- Refinements in processes for collecting and analyzing reported data for potential misconduct and for reporting corrective actions
- Board involvement or review and approval of all Level of Signature Authority (LOSA) levels and exceptions.
- Quarterly accounting reviews of non-PO identified payment disaggregation to circumvent controls on payment approval limits.

12. Litigation Settlement Agreement

A February 9, 2022 agreement in principle addressed a global settlement of a number of federal and Ohio court of common pleas proceedings with some connection to the matters subject to the Deferred Prosecution Agreement, among them:

- *Miller, et al. v. Anderson, et al.*, No. 5:20-cv-01743-JRA (N.D. Ohio)
- *Employees Retirement System of the City of St. Louis, et al. v. Jones, et al.*, No. 2:20-cv-4813 (S.D. Ohio)

- *Gendrich, et al. v. Anderson, et al.*, No. CV-2020-07-2107 (Ohio Ct. of Common Pleas for Summit County).

A Settlement Term Sheet set forth the material terms to which the parties agreed, principal among them payment of $180 million and commitment to changes at the FirstEnergy Corp. board. Exhibit A to the Term Sheet, titled as *Corporate Governance Reforms Term Sheet*, set forth the agreed changes to FirstEnergy Corp. board structure and operations, which generally:

- Provided that the board's six most senior directors would not stand for re-election at then coming (May 2022) annual shareholder meeting
- Would give special powers to a board committee for overseeing a series of measures designed to enhance visibility over and control of political and lobbying activities
- Would limit membership on the committee to all remaining incumbents then on the board and first elected before 2021.

The Term Sheet called for best efforts of the signatories to complete a full settlement agreement within 30 days for filing with and approval by the U.S. District Court for the Southern District of Ohio. A March 11, 2022 Stipulation and Agreement of Settlement ("Settlement") superseded the Term Sheet. Company comments on a draft of this report stated that an August 23, 2022 Southern District Court order granted final approval of the Settlement.

The terms of the Settlement Agreement provided for the parties jointly to move the other, related actions before the federal Northern District and a state court following settlement approval by the Southern District Court. News reports following the execution of the Term Sheet noted that its execution came the day scheduled for executives' depositions in the litigation, thus deferring and potentially mooting them. The parties sought a stay in the Northern District proceedings pending settlement review by the Southern District court. The judge in the Northern District did not agree, according to news reports requiring identification of those who made payments among those detailed in the Deferred Prosecution Agreement. Provision of those names reportedly came on March 23, 2022, identifying the separated FirstEnergy CEO and the Senior Vice President of External Affairs. *Chapter Twelve: External Affairs - - The "DOJ Investigation"* of the accompanying Phase One report addresses their circumstances.

We now understand that final approval of the Settlement by the Southern District Court creates a path for ending litigation in the Ohio common pleas court and in the Northern District proceedings, whether the judge there approves it or not.

The Settlement Agreement as approved preliminarily in Southern District federal proceedings calls for governance changes consistent with those of the Term Sheet, but more detailed. The Settlement Agreement requires implementation of those changes within ten business days of final court approval. Prior to the Southern District's approval of the settlement, FirstEnergy Corp. made board membership and a number of governing document changes at its May 17, 2022 annual shareholder meeting and at the following board of directors full and committee meetings. The Settlement's required governance measures generally remain binding for five years, or at least two years after any acquisition of FirstEnergy during that period.

The specific requirements include:

- Barring the six most senior, incumbent directors from standing for board election in 2022 (already effectuated by their non-candidacy at the May 17 annual meeting)
- A review of the "current c-suite executives" (a term generally encompassing the most senior corporate executives - - often designated as Chief - - hence the "c") officers over named functions or areas of responsibility:
  - Conducted by a special board committee comprised of independent members at least three in number and all having joined the board not sooner than 2019 (thus ruling out the three remaining, most senior directors)
  - Commenced within 30 days after the May annual meeting
  - Completed within 90 days after commencement
  - Enabled at special committee discretion by an outside advisor at company expense
  - Producing recommendations to the full board, which retains final authority to act on them
- Assumption by the full board of responsibility for actively overseeing lobbying and political contributions and activities
- Annual "Political and Lobbying Action Plans" covering all state and federal activities, prepared by management and reviewed and approved by the full board
- Corporate Governance and Corporate Responsibility Committee changes
  - Adding "Political Oversight" to its name
  - Requiring a majority of its members to consist of directors joining the board no earlier than 2019
  - Making it responsible for overseeing management's execution of the Political and Lobbying Action Plan
  - Adding committee charter language memorializing full Board responsibility for lobbying and political contributions and activities
  - Adding committee charter language acknowledging Chief Legal Officer and Chief Ethics & Compliance Officer direct access to the committee
  - Obligating the Chief Legal Officer and Chief Ethics & Compliance Officer, together with senior executives responsible for implementing the Political and Lobbying Action Plan to report to the committee quarterly
  - Requiring quarterly reports of committee findings to the full board
  - Retaining at company expense an independent third party to audit Political and Lobbying Action Plan implementation and compliance annually
  - Immediate violation reporting to the full board and investigation and remediation overseen by the committee
- Proxy statement additions
  - A "Transparency in Corporate Contributions" section detailing payments to§ 501(c)(4) entities operating for the benefit of public officials
  - Third-party auditor reporting of the numbers of violations and non-compliance with the law or the Political and Lobbying Action Plan and dates of their reporting to the board
- Further alignment of senior executive financial incentives with proactive legal and ethical obligation compliances.
- Compensation Committee changes
  - Majority of committee members to consist of directors joining the board after 2018
  - Committee review of senior executive compensation clawback policy
  - Committee authority to review instances of potential clawbacks

- Clawback policy changes
  - Description of policy in proxy statements
  - Policy incorporation into compensation provisions for senior executives
  - Application of clawback provisions to stock-based compensation and bonuses, not base salary
  - Arbitration provisions to resolve clawback disputes
  - The clawback system to include an arbitration provision in case of a dispute.

13. Parent Board Membership

Major changes in FirstEnergy Corp. board membership have come since FirstEnergy became embroiled in investigations, litigation, and other actions following events and in the aftermath of circumstances surrounding efforts to influence Ohio legislative and utility regulatory officials. Those changes first expanded board membership by a third, from 12 to 16, and then reduced it to that original number by eliminating its most senior members.

The first change came in March 2021, with news of plans by Icahn Capital LP to invest up to $920 million in the company. FirstEnergy announced on March 16, 2021 the appointment of two new directors effective March 18, 2021, with plans to support their continuance as directors through normal election at the next annual shareowners meeting (normally held each May):

- A portfolio manager at Icahn Capital (slated to join the Audit Committee and Compliance Oversight Subcommittee)
- The general counsel of Icahn Enterprises LP (slated to join the Independent Review and Demand Review Committees).

These two appointments came under a March 16, 2021 Director Appointment and Nomination Agreement with Carl Icahn, the "Icahn Group" of companies and the two directors. The agreement called for increasing board membership to 14 to accommodate these two new directors (with successors as designated by Icahn interests). Both served until the annual meeting and continue as directors through subsequent annual meeting election. Their continued membership requires maintenance of a "net long position" of at least three percent of outstanding FirstEnergy Corp. common stock. One Icahn Group-designated director must remain while it holds between 1.5 and 3.0 percent. FirstEnergy reported that Icahn Capital LP held 18,967,757 shares (representing 3.33 percent of total shares) having a value of $767,245,771 at September 30, 2021, making it the fifth largest shareholder. The investor relations page of FirstEnergy's website lists Icahn Capital LP as holding the same number of shares, valued in March 2022 at $823,769,686 and representing 3.32 percent of total shares. However, it dropped to sixth position following investment by BlackRock, Inc. (discussed below) whose 42,375,372 shares, valued at $1,840,362,406 represented 7.42 percent of total shares in March 2022.

The board expanded by two more directors at the end of June 2021 with the appointment of two additional directors, both attorneys whose background includes senior legal positions in the electric utility industry. They became members of the newly established Special Litigation Committee at the time of their addition to the FirstEnergy Corp. board. That committee has had full and binding authority to determine full board actions with respect to pending shareholder derivative litigation.

The 2021 Proxy Statement described the process for identifying effective FirstEnergy Corp. board member backgrounds, listing attributes, experience, and qualifications and skills as material criteria in candidate recruitment and selection. The board's Corporate Governance, Corporate Responsibility, and Political Oversight Committee takes into account board size and a matrix of skills of current members in identifying candidates for board memberships. The 2021 proxy statement offers the following summary of experience of the board members at the time issued.

The backgrounds of the six most senior members who did not stand for election in May 2022 are:

- ***Michael J. Anderson***: Chairman of The Andersons, Inc., operating largely in the grain, ethanol and plant nutrient sectors of the U.S. agriculture industry; former auditor for Arthur Young & Co; C.P.A. and holder of an M.B.A. in Finance (board member since 2007)
- ***Julia L. Johnson***: President of regulatory and public affairs firm NetCommunications, LLC; director of public companies: American Water Works, MasTec, and NorthWestern Corp.; former Florida Public Service Commission chair; attorney and B.S. in Business Administration, (member since 2011)
- ***Christopher D. Pappas***: Retired CEO of plastics, latex and rubber producer Trinseo S.A.; chair of the board of publicly traded chemical distributor and provider company, Univar; formerly with NOVA Chemicals, Dow, and DuPont entities; undergraduate degree in civil engineering and M.B.A., (board member since 2011)
- ***Donald T. Misheff***: Retired managing partner, Ernst & Young Northeast Ohio offices; director of public companies: TimkenSteel Trinseo S.A.; C.P.A. with an undergraduate degree from the University of Akron (board member since 2012)
- ***Luis A. Reyes***: Retired Nuclear Regulatory Commission regional administrator; undergraduate degree in electrical engineering and M.S. in Nuclear Engineering (board member since 2013)
- ***Thomas N. Mitchell***: Chairman of non-profit, nuclear safety World Association of Nuclear Operators; former CEO of Ontario Power Generation Inc.; former EPRI director; nuclear engineering undergraduate degree and M.S. in Mechanical Engineering (board member since 2016).

The backgrounds of the three remaining most senior members after May 2022 are:

- ***Steven J. Demetriou***: Chairman, chief executive officer and director of consulting, technical, scientific and project management firm Jacobs Engineering Group; former aluminum manufacturing company CEO; B.S. in Chemical Engineering (board member since 2017)
- ***James F. O'Neil III***: CEO of a company focusing on diversified energy infrastructure; consultant to the energy infrastructure industry; and former CEO of an electric power and oil and gas contractor; bachelor's degree civil engineering (board member since 2017)
- ***Leslie M. Turner***: Retired Hershey Company senior vice president and general counsel; formerly legal positions at Coca Cola, a major law firm and federal government; law degree from Georgetown University and Master of Laws from American University, and B.S. degree from NYU (board member since 2018).

The backgrounds of the independent directors added in 2021 are:

- ***Jesse A. Lynn***: General counsel of diversified investment company Icahn Enterprises L.P.; former COO of Icahn Capital LP; current or former board member of five public companies with large holdings by Icahn interests; former associate at two large law firms; B.A. from the University of Michigan and a J.D. from the Boston University School of Law
- ***Andrew Teno*****:** Icahn Capital portfolio manager; director of publicly traded Herc Holdings and Cheniere Energy; formerly with private investment firm, at a firm working in private equity, and at a mergers and acquisitions boutique firm; undergraduate business degree the University of Pennsylvania's Wharton School
- ***Melvin D. Williams***: Retired president of Southern Company's Illinois gas distribution utility (Nicor); formerly management and executive roles at Southern, including gas includes sales, marketing, regulatory and utility operations; B.S. in business administration from the Savannah State University
- ***Lisa Winston Hicks***: Board chair and former general counsel of MV Transportation, Inc.; director Robotic Research; formerly associate general counsel Energy Future Holdings and at electric holding company TXU; formerly litigator in private practice and legal roles at the U.S. Department of Justice and as Associate Counsel to the President; B.A. in political science from Stanford and J.D. from Harvard Law School
- ***Paul Katella***: Managing director of energy policy and strategy consulting firm; retired First Solar general counsel and officer responsible for federal affairs and compliance; previously general counsel and officer responsible for shared services and compliance for NV Energy; previously partner in a D.C. law firm; law degree from Georgetown University and his undergraduate degree from Hamilton College.

The backgrounds of the two non-independent directors added at the May 2022 annual meeting are:

- ***Jana T. Croom***: CFO for electronics manufacturer Kimball Electronics; former regulatory, operations, and finance responsibilities at NiSource; previous American Electric Power work in investor relations, corporate finance and treasury; B.A. from The College of Wooster and M.B.A. from Ohio State University.
- ***Sean T. Klimczak.***: Global infrastructure head for investment firm Blackstone; former associate at an investment firm and mergers and acquisitions work at Morgan Stanley; B.A. in Finance and Business Economics from the University of Notre Dame and M.B.A. from Harvard Business School.

The backgrounds of the two non-independent directors are:

- ***Steven E. Strah:*** At the time, the president and a long-term employee of FirstEnergy operating companies, named CEO in 2021 after separation of the incumbent CEO (board member since 2021)
- ***John W. Somerhalder II**:* Former CEO of AGL Resources and interim CEO of CenterPoint Energy and Colonial Pipeline Company, director of Gulfport Energy Corp., BS in chemical engineering, former executive with publicly traded natural gas and energy products provider El Paso Corporation (board member since 2021).

The next table summarizes FirstEnergy Corp. board membership prior to the May 2022 annual meeting, identifying those who did not stand for re-election at that time and those made ineligible to serve on certain committees pursuant to the Settlement Agreement.

FirstEnergy Corp. Board Members (May 16, 2022)

Director	Tenure	Age	Committees	Background
Executives				
Strah, Steven E. ***(FE CEO)***	2021	57	None	Various management and executive positions at FirstEnergy entities
Somerhalder II, John W. ***(Vice Chair & Exec. Director)***	2021	65	None	Former interim CEO of Centerpoint Energy and of Colonial Pipeline, former AGLResources CEO, former leadership positions at El Paso Pipeline
Chairs				
Anderson, Michael J. ***Audit Chair***	2007	69	Audit Finance	Chairman, agriculture, railcars, turf products company; former auditor for Arthur Young
Johnson, Julia L. ***Gov. & Resp. Chair***	2011	58	Corp Gov & Resp	President, energy and telecom reg. & public affairs consulting firm and former FL PSC Chair & attorney
Misheff, Donald L. ***Board Chair***	2012	64	Audit	Retired managing partner, Ernst & Young Northeast Ohio offices
Mitchell, Thomas N. **(Ops&Safety Chair)**	2016	65	Ops & Safety Finance	World Assoc. of Nuclear Operators Chair, former Ontario Power Gen. CEO & nuclear plant executive
Demetriou, Steven J. ***Finance Chair***	2017	62	Finance Compensation	Tech. professional services firm CEO (incl.utility project mgmt.) and former aluminum products company CEO
O'Neill III, James F. ***Comp. Chair***	2017	62	Compensation Ops & Safety	CEO of energy infrastructure services group, principal owner of energy infrastructure industry consulting firm; former CEO of power, oil, gas specialty contractor
Turner, Leslie M.	2018	63	Audit Compensation	Retired Hershey SrVP & Gen. Counsel; formerly with Coca-Cola, large law firm, and federal govt.
Other Directors (*by tenure*)				
Pappas, Christopher D.	2011	65	Gov & Resp Finance	Retired CEO of plastics, latex and rubber producer; formerly with NOVA Chemicals and Dow entities
Reyes, Luis, A.	2013	69	Gov & Resp Ops & Safety	Retired Nuclear Regulatory Commission regional administrator
Lynn, Jesse A,	2021	50	Gov & Resp Special Lit.	Gen. Counsel, Icahn Enterprises and fomer associate with a large and with a mid-size law firm
Teno, Andrew	2021	36	Audit Finance	Portfolio manager at Icahn Capital, formerly at private investment and merger & acquisitions firm
Hicks, Lisa Winston	2021	54	SpecialLitigation	Chair of passenger transportation contractor, former Sr. VP and counsel for Energy Future Holdings and lawyer in private practice and with US DOJ
Katela, Paul	2021	66	Special Litigation	Retired First Solar Gen. Counsel , managing director SERC Consulting, former elec/gas utility general counsel, shared services, E&C officer
Williams, Melvin D.	2021	57	Gov & Resp Ops & Safety Special Lit.	Retired president of Southern Co. natural gas subsidiary, former exec. and mgmt. roles at other gas utilities
Not independent	*Subject to <'19 Committee Rules*			*Subject to >5 year non-re-election requirements*

The next table shows membership changes associated with the May 17, 2022 annual meeting and following board and committee meetings.

May 17, 2022 FirstEnergy Corp. Board Membership Changes

Director	First Joined	Age	Lead Positions		Average Years
			Pre 2022 Mtg	Post2022 Mtg	
Strah	2021	57	(FE CEO)	FE CEO	1 year
Somerhalder	2021	65	Vice Chair /Exec. Dir.	Board Chair	
Demetriou	2017	62	Finance Chair	Finance Chair	4.67 years
O'Neill III	2017	62	Comp Chair	Comp Chair	
Turner	2018	63		Audit Chair	
Lynn	2021	50	None	None	0.71 years
Teno	2021	36	None	None	
Hicks	2021	54	None	None	
Katela	2021	66	None	Gov/Resp/Pol Chair	
Williams	2021	57	None	Ops/Safety Chair	
Croom	2022	45	Not members	None	
Klimczak	2022	45		None	
Anderson	2007	69	Audit Chair	Gone per >5 year Settlement Agreement Terms	10.33 years
Johnson	2011	58	Gov/Resp Chair		
Pappas	2011	65	None		
Misheff	2012	64	Board Chauir		
Reyes	2013	69	None		
Mitchell	2016	65	Ops/Safety Chair		
Totals			**16 members**	**12 members**	**1.75 post mtg.**
Not independent			*Subject to Settlement Agreement pre-2019 Limits*		

The tables show two results occurring at the May 2022 annual meeting and made necessary by the Settlement Agreement. Key changes, not counting the CEO who also serves as a director, included:

- Ending membership of the six most senior directors
- Eliminating 62 years of experience - - an average of just over ten years per member barred from standing for election in May 2022, leaving a cumulative 20 years total among remaining incumbents, averaging just over 2 years
- Producing an average tenure of less than two years completed, considering the two new members added in May 2022
- Leaving only three directors who have completed more than a single year on the board, and among those three, two having completed five years and one completing four years
- Banning all three of those now longest-sitting members from the subcommittee charged with the "C-Suite" executive review.

Moreover, following May 2022 board actions, none of the three most senior directors serve on the reconstituted Corporate Governance, Corporate Responsibility, and Political Oversight Committee, meaning that none of that committee's five members had completed more than one year of service on the board, with their average even less. The special committee that will conduct the executive review awaits the naming of its members, making it subject to similar tenure levels. That review's scope also awaits determination, including whether it will look only at continuation of the incumbents holding the most senior executive positions or whether that scope will extend to executive structure overall.

We found the individual qualifications of the directors commendable, but the range of their backgrounds and experience significantly narrower than what one typically sees in other large holding companies. Four, directors educated as attorneys, have spent the bulk of their careers in providing legal services in either of a combination of outside law firms, government positions, or utility enterprises. Four of them bring experience focused on finance and investment. Three of those (one among the four attorneys) have spent much of their careers with investment firms and hold their seats due to very recent and essentially billion dollar or more share purchases by activist investors. The fourth has served in financial roles, which have included utility positions. Two have top executive leadership experience in providing services and goods in significant part to the utility industry. The remaining, current independent director has held a number of senior positions with the gas side of an electric and natural gas utility holding company, in his most senior position before retiring as president of a state-level natural gas subsidiary.

14. FirstEnergy Service Company Board of Directors

The boards of utility service company holding companies generally do not contain independent or other outside directors, instead comprising them using a small team of senior executives. FirstEnergy has employed this approach, employing for its service company a board comprised of three members of the FirstEnergy executive team:

- The President and CEO
- Senior Vice President, Operations
- Senior Vice President, CFO & Strategy.

15. JCP&L Board of Directors

N.J.A.C. 14:4-4.6 has required since October 6, 2009 that electric and gas utilities with boards exceeding one director annually certify to the BPU that at least 40 percent of its directors qualify both as independent (applying New York Stock Exchange requirements) and as having residency, employment, or other significant ties with New Jersey. Grandfathering and good-faith-efforts exceptions apply. The JCP&L board of directors consists of three employee members and two independent directors, as it has for some time. The employee members all comprise part of the same FirstEnergy chain of command, listed in descending order:

- FirstEnergy's Senior Vice President, Operations
- FirstEnergy's Vice President, Utility Operations
- JCP&L's President.

With two serving at a time, there have been four total independent directors since 2007. The more senior of the two independent JCP&L directors (age 70) came to the utility's board in January 2019. Recently retired as New Jersey Regional President of PNC Bank, she had also served as Chair of the New Jersey State Chamber of Commerce. The current JCP&L President and fellow utility company board member succeeded her in that chamber role. She replaced an individual who had a long history of membership on the boards of many FirstEnergy entities, beginning in 1992 and continuing until retirement as a JCP&L director in December 2018 at age 79. He initially joined the Ohio Edison board in 1992, became a FirstEnergy Corp. director at its formation in 1997, and retired from that board in 2012. Thereafter, he continued as a member of the JCP&L board on which he had begun to serve in 2007. He retired in 1998 as Vice President of Human Resources Policy, Employment Practices and Systems for Goodyear Tire & Rubber, which he joined in Akron, Ohio.

The second of the two independent members came to the JCP&L board in November 2021. He replaced (after our engagement commenced), a director whose tenure began in 1985 and ended in October 2021 at age 90. This former director, a small business owner, served formerly as a member of National Board for Small Business and founder of the New Jersey Association of Women Business Owners. This second independent director (age 56) has spent more than two decades in chamber of commerce executive management. He serves as head of New Jersey's African American Chamber of Commerce, which he founded. He has held CEO or board positions at other state and regional chambers and related organizations, and has served on the boards of other public institutions, including the BPU's Supplier Diversity Development Council (SDDC) institutional boards. He spent his earlier career years in banking management and in an interstate commodities transportation company he founded.

A 2016 Financial and Operational Review of JCP&L's Distribution System (described more fully in the *Recommendations & Review of Previous Analysis* Chapter of this Phase Two report) included a recommendation (Recommendation B1.2-1):

> *Give consideration to more fully defining the role of the JCP&L Board and, in particular, the level of activity of the external board members.*

Management responded to this recommendation by citing the general powers conferred upon the board by the JCP&L charter - - powers expressed very generally. The response also noted the matters on which the board meetings focused; *i.e., "*financial reports, budget review and approval, labor relations, safety, reports on operation and environment, charitable contribution updates, officer changes, and other topics or approvals as needed and at appropriate times during the year." We found in management's response no substantive information addressing the portion of the recommendation regarding board member level of activity.

16. JCP&L Information Regularly Reported to the FirstEnergy Corp. Board

The FirstEnergy Corp. board has not regularly received reports that uniquely address JCP&L plans, resources, results, and operations. The reports normally provided to the board address the operating companies on a consolidated basis. We did encounter two "New Jersey Operations Updates" presented by the JCP&L President - - for the FirstEnergy Corp. board July meetings in 2015 and in 2016, but none thereafter according to documents provided by the company.

The presentations (six slides for 2015, down to four for 2016) each began with a slide summarizing JCP&L customer numbers, service territory area, energy delivered, assets net of depreciation and employee numbers. A second slide provided a measure of safety performance (OSHA incident rate). The 2015 presentation provided a table breaking down revenues and six categories of operating expenses to show operating earnings and capital for the two prior years and as forecasted for 2015. The 2016 presentation reduced that detail to two lines - - operating earnings and capital

- - eliminating the revenue and expense detail of the 2015 version. It also limited historical data to the preceding year.

The 2015 version provided three other slides, highlighting employee development and bargaining unit engagement, an operations review, barrier island rebuild, a chart of solar net meter installations, two large new customer additions, JD Power-measured customer satisfaction, and an advertising campaign. The 2016 version provided a single JCP&L state issues slide, consisting of pictures of new pole installations on a barrier island and a Morristown substation, and a similar chart of solar net meter installations.

17. Formal Stakeholder Groups

We asked for a list and description of committees, councils, or other, similar bodies used to provide stakeholder input on matters affecting the operation of JCP&L, FirstEnergy or FirstEnergy Service Company since 2017. The response provided only groups consisting of internal personnel, except for a JCP&L's Safety Governance Committee, which included a non-company participant.

The subsidiary responsible for nuclear station activities had operated a FirstEnergy Nuclear Operating Company-level *Company Nuclear Review Board* (CNRB) for a number of decades, ending it following FirstEnergy's recent exit from the commercial power and energy business. FirstEnergy understands that the Nuclear Regulatory Commission initiated the process producing creation of this board following the 1979 incident at TMI. This board consisted of internal and external members possessing minimum technical education or experience and organized into several subcommittees. External participants included persons from other nuclear licensees. This board provided independent review of station activities to promote nuclear safety and operation maintenance in accord with operating licenses and regulations. Work of the Company Nuclear Review Board came periodically before the FirstEnergy Corp. board committee responsible for overseeing nuclear operations.

C. Conclusions

1. FirstEnergy Corp. board and committee membership contains sufficient numbers of independent members and membership of the JCP&L board contains the numbers of independent directors required by N.J.A.C. 14:4-4.6.

The parent board for some time had only one non-independent member, the FirstEnergy CEO. The addition of the Vice Chair and Executive Director in the aftermath of major financial distress at the parent level and the investigation by the Office of the U.S. Attorney for the Southern District of Ohio added one. Many utility holding companies have only one inside director, normally the CEO. Nevertheless, adding one does not fundamentally break with that approach, particularly given the need for FirstEnergy to recover from a series of existential crises. The former Vice Chair and Executive Director has now relinquished executive responsibilities as of the May 2020 annual meeting, but remains non-independent for a period of three years.

All members of the parent board committees responsible for audit, nominating, and compensation oversight have been and continue to be independent. Two of the five JCP&L board members, which does not employ committees, meet the independence and New Jersey connection requirements of N.J.A.C. 14:4-4.6.

Both boards employ New York Stock Exchange requirements for determining independence and undertake recurring means for ensuring that independent directors continue to remain so. Appropriate limits on transactions between FirstEnergy entities and directors or their interest exist and are subject to sufficient reporting requirements.

The FirstEnergy Corp. board's Compensation Committee exercises control over the development of data and analysis supporting recommendations for and decisions regarding all elements of the compensation of senior executives. The parent board's Corporate Governance, Corporate Responsibility, and Political Oversight Committee consists entirely of independent members. Its responsibilities include board succession planning, considering the value of promoting diversity of experience and skills, ethnicity and gender. It has responsibility for recommending director nominees for full board consideration. Documentation of its and board meetings reflect the committee's engagement in succession planning and in recommending director candidates for election by shareowners.

2. **Committee structure and board and committee governing and guidance documents at the FirstEnergy Corp. level provide clear, comprehensive, and appropriate guidance, and have responded to calls for enhanced control of activities designed to influence political and regulatory issues and circumstances.**

We found overall corporate governance policies and other documents defining board and committee roles, outlining their expected practices, and listing specifically required reviews, approvals, consultations, and other activities complete and in conformity with what we have seen at other major U.S. utility holding companies.

Committee structure and responsibility division follows expected practice. In particular, the employment of an operations focused committee and its revision to concentrate on operating company performance following cessation of nuclear operations at FirstEnergy comprises a notable strength. The duties given to the Safety and Operations Oversight Committee by its charter reflect a sound focus on the importance that effective operations has in ensuring the operating effectiveness and efficiency needed to serve shareowner interest long term by continuing to meet public service obligations and expectations. We did, however, find that committee's addressing of operating performance at JCP&L occurring at a less than optimum level of detail and frequency (see Conclusion #4 below).

3. **The FirstEnergy board's committee structure supports establishment and implementation of appropriate controls.**

The Audit Committee's structure gives it sufficient accountability and comprehensive and independent authority to ensure sound controls executed under proper oversight. The board has crafted appropriate relationships between the committee, internal audit, the independent accountants, and executives with material controls responsibilities. Changes made to the now termed Corporate Governance, Corporate Responsibility, and Political Oversight Committee give it a role that, while broad in comparison with what we have typically seen elsewhere, responds robustly to circumstances that have caused major executive separations and the need to resolve federal criminal and shareowner concerns of major magnitude.

Actions of the committees in the wake of those changes conform to normally expected roles and to commitments made to address the actions and circumstances that led both to externally imposed changes and those identified internally as examination and response to those actions and circumstances have continued, albeit, as noted elsewhere, with less than hoped for transparency about the details of those examinations.

4. **The FirstEnergy board committee structure provides appropriate means for focusing with sufficient particularity on the operating needs of JCP&L; broadening and deepening the engagement of the Operations and Safety Oversight Committee, however, is in order.** (*See Recommendations #1 through #3)*

We found the committee structure of the FirstEnergy Corp. board fairly typical, with the scope given to what it now terms its Operations and Safety Oversight Committee a notable strength.

FirstEnergy includes 10 distinct electric utility operating companies - - nearly twice the number of other large U.S. utility holding companies. This number makes its challenges in understanding the performance drivers and results of each individually extraordinary. The charter of the Operations and Safety Oversight Committee gives it accountabilities, authorities, responsibilities and access to resources commensurate with doing so. This committee replaced the Nuclear Committee after departure of commercial power and energy entities and operations from FirstEnergy. That committee received what appears to have been detailed information about each of the three nuclear stations then operating.

Detail at the individual level (now operating companies as opposed to nuclear stations) has not continued. The new committee met six times in 2021. Pre-meeting information provided to the members about the operating committees came at the consolidated 10-company level. Even that data covers an extremely limited set of operations metrics (again, all presented at only the consolidated, 10-company level):

- *System Average Interruption Duration (SAIDI)*
- *Customer Average Interruption Duration (CAIDI)*
- *System Average Interruption Frequency (SAIFI)*
- *Transmission Outage Frequency*
- *Customer Service First Call Resolution*

The presentations also provided consolidated measures in the following categories:

- Safety: OSHA incidents, DART (measuring lost work time), life changing events
- Financial: Capital and O&M expenditures versus budget, noting amounts recovered under formula rates
- Regulated Generation: equivalent forced outage rates and equivalent availability factor
- Environmental: Excursions (*e.g.*, limits exceeded) and notices of violations

The slides presenting this quantified information provided some summary descriptions of overall performance drivers and actions, but not at a level meaningfully relating gaps to those drivers and connecting them with specific remedies under consideration or in execution.

Each meeting included a presentation for one individual operating company. Quantified performance information generally covered the same data provided in the consolidated information; *i.e.*, provided generally the metrics for the individual company up to that month but no more. The presentations reviewed for the individual companies provide some narrative highlights of events and circumstances, but not in a manner particularly useful for gauging operational performance. With six meetings per year and 10 operating companies, it takes a cycle that approaches two years for JCP&L to become the individual utility highlighted at committee meetings.

Pre-meeting information to the full board in 2021 included a 20-page or more "Financial and Operational Report to the Board of Directors" generally providing only a single page of operational information, dropping three of the five operations metrics listed above to two (CAIDI, SAIFI and first call resolution) and providing the three safety and two environmental measures, all at the consolidated level and without discussion of trends, variances, and responsive actions.

Moreover, the agendas of the 2021 meetings we reviewed showed infrequent listing of the committee as reporting to the full board. Finally, questions provided in advance of interviews with board leadership included areas or circumstances that would distinguish JCP&L from the other operating companies. The interviewees did not find any areas that distinguished the company for good or bad, citing only investment opportunities there as factors distinguishing JCP&L.

Moreover, significant direct interaction between the JCP&L board and the FirstEnergy Corp. board or its committees does not occur. Moreover, the JCP&L president, with the lead officers of the other operating companies, does attend Operations and Safety Oversight Committees, but does not have regular opportunity to make presentations to it outside the designated opportunity that occurs at greater than two year intervals.

These factors illustrate the challenges that separate a board seeking to oversee operations at 10 dispersed operating companies versus those responsible for one, or even the five or six more typical of other large U.S. holding companies that include electric utilities. The FirstEnergy Corp. board and the committee accountable and empowered to oversee utility company operations has untapped opportunities to enhance understanding of facts and circumstances material to matters that should concern them.

In summary, FirstEnergy should take greater advantage of the availability of the separate JCP&L board of directors to complement the parent board's concentration on consolidated needs and performance with important local perspectives on New Jersey needs and circumstances.

5. **The FirstEnergy Corp. board engages significantly in planning, but its structure and relationships with the JCP&L board do not optimize focus on the distinct needs of JCP&L.** (*See Recommendations #1 through #3)*

The *Planning and Budgeting* Chapter of this Phase Two report addresses the processes by which planning and budgeting develop and how they become consolidated. We found the parent board sufficiently engaged in those processes. We recommended significant changes in those processes (see the Recommendations section of that chapter). The JCP&L board should become engaged in them directly. It does not do so now, but does address monitoring of progress against and variances to them. Moreover, the JCP&L board does not how have a structure optimum for doing so.

We found its two independent members qualified, capable, engaged, and highly focused on what the company's operations mean for shareowners, customers, and other stakeholders. Expanding the number of independent directors would, however, create a structure more suitable for providing greater involvement not only in planning and budgeting, but in expanding the scope and increasing the depth of JCP&L engagement in the key drivers of operational success in New Jersey. That increase has equal application to promoting shareowner success and fulfillment of public service requirements and expectations. As we have explained elsewhere in our two reports on this engagement, long-term divergence between the two should be minimal at most.

6. **Recent changes in FirstEnergy Corp. board membership have left it with membership that, while consisting of individually qualified individuals, nevertheless lacks the breadth of skills and experience one finds in other large U.S. utility holding companies.** (*See Recommendations #1 through #4)*

The FirstEnergy Corp. board grew to 16 members in 2021 as it expanded to address a transition in executive leadership and to create a committee structure designed to address federal civil litigation arising at least in major part from the circumstances that produced leadership departures necessitating that leadership transition. Too large to be considered representative or by many desirable under normal circumstances, that expansion had a strong grounding, considering the circumstances facing the enterprise. The board returned to a more typical size of 12 at the May 2022 meeting, but with characteristics well apart from the norm for large U.S. utility holding companies. First, the board now has an extraordinarily short tenure overall and among a majority of its members individually. More significantly, it has, through operation of the Settlement Agreement, lost its six most experienced directors - - those with the longest time to have become familiar with the operating needs on which successful utility performance depends. Adding two new members who have utility experience, in senior management and executive positions (not board ones) has moderated that loss.

In addition to the loss of experience, the FirstEnergy board has a far greater representation from directors whose backgrounds consist so largely of legal, financial (particularly investment-related) positions and responsibilities. Half of the members, for example, come from largely legal backgrounds and large purchase shares by activist investor interests account for the appointment of one quarter of them. No individual member fails to have personal qualifications not matching those typically required, and the particular reasons for their appointments all have a defensible basis.

Nevertheless, well-accepted norms call for a board that overall reflects strong diversity in business and institutional backgrounds and experience. A comparison of board characteristics undertaken holistically clearly shows at other large U.S. holding companies a broader range of experience in terms of functional areas performed, the executive level at which performed, the range of businesses and the institutions at which performed. Finally, as described above, the blend of tenures exhibited at those other holding companies is much greater and produces a cumulative experience level at the companies they serve as directors very much greater than exists now at FirstEnergy.

7. **The May 2022 annual meeting ended an extended period during which FirstEnergy Corp. has employed an independent director as chair, but the existence of a lead independent director creates an expectation that its history of meetings that exclude management will continue.**

An independent director served as the FirstEnergy Corp. board chair for many years. The incumbent in place until the May 2022 annual meeting began that position in 2018, following a predecessor, who served from 2004 until reaching required retirement per board policy, at age 72. Our examination found provision for regular meetings by independent directors only. CEO and board chair roles remain separate, but with each filled by non-independent directors.

The current chair does not qualify as independent due to service just ended as executive director, a role filled provisionally to support the transition period following termination of the then-CEO in October 2020 and a number of other executive and senior management terminations and separations. The new chair now serves only in a board role following election at the May 2022 meeting.

A member has been named as lead independent director, a position whose existence and responsibilities the Corporate Governance Policies (described above) address. Including the holding of independent- director-only meetings, those policies give the lead independent director typical responsibilities and powers.

8. The Audit Committee of the FirstEnergy Corp. consists entirely of independent members, possesses sufficient financial expertise literacy, and has appropriate oversight and control of matters related to financial controls and auditing.

All four members qualify as independent, which the committee charter requires. Three of the four possess qualifications clearly qualifying them as financial experts and the fourth as financially literate. The charter provides appropriate limits on the other FirstEnergy compensation and on membership on the audit committees of other board of directors.

The charter gives the committee comprehensive and appropriate oversight and action responsibility over controls, the external auditor, internal auditing, ethics and compliance, and risk management. Functional reporting of the Vice President, Internal Audit and of the Chief Ethics & Compliance Officer both promotes their independent operation and supports Audit Committee oversight of their plans, resources, and operations. This committee has the power to retain outside resources at company expense to support the performance of its responsibilities. The Audit Committee has sole power over retention, replacement, and termination of the independent auditor and appropriate control over its work and limits on non-audit tasks the independent auditor may be asked to perform. Consultation with the Committee must occur before appointment or removal of the heads of internal audit and ethics & compliance, each of which report functionally to the committee (and administratively to FirstEnergy's Chief Legal Officer).

The Audit Committee has an appropriate role and engagement in ensuring the ability to raise accounting, controls, and other concerns. The *Organization and Executive Management* of Chapter this Phase Two report addresses the means for raising and addressing concerns, questions, and potential violations and the organizations and resources responsible for executing them. We also found the Audit Committee role with respect to overseeing risk identification and management appropriate.

D. Recommendations

1. Restructure the JCP&L board and expand the scope and depth of its engagement in operations and customer service performance oversight. (*See Conclusions #4 through #6*)

JCP&L board membership should expand by the addition of at least two additional independent members and over the long term diminish the professional interconnections among members. The added members should include at least one member with substantial electric utility senior executive leadership (*i.e.*, above the first-executive level, which as normally categorized would mean senior vice president) in operations or customer service.

We found the two current independent JCP&L members both well qualified and engaged. However, both share with the JCP&L President substantial state chamber of commerce backgrounds. We would consider the loss of either member a setback, but the application of the parent board's age-based membership guidelines would give ample time for an appropriate transition to membership with fewer interconnections. We also consider placing one independent parent board member on the JCP&L board useful as well, but of lesser importance.

It remains appropriate to ensure that JCP&L as a subsidiary of FirstEnergy Corp. remains appropriately controlled by the parent. Adding enough management members to the board to ensure a majority would conform to the current method for doing so. Under that approach, however, we consider a change in current management membership appropriate. First, the current management members all operate in the same direct supervisory chain - - from the JCP&L President through his direct superior and then in turn to the next direct superior. A preferable approach would be to add as members FirstEnergy executives from multiple disciplines - - distribution, transmission, and customer service, for example.

In any event, the goal of this recommendation is not to establish potentially conflicting sources of direction or oversight, but instead to engage a JCP&L board with a more optimally designed independent minority and a more broadly based management majority more deeply into understanding, questioning, and contributing to the factors that drive JCP&L performance, recognizing that effective performance for a utility with public service responsibilities has an uncommonly large impact on shareowner success. Therefore, nothing about this recommendation should be read as addressing the matters on which the JCP&L board votes, but upon those that it addresses, how deeply its oversight dives in addressing them, and how sound becomes its opportunity to contribute to dialogue at the highest levels.

Moreover, we emphasize that the focus of the recommendation lies on operational and customer service, and not financial oversight. We do recommend in the *Planning and Budgeting* Chapter of this Phase Two report a more engaged JCP&L board role in planning and budgeting. However, even that recommendation, while it implicates financial matters and the organizations responsible for them, also focuses particularly on ensuring the results of planning and budgeting robustly consider contribution from within JCP&L as part of a process that we understand must ultimately undergo coordination and rationalization the FirstEnergy enterprise level.

2. Expand the operations and customer service metrics and trends regularly reported to and addressed by the JCP&L board of directors and by the FirstEnergy Corp. Safety and Operations Oversight Committee. (*See Conclusions #4 through #6*)**.**

The President of JCP&L should provide for the JCP&L board at least quarterly a presentation that includes a range of operations and customer performance metrics with comparison to targets and to the other operating companies, including a narrative summary of gaps and variances and material circumstances, conditions, and issues. Comparisons of key measures to experience at the other operating companies, with explanations of factors driving those differences (whether external or due to current gaps in JCP&L performance) should form part of these presentations.

Those presentations should precede committee meetings by the usual durations established for pre-meeting provision of information to committee members and be followed by presentations from the JCP&L President at JCP&L board meetings. The range of metrics covered should expand from the much narrower set normally provided to the FirstEnergy Corp. board, encompassing a reasonably full range of measures addressing key measures of operational performance. Just some examples, include productivity, work unit performance, staffing complements, overtime, and backlogs in areas that include field operations, materials warehousing and distribution, and fleet management. It should also include a robust range of measures of customer service performance. Examples of these measures include call response times, appointments kept, first call resolutions, and customer complaints filed and sustained. For at least the indefinite future, these at least quarterly sessions should also include a description of plans, status, and next steps in restoring a more workable relationship with bargaining unit representatives and addressing the issues they feel have particularly affected that relationship.

The independent members of the JCP&L board should meet in the absence of the management members prior to or at a break in meetings addressing these quarterly reports. The independent members, however, should have the ability to meet in executive session as well with the JCP&L President as the only attending management member. At least twice per year, the independent JCP&L board members should conduct a session with the independent members of the FirstEnergy Corp. Safety and Operations Oversight Committee.

The FirstEnergy Corp. Safety and Operations Oversight Committee should more regularly and more deeply receive and address JCP&L operations and customer service performance information. Over time, its interaction with the JCP&L board independent members may lead to the committee’s taking of a more summary level view of data, metrics gaps, and trends. However, it should begin with access ahead of each of its meetings to the same information we recommend be made available to the JCP&L board.

The JCP&L President should commence and should continue to provide summary presentations at committee meetings at three month intervals - - ensuring one timed to coincide with annual planning and budgeting activities and precede board plan and budget review and approval. These presentations should include identification of gaps and trends (whether performance is above or below par), the reasons, responsive measures planned and underway, and an assessment of major needs to be addressed in modifying current or developing future plans.

The committee should for each of its meetings have pre-meeting access to and expect management to address at meetings material differences in JCP&L performance from overall operating company experience and reasons, encompassing measures described above. The committee's independent members should have access to and should conduct at least twice per year sessions with only JCP&L leadership

3. Embark upon a longer range plan to diversify the professional, business, and institutional backgrounds of the FirstEnergy Corp. board directors. (*See Conclusion #6)*

The FirstEnergy Corp. board has already undergone great change over a period of profound to normal operations occasioned by failure of a key business segment, conduct at senior levels that led to major leadership terminations and separations, and managing the potential consequences of resulting litigation. The board has been left as a result with a membership not lacking in individual qualifications, but extraordinarily short in tenure and with an uncommon concentration in professional backgrounds.

Its needs to grow tenure, which can ***only*** happen over time, and it needs to expand the backgrounds, experience, and leadership levels, which ***should*** happen over time lest the tenure problem continue and at the cost of further discontinuity and its potentially adverse consequences. These factors leave little to recommend in the immediate term, beyond securing recognition of the value of and need for long term plans to produce eventually at FirstEnergy Corp. a board whose members display the variety, breadth, depth, and level of professional, business, academic, and institutional track records that simple recourse to the websites of other large U.S. holding companies will show to exist. The board of Exelon, the other holding company with fairly numerous electric utility operations that include a New Jersey electric distribution company, provides a model.

However, this lack of short-term opportunities at the parent board level, viewed in the context of parent and senior leadership level issues that have beset FirstEnergy and the nature and scope of the issues this engagement have shown to still exist underscore the need for the measures proposed in the two preceding recommendations, at least for the near- to intermediate-term future, if not longer.

We consider these measures both central to ensuring a sound focus and sufficient priority on JCP&L and to restoring and sustaining regulatory confidence in how FirstEnergy operates to promote and ensure that the New Jersey utility meets public service responsibilities effectively and efficiently. In recommending these measures, we have sought not to jeopardize the need for governance structure (overall and for JCP&L) to serve shareowner interests - - interests that have been threatened by management and operations at their intersection with the need for meeting public service responsibilities and expectations and in a reasonably transparent manner.

Appendix One: FirstEnergy Corp. Governance Framework

1. The board determines Audit Committee member independence and satisfaction of other Securities Exchange Act of 1934 requirements and of qualification as a financial expert under Securities and Exchange Commission rules.
2. The board determines Compensation Committee member independence and satisfaction of other Securities Exchange Act of 1934 and exchange listing requirements.
3. The overall role of the board includes:
    a. Oversee CEO and other senior management performance
    b. Assure the serving of shareholder best interests
    c. Proactively carry out its duties
    d. Actively monitor corporate management
    e. Provide oversight to ensure that management achieves long-term strategic, financial and organizational goals, competently and ethically.
4. The board is expected to leave day-to-day business to employees, managers, and officers under CEO direction.
5. Board oversight should seek to increase long-term company value for shareowner benefit.
6. Board operations should recognize that long-term enhancement of enterprise value considers other stakeholders, including employees, customers, creditors and suppliers, and the greater community.
7. Effective board action includes diligent inquiry and careful review appropriate to matters considered, asking management and outside advisers probing questions.
8. The board may retain outside advisors at its discretion and at company expense.
9. The board should adopt and disclose corporate governance policy, Audit, Compensation, Finance, Operations and Safety Oversight, and Corporate Governance, Corporate Responsibility and Political Oversight Committee charters, and codes of conduct for directors and for all employees.
10. The board should receive reports from the Chief Ethics & Compliance Officer regarding the Company's Ethics and Compliance Program.
11. An orientation session should occur for new board members shortly after their election or appointment.
12. Continuing education programs should exist for board members.
13. Board engagement should recognize that long-term success depends on maintaining an ethical business environment focusing on adherence to the letter and the spirit of regulatory and legal mandates.
14. Board members should operate consistently with the Code of Conduct.
15. The board should review material risks and oversee risk management practices to ensure the existence of processes appropriate to maintaining company integrity and reputation reinforcing a culture of ethics, compliance, and risk management.
16. The board should review political contribution policies and annual review of contributions to any political group or activity.
17. The board should recognize that management speaks for the company and expect that director communication with "various constituencies" will be only occasional and with prior management knowledge.

18. Processes should provide for receipt of and response to written communications to the board, administered by the corporate secretary.
19. Committee chairs establish agendas for each board meeting in consultation with the CEO and with director ability to suggest items.
20. The board can expect distribution of material important to member understanding in writing before meetings, with individual review of those materials occurring before the meeting involved.
21. Member attendance at all board and committee meetings and at the annual meeting of shareowners is expected.
22. Regular board meeting attendance will include management members designated by the CEO or requested by the board.
23. Executive sessions of non-management and independent directors will occur at scheduled board meetings with an independent member presiding.
24. The board retains discretion with respect to separating the roles of its chair and the CEO at any time.
25. Independent directors will approve CEO compensation, following Compensation Committee recommendation.
26. The board has discretion to permit a retired CEO to remain a director.
27. The Compensation Committee recommends to the full board non-employee director compensation (a portion of which is to be in stock), designed to be competitive with peer companies.
28. Compensation to Audit Committee members is limited to board and committee member compensation.
29. Board members have full access to management and to books and records.
30. Board committees have access to independent advisors.
31. Independent directors (acting as a majority) may retain legal counsel, accountants, consultants, or other experts, at company expense.
32. Board members will tender resignation at age 72, or upon major change in other employment, directorships, or geographical location, with acceptance at board discretion.
33. No set member term limits exist.
34. Audit, Compensation, Corporate Governance, Corporate Responsibility and Political Oversight, Finance, and Operations and Safety Oversight Committees will consist entirely of independent members.
35. A majority of Finance Committee members shall be independent.
36. The Board will consider but need not require rotation of members among committees.
37. Committees determine their meeting frequencies and lengths, with at least annual meetings of all standing committees.
38. Committee chairs set agendas in consultation with other board members, with yearly posting of foreseeable agenda subjects.
39. Removal of committee chairs and members may occur without cause, by majority vote of the board.
40. Committees may delegate their powers to subcommittees.

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Chapter IV: Finance and Cash Management

A. Background - - Dividend Policy and Capital Structure

Sound and well-defined financial policies and strategies provide a key source of support for maintaining utility financial health. JCP&L should apply dividend and capital structure policies on a stand-alone basis, envisioning and seeking consistency with needs that changing marketplaces impose. They should also fully reflect FirstEnergy's evolution from a focus on competitive wholesale electric generation to a concentrated focus on regulated electricity transmission and distribution businesses. JCP&L dividend and capital structure policies should provide the proper foundation for new directions that continue to seek an optimum-cost rate structure.

B. Findings - - Dividend Policy and Capital Structure

1. JCP&L Dividend Policy

JCP&L established a formal dividend policy in 2015 following BPU examination of the status of implementing recommendations from a 2011 management audit report. That report recommended establishment of a formal, written JCP&L dividend policy. JCP&L prepared such a policy in May 2015 and presented it to the BPU, which approved it in July 2015. The dividend policy included a purpose and background statement and a dividend process overview. It also defined the roles and responsibilities of JCP&L officers and board of directors for dividend payments. Factors considered in proposing and approving a specific dividend payment included applicable corporate governance and compliance documents, existing financial agreements and indentures, company performance, financial metrics, credit ratings, and the authorized equity capitalization for ratemaking purposes. JCP&L also enacted an updated dividend policy in November 2020 - - not substantively changed from the 2015 dividend policy.

The JCP&L dividend policy process is as follows:
- Corporate Secretary initiates a dividend review
- JCP&L Treasurer analyzes and develops a recommended dividend payment, if any
- Legal counsel reviews applicable debt covenants, regulatory limitations, and corporate legal matters
- Director of New Jersey rates and regulatory affairs reviews the recommendation
- JCP&L Controller reviews the dividend recommendation
- JCP&L Treasurer develops a new recommendation if participants reach no consensus
- JCP&L Board of Directors ratifies the dividend recommendation
- JCP&L Controller prepares and books the dividend journal entry
- JCP&L Treasurer manages the payment of the dividend to FirstEnergy.

The JCP&L Treasurer has primary responsibility for analyzing and recommending the company's dividend, with required considerations and reviews including:
- Legal and regulatory limitations
- Contractual limitations
- Short-term debt limitations

- Regulated money pool restrictions
- GAAP and non-GAAP net income
- Net cash position
- Retained earnings and equity position
- Borrowings, including short-term debt and long-term debt
- Total capitalization
- Associated ratios and financial metrics
- Forecasted financial statements
- Dividend impact analysis
- Authorized equity capitalization for ratemaking
- Credit agency ratings and metrics.

The JCP&L Treasurer performs dividend analyses at least quarterly and more often as circumstances require. The Treasurer considers the JCP&L capital structure, excluding goodwill, using forward-looking forecasts. JCP&L's current target capital structure calls for 50 to 55 percent equity capital, excluding goodwill.

The Treasurer also considers the company's forward-looking liquidity position, taking into account impacts from factors like storms and other events affecting liquidity. The Treasurer also reviews the five-year forecast for JCP&L capital and funding needs on a going-forward basis. Reviews of credit metrics employ a forward-looking view, including assumed dividends, debt issuances and redemptions, and equity injections from FirstEnergy, if any. The Treasurer considers the most important checks on the dividend analysis performed to include those of the New Jersey Rates & Regulatory Affairs Director (regarding regulatory capital structure impacts) and of legal counsel (regarding debt covenant limitations). The JCP&L Treasurer works with the FirstEnergy Treasurer to develop the dividend recommendation.

2. JCP&L Equity Dividends/Removals and Injections, 2011-2021

JCP&L experienced a number of changes in dividend policy and equity capital maintenance during the period from 2011 through 2021. A 2011 management audit recommended adoption of a formal dividend policy for JCP&L, which came a number of years later, in mid-2015. The following table shows actual removals of equity capital through one major "return of capital" and through a series dividends in 2011 through 2013, followed by a rebuild of equity capital in 2016 through 2018, and then a resumption of dividends.

JCP&L Equity Capital Management, 2011-2021

Date	Equity Impact	Transaction Type
May 2011	$(500 million)	Return of Capital
Q1 2012	$ (50 million)	Common Stock Dividend
Q2 2012	$ (40 million)	Common Stock Dividend
Q3 2012	$(100 million)	Common Stock Dividend
Q3 2013	$ (70 million)	Common Stock Dividend
2014 through 2018	No Dividends	Common Stock Dividends
April 2016	+$250 million	Equity Injection/Re-Build
June 2017	+$245 million	Equity Injection/Re-Build
July 2018	+$150 million	Equity Injection/Re-Build
Q1 2019	$(20 million)	Common Stock Dividend
Q2 2019	$(20 million)	Common Stock Dividend
Q3 2019	$(50 million)	Common Stock Dividend
2020	No Dividends	Common Stock Dividends
Q3 2021	$(70 million)	Common Stock Dividend

FE Treasury described 2011's $500 million removal of equity from JCP&L as resulting from a belief by the management team at that time that JCP&L had an excess of equity capital that required reduction. However, FE Treasury also noted that correct capital management would have included measuring the JCP&L regulatory capital structure by excluding Goodwill from equity capital, as has been the practice of the BPU in its ratemaking decisions. The JCP&L equity position underwent further erosion through dividends of $260 million in 2012 and 2013. In all, cumulative JCP&L equity capital removals from 2011 through 2013 totaled $760 million.

From 2014 through the end of 2018, JCP&L did not make dividend payments to FirstEnergy. Starting in 2016, equity capital was rebuilt, with JCP&L receiving a total of $645 million in equity injections from FirstEnergy, and also redeeming $700 million of long-term debt. FE Treasury noted that the 2016 through 2018 period constituted a "recapitalization" of JCP&L. Following this equity rebuild and recapitalization, JCP&L started dividend payments again beginning in 2019 and has continued them.

3. *JCP&L Regulatory Capital Structure, 2011-2021*

The following table tracks regulatory equity percentages for JCP&L for each quarter from 2011 through September 2021. "Adjusted Equity" removes Goodwill of $1.8 billion and pension mark-to-market balances in calculating JCP&L's equity balance and percentage of total capitalization positions.

JCP&L Equity Adjusted for Goodwill 2011-2021 in Millions

Year	March 31		June 30		September 30		December 31	
	Balance	%	Balance	%	Balance	%	Balance	%
2011	$830	35.7%	$375	20.1%	$462	$0	$556	27.1%
2012	$579	27.9%	$566	27.5%	$601	29%	$558	27.2%
2013	$584	28.1%	$615	29.1%	$679	25%	$634	24.1%
2014	$658	24.8%	$687	25.6%	$760	28%	$827	29.3%
2015	$850	29.9%	$869	30.4%	$920	29%	$930	29.3%
2016	$935	29.4%	$1,205	38.3%	$1,269	40%	$1,315	40.4%
2017	$1,333	40.7%	$1,608	48.7%	$1,677	50%	$1,701	50.1%
2018	$1,732	50.5%	$1,920	55.4%	$2,006	56%	$2,016	56.6%
2019	$2,024	55.1%	$2,048	55.4%	$2,132	56%	$2,134	56.4%
2020	$2,119	56.2%	$2,168	56.8%	$2,262	58%	$2,356	58.8%
2021	$2,397	59.2%	$2,439	53.2%	$2,455	53%		

The next table shows regulatory capital structures approved by the BPU in effect for JCP&L, reflecting rate case decisions from 2003 to the present.

JCP&L's BPU-Approved Capital Structures

Base Rate Case	BPU Docket No.	Approved Debt %	Approved Equity %	Approved MIPS[1]	Approved Preferred Stock	Effective Date
2002	ER02080506 et al	47.77%	46.00%	5.66%	0.57%	August 1, 2003
2012	ER12111052	50.00%	50.00%			April 1, 2015
2016	ER16040383	55.00%	45.00%			January 1, 2017
2020	ER20020146	48.56%	51.44%			January 1, 2021

[1] Monthly Income Preferred Securities

N.J.A.C. 14:4-4.6(c) sets forth the only JCP&L ring fencing requirement addressing "equity maintenance." It requires that JCP&L notify the:

- Office of the Chief Economist and Division of Energy when equity to total capitalization ratio has fallen below 30 percent, as determined for ratemaking purposes and excluding securitization debt
- BPU in writing 30 days in advance of intent to transfer other than by dividend more than five percent of retained earnings to the holding company
- BPU in writing 30 days in advance of intent to declare a special cash dividend that would produce a less than 30 percent equity-to-total capitalization ratio.

FE Treasury does not consider these ring fencing measures to have any effect on its dividend or capital structure decisions because JCP&L's applicable financing or credit facility covenants impose more severe restrictions.

C. Conclusions - - Dividend Policy and Capital Structure

1. JCP&L did not operate under a formal dividend policy before 2015, allowing $760 million of equity removals that resulted in insufficient equity levels per ratemaking from 2011-2018.

JCP&L did not develop and apply prior to mid-2015 the formal dividend policy recommended by a 2011 management audit report. With no formal dividend policy or related analysis of dividend payments, major equity removals from JCP&L to FirstEnergy Corp occurred from 2011 through 2013.

The first major removal occurred in May 2011 with the payment of $500 million classified as a "Return of Capital". Returns of Capital do not come from retained earnings, but rather from paid-in capital. We requested the dividend analysis and recommendation related to the 2011 return of capital. A letter from the JCP&L Controller to the Board of Directors claimed total common equity of $2.641 billion, and a common equity ratio of 63.9 percent prior to the return of capital payment. The pro-forma calculation of capital equity ratio following the return of capital of $500 million showed a residual level of 58.9 percent.

The Goodwill component of JCP&L's equity capital then stood at $1.8 billion, which comprised the vast majority of the equity position. Management and the board of directors did not appear to consider potential regulatory treatment of Goodwill in making the declaration of the $500 million return of capital. Removal of Goodwill left only about $375 million of equity capital, or about 20.1 percent of JCP&L capitalization at June 30, 2011. The lack of consideration of JCP&L's regulatory common equity ratio as addressed in the ratemaking process, which may or may not remove Goodwill, constituted a major financial management misstep that would eventually cause regulatory issues for JCP&L.

JCP&L followed the return of capital with substantial dividend payments in 2012 and 2013, further eroding the equity position. JCP&L Controller letters and capitalization statements to the Board of Directors addressed the recommendation of each dividend payment, which together totaled $260 million in these two years. Analysis and declaration of dividends consistently showed payments made out of retained earnings, with capital statements continuing to include the $1.8 billion of Goodwill in equity capital calculations.

From 2011 through 2013, $760 million of equity capital was removed from JCP&L without proper analysis of the regulatory equity capital positions that should question the inclusion of Goodwill in the company's equity capital.

2. JCP&L's insufficient equity capital position formed a significant issue in both the 2012 and 2016 base rate cases before the BPU.

JCP&L's 2012 and 2016 base rate cases both addressed capital structure. In BPU Docket ER12111052 (2012 base rate case), the company requested a regulatory capital structure of 60.8 percent equity and 39.2 percent debt as of June 30, 2012, adjusted to reflect the issuance of $500 million of long-term debt in August 2013. The New Jersey Rate Counsel opposed JCP&L's capital structure on the basis that Goodwill comprised a major portion ($1.8 billion) of equity capital. The

Goodwill designation operated as an accounting adjustment to the balance sheet, to recognize the premium FirstEnergy paid above book value in 2002 for JCP&L.

Rate Counsel argued that including Goodwill in the ratemaking capital structure produced in effect a request to recover the merger premium in JCP&L rates - - in the form of a return on rate base. Rate Counsel also noted that the removal of Goodwill would produce an overly leveraged, too risky capital structure, proposing instead a 50/50 hypothetical capital structure the company had recognized as reasonable for credit quality and ratemaking purposes. The order in the 2012 Base Rate Case, effective April 1, 2015, employed this capital structure.

The regulatory capital structure issue also arose in JCP&L's 2016 base rate case. A stipulation by parties to the rate case included another hypothetical capital structure consisting of 45 percent equity capital. The stipulation recognized that JCP&L continued to have insufficient equity capital absent the inclusion of Goodwill. The Stipulation also included paragraphs 20 through 22, related to addressing insufficient equity capital, stating that:

> *Paragraph 20: The Parties agree that JCP&L will target a capital structure with an equity (excluding goodwill and mark-to-market adjustments) ratio of 45% by 2020.*
> *Paragraph 21: JCP&L agrees to annual reporting to the BPU Staff and Rate Counsel on progress towards the targets in Paragraph numbers 19 and 20 of the Stipulation.*
> *Paragraph 22: JCP&L agrees that it will not issue a dividend to FirstEnergy Corp. until JCP&L reaches the 45% equity ratio as described in Paragraph 21 of the Stipulation.*

3. FirstEnergy and JCP&L re-built the utility's regulatory equity capital position in 2016-2018, with the company essentially reaching targeted ratemaking equity levels in 2018.

The Stipulation reached in the JCP&L 2016 base rate case effectively directed the company to rebuild its equity position. In April 2016, JCP&L received a $250 million equity contribution from FirstEnergy. The equity contribution comprised one of three major equity injections from FirstEnergy designed to rebuild JCP&L's equity position. The following table shows JCP&L's regulatory equity position reported to the BPU as of March 31, 2017; the $250 million equity injection from FirstEnergy had increased the adjusted, or regulatory equity to 35.2 percent.

JCP&L Regulatory Capitalization at March 31, 2017

JCP&L Capitalization at March 31, 2017 ($ in millions)			
2016 Base Rate Case Settlement			
	Balance	**%**	
Adjusted Equity	1,055	35.2%	*Target 45.0%*
Long-term Debt	1,944	64.8%	
Total Capitalization	3,000	100.0%	

2,840	Total Equity per FERC Form 3Q - 1st Quarter 2017
(1,811)	Goodwill Adj
26	Pension Mark-to-Market Adj
1,055	Adj Equity per Paragraph 21

Note that the preceding table captioned *JCP&L Equity Adjusted for Goodwill, 2011-2021* presents different equity capitalization balances and ratios from those of the preceding and following tables. All of the data in the tables came from management.

Following the just-referenced report to the BPU, FirstEnergy contributed an additional $245 million to JCP&L in June 2017. This second major equity contribution increased JCP&L's regulatory equity position to 44.0 percent at June 30, 2017, as shown in the following figure.

JCP&L Regulatory Capitalization at June 30, 0217

JCP&L Capitalization at June 30, 2017 ($ in millions)			
2016 Base Rate Case Settlement			
	Balance	**%**	
Adjusted Equity	1,330	44.0%	*Target 45.0%*
Long-term Debt	1,694	56.0%	
Total Capitalization	3,024	100.0%	

3,115	Total Equity per FERC Form 3Q - 2nd Quarter 2017
(1,811)	Goodwill Adj
26	Pension Mark-to-Market Adj
1,330	Adj Equity per Paragraph 21

FirstEnergy made a third equity contribution to JCP&L of $150 million in June 2018 making $645 million in total equity contributions from FirstEnergy from 2016 to 2018.

In 2019, JCP&L proved able to resume dividend payments of $90 million for the year, while maintaining its regulatory equity percentage at above 50 percent. Following no dividend declarations in 2020, JCP&L paid dividends of $70 million in 2021 while following its dividend policy, which took into account the maintenance of a regulatory capital structure consistent with the capital structure approved by the BPU for ratemaking.

4. Equity maintenance ring fencing did not ensure, nor did it prove effective in preventing the removal of JCP&L equity capital to levels below its ratemaking capital structure levels. ***(****See Recommendation #1****)***

The New Jersey statutes regarding ring fencing require that:

> *JCP&L notify the Office of the Chief Economist and Division of Energy in the event JCP&L's equity to total capitalization ratio, as determined for ratemaking purposes and excluding securitization debt, has fallen below 30 percent.*

Statutory requirements also mandated notification to the BPU of transfers more than five percent of utility retained earnings to the holding company, or of a special dividend declaration that would produce equity to capitalization ratio below 30 percent. Provisions like these require the notification to regulatory authorities of potentially destructive financial management, but do not necessarily prohibit them.

These types of ring fencing represent early generations of utility financial insulation, which has evolved significantly during the past 20 years. Best practice for effective ring fencing regarding the maintenance of equity capital precludes actions that would reduce utility common equity as a percentage of total capitalization to below regulatory-authority authorized levels at any time. Such equity maintenance ring fencing and dividend policies should comprise a cornerstone of revised ring fencing, as also recommended in Chapter XI of our Phase One Report, *Financial Risks and Consequences of Parent and Affiliate Operations*.

D. Recommendations - - Dividend Policy and Capital Structure

1. Adopt for JCP&L ring fencing that includes new, strong "Equity Maintenance" provisions requiring ratemaking capital structure equity level not to fall below that informing the basis for New Jersey rates. (*See Conclusion #4***)**

Ring fencing in place for JCP&L did not prevent the removal of $760 million of equity from 2011 through 2013. At that time, applicable ring fencing at that time reflected first-generation utility financial insulation, which has evolved significantly since that time. Best practice for effective ring fencing regarding the maintenance of equity capital includes not allowing utility common equity as a percentage of total capitalization to fall below BPU authorized levels at any time.

E. Background - - Long-Term Debt Financing

Long-term holding company and utility subsidiary debt financing can present substantial risk for utilities. The debt of the holding company or a non-utility affiliate may reside in a separate corporate entity. Nevertheless, a variety of financial ties to the utility can cause direct or indirect harm. Financing documents can create such ties, or indirect relationships can serve to make the utility the "only deep pocket" for affiliate or holding company creditors to pursue in the case of financial distress. We evaluated and determined whether any debt financing instruments and long-term debt management associated with the holding company or its non-utility operations impose directly or indirectly on utility financing and financial health.

F. Findings - - Long-Term Debt Financing

1. JCP&L Long-Term Debt Outstanding

JCP&L issues senior unsecured notes to provide long-term debt funding for its utility businesses. The following table shows the utility's long-term debt issuances outstanding at July 30, 2021, including the latest issuance in June 2021. JCP&L debt outstanding totaled $2.150 billion, with a weighted average cost of 4.545 percent and an annual cost to customers of $97.0 million.

JCP&L Cost of Long-Term Debt at 6/30/2021

	Title	Date of Offering	Date of Maturity	Principal Amount	Amount Outstanding	Interest Rate	Net Proceeds	Cost of Money	Annual Cost
Senior Unsecured									
	6.40% Senior Notes	5/12/2006	5/15/2036	200,000,000	200,000,000	6.400%	196,437,128	6.536%	12,839,564
	6.15% Uns Notes	5/16/2007	6/1/2037	300,000,000	300,000,000	6.150%	295,979,780	6.249%	18,497,090
	4.30% Series	2/8/2019	1/15/2026	400,000,000	400,000,000	4.300%	402,865,217	4.180%	16,837,972
	4.70% Series	8/18/2015	1/15/2026	500,000,000	500,000,000	4.300%	493,197,650	4.867%	24,004,030
	4.30% Series	8/18/2015	1/15/2026	250,000,000	250,000,000	4.300%	247,086,512	4.440%	10,970,817
	2.75% Series	6/10/2021	3/1/2032	500,000,000	500,000,000	2.750%	498,630,000	2.779%	13,857,334
					2,150,000,000		**2,134,196,287**		**97,006,807**
					2,150,000,000		**2,134,196,287**		**97,006,807**
							Cost of Long-Term Debt		**4.545%**

2. JCP&L Long-Term Debt Issuances

Each long-term debt issuance reflects stand-alone transactions issued by JCP&L as the responsible corporate entity. The JCP&L Senior Unsecured Notes have issued under the auspices of an indenture document, not secured by a First Mortgage. JCP&L has used unsecured notes as its preferred debt financing vehicle for decades, favoring 7 and 10-year terms until maturity during the past 10 years. We reviewed company debt issuances that occurred in 2021, 2019, 2015 and 2013, which represent over three-quarters of its outstanding debt.

a. <u>2021 LTD Issuance</u>

The following table summarizes JCP&L's $500 million debt issuance completed June 8, 2021. The conclusions below explained that this issuance came at a premium to JCP&L, due to its affiliation with FirstEnergy.

JCP&L 2021 LTD Issuance

Issue Date	Size	Security	Issuer Ratings Moody's/S&P	JCP&L Stand-Alone S&P Rating	Tenor	Coupon	Spread
June 8	$500 million	Senior Notes Unsecured	A3/BB+	BBB	10-Year Long	2.75%	T + 125 bps

This long-term debt issuance came after significant problems at FirstEnergy caused a severe reduction in credit ratings for JCP&L, as discussed in Chapter XI of our Phase One Report, *Financial Risks and Consequences of Parent and Affiliate*. JCP&L's Investor Credit Rating with Standard and Poor's (S&P) stood at BBB prior to the problems arising following federal criminal investigations and related circumstances at FirstEnergy in late 2020. JCP&L's credit rating closely links to that of FirstEnergy, causing a utility company S&P rating decline from BBB to BB - - *i.e.*, by three credit levels. These credit issues related solely to issues at FirstEnergy, not at JCP&L. However, the June 2021 JCP&L debt issuance occurred while its credit rating remained diminished at S&P. S&P rated JCP&L's senior unsecured debt at BB+, or one credit notch above its Issuer Credit Rating, due to the subordination risk analysis commonly applied to subsidiary debt issuances. We also note that JCP&L's S&P stand-alone credit rating (not influenced by the parent's credit issues) as of the debt issuance stood at BBB, and its stand-alone senior unsecured debt rating would have been BBB+.

The Moody's A3 credit rating for JCP&L as of June 2021 indicates that credit issues at FirstEnergy did not significantly affect this rating, given that agency's rating methods. At the time of the $500 million JCP&L debt issuance, a wide credit-rating dichotomy existed, with an A3 Moody's rating, but only a BB+ at S&P. FirstEnergy's credit problems influenced this difference of four credit rating levels. The debt issuance had a coupon rate of 2.75 percent, which reflected an issuer pricing spread of 125 basis points above the benchmark 10-year Treasury rate.

b. <u>2019 LTD Issuance</u>

The following table summarizes JCP&L's $400 million debt issuance completed on February 8, 2019.

JCP&L 2019 LTD Issuance

Issue Date	Size	Security	Issuer Ratings Moody's/S&P	JCP&L Stand-Alone S&P Rating	Tenor	Coupon	Spread
February 8	$400 million	Senior Notes Unsecured	Baa2/BBB-	BBB	7 years	4.30%	T + 135 bps

JCP&L's $400 million debt issuance in February 2019 occurred under different credit circumstances than did the 2021 debt issuance. At this point, JCP&L had a Moody's issuer rating of Baa2, with the S&P rating at a slightly lower level of BBB-. JCP&L's credit rating with S&P linked closely to that of FirstEnergy; the holding company had an improving credit position in early 2019. The FirstEnergy Solutions bankruptcy initiated earlier relieved some of the credit pressure on the holding company, resulting in credit rating upgrades. JCP&L held at the time of this debt issuance an S&P stand-alone credit rating (not influenced by the parent's credit issues) of BBB.

JCP&L's S&P credit rating for the 2019 debt issuance was BBB-, with the FirstEnergy credit group producing a negative influence of one credit rating level on JCP&L. The 2019 debt issuance had a coupon rate of 4.30 percent and a maturity in seven years, with a pricing spread of 135 basis points above the benchmark Treasury rate.

c. <u>2015 LTD Issuances</u>

The following table summarizes JCP&L's $500 million and $250 million issuances of debt, each completed on August 11, 2015.

JCP&L 2015 LTD Issuances

Issue Date	Size	Security	Issuer Ratings Moody's/S&P	JCP&L Stand-Alone S&P Rating	Tenor	Coupon	Spread
August 11	$750 million	Senior Notes Unsecured	Baa2/BBB-	BBB	10-Year Long	4.30%	T + 220 bps

The $500 million of senior unsecured notes reflected a renegotiation of a 2013 issuance in the same amount. The notes did not provide "new money" for JCP&L. The original 4.70 percent interest rate associated with the 2013 debt issuance was replaced with a 4.30 percent interest rate on the same $500 million principal amount, with a 2025 maturity replacing a 2024 maturity.

The $250 million issuance of senior unsecured notes also had a maturity of more than 10 years. The $500 million and $250 million issuances each had credit ratings of Baa2 at Moody's and BBB- with S&P. FirstEnergy experienced financial pressure in 2015 due primarily to issues involving its commercial power and energy entities and operations. JCP&L's stand-alone credit rating with S&P was BBB, with the utility's credit association with FirstEnergy bringing its S&P rating down by one credit notch to BBB-.

The $750 million of JCP&L debt in two issuances in 2015 each had a coupon rate of 4.30 percent, a maturity of 10 plus years, and represented pricing spreads 220 basis points above the benchmark Treasury rate. The large pricing spreads of 220 basis points above Treasuries appear quite expensive for an investment grade utility.

d. <u>2013 LTD Issuance</u>

The following table summarizes JCP&L's $500 million debt issuance completed on August 14, 2013.

JCP&L 2013 LTD Issuance

Issue Date	Size	Security	Issuer Ratings Moody's/S&P	JCP&L Stand-Alone S&P Rating	Tenor	Coupon	Spread
August 14	$500 million	Senior Notes Unsecured	Baa2/BBB-	BBB	10-Year Long	4.30%	T + 205 bps

JCP&L's $500 million debt issuance in August 2013 also occurred under difficult credit circumstances. At this point, the Moody's issuer rating for JCP&L was Baa2, with S&P at a slightly lower, BBB-level. JCP&L's credit rating with S&P also linked closely to FirstEnergy's in 2013, with the rating agency noting "no meaningful insulation measures in place that protect JCP&L from its parent and therefore, JCP&L's higher SACP (Stand-alone Credit Profile of BBB) is capped at FirstEnergy's Group Credit Profile of BBB-."

The 2013 debt issuance had a coupon rate of 4.70 percent, a maturity in 10 years, and a large issuer pricing spread of 205 basis points above the benchmark Treasury rate. As noted above, the 2013 JCP&L notes underwent refinancing in 2015 with lower-priced notes carrying interest rates of 4.30 percent.

3. *JCP&L LTD Documents*

We examined long-term debt financing agreements for the JCP&L long-term debt issuances that remain outstanding. We reviewed the financing documents first to determine any direct or indirect ties to the holding company or other affiliates. We also sought to identify any encumbrance of utility assets by the holding company or any affiliate. We determined whether any cross-default provisions, Material Adverse Change provisions, or collateral call provisions existed in the JCP&L debt documents, and looked for other sources of potential impact on the utility. Overall, we evaluated whether any financial distress at the holding company or other affiliate could cause covenant violations or financial contagion damage to the utility, given the provisions of the JCP&L long-term debt financing documents.

We reviewed all financing and purchase agreements for the JCP&L long term debt issuances currently outstanding. We found no encumbrance of utility assets, cross-defaults, material adverse change provisions, or collateral call provisions. The debt documents appeared fairly standard for utility senior unsecured notes, with no indication of potential transfer of "top-down financial risks" that could harm JCP&L through the utility's long-term financing documents.

4. *FirstEnergy LTD Outstanding*

The following table shows FirstEnergy holding company's long-term debt outstanding at June 30, 2021.

FirstEnergy Cost of Long-Term Debt at June 30, 2021

	Title	Date of Offering	Date of Maturity	Principal Amount	Amount Outstanding	Interest Rate	Net Proceeds	Cost of Money	Carrying Value	Annual Cost
Senior Notes										
	7.375% Series	11/15/2001	11/15/2031	1,500,000,000	1,500,000,000	7.375%	1,484,355,000	7.4626%	1,500,000,000	111,938,327
	4.25% Series	3/5/2013	3/15/2023	850,000,000	850,000,000	4.750%	843,846,000	4.8422%	850,000,000	41,158,650
	2.85% Series	6/21/2017	7/15/2022	500,000,000	500,000,000	3.600%	499,055,000	3.3914%	500,000,000	16,957,071
	3.90% Series	6/21/2017	7/15/2027	1,500,000,000	1,500,000,000	4.650%	1,495,005,000	4.4416%	1,500,000,000	66,624,051
	4.85% Series	6/21/2017	7/15/2047	1,000,000,000	1,000,000,000	5.600%	993,690,000	5.3927%	1,000,000,000	53,926,750
	2.05% Series	2/20/2020	3/1/2025	300,000,000	300,000,000	2.050%	299,385,000	2.0934%	300,000,000	6,280,191
	2.65% Series	2/20/2020	3/1/2030	600,000,000	600,000,000	2.650%	599,574,000	2.6581%	600,000,000	15,948,793
	3.40% Series	2/20/2020	3/1/2050	850,000,000	850,000,000	3.400%	848,716,500	3.4081%	850,000,000	28,968,652
	1.60% Series	6/8/2020	1/15/2026	300,000,000	300,000,000	1.600%	299,550,000	1.6314%	300,000,000	4,894,087
	2.25% Series	6/8/2020	9/1/2030	450,000,000	450,000,000	2.250%	449,325,000	2.2668%	450,000,000	10,200,820
					7,850,000,000		**7,812,501,500**		**7,850,000,000**	**356,897,393**
							Cost of Long-Term Debt			**4.546%**

FirstEnergy had $7.85 billion of long-term debt at the holding company then. Parent-only debt represented about 35 percent of FirstEnergy's consolidated debt - - a very high level compared with percentages at comparable large utility holding companies. Elevated FirstEnergy levels of debt and other risks have resulted from unsuccessful non-utility business ventures, particularly in the commercial power and energy markets. Holding company debt and its non-utility operations have produced FirstEnergy's elevated business and financial risks reflected in its credit ratings over the past 10 years - - risks also transferred to JCP&L and the other FirstEnergy operating companies through strong credit linkage, as described in Chapter XI of our Phase One Report, *Financial Risks and Consequences of Parent and Affiliate Operations*.

FirstEnergy management reports that most parent debt relates to large, sustained losses at FirstEnergy Solutions prior to its bankruptcy and to large holding company payments related to that bankruptcy. For instance, FirstEnergy contributed a waiver of $700 million of FirstEnergy Solution's recent 2018 borrowings outstanding from FirstEnergy under a secured credit facility and a credit agreement to support surety bonds payments in a 2018 bankruptcy settlement. FirstEnergy also waived $112.5 million of shared service costs owed to FirstEnergy by its entities in bankruptcy. FirstEnergy made additional payments of $978 million for bankruptcy settlement and tax sharing upon emergence from bankruptcy in 2020. Additions to the already-significant FirstEnergy debt funded these bankruptcy waivers and payments.

FirstEnergy funded ongoing losses at FirstEnergy Solutions and payments related that subsidiary's bankruptcy with massive amounts of holding company debt, issuing $6.35 billion between 2013 and 2020. This financial overhang of holding company debt remains a financial risk of the FirstEnergy holding company, a financial detractor that continues to this day for FirstEnergy and the credit of its operating companies, including JCP&L.

In addition to the large debt burden, FirstEnergy also has debt guarantee commitments of about $1.3 billion for its non-utility businesses, further compromising its creditworthiness. The guarantees comprise another legacy of the FirstEnergy Solutions financial failure and of credit support for other non-utility business ventures.

5. *FirstEnergy LTD Documents*

We also reviewed the FirstEnergy financing agreements for its long-term debt issuances still outstanding now. We reviewed the financing documents for direct or indirect ties to JCP&L, also looking for any encumbrances of utility assets by the holding company. We sought to determine whether these documents contained any cross-defaults, material adverse change provisions, or collateral call provisions with potential negative impact for JCP&L. We also evaluated whether financial distress at the holding company or other affiliates could cause covenant violations or financial contagion damage to the utility due to covenants in FirstEnergy's long-term debt financing documents.

Our examination of the financing and underwriting agreements for the FirstEnergy long-term debt issuances currently outstanding found no encumbrance of utility assets, cross-defaults, material adverse change provisions, or collateral call provisions in these documents. The debt documents did not include the potential transfer of financial risks that could specifically harm JCP&L due to FirstEnergy's long-term financing documents. FirstEnergy's financing documents do not offer a direct vehicle for transferring financial risks to JCP&L, but other processes, arrangements, or circumstances can cause risk transfer. For example, risks transfer through JCP&L's equity management and dividend policies described above, or through operating common cash management and credit facilities, as described Sections J through L of this Chapter addressing

Cash Management and Chapter XI of our Phase One Report, *Financial Risks and Consequences of Parent and Affiliate Operations*.

G. Conclusions - - Long-Term Debt Financing

5. JCP&L's credit ties to FirstEnergy have caused higher interest expense on its 2013, 2015, 2019, and 2021 long-term debt issuances. (*See Recommendation #2*)

JCP&L's stand-alone credit ratings have proven stronger than its actual Standard and Poor's credit ratings, which have suffered negative influence from credit linkage with FirstEnergy for a number of years. Ring-fencing JCP&L to eliminate the negative interference the holding company would produce for the utility company higher credit ratings and lower interest rates on its long-term debt issuances than experienced over the past 10 years. We discussed above actual JCP&L long-term debt issuances in 2021, 2019, 2015 and 2013. We have compared similar issuances by utilities in the same periods, seeking to determine the potential for lower JCP&L pricing, had the company operated on a stand-alone credit basis.

Investment bankers prepare lists of recent, actual debt issuances prior to a client's debt issuance, to apply actual market information to support indicative pricing of upcoming debt issuances. The following tables compare the interest rates and spreads over Treasuries of issuances similar to JCP&L's. The tables list the actual issuer credit rating for JCP&L from Moody's and S&P, along with the JCP&L stand-alone rating prepared by S&P at that same point in time.

The first table compares JCP&L's $500 million senior unsecured note issuance in June 2021 with other selected utility issuances that are the most similar for comparison purposes; *i.e.*, with rating levels that are the closest to A3 (Moody's) and BB+ (S&P). Operating utility unsecured notes with 10-year maturities are the most comparable to this JCP&L debt issuance.

2021 JCP&L Long-Term Debt Issuance Comparisons

Issue Date	Size	Security	Issuer Ratings Moody's/S&P	JCP&L Stand-Alone S&P Rating	Tenor	Coupon	Spread
Jersey Central Power & Light - Operating Company							
June 8, 2021	$500 million	Senior Notes Unsecured	A3/BB+	BBB	10-year Long	2.75%	T + 125 bps
A3/BBB Issuances Comparables							
Consolidated Edison of New York - Operating Company							
June 3, 2021	$750 million	Unsecured	Baa1/A-		10 years	2.40%	T + 80 bps
Indiana Michigan Power - Operating Company							
April 27, 2021	$450 million	Unsecured	A3/A-		30 years	3.25%	T + 100 bps
Public Service Co. of New Hampshire - Operating Company							
June 1, 2021	$350 million	Unsecured	A1/A+		10 years	2.20%	T + 105 bps

Each of the comparable debt issuances shown consisted of unsecured notes issued by operating utilities, and not holding companies or their other subsidiaries. Two of the three comparable issuances have 10-year maturities. The Consolidated Edison debt issuance was similarly unsecured, runs about 10 years to maturity, and came under credit ratings one rating level below that of JCP&L with Moody's, and four credit rating levels better than JCP&L's S&P issuer rating. Consolidated Edison's pricing spread of 80 basis points above Treasuries proved 45 basis points lower than that of JCP&L.

The Indiana Michigan debt issuance, also unsecured, came from an operating company having credit ratings the same as that of JCP&L with Moody's, and four credit rating levels better than JCP&L's S&P issuer rating. The maturity of 30 years should be significantly more expensive than a 10-year maturity. The Indiana Michigan debt had a pricing spread of 100 basis points above Treasuries, or 25 basis points less than that of JCP&L.

The unsecured Public Service Company of New Hampshire (PSNH) debt issuance also came from an operating utility and had a 10-year maturity. Its credit ratings were two credit levels better than those of JCP&L with Moody's, and six credit rating levels better than JCP&L's S&P issuer rating. The PSNH debt had a pricing spread of 105 basis points above Treasuries, or 20 basis points better than that of JCP&L.

None of these utility debt issuances compared exactly with that of JCP&L; however, the most important parameters indicate that JCP&L experienced a higher (more expensive) pricing spread and higher interest rates than did utilities making similar issuances but not burdened by the negative credit linkage of FirstEnergy. The issuances described provide a meaningful measure of the existence and size of the premium in rates experienced by JCP&L due to its affiliation with FirstEnergy. We would roughly estimate extra interest rates in the range of 15 to 25 basis points on the 2021 debt issuance.

The following table compares JCP&L's $400 million senior unsecured note issuance in February 2019 with other selected utility issuances most similar for comparison purposes; *i.e.*, rating levels that are the closest to Baa1 (Moody's) and BBB- (S&P). Operating utility unsecured notes with 7-year maturities are the most comparable to this JCP&L debt issuance.

2019 JCP&L Long-Term Debt Issuance Comparisons - -

Issue Date	Size	Security	Issuer Ratings Moody's/S&P	JCP&L Stand-Alone S&P Rating	Tenor	Coupon	Spread
Jersey Central Power & Light - Operating Company							
February 8, 2019	$400 million	Senior Notes Unsecured	Baa1/BBB-	BBB	7 years	4.30%	T + 135 bps
Niagara Mohawk Power Corp. - Operating Company							
November 29, 2018	$500 million	Unsecured	A2/A-		10 years	4.28%	T + 125 bps
Consolidated Edison of New York - Operating Company							
November 27, 2018	$500 million	Unsecured	A3/A-		10 years	4.00%	T + 95 bps
Nevada Power Company - Operating Company							
January 28, 2019	$500 million	Secured	A2/A+		10 years	3.70%	T + 100 bps
Entergy Texas - Operating Company							
January 3, 2019	$300 million	Secured	Baa1/A		10 years	4.00%	T + 145 bps

Each of the debt issuances shown above came again from operating utilities. Two of the four comparable debt issuances consisted of unsecured notes, with the two others secured by utility assets. All issuances had 10-year maturities, different from JCP&L's 7 years. The unsecured Consolidated Edison issuance runs 10 years to maturity, under credit ratings one level above those of JCP&L with Moody's, and three credit rating levels better than JCP&L's S&P issuer rating. Consolidated Edison' s pricing spread of 95 basis points above Treasuries proved 40 basis points better than that of JCP&L.

The unsecured Niagara Mohawk issuance came under credit ratings two ratings notches better than those of JCP&L with Moody's, and three credit rating levels better than JCP&L's S&P issuer rating. The Niagara Mohawk debt pricing spread of 125 basis points above Treasuries proved 10 basis points less than that of JCP&L.

The Nevada Power debt issuance with a 10-year maturity was secured by utility assets, which tends to provide better pricing than do unsecured notes. Its credit ratings were two levels better than those of JCP&L with Moody's, and five levels better than JCP&L's S&P issuer rating. Nevada Power obtained a pricing spread of 100 basis points above Treasuries, 25 basis points better than that of JCP&L.

The Entergy Texas debt issuance had a 10-year maturity, also secured by utility assets. Its credit ratings were the same as those of JCP&L with Moody's, but four credit rating levels better than JCP&L's S&P issuer rating. The Entergy Texas pricing spread of 145 basis points above Treasuries proved 10 basis points worse than that of JCP&L.

These other utility debt issuances proved the most comparable to JCP&L's issuance from among the investment banker data provided to that of JCP&L. Nevertheless, we did not find the parameters sufficiently similar enough to provide a meaningful indicatory of whether or by how much JCP&L may have paid in additional pricing spreads and interest rates. JCP&L undoubtedly paid somewhat more for its 2019 financing due to FirstEnergy's negative influence on its credit ratings and risks, but the data do not support an attempt to quantify the difference.

The following table compares JCP&L's two senior unsecured note issuances totaling $750 million in August 2015 with other selected utility issuances the most similar for comparison purposes; *i.e.*, rating levels that are the closest to Baa2 (Moody's) and BBB- (S&P). Operating utility unsecured notes with 10-year maturities proved the most comparable to this JCP&L debt issuance.

2015 JCP&L Long-Term Debt Issuance Comparisons

Issue Date	Size	Security	Issuer Ratings Moody's/S&P	JCP&L Stand-Alone S&P Rating	Tenor	Coupon	Spread
Jersey Central Power & Light - Operating Company							
August 11, 2015	$500 million	Senior Notes Unsecured	Baa2/BBB-	BBB	10-year Long	4.30%	T + 220 bps
August 11, 2015	$250 million	Senior Notes Unsecured	Baa2/BBB-	BBB	10-year Long	4.30%	T + 220 bps
Public Service Company of New Mexico - Operating Company							
August 6, 2015	$250 million	Unsecured	Baa2/BBB		10 years	3.85%	T +165 bps
Exelon Corp. - Holding Company							
June 8, 2015	$1.125 billion	Unsecured	Baa2/BBB-		10 years	3.95%	T + 160 bps
Appalachian Power Company - Operating Company							
May 11, 2015	$300 million	Unsecured	Baa1/BBB		10 years	3.10%	T + 120 bps
Southwestern Electric Power - Operating Company							
March 23, 2015	$400 million	Unsecured	Baa2/BBB		30 years	3.90%	T = 145 bps

Three of the debt issuances shown above came from operating utilities, with the other from a holding company having the same credit ratings as JCP&L. All four came as unsecured notes with

10-year maturities. The debt issuance by operating company Public Service Company of New Mexico (PNM) compares closely with the JCP&L "twin debt issuances" of $750 million. PNM and JCP&L had the same credit ratings with Moody's, and the S&P issuer rating was the same between PNM and JCP&L on a stand-alone basis. The PNM pricing spread of 165 basis points above Treasuries proved 55 basis points better than that of JCP&L.

The Exelon debt issuance came at the holding company level, where debt is considered somewhat riskier than utility operating company debt, even with no difference in ratings. The Exelon credit ratings equaled those of JCP&L by Moody's, and equal to JCP&L's issuer rating. The Exelon pricing spread of 160 basis points above Treasuries proved 60 basis points less than that of JCP&L.

The Appalachian Power debt issuance came under credit ratings one level better than those of JCP&L with Moody's, and equal to JCP&L's stand-alone S&P rating. Appalachian Power's pricing spread of 120 basis points above Treasuries proved a full 100 basis points better than that of JCP&L.

The Southwestern Power debt issuance came under credit ratings the same as those of JCP&L with Moody's, and the same as JCP&L's stand-alone S&P rating. Southwestern Power's pricing spread of 145 basis points above Treasuries proved 75 basis points better than that of JCP&L.

We found these 2015 utility debt issuances sufficiently comparable to use in assessing the existence and size of any JCP&L premium. The comparison indicates that JCP&L paid a significant premium for its $750 million of 2015 debt, with substantially greater pricing spreads and interest rates than those of comparable utility issuances not burdened by the negative credit linkage of FirstEnergy. We would estimate extra interest rate expense in the range of 55 to 100 basis points on the 2015 debt issuances - - a substantial penalty for its credit linkage with FirstEnergy.

The following table compares JCP&L's $500 million senior unsecured note issuance in August 2013 with other selected utility issuances that are the most similar for comparison purposes. We note that the 2013 JCP&L debt issuance was re-priced in 2015, resulting in a replacement $500 million debt issuance, and is no longer outstanding.

2013 JCP&L Long-Term Debt Issuance Comparisons

Issue Date	Size	Security	Issuer Ratings Moody's/S&P	JCP&L Stand-Alone S&P Rating	Tenor	Coupon	Spread
Jersey Central Power & Light - Operating Company							
August 14, 2013	$500 million	Senior Notes Unsecured	Baa2/BBB-	BBB	10-year Long	4.70%	T + 205 bps
ITC Holdings							
June 26, 2013	$250 million	Unsecured	Baa2/BBB		10 years	4.05%	T + 155 bps
Entergy New Orleans							
June 18, 2013	$100 million	Unsecured	Baa3/A-		10 Years	3.90%	T + 175 bps
Baltimore Gas & Electric							
June 12, 2013	$300 million	Unsecured	Baa1/BBB+		10 years	3.25%	T + 115 bps

Two of these three unsecured debt issuances comprised unsecured notes issued by operating utilities, with the third from a non-utility holding company. All three had 10-year maturities. The

ITC debt issuance came under credit ratings the same as those of JCP&L with Moody's, and one credit rating level better than JCP&L's S&P issuer rating. ITC Holdings' pricing spread of 155 basis points above Treasuries proved 50 basis points better than that of JCP&L.

The Entergy New Orleans debt issuance came under credit ratings one notch below those of JCP&L with Moody's, and three credit rating levels better than JCP&L's S&P issuer rating. Entergy New Orleans's pricing spread of 175 basis points above Treasuries proved 30 basis points less than that of JCP&L.

The Baltimore Gas & Electric (BG&E) debt issuance came under credit ratings one notch better than those of JCP&L with Moody's, and two credit rating levels better than JCP&L's S&P issuer rating. BG&E's pricing spread of 115 basis points above Treasuries proved 90 basis points better than that of JCP&L.

These comparisons indicate that JCP&L paid more in its pricing spread and interest rates than came under sufficiently comparable utility issuances burdened by the negative credit linkage of FirstEnergy for examining the question of JCP&L premiums. We roughly estimate extra interest rates in the range of 50 to 75 basis points on the 2013 debt issuance, but again note the repricing of the 2013 JCP&L debt issuance and the fact that it no longer remains outstanding.

6. FirstEnergy's extensive long-term debt and guarantees cause financial risks for JCP&L that are reflected in reduced credit ratings.

Holding company long-term debt outstanding at June 30, 2021 totaled $7.85 billion. This amount comprised about 35 percent of FirstEnergy's consolidated debt - - very high levels for comparable, large utility holding companies. Elevated FirstEnergy levels of debt and other risks have resulted from unsuccessful non-utility business ventures, particularly in commercial power and energy markets. Holding company debt and non-utility businesses have produced elevated FirstEnergy business and financial risks reflected in its credit ratings over the past 10 years. JCP&L and the other operating companies have experienced the effects of those circumstances through strong credit linkage described in Chapter XI of our Phase One Report, *Financial Risks and Consequences of Parent and Affiliate Operations*.

FirstEnergy funded ongoing losses at FirstEnergy Solutions and payments related to that subsidiary's bankruptcy with massive amounts of holding company debt. This financial overhang of holding company debt remains a financial liability today, and one that negatively influences the credit and financial status of JCP&L.

In addition to the large debt burden, FirstEnergy also has debt guarantee commitments of about $1.3 billion associated with non-utility businesses, further compromising its creditworthiness. The guarantees comprise another legacy of the FirstEnergy Solutions failures and of providing credit support to non-utility business ventures.

7. The JCP&L and FirstEnergy long-term debt agreements do not contain covenants that materially threaten legal or financial harm to JCP&L.

The outstanding financing and underwriting agreements for JCP&L and FirstEnergy long-term debt issuances contain no apparent encumbrance of utility assets, cross-defaults, material adverse change provisions, or collateral call provisions. We also found in the debt documents no potential transfer of financial risks to JCP&L due specifically to long-term financing document covenants. As explained above, however, circumstances such as management of JCP&L equity and dividend policies and operating common cash management and credit facilities do create the potential for financial harm to the utility, as described in Chapter XI of our Phase One Report, *Financial Risks and Consequences of Parent and Affiliate Operations*.

H. Recommendations - - Long-Term Debt Financing

2. Provide for JCP&L ring fencing that will produce for its credit ratings on a stand-alone basis, in order to eliminate debt interest cost premiums like those of the past decade. (*See Conclusion #5*)

FirstEnergy's clear influence on JCP&L's financial and business risk and credit ratings have had a negative effect on the utility's long-term debt issuances over the past ten years, with varying impacts for the four issuances in 2013, 2015, 2019 and 2021. We found the harm to JCP&L most clear and significant under the 2015 debt issuances. We found that JCP&L incurred a large premium for its $750 million of 2015 debt, with increased pricing spreads estimated at 55 to 100 basis points. Effectively ring fencing JCP&L with techniques that have come into more common use in the industry can mitigate such contagion penalties in future long-term debt issuances.

I. Background - - Cash Management

Utility holding companies like FirstEnergy Corp. often conduct cash management operations jointly to meet the liquidity needs of the utility, holding company and affiliates. Cash management systems, concentration accounts and bank lines of credit create opportunities for the inappropriate management of funds and should operate under a structure designed and executed to prevent such occurrences.

Financing of many utility cash management operations occurs through issuance of commercial paper by individual utilities, but not so for JCP&L. FirstEnergy's approach has been to operate money pools for both its utilities and unregulated subsidiaries. The money pools can allow the internal borrowing and lending of funds between affiliates without tapping external markets, thereby saving transaction and market costs. However, the inclusion of the utility in such a money pool arrangement can also cause negative affiliate-related consequences for utility participants.

JCP&L also had access at the time of this report's preparation to revolving lines of credit set up by FirstEnergy, providing additional and back-up access to liquidity capital. Encroachment by the holding company or affiliates on JCP&L's "share" of revolving credit facilities should not compromise the utility's access to liquidity. Company comments on a draft of this report state that such access no longer exists.

J. Findings - - Cash Management

1. Cash Management Operations

A central, FirstEnergy Service Company (FirstEnergy SC) group jointly performs cash management for all of the operating companies and the holding company and other affiliates. Daily cash management operations follow a consistent, specific process repeated each business day

FirstEnergy's SAP Enterprise Resource Planning (ERP) financial systems support cash management operations and transaction recording. SAP operates as the "system of record" for the FirstEnergy companies, promoting effective management of core business processes needed at the utility holding company, including finance, accounting, human resources, supply chain, services and procurement, to name a few functions.

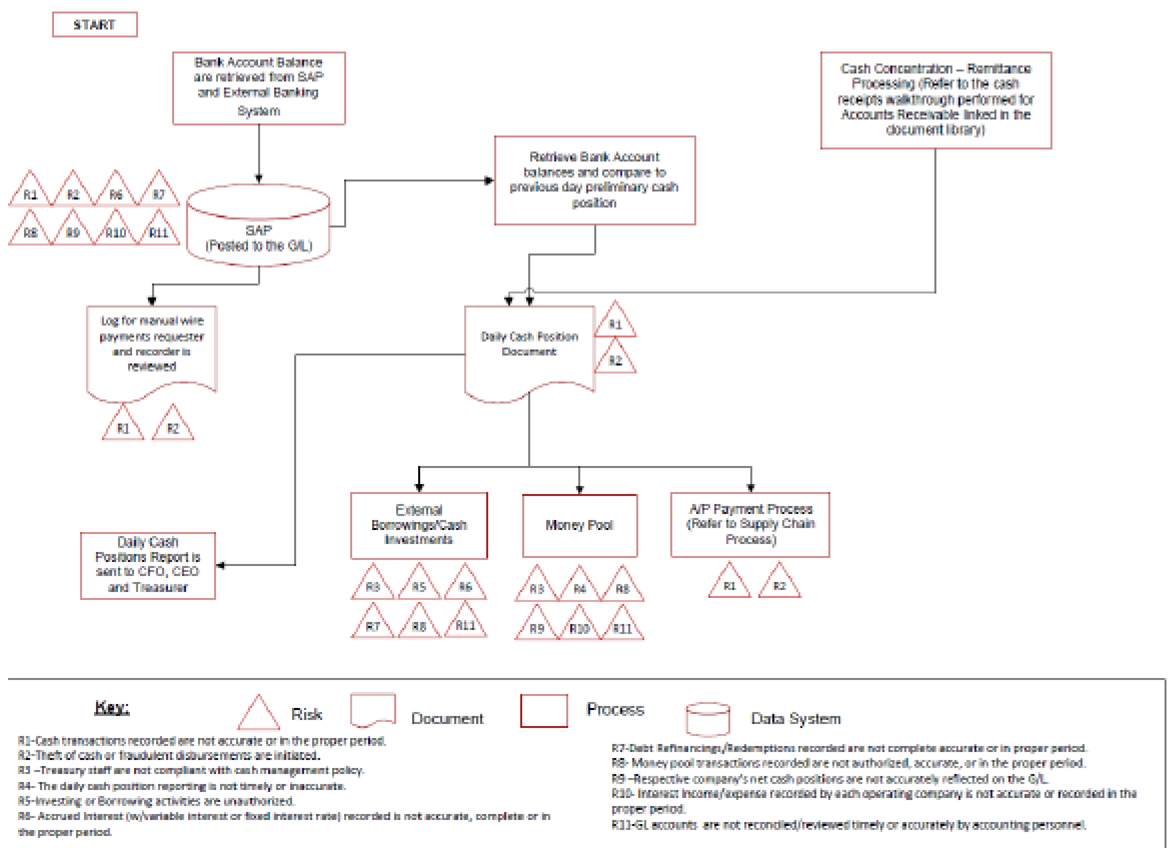
Major cash management operations activities include processing receipts, posting balances to appropriate bank accounts, retrieving bank account balances, concentrating funds from smaller bank accounts, monitoring daily cash position including collections and disbursements, supporting short-term borrowing or investing, disbursing funds via wire transfers, monitoring the use of the corporate purchasing card, and forecasting cash positions.

The following activities list describes the daily cash management process at FirstEnergy Cash Operations:

- Determine current day's net cash position using daily cash receipts and disbursements extracted from SAP
- Determine short-term borrowings and investments, and contact financial institutions for processing
- Initiate and approve cash transactions such as manual wires or transfer of funds from other Company bank accounts in external banking systems
- Enter debt transactions (short-term and long-term) into SAP Transaction Manager
- Enter short-term investments into SAP Transaction Manager
- Process interest and principal through SAP Transaction Manager
- Process short-term investment income through SAP Transaction Manager
- Process current day cash activities in the SAP In-House Cash module, and track money pool activities using the In-House Cash module
- Calculate month-end money pool interest rate and interest using the In-House Cash module.

The next diagram depicts a flow chart of daily FirstEnergy cash management operations.

Daily FirstEnergy Cash Management Operations



An analyst within Cash Operations has responsibility for setting the daily cash position for the companies. Calculation of an estimated closing day cash balance in the main bank accounts employs a preliminary cash position report. The preliminary cash position report includes all the current cash in the main account and in the other remittance accounts used for cash received from customers upon payment. Sweeps of remittance cash in these other accounts produce transfers to the main account each evening.

A Cash Operations analyst finalizes the previous day's preliminary cash position report by 9 a.m. for review by the Manager, Cash Operations. After this review, the daily journal voucher entries for the cash transactions are prepared and uploaded into SAP. A separate Cash Operations analyst reviews and approves these entries.

The "Daily Cash Position Document" noted in the preceding schematic summarizes total receipts, disbursements and cash positions for all FirstEnergy companies in the primary account. The cash positions for each company are then fed into the Money Pool operations (the bottom row in the schematic) for borrowing and lending transactions among the pool companies.

The recording of cash management transactions and the reporting of such transactions occurs as follows:

- Review and approve cash transactions in SAP; maintain supporting documentation
- Compare short-term borrowings to regulatory authorizations for compliance

- Review short-term investments for compliance with the Short-Term Investment Policy
- Process accruals and amortizations in SAP Transaction Manager by General Accounting (debt) and Treasury (investments)
- Distribute month-end In-House Cash and net cash position by Company to General Accounting for recording in SAP, and provide to Treasury Management
- Distribute intra-month In-House Cash and net cash position reports to Treasury Management as needed
- Prepare and distribute month-end summary of short-term borrowings, short-term investments, and rates to Treasury Management
- Record Balance Sheet and Income Statement line items affected by the Cash Process journals.

2. Money Pool Operations and Participants

The Utility Money Pool provides the primary liquidity vehicle for JCP&L and the other operating companies. FirstEnergy uses separate Utility and Non-Utility Money Pools in the Cash Operations process. The money pools provide for the daily working capital requirements of the participating companies.

JCP&L and the other operating companies can lend or borrow on a short-term basis from the Utility Money Pool, whose operation an agreement dated January 17, 2017 addresses. This pool provides participants with a flexible source of borrowing and an investment alternative for surplus cash. The money pool can provide cost savings through use of participants' cash to reduce external short-term interest expense, as compared with the Revolving Credit Facility as an alternative.

The Utility Money Pool sets for its participants borrowing and investment limitations according to regulatory commission requirements, including the BPU for JCP&L. A business analyst calculates and reviews company money pool positions daily for compliance with those requirements. Design of the spreadsheets incorporates "flags" identifying potential regulatory violations, according to FirstEnergy cash managers. The SAP In-House Cash module implemented in April 2012 records and tracks Utility Money Pool activity and conditions. A custom program computes monthly interest for the pool and calculates actual interest income and expense for participants.

Shortages or excesses of funds as determined by each company's daily cash position drive external short-term borrowings or investments. The business analyst setting the daily cash position determines the need to borrow funds or redeem any short-term investments and the ability to pay off outstanding short-term borrowings or make short-term investments. The FirstEnergy Short-Term Investment Policy guides external short-term investments, made with approved financial institutions and using specified, conservative investment options. Each company's Revolving Credit Agreement provides the terms and conditions applicable to short-term borrowings. The pool may borrow to cover any negative total pool balance - - from FirstEnergy Corp. if it has availability, or from the FirstEnergy Revolving Credit Facility.

A daily money pool operations sheet showed each participant's balance, whether borrowing (negative) or lending (positive). At each month end, the money pool balances became either an associated company notes payable or notes receivable with FirstEnergy Service Company, which serves as the administrator of the Money Pool.

3. *Short-Term Borrowing and Interest Costs*

The money pools seek to produce rates advantageous for both borrowers and investors, as compared to external alternatives. Interest on money pool borrowings and investments by the participants is either earned or charged based upon the daily money pool balance of each, as shown above. Money pool rates are calculated as a weighted average of "internal and external funds" invested and borrowed. Each of the separate Utility and the Non-utility money pools has a distinct rate, driven by the different participants and interest calculations for each. Pool borrowing rates and the investment rates equal each other, ensuring that total money pool interest nets to zero.

The pools price "Internal" funds (the surplus funds in the treasuries of the operating companies and FirstEnergy for the Utility Money Pool) at the higher of the 30-day LIBOR rate or a money market rate. "External funds" for the Utility Money Pool come from proceeds from revolving credit bank borrowings of the participants, or the sale of commercial paper by FirstEnergy or other participants. However, commercial paper has not proven advantageous for either FirstEnergy or the operating companies for a decade or more, because effective participation in that marketplace requires higher credit ratings than those experienced by FirstEnergy entities.

FirstEnergy Cash Operations reports that the operating companies typically use the Utility Money Pool as the first source for meeting liquidity needs. The pool has proven the cheapest source, with its pricing using money market or 30-day LIBOR rates. Some operating companies occasionally use their revolving credit facility access, when their borrowing needs exceed available money pool resources. JCP&L must pay off its money pool borrowing for at least one day a year in accordance with a BPU restriction.

JCP&L has for many years also used its $500 million of borrowing access from the FirstEnergy revolving credit facility for its liquidity needs. The borrowing interest rate on its revolving credit facility access operates on a sliding scale based on JCP&L credit ratings. Chapter XI of our Phase One Report, *Financial Risks and Consequences of Parent and Affiliate Operations* explains how FirstEnergy has negatively influenced JCP&L ratings for an extended number of years. As a result, JCP&L almost always uses the Utility Money Pool to meet its liquidity needs; its revolving credit facility proves a more expensive alternative. However, a late-2020 JCP&L liquidity crisis (described in Chapter XI of our Phase One Report) caused it to borrow $450 million from the revolving credit facility for several months prior to the issuance of its 2021 long-term debt. As described below, JCP&L now has (as of October 2021) its own, stand-alone revolving credit facility of $500 million.

The following table shows JCP&L's monthly money pool and revolving credit borrowings, short-term interest expense, and money pool and revolving credit interest rates from the beginning of 2016 through September 30, 2021. For comparison purposes, the table also shows A-1 and A-2 rated commercial paper interest rates.

FirstEnergy Utility Money Pool Interest Rate Components

FirstEnergy Utility Money Pool Interest Rate Components										
Date	JCP&L Money Pool Borrowings	JCP&L Revolver Borrowings	LIBOR	FE RCF Rate	OpCo RCF Rate	JCP&L RCF Rate	FE Utility Money Pool Rate	A-1 Commercial Paper Rates	A-2 Commercial Paper Rates	JCP&L Short-Term Interest Expense
1/31/16	$37,076,107.75		0.43%	2.156%			0.70%	0.61%	0.82%	$53,926.91
2/29/16	$46,898,239.91		0.44%	2.156%			0.82%	0.61%	0.86%	$48,127.35
3/31/16			0.44%	2.156%			0.88%	0.67%	0.89%	$48,372.59
4/30/16			0.44%	2.156%			0.50%	0.63%	0.87%	$32,349.57
5/31/16	$142,999,206.90		0.47%	2.156%			0.63%	0.62%	0.81%	$91,852.99
6/30/16	$159,237,167.71		0.47%	2.188%			0.87%	0.66%	0.80%	$150,085.80
7/31/16	$155,368,817.38		0.50%	2.188%			0.60%	0.74%	1.00%	$114,057.84
8/31/16	$115,623,057.86		0.52%	2.219%			0.52%	0.82%	0.84%	$88,195.14
9/30/16	$82,297,638.01		0.53%	2.219%			0.53%	0.88%	0.87%	$79,303.91
10/31/16	$57,593,702.04		0.53%	2.219%			0.58%	0.88%	0.86%	$67,306.29
11/30/16	$37,706,341.51		0.62%	2.219%			0.56%	0.90%	1.00%	$49,642.58
12/31/16	$98,434,304.21		0.77%	2.470%			1.03%	0.96%	1.06%	$403,383.00
1/31/17	$88,619,314.74		0.78%	2.480%			1.12%	1.00%	1.10%	$138,495.88
2/28/17	$84,997,741.94		0.79%	2.470%			0.81%	0.98%	1.08%	$93,580.74
3/31/17	$55,394,279.47		0.98%	2.700%			1.37%	1.12%	1.11%	$141,358.18
4/30/17	$92,283,000.08		1.00%	2.700%			1.77%	1.11%	1.23%	$153,166.03
5/31/17	$133,007,902.71		1.06%	2.700%			1.66%	1.16%	1.36%	$214,820.41
6/30/17	$156,421,980.32		1.22%	2.940%			2.11%	1.28%	1.46%	$752,553.10
7/31/17	$113,061,190.28		1.23%	2.950%			1.84%	1.29%	1.47%	$269,576.38
8/31/17	$56,288,851.81		1.23%	2.950%			1.48%	1.30%	1.31%	$149,802.96
9/30/17			1.23%	2.950%			1.41%	1.31%	1.48%	$97,031.91
10/31/17			1.24%	2.960%			1.31%	1.34%	1.49%	$24,823.49
11/30/17			1.37%	2.950%			1.30%	1.45%	1.71%	$0.00
12/31/17			1.56%	3.240%			1.57%	1.69%	1.72%	$0.00
1/31/18	$95,670,232.20		1.58%	3.220%			1.72%	1.74%	1.95%	$112,423.45
2/28/18	$96,209,200.71		1.67%	3.230%			1.65%	1.91%	2.18%	$164,579.17
3/31/18	$274,814,072.79		1.88%	3.490%			2.47%	2.15%	2.44%	$674,912.06
4/30/18	$249,301,664.72		1.91%	3.500%			2.65%	2.23%	2.47%	$603,814.13
5/31/18	$307,110,458.57		2.00%	3.510%	3.01%		2.30%	2.16%	2.51%	$633,502.30
6/30/18	$297,803,178.20		2.09%	3.740%	3.24%		2.29%	2.22%	2.48%	$635,355.12
7/31/18	$292,452,917.67		2.08%	3.700%			2.45%	2.25%	2.43%	$682,179.96
8/31/18	$262,697,582.50		2.11%	3.710%			2.23%	2.25%	2.51%	$589,114.76
9/30/18	$222,149,635.53		2.26%	3.920%			2.25%	2.37%	2.71%	$515,047.99
10/31/18	$183,224,245.82		2.31%	2.870%			2.29%	2.54%	2.89%	$1,186,498.05
11/30/18		$200,000,000.00	2.35%	2.870%		5.75%	2.32%	2.68%	3.09%	$401,703.66
12/31/18	$143,086,743.25		2.50%	3.070%			2.54%	2.84%	3.01%	$419,199.18
1/31/19	$166,774,881.39		2.51%	3.070%			2.54%	2.66%	3.03%	$380,875.86
2/28/19	$72,748,457.92		2.49%	3.070%			2.61%	2.57%	2.95%	$364,060.11
3/31/19	$80,067,821.02		2.49%	3.060%			2.54%	2.58%	2.93%	$196,743.99
4/30/19	$74,063,731.14		2.48%	3.080%			2.63%	2.53%	2.86%	$185,189.20
5/31/19	$111,415,489.81		2.43%	3.050%			2.55%	2.48%	2.82%	$259,322.21
6/30/19	$129,431,223.73		2.40%	3.040%			2.43%	2.28%	2.68%	$258,514.06
7/31/19	$144,397,041.76		2.22%	3.000%			2.32%	2.21%	2.56%	$325,013.22
8/31/19	$128,807,071.20		2.09%	2.790%			2.19%	2.07%	2.34%	$291,923.99
9/30/19	$56,298,720.62		2.02%	2.580%			2.07%	2.01%	2.27%	$202,198.57
10/31/19	$43,376,915.91		1.78%	2.410%			1.88%	1.79%	2.10%	$113,851.38
11/30/19			1.70%	2.250%			1.74%	1.88%	2.03%	$112,961.78
12/31/19	$114,140,938.90		1.76%	2.260%			1.77%	1.74%	2.00%	$134,852.18
1/31/20	$136,594,596.03		1.66%	2.210%			2.01%	1.68%	1.80%	$276,642.02
2/29/20	$140,973,038.20		1.52%	2.260%			1.94%	1.62%	1.74%	$234,023.17
3/31/20	$139,085,657.51		0.99%	2.520%			1.44%	1.58%	2.02%	$203,537.78
4/30/20	$157,268,250.11		0.33%	0.810%			0.84%	0.35%	2.44%	$139,092.23
5/31/20	$225,869,041.24		0.18%	0.750%			0.43%	0.20%	1.91%	$105,140.70
6/30/20	$218,058,238.97		0.16%				0.21%	0.19%	0.56%	$67,135.63
7/31/20	$229,001,136.68		0.15%				0.11%	0.17%	0.39%	$47,450.10
8/31/20	$463,793,051.38		0.16%				0.69%	0.17%	0.29%	$273,369.64
9/30/20	$420,946,449.72		0.15%				0.21%	0.16%	0.34%	$103,106.12
10/31/20	$422,576,511.86		0.14%	1.860%			0.26%	0.15%	0.33%	$181,220.02
11/30/20		$450,000,000.00	0.15%	2.510%	2.07%	2.26%	0.65%	0.20%	0.31%	$468,761.60
12/31/20		$450,000,000.00	0.14%	2.510%	2.07%	2.26%	1.93%	0.15%	0.30%	$960,269.59
1/31/21	$1,747,112.95	$450,000,000.00	0.12%	2.510%	2.07%	2.26%	2.05%	0.14%	0.25%	$971,828.11
2/28/21	$9,729,688.77	$450,000,000.00	0.12%	2.510%	2.04%	2.26%	1.90%	0.14%	0.23%	$865,833.80
3/31/21	$3,863,503.93	$450,000,000.00	0.11%	2.510%	2.04%	2.26%	1.67%	0.17%	0.24%	$896,500.45
4/30/21	$29,032,675.40	$450,000,000.00	0.11%	2.510%	2.05%	2.26%	1.88%	0.13%	0.23%	$1,030,902.58
5/31/21	$28,629,926.87	$450,000,000.00	0.09%	2.350%	1.96%	2.07%	1.88%	0.07%	0.17%	$977,133.05
6/30/21	$40,683,677.69		0.10%	2.350%	2.12%		1.36%	0.11%	0.20%	$416,114.72
7/31/21	$127,808,831.19		0.09%				0.65%	0.10%	0.21%	$167,056.33
8/31/21	$72,045,150.97		0.08%				0.09%	0.10%	0.18%	$148,769.87
9/30/21	$34,130,670.55		0.08%				0.08%	0.11%	0.23%	$146,330.71

4. *Money Pool Borrowing Restrictions and Violations*

a. Money Pool Restrictions

JCP&L and the other operating companies operate under borrowing and investment limitations established by their state regulatory commissions and the FERC. JCP&L has a limit of $500 million of borrowing from all of its short-term liquidity sources, after applying BPU and FERC restrictions and approvals. The BPU restrictions on JCP&L run through the end of 2022; continuing FERC approval must come every two years.

Only regulated companies as its participants may borrow from the Utility Money Pool. The operating companies also may not lend funds to FirstEnergy Corp, but the holding company may lend funds to the utilities under the structure of their money pool. Both the utility and non-utility money pools roll up into one bank account. Management must therefore manage positions to ensure that the Utility Money Pool produces no funds flow (loans) to the unregulated money pool. The Utility Money Pool must invest excess funds to eliminate any net positive cash position. The resulting negative position prevents Utility Money Pool funds flow to the other pool. This restriction, presumably a part of the money pool structures and operation, has not always had the desired effect - - notably in the case of JCP&L in late 2020 and early 2021 (explained immediately below).

Other BPU restrictions require JCP&L to repay any outstanding money pool borrowings once in a 365-day period, and preclude the lending of external funds borrowed at JCP&L to the money pool.

A BPU order dated December 6, 2019 approved JCP&L's continued participation in the Utility Money Pool through December 31, 2022, under specific conditions. One condition on JCP&L participation requires that all borrowers from JCP&L maintain investment grade ratings from all three principal rating agencies. Further, if the senior secured credit rating of any Money Pool borrower falls below investment grade, it must repay outstanding loans within three days.

b. Liquidity Crisis and Money Pool Violations

Chapter XI of our Phase One Report, *Financial Risks and Consequences of Parent and Affiliate Operations*, describes the liquidity crisis that JCP&L experienced in late 2020, following credit rating downgrades subsequent to disclosure of an Ohio U.S. Attorney's Office investigation and recognition of related parent control issues. JCP&L had borrowed $420.9 million from the Utility Money Pool as of September 30, 2020. The violation of anti-corruption covenants in the FirstEnergy Revolving Credit Facility caused an event of default, and removed the credit facility as a liquidity option, unless waived by the bank syndicate. Credit downgrades on October 30, 2020 also threatened JCP&L's access to the money pool; further rating downgrades would require JCP&L to pay back its $420.9 million in borrowings to the pool.

A large drawdown of the Revolving Credit Facility would cause further credit rating downgrades, according to FirstEnergy Treasury personnel. FirstEnergy chose to have JCP&L pay back its money pool borrowings with a draw of $450 million from the Revolving Credit Facility, triggering two more levels of credit downgrades and restricting access to the money pool in a manner that would comport with BPU requirements. JCP&L could not access money pool borrowing to fund its operations, and liquidity of only $50 million of capacity remained on the FirstEnergy Revolving Credit Facility. JCP&L did not note restrictions on its access to the money pool in a December 11, 2020 liquidity presentation to the BPU. A FERC borrowing limit of $500 million in total short-term debt also applied.

With only $50 million of available liquidity, by March 2021 JCP&L had not yet received BPU authorization to issue $500 million in long-term debt to pay down the Revolving Credit Facility. On March 25, JCP&L notified the BPU that it had been in violation of its money pool restrictions at times since November 2020. It also requested a waiver to the BPU investment grade credit rating restriction, thereby restoring full participation in the money pool. JCP&L in June 2021 reported money pool borrowing of $49 million after taking advantage of the waiver.

JCP&L experienced challenged access to the FirstEnergy Revolving Credit Facility pending a bank covenant waiver of FirstEnergy's anti-corruption violations. JCP&L faced restrictions on access to the Utility Money Pool following the loss of its investment grade credit rating, a loss driven by federal criminal investigation and the credit facility draw-downs. Circumstances created by affiliation with FirstEnergy forced JCP&L into an untenable liquidity situation, highlighting the need for additional and stronger ring fencing for the utility.

5. *New JCP&L Revolving Credit Facility*

Chapter XI of our Phase One Report, *Financial Risks and Consequences of Parent and Affiliate Operations* describes FirstEnergy's exploration throughout 2021 of separate, stand-alone operating company revolving credit facilities to provide utility-company liquidity protection. FirstEnergy reported following the Deferred Prosecution Agreement with the U.S. Attorney's Office for the Southern District of Ohio creation of separate and stand-alone revolving credit facilities for FirstEnergy/FirstEnergy Transmission, JCP&L, and the Ohio, Pennsylvania, Maryland, and West Virginia operating companies on October 18, 2021.

The new JCP&L revolving credit facility has a size of $500 million and an option to borrow $250 million more, subject to FERC and BPU approval and lending bank commitments to additional funding. Treasury management has described the new facility's financial covenants as similar to those of the previous Revolving Credit Facilities. The only operating company restrictive financial covenants address maximum leverage of 65 percent, as has traditionally been the case. However, the separate $1 billion revolving credit facility for FirstEnergy and FirstEnergy Transmission includes more stringent interest coverage tests. The lenders consider the holding companies as carrying more risk than do the operating companies. JCP&L will continue to have the same access to the Utility Money Pool as it has had historically.

Mizuho Bank serves as administrative agent for the JCP&L revolving credit facility, whose joint lending agents include JPMorgan Chase, PNC, Barclays, Bank of America, CitiBank, CoBank, Morgan Stanley, ScotiaBank, and MUFG. The five-year JCP&L facility provides for specific undrawn and drawn fees and interest rates based on borrower credit ratings. The operating companies pay upfront fees of 20 basis points for each of their revolving credit facilities. The next chart provides an overview of the new JCP&L revolving credit facility:

JCP&L New Revolving Credit Facility Overview

Credit Facility Overview

Borrowers	JCP&L	
Facility	$500.0 million senior unsecured revolver	
Borrower Sublimits	N/A	
Ratings	A3/BB+	
JLAs	[JPM / Mizuho / PNC / Barclays / BofA / Citi / CoBank / MS / MUFG / Scotia]	
Admin. Agent	Mizuho	
Closing Date	October 2021	
Maturity Date	October 2026	
Tenor	5 years	
Extension Option	Two available at close	
Purpose	General corporate purposes	
LC Sublimit	$100.0 million	
Accordion	$250.0 million	
Ratings*	**Undrawn (bps)**	**Drawn (L + bps)**
≥ A3 / A-	12.5	112.5
Baa1 / BBB+	17.5	125.0
Baa2 / BBB	22.5	150.0
Baa3 / BBB-	27.5	175.0
Ba1 / BB+	35.0	200.0
Ba2 / BB	50.0	250.0
≤ Ba3 / BB-		
Upfront Fees	20.0 bps	
Financial Covenant	Max. Debt / Cap ≤ 65.0%	

* If there is a difference of one level, the higher of the two ratings applies; if there is a difference of more than one level, the rating that is one level above the lower will apply, unless the lower of such Reference Ratings falls in Level 6, in which case the lower of such Reference Ratings will be used to determine the pricing level; if no senior unsecured rating exists, the Reference Rating will be one level below the senior secured debt of the Borrower

[1] Applicable to all Borrowers

[2] Reflect Issuer Ratings for both Moody's and S&P

[3] Reflect Issuer Rating for Moody's

K. Conclusions - - Cash Management

8. FirstEnergy's Cash Operations group effectively manages JCP&L's daily cash operations, using SAP systems.

This central group jointly performs cash management operations for JCP&L and the other operating companies, the holding company, and other affiliates. Cash receipts and disbursements operate centrally under FirstEnergy SC management. Disbursements centralization occurs through SAP the Accounts Payable systems. SAP accounting systems track journal accounting entries for all cash movements among the companies.

Daily cash management operations begin with an analyst's preparation of a report on receipts and disbursements, which feeds into the money pool operations. Next comes a daily forecast termed the "Cash Positions Report." At mid-morning, the SAP In-House Cash module performs cash transactions. The cash module captures the intercompany cash movements, and the delta or the change in cash position for each company for each day. One report generates a cash position for each company. The SAP cash module handles all cash transactions. Cash movements undergo daily analysis to determine a daily "Corporate Cash Position." SAP capabilities have supported FirstEnergy cash management transactions since 2003, with the In-House Cash module added in 2012.

Comingling of utility, affiliate, and holding company funds has formed a matter of regulatory scrutiny and action traditionally. Concerns about use of utility funds for non-utility purposes has led to requirements that utilities and affiliates maintain separate bank accounts, accounting systems and books and records, in order to segregate and protect utility funds effectively.

SAP financial and cash management capabilities place such requirements and protections in a new light. For example, with respect to "***separate-bank-accounts***" considerations, a single bank account consolidates the cash of FirstEnergy along with that of all the operating companies and other affiliates. Separation does not therefore take the form of technically distinct bank accounts, but occurs through separation using SAP capabilities in the accounting system; each cash transaction gets assigned to distinct companies. Funds do not flow between and among accounts per se, but are accounted for through FirstEnergy SC cash managers' daily recording of them for segregation in SAP.

Turning to ***separate-accounting-systems*** considerations, FirstEnergy actually employs a single, consolidated cash system and supporting SAP process for all entities, with cash transactions distinctly recorded and assigned to participating companies. With respect to ***separate-books-and-records*** considerations, the SAP system operates as the single source for managing books and records, but the system segregates company cash actions and accounts.

For all three of these sets of requirements, the SAP financial system holds the cash records for all companies. The SAP system replaces the separate cash systems required previously, providing a different type of affiliates cash model and requiring new types of restrictions specific to this system, as well as related ring fencing to protect JCP&L's cash sufficiently. Current operations using the SAP system can provide adequate separation, if accompanied by proper restrictions on cash operations. The money pool violation occurred following incorrect monitoring and enforcement of existing restrictions. Specific restrictions need to be designed for this system, and accompanied by ring fencing that enforces the restrictions.

9. JCP&L's Money Pool borrowings have come at reasonably low interest rates, particularly when compared with FE's Revolving Credit Facilities.

The money pool rates that most JCP&L's short-term borrowing has used since 2016 have almost always proven substantially lower than those of the Revolving Credit Facility alternative. The lower money pool rates result from use of relatively inexpensive money market or 30-day LIBOR rates as the interest rate calculation factor with the most weight.

JCP&L has used the money pool facility at almost all times, with two exceptions:

- In November 2018, JCP&L paid off its money pool borrowing, as required by BPU rule, with Revolving Credit Facility borrowings at 5.75 percent for one week. The borrowing was at the prime rate (alternative) rate rather than the usual LIBOR-based rate, and replaced money pool borrowing priced at 2.32 percent.

- In November 2020, JCP&L borrowed $450 million from the FE Revolving Credit Facility in response to the liquidity crisis caused by FirstEnergy's DOJ investigation and resulting credit rating downgrades. The $450 million was outstanding until June 2021, with interest rates slightly above the FE money pool rates.

10. The "common liquidity facilities" among the FirstEnergy companies have repeatedly been cited by credit rating agencies as a cause of utility credit linkage with a less financially stable holding company parent. (*See Recommendation 3***)**

Chapter XI of our Phase One Report, *Financial Risks and Consequences of Parent and Affiliate Operations,* detailed FirstEnergy's joint negotiation and operation of all of the liquidity facilities for the holding company and all of its regulated and unregulated subsidiaries comprise primary contributors to lower credit ratings than its utilities would obtain if viewed as stand-alone from a credit perspective. Short-term borrowing facilities for providing liquidity to all of the FirstEnergy companies are linked and centrally operated by FirstEnergy SC. The liquidity facilities of concern include the Revolving Credit Facilities, the Utility Money Pool, and a separate unregulated money pool serving the remaining FirstEnergy subsidiaries. S&P and Fitch have recognized ties in the short-term debt facilities as financial links between FirstEnergy and its subsidiaries. S&P has stated that:

> *… its (subsidiary) short-term borrowing is linked to FirstEnergy's consolidated credit facility. In our view, financial links between the subsidiaries and the parent remain and the subsidiaries are not highly independent from the group.*

Fitch has also made clear that FirstEnergy's short-term borrowing facilities cause credit linkage:

> *Subsidiary funding is facilitated via sub-limits under FirstEnergy's fully committed bank facilities, and its subsidiary companies participate in separate utility and competitive segment money pools. These factors and significant parent-only leverage underscore the relatively strong parent-subsidiary linkage throughout the FirstEnergy corporate family.*

FirstEnergy traditionally jointly negotiated all Revolving Credit Facilities with a large bank syndicate to provide market liquidity for each operating company and the parent company. The FirstEnergy and FirstEnergy Transmission Revolving Credit Facility facilities negotiated in late 2016 considered the termination of a previous third Revolving Credit Facility for FirstEnergy Solutions. FirstEnergy increased its Revolving Credit Facility capacity to $4.0 billion as of December 6, 2016.

The December 2016 Revolving Credit Facility agreement allowed FirstEnergy to borrow up to $4.0 billion (or the entire amount of the Revolving Credit Facility capacity), potentially leaving the operating companies with no liquidity market access. We found this feature of the Revolving Credit Facility particularly problematic (as did the credit rating agencies), but it has formed part of FirstEnergy credit facilities since at least 2011. FE Treasury recently put into place separate and stand-alone revolving credit facilities for FirstEnergy/FirstEnergy Transmission, JCP&L, and the Ohio, Pennsylvania, Maryland, and West Virginia operating companies on October 18, 2021.

Standard and Poor's upgraded the operating companies and JCP&L (only) by one credit notch in recognition of the new facilities.

The money pools create concern because FirstEnergy has participated in the Revolving Credit Facility and in both the Utility Money Pool and its other, non-utility money pools. FirstEnergy could lend funds, including proceeds from Revolving Credit Facility borrowings, to non-utility subsidiaries, including the FirstEnergy Solutions group, until 2018 as part of the unregulated money pool agreement then in place. Joint negotiation and operation of the Revolving Credit Facilities and both money pools have enabled FirstEnergy to control liquidity facilities centrally, to the detriment of JCP&L.

11. JCP&L has violated the BPU restrictions on lending to the Money Pool. (*See Recommendation 3*)

The operators of the utility money pool have "general rules and restrictions" permitting only regulated companies to borrow from the Utility Money Pool, and denying money pool utilities the power to lend to FirstEnergy Corp. Sound concepts of affiliate relations practices dictate that neither holding company parents nor non-utility affiliates may borrow from regulated utility entities, in order to protect utility customer interests.

Another money pool general rule and restriction at FirstEnergy follows:

> *… because the utility and non-utility money pools roll up into one JPMorgan Chase bank account, the Utility Money Pool must always have a negative cash position to prevent funds from flowing to the unregulated money pool. If the Utility Money Pool has a net positive cash position, its excess funds must be invested externally to take that pool back to a negative position, therefore not allowing funds to flow to the unregulated money pool.*

JCP&L on March 25, 2021 self-reported periods of time starting in late November 2020 when it had a positive money pool balance, making it a lender to the pool. JCP&L maintained that the construct of the money pool deemed amounts loaned or borrowed each day "pro rata" among the participants. Accordingly, this view goes on to suggest that JCP&L and the other money pool participants do not have the ability to restrict or direct their lending to only certain pool members. Management also reported to the BPU that that for a period of time between November 23, 2020 and March 21, 2021, JCP&L did not comply with the BPU lending restriction. The company took steps to move surplus JCP&L funds from the money pool into a separate external investment account, completing them on March 22nd, 2021.

We asked JCP&L to explain what specific changes were made to prevent the recurrence of such money pool violations. The company responded that:

> *To prevent recurrence of this violation, Treasury staff reviews the money pool position of JCP&L and other participants on a daily basis. Additionally, Treasury has entered the JCP&L money pool authorization, including the lending limitation, into its debt covenant database for quarterly compliance review. Should JCP&L be in a position where it comes out of compliance with the lending restriction, then immediate corrective action will be taken, with JCP&L moving all of its funds from the money pool to the external investment account referred to above.*

We did not find JCP&L's solution to preventing further violations sufficient. An effective solution, as is true for other ring fencing measures, should prevent, not simply remediate violations.

12. JCP&L's liquidity crisis in late 2020 following credit market awareness of the FirstEnergy federal criminal investigation produced more expensive short-term borrowing under the FE Revolving Credit Facility.

JCP&L uses the Utility Money Pool for its primary liquidity needs. The FE Revolving Credit Facility has almost always proven a more expensive alternative. However, BPU requirements that would mandate a repayment of $420.9 million of Utility Money Pool borrowing caused by the loss of JCP&L's investment grade credit rating in November 2020 produced a critical lack of liquidity for some six months for the utility. JCP&L's loss of its investment grade credit rating followed the FirstEnergy holding company's DOJ investigation. The issues did not arise from any change in the business and financial risks of the utility. (see Chapter XI of our Phase One Report, *Financial Risks and Consequences of Parent and Affiliate Operations* for a discussion of these circumstances.)

The liquidity dilemma caused JCP&L to borrow $450 million from the FE Revolving Credit Facility to repay the money pool loan, which restricted access to the pool and further required repayment of $420.9 million in its loans. The revolving credit borrowing remained outstanding for several months until JCP&L's June 2021 issuance of $500 million of long-term debt. Highly restricted access to sources of liquidity comprised the primary concern regarding JCP&L's cash circumstances from late 2020 through the first half of 2021; however, it also paid a small premium on short-term borrowings because restrictions on access to the Utility Money Pool. JCP&L paid interest rates averaging 2.23 percent for the Revolving Credit Facility borrowing, as compared to money pool rates during the same period of 1.71 percent.

13. FirstEnergy's establishment of a $500 million stand-alone revolving credit facility for JCP&L has made a positive contribution to mitigating financial risks to the utility from affiliation.

FE Treasury put in place separate and stand-alone revolving credit facilities for FirstEnergy/FirstEnergy Transmission, JCP&L, the Ohio operating companies, the Pennsylvania operating companies, and the Maryland and West Virginia operating companies on October 18, 2021. For JCP&L, the new revolving credit facility has a size of $500 million, with an option to borrow an additional $250 million. Standard and Poor's upgraded the credit ratings of JCP&L and the operating companies by one rating notch in light of the new facilities. The new revolving credit facility brings some improvement in reducing the "common liquidity facility" risks, but significant credit linkage between FirstEnergy and JCP&L remains.

14. Lower credit ratings due to credit linkage to FirstEnergy have precluded a commercial paper financing alternative for JCP&L for a long time. (*See Recommendation #3*)

Commercial paper offers a short-term funding option that financially strong utilities have used for decades. None of the FirstEnergy operating companies have commercial paper programs, and the FirstEnergy holding company does not have an active program. Maintaining high credit ratings satisfies a qualification measure for establishing a commercial paper program. FirstEnergy

Treasury has noted that an economical commercial paper program generally requires at least BBB+ or A- level credit ratings.

Bankers prepared January 2017 and March 2021 analyses of commercial paper programs for JCP&L. The March 2021 analysis underscored the importance of credit ratings to successful commercial paper use:

> *The US commercial paper market provides many issuers with a consistent source of short-term liquidity, which can be used for a variety of funding needs. (Credit) Ratings are a key determinant of market access, pricing, and capacity.*

Based on market conditions in March 2021 and its then-current P-2 (Moody's) and F-3 (Fitch) commercial paper ratings and non-investment grade Standard and Poor's rating, JCP&L was estimated to have commercial paper funding costs of 30-day LIBOR plus 65 to 75 basis points (inclusive of dealer fee), or 0.76 to 0.86 percent in March 2021, although consistent market access would be questionable with sub-standard credit ratings.

Further analysis assumed improvement of JCP&L's commercial paper credit ratings to A-2 (S&P)/P2 (Moody's)/F2 (Fitch), which equate to long-term ratings of from BBB to A-. JCP&L was estimated to have commercial paper interest costs of approximately 30-day LIBOR plus 20 basis points (inclusive of dealer fees), with a large estimated capacity for the program of $1 to $2 billion. The estimated interest rates of 0.31 percent would be well below the JCP&L money pool rate (1.67 percent) or its Revolving Credit Facility rate (2.26 percent) in March 2021.

JCP&L would face significant costs in establishing a commercial paper program, but should stand ready to analyze one should credit ratings reach these improved levels or higher. Such a program under improved credit standing could produce lower short-term debt costs.

L. Recommendations - - Cash Management

3. Provide improved ring fencing for JCP&L to enhance protection of its money pool positions and access to its new revolving credit facility, and stand prepared to consider a commercial paper program under improved credit ratings. (*See Conclusions #10, 11 and 14***)**

FirstEnergy's joint negotiation and operation of all of the liquidity facilities for the holding company and all of its regulated and unregulated subsidiaries have proven primary contributors to detrimental credit linkage for JCP&L. The FirstEnergy money pools create concern, because FirstEnergy has participated in the Revolving Credit Facility and in both the Utility Money Pool and its other, unregulated money pools. The Utility Money Pool places restrictions on JCP&L's lending funds outside of the pool, but JCP&L has violated BPU restrictions on lending to the money pool - - apparently not recognized for months. New ring fencing for JCP&L should include improved protections for JCP&L regarding money pool, as well as consideration of any new ring fencing that may be required to protect the utility's interests related to its new revolving credit facility.

New, stronger ring fencing for JCP&L should minimize the credit linkage with FirstEnergy, and result in improved credit ratings for the utility, perhaps as high as the BBB+ to A- range. Improved, stand-alone credit ratings will also allow the consideration and analysis of a commercial paper facility for JCP&L, which could result in significant interest savings.

M. Background - - Capital Investment Decisions/Tax Considerations

Utility holding companies, including FirstEnergy, allocate their consolidated tax position among its subsidiary companies, including both regulated and unregulated sectors. The actual, experienced tax allocations identify the principal affiliate beneficiaries of tax consolidation and determine the overall magnitude of tax benefits and liabilities, and tax payments made and received. Tax consolidation and allocation policies must remain fair to JCP&L and ensure no tax cross-subsidies of affiliate interests by the utility.

Tax policies and allocations might also affect operating company capital investment decisions. We examined whether tax considerations have influenced allocation of capital, comparing FE's regulated versus unregulated businesses. Findings - - Capital Investment Decisions/Tax Considerations.

N. Findings - - Capital Investment Decisions/Tax Considerations

1. FirstEnergy Tax Allocation Agreement

FirstEnergy allocates its consolidated income taxes in accordance with the *FirstEnergy Corp. and Subsidiary Companies Intercompany Income Tax Allocation Agreement* dated January 31, 2017, signed by both the JCP&L President and Controller. An original tax allocation agreement that became effective approximately 20 years ago reportedly employed the same basic concepts and mechanisms as its successor, which remains in effect today. Various amendments to the agreement have added or removed participant companies, which includes all of the FirstEnergy regulated and unregulated subsidiaries. We reviewed the tax allocation agreement as well as the results of the allocation processes for each year from 2011 through 2020.

Conceptually, the tax allocation agreement prescribes the allocation of the FirstEnergy consolidated tax position to its subsidiary companies. The first step in this process determines the tax liability for each subsidiary, calculated on a stand-alone basis (*i.e.*, as if each company were filing its own tax returns, and not as part of the FirstEnergy group return). The taxable income or tax losses for each company then roll up to FirstEnergy, producing a net consolidated taxable income and tax position. The FirstEnergy group tax liability then gets allocated according to the tax allocation agreement provisions. Profitable subsidiaries with positive taxable income make payments, while those with negative taxable income receive payments in accordance with their losses. In other words, the profitable "winners" pay income taxes, and the "losers" receive tax payments. The subsidiary income winners make actual payments to the income tax losers.

2. Federal Tax Allocations

FirstEnergy provided the taxable incomes, tax payments or receipts, and consolidated totals for each year from 2011 through 2020. For 2020, the consolidated federal income tax return came due October 15, 2021; FE originally provided an estimate, updated later with revised taxes for that year. The following table shows JCP&L taxable income or loss for each year, its actual taxes paid or tax payments received, and a calculated effective tax rate for each year. The table also shows

FirstEnergy's consolidated taxable income for each year, and identifies the highest taxpaying subsidiary and the subsidiary recipient of the largest tax payments for each year.

FirstEnergy Tax Consolidations 2011-2020 (*in thousands*)
(table is confidential)

[redacted]

[redacted] We calculated tax payments or receipts as a percentage of taxable income in each year. We compared JCP&L's percentages of the payments/receipts to those of other FirstEnergy subsidiaries in each year; JCP&L paid or received the same payment percentage as other FE subsidiaries in each year.

The 2020 consolidated income tax calculations for FirstEnergy and several subsidiaries show a [redacted]. In its 2021 SEC 10-K filing, FirstEnergy noted:

> *By eliminating a significant portion of its competitive generation fleet with the deconsolidation of the FES Debtors, FirstEnergy has concluded the FES Debtors meet the criteria for discontinued operations, as this represents a significant event in management's strategic review to exit commodity-exposed generation and transition to a fully regulated company.*
>
> *As a result of the FES Debtors' tax return deconsolidation, FirstEnergy recognized a worthless stock deduction of approximately [redacted], net of unrecognized tax benefits of [redacted], for the remaining tax basis in the stock of the FES Debtors. Based upon completion of the IRS's review of the 2020 federal income tax return during fourth quarter 2021, FirstEnergy recognized the full tax benefit of the worthless stock deduction of approximately [redacted], or [redacted] on a tax-effected basis …*

FE tax managers noted that the "worthless stock" included FirstEnergy Solutions Corp., FirstEnergy Nuclear Generation Corp., and FirstEnergy Generation Corp. investments held by FirstEnergy. The 2020 tax return wrote off the tax basis of these investments. The JCP&L taxable loss for 2020 was also updated to a [redacted]. Large repairs, casualty losses, and storm damage in August 2020 totaling about [redacted], as well as over [redacted] of a decommissioning trust were [redacted], contributing to JCP&L's [redacted].

3. Tax Impacts of Capital Expenditures

We examined whether income tax considerations affected allocation of capital expenditure dollars for non-utility versus utility and transmission investments. FirstEnergy prepared a comparison of capital expenditure, capital repairs, casualty loss, storm damage and decommissioning trust tax treatments applied to JCP&L and the other operating companies, the FE transmission subsidiaries (ATSI, MAIT and TRAIL), and market electric generation (FENOC, FE GENCO, AE Supply, and Allegheny Generating Company). The next table summarizes this comparison.

Tax Treatments for FE Capital Expenditures
(table is confidential)

	JCPL/Other OpCo's										
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Capital Expenditures	[redacted]										
Capital Repairs	[redacted]										
Casualty Loss	[redacted]										
Storm Damage	[redacted]										
Decommissioning Trust	[redacted]										
	FE Transmission Subsidiaries										
Capital Expenditures	[redacted]										
Capital Repairs	[redacted]										
Casualty Loss	[redacted]										
Storm Damage	[redacted]										
Decommissioning Trust	[redacted]										
	FE Electric Generation (Non Regulated)										
Capital Expenditures	[redacted]										
Capital Repairs	[redacted]										
Casualty Loss	[redacted]										
Storm Damage	[redacted]										
Decommissioning Trust	[redacted]										

Capital expenditures for the utility operating companies, transmission subsidiaries and unregulated Generation each have been afforded bonus depreciation on qualifying capital property from 2011 through 2017. Each category also continues to apply the MACRS General Depreciation System for depreciation. As of January 1, 2018 bonus depreciation ended for operating company and transmission company investments, but non-utility electric generation continued to qualify for bonus depreciation. Capital repairs generate qualified repair tax deductions in each of the three categories.

The same treatment of casualty losses has applied for the operating companies and the transmission subsidiaries, but is not applicable to electric generation. For storm damage, the operating companies can take a deduction on O&M expenses deferred for future recovery, but that treatment does not apply to either the transmission subsidiaries or electric generation. For decommissioning trusts, contributions to qualified funds are deductible for the operating companies and nuclear electric generation, but not for transmission.

O. Conclusions - - Capital Investment Decisions/Tax Considerations

15. FirstEnergy has allocated federal income taxes under an industry-standard tax allocation agreement.

The *FirstEnergy Corp. and Subsidiary Companies Intercompany Income Tax Allocation Agreement* allocates FirstEnergy's income taxes on stand-alone principles, as if each company were filing its own tax returns. The FirstEnergy tax allocation agreement is similar to that used by numerous utility holding companies across the U.S. Subsidiaries with positive taxable income pay income taxes, while those with negative taxable income receive income tax payments in accordance with their losses. The tax allocation agreement is fair to JCP&L as payments have been made to the utility that reflect its substantial taxable income losses in certain recent years.

16. Actual tax allocations and payments treat JCP&L fairly, with equivalent payment percentages with other FirstEnergy consolidated tax participants.

Our review of actual income tax payments and receipt of tax payments over the 2011- 2020 period showed net federal tax payments of only $74.1 million for JCP&L. Tax payments made in six of the 10 years were significantly offset by large tax payments received in 2012 and 2018 due to taxable income losses in those years. Examining the percentages of payments/receipts to taxable income of other FirstEnergy subsidiaries showed that JCP&L paid or received the same payment percentage as other FE subsidiaries in each year. FirstEnergy's tax allocation resulted in JCP&L paying its fair share of federal income taxes during the previous 10-year period.

17. Tax treatments for capital expenditures have remained similar for FirstEnergy's utility and unregulated generation businesses, and have not given reason to find capital allocation favoritism.

FirstEnergy prepared a comparison of tax treatments for capital expenditure investments of its entities, including JCP&L. Tax treatment on capital expenditures have been equivalent among them. Management reported that its heaviest period of capital investment for non-utility businesses in the decade we examined came from 2011 through 2013, falling greatly in subsequent years. FirstEnergy has now largely exited the competitive power and energy businesses with the separation of FE Solutions, its bankruptcy filing in 2018, the emergence from bankruptcy in early

2020 and the tax write-off of over $5 billion recognized on the 2020 federal tax return. With merchant electric generation capital investment eliminated in recent years, we did not find reason to consider tax treatments for this sector an influence on FirstEnergy's capital allocation currently.

P. Recommendations - - Capital Investment Decisions/Tax Considerations

We have no recommendations in this area.

Chapter V: Planning and Budgeting Table of Contents

Chapter V: Planning and Budgeting

A. Background

Utility holding companies must regularly examine the content and implementation of their strategic plans to remain assured of having properly identified all key external and internal driving forces affecting the ability of their operating companies, like JCP&L in this case, to provide reliable utility service effectively. Identification and management of risk comprises a key element in guiding and informing such planning and the measurement of its effectiveness. The strategic planning process should include setting and achieving proper JCP&L long-term objectives and developing strategic and major infrastructure projects.

Strategic planning generally happens through processes and personnel operating centrally and under direction of the holding company, while giving strong consideration to the needs and service obligations of utility subsidiaries. We addressed planning at both the corporate and JCP&L levels and the resources and methods engaged in it. We specifically considered allocation of capital to JCP&L. We examined success in transitioning to the current business environment globally and in recognition of the loss of the competitive generation business. The Phase Two report Chapters on *Governance*, *Organization, and Executive Management*, and *Staffing* addressed much of the execution of that transition, with this chapter describing the guidance that planning has provided. The *Staffing* chapter of this Phase Two report and Chapter Two: *Operations Organization* from the accompanying Phase One report address JCP&L focus and experience.

This chapter describes the formulation of strategic plans and their use in formulating long-term enterprise and business unit plans, accompanied by resource and financial projections. Again, the *Staffing* Chapter of this Phase Two report particularly addresses planning and execution of measures to change staffing to reflect the elimination of the commercial power and energy businesses from the FirstEnergy portfolio. Chapter Eleven: *Financial Risks and Consequences of Parent and Affiliate Relationships* from the accompanying Phase One report address the financial effects of diversification into those businesses on JCP&L.

In particular, this chapter addresses the results of our examination of:

- Purpose, mission, vision, and high-level strategy
- Short- and long-term goals and objectives
- Long-term plans
- Capital allocation
- Responsibility for JCP&L-specific planning.

Factors we examined in reviewing planning included:

- Existence of appropriate purpose, mission, and vision statements
- Clarity and design of process for determining, articulating, and delineating the strategic plan
- Nature of board of director oversight and participation
- Focus on infrastructure planning
- Participation of JCP&L leadership and management in plan and budget formation

- Sufficiency of capital allocations to allow JCP&L to meet utility service obligations
- Linkage among strategic plan, long-term business plans, financial plans and forecasts, and capital and expense budgets
- Conformity of goals and objectives with conditions
- Application of substantive metrics in assessing performance against plans
- Reflection in JCP&L of plans of resources needed to address customer needs and requirements (*e.g.*, Energy Efficiency and Clean Energy Future)
- Process for incorporating customer needs, interests and priorities into JCP&L plans
- Engagement of JCP&L in assessing results against plans and in identifying variances and their causes
- JCP&L leadership and management awareness of markets and business environment
- JCP&L share of resources as allocated
- Resolution of bottom-up versus top-down approaches to planning.

The definition of a purpose, mission, vision and high-level strategy for the overall organization and its operating entities addresses how the enterprise grows and nurtures its utilities within the context of overall holding company circumstances and expectations. Plans should robustly consider and reflect JCP&L needs and responsibilities, use of competencies to meet customer needs and market demands, and capabilities that warrant development, all developed with due consideration for the risks involved. Capital allocation to the holding company, operating companies or non-New Jersey transmission businesses should not impinge on the capital requirements of JCP&L. The process for the development of strategic plans and their integration should consider how FirstEnergy views the future of the energy utilities industries and its regulated and unregulated participation, incorporating the views that result into strategy expressions and supporting them with sound long-term plans.

Utilities and the parent companies that hold them should regularly examine the content and implementation of their strategies, in order to properly identify material external and internal driving forces affecting their ability to meet public service requirements fully, effectively, and efficiently. The strategic planning process addressing the operations of JCP&L needs to consider three dimensions - - its individual needs and circumstances, those of the nine other FirstEnergy operating companies, and those of other businesses operating within the overall structure. Through the late 2016 internal separation and subsequent 2018 bankruptcy of affiliates operating in the commercial power and energy businesses, those other, non-utility businesses commanded a very large share of FirstEnergy attention and financial and operating resources. As those businesses transitioned through the bankruptcy process to eventual third-party ownership, planning at the highest levels faced the need to address their transition and to restructure following their separation. FirstEnergy faced at the same time severe financial constraints that introduced compelling short-term planning needs. The pendency and aftermath of the criminal investigation by the Office of the U.S. Attorney for the Southern District of Ohio added to planning challenges and introduced substantial disruption in senior leadership responsible for it.

Particularly important longer-range planning considerations include setting objectives and overall strategies for meeting continuing needs, enhancing performance, developing the capability, approaches, and programs to address changing expectations, and addressing the need for developing major infrastructure projects. Strategic planning and related financial forecasts should provide for financial controls and integrity, ethical standards of conduct, customer satisfaction, employee development, proper organization structure, risk management, corporate accountability, safety, compliance, external relations, and ensuring that non-utility operations (largely through the times of the internal separation and later bankruptcy noted above) do not risk harm to utility operations. Bankruptcy, financial stress, and the criminal investigation introduced a strong need for short-term planning focus, but not to the exclusion of a continued long-term focus as well. In fact, particularly the last source of immediacy also produced a need for review and restatement of central elements of the FirstEnergy vision.

Our examination of strategic planning considered FirstEnergy top leadership, common service organization resources, and JCP&L participation in strategic planning, addressing the planning, structuring, execution, and performance-measurement of their roles. We examined success in transitioning to a nearly total electricity distribution and transmission business scope and to a hoped-for restoration of leadership stability and re-commitment to values breached in connection with circumstances producing the criminal investigation and the Deferred Prosecution Agreement. We considered how well FirstEnergy top leadership and service organization management have conducted strategic planning that focuses appropriately on the interests of JCP&L and its customers.

We looked at how the organizations and resources involved have gone about strategic plan formulation. We examined how they obtain, assess and incorporate external market, regulatory, economic, and technology factors, how these strategic plans secure support with management and financial resources, and how plans employ contingency planning and risk assessment and management.

We examined long-range goals and objectives and the long-term planning that they drive for the parent and JCP&L. Long-term financial plans should build around short and long-term goals and objectives and express comprehensively the highest-level strategy elements and financial targets of the parent and its subsidiaries. JCP&L, like the other operating companies, should operate under plans that demonstrate consistency with market circumstances and their variability, comprehensively address infrastructure development, respond to operating and reliability issues, express and reflect risk appetite, and address responses to contingencies robustly.

Clear goals and objectives need to form central elements of strategy formation and of plans to pursue those strategies in manners cogently and consistently outlined and sequenced, again reflecting risks and response to them. The various resources available to FirstEnergy and JCP&L require realistic assessment and expression, with dimensions that include capital resources and allocation, funds flow, investment strategies, investor preferences and enterprise competencies.

Capital allocation among a parent's business operations and entities has strong bearing on the ability of companies like JCP&L to maintain access to sufficient capital. Our examination focused significantly on the nature and share of FirstEnergy capital investments and capital plans and resources actually made available to JCP&L. These matters should form critical components of utility plans and performance. JCP&L, or any other subsidiary operating in a family with limits on access to capital, competes with its affiliates for financial resources. Particularly in larger, more dispersed corporate families, unique attributes of each present differences that influence which get allocated how much and for what, for example:

- Needs for capital (*e.g.*, lumpy capital needs if engaged in vertically integrated operations or slow to no growth for required delivery infrastructure expansion)
- Risks (*e.g.*, weather or system age or condition)
- Opportunities (*e.g.*, rates of return or lag in cost recovery)
- Markets (*e.g.*, competitive power and energy versus monopoly distribution).

We sought to determine whether operation as part of FirstEnergy has caused or threatens to cause any undue constraints on meeting JCP&L's needs for resources to meet capital and operating needs to sustain a level of service that meets public requirements and prevailing stakeholder expectations. Relevant in normal circumstances, our evaluation considered how particular sources of stress (for example, large FirstEnergy debt service requirements or non-utility threats) affected capital allocation in ways that could constrain the availability of financial resources needed at JCP&L.

Budgeting for JCP&L, the analysis of results against the budgets that result, and prompt identification and response to address variances form key elements in effective plan execution (and revision where necessary). Operating expense budgets offer key vehicles for implementing a utility company's strategic objectives and business strategy, making their relationship with high-level strategies and specific strategic initiatives important. Operating budgets closely relate to the number of employees; JCP&L operating budget processes should include analyzing them from the development of objectives to the measurement of results.

Developing capital portfolios robustly and with clear recognition of operating utility needs and responsibilities have special importance in the capital-intensive utility business where JCP&L operates. Capital investments for utility infrastructure and the maintenance of effective utility operations, system reliability and resiliency require careful attention through unique processes.

Building capital plans and budgets should begin from the bottom-up by the individual utility companies able to introduce their views about local needs for investments in reliability, regulatory, new customer, and financial requirements into the planning processes. How FirstEnergy and JCP&L select from among competing capital projects to meet strategic objectives specific to local New Jersey requirements formed a focus of our examination. The capital selection and allocation processes should reflect participative iteration and negotiation among the operating entities and central resources who guide or direct planning, to optimize rationalization of top-down capital targets and bottom-up approaches, and to integrate strategic, capital budgeting and annual budgeting considerations.

B. Findings

1. Planning

a. Planning Organizations

Through mid-2021, strategic planning fell under the Senior Vice President, Strategy, who headed a strategy group formed by FirstEnergy in 2015. The senior vice president reported directly to the

FirstEnergy CEO. The reports to the senior vice president included two vice presidents, one responsible for marketing and product development and the other for sales. The senior vice president's other reports included four directors - - one of them the Director, Strategy, LT Planning, and Corporate Responsibility. The other directors had responsibility for emerging technologies, business development, and FirstEnergy's Innovation Center. The center moved to the Information Technology group in July 2021 and has undergone a name change to Innovation & Digital Factory.

The reports to the Director, Strategy, LT Planning, and Corporate Responsibility included two managers. One of those two managers, the Manager, Strategy and Corporate Responsibility led a staff of three analysts and a seven-person Corporate Responsibility group operating under a Supervisor. The other manager, the Manager, LT Planning, led a staff of three analysts and one data analytics consultant.

A change in organization came with the mid-2021 retirement of the Senior Vice President, Strategy. Responsibilities for strategy no longer reported to the FirstEnergy CEO, moving down one level to report to the FirstEnergy CFO (now titled Senior Vice President, CFO & Strategy). Planning, however, now rose to the executive level and became combined with business performance, reporting to a new Vice President, LT Planning & Business Performance. The new executive came from the finance and accounting organization, formerly having managerial responsibilities that included business planning and performance.

This new organization included:

- A 14-person group under a Director, Business Planning & Performance employing a group focused on operating utility and transmission business and another on corporate (FESC) business services supporting them)
- An eight-person group under a Manager, LT Planning (responsible for performing as-requested analyses of various scenarios that consider potential or emergent opportunities and risks, such as acquisitions and divestitures in the commercial power and energy business era)
- Three analysts, reporting directly to the vice president, who address high-level statements of mission, core values and the other highest-level elements that FirstEnergy terms as strategic planning.

The central Business Planning and Performance group now coordinates long-term planning for FirstEnergy Corp. and its subsidiaries. It engages in development of enterprise level long-term plans that apply core values that drive plans, major business initiatives, and financial goals and objectives for the parent and its subsidiaries on a consolidated basis. Business Planning and Performance also coordinates long-term planning for the Utilities and FE Transmission businesses. The group guides the sequential steps of planning processes, develops and disseminates planning activity calendars, ensures timely completion of activities, and provides analytical and technological support to the many other groups engaged in various steps of the process at various times. Business Planning and Performance also coordinates the provision of "business services" to FESC's shared services organizations and to the organizations responsible for operating company and transmission business operations. Business services include budget development and the reporting and management of costs.

The preceding discussion noted other groups that had also reported through the organization of the now retired Senior Vice President, Strategy. Changed reporting locations as of mid-2021 include:

- Corporate Responsibility moved under the FirstEnergy Vice President Investor Relations & Communications, with a staff of five reporting to a Supervisor
- Emerging Technologies moved under a FirstEnergy Vice President, Transformation, with a staff of 10 reporting to the Director, EMT Strategy
- The Innovation Center, with its staff of 11 headed by a Director, moved to the organization ultimately headed by the FirstEnergy Vice President & Chief Information Officer, who leads IT functions and activities overall
- Business Development, now consisting of five persons under a Director, Business Development moved under the Vice President & Treasurer, who in turn reports to the CFO.

Company comments on a draft of this report stated that the Innovation & Digital Factory (a renaming from the Innovation Center) had a staff of 84 by August of 2022, with plans for an increase to 141 through 2023.

Bottom-up planning of capital programs, projects, and initiatives to meet system needs, including reliability and resiliency lies with JCP&L engineers, operating under senior leadership at the utility. Their work assembles capital expenditure plans. Working with support from central resources, they develop proposals used in three rounds of FirstEnergy's overall, enterprise-level evaluation processes managed by FirstEnergy Portfolio Management personnel. Operating company proposals undergo evaluation using similar methods and criteria, considering their overall fit with financial objectives and total capital spending parameters at the enterprise level. The central Portfolio Management resources that direct the process overall expect each operating company to prepare capital proposals that include funding requirements, proposed programs, and prioritizations and classifications under common, established categories.

A FirstEnergy-level Vice President, Regional Engineering has executive responsibility for distribution engineering at the operating companies. This executive's resources include a manager assigned to JCP&L. Resources under this manager, also assigned directly to JCP&L, develop bottom-up capital plans targeted to meeting reliability metrics and state-level benchmarks, standards, and requirements.

Engineering resources assigned to JCP&L use FirstEnergy-standard templates for their capital planning identification and analysis work. These templates feed automated systems that support storing of, collation of, data retrieval from, and analysis of planning information. Extensive and detailed information accompany the operating company outputs, which include detailed descriptive presentations and robust analyses of needs, how proposed items serve them, alternative solutions, and justification for preferred alternatives. Review, analysis, challenging, adding of details, and resulting alterations produce summaries of results and preparation of revised proposals for subsequent second and third rounds. JCP&L's President has responsibility for preparing and presenting JCP&L's final, Round 3 proposal, as does leadership of the other operating companies for their operations.

b. The Changing Nature and Focus of FirstEnergy Planning

The focus of planning and the horizons it employs show significant flux in the past five years. This period has witnessed an unusual and in many respects profoundly disappointing succession of problems and crises that generated needs for fundamental responsive and rehabilitative efforts. Disruptions arisen from causes (related in various ways) have included:

- First trying to salvage and then working to disengage from a now-gone commercial power and energy business
- Severe financial stress, major credit rating downgrades, and unusual actions to address threats to capital access
- Addressing criminal investigations (resolved in some respects at large economic costs but with a variety of related or consequential actions and requirements still seemingly far from over), major shareowner and other litigation, and wide-spread terminations and other separations of senior leaders, executives, and managers
- Parent board and top executive leadership that remains uncertain pending a looming review of both board and executive organization structure.

c. Commercial Power and Energy Business Concerns (2015-2018)

The future of FirstEnergy's commercial power and energy business drew the primary attention of the Strategy group in the first years after its 2015 constitution. Growing financial troubles encountered in their changing markets had reached existential levels by 2016. During that period, attention increasingly turned from salvaging to ending operations in the markets involved, with principal focus turning to modeling and analyzing sale or bankruptcy.

Announcing the intention to exit those troubled businesses in late 2016 might have offered the Strategy group a clearer path to strategic thought about the long-term direction of the remainder of the business. It would become dominated by the operations of 10 electricity distribution utilities and a transmission business. However, that change did not become apparent; it would take years for FirstEnergy finally to disentangle itself fully from the underlying operations. The debtor subsidiaries under which the commercial power and energy businesses proceeded through a lengthy bankruptcy process did not end until their 2020 emergence from bankruptcy under overall ownership of a third-party entity organized by creditors.

The Strategy group found itself engaged deeply and primarily for a long period in tactical analysis and execution of options and efforts to produce a transition that would eventually separate the commercial power and energy entities. Those entities took common services at high levels from the same general group serving the 10 distribution utilities and the transmission business. The group addressed ways for creating a structure that would "separate" them sufficiently to enable eventual emergence from bankruptcy.

Plans, agreements, procedures, and methods for continuing to provide them with needed corporate, technical, and operating support from common service organizations took substantial time and effort from the Strategy group. Moreover, and more significantly, transitioning and separating the debtor entities and their business operations engaged senior executive leadership and the parent board as well. By 2018, the eventuation of their bankruptcy came to play a major role in separation and support considerations, as bankruptcy-court-managed disposition or even dissolution supplanted voluntary sale on the market as the separation vehicle. Through this period, Strategy worked with senior executive leadership to develop the ways and means for temporary isolation pending final separation.

In short, FirstEnergy did not operate in this period under a long-term strategy or plans developed through the kind of comprehensive, deliberate, robustly participative processes needed to ensure effectiveness for a utility holding company. It ran the business largely in response to existential short-term needs driven by the failed commercial power and energy businesses. FirstEnergy actually produced no strategic plan at all from 2016 through 2018, illustrating the dominance of immediate-term needs, not just to the operations of the Strategy group, but to the overall FirstEnergy enterprise. The press of dealing with its failing non-utility businesses and the potential impacts of that failure to the enterprise as a whole appears to have produced a suspension of normally focused, structured assessment and plan creation for the electricity distribution and transmission businesses.

d. The Crisis Produced by the Criminal Investigation (2020-2021)

Management has stated that it did not in recent years produce a documented strategic plan until the one published in November 2019. However, another hiatus would soon follow. Criminal charges by the Office of the U.S. Attorney for the Southern District of Ohio of individuals associated with the Ohio state legislature became public in July 2020. FirstEnergy became embroiled in the federal investigation that produced a year later (in July 2021) a federal criminal charge against FirstEnergy for conspiring to commit honest services wire fraud. The Deferred Prosecution Agreement, announced with the charging allowed for dismissal on payment of a $230 million monetary penalty and on satisfying the requirements of the agreement over time. That investigation, the Deferred Prosecution Agreement, and the design and execution (still underway) of remedial measures produced another extended diversion of focus away from strategic and long-range planning under structured, broadly participative processes.

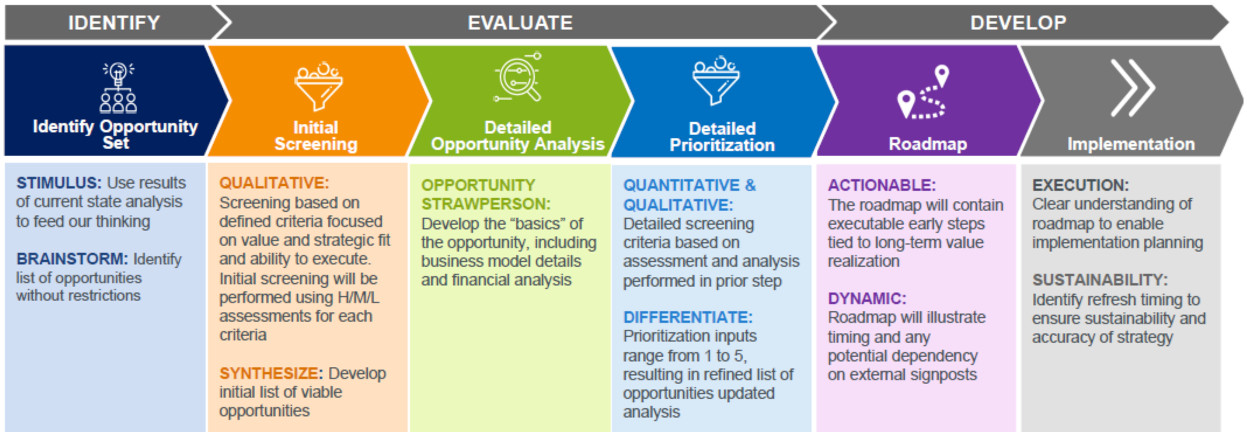
The separation of an unusually large number of executives (including the CEO) further encumbered the ability to focus in a structured and careful way on the long-term. No FirstEnergy strategic plan came forth in 2020. The gap lasted until January 28, 2021, when a plan update emerged.

The presentation to the FirstEnergy Corp. board of a five-year plan and related Long-Term forecast at an October 2021 meeting has hopefully signaled a return to an approach more consistent with an expected and important practice.

e. Opportunity-Based Planning in the Interim

The Strategy group focused primarily on analyzing and guiding a pivot away from a business with a large commercial and power component to one dominated by utility transmission and distribution during the 2016-2020 period. Acute short-term crises largely defined that era for FirstEnergy. With regular strategic and long-term plans foregone, the Strategy group's primary responsibilities in 2016 to 2018 comprised identifying, evaluating, and developing specific "business opportunities" through the process illustrated shown below.

FE Opportunity Pursuit Process



A structured approach to compare opportunities (short and long term) with a flexible evaluation process to meet the strategic needs of the organization

The business opportunities focused on those related to the regulated transmission and distribution businesses expected to dominate in the future. Examination of emerging technologies as both opportunity and threat comprised a primary focus of the Strategy group, which addressed them in 2017. That effort led to creation of a formal team constituted to continue exploration and development. A structured organization, staffing, and methods continues today under the Director, EMT Strategy (identified earlier in this chapter), acting under a FirstEnergy Vice President, Transformation.

During this period, the Strategy group also participated in development of guidance documents ("roadmaps") for a number of FirstEnergy groups or activities undergoing development or change. One of these roadmaps, developed in 2018, addressed corporate responsibility. One for economic development came in 2020. The Strategy group also worked on the development of guidance and plans for "discover FE" (FE University) in 2020. This internal creation seeks to enhance FirstEnergy employee knowledge of the electric utility industry and the company. Leadership of the transmission business developed their own roadmap as well to guide their operations.

With the resumption of more typical, broadly based, and structured strategic planning in 2019, the Strategy group partnered with the business units (including JCP&L management) to develop individual goals and objectives for eventual consolidation at the enterprise level. The Strategy group at the same time worked with FirstEnergy-level executives to develop statements of values, mission, visions and top-level goals and objectives. The group also coordinated plans and documentation to support parent board member participation in an off-site session to provide strategic planning input as development proceeded. As final plan approval approached, the Strategy group also worked with Communications to develop formal plan documents and address their internal and public release and discussion.

Importantly, a different group (Long-Term Planning) has had responsibility for the forecasting, financial, and other work involved in developing long-term plans. The Strategy group's input to the long-term plans has concentrated more on feeding more qualitative strategy inputs to the development of the long-term plans.

f. Fundamental Drivers of the Current Strategic Plan

The process that FirstEnergy terms "strategic planning" does not include the building of financial forecasts for long-term plans. Rather, strategic planning coordinates the development of qualitative statements of mission and values statements and of strategic goals. These "strategic elements" state concepts that provide the foundation for long-term financial plans. These statements emerge through a process in which corporate-level executives participate.

A FirstEnergy mission statement developed in 2015 underwent revision as part of 2021 corporate planning. The new mission statement reads:

> *We are a forward-thinking electric utility centered on integrity, powered by a diverse team of employees committed to making customers lives brighter, the environment better and our communities stronger.*

A January 28, 2021 enterprise-level "strategic plan update" identified the following core values as planning foundations:

- *Safety & Performance*
- *Innovation*
- *Social Responsibility*
- *Customers*
- *Teamwork*
- *Diversity & Inclusion*

Strategy documentation expresses the following supportive commitments:

- Enabling a smarter, more resilient electric system
- Embracing innovation across the organization
- Meeting the challenges of climate change
- Enhancing a culture of compliance through transparency and accountability
- Developing a diverse and inclusive workforce
- Building collaborative relationships, marked by trust and respect, with all stakeholders
- Strengthening a safety-first culture
- Delivering strong and predictable financial results.

The strategy includes a series of goals established for key areas of business to provide guidance in achieving commitments:

- *Customers*
    - Annual transmission reliability investments of $1.2 - 1.45 billion, targeting 20 percent reduction in $\geq$100kV Transmission Outage Frequency by 2025
    - Annual operating company investment of $350 - $400 million in grid modernization, targeting a 5 percent reduction in service interruption duration by 2025
    - 4 million smart meters installed (two-thirds of total customers) by 2025
    - Customer energy-efficiency programs supporting energy savings of +7.5 million MWh and peak demand reduction of 400 MW through 2025
    - 100 percent conversion of operating company street lights to smart LEDs by 2030

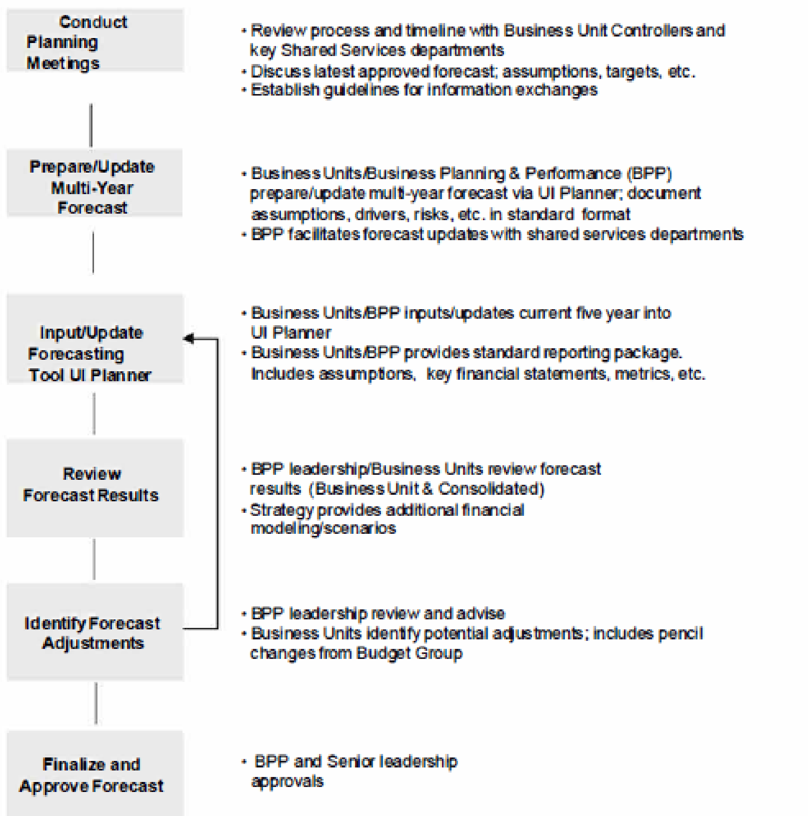
- *Innovation*
  - Innovation Center use of data analytics, automation, and digital capabilities in deployment of at least six bots and four analytical models in the next 18 months
  - Giving all employees remote capability to access work securely anywhere on any device at any time
- *Corporate Social Responsibility*
  - $25 billion in cumulative economic impact created by 2025
  - 75 percent senior leadership participation on nonprofit boards and 25 percent executive team involvement on diverse or multicultural nonprofit boards by 2025
  - Ownership of ≥50MW of solar generation in West Virginia by 2025
  - Reduced Scope 1 GHG emissions by 30 percent by 2030 and carbon neutrality by 2050
  - 20 percent reduction in coal plant water consumption by 2030
  - 225 acres of biodiverse pollinator habitats in transmission rights-of-way and company properties by 2025
- *Diversity and Inclusion*
  - 30 percent increase in numbers of racially and ethnically diverse employees companywide and at supervisor-and-above level by 2025
  - 20 percent of supply chain spend with diverse suppliers by 2025
- *Teamwork*
  - Year-over-year improvement in index measuring employee perceptions of efforts to create a diverse and inclusive work environment
- *Safety*
  - Proactively hazard identification and effective mitigation strategies to reduce workplace exposure to life-changing events
- *Performance*
  - Capital investments of approximately $3 billion for the foreseeable future
  - Regulated operations scale and scope expansion to achieve long-term, customer-focused growth
  - Funds from operations (FFO) to debt ratio improvement by enhancing cash flow generated from operations
  - Dividend payout ratio targeted at 55 – 65 percent of operating earnings.

2. *Long-Term Planning and Capital Allocation*

a. Planning Processes and Approvals

Business Planning and Performance commences the annual long-term planning process in January of each year, sending out planning schedules and guidelines. The guidelines provide spending range “guardrails” (*e.g.*, keeping O&M budgets at near the approved level included in rates for each operating company). Long-Term Plans existing at commencement of the yearly process generally serve to set a spending-level framework for those engaged in first efforts to begin building budgets for their groups and entities. The following diagram shows the high-level process for developing the Long-Term Plan each year through its completion and approval.

FirstEnergy Long-Term Planning Process



UI Solutions Group (formerly known as Utilities International, or UI) provides a suite of financial and related tools employed by most of the largest U.S. utility companies. Business Planning and Performance makes use of the firm's financial planning solution (UI Planner) to house data and perform modeling that supports plan development. Business Planning and Performance coordinates January, February and March planning meetings that:

- Gather information
- Review timelines with engaged personnel (*e.g.,* from the controller's organization)
- Discuss the latest approved forecast, assumptions and targets
- Establish guidelines for proceeding with development of the new plan.

Business Planning and Performance uses the resulting, still maturing information to prepare a starting forecast to employ on a "dry run" basis. Dialogue continues with personnel from the operating companies and other business units on key inputs; *e.g.*, load forecasts or collectibles. Business Services personnel assigned to the common service organizations and to the operating companies make and revise inputs to the model, again as information refinement and analysis continue.

Each operating company has responsibility for forecasting its spending levels, guided by the general framework described above and supported by their assigned Business Services personnel.

Business Planning and Performance works with budgeting units and entities to produce consensus on five-year forecast elements, assumptions, key financial metrics, and other plan drivers.

As this work proceeds, Business Planning and Performance provides additional financial scenarios that provide a bed for testing impacts on FirstEnergy and its businesses over the period the developing plan covers. Production of a forecast refresher in July or August ensures consideration of changes emerging since the inception of planning efforts. By September, with the bottom-up contribution from the business units now well advanced, work begins on resolving differences between those results and top-down strategic and financial parameters, seeking convergence on plans and forecasts advanced enough for top management and board review.

The plans provide more granular information for the first of the five years covered. After completion and approval, the plan will provide an approved one-year budget and a five-year Long-Term Plan that drives business unit operations and frames communications with stakeholders, such as investor groups and rating agencies.

Business Planning and Performance and the business units continue making adjustments as top/bottom reconciliation proceeds and as forecast changes undergo analysis of their implications. As Business Planning and Performance approaches satisfaction with the maturity and coherence of the draft plan, it offers the business units an opportunity to examine it and comment. Business Planning and Performance determines when and in what form to make the plan available for FirstEnergy executive leadership approval. A FirstEnergy Corp. Board of Directors Strategy Meeting (*e.g.*, held in October for 2021) then reviews the plan, which can become final thereafter.

The presentation of information about the plan and some of its financial components at an early November finance conference of the Edison Electric Institute (EEI) serves as a driver for completion of the plan by October. Management prepares a presentation for that conference, which provides a forum for utility holding companies to present to investors their strategic direction, primary initiatives, and financial goals and objectives overall and at the operating company level. Presentations to the rating agencies also create first opportunities for "use" of plan contents in informing outside interests.

FirstEnergy describes its Long-Term Plan as presenting the "financial aspirations" toward which its planning gears overall, particularly focusing on objectives for earnings per share growth and plans for capital spending levels. This last factor comprises a paramount financial performance driver in the capital-intensive industry in which FirstEnergy's distribution and transmission businesses operate. The next illustration highlights those aspirations as summarized for the board's October 2021 Strategy Meeting. They include 6 to 8 percent earnings per share growth. They also target producing funds from operations at 13 percent of debt. The rating agencies consider this FFO/debt metric the most important in determining credit ratings - - hence the stressing of this measure and its connection to investment-grade ratings.

2021-2026 Plan Financial Targets
(figure is confidential)

[redacted]

The next illustration, from the same board meeting, lists assumptions driving the financial growth aspiration. Rate base growth of six to seven percent per year and growth in utility investments under "Formula Rates" (*i.e.*, expedited recovery) comprise the primary drivers of earnings growth. "Strategic Financing" has already played an important role. FirstEnergy raised a long-needed $3.3 billion of equity capital through its late 2021 sale of 19.9 percent of FE Transmission and a placement of $1.0 billion of equity with a private investor. FE Forward initiatives have driven an assumption that reductions in O&M will actually outpace inflation, decreasing by one percent in each of the plan's five years. FE Forward has also led to estimates that FirstEnergy can reduce cash capital expenditure outflow by $1.5 billion (see the gray-shaded portion in the center of the later chart titled "Financial Metric Forecasts").

2021-2026 Plan Financial Assumptions
(figure is confidential)

[redacted]

The next depiction, also from the October 2021 board meeting, shows the impact of planned 2021-2026 investment plans, financing, and O&M efficiencies. FirstEnergy projected expected "proceeds" of $4.8 billion from: (a) capital expenditure efficiencies of $1.5 billion, and (b) sale of a 19.9 percent interest in FirstEnergy Transmission and equity sale, raising a combined $3.3 billion. Plans for the funds raised included:

- Increasing capital invested in formula rate projects by $700 million, taking the percentage of such projects from 65 percent to 75 percent of capital spending
- Paying down holding company debt by $1.65 billion
- Making a pension contribution of $800 million
- Reducing combined utility debt by $500 million.

FirstEnergy anticipates that this redeployment of $4.8 billion will enable achievement of financial goals by the last plan year. Management's expected movement of the FFO/debt metric from the 10-12 percent to the 12-14 percent range would comport with its 13 percent target. Expectations also include earnings per share growth from 5-7 percent to 6-8 percent annually. The 10 operating companies drive much of total FirstEnergy capital expenditures and anticipated O&M expense reductions, making changes in both categories of direct JCP&L interest.

Financial Metric Forecasts

(figure is confidential)

[redacted]

b. Reporting Against the Plan

The UI Planner system stores five-year Long-Term Plan forecast data and serves as the repository for reporting against those forecasts and analyzing and reporting against that data over time. A variety of reports at the governance, senior FirstEnergy executive, FirstEnergy Utilities, operating company and transmission business levels issue across the year. Business Planning and Performance has responsibility for governance and for FirstEnergy-level reporting. The parent board of directors get monthly updates that track progress against the Long-Term Plan and a "Financial and Operational Report" that summarizes data for the calendar year.

Before ending operations in the commercial power and energy business, reporting employed four categories. Three addressed its operating utilities, transmission, and commercial power and energy (CES). The fourth addressed (and still does), the typically used Corporate/Other category to capture costs not directly attributable to an operating business line. Labor support dollars from corporate functions and FirstEnergy debt interest charges offer examples of the amounts that comprise this fourth category. The CES category fell away in 2019 as transfer of the entities comprising CES moved toward emergence from bankruptcy through transfer to a third-party group of entities formed by creditors. An annual version has provided for the board results categorized at these levels (*i.e.*, not by operating company) for the preceding calendar year, assembled by Business Planning and Performance and published in the last half of January.

Business Services in FE Utilities prepares variance reports. Business Planning and Performance also prepares "big picture" monthly variance reports for the parent board of directors and the Executive Council. Prior to 2021, the Executive Council also received monthly one-page summaries called "Post-Close Reports." Business Planning and Performance was challenged in 2021 to provide a new performance report geared to management as opposed to the board level, expecting that more detailed reports would engender executive dialogue and debate about key drivers such as headcount (an important issue in 2021).

Business Planning and Performance also prepares "operator view" variance reports for the Business Services group to support discussion at monthly variance meetings with operating company leadership and management.

c. <u>FE Utilities Plans</u>

A mid-2021 reorganization retitled the FirstEnergy Senior Vice President & President FEU to simply, Senior Vice President, Operations. Separate Vice Presidents for Utility Operations and for Transmission (referred to as FET) continued to report to the Senior Vice President, as they did before the name change. The term "FEU" (FE Utilities) comprises legacy terminology from the era when FirstEnergy also operated large commercial power and energy businesses. The term remained in use during our review of 2021 plans and still appears to exist in some position titles.

Plans from 2019 included versions for FirstEnergy and for JCP&L, each presented to their respective Boards of Directors in 2019. Thereafter, JCP&L plans became part of an aggregated FE Utilities strategic plan for all 10 FirstEnergy operating utilities operating under the Vice President, Utility Operations. The aggregated plan breaks out spending plans for each of the 10 operating companies. The FirstEnergy mission and core values have driven annual updates to FE Utilities strategic plans, producing goals, objectives, and execution plans. Planning documentation addressing 2021 through 2023 expresses quantitative goals and objectives at the aggregated Utility Operations level. Breakdowns exist for each operating company's capital and O&M budgets as well. Similar planning addresses Transmission (FET) business operations.

Utility Operations and Transmission leadership and management worked in concert with operations personnel (including JCP&L leadership), supported by human resources, supply chain, and other FESC subject matter experts to develop plan goals expressed as consolidated (not by operating utility or transmission project or sector) targets. FirstEnergy-level Executives engage directly and substantially in setting goals and guiding development of tactical plans for both Utility Operations and Transmission. JCP&L leadership participates in capital and O&M cost forecasting for planning purposes and have responsibility for managing to approved levels, addressing variances as they arise.

Top-level plans at the FE Utilities level set forth planning objectives, a tactical plan, and a forward vision addressing each of the core values listed above. A review of the goals showed them as qualitative in nature, except for portions of the Performance section. For example, more tactical than strategic level targets exist for SAIDI and SAIFI. Financial goals and forecasts exist as well, covering both capital expenditures and O&M expenses. The next depiction highlights those goals for the 2021 through 2023 period. The FE corporate organization of the VP Strategy and Long-Term Plans, including Business Planning and Performance, prepares the underlying reports and forecasts.

Utility and Transmission Goals and Forecasts

CORE VALUE – FINANCIALS

A look at the financial future of FEU

FEU is committed to delivering solid and consistent financial stability and growth. We are focused on executing our 2021–2023 plan, while delivering solid rate base growth through our capital investment programs designed to enhance customer reliability. We are mindful that ongoing governmental investigations may present added challenges to meeting our financial objectives. However, we will take the necessary actions financially to weather this uncertainty and put the company in the best possible position. Our planned capital range is $2.9–$3.2 billion annually, during this timeframe. Our plan includes a targeted spend of $1.2 billion through 2022 in our transmission segment, increasing to $1.45 billion in 2023, with 100% covered through forward-looking formula rates. We expect our distribution segment to be in the $1.7 billion range and we employ several formula riders in that segment as well.

Key Highlights

- FEU net income growth driven by Ohio DCR rate increases, WV load growth, and growth initiatives such as *OH Grid Mod*, PA DSIC, NJ AMI, and base rate increase in NJ
- FET net income growth driven by higher rate base related to the *Energizing the Future* investment plan
- Capital spend at top end of approved limit and includes $250M incremental FET spend beginning in 2023

FE UTILITIES & TRANSMISSION

$ in millions		2021	2022	2023
O&M	FEU	$ 1,450	$ 1,533	$ 1,558
	FET	219	228	240
	FEU/FET	$ 1,669	$ 1,761	$ 1,798
Segment Capital	FEU	$ 1,725	$ 1,785	$ 1,781
	FET	1,199	1,198	1,450
	FEU/FET	$ 2,924	$ 2,983	$ 3,231
Headcount *		11,203	11,202	11,195

* As of 12/31. Includes full-time, part-time and student temporary employees

FINANCIAL GOALS

- Meet financial commitments to internal and external stakeholders
  - Execute $2.9–$3.2B in annual capital spend
  - Move transmission assets in the Allegheny Power System Zone to forward-looking formula rates
  - Operationalize regulatory growth initiatives
- Manage financial risk by preserving cash and balance sheet flexibility by improving transparency and governance around our external spending
- Implement a targeted arrears management strategy which resolves pandemic-related payment challenges at the earliest stage possible, reducing the number and frequency of customer actions taken, as well as reducing uncollectible expenses.[1]

1 This strategy acknowledges that arrears will be higher due to state restrictions on disconnect activity associated with pandemic conditions

Management prepares these FE Utilities forecasts using a commonly used tool in the industry, UI Planner, and uses the same data sources employed in preparing the FirstEnergy-level FE Long-Term Plan above. More detailed documentation of forecasts of capital and O&M spending for each of the 10 operating companies exists as well.

3. *Addressing Risk*

a. Overall Approach

FirstEnergy conducts enterprise risk management (ERM) on an enterprise-wide basis, categorizing the "universe" of risks managed as:

- Strategic Risks: arising from adverse or improperly implemented business decisions, or unresponsiveness to industry changes and creating or threatening impacts on earnings or capital
- Operational Risks: arising from failure to employ resources effectively and efficiently or from inadequate asset safeguarding, and creating or threatening impacts on ability to meet objectives
- Compliance Risks: arising from failure to comply with laws and regulations (including those addressing investment approval, price regulation, tariffs, antitrust, anti-bribery, intellectual property, consumer and business taxation, trade and exchange controls, and environmental and recycling requirements), and creating or threatening fines or penalties that may adversely affect operations results, financial conditions, cash flows, reputation or credibility
- Financial Risks: arising from internal and external financial information or reporting, not reliable, timely, or transparent and failing to meet stakeholder obligations or expectations.

A FirstEnergy Corp. Corporate Risk Management Policy bearing a September 2020 date describes and guides the processes by which the company seeks to identify and evaluate its "exposures to uncertainty" and to take measures to bring exposure to inherent internal and external risks to tolerable levels through acceptance, avoidance, mitigation, or transfer measures. The policy address management of those residual risks that remain after planned actions to address them. It also includes as one of its purposes the creation of an environment for identifying, understanding, and effectively managing risks. It assigns responsibility for managing risks on a hierarchical basis that considers the sources and locations of their origins, their magnitude, and the active measures for addressing them.

The goals the program seeks to achieve comprise:

- Avoiding unnecessary costs and liabilities
- Protecting asset values
- Incorporate appropriate risk premiums in pricing for energy and related services
- Optimizing capital allocation
- Accelerating responses to market activity and opportunities
- Preserving a good company reputation
- Supporting ability to achieve key performance indicators ("KPIs")

- Implement practices that bring risks to acceptable levels and permit opportunity capture
- Foster an effective risk management culture empowering independent employee action subject to clear guidelines
- Identify and define risks components using common expression and convention
- Measure risks and rewards approved using approved methods
- Monitor and systematically report to senior management key risk information
- Communicate risk management procedures and promote consistent practices addressing risk.

The policy calls for the application of an array of risk management techniques, as determined by company appetite for risk, means available for mitigating it in particular circumstances, the costs of mitigation, the level of residual risk remaining after mitigation, and impact on strategy, objectives, and plans for meeting them:

- Acceptance: absorbing (*e.g.*, self-insuring) risks internally
- Avoidance: exiting or curbing particular operations or activities given the nature and magnitude of risks involved
- Exploitation: using risk to Company advantage (*e.g.*, as an opportunity)
- Mitigation: reducing risk by applying controls on its sources
- Transfer: moving risk to another party (*e.g.*, insurance).

b. Corporate Roles and Responsibilities

The FirstEnergy Corp. board's Audit Committee has ultimate responsibility for activities covered by the policy, including approval for all changes to it. The Audit Committee has charged the Chief Risk Officer and a Risk Policy Committee to assist it through the performance of defined oversight activities and through periodic reports to the committee on risks and programs for managing them across FirstEnergy's operating companies and units.

Executive responsibility for ERM execution falls under the FirstEnergy Vice President, Chief Risk Officer, who heads the FirstEnergy Risk department and who reports to the Senior Vice President, CFO & Strategy. The Chief Risk Officer's two direct reports include a Manager, ERM & Risk Control who supports ERM activities using a staff of four (reportedly increased to five according to company comments on a draft of this report). The Chief Risk Officer's other direct report, the Manager, Insurance has responsibility for the activities described in the *Risk Management* Chapter of this report. As described below, oversight of ERM comes from the FirstEnergy Corp. board's Audit Committee and a Risk Policy Committee (reconstituted and renamed in 2021 as described below). The Chief Risk Officer has chaired this second committee.

The Chief Risk Officer has responsibility for execution of a range of ERM activities that support the overall risk roles of the board's Audit Committee. In an overarching way, those responsibilities include producing ongoing, frank discussion of risks in a manner that encourages and enables individual business units (such as JCP&L) to take ownership of managing risks associated with their operations and subject to influence by them. The Chief Risk Officer has responsibility for examining risk in a coordinated way across the business units, using a systematic risk assessment approach throughout the company and for providing the Risk Policy Committee with ongoing information about risk identification, quantification, and mitigation or avoidance, with understanding of the FirstEnergy's tolerance for risk.

The Chief Risk Officer also has responsibility for providing annual reports to the FirstEnergy Corp. board. The policy also calls for this executive and the Corporate Risk Policy Committee to provide to the CEO and to the Audit Committee periodic risk-activity reports that address:

- High Residual Risks - - those with high financial impacts for the current year
- Longer Term Risks - - those whose financial impacts begin following the current year
- High Impact/Low Probability Risks - - unlikely to occur but with extraordinary enough financial or other risk to justify keeping leadership informed of their details.

The Corporate Risk department that the Chief Risk Officer heads has responsibility for providing support to ensure that accounting for derivatives and fair value measurement complies with accounting principles and for developing throughout FirstEnergy a common understanding of risk tolerance and metrics for measuring exposure to risk. The two principal Corporate Risk groups have specifically assigned responsibilities. Enterprise Risk Management has responsibility for developing and implementing risk policies and procedures and for maintaining compliance with and enforcing them. This group maintains a common, unified risk database, identifies and quantifies significant risks, assesses the results of business unit results in mitigating their risks, and measures, monitors and reports residual risk to executive management. It also has responsibility for Treasury and Investment Management's risk control and for a number of activities associated with commodity risk:

- Developing commodity decision tools and models
- Maintaining awareness of and monitoring business and hedging plans and strategies
- Verifying capture of all commodity deal data
- Maintaining forward curves and price information
- Preparing and distributing commodity risk reports.

Five employees, four titled Analysts and one a Consultant, report to the Manager, ERM & Risk Control. Two of the analysts maintain the risk database and support the function's reporting activities. One analyst has responsibility for maintaining and operating risk modeling. The remaining analyst and the consultant work across all functions of the group. These five group members have significant experience in risk management - - each a minimum of 14 years in the field, all with FirstEnergy entities. Their principal training and refresher sessions come through attendance at industry conferences. None have certification as "Risk Management Professional" (PMI RMP) from the Project Management Institute, but one, since delayed by COVID-19 circumstances, was close to completing certification requirements.

Management of matters related to insurance operate under the second of two managers (the Manager, Insurance), who reports to the Chief Risk Officer. The responsibilities of this group focus on risk transfer (*e.g.*, through procuring commercial or captive insurance or through contract provisions), loss prevention activities (*e.g.*, inspections).

The Risk Policy Committee that the Chief Risk Officer chaired operated with accountability to the Audit Committee. The Risk Policy Committee did not meet in 2020 and first met in 2021 in March.

Management described the committee's responsibilities as carried out during that hiatus on an "ad-hoc" basis by the CFO the Chief Risk Officer and other committee members. The committee's name changed to the Enterprise Risk Management Committee in mid-2021. The purposes of the Risk Policy Committee and its successor comprise:

- Monitoring the enterprise-level risk function and significant programs, policies, and plans established to identify, assess, measure, monitor, mitigate, and manage material risks
- Overseeing efforts of the Chief Risk Officer to promote ERM program maturity and development
- Facilitating reporting of risks the full FirstEnergy Corp. board and its committees
- Assisting the FirstEnergy Corp. board Audit Committee in overseeing the ERM program and implementation of and adherence to the Corporate Risk Management and other risk policies.

Responsibilities assigned to the Risk Policy Committee included:

- At least annually
    - ERM framework, maturity, and effectiveness review and input into further program development
    - Input to mitigation plans to ensure acceptable risk mitigation
    - Review of insurance policy coverage adequacy
    - Approval of all risk policies and risks addressed
    - Review and update of committee charter and membership
    - Assessment of committee performance, provided to the FirstEnergy Corp. Audit Committee
    - Review of risk-management training and recipients
- Other
    - At least bi-annual direction regarding risk identification, assessment, and mitigation to ensure proper management of risks, with participation by the CEO and the FirstEnergy Corp. board's Executive Director.
    - Monthly review of FirstEnergy enterprise-wide risk profile risk, their mitigation strategies, and assessing identification and proper mitigation of known and emerging material risks
    - As needed reinforcement of sound risk management culture
    - As needed review of and proper mitigation measures for risks occurring at peers or in other industries
    - As needed addressing of required risk escalation actions.

Membership of the committee consists of the following or their designees:

- Chief Risk Officer (committee chair)
- Senior Vice Presidents of Operations and of Customer Experience
- Chief Officers of Legal, Financial, Ethics & Compliance, Human Resources, and Information
- Vice Presidents of Rates & Regulatory Affairs, Investor Relations & Communications, and Internal Audit.

Management made strong progress in 2021 in developing a comprehensive enterprise risk management program and processes. The presentation materials for the resumed committee meetings in March show a comprehensive plan, attention to progressing in the development of key program and process elements (highlighted in the following illustration). The materials candidly addressed lagging areas, noted the retention of senior level outside assistance, and reported a return to progress on those areas as the year progressed.

2021 ERM Program Development Dashboard

Priority	Status	Recent Accomplishments	In-Progress Activities
Enterprise Risk Management Committee	✓	• Finalized committee charter and membership	• Ongoing ERMC model
Enterprise & Operational Risk Management	●	• ERM 2022 Implementation plan in progress	• See McKinsey status update (slides 12-13)
Assurance Map & Governance	●	• Preliminary assurance map drafted	• Partnership with Compliance and Internal Audit on GRC implementation plan
ESG & ERM Integration	●	• Updated language for Corp. Responsibility website	• Finalized 2022 project plan
Risk Appetite	●	• Developed agenda and pre-reads for Risk Appetite Workshop	• Conduct workshop and incorporate outcomes into ERM roadmap
Compliance Program Partnership	●	• Preliminary discussion of roles & responsibilities across ERM, Compliance, and IA	• Continue work with Chief Ethics & Compliance Officer to fulfill compliance recommendations
External ERM Review	●	• ERM Design sprint began 9/27	• See McKinsey status update (slides 12-13)
ERM Database Implementation	✓	• Project ongoing since Summer 2019; Phase II work complete	• Database has now entered ongoing maintenance phase

As 2021 ended, the outside consultant, a leading international firm had completed an important set of deliverables in reconstituting a comprehensive, structured ERM program. The consultant:

- Worked to establish a core vision, working with top executive management and considering best practices to define ERM philosophy, purpose, and strategic value
- Designed a framework and implementation plan for defining risk appetite and conducted an initial workshop to begin development of formal expression of that appetite
- Provided a definition and description of ERM roles and responsibilities reflecting best practice
- Developed an implementation plan providing milestones and a roadmap to guide effective implementation of ERM core components.

As this status at year-end 2021 suggests, the year's accomplishments, while substantial, nevertheless laid the ground work for (rather than completing base implementation of) a reconstituted ERM program operating at a high level. Plans for the first part of 2022 plans to move that implementation forward included:

- Finalizing the risk appetite statement at the enterprise level (necessary to produce decisions and actions consistent with values, objectives, and risk tolerance in achieving them)
- Finalizing risk taxonomy (which ensures a consistent approach to assessing and expressing and using risk to inform decisions)

- Analyzing resource requirements (important to identifying and filling resource gaps in effectively implementing a broader and more structured program for managing risk)
- Refining risk governance and escalation (necessary for ensuring that the right level of management and governance addresses major concerns, conflicts, and uncertainties).

The committee's efforts also produced a clear statement (set forth in the following illustration) of how FirstEnergy would use its reconstituted ERM, scheduled for implementation by the end of the third quarter of 2022, expressed in a manner and with a comprehensiveness reflective of best practice.

FirstEnergy 's ERM "Value Proposition"

A best-in-class ERM program will allow us to answer these questions:

Have we identified our key risks?	▪ What are the risks to our business strategy and operations ▪ How do we determine the size and scope of risks and report the results
Is risk a part of strategy setting?	▪ What risks are we willing to take ▪ What else can go wrong with the strategy execution
Is risk embedded in regular operations?	▪ How do we ensure that we have the right information to manage risks ▪ How robust is our control environment ▪ How do we manage our project risks
Is there governance around risk taking activities?	▪ How can we ensure that our risk-taking activities are managed well ▪ What are we doing about risks that either have breached risk appetite or have the potential to do so
Is there a robust risk-aware culture?	▪ How do we ensure the entire organization feels empowered to report and manage risks ▪ How do we create an environment sensitive to changes in the broader physical, social, and economic realities

c. Business Unit Responsibilities

Business unit "ownership" of the management of risks associated with their operation forms a core element of FirstEnergy's approach to ERM. Each business unit has primary accountability for the identification, measurement, management, monitoring, and reporting of their business activity risks, employing effective and efficient processes and procedures, consistent with the Corporate Risk Management Policy. Business units must perform at least annual risk assessments. In collaboration with Corporate Risk, to identify and rank their risks, and to produce documented plans for managing them. Each unit's employees should receive information and training about unit risks affecting their jobs and instruction about avoidance of activities inconsistent with managing those risks.

Business-unit and topical level Risk Management Policies exist for:

- Transmission
- Power and energy commodities (discussed more fully below)
- Utility Credit
- Interest Rate and Short-Term Investments
- Pensions.

d. Commodity and Credit Risk

The Commodity Risk Management Policy applies to utility operating risk (*e.g.*, purchases to serve JCP&L BGS customers) and to commercial generation operations. This policy calls for engagement of a range of FirstEnergy-level entities to conduct a series of measures to control commodity risks like those associated with BGS purchases and with sales (*e.g.*, from NUGs). FE Utilities Regulated Commodities Sourcing Group plays a primary role in the conduct of the activities involved. The head of this 10-person group, the Director, Regulated Commodity, reports directly to the Vice President, Compliance & Regulated. This Vice President reports to the Senior Vice President, Operations - - a direct report to the FirstEnergy CEO.

The Vice President's other direct reports comprise Directors of FERC & RTO Technical, FERC & State Regulatory, Policy & Support, and Regulated Settlements. Two managers report to the Director, Regulated Commodity - - one of whose responsibilities includes JCP&L activities. The group's responsibilities include managing FirstEnergy utility load-related, commodity risks, executing regulatory-approved procurement plans, addressing any supplier default or bid insufficiency, managing congestion hedges and transmission rights, monitoring and mitigating the financial impacts of NUG agreements, and ensuring a sufficient, flexible inventory of renewable credit allowances. The group also manages the generation-related risks of utility generation, including offers into PJM markets.

Other FE groups have specified roles in managing commodity risks that include FirstEnergy utility participation in power and energy markets and operations:

- FirstEnergy Legal approval of contracts for wholesale commodity purchases and sales
- FirstEnergy Risk maintenance of a common roster of and regular reporting on counterparty exposures, employment of contractual means and collateral to mitigate credit risk, and ensuring that counterparties maintain minimum credit standard
- FirstEnergy Rates and Regulatory Affairs to engage with state utility regulators to develop process and agreement documentation and secure recovery of costs from customers
- FirstEnergy Controller to notify FirstEnergy Risk any counterparty non-payment, and for monitoring and reporting FirstEnergy utility performance and results
- FirstEnergy Treasury to notify FirstEnergy Risk of rating agency or margining changes.

Management of credit risk operates under Credit Risk Management, which operates within the organization under the Chief Risk Officer. This group has responsibility for assessing creditworthiness of customers, vendors and counterparties and for ensuring adequate cash flow to cover all of FirstEnergy liabilities. Its roles in mitigating the impact of credit defaults include:

- Serving as a resource for business units
- Coordinating execution of counterparty commodity documents
- Performing credit risk evaluations for vendors and other counterparties
- Approving all credit limits and exposures
- Obtaining required credit enhancements
- Monitoring counterparties, customers, and vendors with beneath-investment-grade ratings.

e. Risk Tools

A risk "toolbox" provides information, support, and guidance for carrying out ERM activities. It describes the overall corporate risk framework, and the various risk registries used (major, major event, business unit, and project). It also describes the available forms of risk analysis and the tools available, providing instruction, illustration, and samples to aid in contributing to or using them.

ERM group personnel participate in regular meetings with the corporate and operating company risk "owners" to keep risk registers current, ensuring regular assessment of risk levels and of means for mitigating them and gauging the residual risk levels remaining after mitigation. The group does so on cycles that differ by risk owner. Meetings (termed "risk interviews") with JCP&L take place at least twice yearly. They include the JCP&L president and those personnel the president deems material to the discussions about risks and mitigating them. Our review of the notes from those meetings over the past five years showed them generally comprehensive and detailed.

Many of the operating risks facing JCP&L are common to other or all FirstEnergy operating utilities, but provision exists for identifying and determining management measures unique to an individual operating company. The current risk register for JCP&L includes specific risks characterized as extant, some specific to New Jersey and others extending farther across the FirstEnergy system. The 139 listed risks include 23 designated as having a high residual (post-mitigation) threat level, These red coded risk focus primarily on storms and safety risks and including risks associated with aging equipment and systems, credit downgrades, lease renewal, new transmission and substation facilities, sales volumes, TMI shutdown, and security. The list includes 50 risks at the medium, code yellow, residual risk designation and 66 coded green. These lower-threat risk cover a range of network and equipment, personnel related, security, revenue, environmental and other risks.

The register lists for each risk:

- A clear and concise description of risk source, location, and cause
- A concise list of mitigation strategies applied
- Departments responsible for mitigation actions
- Departments responsible for monitoring mitigating actions
- A lead contact
- Areas affected by the risk (cash, capital, compliance, earnings, financial, legal, operational, regulatory, reputational, safety)
- Inherent (before mitigation) Likelihood of occurrence as a percentage
- Inherent (before mitigation) Impact in dollars
- Residual (after mitigation) Likelihood of occurrence as a percentage
- Residual (after mitigation) Impact in dollars
- Summary description of any non-financial risk rating
- Residual threat level (red, yellow, green)
- Years affected by the risk.

f. <u>Navigant Audit Recommendation</u>

The Navigant audit recommended (Recommendation B.1.6-1) that management:

> *Conduct a Study to evaluate whether the current Risk Management process is allowing sufficient consideration to be given to operational risks at the distribution utility level.*

The company's response began with a statement of FirstEnergy's Enterprise-Wide Risk Management Program mission and a brief summary of the approach and methods for accomplishing that mission. The brief and general opening material did not address distribution-utility-level (*e.g.*, JCP&L) risks directly. The response did cite the availability of a corporate database and ERM group participation in developing business-unit programs. The response cited a 2017 EEI assessment's failure to recommend any improvements that "pertained to the distribution utilities," as confirming the lack of a need for review of risk management programs. However, as described above, a reasonably robust and a regularly re-examined assessment and documentation of JCP&L risk and measures to address them now applies, satisfying the needs addressed by this recommendation.

4. Budgeting and Analysis

a. <u>Budgeting Organizations</u>

The responsibilities under the FirstEnergy-level Vice President, Controller and CAO (Chief Accounting Officer), whose staff numbers 127, include responsibility enterprise-wide for coordinating budgeting and analysis, working with the business units and corporate functions whose costs drive those budgets. The CAO's direct reports include an Assistant Controller, FEU (staff of 54) and an Assistant Controller, Corporate (staff of 49). The first addresses the operating companies and the second the corporate groups that serve them. The CAO's other two direct reports include an Assistant Controller for Tax (staff of 18) and one for Finance.

The two main groups under the Assistant Controller-FEU, each headed by a director, consist of Utility Business Services (staff of 36) and Transmission Business Services (staff of 11). A third group of 7 has responsibility for reporting. Resources of Utility Business Services divide into four sections. An eight person section headed by a Manager, Business Services responsible for New Jersey, Maryland, and West Virginia handles JCP&L matters. Pennsylvania (staff of 9), Ohio (staff of eight), and regulated generation (staff of 6) have their own separate Managers, Business Services. Staffing of the section responsible for JCP&L comprises two analysts who perform budgeting and reporting responsibilities and one who addresses account reconciliation and journal entries.

The primary functions of the section responsible for JCP&L comprise:

- *Budgeting and Forecasting*: Working with operating company operations personnel to build plan-based budgets from the bottom-up
- *Monthly Reporting*: preparing JCP&L monthly financial results reports for corporate Utilities leadership and management
- *Financial Updating for JCP&L*: Monthly meetings that address reports providing detailed capital expenditure and O&M spending and variance reports; participants include the

President, Vice President, Operations and Directors from JCP&L and the Director, Manager, and two analysts from Business Services.

b. Budgeting Processes

The budgeting process for JCP&L encompasses the first year of the long-term planning process discussed above. The process specific to LCP&L involve the listed steps:

- Business Planning and Performance (sometimes termed "BPP"), a separate corporate group reporting to the CFO, sends out a planning calendar near the beginning of each year. The Manager – Business Services notes that their key target date for budgeting is when inputs to UI Planner are due.
- Business Planning and Performance provides planning advice and is in a support role for Business Services. Business Services is responsible for operating company and transmission planning at the overall FE Utilities level
- The planning starting point is the updated forecast for the current year, plus last year's budget and forecast for years 2 through 5.
- The manager works closely with the FirstEnergy capital portfolio team regarding capital budgeting. New Jersey engineers develop a bottom-up capital budget early in each year. A key meeting held in March, vets and justifies all CAPEX, providing a general feel for capital expenditure levels.
- In June, Business Services managers meet with top operations executive (the President FEU until renamed the Senior Vice President, Operations recently). Each region presents its bottom-up capital requirements to the President.
- For JCP&L O&M expenses, budgeted levels are very consistent on a year-to-year basis. The most important spending recently has been for vegetation management and reliability improvement programs. O&M expense budgets are contingent on the capital plan, providing related programs that are operating expenses.
- All five years of business unit planning information (including that of JCP&L) enters UI Planner, in or around mid-September, based on the year's planning calendar.
- The planning results undergo analysis and preparation for executive review and approval. Note that JCP&L leadership reviews information and interim versions of planning documentation information on an ongoing basis as it develops.
- Executive leadership makes an executive review in late September.
- Adjustments made reflect the results of the executive reviews.
- A final review and any further adjustments then occur to "meet the corporate strategy" (apparently the long-term "financial aspirations" presented to investors)
- Business Planning and Performance prepares the forecast and presents for approvals and finalization by the FirstEnergy Board. Years two through five of the Long-Term Plan, although included throughout the process, show "less granular" information as compared with budget year data.

c. JCP&L Reports and Responsibilities

Business Services has since January 2020 produced a monthly JCP&L financial report, called "JCP&L Monthly Financial Discussion" that provides company-specific results. These reports detail JCP&L capital and O&M expense performance. The reports that began at the start of 2020 replace a less detailed, one-page highlight document provided in earlier years. The next depiction illustrates the contents of the new monthly reports (using the September 2021 report as an example).

JCP&L September 2021 Monthly Financial Report

Settled Capital – September Breakdown

Settled Capital – September Breakdown

	Sep Actuals	Sep Budget	Variance
Metering	$554,898	$609,986	$55,088
Other	($317,701)	($637,172)	($319,471)
Reliability	$1,240,860	$2,118,984	$878,123
Replacements & Improvements	$6,361,613	$6,191,410	($170,203)
Street Lighting	$774,900	$1,017,255	$242,355
System Reinforcements	$759,422	$262,204	($497,218)
Facilities	$489,053	$177,086	($311,967)
Tools & Equipment	$215,137	$183,933	($31,204)
Total Base Capital	**$10,078,182**	**$9,923,685**	**($154,496)**
Damage Claims	($330,054)	$323,240	$653,294
Joint Use	$316,394	$154,910	($161,484)
New Business	$3,414,767	$4,008,564	$593,797
Relocations	$284,877	$356,193	$71,316
Storms	$7,208,109	$334,891	($6,873,218)
Incremental STIP/Health Care Adj	($2,107,248)	$0	$2,107,248
Total Other Than Base Capital	**$8,786,845**	**$5,177,799**	**($3,609,046)**
Total JCP&L Capital	**$18,865,026**	**$15,101,484**	**($3,763,542)**

Monthly Details:

Other - Higher undistributed overheads (timing).

Reliability - Favorable due to timing of blanket and program work.

System Reinforcements - Unfavorable due to higher line inspection follow-up work ($0.4M), and other capacity work ($0.1M)

Damage Claims - Favorable due to timing of claims reimbursements

New Business - Favorable due to higher commercial and residential connections.

Non-Deferred O&M – September vs. Budget

Non-Deferred O&M – September vs Budget

		Budget								
		September 2021 Results				YTD Results				Annual
favorable/(unfavorable)		Actual	Budget	Variance		Actual	Budget	Variance		Budget
Non-Deferred O&M	**Labor (net of S&E Overheads)**	$ 5.2	$ 4.3	$ (0.8)		$ 54.3	$ 48.7	$ (5.6)		$ 68.2
	Non-S&E Overheads	$ (1.3)	$ (1.6)	$ (0.3)		$ (11.7)	$ (14.3)	$ (2.6)		$ (19.1)
	Non-Forestry Contractors	$ 2.3	$ 2.4	$ 0.0		$ 20.2	$ 18.8	$ (1.4)		$ 25.3
	Forestry Contractors	$ 2.2	$ 2.2	$ (0.0)		$ 26.8	$ 24.4	$ (2.4)		$ 31.0
	Materials	$ 1.4	$ 1.2	$ (0.1)		$ 7.6	$ 6.0	$ (1.6)		$ 6.7
	Uncollectible Expense	$ 0.2	$ 0.0	$ (0.2)		$ 0.3	$ 0.1	$ (0.2)		$ 0.1
	Storms	$ 5.4	$ 1.7	$ (3.7)		$ 20.9	$ 15.8	$ (5.2)		$ 21.0
	Other - Operational	$ 1.1	$ 1.6	$ 0.5		$ 10.6	$ 11.5	$ 0.9		$ 14.1
	Other - Non-Operational			$ -		$ 2.1	$ -	$ (2.1)		$ -
	Service Company/Other Corp	$ 3.5	$ 0.7	$ (2.8)		$ 3.1	$ 2.7	$ (0.4)		$ 0.1
	Total O&M	**$ 20.0**	**$ 12.5**	**$ (7.5)**		**$ 134.2**	**$ 113.7**	**$ (20.5)**		**$ 147.4**

Non-Deferred O&M Drivers vs. Original Budget:

September: Non-Deferred O&M is ($7.5M) unfavorable primarily driven by higher non-deferred storm expenses, higher labor benefits, and lower labor capitalization.

YTD: Non-Deferred O&M is ($20.5M) unfavorable primarily driven by higher labor costs (overtime and labor capitalization), higher overheads, higher contractor and material spend, timing of forestry spend, higher non-deferred storm costs, and legal reserves.

"Settled Capital" comprises all-in capital costs; *i.e.*, adding overhead and indirect costs. Annual values for "non-deferred O&M" effectively equal the amounts approved for current recovery in rates. Variances show the bottom-line impact of O&M expenses on the JCP&L income statement.

The Business Services participants lead the monthly JCP&L meetings. JCP&L management can secure from them information on a follow-up basis to assess specific variances or other results reported, for discussion at the ensuing meeting.

The details of the preceding depiction include a large year-to-date storm capital variance through September 30, 2021 - - a recurring JCP&L result across each of the past several years. Business Services reported that a recent analysis of budgeted/actual JCP&L storm costs has produced an increase in budgets for them. We observed annual budgets of $4 million prior to 2020, an increase to about $7.8 million in the 2020 budget, followed by a reduction to $4.4 million in the 2021 budget. Management reported an increase to its non-deferred storm recovery (O&M) to $21 million in the recent rate case, effective January 1, 2021. However, the 2021 budget did not include that increase, thus contributing strongly to the variance. The O&M "Forestry" category reflects addresses vegetation management costs budgeted following the 2020 rate case, which management interprets as including $31 million in annual spending.

d. JCP&L Performance Against Capital Budgets

JCP&L has overrun capital budgets by between 21 and 36 percent in each year from 2018 through 2021. The table below shows that "storm capital above budget" was the company's variance explanation for 87 percent of the over-spends over the five-year period from 2017 through 2021, dwarfing any other variance cause. The table shows dollars in millions.

JCP&L Budgeted/Actual Capital

Year	Actual	Budget	Total Variance		Storm	Net of Storms	
			Dollars	%	Variance	Dollars	%
2017	$188.9	$184.5	$4.4	2.4%	$5.9	($1.5)	-0.8%
2018	$252.2	$191.1	$61.1	32.0%	$78.0	($16.9)	-8.8%
2019	$277.1	$229.0	$48.1	21.0%	$41.4	$6.7	2.9%
2020	$323.4	$267.4	$56.0	20.9%	$46.5	$9.5	3.6%
2021	$249.2	$183.0	$66.2	36.2%	$33.2	$33.0	18.0%
Total	***$1,290.8***	***$1,055.0***	***$235.8***	***22.4%***	***$205.0***	***$30.8***	***2.9%***

The next table (showing dollars in millions) illustrates largely fixed annual budgets for capital work related to storms as the cause of the large overruns. Management reports annual storm budgets essentially as reflecting approximate amounts included in JCP&L rates. Over the period covered by the table, actual costs have exceeded budget by more than eight times - - more than double the budget in the year of the smallest variance.

JCP&L Budgeted/Actual Storm Capital

Year	Actual	Budget	Variance	
			Dollars	%
2017	$9.8	$3.9	-$5.9	-151.3%
2018	$82.1	$4.1	-$78.0	-1902.4%
2019	$45.6	$4.2	-$41.4	-985.7%
2020	$54.3	$7.8	-$46.5	-596.2%
2021	$37.6	$4.4	-$33.2	-754.5%
Total	***$229.4***	***$24.4***	***$205.0***	***840.2%***

e. JCP&L Performance Against O&M Budgets

Storms played a similar, but less dominant role in the persistent inability JCP&L has recently shown in meeting O&M budgets as well. Storm costs not deferred for later recovery, summarized in the next table, served as the primary cause of JCP&L O&M budget overruns. The next table (which shows dollars in millions) demonstrates that JCP&L O&M overruns averaged about 18 percent per year, with non-deferred storm costs accounting for more than half of those overruns.

JCP&L Non-Deferred O&M Performance vs. Budgets

Year	Actual	Budget	Variance		Storm	Net of Storms	
			Dollars	%	Varianc	Dollars	%
2017	$ 129.4	$ 114.7	$14.7	12.8%	$4.8	$9.9	8.6%
2018	$ 138.2	$ 119.8	$18.4	15.4%	$14.1	$4.3	3.6%
2019	$ 146.9	$ 121.4	$25.5	21.0%	$12.9	$12.6	10.4%
2020	$ 155.5	$ 126.5	$29.0	22.9%	$16.0	$13.0	10.3%
2021	$ 171.5	$ 147.4	$24.1	16.4%	$4.5	$19.6	13.3%
Total	***$741.5***	***$629.8***	***$111.7***	***17.7%***	***$52.3***	***$59.4***	***9.4%***

The next table (also showing dollars in millions) isolates the storms portion of JCP&L O&M budgets. It shows extreme overruns in each year until 2021, when the overrun level moderated substantially. The table also breaks the variance between deferred amounts and those not deferred (*i.e.*, those shown in the preceding table).

JCP&L O&M - Storm Costs vs. Budgets

Year	Actual	Budget	Variance		Deferred?	
			Dollars	%	Yes	No
2017	$17.8	$4.4	$13.4	304.5%	$8.6	$4.8
2018	$201.0	$4.4	$196.6	4468.2%	$182.5	$14.1
2019	$100.2	$24.5	$75.7	309.0%	$62.8	$12.9
2020	$206.0	$50.6	$155.4	307.1%	$190.0	$16.0
2021	$25.3	$20.8	$4.5	21.6%	*none provided*	
Total	***$550.3***	***$104.7***	***$445.6***	***425.6%***	***$443.9***	***$47.8***

O&M storm budgeting, as applies for storm capital as well, uses amounts effectively approximating "non-deferred O&M" approved for rate recovery. The JCP&L president and his operations executives have "ownership" of O&M expense budgets, as well as responsibility for performance, variances and mitigation, with responsibility for specific details pushed down to lower levels in the organization.

Management describes planning and budgeting for storm expenses as resulting from "collaboration" among corporate planning personnel, operating company management and the central groups supporting them. We did not find clear responsibility or methods for storm-cost planning and budgeting, other than acknowledgement that the "final call" rests with operating company management, who have ultimate responsibility for expenses and performance, supported by the business support groups with whom they work.

5. *Capital Portfolio*

a. Capital Portfolio Management

The results of planning for capital expenditures at the operating companies and for the transmission business feed long-term plans and budgets, but develop under processes coordinated by a separate group. This enterprise-wide group operated as part of the 316-person organization headed by the FirstEnergy Vice President, Construction & Design Service at the time of this report's preparation. Company comments on a draft of this report cite 385 as the current staffing. This executive reports to FirstEnergy's Senior Vice President, Operations. Three of the four directors under the Vice President, Construction & Design Service address substation and transmission design and transmission construction and program matters.

A fourth, the Director, Portfolio Management, has responsibility for two groups - - a 20-person group headed by the General Manager, Portfolio Development and the 22-person group headed by the Manager, FET Finance. Company comments on a draft of this report cite 29 as the current staffing of the General Manager, Portfolio Development. Three Managers report to the General Manager, Portfolio Management:

- Manager, Distribution Portfolio Management, whose group supports and co-ordinates each operating company's capital planning
- Manager, Transmission Portfolio Management, whose group develops transmission portfolio and provides project monitoring during their development and continues monitoring through construction and closeout
- Manager, Transmission Project Development, whose group develops larger transmission projects, with a primary objective in the early stages of projects of minimizing their risks; overall, the group has responsibility for developing mitigation plans for projects through their life cycles, and it has responsibility for budgets and forecasts for transmission projects an major distribution programs in other jurisdictions.

The Manager, FET Finance plans for transmission projects. Two supervisors perform transmission forecasting, purchase requisition, and invoice processing activities, while a third group sets up accounting for transmission projects and provides additional support employees to the transmission business unit.

The Manager, Distribution Portfolio Management manages four full-time employees who support all the operating companies in planning for their distribution projects. Operating company engineering groups, including at JCP&L, identify, plan and develop distribution capital projects. Three business analysts work directly with the Operating company engineers - - one each for JCP&L, Pennsylvania, Ohio, and Maryland/West Virginia (including in the last case remaining regulated generation). The business analysts lead and coordinate the capital portfolio review processes for all operating company distribution and for regulated generation. An engineering manager reporting to FE Regional Engineering develops bottom-up distribution capital plans for JCP&L.

b. Capital Planning Process

The capital planning process begins well before other planning at FirstEnergy, starting with a kickoff meeting in October of the previous year. The process ends in early June, with capital data fed into the Long-Term Plan and budgets. Distribution projects for New Jersey originated at FirstEnergy Regional Engineering, whose identification of capital projects and programs begins the capital planning process. FirstEnergy transmission organizations, organized by region, plan New Jersey transmission projects.

Three distinct "rounds" of capital planning apply for both operating company and transmission projects and programs. The distribution portfolio team schedules and runs a capital portfolio kickoff meeting (for example, in October 2021 for the 2023 capital budgets). The kick-off meeting addresses all the operating companies. Capital expenditure templates provided to operating-company engineers organize project proposals and provide consistency across business units. A guideline of the "purpose and expectations" that Portfolio Management expects from operating company engineers for each of Rounds 1, 2 and 3 of the capital process channels work of those engaged in first capital planning efforts.

Round 1 (Identify Projects) takes place in February and March of each planning cycle. Portfolio management schedules a full day with each operating company to review its bottom-up proposals. Each operating company prepares detailed presentations including projects, programs and "blanket" expenditures for both base-rate and rider capital for the budget year. Operating company Round 1 meeting participants include operations, engineering, reliability, and lines groups. The operating companies complete analyses of needs, alternatives and solutions for each project, and identify project constraints, such as labor shortages, to support Round 1 meetings. Violations of reliability criteria and proposed solutions drive certain distribution projects.

The purpose of Round 1 is to identify, challenge and determine needs for proposed projects, programs and blankets. Portfolio Management also uses peer group reviews to validate needs for projects proposed. Following the Round 1 meetings, portfolio management provides informal feedback at a debriefing meeting. Portfolio Management also provides project input to corporate groups (*e.g.*, the one responsible for standards). Portfolio Management relays any Round 1 comments from FirstEnergy-level executives to the operating companies. The distribution portfolio team schedules bi-weekly meetings with the operating companies, starting in October or November and continuing through the end of Round 3. Preparation of a "Capital Portfolio Summary" for FE Utilities executives ends Round 1.

JCP&L engineers prepare all Round 1 proposals, evaluations, and analysis, with Portfolio Management asking questions and posing challenges as warranted.

Round 2 (Project Development) begins with the same participants, present for April or May individual meetings for each operating company. Round 2 incorporates examination and review of capital items added since Round 1, provides a forum for addressing questions raised about items included in Round 1, and sets expectations for the coming Round 3. Portfolio Management assists operating companies to update and enhance documentation and resolve items from Round 1. Round 2 also provides an opportunity to discuss estimates. Not all Round 1 projects include formal estimates. Portfolio management assists in follow-on vetting, issue identification, and further analysis of projects as Round 2 closes.

Prioritization of capital projects forms a subject of Round 1 and 2 activities, through questions, challenges, and discussions that produce an initial paring of the list of potential projects and programs. This paring engages operating company and transmission business personnel. Round 2 culminates in the emergence of a general structure for the total portfolio of operating company and transmission items. The operating companies participate in making adjustments to that structure. Portfolio Management works with the operating companies to structure remaining Round 3 needs and activities, also producing a summary of Round 2 results.

Round 3 (Presentations) includes a one-day June meeting of operating company and transmission leadership and FirstEnergy-level executives. Operating company presidents and directors on the transmission side make presentations addressing their proposed capital items. Portfolio Management facilitates the meeting, which includes negotiations of proposed projects as capital requests from all FirstEnergy sources undergo review. Rounds 1 and 2 produce paring of initial lists, accommodation of emergent items as they progress, and effective approval to pass to the next round. Round 3 culminates in approval of a capital portfolio that includes all FirstEnergy operating companies and the transmission business. The approved list remains subject to board approval. Business Services personnel enter distribution capital details into the planning model; FirstEnergy Transmission finance personnel do so for transmission.

c. <u>JCP&L 2021 Capital Proposal</u>

JCP&L made a Round 1 Capital Portfolio presentation for the 2021 planning cycle. A FirstEnergy-level "JCPL FEU capital target" of $128.6 million provided the framework for preparation of the portfolio that presentation addressed. The JCP&L portfolio goals focus on safety, customers and performance. Company developers, as expected, developed the portfolio and the details supporting it. They refer to the goals when building their capital plan reflected in this presentation; *e.g.*, measured through reliability metrics, especially state regulatory benchmarks or requirements. Top FirstEnergy leadership expects operating companies to target their investments to meet or exceed state requirements.

The 2021 proposed capital portfolio prepared by JCP&L engineers included sections addressing:

- Corporate IT and facilities
- Reliability strategy and performance
- Maintaining reliability projects and programs
- Capacity and duty to serve overview and projects
- Commission programs and vegetation management
- Relocation and street lighting
- Value added projects
- Portfolio risks.

The following slide summarizes this JCP&L Round 1 capital proposal.

JCP&L 2021 Round 1 Capital Proposal
(figure is confidential)

[redacted]

In the slide above, the "2021 Forecast" column comes from the previous 5-year Long-Term Plan, and "RPA" consists of projects requested from the bottom-up by JCP&L.

d. <u>2017-2021 JCP&L Capital Plan Development</u>

FirstEnergy's long-term plan favors investments subject to formula rates. JCP&L recovers the bulk of distribution capital expended through base rates. During the past five years JCP&L has consistently overrun capital budgets by large margins. We undertook a closer examination of the evolution of JCP&L distribution capital plans in the past five years as they moved from targets initially set at the FirstEnergy level through the planning rounds and on into execution (measured by actual expenditures).

The next table shows changes from the distribution targets for JCP&L, under which bottom-up development began within the utility through key rounds in the planning process and compared them with actual expenditures.

JCP&L Distribution Capital Budget Process

Plan Year	Target	Round 1	Round 3	Actual Spend	
				Dollars	vs. Target
2017	$132.5	$135.7	$135.7	$137.9	4.1%
2018	$125.1	$126.6	$131.0	$198.2	58.4%
2019	$132.9	$137.4	$132.9	$206.2	55.2%
2020	$138.3	$138.3	$171.6	$156.0	12.8%
2021	$128.6	$136.0	$128.6	$175.2	36.2%

The starting values provided by central planning resources for each year show small variation, no apparent upward adjustments for inflation, and no evident expansion reflective of any recurrence of consistent budget overspends in recent years. They actually reflect a three percent drop over five years. JCP&L engineering personnel engage in development of the Rounds 1 values shown in the table. They too show an extraordinarily high level of consistency with the target values - - averaging less than three percent above them over the past five years. Changes through Round 3 show little movement, except in 2020.

A Round 3 proposal presented by the JCP&L President in mid-2019 increased the distribution capital budget from $138.3 to $171.6 million. This Round 3 proposal noted high capital spending levels in 2018 and 2019, with, for example, actual 2018 spending of $198.2 million versus budgeted JCP&L distribution capital of $132.3 million, with storms noted as the key variance driver. The presentation also noted that JCP&L failed to meet 2018 SAIDI reliability, as it had in 2017. A July 2019 slide prepared for Round 3 of the process conducted in 2019 for 2020 (depicted below) also shows the proposed capital increases and $44 million in "Rider-Focused" spending.

Round 3 Proposed JCP&L Capital Spending for 2020 Plan
(figure is confidential)

[redacted]

JCP&L had filed a Reliability Plus program with the BPU in 2018 to address reliability. The BPU approved that program in May 2019 (*i.e.*, as capital planning continued and shortly before the July 7, 2019 date of the slide depicted). Reliability Plus targeted overhead circuit reliability and resiliency improvement, substation reliability enhancement, and distribution automation installation. The Reliability Plus recovery rider approved by the BPU included $97 million in capital investments in addition to the JCP&L base capital portfolio, to be completed between June 2019 and December 2020.

An informed planning process would not have discovered previously unforeseeable need for additional distribution investments between Round 1 and Round 3 of capital planning for 2020. Moreover, our work addressed in Chapter Seven: *Reliability Programs and Smart Grid Activities* of the Phase One report did find the Reliability Plus program appropriate, but for reasons and in response to performance emergent over time, not suddenly becoming evident in mid-2019. It does not appear, however, that the needs to which the program responded influenced JCP&L in determining proposed Round 1, bottom-up project and program values for 2020. However, shortly after establishment of alternate recovery came the singular jump of material consequence in the process of planning JCP&L distribution investments for the past five years.

With the 2020 end of Reliability Plus spending, the target for 2021 under which JCP&L began capital planning returned to historical levels, actually falling three percent below the starting point established for 2017. JCP&L's Round 1 work, as the preceding table shows, led to a proposed amount $7.4 million above that starting point, but the increase did not last. The executive summary for Round 1 characterized the round's results as producing an excess of $49 million over target spending for the operating companies as a group. JCP&L responded to portfolio management's request for operating companies to lower proposed spending produced this response for 2021 distribution capital:

> *JCP&L evaluated its proposed Round 1 investments and proposed reductions to its capital portfolio across various blankets and programs by approximately $7.6 million.*

This response led to a Round 3 value for JCP&L at the level set for the utility as the target for guiding its bottom-up efforts for 2021. However, enterprise-level personnel responsible for capital management did not consider the reductions as affecting JCP&L service levels or reliability.

e. Company-Identified Opportunity for Material JCP&L Capital Cost Reductions

Capital planning forms a core element of both long-term planning and budgeting. Management reviewed that planning and the execution of resulting plans as part of FE Forward. The February 2021 Phase 1 FE Forward report found opportunity for major savings achievable through correction of a series of weaknesses in transmission and distribution planning and execution, stating that:

> *Opportunities* were *identified across 6 levers to enhance existing project development and execution approaches to improve project outcomes*

Observations regarding these levers included:

- Business Case and Project Scoping
    - Inaccurate preliminary estimates based on "very rough data," with very large (+/- ~50%) budget/actual cost variances
    - Limited feedback to the budgeting process reflecting estimate refinement, again with significant cost variances from preliminary estimates observed
    - Need for increased consideration of risk in identifying project alternatives

- Project Design
  - Failure of design personnel to present more than a single preferred option
  - Limited input from commercial/ financial teams
  - Sufficiency of consideration of field condition assessments to optimize designs
- Project Planning and Procurement
  - Permit requirement delays on access and project start
  - Delays related to coordination of project materials and equipment
- Baseline Estimate Accuracy
  - Different operating company cost estimating tools and use of date work units
  - Lack of standard approach to employing unit-based project cost estimates across project life cycles
- Contractor Selection and Management
  - Need for standard work units to analysis of competing contractor bids
  - Lack of a standard invoice review and approval process
  - Lack of a standard quality and change order review processes
  - Lack of an organization/processes to capture project-based best practices
- End-to-End Project Accountability
  - Sufficiency of project coordination to resolve issues promptly and increase productivity
  - Lack of standard project management process, governance, data collection, and use of cost/schedule/other performance metrics

FE Forward reporting valued capital spending savings from addressing such factors highly, noting that:

> *10 to 15% capital headroom opportunity is typically created through designing and implementing best practice (capital) approaches*

Our experience supports such valuations when the gaps subject to closure prove large, as opposed to more marginal changes in project and program management effectiveness. The breadth of the observations noted above and the application of such a large "headroom" factor underscore the need for addressing the issues raised. The resulting Phase 1 value estimate FirstEnergy-wide for distribution and transmission ranged between $123 and $184 million. For example, this range would equate to a value in the range of $25-35 million for 2021 JCP&L capital spending (including transmission).

The ensuing, June 2021 "bankable plan" produced in FE Forward Phase 2 confirmed the total FirstEnergy values produced in Phase 1- - meeting or exceeding them. Phase 3 began at that time. A number of initiatives had begun, with more planned for execution through 2022.

Ultimate success remains for determination, but we found the opportunities identified real and material. Pursuit of them should remain a top priority for those responsible for the planning, management, and execution of JCP&L capital work.

C. Conclusions

1. FirstEnergy suspended major elements central to effective strategic planning in 2016 through 2018 and in 2020, but planning now appears on the path of return to more expected activities and schedules. (*See Recommendations #1, #2, and #3*)

FirstEnergy did not express formally enterprise-level strategic plans for 2016, 2017, 2018 and 2020, and the 2021 plan became delayed by months to January of that year. It faced a series of existential challenges during that period - - eliminating a major business sector, addressing fundamental financial challenges, and addressing a major federal criminal investigation and the large-scale executive dislocation and spate of shareowner litigation that followed. The Chapter addressing *Organization and Executive Management* describes some of these sources of disruption and it also explains the lack of a sound approach to risk management - - itself a central element to effective planning. Recognizing the need for a primary focus on addressing immediate crises, we nevertheless found discontinuance of key planning activities and expressions, with the exception being 2019, unfortunate.

More recently, planning has produced appropriately expressed statements of missions and of core values and their dimensions. It has also produced clear higher-level goals for utility operating companies and JCP&L. The processes underlying them engage a sufficiently broad range of participants, and operates with sufficient FirstEnergy Corp. board and top leadership oversight and direction. Recently re-introduced strategic planning at the FirstEnergy level has generated financial and overall operating targets and identified major initiatives clearly focused on those associated with utility transmission and distribution businesses.

The 2019 plans for FirstEnergy and JCP&L went to their respective boards for review. The FirstEnergy statements of mission and core values drive existing FE Utilities goals and objectives, which tend more toward a tactical, or operational approach. Similarly, the three-year horizon for the FE Utilities plans, which encompass both distribution and transmission systems and supporting needs, is shorter than the FirstEnergy 5-year long-term plans.

2. The changes that strategic planning has undergone, in responsibilities for its development and in the subjects and elements plans address, have produced a lack of clarity in how it drives long-term planning, budgeting, and performance management. (*See Recommendation #1*)

Planning has proven inconsistent in scope and in the entities covered. Activities central to sound strategic planning have gone formally unexecuted. An important example, enterprise risk management, appeared at the end of our work on a path to improvement, but even there, it was clear that much work remains for 2022 to restore it to a fully effective state. Separation of responsibility among multiple groups for what FirstEnergy terms the “strategic” aspects of top-level planning from five-year planning and capital allocation and budgeting, combined with inconsistent execution and content of plans makes less clear linkage of various elements of long-term plan elements. That separation of responsibility has also contributed to an extensive series of reports, whose number and purpose do not fully promote a clear connection of budgeting to plans, goals, risks, and projections and they also tend to cloud accountability for performance.

3. FirstEnergy has streamlined the organizations responsible for coordinating strategy and long-term plan development, giving it a greater focus on those activities, but the resulting structure and resource alignment does not optimize coordination and linkage of planning and budgeting responsibilities. (S*ee Recommendation #1*)

At the end of 2016, the Senior Vice President, Strategy had responsibility for two principal groups, each with 15 members. One group had responsibility for strategy and long term planning and the other for business development. By mid-2021, the functions under the senior vice president resources under personnel had grown to include new functions such as marketing and sales, and related ones, such as emerging technologies and the Innovation Center. The retirement of that senior vice president in mid-2021 led to creation of a vice presidential position limited to strategy, long-term planning, and business planning and performance with a staff of 22. That change concentrated the focus of the executive assigned to strategy and planning on those functions, with other responsibilities transferred to other areas. Those transfers, for example, included business development and emerging technologies, whose staff of 16 remained roughly equal to the business development resource levels of 2016. The transfers also included the Innovation Center activities and corporate responsibility functions.

On a net basis, the changes better focused the responsibilities of the executive responsible for strategy development and long range planning, moving other functions under different executives while maintaining reasonably consistent resource levels. The 11 persons added through creation of the Innovation Center (described in the *Staffing* Chapter of this Phase Two report) reflects a forward looking approach to incorporating technology effectively and efficiently into operations. The more project-based activities of what FirstEnergy termed the Innovation Center at the time of this report's preparation make its move to another organization supportive of retaining executive leadership focus more on strategy and longer term planning

The February 2021 FE Forward Phase One report identified significant planning improvement initiatives. We consider a number of them connected with the dispersion of planning responsibilities among so many organizations. Examples include the following, expressed in the words of the February 2021 summary of needs and potential means for meeting them at the end of the first phase of FE Forward:

- *Streamline 5-year forecast process, explore adjustments to frequency and granularity*
- *Implement driver-based planning*
- *Standardize management reporting and analysis to focus on improving outcomes.*

The attention to process streaming and adjustment responds to the need for assuring clear and focused responsibility on establishing planning assumptions generally applicable to the operating companies as a group. The focus on granularity adds the ability to tailor plans to reflect circumstances and influences that affect JCP&L uniquely in nature or degree. With those who can input data into UI planner numbering as many as 300, maintaining control over the consistency and quality of inputs becomes at the least inefficient, and at the worst, subject to inaccuracy. Company comments on a draft of this report show that number presently at 92, which would demonstrate substantial progress.

The second example, concerns identification and use for planning of performance factors that drive measurable performance (*e.g.,* unit rates and costs), again an activity that requires focused responsibility for identifying those drivers, ensuring that they are consistent and reflective of recent and expected performance, and employed directly in modeling and analyzing potential results at both the enterprise and at the operating company level. Proper use of drivers like unit rates and costs also substantially assists in analyzing variations from established plans as management executes them.

Our treatment of metrics comparisons among the operating companies in the *Staffing* Chapter of this Phase Two report exemplifies the merits in using meaningful performance drivers to assess performance effectiveness and efficiency. Consistency (as well as differentiation among the operating companies where appropriate) between the factors that underlie plans and that measure performance, best support meaningful planning and timely response to variances that occur in plan execution. Standardizing reporting, using consistent and quantitative measures, and making it actionable also becomes more difficult when too many reports end up producing in effect too little useful information either because of different measurements, inconsistent analysis, or the burying of the most useful and actionable information in a sea of reports. Consolidating responsibilities for report definition, structure, controls over the use of the data underlying them, and ensuring consistent measurement of related activities or organizations is in order.

At present, Business Planning and Performance has responsibility for reporting at the Executive Council and parent board levels. The FESC Controllers group addresses more tactical and detail-oriented Utilities and Transmission plans. A third group, Business Services has responsibility for operating company budgets, financial results and variance reporting.

The FirstEnergy planning processes should demonstrate strong linkage, managed as an integrated set of processes, with common corporate assumptions and clarification of roles and responsibilities in planning. Such effectively integrated planning is difficult to achieve with pieces of the planning processes managed by disparate organizations. planning data for years one (budgets) through five (Long-Term Plan) for FirstEnergy is consistent and contained in the same UI Planner database, numerous organizations input into the database, and a massive number of financial reports (more than 250) are prepared by a variety of users for different client audiences. More effective and better-integrated management of planning activities from strategic planning to budgeting should be based on further improving the organizational alignment under a single organization.

FirstEnergy's outside consultant for FE Forward recognized planning and budgeting performed in separate or multiple organizations as an issue by addressing streamlining of planning activities. We understand senior FirstEnergy financial leadership to be planning to integrate organizations, resources, planning cycles, and methods to link strategy, longer-term planning and budgeting, to coordinate their processes. A mid-2021 change placed coordination of strategy and long-term planning under a single executive, not burdened by other material areas of responsibility. This change came as part of efforts to bring finance and strategy together under the CFO, for the reasons stated as follows in announcing the mid-2021 organization changes:

> *To better align and link the strategy plan, long-term plan and budget, the Corporate Strategy, Long-term Planning, and Business Planning and Performance departments were all grouped under the Finance and Strategy pillar."*

However, major budgeting functions remain under resources provided by Business Services (part of the controller's organization which reports to the Chief Accounting Officer), to support operating company businesses.

Initiatives to address all the issues were underway as we closed field work on the subjects addressed by this report chapter. Apart from the benefits of better and more consistently informing plans and enabling analysis of performance against them consistently, completing those initiatives is expected to produce savings on total enterprise basis of $5 to $7 million per year.

4. **A refocus on risk management at the FirstEnergy level promises a restoration of expected circumstances, but major actions remain to be completed in 2022.** (*See Recommendation #1*)

We observed a major lapse in structured attention to enterprise risk management at the FirstEnergy level as it faced the business failure, financial, criminal investigation, and shareowner problems addressed in this Phase Two and in the accompanying Phase One reports. Even confronting these existential risks should not cause a loss of focus on a forward-looking program to incorporate risk into strategic and long-term planning and to carefully assess and manage existing, emergent, and potential new or increased risks.

The predecessor to the ERM Committee did not meet in 2020 and a review of the documentation management provided for the first half of 2021 showed more attention to revising that framework and assessing the committee's role than on attention to overseeing the identification and management of specific risks of consequence. One overarching factor; *i.e.*, diversion of senior leadership attention to matters following mid-2020 disclosure of the criminal investigation by the U.S. Attorney for the Southern District of Ohio likely contributed. An important organizational discontinuity likely did as well; *i.e.*, the change in responsibility for and the multi-month gap in executive risk organization leadership. The impacts of that gap likely became magnified by the other senior leadership changes that followed in the aftermath of the investigation.

Whatever the cause, we found the management-provided documentation of the ERM Committee's predecessor insubstantial when compared to what we have customarily seen when examining the operation of similar entities at other utility operations. We also found uncharacteristic the lack of committee meetings in 2020 and the routine attendance absences of large near majorities of committee members in the first half of 2021. We found that absence striking, given the focus on re-examining and reconstituting principal foundations of the ERM framework. Equally striking was the engagement of the committee in re-examining such foundations and in seeking outside consulting help at a time when executive leadership of ERM remained vacant and management was, it appears, completing efforts to bring in that leadership. FirstEnergy's July 22, 2021, announcement of the appointment of the new Chief Risk Officer noted a number of factors that emphasized his expected role in developing and strengthening the framework, programs, and activities for managing risk, citing (bolding added for emphasis) with regard to this experienced new executive:

> *Extensive industry expertise will help **build** best-in-class risk program while reinforcing commitment to ethics and compliance*

> *…he will **develop** and execute a risk program that reflects FirstEnergy's core values and behaviors; **establish** standards and **implement** robust processes and procedures to identify, mitigate, and prevent risks across the company*
>
> *…support efforts by the Board of Directors and senior leadership to **implement**, review and approve the company's enterprise-wide risk governance and compliance framework.*

The emphasized verbs show re-examination, change, and enhancement of framework foundations and core program elements as the need - - not mere transfer of leadership of a steady-state operation. Meeting this need after the executive transfer, as opposed to advancing revisions of such foundations prior to it would appear to have been more logical. In any event, these mid-2021 circumstances beg the question of how and when FirstEnergy completed foundational change and returned to the detailed activities that groups like the ERM Committee need to address to address risk soundly.

In summary, committees responsible at the corporate level stopped meeting, failed to incorporate risk as part of strategic planning, while also deferring the completion of planning itself. The exit from commercial power and energy businesses and a reversion to focusing on utility distribution and transmission operations does not eliminate or even reduce the need for robust treatment of risk - - although it has changed the exposures that FirstEnergy faces. Fortunately, recent efforts appear to recognize the importance of renewing focus on risk. Major efforts occurred in 2021, but activities scheduled for completion in 2022 will determine whether the broad and fundamental change needed will happen, with later year circumstances dictating whether any such change will last.

Large organizational and substantive disruptions in recent years dictate a cautious approach in ensuring that change will come and last. That said, however, we commend development efforts through 2021 in terms of how far forward they have brought risk management and in some respects how they have committed to changes that auger notable strengths.

5. **In contrast however, we found that managing particular elements of risk management, such as credit, commodity, and insurance followed sound organizational, separation, resourcing, and execution concepts, processes and tools. Moreover, we found JCP&L's risk identification, magnitude and likelihood assessment, and mitigation planning effective. Despite the concerns expressed in the proceeding conclusions, we did find sufficient focus on and attention to the capital needs of JCP&L in planning and budgeting processes.**

Following conclusions addressing concerns about specific negative influences on capital planning and budgeting as they affect JCP&L, but did not find them to result from a lack of focus on the capital needs of JCP&L. Nor did we find substantial deprivation of needed capital for JCP&L, although the concerns expressed in those following conclusions do give reason for concern about processes and activities controlled at the FirstEnergy level and executed under direction and coordination of common service organizations.

Structured and comprehensive means apply in identifying and prioritizing the capital needs of the operating companies (including JCP&L) and the transmission business and for producing overall FirstEnergy plans and budgets that rationalize them. JCP&L technical resources and its leadership play material roles in the processes involved. Planning adequately addresses the financing needs associated with planned capital spending. We did not find indication that holding-company debt service now crowds out or impinges on capital funding for JCP&L. Chapter Eleven: *Financial Risks and Consequences of Parent and Affiliate Relationships* from the accompanying Phase One report addresses the historical impacts of the failure of FirstEnergy's commercial power and energy operations on financial matters (*e.g.*, financial health generally affects credit ratings, liquidity, access to and rates for financing). That chapter addresses legacy issues resulting from the failure of commercial power and energy businesses and their bankruptcy and the timeliness and effectiveness of management's response to them.

Apart from the remaining effects of legacy issues as that Phase One report chapter describes, we did not observe new sources of adverse impact. Neither did we observe lack of access to needed financing to provide sufficient financial resources to meet operating company capital needs.

Diversification goals no longer include commercial power and energy, but there remains interest in examining opportunities outside the scope of "old school" distribution company activities, but in keeping with an expanding view of the distribution marketplace as national and state interest in addressing environmental and social goals (as examples) expands. We did not find indication of a diversion of attention to or resources from utility operations generally. Expansion of its transmission business has strategic importance for FirstEnergy, but again, without producing clear, substantial adverse impact on JCP&L. Nevertheless, the following conclusion does address a bias that tends to sub-optimize balancing among the operating companies, based on the nature of rate recovery mechanisms available in some jurisdictions for some categories of investment.

FirstEnergy's overall direction of capital planning and budgeting for its businesses, including its operating companies, has provided for early, meaningful, and continuing engagement by JCP&L subject matter experts and leadership.

The processes employed in identifying capital project needs and prioritization, forming short and longer-term capital plans and budgets, and establishing O&M budgets operate under strong coordination from central resources, and ultimately undergo FirstEnergy-level executive balancing of competing business needs across the enterprise, and final approval. The processes leading to those ultimately approved results, however, include the participation of operating company personnel at both the functional level (*e.g.*, as part of first efforts to identify and rank capital projects to serve JCP&L specific needs) and by executive operating company leadership (the utility president and operations vice president in particular at JCP&L). The processes for managing to capital and O&M plans and budgets also assigns clear operating-company-level responsibility and accountability.

JCP&L engineering and the utility's senior leadership have substantial responsibility for identifying and analyzing capital projects, programs, and initiatives that set a bottom-up baseline for capital planning and budgeting, which FirstEnergy directs on a consolidated basis across the enterprise.

Our review of planning process documentation and the understanding of process execution gained through interviews with executive and managers with direct engagement showed that utility needs and the resources required to meet them have formed central focuses of long-term planning, of budgeting, and of managing to budgets. More specific conclusions about the design, resourcing, and execution of those processes follow - - some of them addressing weaknesses whose correction will better serve the interests of JCP&L and its customers, without impairing the need for FirstEnergy to ensure processes that operate consistently across its businesses on a concurrent basis, and in support of the need for final plans and budgets that can work effectively on a consolidated basis.

6. **The capital planning process led by FirstEnergy introduces unsupportive pressures on JCP&L in the identification and approval of projects and programs planned and budgeted for New Jersey.** (*See Recommendation #2*)

The early engagement of JCP&L technical personnel, operating under the direction of New Jersey utility leadership, comprise an important and appropriate early step in identifying capital projects, and programs. Moreover, the employment of targeted spending levels at the outset of JCP&L's contribution finds common application in the industry. These targets serve to keep overall spending at levels "affordable" at a consolidated level, and in so doing promote discipline on planners at the utility level in focusing on investments most valuable in sustaining (or, where called for, improving) system capabilities and health. However, those targets should not operate in a way that forecloses candid and complete identification of a robust range of options and a full complement of useful programs and projects. Moreover, the process for identifying capital work should not suffer constraint on the basis of the nature of measures available for recovering its costs through retail rates.

Reasons exist to conclude that inflexibility in applying starting targets and preferences for certain forms of rate recovery have affected capital planning for JCP&L. We observed remarkable consistency for capital work over the past five years between starting targets that preceded bottom-up capital plan and project identification and analysis by JCP&L's technical resources, and the final plans approved at the FirstEnergy level following JCP&L input. Notably, JCP&L's initial, bottom-up work did not stimulate that variance. Its work produced a value in line with the starting target. Rather, a change that produced a 28 percent Round 3 increase over the starting target came after approval by the BPU of an alternate ratemaking approach for $97 million in work targeted at reliability and major event response and resiliency.

Planning by JCP&L, as for all similar entities, certainly had considered and responded to needs and responses of the types at issue through the earlier years of the five-year period we addressed. Equally certainly, the needs at issue did not arise following the 2019 Round 1 work by JCP&L. However, it does not appear that those needs caused JCP&L to include them before the change in rate recovery methods that came mid-stream in the 2019 planning processes for 2020 work.

Moreover, at the slated 2020 end of $97 million program, circumstances returned to their prior state. In fact, even the modest increase over starting target proposed by JCP&L in Round 1 of 2020 planning for 2021 (6 percent) did not survive what appeared as an across-the-board cut imposed at the FirstEnergy level to reduce enterprise-wide capital spending to a targeted level. The result of that cut left JCP&L at the same Round 3 level (0.2 percent higher) determined for four years earlier (2017). Over this period, JCP&L, as explained in Chapter Seven: *Reliability Programs and*

Smart Grid Activities of the accompanying Phase One Report has experienced mixed reliability measure results.

This circumstances do support a high degree of confidence that capital planning for JCP&L has occurred without negative influence from starting targets too firmly held to at the central level or from the clear preference that investments covered by ratemaking treatment preferred by parent "aspirational" goals - - goals pursued through planning processes administered at the central level.

7. The preference for investments in rider-recovered investments creates does not create a level playing field in allocating capital. (*See Recommendation #2*)

Five year plans for FirstEnergy at the time of our field work covered a five year period. Its high-level financial targets include quantified, aspirational goals for earnings per share growth and Funds from Operations/Debt percentage - - typical of those used by utility holding companies. FirstEnergy adds targeted investment categories that create a bias in favor of investments with costs recoverable under what it terms "Formula Rates." Such ratemaking methods generally provide faster recovery (eliminating lag associated with base rate review) and sometimes streamlined processes for determining investment necessity and prudence. FirstEnergy financial planning assumes an increase by 2026 of 10 percent (from 65 to 75 percent) in the proportion of its total investment recoverable through formula rates.

FirstEnergy considers its FERC-regulated transmission business fully characterized by formula rate recovery. The jurisdictions in which the operating companies provide service make varying uses of riders. Ohio and Pennsylvania use them widely for distribution capital, Maryland for energy efficiency, and West Virginia not at all. New Jersey has permitted energy efficiency, electric vehicle, and AMI recovery mechanisms. States that allow them do so for policy reasons they consider material, giving such methods all the justification they require to exist. Therefore, the issue is not constraining them, but ensuring that a multi-state utility business does not create incentives to imbalance investment because of them.

Expressing goals like these at the enterprise level introduces a bias at the outset of planning. FirstEnergy operating companies who perform bottoms-up capital budgeting in Round 1 can be expected to respond to it, as can the central resources who work in support of and in review of Round 1 efforts, and continue to do so as Rounds 2 and 3 progress. Certainly, more senior management and executive personnel who engage in review of planning round results can be expected to respond as well.

Incenting those who engage in state regulatory activities to make successful arguments for establishing rate regimes of the types top-level management prefers is direct and transparent. The very arguing for them expresses the goal transparently. The problem with a top-level goal to increase the dollars so recovered is not transparent. Without doubt it introduces bias in ways defying easy measurement, making the preferable approach to remove that bias from earlier planning efforts.

Failing to do so can produce disadvantage in jurisdictions that make less common use of such ratemaking methods and it can also tend in any given jurisdiction to induce investments in programs and projects with lower benefits per customer dollar at issue. These risks make it important to ensure clear investment targets at the individual utility level as well, along with clear operating targets at that same level of detail as well.

Executive leadership and the board should have clear visibility on allocation of capital among the individual companies and an understanding of measurable operating performance toward which investments go. There also needs to be accountability at the top level for more than overall performance. That accountability becomes less direct when measurements at the top level use only consolidated values, particularly when goals and targets have the tendency to direct investment to jurisdictions with more "favorable" rate treatments as opposed to those with the greatest operations needs and lagging performance metrics.

8. **JCP&L has largely met capital budgets, with the important exception of capital work associated with storms.** *(See Recommendation #3)*

Excepting capital work associated with storms, JCP&L's actual capital costs have matched budgets overall from 2017 through 2021. They have in fact moderately exceeded budget, giving indication that resources committed through capital planning and budgeting do find their way for use at JCP&L. However, the means by which FirstEnergy addresses storm costs introduces a weakness. That weakness has caused unusually large capital cost overruns (between 21 and 36 percent annually) since 2017. "Storm capital" accounted for almost 90 percent of overspends. In turn, continuing use of an unrealistically low budget for storm capital, when compared with recurring levels of capital needs driven by weather events.

Management has used amounts built into rates to set storm capital budgets. We understand interest in measuring differences between rate recovery levels and actual costs. However, doing so does not require, nor should it drive budgets. From and operations perspective, budgets drive plans for work performance and the resources required to execute them. Plans that do not build in realistic storm expectations do not support execution as designed or with the resources they anticipate. Giving management a baseline far out of line with expected conditions had the tendency to disrupt performance of work determined as needed and to diminish the cost effectiveness of its performance (*e.g.*, through expanded overtime or unplanned contractor use). The *Staffing* Chapter of this Phase Two report addresses JCP&L performance effectiveness, although it is not possible to determine with any precision how much this budgeting issues has contributed to them.

JCP&L management needs to operate from a capital budgeting foundation that more realistically addresses the needs likely to arise from major weather events. Responding to such needs at eight times (on a dollar basis) their expected levels does not offer that foundation. It also calls into question the effectiveness and timeliness of corporate level reallocation processes that must promptly follow and fully respond to such large variations from budgets without impinging on amounts designated for other needs.

9. **Similar methods for treating O&M costs for storm work have also impaired the effectiveness of JCP&L's budgets and have proven the largest contributor to persistent and large excesses of O&M costs above budgeted amounts from 2017 through 2021.** *(See Recommendation #3)*

Over-spending versus the JCP&L O&M budgets has run at least 13 percent annually from 2017 through 2021, averaging about 18 percent overall. Storm-induced O&M work alone accounts for roughly half of the overage. Use of rate-included amounts as the primary determinant for budgeting storm-related O&M costs again has served as a principal driver of the overrun. Actual storm-related O&M costs, including amounts deferred for later recovery, exceeded their budgets by about five times.

This approach has the same kind of consequences here as it does for capital expenses required to respond to storms. Again, determining variances between amounts in rates and amounts expended lends itself to methods other than those that establish for operating purposes a foundation that is not realistic. JCP&L leadership has responsibility for managing to budgets, but we did not find clarity in how "collaboration" with central organizations who conduct planning for FirstEnergy entities and with Business Services who work on budgeting and cost management with JCP&L (provided from the central Controller's organization) produces final budget amounts. We understood management to acknowledge clarity of responsibilities for formulating budgets to address storm-related O&M as an issue.

10. FE Forward has identified changes that can reduce annual JCP&L capital spending by a range of 10 to 15 percent. (*See Recommendation #4*)

The February 2021 Phase 1 FE Forward report identified a broad range of capital program and project planning, management, and execution gaps whose closure can save JCP&L in the range of 10-15 percent of its capital expenditures for distribution and transmission. Initiatives have begun to close those gaps, but they remained in progress or planned for later initiation at the time of our field work.

Our experience supports such valuations when the gaps subject to closure prove large, as opposed to making more marginal changes in project and program management effectiveness. The breadth of the observations noted above and the application of such a large "headroom" factor underscore the need for addressing the issues raised. The resulting Phase 1 value estimate FirstEnergy-wide for distribution and transmission ranged between \$123 and \$184 million. For example, this range would equate to a value in the range of \$25-35 million for 2021 JCP&L capital spending (including transmission). We understand those estimates to have considered the need for maintaining service reliability.

The ensuing, June 2021 "bankable plan" produced in FE Forward Phase 2 confirmed the total FirstEnergy values produced in Phase 1- - meeting or exceeding them. Phase 3 began at that time. A number of initiatives had begun, with more planned for execution through 2022.

Ultimate success remains for determination, but we found the opportunities identified real and material. Pursuit of them should remain a top priority for those responsible for the planning, management, and execution of JCP&L capital work.

11. Inclusion of JCP&L technical resources and leadership does not obviate the importance of separate JCP&L strategic plans integrated with and supportive long-range plans at a detailed level and addressing New Jersey-specific goals and objectives. (S*ee Recommendation #5*)

JCP&L has not had a company-specific, long-term plan since 2019. It has operated under 2020, 2021 and 2022 plans at the overall FE Utilities level. Those plans take a more tactical than strategic view. The plans do break down into specific operating company components, such as capital and O&M budgets measurable at the JCP&L level. However, no process seeks formally to analyze and develop high-level goals and targets reflecting circumstances, opportunities, and risks unique to JCP&L. The JCP&L board does not engage in the formation of FE Utilities plans or in development of JCP&L long-term capital plans or capital and operating budgets.

D. Recommendations

1. Continue to develop FirstEnergy strategic and long-range planning development participants and processes. (*See Conclusions #1 through #4)*

FirstEnergy has moved back in the direction of more complete and regularly sequenced planning and more appropriately scoped strategic and long-term plans. However, several factors underscore the significance of continuing efforts:

- Sporadic attention to key elements over a long duration itself should bring caution in presuming continuation in the future
- FE Forward work performed by FirstEnergy internally, with substantial outside assistance has observed the need for significant improvements, including, but not limited to consolidation of related functions and activities
- A parallel effort not only to return to a comprehensive, structured, and more rigorously applied enterprise risk program, but to bring it to a leading-edge state in some respects, still has much to accomplish in 2022 to reach a fully functional state
- Reorganization and realignment of resources engaged in related strategic and long-term planning and budgeting, still of recent origin, should be recognized as contributing to at least transitory uncertainties about roles, responsibilities, and methods
- Changes in top executive positions tend to have the same effect, however, effective they may prove in the longer term
- While common direction under the CFO creates some linkage between planning and budgeting, key planning and budgeting responsibilities for FEU and FET remain under direction of the controller's organization, not the separate organization responsible for FirstEnergy corporate planning
- Highly consequential changes in FirstEnergy Corp. board membership, have the potential (pending court approvals of a settlement agreement covering a range of shareowner litigation) for leaving parent board membership with an extraordinarily low comparative average tenure and a narrowed breadth of experience, making it critical to consider how to engage it optimally in strategy and goal setting, planning, and budgeting creation and execution oversight processes (See the Governance Chapter of this Phase Two report)
- Leadership must remain deeply engaged in a series of initiatives required to comply with the Deferred Prosecution Agreement directly and in other significant work (*e.g.*, addressing ethics and compliance and controls) required to create and maintain the framework intended to create and sustain a level of responsible and ethical performance
- A deep-seated corporate culture that continues (measured by the nature and degree of responsiveness to requests for information required to address the scope of the engagement the BPU has consigned to us) to stand in the way of producing the "transparency" to which FirstEnergy has announced a dedication, but to which, at least for purposes of this audit, it

has not yet approached attaining, comprises a fundamental risk to achieving over the long term a level of success that only earned trust with its regulators requires.

Factors and circumstances like these call for a particularly dedicated and holistic approach to ensuring the continued advancement of changes already and constructively made in strategic and long-term planning and budgeting. We consider that advancement necessary to complete changes needed to institute methods and results that support operating company needs fully and to secure their continuation. Planning and budgeting continue to require change to reflect the predominance of operating company and transmission operations. Pressing needs to address other factors contribute to the need for special efforts to assure no loss of focus on strategy and long range planning. Major work remains to complete work in instituting and then sustaining measures. FirstEnergy should immediately create and execute with dispatch a comprehensive process encompassing:

- Analysis of the strengths and weaknesses exhibited by its long-term planning and budgeting processes since 2015
- A full description of how those processes and particularly their execution have contributed to both successes and disappointments over that period.
- A dialogue engaging board members likely to continue longer term, newer executive leaders, the multiple finance executives with planning responsibilities, operating company leadership, and resources from the multiple organizations that now address planning, designed to produce a common situational awareness of how planning processes work and interrelate, what products they produce when and for what use, and perceived needs and gaps
- Follow through on the expressed interest of top executive management to enhance coordination and responsibility for strategy, planning, budgeting and management of performance to budgets, specifically considering how consolidation of the organizations responsible would improve linkage among these functions and their activities
- A comprehensive description of the desired "continuing state" sought for those processes, addressing factors including, but not necessarily limited to, planning scope, content, processes, participants, their roles, cycle/schedule, document scope and content, metrics and other bases for measuring performance against specific goals and objectives, roles
- Inclusion in 2022 activities planned for completing the reinstitution and reconstitution of structured enterprise risk management of and examination of the role that risk should play in forming strategic objectives, goals, and targets, and of how risk should be considered in examining progress against, continuing viability of and propriety of adjusting goals and targets
- Inclusion in that examination of a robust and candid assessment of how conditions and circumstances involving integrity, focus on customers, transparency, and other factors that threaten a loss of regulatory confidence affect short- and long-term financial and operational goals
- Expanding the range of measurable objectives focused on operational success (defined with full consideration of regulatory expectations) that take on greater strategic significance given the narrowed scope of business operations

- Assessment of commonality/distinction of planning scope and content between enterprise and individual operating company plans and relationship/priorities/synergies/conflicts between operating company and transmission businesses
- Increasing focus on the difference between what should at the enterprise versus operating company level be perceived as strategic versus tactical and the potential for enhancing strategic planning at the operating company to expand JCP&L's specific strategic goals and measurable objectives to address the business's expectations and those of its regulator and stakeholders - - accompanied by a revisitation of the role that JCP&L's leadership and board should play in expanded goal setting, planning, budget creation, and oversight of performance against them.

Planning and budgeting have been particularly buffeted by events and circumstances, affected by the need to respond to key departures, and now subject to board and leadership changes under the pending settlement agreement. A "step back" to take a holistic look at planning purposes, components, drivers, participants, and practices for planning and budgeting, preferably led by the CFO directly, is in order to make it function more predictably, traditionally, efficiently, and consistently with the needs of a business substantially changed in scope and now led by substantially changed and still in-flux executive and board leadership and oversight. We also recommend oversight by the parent board's Operations and Safety Oversight committee and direct and active engagement of at least one of its two most senior members.

Much of the work envisioned under this effort will consist in bringing together the work underway by multiple groups engaging in a range of related activities and change processes. We would expect that such activities address matters of continuing interest to and inquiry from the board as well. Ensuring that those activities benefit from coordinated consideration focused specifically and solely on strategy, goals, risks, planning, budgeting, and conforming results to plans and budgets is necessary to bring together the efforts underway to an optimum conclusion. With FE Forward already establishing a path for moving the functions and activities at issue forward and promptly, it may well be that structures, methods, and schedules for it that have developed since the end of our field work before 2022 will provide a strong framework for ensuring the holistic examination we propose without introducing delay in efforts already underway.

2. **Mitigate pressures that starting capital spending targets and a preference for "formula rate" recovery have applied on optimization of JCP&L capital spending.** (*See Conclusions #6 and #7*)

The use of starting capital spending targets for distribution that essentially have not moved for five years establishes arbitrary guidelines when measured against actual JCP&L needs as they change, as others get met, and even as inflation makes each dollar less productive over time. More significantly, the conformity of JCP&L Round 1 proposals to those starting guidelines shows that they have a strongly controlling effect. The bottom-up processes in which JCP&L engages should tend toward over-, not under-inclusivity. It is inconceivable that, across the spectrum of operating companies, the "next in line" projects of each will demonstrate the same necessity or "bang for the buck" in their execution. Nevertheless, overly strict conformity to guidelines set for each before engineers start to plan has that effect.

This approach can leave JCP&L deprived of capital that would produce much greater value than projects that make the cut at other operating companies. Similarly, it could leave JCP&L to build out projects that have relatively low comparative value. We respect that the three rounds of proposals looks at all projects at the margins, but the starting and ending points do not show that much if any real change happens. The repeated use of historical levels without material adjustment makes it unsurprising that JCP&L does not secure less than Round 1 proposal amounts. However, use of "smart" targets should produce a multi-year pattern that produces approved amounts dispersed above and below them. Smarter targets would address inflation, recent year trends in actual capital costs, major programs at or nearing completion, and new programs coming into being. The targets from which JCP&L has begun do not evidence such sensitivities, nor do its proposals indicate that it has applied such sensitivities. The one exception tends to prove the rule (and that applicable to rate recovery mechanism influence as well. BPU approval of an alternate ratemaking approach for $97 million in reliability and resiliency investments in 2019 appears to have directly influenced the third round of planning work undertaken. Before that, the needs those dollars addressed appear not to have entered early round planning proposals.

FirstEnergy needs to permit JCP&L capital planning efforts to begin either unconstrained, respecting local management's ability to understand concern for overall affordability or at least to set smart targets. We think that the apparent over-reliance on static starting targets argues for the former approach for at least one, and probably two planning cycles - - to break whatever barriers and reluctance that present approach may be imposing on JCP&L's work. Thereafter, experience gained will provide a sounder basis for determining how to use starting points to keep the planning process focused on what is realistically achievable.

The changes in order also include clear instruction and encouragement of producing a list of candidates that extends materially beyond whatever guidance applies. Capital programs, projects, and initiative lists should include for each clear explanation of needs and opportunities to which they respond, costs, quantifiably expressed benefits or risk mitigation/avoidance they will achieve, execution risk, and clear analysis of the relationship between cost and benefits.

Only by examining this type of information for projects both above and below whatever line JCP&L's planners address can optimization of capital planning and balancing out the often "lumpy" investment pattern that can result can there exist sufficient confidence that JCP&L capital planning has been optimized. We emphasize that ensuring "optimization" going forward is the proper focus here, not correcting, consistently with the first conclusion, clear and material underinvestment in the past. That said, however, the surprising level of consistency between starting targets from year to year and between yearly targets and JCP&L Round 1 proposals does not show that optimization for JCP&L has been sufficiently prioritized. Rather, prioritization occurs in the "Rounds 1 through 3 processes" within the Capital Portfolio organization. JCP&L requires its own prioritization of projects and spending focused on the needs of its own system, rather than collective measures of the operating companies.

JCP&L capital investments should be driven by least cost means for meeting service needs in accord with reliability and other service attributes required and reasonably expected by customers, recognizing that what will best do so requires judgment. Moreover, nothing should bar utility requests for particular means of cost recovery in rates or regulatory authority determinations that meeting particularly important or unique requirements call for other than traditional methods. What is at issue here is something different; *i.e.*, planning for the needs of 10 operating companies operating in six jurisdictions (perhaps five in the future) and at the same time a transmission business targeted for investment-driven growth.

Whatever one's views on the merits of accelerating or easing the burdens associated with investment recovery, it seems clear that base planning for the individual elements of such a business should not begin under an announced preference for project or program types that by definition have a favored status.

FirstEnergy should confine targets, goals, and incentives related to rate recovery methods to what it argues for before utility regulatory authorities, not to the very first processes of setting a framework for and identifying potential projects that face exposure not only to cuts based on internal priorities of individual operating companies like JCP&L, but when comparing projects across all of the many affiliated operating businesses units competing for capital. We have not seen direct instructions to so favor certain projects, but the creation of a clearly expressed and quantified degree of preference for them clearly tends in the direction of favoring them in both first operating company project identification and in subsequent efforts to cull lists to keep capital costs manageable and recoverable.

All that said, the bias is clear and not likely to change fundamentally in the short term on the basis of whether a strategic goal expresses it or not., At the least, however, instructions explicit, documented, originated from and reinforced by top authority should make clear that Round 1 capital planning efforts should give no mention, consideration of, or other preference to programs or projects perceived as offering comparatively more favored rate recovery. Post-mortem analysis of finally resulting plans and budgets should include and executive level review including JCP&L leadership to ensure that no such bias has influenced resulting capital allocations to JCP&L. This recommendation intends no limits on what recovery methods management can or should urge. Nor does it suggest lowering priorities on programs or projects whose execution clear regulatory requirements calls for, because of the existence of accelerated recovery methods.

This recommendation assumes no major changes in governance and leadership at JCP&L in response to our recommendations in the *Governance* and *Organization and Executive Management* chapters of this Phase Two Report. Adoption of those recommendations would lead us in a different direction for addressing this recommendation; *i.e.*, to providing for executive presentation of JCP&L's Round 1 capital program and project roster to the JCP&L board, as those recommendations envision it, accompanied by detailed, retained documentation of the justifications for the items included, prioritized internally by JCP&L. The list that follows JCP&L board review would then be the one subject to the assistance, coordination, ranking, and other activities supported by central service resources in producing a vetted Round 1 product for JCP&L.

This approach, if accompanied by those governance and organization and executive management changes would better serve to ensure full objectivity in Round 1 lists, while preserving the ability of FirstEnergy to make the Round 2 and 3 adjustments needed to produce a coherent, coordinated, and achievable capital plan at the enterprise level.

3. Develop realistic budgets for capital costs and O&M expenditures related to storm costs. (*See Conclusion # 8 and #9*)

Reliance on amounts identified as included for retail rate recovery has produced budgeted, storm-related capital and O&M amounts that reflect only a fraction of the costs that JCP&L has incurred or can be expected to incur. Tracking costs incurred against those presumably included in rates (even where possible with rate cases resolved through "black box" settlements, which do not itemize amounts allowed versus those requested) has value for determining when rate recovery no longer accommodates costs after reasonable attempts to control them. However, capital and expense budgets serve critical operations purposes that require them to conform to reasonable operating conditions needs. Budgets, for example, should correspond to expected work levels, in order to provide for proper work planning, assure its completion in a timely manner, and properly align resource requirements (*i.e.,* balancing work among internal resources, overtime amounts, and contractor use).

Capital and O&M work related to storms does exhibit significant variability, but can be expected to occur at levels many times exceeding those reflected in JCP&L budgets. Failure to employ more realistic values can produce unnecessary disruption in completion of planned work and significant inefficiency in planned and storm-related work with adjustments to resource balancing as weather-related and other off-normal factors introduce needs for unplanned work. Year-to-year variability will also still have such effects, but at moderated levels if expectations set through budgeting have a more realistic foundation.

Realistic budgets better drive effective performance while still allowing those responsible to assess the adequacy of revenues to cover costs.

4. Complete The FE Forward Phase 3 work required to support achievement of the capital cost savings, reporting status, actions remaining, and results achieved every six months. (*See Conclusion #10*)

The FE Forward process has identified changes that can save 10 to 15 percent in annual capital expenditures. The changes address fundamental drivers of cost, schedule, and quality in planning and managing programs and projects of the types that typify expenditures on JCP&L's transmission and distribution systems. Our general experience suggests that the top end of this range may be high, but the nature of the gaps identified through the FE Forward process nevertheless suggest material savings. Applying even a much lower factor (derived for all FirstEnergy operating company and transmission businesses) would nevertheless generate significant reductions for JCP&L customers. For example, achieving for JCP&L a level of savings well below the low end of the range established by FE Forward work could produce values in the range of $20 million per year for JCP&L.

Such values make prompt completion of the FE Forward Phase 3 activities and application of the resulting changes to JCP&L capital program and project planning and execution significant priorities for customers and the BPU in examining the New Jersey utility's capital plans and spending. JCP&L should therefore report at twice yearly on the status of plans and actions associated with these subjects.

One should expect other sources of capital expenditure to change with time, making the measurement bases expected costs without the changes and budgeted and actual costs following them. The reports should show and justify work unit comparisons underlying the comparison, as well as any other quantifiable factors used to explain the changes.

These reports will provide the BPU with a basis for verifying Phase 3 activity completion and results. The reports should end when the BPU determines that the changes have been completed and the cost effects of their implementation stable.

5. Reinstitute JCP&L strategic plans and give its board and leadership meaningful roles developing and overseeing performance in executing them. (*See Conclusion #11*)

The Chapters addressing *Governance* and *Organization and Executive Management* describe important recommendations for expansion of the roles of senior JCP&L leadership and its board of directors. Key among that expansion lies reinstitution of top-level planning and its performance from within JCP&L. The plans that have existed for FE Utilities do include JCP&L breakdowns set in some cases (*e.g.*, reliability metrics). One can agree that what needs, circumstances, requirements and stakeholder expectations qualify as “top level” at an individual operating company requires aggregation, categorization, and simplification at what has traditionally been considered the FE Utilities level, whose leadership and management need to shepherd 10 different operating utilities operating in 6 different jurisdictions. In turn, what the parent has deemed “strategic” in nature is different from corresponding levels of FE Utilities planning, with the parent still the principal external face to many stakeholders (and not that long ago needing to consider the needs of another large business sector in the commercial power and energy markets). The differences between the parent and its transmission and distribution utility businesses have certainly narrowed, but the large number of operating companies and jurisdictions still make unwieldly a process that fails to offer aggregation, categorization, and simplification.

Nevertheless, that need should not leave JCP&L without a coherent, comprehensive structure that, cascading from the top down sets forth clearly details such as:

- What elements it would consider “strategic” if it stood alone as a corporate entity
- What opportunities and risks apply in setting a strategy
- How its unique set of stakeholder (regulatory and other) requirements and expectations
- How that strategy should translate into comprehensive goals and targets
- What comprehensive set of measures should define success and identify gaps and needs for changes
- What specific incentives should induce the best possible performance from those who serve its needs
- How it and those it serves remain sufficiently accountable and transparent to those whose local requirements guide its operations an entity with unique opportunities and responsibilities in operating a public utility franchise.

Interviews with the two JCP&L outside board members found them very capable and engaged, and also focused on matters of importance - - matters for which it would be difficult to find clear expression combined with measurable indicators at the FirstEnergy level. Those interviews did not so much show what FirstEnergy has failed in doing but more in what it cannot be expected to do

10 times over, but which needs to be done anyway. That is not to say that there have not been gaps in governance and executive management, which have been clear.

Moreover, things like the pending settlement whose court approval would end various shareowner actions produce major uncertainty and augur potentially profound change in FirstEnergy executive leadership and governance. Stopping at what FirstEnergy categorically cannot be expected to do justifies and expanded JCP&L board and executive role. What it has not done well, what it will continue to need to do for some time to satisfy the Deferred Prosecution Agreement, and what changes will come in ending the spate of litigation still extant reinforce the need.

The JCP&L board and its senior leadership, reconstituted as explained in *Governance* and *Organization and Executive Management* chapters of this Phase Two Report should conduct utility-specific strategy formation, long-term planning, and budget development processes in parallel with those conducted at the FirstEnergy and FE Utilities levels. The processes require synchronization to permit related activities to proceed on the basis of common overall values and information and in a way that permits FirstEnergy executive oversight and participation and milestone and final approval by the parent board at times conforming to its needs for planning at the enterprise level and in ways that sustain its overriding authority to make different judgments about outputs from the JCP&L process.

This recommended process does not anticipate separate overall mission and value statements, but does anticipate development of specific goals, objectives, and targets that respond specifically to JCP&L's needs and circumstances, again recognizing that in reconciling any differences, the judgment of the parent prevail.

Management can synchronize the JCP&L process with the higher-level processes by advancing utility presentation of certain elements and in other cases deferring them pending development of underlying data, forecasts and other inputs centrally developed by common service groups or the parent board itself as needed. When synchronized properly, the JCP&L process will serve to provide perspective to FirstEnergy leadership, board, and central services planning personnel of New Jersey specific matters relevant to overall planning. It will also provide a more comprehensive list of targets and metrics that can be disaggregated at the state level. Targets measured and met at the enterprise level can nevertheless leave one state behind. Moreover, differences in circumstances may set a challenging bar overall, but one too easily met by a particular operating company. Engaging local leadership and board in recognizing difference in setting targets and examining performance in meeting them can enhance target realism and accountability for meeting them. Some targets are already differentiated; all that are material to needs, circumstances, and expectations at the individual operating company should be.

Chapter VI: Staffing Table of Contents

Chapter VI: Staffing

A. Background

FirstEnergy has assigned responsibility for many activities that drive staffing effectiveness and efficiency to central operations groups. However, direct management of the JCP&L workforce, as explained in Chapter Two of the accompanying Phase One report rests with the local utility's Operations group. This chapter provides the results of our examination of staffing in the context of overall FirstEnergy resources and with reference to how FirstEnergy and JCP&L together have managed staffing structure, organization, planning, actual numbers, aging, attrition, replacement, diversity, training and development, and workforce productivity and utilization.

We broadly addressed productivity and utilization of the large JCP&L workforce (principally dedicated to New Jersey distribution facilities and operations) in Chapter Two of our Phase One report. This chapter addresses a number of aspects of planning for New Jersey-specific resources as well, considering the production, productivity, overtime, age, and other drivers of that planning, but without repeating the substantial underlying information presented in Chapter Two of our Phase One report.

The bankruptcy that brought an early 2020 transfer of the FES Debtors also stimulated an intensive effort to change the common services structure. This effort focused on transitioning that structure to one focused overwhelmingly on the components of the electric utility business (transmission and distribution). A small number of generating stations, now further diminished, have continued to serve customers in a vertically integrated structure, principally in West Virginia. This chapter focuses significantly on that transition, planning for which began by 2018, producing by now large reductions in resources dedicated to serving multiple businesses that now consist largely of the 10 FirstEnergy operating companies that extend across five principal states and, at least pending its disposition, a small electric utility operation in New York.

We reviewed how central FirstEnergy organizations and JCP&L assure that operating and support groups employ effective means for determining and maintaining appropriate levels of productivity and utilization. We reviewed standards and metrics, how management has monitored performance against them, and the timeliness and effectiveness of means to identifying and taking actions to address staffing needs and issues.

The industry has for many years experienced continuing, widespread restructuring and resizing in the wake of mergers and acquisitions and heightened concern about optimizing efficiency and effectiveness. Many utilities, including FirstEnergy, have employed outside studies and performed broad-scale internal effectiveness reviews. We examined the use of quantitative tools and specialized organizations for developing staffing plans and addressing work efficiency and effectiveness. We considered how management uses historical and forecasted workloads and unit rates to assist in determining staffing levels. We examined the sources and levels of overtime and measures to employ this "resource" type efficiently. We looked at available measures of staffing sufficiency and effectiveness.

When integrated with corporate budgeting processes, sound staffing planning provides a vehicle for review of expected staffing requirements, and a baseline against which to measure changes in personnel numbers. We examined how personnel planning processes and controls have worked to accomplish this objective. This chapter details staffing levels, turnover, and employment application information. Note that other chapters addressing a variety of corporate and administrative services address staffing specific to the organizations who provide those services.

Specific planning and measurement considerations we applied in looking at staffing effectiveness included:

- Whether staffing plans have reflected actual and expected future changes in productivity and utilization
- Whether the tools used for workforce planning and performance measurement have proven commensurate with the scope and scale of operating company needs (with reference to how well they have served JCP&L and the organizations who serve it)
- Whether management has placed sufficient priority on performance measurement and used it to identify resource and practice improvements
- How well staffing complements and changes to them correspond to performance levels achieved and expected for the future.

Our examination here sought to:

- Locate responsibility for managing worker productivity and utilization
- Examine workforce-management practices and procedures
- Examine systems used to measure productivity
- Examine craft personnel planning practices and procedures
- Determine the process used to justify staffing changes
- Review staffing levels and trends
- Identify any recent staff-sizing or effectiveness reviews
- Assess plans and options to use staff restructuring or reduction programs
- Locate authority for enhancing workforce diversity, equity, and inclusion (DEI), and examine the goals, programs, initiatives, and measures employed
- Determine exposures to attrition and measures to address them through succession planning and other means
- Locate responsibility for and examine training for operations resources
- Determine the timing, sizes, and reasons for changes in JCP&L resources, particularly considering bargaining unit positions.

Chapter Two of our Phase One report also addressed some of these issues as they relate directly to the operation of the JCP&L transmission and delivery system. This chapter summarizes some of the key observations made there but does not repeat them in detail.

FirstEnergy reports employment by entity in its annual 10-K reports to the U.S. Securities and Exchange Commission. Those reports show a drop of 21 percent in total employees - - from more than 15,600 in 2017 to about 12,400 by the end of 2021. The vast majority of the drop came following the bankruptcies of the FES Debtors, principal among them:

- FirstEnergy Nuclear Generation, LLC, an owner of nuclear generating facilities

- FirstEnergy Nuclear Operating Company (FENOC), an operator of generating facilities
- FirstEnergy Generation, LLC, a subsidiary of EH, an owner and operator of fossil generating facilities
- FirstEnergy Solutions Corp. (FES), a provider of energy-related products and services.

The FES Debtors had employed about 3,200 persons, largely engaged in operation of a generation fleet consisting of fossil and nuclear stations. The bankruptcy of those entities led to their February 2020 transfer to Energy Holdings Corp., formed by creditors. Beyond that direct drop of more than 3,000, FESC also experienced a personnel reduction occasioned principally by transfer of the FES Debtors.

That drop left FEC with only a nominal change in total resources. However, considering positions moved from operating companies to FESC since 2018 and a drop of about 700 in positions filled by outside firms who supply personnel, the reductions in common resources serving the FirstEnergy operating companies has been large, as the focus of those organizations has narrowed to the 10 utility operating companies and a small number of generation plants that one of them (Monongahela Power in West Virginia) operates. This chapter discusses more generally where staffing changes have occurred. Other chapters in this Phase Two report addressing particular corporate and administrative support functions performed at the FESC level (*e.g.*; legal, supply chain, and information technology) discuss their staffing changes in more detail.

B. Findings

1. Workload and Staff Planning

Our inquiry into generally applicable requirements, systems, and methods for workload and staffing planning (including means for determining both expected workloads and associated personnel requirements) produced only a general response. It does not appear that FirstEnergy takes an analytical approach to formulating staffing plans driven by specific forecasts of workloads or changes in them from year to year. We did find a reasonably typical process for controlling staffing additions as vacancies occurred or when new needs arose. Filling open JCP&L positions, including those that become vacant through departures, requires approval of the JCP&L Vice President, Operations and of the utility President. Similarly, filling FESC positions requires approval at the FESC group's vice-presidential level.

Despite the lack of direct and significant links between forecasts of work levels and staffing needs, staffing structure, numbers, and effectiveness have nevertheless remained an ongoing and central FirstEnergy focus, since the establishment of the FE Tomorrow initiative.

2. FE Tomorrow

FirstEnergy continued to provide shared support services to the FES Debtors as they proceeded through bankruptcy. The resulting Shared Service Support Agreement governed the provision of those services by FESC from September 2018 generally through June 2020. Recognizing that completion of this transition would leave FirstEnergy as a business overwhelmingly focused on electricity transmission and distribution, management undertook the FE Tomorrow initiative to restructure and streamline common service operations.

FirstEnergy performed an outside analysis of staffing in connection with its "FE Tomorrow" initiative, designed to address the following objectives:

- Align common service organizations to support a "regulated-only vision" efficiently
- Implement and manage the agreement for providing the FES Debtors with common services through the transition period occasioned by the bankruptcy
- Maintain current utility cost structure without burdening it by competitive business support costs
- Create and retain employee opportunities
- Support utility earnings growth of 6-8 percent.

A leading firm benchmarked staffing numbers and costs of the FirstEnergy corporate and service functions in connection with FE Tomorrow. This initiative has addressed restructuring of these services to support a largely regulated company following transfer of generation-related business operations. The benchmarking employed peer groups for the following range of corporate and service functions:

- *Communications*
- *Finance*
- *Information Technology*
- *Real Estate & Facilities*
- *External Affairs*
- *Generation Support*
- *Legal*
- *Corporate Security*
- *Flight Ops*
- *Human Resources*
- *Rates & Regulatory*
- *Supply Chain*

The outside firm's work found, when comparing FirstEnergy to the utility groups selected for benchmarking:

- Finance costs overall well below the median, but salary and benefits costs well above
- Few useful utility industry benchmarks for Communications but advertising costs essentially at the median
- Corporate Security costs high as a percent of revenues and costs per person
- External Affairs resources among the very highest as a percentage of total personnel numbers, but no useful cost benchmarks
- Generation Support personnel numbers essentially at the median
- Human Resources total and per employee costs and employee numbers significantly below the median, but salary and benefit costs per person above the median
- Information Technology spending and personnel near or at the first quartile (lowest) levels
- No comparisons to any utility peer group results for Legal showed
- Rates & Regulatory Affairs costs and personnel approaching or within the first quartile
- No useful comparisons with the utility peer group for Supply Chain, but low costs and personnel, counterbalanced by high salary and benefit costs when compared to a broader industry group
- No useful comparisons with the utility peer group for Facilities & Real Estate, but low costs and high salary and benefit costs when compared to a broader industry group
- Flight Operations at FirstEnergy above the norm, with most companies of similar size or range of states served not employing air fleets at all.

Management set goals in 2018 for staffing reductions achievable following completion of services to the FES Debtors. Management created a roster of resources in the areas affected by the initiative, using early-2018 resource alignment and numbers as a baseline to set post-transition targets for year-end 2021. The next table shows the "FE Tomorrow Headcount" reflecting those targeted reductions, along with a list of actual 2021-end resource levels. As the chart notes, reassignment of responsibility for resources in a number of areas complicates direct measurement of results in achieving targets, as does some movement of other groups among the FESC organizations responsible for providing corporate services. Nevertheless, the table shows substantial success in meeting the targets established. The targeted groups comprised about half of total FESC staffing.

Targeted/Achieved FE Tomorrow Reductions

FE Tomorrow - FTE Reductions	2018 Baseline	FE Tomorrow	2021 Actual
Corporate	***225***	***148***	212
Strategy	37	36	27
Corporate Secretary, Facilities	77	57	125
Retail Sales and Marketing	55	0	0
FE Products	31	31	32
Flight Operations	20	20	24
Executive	5	4	4
Information Technology	***682***	***572***	583
Supply Chain	***171***	***40***	325
Corporate Security	***56***	***27***	***24***
Strategy, Reg Affairs, Legal	***354***	***253***	263
External Affairs	97	84	68
Legal	77	64	102
Internal Audit	33	23	18
Corporate Dept	11	6	4
Real Estate	28	22	22
Records and Info. Compliance	52	6	6
Rates and Regulatory Affairs	56	48	43
Communications	***52***	***41***	***38***
CFO Organization	***312***	***191***	***172***
Generation Support	***414***	***108***	***115***
Human Resources	***160***	***95***	135
Total	***2,426***	***1,475***	1,867

3. *FE Forward*

Examination of work processes and activities and the structuring and numbers of resources to perform them continued, in principal part through the FE Forward initiative that began in 2020. The *Planning* chapter of this Phase Two report describes the planning-related aspects of FE Forward and its implications for capital investment planning. This chapter's focus on staffing makes the initiative's attention to O&M activities and costs more pertinent here. The FE Forward initiative encompasses a re-evaluation of business practices, processes and decision making. FirstEnergy has described the core of FE Forward as "…designed to support near-term financial resiliency and flexibility while opening new opportunities for long-term growth."

FE Forward has focused on identifying changes to methods, processes, and tools to promote efficiency and performance effectiveness, both in how employees perform business activities and in giving customers a "modernized" experience. Communication of the initiative disclaims downsizing as a purpose of the initiative. Nevertheless, data produced across its duration has identified labor (both contractors and employees) as a very large source of O&M savings. FE Forward reached a major milestone following initiation in 2020 with a January 2021 summary of its first phase efforts, which provided a description of improvement opportunities and an effort to quantify them. The initiative clearly tied savings with resources in addressing distribution and transmission operations, with distribution (the principal province of the operating companies), making up nearly all that total and with JCP&L alone accounting for a third of it. The summary reported that:

> *Our findings suggest 5-8% ($76-108M) O&M savings opportunity (excluding 3rd party spend), driven largely by improving frontline productivity through the end-to-end planning, scheduling, and execution process and data-driven asset management decisions. Ride-alongs, departure, analysis and interviews suggest only ~30-40% of crew time is used for productive work.*

Another milestone came with the June 2021 summary of second phase FE Forward progress, reportedly successful in producing a "Bankable Plan" producing a still higher quantification of steady state operations distribution and transmission savings ($132 million by the end of 2023). At that time, FE Forward moved essentially into an implementation phase that, while calling for modest savings in 2021, showed implementation continuing through 2023 before producing the full range of expected sustained annual savings. FirstEnergy has publicly cited the "identification of more than 300 opportunities to automate processes and to address operating expenditures more strategically."

4. Overall Changes in Common Service Staffing

The next table summarizes overall staffing changes in the organizations providing common services, as opposed just to those targeted by FE Tomorrow. Changes have occurred in the structure under which the functions report to senior FirstEnergy executive leadership and the activities of some have moved from group to group. The table uses the current structure, making one-to-one comparisons of staffing changes impossible; it nevertheless does show overall how resources have changed.

Common Service Function Staffing

Senior Executive	Functional Group	Full Time Equivalents			Change	
		2017	2019	2021 Q3	#	%
Sr. VP Operations	Corporate Affairs & Community	6	5	8	2	33%
	Distribution Support Total	592	704	604	12	2%
	Transmission	656	416	441	-215	-33%
	External Affairs	83	69	68	-15	-18%
	Transformation	22	31	36	14	45%
	Corp Affairs & Community Involvement	6	5	8	2	40%
	Fleet Operations (Regulated Generation)		231	73	-158	-68%
	Utility Services	207	105	116	-91	-44%
	Environmental	62	48	53	-9	-15%
	Construction & Design	153	336	317	164	107%
	Compliance & Regulated	77	78	78	1	1%
	CIO (IT, Security, Cyber, Innovation)	763	651	706	-57	-7%
	Subtotal	***2,627***	***2,679***	***2,508***	***-119***	***-5%***
SVP, CHRO & Corp Services	Human Resources	107	90	93	-14	-13%
	Administrative Services	73	56	55	-18	-25%
	Real Estate	25	22	23	-2	-8%
	Flight Operations	19	20	25	6	32%
	Subtotal	***224***	***188***	***196***	***-28***	***-13%***
SVP, CFO & Strategy	Investor Relations and Communications	8	6	6	-2	-25%
	Communications	52	39	38	-14	-27%
	Controller	144	107	105	-39	-27%
	Tax - Controller	23	17	19	-4	-17%
	Treasury	28	12	19	-9	-32%
	Enterprise Risk Management and Risk Control	5	8	6	1	20%
	Insurance	4	5	8	4	100%
	Strategy, LT Planning & Business Performance	29	32	27	-2	-7%
	Supply Chain	389	350	325	-64	-16%
	Rates and Regulatory	55	49	44	-11	-20%
	Rates & Reg. Transmission & Load Forecasting	26	16	13	-13	-50%
	Subtotal	***763***	***641***	***610***	***-153***	***-20%***
SVP Customer Experience	Customer Operations	1,037	1,048	1,025	-12	-1%
	Products & Marketing	27	33	34	7	26%
	Sales		5	6	6	0
	Economic Development	8	8	8	0	0%
	Energy Efficienct and Implementation	31	26	26	-5	-16%
	National Accounts	4	4	5	1	25%
	Customer Service Analytics	16	17	27	11	69%
	Subtotal	***1,123***	***1,141***	***1,131***	***8***	***1%***
SVP & Chief Legal Officer	Lead Counsel State Regulatory	27	17	15	-12	-44%
	Other Legal	31	30	31	0	0%
	Claims	19	15	16	-3	-16%
	Information Compliance	9	5	6	-3	-33%
	Ethics and Compliance	0	0	4	4	-
	Internal Audit	30	20	20	-10	-33%
	Subtotal	116	87	92	-24	-21%
	Grand Total	***4,853***	***4,736***	***4,537***	***-316***	***-7%***

The table excludes positions filled by individuals (managed individually by FirstEnergy as if they were employees) provided under contracting with an outside staffing supplier. FE Tomorrow examined use of outside personnel, which has fallen in number as well. The next table summarizes their changes. Management cannot readily assign them historically by specific function, but can do so more generally, as the table shows.

Changes in Personnel Provided under Contract

Area	Year				Change	
	2018	2019	2020	2021	#	%
Shared Services	196	236	132	167	-29	-15%
Operations	531	514	449	386	-145	-27%
Customer Experience	971	813	522	483	-488	-50%
Generation	91	196	16	0	-91	-100%
Total	***1,789***	***1,759***	***1,119***	***1,036***	***-753***	***-42%***

5. Operating Company Personnel

The common service and support structure on which JCP&L relies in providing utility service exists for the other operating companies, with the existence of utility-level generation (the principal factor distinguishing the categories of service and support each gets) principally at Monongahela Power's Harrison and Ft. Martin stations. JCP&L no longer has generation assets whose costs get recovered through its rates. The same is true for most of the other operating companies, with Monongahela Power the major exception. The next table shows reported changes in operating company personnel, with the 2021 data reported as of May. Monongahela Power experienced a large increase in staffing with the 2017 assignment of 411 Fort Martin and Harrison generating station personnel (now numbering 397) in West Virginia to it from FirstEnergy Generation, LLC. The table excludes those 397 personnel, making the operations encompassed by the operating companies more comparable. The table shows that staffing at the other operating companies has grown by about five percent, while JCP&L staffing fell by about three percent, making it one of only two operating companies to experience a reduction.

Operating Company Personnel

Entity	Year		Change	
	2021	2017	#	%
JCP&L	*1,292*	*1,334*	*(42)*	*-3.1%*
Other Opcos	*5,866*	*5,599*	*267*	*4.8%*
Opco Total	*7,158*	*6,933*	*225*	*3.2%*
Individual OpCos				
OhioEd	1,106	1,096	10	0.9%
CEI	870	907	(37)	-4.1%
WestPenn	735	679	56	8.2%
Penelec	729	696	33	4.7%
MonPower	710	627	83	13.2%
MetEd	637	597	40	6.7%
PotomacEd	537	478	59	12.3%
ToledoEd	355	336	19	5.7%
PennPower	187	183	4	2.2%

The next table, using year-end 2021 numbers, shows a further reduction in JCP&L actual resources. It also shows that variances between targeted and actual JCP&L staffing positions have persisted since 2018, growing moderately in the time period affected by COVID-19 circumstances.

JCP&L Targeted vs. Actual Staffing

Staffing	2021	2020	2019	2018	2017
Target	1,270	1,347	1,353	1,346	1,300
Actual	1,200	1,263	1,290	1,294	1,292
Variance	70	84	63	52	8
	5.5%	6.2%	4.7%	3.9%	0.6%

Management indicated that plans exist to fill some number of open positions in 2022. Moreover, the data show that COVID-19 restrictions have recently constricted a major pipeline for providing skilled new employees for the operating companies. The Workforce Strategy & Planning group (part of the FEU-level Distribution Support organization) operates a Power Systems Institute, which provides accepted candidates with classroom and hands-on learning leading to an associate degree. The institute has produced more than 2,300 graduates. Completion of the program does not guarantee a FirstEnergy employment offer or oblige acceptance of one, but the institute has nevertheless served as a source for producing for the operating companies new employees who enter with a substantial skill levels. A major fall in participants during COVID-19 restrictions has affected hiring plans, but participation has largely recovered in recent months.

Management reports the 2021 drop in targeted positions resulted entirely from moves of personnel on a one-for-one basis from JCP&L to service company groups. The groups from which the moves came included human resources, vegetation management, claims, facilities, engineering, and the distribution control center.

An annual process tied to planning, budgeting, and forecasting drives the determination of required JCP&L resources. The Workforce Strategy and Development group (operating under FESC Workforce Development) prepares staffing templates showing current headcounts, attrition, current workforce age, and average retirement age data, for use in preparing a five-year staffing outlook. The data provided depict three years of attrition and age ranges. An HR manager assigned to JCP&L records anticipated attrition, transfers, and hires, working with business unit and other subject matter experts. Workforce Strategy and Development works with HR to justify and adjust the projected numbers. Indicated needs for additional personnel require development of a business case to justify them. Workforce Development works with Distribution Portfolio Management to rationalize staffing requirements with budget considerations. Workforce Strategy and Development operates separately from, but ultimately reports to, the same senior First Energy executive (the Senior Vice President, Operations) as does the Vice President, Utility Operations (under whom JCP&L's President operates).

6. *Total JCP&L Positions*

The next table shows actual January 2021 JCP&L positions and those forecasted at that time through 2025. Note that the values shown in the preceding *JCP&L Targeted vs. Actual Staffing* table show later, year-end values.

JCP&L Positions

Area	Year						Change
	Jan 2021	Dec 2021	Dec 2022	Dec 2023	Dec 2024	Dec 2025	
Lines	559	578	568	578	610	655	17.2%
Substation	183	191	198	210	234	260	42.1%
Meter Reading	153	170	170	145	84	-	-100.0%
Engineering	120	130	130	130	130	140	16.7%
Meter Services	69	70	70	70	70	70	1.4%
Control Center	51	59	60	63	68	68	33.3%
Fleet	49	56	56	56	56	56	14.3%
Customer Support	21	25	27	27	27	27	28.6%
Administration	18	20	20	20	20	20	11.1%
Forestry	11	11	11	11	11	11	0.0%
External Affairs	9	10	10	10	10	10	11.1%
Facilities	8	11	11	11	11	11	37.5%
Claims	4	6	6	6	6	6	50.0%
Human Resources	4	6	6	6	6	6	50.0%
Work Management	4	4	4	4	4	7	75.0%
TOTAL	**1,263**	**1,347**	**1,347**	**1,347**	**1,347**	**1,347**	**6.7%**

The table shows flat forecasts for JCP&L positions through 2025. However, the FE Forward initiative calls for the movement of some persons on a one-for-one basis of personnel from JCP&L to corporate groups. The affected groups include Distribution Vegetation Management, Human Resources and Claims. Staffing plans available in mid-2022 will thus show one-for-one JCP&L reductions for personnel moving to the corporate groups.

7. *JCP&L Bargaining Unit Personnel*

The next table shows the FESC and JCP&L bargaining unit staffing for operating in New Jersey, all of them represented by a single union - - IBEW Local 1289. A bargaining agreement with the local set a term of November 1, 2018 through October 31, 2021.

New Jersey IBEW Local 1289 Personnel

JCP&L						FESC		
Role	**2021**	**2018**	**Role**	**2021**	**2018**	**Role**	**2021**	**2018**
Auto Painter	1	1	Line Inspector	1	1	Maintenance & Repair	2	2
Bldg. Maint. & Repair		1	LTD Job		2	Clerks	2	2
Cable Splicer	22	25	Mapping Technician	2	4	Communications Tech	11	13
Clerk	78	82	Messenger	2	3	Customer Service Rep	24	36
Customer Service Rep	28	31	Meter Reader	138	160	Meter Reader	9	9
Drafting Tech	13	4	Meter Tester	34	35	Stockkeeper	17	17
Express Service Technician	91	92	Relay Tech.	25	23	Fleet Tech		1
Fleet Services	43	44	Safety & Training Rep		4	**Total FESC**	**65**	**80**
Heavy Equipment Operator	14	13	Single Phase Meter Test	14	20	*Change*	**(15)**	
Hydro Tech		5	Street Light Maintenance	2	2	**Total JCP&L**	**1,025**	**1,053**
Janitor	2	2	Test Tech.	6	6	*Change*	**(28)**	
Laborer	1	1	Undgd. Const. & Maint.	101	80			
Layout Tech	65	65	Und.Res.Dev.	8	15			
Line Const & Maint.	309	309	Utility Technician	25	23			

We asked for a list of the metrics used since to track key measures of labor-relations performance (*e.g.*, grievances, arbitrations, and resolution backlogs and reports showing results using them). Management reported that it has not used any. Trackable metrics include, for example, the following grievance measures: number open, new ones as a percentage of bargaining unit positions, time to first contact, percentage resolved at various stages, percentages closed.

FirstEnergy managed labor relations on a consolidated basis for its utility operating companies, employing a staff of eight operating under a Manager, Employee Relations and HR. Company comments on a draft of this report suggest changes have occurred since that draft. The Manager reported to the Director, Labor/Employee Relations & Corporate Safety, who in turn reported to the Senior Vice President, Chief HR Officer & Corporate Service. The Manager's "FE Labor Relations Team" leads contract negotiations, performs contract administration, and engages in addressing grievances through arbitration. The team works with JCP&L leadership as required to ensure compliance with labor laws, to interpret the collective bargaining agreement, and to support memorandums of understanding or agreements designed to promote consistent application of the agreement.

Management and bargaining unit representatives began negotiations on a new labor agreement in May 2021, with management's team consisting of the Vice President, Operations, the Director, Operations, and a Lead Negotiator from FESC. An agreement effective November 1, 2021 has a term of three years. Management reports the material changes as including:

- Wage increases of three percent effective May 1, 2022, May 1, 2023, and November 1, 2023
- Company's contribution to active and retired employee base medical plan
- Pension plan changes
- Updates to benefits plan design.

8. *JCP&L Overtime*

The next table summarizes overtime data for JCP&L in comparison to the other operating companies. It compares overtime to straight time (through year end for 2021) and shows the dollar variance (through midyear for 2021). The data show JCP&L's overtime ratios at comparatively high levels compared to the other operating companies and in relation to what we have observed in the industry. The dollar variances from expected levels have also been the highest of all the operating companies.

JCP&L Overtime Levels

Overtime to Straight Time				Overtime $ Variance				
				Total			Base	
OpCo	2021	2020	2019	2021	2020	2019	2020	2019
JCP&L	38.3%	40.0%	36.9%	108.0%	40.4%	45.6%	37.9%	42.4%
Average	*27.8%*	*29.4%*	*27.0%*	*1.9%*	*23.2%*	*23.2%*	*9.9%*	*16.6%*
Median	*26.1%*	*26.5%*	*24.3%*	*-3.6%*	*22.5%*	*22.0%*	*11.3%*	*16.6%*
OhEd/PennP	35.9%	38.2%	29.0%	5.1%	40.4%	23.8%	11.2%	25.6%
Toledo Ed	22.8%	24.9%	21.7%	-15.5%	14.6%	24.3%	-1.7%	29.6%
Penn Elec	26.7%	26.9%	24.7%	-35.7%	22.4%	22.0%	-3.6%	18.7%
W.Penn	25.4%	28.0%	28.7%	4.5%	22.7%	15.1%	11.4%	14.4%
MetEd	43.3%	46.2%	37.8%	88.4%	28.1%	43.3%	28.1%	28.1%
Mon Power	18.8%	22.0%	23.3%	-11.8%	17.1%	15.0%	12.1%	-3.6%
Potomac Ed	20.3%	19.9%	23.8%	-21.8%	17.2%	18.7%	12.1%	3.5%
Clev Elec	28.9%	26.1%	23.4%	13.2%	42.3%		3.7%	8.7%

We asked management to explain the reasons for consistently high comparative overtime levels in each year since 2019. Management first cited causes of overtime, which we find typical of all utilities, without specifically differentiating New Jersey circumstances. It did cite, however, Storm Isaias as a major overtime contributor in 2020. Management also cited more stringent measures to address COVID-19 protocols in New Jersey. Management also cited difficulty in filling transitional meter reading positions created to facilitate a move to Advanced Metering Infrastructure deployment, producing a need for overtime to ensure timely meter reads. Management reported an ongoing process for adding the transitional meter readers as this report was being drafted.

In all, the explanations did not substantially address what has been a continually high level of overtime. Management's response did appear to acknowledge resource numbers as an overtime contributor, noting the hiring of 10 journeymen line persons in 2021 and plans to hire 12 more in 2022.

Storms have accounted for a very large amount of overtime. Excluding overtime management attributes to storms, however, still left $9.1 million in overtime above forecasted levels in 2020 (a 64 percent increase above the 2017 excess of actual overtime costs over those forecasted).

9. *Diversity and Inclusion*

A compliance group within HR develops with assistance from an outside consultant annual affirmative action plans and mid- and end-year reports addressing progress under those plans. Plans and regular reports address female, minority, disabled individual, and protected veterans goals. Plans exist for Regional Operating Companies, FirstEnergy Utility Company (FEUC), and FESC. The Supply Chain organization has a primary role in supplier diversity programs and activities; the *Supply Chain* chapter of this Phase Two report addresses them.

Two of HR Compliance's mid- and end-year reports compile demographic information on all external hire applicants and on FirstEnergy employees. The third compiles historic demographic information on all hires, promotions, transfers, and terminations. The consultant produces required and supplemental reports addressing placement goals for the groups noted above, by job group. Reports address progress in meeting annually set federal government benchmarks and placement goals for individuals with disabilities and for protected veterans.

Development of strategies, execution, and measurement of DEI goals and initiatives fall under HR's Director, DEI, whose resources include full-time HR personnel and a loaned staff member. This group engages employees through Employee Business Resource Groups, learning programs, Speak Up forums, and other community involvement activities. Reviews of reports by HR Compliance and the consultant identify achievements and improvement opportunities relative to established goals, with meetings involving local HR representatives to discuss goal attainment and planning for new placement goals for the business units or organizations they support. HR's Recruiting, Employee Relations, and DEI groups have responsibility for outreach to those in groups for which goals exist. The outside consultant regularly used to support DEI activities provides a Compliance Resource Center platform, with HR Compliance responsible for overseeing HR group entries to ensure accurate and complete records.

Management employs a variety of means and vehicles for communicating diversity, equity, and inclusion goals, objectives, and policies to employees and other stakeholders. They include the provision every two years of:

- CEO Affirmative Action Plan (AAP) Statement
- HR Policy Letter 101, addressing the EEO AAP Policy
- Affirmative Action Summary, providing a summary of policy letters addressing AAP for women and minorities (HR Policy Letter 105) and individuals with disabilities and protected veterans (HR Policy Letter 106).

FirstEnergy received for the fourth consecutive year inclusion in the Bloomberg Gender-Equality Index, granted to companies who score at or above a threshold level of disclosure and performance across dimensions addressing "female leadership and talent pipeline, equal pay and gender pay parity, inclusive culture, anti-sexual harassment policies, and pro-women brand."

Employees in New Jersey also receive an annual *Right to be Free of Gender Inequity Notice*, which they must sign and return. Onboarding of new employs includes a review HR Policy Letters 101, 105, and 106. An internal portal (FirstEnergy Today) also makes these documents available electronically to employees.

Other internal communications vehicles for addressing diversity, equity and inclusion include a DEI SharePoint site, Employee Business Resource Group (EBRG) communications to members, and articles placed on the FirstEnergy Today Portal. DEI-related external communication employs press releases made available through corporate Facebook and Twitter accounts. The JCP&L page of the FirstEnergyCorp.com website includes equal employment documentation.

The Office of Federal Contract Compliance of the U.S. Department of Labor requires federal contractors (including electricity suppliers) to disseminate their EEO policy internally. Bulletin boards at all FirstEnergy locations post the annual CEO EEO Statement and required Federal Labor Law Postings. Employees and new hires also receive the HR documents noted earlier. All external job postings include a statement regarding consideration for employment without regard to "*race, religion, color, national origin, sex, sexual orientation, gender identity, age, status as a protected veteran, or status as a qualified individual with a disability.*"

FirstEnergy has employed affirmative action goals for women and minority placements. It also tracks by class the number of cases where other employment decisions (promotions and terminations) have had high impacts on women or minorities. The next table summarizes affirmative action goals and instances where hires, promotions, or terminations have had outlying effects. Note that the goals for which not hiring opportunity presented itself during the year are omitted from the table.

Affirmative Action and Disparate Impacts

Year	2018		2019		2020		2021	
Regional Operating Companies								
Affirmative Action Goals - Placements								
#Goals and #Met	*G*	*M*	*G*	*M*	*G*	*M*	*G*	*M*
Female	7	1	7	2	6	2	1	1
Minority	1	0	3	0	2	1	1	1
Classes with High Race or Gender Impacts (>1.96 standard deviations)								
Total Terminations	1		4		1			
Voluntary Terminations	1		3					
Hires	2		1		1			
Promotions	2		2		1		1	
Total	6		10		3		1	
SelectionsExceeding Applicant Pool								
	1		0		0		0	
Shared Services								
Placements								
#Goals and #Met	*G*	*M*	*G*	*M*	*G*	*M*	*G*	*M*
Female	3	1	2	0	2	1	1	1
Minority	2	1	2	0	1	0	1	1
Affirmative Action Goals - Placements								
Total Terminations	2		2		1			
Voluntary Terminations	1		2					
Hires			6		2			
Promotions	1		2		1		1	
Total	4		12		4		1	
SelectionsExceeding Applicant Pool								
	8		0		4		1	

The next table shows reporting against goals for employees with disabilities and benchmarks for protected veterans.

Employees with Disabilities and Protected Veterans

Year	2018	2019	2020	2021
Regional Operating Companies				
Goal for Individuals with Disabilities				
Goal	7.00%	7.00%	7.00%	7.00%
Actual	1.74%	1.75%	2.35%	2.37%
Benchmark for Protected Veterans				
Benchmark	6.70%	5.90%	5.90%	5.70%
Actual	5.21%	5.20%	5.36%	5.34%
Shared Services				
Goal for Individuals with Disabilities				
Goal	7.00%	7.00%	7.00%	7.00%
Actual	4.74%	4.93%	6.85%	7.05%
Benchmark for Protected Veterans				
Benchmark	6.70%	5.90%	5.90%	5.70%
Actual	4.93%	5.06%	4.87%	4.87%

An August 2020 DEI Workforce and Culture Report provides a snapshot intended by management to provide more transparency on goals and progress. The report presented a number of statistical measures, along with describing a variety of initiatives, programs, and circumstances regarding diversity, inclusion, recruiting, and development. The report:

- Cited three values
  - Building a diverse workforce for the future
  - Advancing a culture of inclusion and belonging
  - Enhancing focus on diversity with customers, communities, and suppliers
- Benchmarked regional labor market racial and ethnic diversity at 14 percent
- Expressed an "aspirational goal" to increase racial and ethnic work force diversity by 30 percent by 2025 (from 10 to 13 percent)
- Broke down workforce percentages by characteristics
  - Gender (overall and leadership)
  - Race and ethnicity (overall and leadership)
  - Generations (overall)
  - LGBTQ+ (overall)
  - Individuals with disabilities (overall)
  - Veterans
- Listed internal versus external hire percentages
- Provided percentages of external hires by gender and racial/ethnic diversity.

Our request for an identification of enforcement actions by the Office of Federal Contract Compliance Programs (OFCCP) or other applicable authority since 2018 produced a response that none have occurred in relation either to JCP&L or FESC.

10. Succession Planning

Succession plans get updated at least yearly, addressed through what FirstEnergy terms its "Talent Talk" process. Talent Talks seeks to identify employees with leadership potential, capture their capabilities and aspirations, and establish plans for their development. Ongoing talent discussions across the year support formal, business-unit-level Talent Talks in the second and third quarters, culminating in a corporate-wide, third quarter Executive Council Talent Talk. This last session addresses succession planning for the Leadership Council. In-year updating of the resulting succession plans occurs when key departures occur or when management identifies candidates whose status or potential give occasion for changes in succession candidate additions or their development plans.

The FirstEnergy Leadership Council includes executives across all entities (approximately 50 of them). The JCP&L members include the utility's President and its Vice President, Operations. The Leadership Council also includes 23 directors, including the New Jersey Director, Rates & Regulatory Affairs. A more senior, Executive Council includes the following nine executives, as reported in early 2022:

- FirstEnergy's CEO
- Five senior vice presidents, serving as CFO & Strategy, Chief Human Resources Officer & Corporate Services, Operations, Chief Legal Officer, and Customer Experience
- Two vice presidents, Communications and Chief Ethics & Compliance Officer, and Investor Relations.

The FirstEnergy Corp. Board of Directors reviews Leadership Council succession plans in the third or fourth quarter, depending on the timing of the Board Talent Review. In addition, FirstEnergy's talent management system (My Career Map) houses succession plans for each manager-and-above position. These plans identify candidates by degree of readiness (*e.g.*, ready now, in less than two years, in two-to-four years, and in greater than four years). The development system houses the development plans, and triggers periodic career conversations, with plans and progress against them addressed in the Talent Talks.

FESC Human Resources tracks the number of successors for each operating and service company position. Save for a single JCP&L position (which has a single candidate identified), all others have at least three, and some many more identified candidates. A total of 299 identified candidates exist for the 22 JCP&L management positions, with a least 8 each for the three JCP&L executive positions (the President and the two Vice Presidents - - for operations and for external affairs). All but 10 of the more than 150 management level FESC positions have at least three (and generally more) identified candidates. Human Resources also tracks the number of percentage of successors to vice president and above positions who have recorded development plans. All did as of the end of 2020.

11. Planning for Attrition

Utilities generally employ reasonably structured approaches to and analyses of work force aging issues, projected vacancies, and anticipated recruitment needs. The central Workforce Development group provides JCP&L with data addressing the three main elements used in identifying emerging staffing needs: (a) historical average retirement age, (b) current age range of employee ages, and (c) attrition data for the preceding three years. JCP&L management uses this data to prepare for meeting those needs. Corresponding FESC staff planning activities consist of monitoring headcounts and the annual Talent Talk process. Management tracks for some 90-different FESC work groups annual turnover numbers and percentages and average tenure at turnover. For 2020, FESC as a whole experienced 202 turnovers, producing a rate of 4.7 percent, with average tenure of 16 years at turnover. Some groups experienced much higher rates or lower tenures at departure. However, it does not forecast turnover for them.

The next table summaries departures by year and reason for selected FESC groups and for JCP&L utility operations.

Departures from Key FESC Groups and from JCP&L Utility Operations

Area	Year				
	2017	2018	2019	2020	2021
Chief Information Officer	***40***	***116***	***75***	***20***	***46***
Death/Retirement	22	11	5	3	16
VERP/Outsourced	0	85	53	4	0
Personal/Other Opportunity	17	19	14	13	25
Performance	1	1	3		5
Customer Operations	***103***	***97***	***66***	***67***	92
Death/Retirement	16	12	13	14	9
Personal/Other Opportunity	52	52	33	35	63
Performance	32	30	20	18	20
Layoff/Other	3	3			
Distribution Support	***24***	***35***	***33***	***18***	19
Death/Retirement	19	16	18	10	15
VERP		8	6		
Personal/Other Opportunity	5	7	8	7	3
Performance		4	1	1	1
Supply Chain	***13***	***221***	***26***	***20***	20
Death/Retirement	7	15	12	12	12
VERP		10	8	7	
Personal/Other Opportunity	4	2	3	1	6
Performance	2		3		2

Area	Year				
	2017	2018	2019	2020	2021
Transmission	***12***	***16***	***27***	***22***	27
Death/Retirement	8	6	14	14	15
Personal/Other	3	8	10	7	12
Performance	1	2	3	1	
Utility Services	***7***	***48***	***30***	***2***	3
Death/Retirement	4	5	4	1	3
VERP		41	26		
Personal/Other	3	2		1	
FESC Total	***330***	***616***	***466***	***214***	***299***
JCP&L Utility Operations	***61***	***73***	***76***	***71***	78
Death/Retirement	45	57	61	67	65
VERP					
Personal/Other	13	10	10	3	8
Performance	3	6	5	1	5

The next table shows the age distribution of JCP&L employees, average retirement ages, and the number of departures as of the end of 2021 and of 2019.

JCP&L Employee Ages and Departures

2021 Year End								2019 Year End							
Area	Total	>= 55		>=60		3 Year Avg.		Area	Total	>= 55		>=60		3 Year Avg.	
		#	%	#	%	RetAge	Attrit.			#	%	#	%	RetAge	Attrit.
Admin	13	9	69%	3	23%	64.7	2	Admin	17	6	35%	3	18%	58.3	2
Claims	no longer tracked at state level							Claims	5	3	60%	1	20%	63	1
Customer Support	21	11	52%	9	43%	63.3	2	Customer Support	20	13	65%	10	50%	63.7	3
Dispatch	no longer tracked at state level							Dispatch	58	27	47%	15	26%	63.3	3
Engineering	121	42	35%	28	23%	64.8	5	Engineering	125	44	35%	28	22%	64.7	10
External Affairs	no longer tracked at state level							External Affairs	8	4	50%	2	25%	59.5	2
Facilities	8	7	88%	5	63%	65.5	1	Facilities	8	7	88%	4	50%	64.3	2
Forestry	no longer tracked at state level							Forestry	8	3	38%	2	25%	66	1
Garage	52	25	48%	17	33%	62.9	5	Garage	52	31	60%	18	35%	63	4
Human Resources	no longer tracked at state level							Human Resources	5	2	40%	1	20%	*none*	1
Lines	556	202	36%	113	20%	64	30	Lines	555	229	41%	107	19%	62.9	28
Meter Reading	147	28	19%	14	10%	65	7	Meter Reading	162	28	17%	17	11%	66.5	7
Meter Services	64	37	58%	22	34%	63.3	4	Meter Services	74	36	49%	22	30%	62.3	4
Substation	201	65	32%	38	19%	62.7	9	Substation	173	68	39%	31	18%	62	8
Underground	10	10	100%	8	80%	61.3	2	Underground	12	11	92%	8	67%	62.3	2
Work Management	4	2	50%	1	25%	*none*	*none*	Work Management	4	3	75%	2	50%	*none*	*none*
Total	***1,197***	***438***	***37%***	***258***	***22%***	***63.7***	***63***	***Total***	***1,286.0***	***515***	***40%***	***271***	***21%***	***62.9***	***71***

age increasing *age decreasing*

The next table shows that the largest groupings of employees fall into the youngest and oldest brackets.

JCP&L Staffing by Age

Age	Employees
30-39	25.9%
60+	21.4%
40-49	16.2%
55-57	10.5%
50-54	9.7%
18-29	8.6%
58-59	7.7%

The next table shows forecasted attrition rates for JCP&L positions. The forecasted 2021 rate of attrition exceeds the rate of the prior years by one percent or so. FirstEnergy undertakes formal succession planning only for management employees. It does not similarly address replacement candidate identification, readiness assessment, or development plans for non-management positions whose loss would threaten disruption in operations. However, Talent Talk discussions do have a structure and nature that permits identification of high-impact persons with high attrition risk and those who could fill gaps.

JCP&L Attrition Forecast

Item	Year				
	2021	2022	2023	2024	2025
January Staffing	1,263	1,347	1,347	1,347	1,347
Attrition (#))	82	76	50	37	33
Attrition (%)	6.5%	5.6%	3.7%	2.7%	2.4%

12. Training & Development

An arm of the centralized FE's Operations Organization, operating under the Vice President, Distribution Support, has responsibility for technical and operations training for resources that work for or support JCP&L and for the workforce planning activities described earlier. Direct responsibility resides under the Director, Regional Workforce's 181-person organization at the time of this report's preparation, but marginally lower now according to Company comments on a report draft. Costs for 2019 through 2021 have remained flat at roughly $5 million (annualizing 2021 partial-year amounts made available) and have run below budget in all three years. Four managers report to the director, with resources aligned functionally as follows:

- Operations Skills Training - - staff of 74
- Workforce Strategy & Planning - - staff of 53
- WFD Processes and Systems - - staff of 38
- Transmission and Regulated Generation Training - - staff of 13.

Leadership development programs fall under the central HR department's Learning & Development group. FirstEnergy had employed a six-person organization in 2017, headed by a Manager, Learning & Development. The Manager who heads the current, eight-person group reports to HR's Vice President, Talent Management heads. The group's costs have been at about $2.5 million for 2019 through 2021 (annualizing 2021 partial-year amounts made available). The group offers promoted leads and supervisors a New Supervisor and Manager (NSM) Program that proceeds through a series of phases and engages participant supervisors. FirstEnergy offers an Experienced Leader Program to continue the development of selected, experienced managers and directors.

13. Innovation & Digital Factory

An October 2019 board presentation addressed creation of a FirstEnergy "Innovation Center of Excellence." A cross-functional team, supported by an outside consultant, worked during 2020 to develop a plan for such a group, secured needed staffing and access to IT resources, and survey business areas for opportunities to support the identification of "use cases" to pursue. Becoming the Innovation & Digital Factory in 2021, the team focused on delivery of digital business products, building on the work of the enterprise-wide FE Forward initiative.

Opportunities to employ web feature development, advanced analytics, and automation form the main focuses of the group, prioritizing those opportunities on the basis of potential value gained relative to implementation requirements. The process for evaluating and selecting cases for pursuit focus on two main categories, with numerical weighting for defined dimensions under them:

- Ease of Implementation
    - Resources Needs and Costs
    - Technical Complexity
    - Solution Complexity
    - Sponsor and Resource Alignment and Availability
- Value of Opportunity
    - Financial Benefits
    - Strategic Priority Fit

- Customer Perception and Effort Reduction
- Employee Enablement
- Sustained Value.

The changes delivered beginning in 2021 underscore the key role of design thinking and digital technology use in the group's efforts.

Innovation Center Projects Delivered

Value Case/Initiative	Using Business Unit	Implementation
Customer Self Service	Customer Service	28-Apr-2021
Print Telememos	FE Products	2-Jun-2021
Regulated Commodities Data Updates	Reg, Commodity Sourcing	9-Nov-2021
Reuse Market SharePoint Flow	Environmental	5-Jan-2022
Tax Account Reconciliations	Finance Transformation	1-Feb-2022
Executive Dashboard	Org Perf Mgmt & Strategy	12-Apr-2022
30 Day No Bill	Customer Service	21-Jun-2022
Meter Exchange	Customer Service	14-Jun-2022
OH Outage Reporting	Reg, Compliance & Reporting	8-Mar-2022
Customer Digital Persona	Customer Service	15-Dec-2021
Critical Control Verification Reporting (R1)	Safety	16-Apr-2021
Tree Outage Predictive Model	Forestry	13-Oct-2021
Maryland Electric Vehicle Data Filings	Emerging Technologies	1-Mar-2022
Critical Control Verification Reporting (R2)	Safety	1-Mar-2022
Customer Payment Journey	Customer Service	1-May-2022

Comments on a draft of this report stated that staffing of this group, part of the Information Technology department, had mid-2022 staffing of 84, with plans to grow it to 141 through 2023.

14. Workforce Productivity and Utilization

We examined the organizations, methods, systems, and activities used to manage work at JCP&L. Chapter Two, *Operations Organization* of our Phase One report addressed work management for work performed by JCP&L. The local utility Operations organization has responsibility for engineering, construction, inspection, and maintenance of distribution facilities. These organizations use work management processes and technologies centrally provided by FirstEnergy to manage (through measures common to the operating companies) crew scheduling and work production effectiveness and efficiency. Work management systems, tools, and practices support development, monitoring, and assessment of job and crew planning, crew productivity, job progress, and work completion.

FirstEnergy implemented a Corporate Work Management Systems team model to optimize and standardize work processes and practices among its operating companies. It reports through Distribution Support in Akron and has embedded four persons at JCP&L. This group provides systems, tools, and processes to assist in the use at the operating companies. The embedded four work management persons at JCP&L reported through operating company leadership and monitored work execution in real time, forecasted labor requirements and held the monthly meetings.

We directly observed in the field effective use of Outage Management System (OMS) data, work management tools and methods, job scheduling and tracking software. Job planning uses automated methods for developing job labor and material estimates. Real-time monitoring of job performance takes place. Production, productivity, and schedule data entered into systems at the field level enable the central Work Management group to monitor and measure estimated versus actual work scope accomplished, schedule performance, and hours charged for work performed by JCP&L resources.

FEU Work Management has reported comparative performance of the operating utilities against a set of defined metrics for a number of years. FirstEnergy had reported monthly for each operating company a set of measures it termed Operational Excellence Indicators (OEI), designating them as productivity measures used to compare performance among operating companies and within each year-over-year. Management used these indicators to "…drive continuous improvement in areas of efficiency, productivity, and operational excellence." However, management discontinued their use at the end of 2021 with their replacement remaining under development at our last report (Mid-March 2022), as part of the FE Forward initiative.

The measures used in 2021 included the following, measured distinctly for line and for substation work:

- Lines
  - Actual vs. Design Hours for work requests: success defined as timesheet charges within 30 percent of original design
  - Scheduled vs. Design Hours for work requests: success defined as total schedule hours within 30 percent of original design
  - Actual vs. As-built Hours for work requests: success defined actual timesheet charges within 30 percent of as-built design
  - Departure Time: success defined as vehicle departure from shop within 60 minutes of shift start.

Additional substation measures included:

- Substations
  - CM Prioritization: success defined as inspection completion in accord with assigned priority code
  - Inspection vs. Order Close: success defined as field completion of work orders within 30 days of inspection
  - Actual vs. Standard Hours: success defined as timesheet charges within 50 percent of standard hours
  - Departure Time: success defined as vehicle departure from shop within 60 minutes of shift start.

The next table summarizes JCP&L measures and compares them with group average and low measures.

Reported Operating Company Productivity Values

Measure	Goal	JCP&L	Avg.	Low	JCP&L	Avg.	Low
Lines - 2021							
Actual vs. Design Hours	Gain 2% or 69% Min.	46.0%	56.1%	43.8%	-3.5%	-0.7%	-6.9%
Scheduled vs. Design Hours	Gain 2% or 82% Min.	50.4%	67.1%	JCPL	-7.9%	-1.2%	-9.3%
Actual vs. Asbuilt Hours	Gain 2% or 76% Min.	55.8%	62.1%	50.4%	-3.8%	-0.9%	-13.4%
Departure Time	Gain 2% or 68% Min.	54.2%	41.3%	25.4%	-9.5%	-6.4%	-10.2%
Lines - 2020							
Actual vs. Design Hours	Gain 2%	49.6%	56.8%	JCPL	-3.1%	1.8%	JCPL
Scheduled vs. Design Hours	Gain 2%	58.4%	68.3%	57.5%	3.8%	4.1%	-3.5%
Actual vs. Asbuilt Hours	Gain 2%	59.7%	63.1%	53.9%	0.1%	2.7%	-4.4%
Departure Time	Gain 2%	63.7%	47.7%	34.7%	5.4%	-3.0%	-13.0%
Substations - 2021							
CM Prioritization	Gain 2% or 70% Min.	86.5%	90.2%	JCPL	-3.9%	-1.1%	-4.6%
Inspection vs. Order Close	Gain 2% or 90% Min.	87.4%	94.0%	84.1%	-4.5%	0.5%	JCPL
Actual vs. Standard Hours	Gain 2% or 83% Min.	50.6%	58.7%	44.5%	-2.6%	3.9%	-7.6%
Departure Time	Gain 2% or 73% Min.	59.7%	65.0%	33.3%	-9.4%	-0.5%	-34.3%
Substations - 2020							
CM Prioritization	Gain 2% or 70% Min.	90.4%	91.3%	82.7%	-4.3%	-0.7%	JCPL
Inspection vs. Order Close	Gain 2% or 90% Min.	91.9%	93.5%	83.3%	-0.3%	0.7%	-5.4%
Actual vs. Standard Hours	Gain 2% or 90% Min.	53.2%	54.9%	42.9%	9.1%	7.4%	-5.3%
Departure Time	Gain 2% or 90% Min.	69.2%	65.5%	60.1%	-3.7%	1.1%	-8.5%
		below average value		*above average value*		*lowest OpCo value*	

FE Forward implementation has included developing new performance metrics. That initiative included an early effort that "…identified core upstream process and labor productivity opportunities" employing direct work interviews, observation and data for the 12 months ending October 2020. What management has described as the effort's "bottoms up estimate of labor" produced an "O&M opportunity" of between $70 and $110 million built from estimates individually determined for each of the 10 operating companies and from the transmission business. That analysis, supported by a consultant, compared these 11 business operations using a range of metrics. It found significant room for savings at JCP&L, using a series of "Markers of Opportunity." These markers identified JCP&L as producing the greatest opportunity for reductions (accounting alone for between $26 and $35 million of the total O&M "opportunity"). The overall O&M savings estimates that evolved as FE Forward continued through 2021 showed no diminishment of the overall O&M "opportunity" or JCP&L's contribution to it.

The measures employed in the 2020 analysis showed JCP&L as having (by an extremely large margin) the highest O&M per customer. JCP&L also had the highest (again by a large margin) ratio of contractors to employees measured by dollars for each. It had the lowest percentage of jobs completed within 30 percent of design hours. JCP&L fell near the median in daily crew hours on the job and exhibited the second highest percentage of time crews departed for work sites within an hour of shift start. However, the two areas in which JCP&L compared favorably appeared to be areas where operating company performance overall did not compare well to external measures.

In terms of a direct, bottom-line measure, the late 2020 analysis noted that some operating companies had undergone examination, but JCP&L was not among them. The reported data also contained one element we found curious, given data management provided. The late 2020 analysis showed JCP&L overtime as a percentage of straight time as the lowest of the operating companies.

Management-provided data provided under *JCP&L Overtime* in the *Findings* section above shows JCP&L overtime consistently at the high end of the FirstEnergy operating company range.

C. Conclusions

1. FirstEnergy responded timely and appropriately to the need to transform its common service organizations to reflect the departure of the commercial power and energy businesses following the bankruptcy of the entities that ran them.

A transition services agreement provided for continuation of services to the FES Debtors involved in bankruptcy. The agreement covered the provision of services through remaining bankruptcy activities as of 2018 and for a short period (ending in June 2020) following transfer of those debtors and their operations to Energy Harbor, Corp. entities. We examined the agreement's structure and effects. For purposes of addressing staffing, we found it appropriately structured to permit FirstEnergy's service-providing organizations to plan and manage staffing with reasonable continuity and efficiency, as the FES Debtors elected those services they wished to continue.

The 2018 institution of FE Tomorrow, accompanied by a large-scale voluntary early retirement plan, produced a comprehensive re-evaluation of service company needs and the structure and resources required to provide them. FE Tomorrow targeted specific resource reductions for common service organizations. Nominally, the numbers of personnel classified as FESC employees have not changed much since initiation of FE Tomorrow. However, common service restructuring has also addressed centralizing some employees previously accounted for as operating company employees and the positions filled by personnel provided by outside firms who supply personnel. Counting those two sources of FESC staffing change (nearly 500 centralized operating company employees and 700 outside personnel eliminated) has permitted substantial achievement of targeted personnel reductions in what had been an approximately 4,900 person FESC organization before the transition began.

Continuing efforts to address the effectiveness of central service organizations continues under a newer FE Forward initiative, underway during our audit field work. Changes identified through that initiative have both capital and O&M planning and budgeting implications, which have staffing implications as well. See the *Planning* chapter of this Phase Two report, which addresses FE Forward specifically and impacts on capital planning for the future.

2. FE Forward and the Innovation Center demonstrate a continuing commitment to improving the effectiveness and efficiency of centrally provided corporate, support, technical, and operating services.

FE Forward offers a broad, comprehensive, ongoing process for examining and redesigning how FE conducts business going forward. The *Planning* chapter of this Phase Two report describes FE Forward, focusing primarily on how it has changed and will continue to change planning and budgeting. The initiative has major implications for staffing (both internal and contractor-supplied). The focus of FE Forward on how work gets done and why reflect a maturing of the efforts preceding it (and conducted in major part under FE Tomorrow). That effort, while it did examine methods and practices to a degree, faced the nearer term issue of responding to the need to pare a group of combined-service organizations soon to serve operations materially smaller in size and narrowed in scope.

The previous conclusion described what can fairly be characterized as essential success in making that transition with reasonable dispatch. For the future, we find sound the comprehensive nature of FE Forward, its focus on planning and budgeting change, and its recognition that practices and activities, informed by advanced technological capabilities, tools, and systems ultimately provide the proper framework for determining how to improve customer experience and increase effectiveness and efficiency in delivering it. Its design and what we have learned about its execution to date, appears place it on paths designed to deliver large O&M savings at JCP&L on a steady state basis.

Given the reasonably-long standing and evident gaps in JCP&L staffing and performance data, it seems clear that the failure to enhance performance there represents an opportunity lost for an extended period of time. Changes in methods, systems, and tools will maximize the benefits to be gained. However, the data that is available do not support a conclusion that other systemic causes have contributed to workforce productivity and utilization in New Jersey operations. JCP&L alone accounted for a third of the O&M opportunity that management's efforts identified as far back as late 2020.

That management has for some time had reason to probe more deeply into the factors driving JCP&L performance does not, however, undercut the value to be gained through FE Forward. Neither does it suggest a fundamentally separate program for JCP&L. Certainly, under less disrupting circumstances, the initiative might have advanced further by today. However, the bankruptcy of the entities conducting FirstEnergy's commercial power and energy businesses, disentangling them as major consumers of common services, extreme financial distress at the holding company level, and addressing and responding to the profoundly disturbing and disappointing circumstances exposed by the U.S. Attorney for the Southern District of Ohio have all caused disruption.

Whatever those factors mean to a retrospective analysis, the forward-looking perspective we apply here leads us to find the change process at a current acceptable stage and maintaining a reasonable pace, given expectations that 2022 cost performance will begin to show benefit and that essential completion of the work to produce sustained O&M reductions at the levels identified for JCP&L will be complete and effective by the end of 2023.

In short, we consider the planned actions and schedules of FE Forward as they relate to improving staffing efficiency and effectiveness an appropriate focus. The next conclusion addresses what we consider to be an important complement to those actions.

3. **FirstEnergy systems and capabilities provide a reasonable ability to measure productivity and utilization even before the improvement that FE Forward will bring; a number of anomalies indicate the need for determining the degree to which JCP&L performance-affecting factors require unique assessment.** (*See Recommendation #1*)

Other operating companies have grown resources, while JCP&L (and only one other) have experienced reductions. JCP&L has steadily operated with fewer than its authorized numbers of resources, with comparatively very high levels of overtime, and with the largest contractor/employee ratio among the operating companies. Forecasts of its resources remain identical for each year through 2025, except for what management has described as one-for-one moves of personnel from direction by JCP&L executives to operation under central organizations serving all the operating companies.

The *Surface and Air Fleet Management* chapter of this Phase Two report describes what we concluded was a sound set of metrics addressing resources, productivity, and utilization. The concern we had about them was the degree to which management used them to assess the need for ability to improve performance. Similar capabilities for measuring work at the remainder of the operations that JCP&L leadership manages directly exist as well. However, juxtaposing the data sources listed in the preceding paragraph do not exhibit effective use of those capabilities. As the net conclusion details, moving to effective use of them appears to present large opportunities for reducing JCP&L costs.

The Reported Operating Company Productivity Values table presented in the last of the Findings sections above highlights both concerns addressed here - - what management measures and relies on, and what the data show about comparative JCP&L performance. The measures are not extensive and focus less on drivers of personnel-related costs and productivity when compared with, for example, the vehicle and equipment metrics management employs (detailed in the *Surface and Air Fleet Management* chapter). Moreover, comprehensive or not, the data shows large and persistent negative gaps in JCP&L measurements when compared with those of the operating companies. Regular reports of that data through the year show statements of general intent and response by JCP&L, nominally agreeing with the need to address gaps, but not specific or clear in describing specific actions or their results in addressing gaps.

We also found illuminating the 2020 analysis, supported by the work of an outside consultant. It compared the operating companies across a range of measures. It found JCP&L's O&M per customers by far the highest and its contractor use proportionately the highest as well. It found schedule versus design hours (regularly monitored by FirstEnergy through the year) the weakest at JCP&L. It found overtime the lowest of the operating companies, while the data management provided and described in the JCP&L Overtime section of the preceding Findings portion of this report showed comparatively high levels. JCP&L also stood among the half or so of the operating companies for which productivity had not yet been examined. Even with the generalized data, variances from what management reported to us, and no detailed analysis of productivity at JCP&L, the analysis found a potential for $25 million or more in O&M as part of FE Forward Phase I analysis.

Perhaps most significantly, management discontinued use of the existing performance metrics at the end of 2021. Replacement measures remained incomplete at our last report in mid-March making the emergence of a more comprehensive and useful set now well more than a year after work identifying very large potential savings in areas such measures address.

The available data shows the need for an analysis of the factors that have produced seemingly anomalous measures of JCP&L workforce utilization. Such analysis should be geared to the identification of means that will ensure that the overall changes in process through FE Forward get implemented (and as needed complemented) as needed to maximize efficiency and effectiveness gain.

Material improvements in work efficiency at JCP&L have a likelihood high enough to warrant this added management attention. FirstEnergy's late-2020 FE Forward Phase I analysis indicated an opportunity to reduce costs by between $26 and $35 million annually. While more detailed analysis following this phase continued, it remains the case that significant cost reduction appears promising.

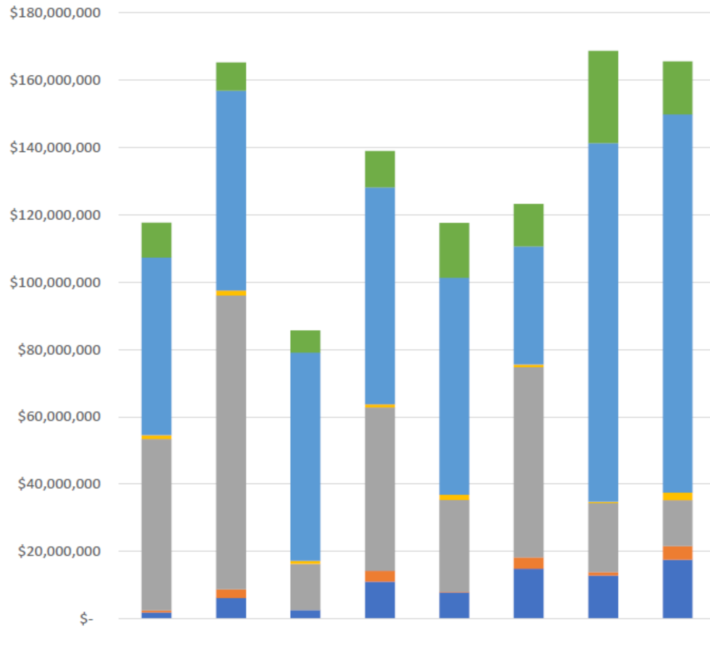
4. **The resource levels that FirstEnergy employs in the transmission exhibit a seemingly anomalous growth that management has not convincingly explained.** (*See Recommendation #2*)

Two large organizations operating under the FirstEnergy Senior Vice President, Operations, Construction and Design Services and Transmission, have had responsibility for transmission and large substation planning, design, and construction. The next table shows large growth in their numbers, despite a lack of increased capital spending or quantities of facilities to operate. We made several attempts to secure from management explanations for the increase. Early ones produced requests for further study before responses could be provided. The last produced an effort to correlate increased resource requirements with increased levels of expenditure for capital and operations and maintenance combined. The data provided did not show a change in expenditures material enough to correlate it with the large increase in staffing, which had largely occurred before 2021. The next table and the following chart show the resource changes and the expenditure changes provided by management.

Change in FESC Transmission Resources

FESC Group	Year			Change	
	2017	2019	2021	#	%
Construction and Design Services	153	336	317	164	107.2%
Transmission	503	416	441	-62	-12.3%
Total	***656***	***752***	***758***	***102***	***15.5%***

Reported Changes in Transmission and Substation Spending



	2017 A	2017 B	2018 A	2018 B	2019 A	2019 B	2020 A	2020 B
Dx Substation	$10,364,	$8,379,2	$6,583,0	$10,849,	$16,238,	$12,579,	$27,378,	$15,699,
Tx Substation	$52,783,	$59,401,	$61,812,	$64,397,	$64,518,	$35,125,	$106,631	$112,435
Tx lines	$1,195,7	$1,495,0	$979,637	$993,621	$1,561,1	$758,447	$404,166	$2,244,2
Tx lines	$50,918,	$87,326,	$13,715,	$48,518,	$27,309,	$56,569,	$20,484,	$13,602,
Sub tx Lines	$601,406	$2,595,5	$(131,28	$3,273,5	$139,683	$3,401,0	$975,573	$4,159,7
Sub tx Lines	$1,844,4	$6,142,5	$2,543,4	$10,977,	$7,817,3	$14,819,	$12,842,	$17,469,

Sub tx Lines Sub tx Lines Tx lines Tx lines Tx Substation Dx Substation

For reference purposes, these organizations produce costs among those that the recent FERC audit determined to have used general allocators not sufficiently causally related to work performed. This aspect of the FERC Audit, addressed in the *Accounting and Property Records* chapter of this Phase Two report addresses costs that, at least in sufficient part, become part of the base on which FERC-permitted returns apply. The results of the FERC audit indicate that it would be more appropriate for portions of these costs to secure recovery as FERC-jurisdictional O&M versus capital costs, or even through state-based ratemaking as capital and O&M costs.

5. FirstEnergy has developed and communicated a commitment supportive of DEI and has planned, structured, and communicated efforts to meet that commitment appropriately and in tangible and transparent ways.

FirstEnergy has placed appropriate emphasis on DEI, structured responsibility for coordinating its planning, goal setting, and reporting appropriately, communicated its commitment and practices sufficiently, made progress in meeting affirmative action and protected class goals, and achieved recognition for its DEI performance and transparency.

Resources under the Director, DEI (operating at FESC Human Resources) employ formal groups, forums, and a range of other means to engage employees and other stakeholders on DEI planning, outreach, and status subjects. A range of communication methods provide for required EEO and

AA reporting and posting. Notably, the Bloomberg Gender-Equality Index has included FirstEnergy for the past four years among enterprises that meet its threshold criteria for DEI performance, including making goals, their achievement, and barriers to meeting them known to employees, potential applicants, and others.

Success in achieving affirmative action goals for females and minorities has improved. Reporting also shows trends in terminations, hires, and promotions in these two categories, giving HR personnel and leadership visibility into the robustness of opportunities for meeting them. Recent years have also shown improvement in numbers of individuals with disabilities and protected veterans employed. FirstEnergy recently adopted and broadly announced a plan to increase racial and ethnic work force diversity by 30 percent (above the current reported level of 10 percent). There have been no reported OFCCP or other enforcement actions since at least 2018.

6. Succession planning employs an effective approach, broad participation of affected business units and groups (including JCP&L), and it has produced a strong population of successor candidates and identification of their growth and development needs.

A process broadly engaging management and HR personnel across FirstEnergy supports annual revision to succession plans covering management positions. That process has produced a reasonably "deep" roster of candidates, with the readiness of each classified. Mid-year adjustments address sudden departures or the emergence of personnel with significant future promise. The parent board of directors reviews succession plans for all executive positions each year.

Planning appropriately considers and identifies individual development needs and opportunities, engaging employees on their aspirations and views of "readiness." A documented development plan exists for each candidate for an executive position. The same processes and documentation that apply at the FirstEnergy level apply to covered JCP&L positions.

7. FirstEnergy collects and analyzes attrition trends and risks, and makes appropriate efforts to ensure a pipeline of resources to fill positions at JCP&L.

JCP&L receives from the central Workforce Development group recent-year average retirement ages and attrition rates and the ranges of current employees, for use in anticipating vacancies. JCP&L management uses this data to prepare for meeting those needs. Attrition forecasts for JCP&L employees for the coming years show what appear to be reasonably manageable levels.

FirstEnergy undertakes substantial efforts to develop a pipeline through which JCP&L can secure new resources. The Workforce Strategy & Planning group (part of the FEU-level Distribution Support organization) operates a Power Systems Institute whose combination of hands-on and classroom learning has produced a large number of graduates prepared to begin work in the electric industry. COVID-19 circumstances have restricted the scope of its operations and affected JCP&L recruitment, but its operations appear to have substantially recovered already.

8. FE has appropriately centralized management of labor relations, but engages local management sufficiently in bargaining and in other labor relations matters; however, it does not capture and compare measures of performance in managing relations with the bargaining unit employees. (*See Recommendation #3*)

We find tracking of a series of metrics common in gauging effectiveness in managing labor relations and in assessing the quality and direction of relationships with bargaining unit members and their leadership. An uncommonly broad and pertinent comparator group exists here, given the large number of operating companies and the commonality of many factors that guide worker performance and support. The low quality of the relationship with New Jersey bargaining unit leadership further underscores the need for more comprehensive and objective measures of labor management performance in New Jersey. The *Organization and Executive Management* chapter of this Phase Two report describes that relationship in greater detail.

9. FE employs a central training organization that has provided technical and operations training at stable costs over recent years.

Technical and operations training operates centrally, producing common approaches, methods, and modules. This approach has promoted efficiency, with training resources and costs remaining stable. It also makes cross utilization of resources (*e.g.*, providing mutual assistance in storm response) more efficient and effective. Proper methods and systems track delivery of and participation in required training. The Power Systems Institute also serves to provide a source of new employee candidates who can come on board with a material level of knowledge and even hands on experience gained through a structured, two-year program.

D. Recommendations

1. Examine the reasons underlying outlying JCP&L measures of productivity and resource utilization and identify measures other than those contemplated by FE Forward to improve them where practicable. (*See Conclusion # 3*)

JCP&L stands, and has done so for a number of years, as an outlier from the other FirstEnergy operating companies under a number of measures generally considered as among the factors meriting consideration in assessing staffing optimization and effectiveness. These measures include overtime, contractor use, gaps between authorized and filled positions, and flat projections of requirements for multiple years, along with those management used to compare operating company performance. FE Forward will bring improvement in the efficiency and effectiveness of work performed under the operation of JCP&L directly and in those areas under central management. The estimates of the costs of making changes that will bring improvements that directly affect O&M costs appear sound in relation to expected benefits. The efforts to bring those benefits into being should continue at the pace scheduled.

However, there is reason to question whether the changes will serve to optimize performance at JCP&L, which has been an outlier in a number of categories. Metrics (not in use, but under development at the time of this writing) that provide comprehensive, detailed, and quantitative data, accompanied by timely, meaningful, and actionable analysis of performance lie at the heart of effective and efficient management of an electricity distribution and transmission system.

We commend the effort to tune those metrics to the ongoing needs on which FE Forward has focused. Moreover, we found the metrics that have been discontinued less than fully comprehensive, direct, and meaningful in terms of identifying and addressing drivers of staffing-related costs. Nevertheless, FirstEnergy systems have capabilities to produce measures that can serve to support analysis of the reasons for outlying JCP&L performance, its drivers, and its controllability, even if measures to come might improve that analysis. That analysis should be occurring now. Even very positive permanent change can prove unsettling and even disruptive as it gets implemented.

To the extent that FE Forward already contemplates measures sufficient to require significant "change management" it may prove necessary to defer actions that would make new methods, practices, and tools even more effective at a part of the organization experiencing a parallel set of circumstances inhibiting effectiveness and efficiency. Even if so, there is sound reason to determine what forms of meaningful data exist and can be collected to determine what factors have driven anomalous JCP&L performance and to assess whether measures beyond those contemplated by FE Forward as they will affect staffing will bring economically obtainable enhancement in performance effectiveness and efficiency.

As reported in late 2020, there had not even been an analysis of JCP&L productivity, even though work had already been undertaken at other operating companies, necessarily, it would seem, who did not share the outlying performance being experienced at JCP&L. Management should parallel work to implement related FE Forward actions with a concentrated, promptly implemented exercise of efforts to determine the reasons for outlying JCP&L performance and to assess the ability to complement FE Forward measures with actions specifically designed to control those performance areas to the extent analysis shows them controllable. Delaying this activity pending development and collection of data under new metrics (even if substantially improved) or end of 2023 FE Forward implementation will unduly extend recognition of any systemic JCP&L issues that may remain. Delayed recognition will mean delayed correction, which will (absent clear and convincing reasons for all aspects of outlying performance) mean extension of a lost opportunity even longer.

Company comments on a draft of this report stated that it has adopted new metrics.

2. **Re-examine the resource levels dedicated to transmission and large substation planning, design, and operation; change their alignment and number as appropriate; examine any such changes in connection with the recommendations of the FERC audit.** (*See Conclusion #4*)

We found curious the difficulty management exhibited in explaining the reasons for the growth in the resources of the two groups involved - - Transmission and Construction & Design, both of them reportedly engaged predominately in transmission and large substation work across the FirstEnergy transmission business areas and its operating companies. Moreover, we found management's eventual explanation unsupported by the data it said showed reason for the increase.

It is not clear why an additional 100 or so personnel and their substantial costs have been required in recent years. For example, even at $100,000 in fully loaded costs, they imposed $10 million in annual costs. Moreover, the recent FERC audit has found material issues with capitalization methods, rationales, and amounts. Pending resolution of the recommendations that audit made, it is unclear whether and if so by how much costs for the resources involved may be affected. Recommendation #3 of the *Accounting and Property Records* chapter of this Phase Two report addresses the need for assuring that the implementation of the FERC recommendations fully incorporate New Jersey retail ratemaking considerations. There may be none; they may all concern transmission subject to FERC jurisdiction and the rates of return and other ratemaking methods it employs. That remains to be determined.

3. **Track New Jersey performance in comparison to the other operating companies across a range of measures used in the industry for labor management performance.** (*See Conclusion #8*)

Central management of labor relations has benefits, but it remains important to ensure that performance of that management operates with equal effectiveness across the affected companies. Others use measures to provide indicators of labor management performance and of the state of relations with bargaining unit employees and their representatives. Trackable metrics include, for example, the following grievance measures: number open, new ones as a percentage of bargaining unit positions, time to first contact, percentage resolved at various stages, percentages closed. FESC should begin to use such measures and to compare operating companies using them, in order to ensure that New Jersey performance and relationships receive appropriate attention and that any measured differences have reasonable explanation.

Chapter VII: Compensation and Benefits Table of Contents

Chapter VII: Compensation and Benefits

A. Background

FirstEnergy manages compensation centrally through the FirstEnergy Service Company HR organization. FirstEnergy has adopted the common practice of targeting compensation at market medians. It makes appropriately use of base compensation, a short-term, cash-based incentive program (STIP), and a long-term incentive program (LTIP) tied to stock value and changes in that value. FirstEnergy makes STIP participation broadly available and has placed typical limits on the higher-end positions eligible for LTIP participation. We found the escalating portions of compensation tied to the STIP and LTIP at higher job positions typical and appropriate. The STIP uses quantified targets and includes utility operations measures, including several specific to JCP&L, for its participating employees.

The LTIP portion employs two metrics that measure value provided for shareowners and exclude direct measures of utility performance effectiveness at either the JCP&L or total operating company levels. Some jurisdictions have restricted the amounts of such awards includable as above-the-line utility costs. The compensation of the parent board's vice chair, who also fills an executive management role raises a separate question about qualification as reasonably necessary utility costs. FirstEnergy created the position to address financial circumstances and the aftermath of the Deferred Prosecution Agreement whose underlying circumstances produced extreme executive-level disruption at FirstEnergy. An already large board and a full complement of executives already existing make it sound to consider the costs created by the incumbent's compensation as below the line.

HR's two compensation units comprehensively and regularly match the company positions for which they are responsible to market comparators and measures how compensation compares to market medians by matched position. That matching uses multiple and widely accepted source of market compensation data. It applies appropriate practices to ensure sound review of compensation decisions and to provide regularly for sound means to calibrate compensation, ensuring common treatment and consistent results.

Overall, compensation levels within FirstEnergy, FirstEnergy Service Company, and JCP&L compare favorably (at or around 100 percent) when compared to market. However, the highest level positions (those qualifying for LTIP participation) overall have exceeded the 100 percent level and the gap has grown since 2019. We recommended a detailed analysis of the reasons for that gap. Recent-year circumstances at FirstEnergy have included financial performance problems, "human performance" circumstances, such as those underlying the Deferred Prosecution Agreement described in Chapter Twelve, *External Affairs – The "DOJ Investigation"* of our Phase One report, and a wide-scale voluntary early retirement program. At the least, the pay gap from market, when compared with performance at JCP&L, call into question the connection between compensation (particularly the LTIP portion) and performance that matters to customers.

The range of benefits that FirstEnergy provides includes medical, dental and vision coverages, life insurance, time off with pay, and retirement income. FirstEnergy targets the total benefits package provided at the average of an index comprised of utility and general industry companies it considers as peers. A third-party consulting organization benchmarks FirstEnergy benefits. We found the range of benefits reasonably typical. Management regularly assesses their costs, their value to employees, and their market competitiveness. The changes it has made from year to year evidence sound attention to managing the costs of benefits provided, while ensuring that they continue to provide employee value commensurate with the market. Management informs its decisions about benefits through recourse to leading firms who consult in the utility and other industries with whom FirstEnergy competes for talent.

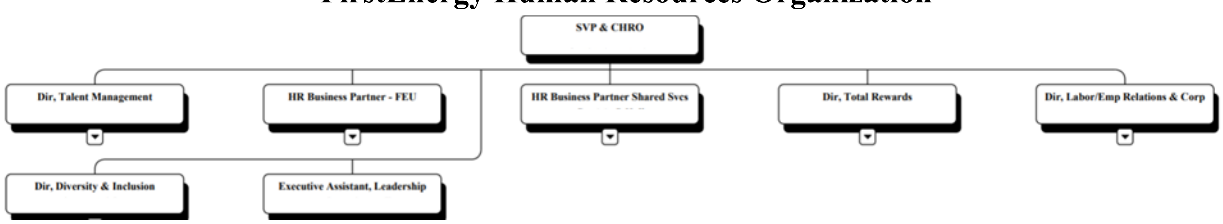
FirstEnergy provides a largely common set of benefits programs across all entities, with two unique programs for JCP&L programs. Management regularly tests their components, value to employees, and costs to JCP&L for competitiveness. Programs have remained fairly stable, with moderate changes commensurate with changing market offerings and costs. Costs have remained in line with other comparable enterprises.

B. Findings

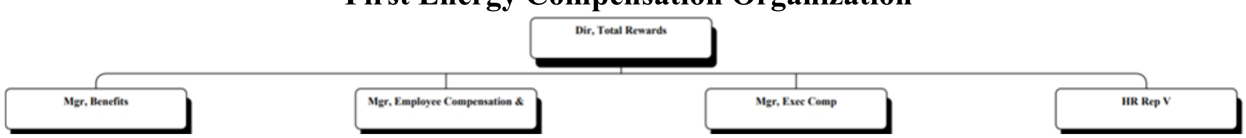
1. Compensation Organization

Human Resources (HR) activities at FirstEnergy, which include compensation, fell under the Senior Vice President & Chief Human Resources Officer at that time. The next table shows the HR organization. Company comments on a draft of this report indicated that the organization has since changed.

FirstEnergy Human Resources Organization



First Energy Compensation Organization



The direct reports to the Chief Human Resources Officer include the Director, Total Rewards, whose organization the chart above illustrates. This Director has overall responsibility for managing compensation, including benefits, at all FirstEnergy entities. The Compensation Section of the FirstEnergy Service Company Human Resources Department, operating under the direction of the Director, Total Rewards, has responsibility for developing, implementing, and administering the corporate-wide Total Compensation Program. The section provides interpretation and education about the program, with management throughout FirstEnergy responsible for assuring conforming compensation decisions and practices for the groups they manage. The section reviews all requests to set compensation ranges, using established forms and approvals to control those ranges.

Two managers under the director split responsibility for compensation matters by employee level. A Manager, Executive Compensation has responsibility for compensation programs that apply to executives, working with a staff of four HR Representatives. The first three FirstEnergy Employment tiers (1-3) encompass the executive range; these tiers consist of the CEO, the CEO's direct reports, and other vice-presidential positions. The Manager, Employee Compensation & Payroll addresses compensation for lower employee levels (*i.e.*, through the director level) at FirstEnergy's entities and also manages payroll. Directors comprise the fourth tier, and managers the fifth. This second manager's staff includes three HR representatives and one payroll supervisor. A third Manager under the Director, Total Rewards has responsibility for benefits.

The compensation responsibilities of the manager for non-executive compensation extends to pay for performance (annual base salary increases that tie to performance measures) and short term (annual) incentives. Executives in the first tier also qualify for participation in the long term incentive and deferred compensation plans. Some directors and managers (fourth and fifth tiers) also qualify for the long-term incentive plan participation. JCP&L executives, directors, and managers fall into the same tiering structure and similarly qualify for long-term incentive and executive deferred compensation plan participation, all managed under the direction of the FirstEnergy Director, Total Rewards.

2. *Compensation Philosophy*

As typifies the utility industry and U.S. large businesses in general, FirstEnergy targets total compensation at the market median for comparable positions. FirstEnergy targets total direct compensation, which include base salary, the targeted opportunity level for the Short-Term Incentive Plan (STIP), and the Long-term Incentive Plan (LTIP) at the 50th percentile, calculated using market measures of compensation. The use of the 50th percentile, its components, and the balance among them have remained the same for a long time. The pay-for-performance approach that underlies compensation policy here seeks to combine base and variable pay in a manner that provides compensation rewards on the basis of individual, business unit and corporate results. The proxy statement outlines the executive compensation philosophy of FirstEnergy. It follows the same general pay-for-performance approach, targeting compensation at the 50th percentile (compared to market) for "strong corporate performance," above the 50th percentile for "exceptional performance," and below the 50th percentile for "below expected performance."

FirstEnergy uses utility and general business comparator groups for measuring compensation competitiveness. Its three major direct compensation elements include:

- Base salary, reviewable and changeable annually based on assessments of performance and generally guided by an overall percentage increase level
- A short-term incentive plan setting for each participating management employee grade or level a maximum attainable percentage of base salary, determining award amounts on the basis of the degree to which specified annual performance targets have been met
- A long-term incentive plan that makes grants of stock ownership or some proxy therefor, on the basis of top level company financial performance metrics.

FirstEnergy sets annual budgets for changes in the base salary component for non-bargaining employees. Set at 3.5 percent, management decreased this level to 3.0 percent for 2021, which it found competitive with base pay increase budgets at other companies. Management also delayed the normal annual benchmarking of non-bargaining unit to the fall of 2022 because COVID-19 circumstances had caused produced market circumstances that diminished the utility of the data. A number of documents describe compensation approach and elements or address calculations of annually determined elements, such as STIP and LTIP. They include:

- Compensation policies
- HR Policy Letters HR Letters Annual compensation summary
- Short-Term Incentive (STIP) form
- Quarterly newsletters on how performance is tracking to targets
- Annual Long-Term Incentive (LTIP) Newsletter each March.

3. Job Levels

The next table summarizes the recommended minimum degree and experience requirements for different FirstEnergy (including JCP&L) positions. The positions that generally require degrees include leadership, attorneys, engineers, and accounting and finance personnel, with consideration given to substituting added levels of experience as a degree substitute.

Position Degree and Experience Requirements

Category	Job Level	Degree & Recommended Experience Requirements
Exempt Leadership	Director	Minimum 10 years related experience
	General Manager	Minimum 10 years related experience
	Manager	Minimum 10 years related experience
	Supervisor	Minimum 5 years related experience
Exempt Level 2	V	Bachelor's & minimum 10 years relevant work experience or 12 years relevant work experience
	IV	Bachelor's & minimum 7-10 years relevant work experience or minimum 10 years relevant work experience
	III	Bachelor's & minimum 4-7 years relevant work experience or minimum 7 years relevant work experience
	II	Bachelor's & minimum 2-4 years relevant work experience or minimum 4 years relevant work experience
	I	Bachelor's & minimum 0-2 years relevant work experience or a minimum 2 years relevant work experience
Exempt Level 1	Staff	Bachelor's & more than 12 years relevant work experience or minimum 14 years relevant work experience
	Senior	Bachelor's & minimum 10 years relevant work experience or minimum 12 years relevant work experience
	Advanced	Bachelor's & minimum 7 years relevant work experience or minimum 10 years relevant work experience
	Analyst	Bachelor's & minimum 4-7 years relevant work experience or minimum 7 years relevant work experience
	Associate	Bachelor's & minimum 2-4 years relevant work experience or minimum 4 years relevant work experience
	Assistant	Bachelor's s & minimum 0-2 years relevant work experience or minimum 2 years relevant work experience
Non-Exempt	Sr. Admin Assist.	Minimum 8+ years relevant work experience & ability to pass Support & Admin. Selection System test
	Advanced Admin Assist.	Minimum 6-8 years relevant work experience & ability to pass Support & Admin. Selection System test
	Admin Assistant	Minimum4-6 years relevant work experience & ability to pass Support & Admin. Selection System test
	Assoc. Admin Assist.	Minimum 2-4 years relevant work experience & ability to pass Support & Admin. Selection System test
	Assistant Admin Assist.	Minimum 0-2 years relevant work experience & ability to pass Support & Admin. Selection System test
	Admin Tech III	Minimum 10 years relevant work experience & ability to pass Support & Admin. Selection System test
	Admin Tech II	Minimum 5-10 years relevant work experience & ability to pass Support & Admin. Selection System test
	Admin Tech I	Minimum 0-5 years relevant work experience & ability to pass Support & Admin. Selection System test

4. Short-Term Incentive Plan

FirstEnergy Corp.'s 2020 Incentive Compensation Plan as approved by shareholders includes a Short-Term Incentive Program (STIP) that makes certain employees eligible for cash awards tied to corporate financial and operational Key Performance Indicators (KPIs). Employees not part of a bargaining unit qualify, unless subject to another specific short-term incentive program. Bargaining unit employees covered by labor agreements permitting STIP participation also qualify. The KPIs consist of generally applicable system KPIs addressing operating earnings and safety. Operational KPIs set at the business or department level also apply, except for those on the FirstEnergy Executive Council. Each eligible employee has an STIP percentage "opportunity" based on the employee's level. The opportunity calculation multiplies base salary by the employee's target percentage. The degree of success in meeting KPI targets drive STIP payouts to participating employees, for example:

- KPI performance less than 50 percent of nominal targets - - no payouts

- KPI performance at 50 percent of nominal targets - - payouts at 50 percent of each employee's "opportunity"
- KPI performance at 100 percent of nominal targets - - payouts at 100 percent
- KPI performance at 200 percent of nominal targets - - payouts at 200 percent
- KPI performance greater than 200 percent of nominal targets - - payouts at 200 percent.

The next table summarizes the metrics used to calculate STIP payouts for the past three years. It shows the level of performance achieved for 2019 and 2020; final calculations for 2021 remained pending when we prepared this report chapter. A series of generation-related measures applied as well.

STIP Key Performance Indicators

Area	Key Performance Indicator	2019 Performance	2020 Performance	2021 Goals
Financial ($)	*FE Operating Earnings*	Met Target	Met Target	Used
	FE Cash Flow	Not Used	Not Used	Used
	O&M - Systemwide	Met Target	Below Threshold	Not Used
Safety	*Systemwide OSHA*	Met Threshold	Not Used	Not Used
	Jersey Central Power & Light OSHA	Met Threshold	Met Threshold	Not Used
	T&D Warehousing & Materials OSHA	Below Threshold	Met Target	Not Used
	Systemwide Life Changing Events	Met Stretch	Met Target	Used
	Systemwide DART	Met Threshold	Met Stretch	Not Used
	*DART JCP&L ***	Below Threshold	Met Threshold	Used
	T&D Warehousing & Materials DART	Below Threshold	Met Target	Used
	*JCP&L CMVAR***	Met Target	Met Threshold	Used
	T&D Warehousing & Materials CMVAR	Met Stretch	Met Target	Used
Operational	*Distribution SAIDI*	Met Threshold	Meets Threshold	Used
	*JCP&L SAIDI***	Met Target	Meets Threshold	Used
DEI	*Diversity and Inclusion Index*	Met Threshold	Met Target	Used
	Number of Diverse Succession Candidates	Met Target	Met Stretch	Used
	Diverse Succession Candidate Performance Gate	Not Used	Not Used	Used
	Percentage of Diverse Hires	Met Stretch	Met Target	Used
	Improvement on D&I Climate Survey	Below Threshold	Met Target	Not Used
	Diverse Hiring Performance Gate	Not Used	Not Used	Used
	Inclusion Index	Not Used	Not Used	Used
	Ethics and Compliance	Not Used	Not Used	Used
Other	*Transmission Outage Frequency*	Met Threshold	Met Target	Used
	First Call Resolution (%)	Met Target	Met Stretch	Used
	FE Environmental Excursions and NOV's	Met Threshold	Met Stretch	Used

The asterisked JCP&L measures had corresponding values for the other operating companies - - the same for safety and varying by company for SAIDI. Explanations of some of the terminology follows:

- LCE - - Systemwide Life Changing Events - - the sum of work-related fatalities, injuries, or illnesses requiring immediate rescue action, and injuries or illnesses that permanently change or disable normal life activity
- DART - - Systemwide Days Away/Restricted or Job Transfer - - the sum of work-related injuries or illnesses resulting in one or more days of lost time, transfer, or restriction after the day of injury
- Operating Earnings (non-GAAP) - - calculated from GAAP earnings with adjustments for special items consistent with those applicable to non-GAAP operating earnings and other board of directors-approved adjustments

- FE Cash Flow - - Aggregate GAAAP Cash Flow From Operations (GAAP) adjusted for special items applicable to non-GAAP operating earnings and other board of directors-approved adjustments
- Operations Index - - the sum of points attained for reaching performance levels in the five equally weighted areas of SAIDI (System Average Interruption Duration Index), TOF (Transmission Outage Frequency), First Call Resolution (of customer inquiries), Environmental Excursions and NOVs (notices of environmental violations), and EFOR (equivalent forced outage rate) of regulated generation stations.
- D&I Index (assigned only to managers and above) - - scoring under a set of Diversity & Inclusion Index equally weighted metrics addressing succession planning and hiring diversity, and degree of agreement on statements presented in the company's D&I Employee Survey.
- Performance Gates - - racial and ethnic performance levels that must be obtained to unlock D&I-related payments
- Ethics and Compliance (applies to non-bargaining employees only) - - a modifier applied at the individual level that can only reduce awards up to 100 percent.

FirstEnergy extends STIP eligibility to all employees (roughly 12,000, 5,700 of them bargaining unit). Their level sets the size of their "opportunity" (the percentage of base salary potentially available). The next table shows the escalation in amounts earnable (target opportunities as a percentage of base salary) for both STIP and LTIP as employee levels increase. The next section addresses the Long-Term Incentive Plan (LTIP), available to a significantly smaller employee population.

STIP/LTIP Target Opportunities

Job Title	Opportunity	
	STIP	LTIP
President & CEO	115%	450%
Vice Chair & Exec. Director	100%	0%*
SVP, CFO & Strategy	85%	250%
SVP, Operations	75%	250%
SVP & Chief Legal Officer	75%	225%
SrVPs/Section 16 Officers	40%-60%	60%-130%
Vice Presidents & equivalents	30%-55%	30%-110%
Directors	20%-40%	15%-40%
Managers eligible for LTIP I	25%	22%
Managers eligible for LTIP II	20%	15%
Managers not eligible for LTIP	20%	0%
Supervisors	10-20%	0%
Individual Contributors I	10%	0%
Individual Contributors II	8%	0%
Individual Contributors III	6%	0%

The next table shows costs booked to JCP&L in each of the last three years (based on performance under the STIP program) established in the immediately preceding year.

STIP Costs Booked to JCP&L

JCP&L Costs	Year		
	2019	2020	2021
Directly Charged	$10,675,943	$18,008,395	$13,298,792
FESC Allocated	$5,340,230	$12,922,074	$10,025,205
Total	$16,016,173	$30,930,470	$23,323,996

5. *Long-Term Incentive Program*

FirstEnergy also employs a Long-Term Incentive Program (LTIP) technically open to all employees and directors, but which has included awards only to a small number of people. The next table summarizes the numbers and locations of those participating in the last three cycles. Eligible independent directors of the FirstEnergy Corp. board, the top executives of the FirstEnergy Executive Council, Section 16 officers, senior vice presidents, vice presidents, directors, and designated managers made up these participants. The table lists them by payment year, with payments in each year made under a cycle consisting of the three prior years (*e.g.*, 2019 payments arose under the 2016-2018 cycle).

LTIP Participants

Participants	2019	2020	2021
Board Members	12	10	15
FESC Employees	332	351	342
JCP&L Employees	13	11	13
Total Participants	***357***	***372***	***370***

The FirstEnergy Board of Directors administers the LTIP. The committee possesses the powers, which it may generally delegate to company officers, to determine award recipients and size. The LTIP employs stock-derived instruments (such as options, stock appreciation rights, and restricted stock, restricted stock units, performance shares) and allows for cash-based awards as well. The Committee has very broad authority to establish the performance measures used for determining and making LTIP awards. Those measures include a wide range of earnings and returns, operational, legislative and regulatory, safety, environmental, technological, financial, and other measures. The current three-year LTIP cycle covers the years 2020 through 2022. The information management provided lists two areas of required achievement: (a) cumulative operating earnings per share growth and (b) average capital effectiveness. Management describes the latter as a non-GAAP measure of the financial return effectiveness on capital investment in business unit operational assets. Awards will vest across the cycle if and as warranted by the achievements relative to these two financial KPIs.

A separate incentive structure applies for the FirstEnergy Corp. board of directors and for the Vice Chairperson & Executive Director who began on March 1, 2021. The announcement of his appointment stated that he would also serve in an executive role, "…in a transitional capacity while the company focuses on advancing its immediate strategic priorities." The announcement further explained the background to his appointment as follows:

> *As vice chairman, he will help lead efforts to rebuild trust with FirstEnergy's external stakeholders, including regulators and the financial community. In his role as executive director, [he] will also serve as a member of FirstEnergy's Executive Council and support*

the senior leadership team's efforts to achieve its priorities and strengthen the company's governance and compliance functions during this time of unprecedented change.

Changes in the role of this vice chairman have changed since mid-2022, following preparation of this report. The table above indicates Vice Chairperson & Executive Director's STIP target opportunity of 100 percent of base salary. A compensation arrangement with the vice chairman replaced participation in the LTIP with grants of:

- Time-based restricted stock valued at about equal in value to about $1,252,500 (1.67 times base salary)
- Performance-based restricted stock units at the same multiple, and thus adding another roughly $1,252,500 in target value, subject to achievement of performance objectives.

We asked for actual LTIP award amounts by participant; management provided the aggregate amounts shown in the next table.

LTIP Costs Booked to JCP&L

JCP&L Costs	Year		
	2019	2020	2021
Directly Charged	$1,218,174	$755,397	$633,842
FESC Allocated	$6,441,089	$2,384,243	$4,891,619
Total	$7,659,263	**$3,139,641**	**$5,525,461**

6. Special Compensation Awards

A Discretionary Awards program provides for amounts between $500 and $5,000 for efforts outside those normally expected and producing operational or financial benefits. FirstEnergy also employs "Celebrate Success Awards" to reward employees, in amounts up to $500 for noteworthy contributions. Management cites storm or plant outage restoration, large team project completion, and exemplary customer service as examples of such awards.

The next table shows the awards made recently to JCP&L employees under the Discretionary and Celebrate Success Awards programs.

Other JCP&L Compensation Awards

Type	Year					
	2019		2020		2021	
	No.	Total $	No.	Total $	No.	Total $
Discretionary	none	-	898	$3,007,212	none	-
Celebrate Success	20	$1,834	122	$5,143	131	$4,585

7. Measuring Compensation Market Competitiveness

The Executive Compensation group reviews position matching and makes comparisons of compensation to market annually for vice president (and equivalent) and above positions. The Employee Compensation group does so every other year for non-bargaining-unit positions at lower than the vice presidential level. The last review for the more senior group took place in December 2021. COVID-19 circumstances have delayed the review for the less senior group, now scheduled for Spring 2022. Management employs common positions across the operating companies for positions among them that it finds similar.

Compensation for all FESC and JCP&L non-bargaining-unit employees falls within the 85-120 percent range, with compensation freezes in place until 2025 for those at a 120 percent compa-ratio.

Executive Compensation has responsibility for the CEO, SVP and VP and equivalent level positions. Employee Compensation has responsibility for all others. For both groups, the process begins with gathering market survey data for matching positions for comparison to the then current market rates established for FirstEnergy positions. The process may employ alternate surveys, discounts/premiums, or slotting a position relative to others when the current year's survey does not provide helpful data for particular positions.

After survey data gathering, the market values undergo comparison relative to FirstEnergy's current market rate for the position or standard rate structure. If the survey data is not available for the current year, the job pricing may be derived from utilizing other survey pricing levels or by using discounts or premiums. If applying a discount premium, typically any discount or premium greater than 15% would not be considered a good match. In this case, slotting the job may be more appropriate. Slotting a job would be useful if a job cannot be appropriately matched to a benchmarked position or if it is like that of another position. The next table shows the ranges for the various levels of employees, highlighting those applicable to New Jersey personnel.

Base Compensation Ranges

Job Title	Market Rate				
	Average	Minimum	Maximum	Employees	Range
President & CEO	1,275,905	1,020,724	1,531,086	1	80-120%
SVP, CFO & Strategy	759,000	607,200	910,800	1	
SVP, Operations	750,000	600,000	900,000	1	
SVP & Chief Legal Officer	647,000	517,600	776,400	1	
Senior Vice Presidents/Section 16 Officers	357,500	286,000	429,000	5	
Vice Presidents & Equivalents	259,638	220,692	311,566	41	85-120%
Directors	200,109	170,093	240,131	33	
NJ Managers eligible for LTIP I	205,083	174,321	246,100	12	
Managers eligible for LTIP I	167,694	142,540	201,233	124	
NJ Managers eligible for LTIP II	164,364	139,709	197,237	11	
Managers eligible for LTIP II	142,370	121,015	170,844	196	
NJ Managers not eligible for LTIP	152,063	129,254	182,476	23	
Managers not eligible for LTIP	129,215	109,833	155,058	309	
NJ Supervisors	136,297	115,852	163,556	132	
Supervisors	116,356	98,903	139,627	1,371	
NJ Individual Contributors I	111,810	95,039	134,172	155	
Individual Contributors I	95,684	81,331	114,821	1,601	
NJ Individual Contributors II	91,966	78,171	110,359	59	
Individual Contributors II	75,134	63,864	90,161	912	
NJ Individual Contributors III	75,929	64,540	91,115	29	
Individual Contributors III	59,070	50,210	70,884	1,291	
NJ Positions		Total Employees		6,308	

The use of position matching and the establishment of a goal to compensate at market medians makes a compa-ratio of 100 percent (or 1.00) the measure of how closely compensation comes to meeting that goal. The next table shows overall compa-ratios for recent years, which have fallen below determined market average (100 percent) consistently.

Overall Compa-Ratios

Group	Year				
	2017	2018	2019	2020	2021
All FirstEnergy	0.96	0.97	0.98	0.97	0.98
FE Service Company	0.95	0.97	0.96	0.96	0.98
All Operating Companies	0.95	0.97	0.97	0.97	0.99
JCP&L	0.91	0.93	0.94	0.94	0.97

The ratios for those who qualify for LTIP have run at substantially higher rates, both in comparison to the overall rates shown above and to the market measures FirstEnergy uses to benchmark compensation and the 100 percent level comprising its overall compensation goal. The next table summarizes compa-ratios for those qualifying for LTIP participation in recent years. They have increased substantially essentially across the board for LTIP participant groups since 2019.

Compa-Ratios for LTIP Participants

Position	Year			Δ
	2021	2020	2019	
FirstEnergy				
CEO/SVPs/ Sect. 16 Officers	102.6%	112.8%	96.1%	6.5%
VPs & Equivalents	104.3%	101.8%	102.1%	2.2%
Directors/Managers	107.9%	105.5%	104.5%	3.4%
Managers	105.1%	102.2%	101.8%	3.3%
Service Company				
CEO/SVPs/ Sect. 16 Officers	102.6%	112.8%	96.1%	6.5%
VPs & Equivalents	103.3%	100.6%	100.1%	3.2%
Directors/Managers	107.4%	105.1%	104.3%	3.1%
JCP&L				
All Executive Positions	105.0%	102.1%	101.7%	3.3%
Other OpCos Combined				
VPs & Equivalents	107.7%	106.1%	109.1%	-1.4%
Directors/Managers	110.4%	107.1%	105.2%	5.2%

Compensation for the top three tiers (somewhat more than 50 positions across the FE entities) undergoes benchmarking each year and the executive compensation organization also reviews Willis Towers Watson and AON compensation survey data for these three tiers annually. Farient Advisors provides compensation services. The Compensation Committee of the FirstEnergy Board of Directors reviews compensation considerations and actions involving 10 Tier One and Tier Two individuals comprising "Section 16 officers." Such officers include the CEO, CFO, principal accounting officer, vice-presidents in charge of a principal business unit, division or function, other policy-making officers. Compensation competitiveness for fourth tier positions undergoes review every other year (deferred in 2020 due to COVID 19). These reviews do not use outside consultants; resources under the Manager, Employee Compensation and Payroll perform the review using market compensation data purchased from a leading compensation consultant in the industry.

Management uses the same peer groups to benchmark compensation at all levels. It consists of 23 utilities and 32 enterprises operating in general industry. Benchmarking produces a separate report for the first two tiers. A spreadsheet goes to the CEO and Executive Counsel for third tier officers. Management has also used another survey, but with retirement of the lead who conducted it, FirstEnergy has arranged for a leading compensation consulting firm to prepare a similar survey, for use beginning in 2022. FirstEnergy's 2021 proxy statement described the groups as established for 2020 by the parent board's Compensation Committee with assistance from a leading outside consultant. As compared with FirstEnergy's reported $11 billion in 2020 revenue, the revenues of the two groups (drawn from Fortune 500 companies participating in compensation surveys) ranged between half to 2.5 times that value.

The selection of the groups also considered geographic proximity and excluded firms with differing "compensation or business models: (*e.g.*, financial services, health care, retail, franchise, media, and internationally headquartered companies). The next two tables list the 23 utility peer companies and 32 general industry peer companies in the 2020 groups.

2020 Utility Peer Group

AES Corporation	Ameren Corporation	CMS Energy
American Electric Power	CenterPoint Energy	Entergy Corp
Duke Energy	Edison International	NextEra Energy
Eversource Energy	Exelon Corporation	PG&E Corporation
NiSource Inc.	NRG Energy	Sempra Energy
PPL Corporation	Public Service Enterprise Group	Xcel Energy Inc.
Southern Company	WEC Energy Group	DTE Energy Company
Consolidated Edison	Dominion Resources	

2020 Industry Peer Group

Air Products & Chemicals	Alcoa	Automatic Data Processing
Ball Corporation	BorgWarner	Campbell Soup
Conagra Brands	Eastman Chemical	Eaton Corp
Fortune Brands	Hanesbrands	Harley-Davidson
Honeywell International	Hormel Foods	Howmet Aerospace
Kellogg Company	L3 Harris Tech	Masco Corp
ONEOK, Inc.	Parker Hannifin	PPG Industries
PVH Corp.	Rockwell Automation	Stanley Black & Decker
Textron Inc.	Clorox	Estee Lauder
Goodyear	Hershey	Progressive
Sherwin Williams	V.F.Corporation	

8. *Calibration*

Calibration takes place in the fall, supported by HR business partners and engaging the compensation team also. The compensation team conducts an EEO audit as well.˒ The calibration process examined the distribution of performance levels by major FirstEnergy employee groupings, as the next table summarizes. The data provided combined all service company personnel; *i.e.*, it did not list separate results for JCP&L.

Employees Above Mid-Point Performance

Business Unit	Year 2020	2019	2018	Δ
FirstEnergy Total	**75.6%**	**71.6%**	**78.9%**	**-3.3%**
Rates & Regulatory Affairs	93.6%	91.8%	92.9%	0.8%
Strategy	91.9%	92.1%	83.3%	8.6%
Corp Services and CIO	89.5%	85.3%	84.9%	4.6%
Human Resources	89.4%	85.6%	87.8%	1.6%
External Affairs	86.9%	87.5%	82.7%	4.2%
Finance	86.2%	85.9%	91.4%	-5.2%
Product Dev Marketing & Branding	85.7%	76.0%	88.7%	-3.0%
Legal, Risk, Audit, Real Est, & Innov	83.7%	80.2%	75.6%	8.1%
FE Utilities (FEU)	*72.2%*	*68.0%*	*77.0%*	*-4.8%*
FEU Corporate	*75.7%*	*72.5%*	*80.6%*	*-4.8%*
FEU Operating Companies	*68.6%*	*63.5%*	*73.4%*	*-4.9%*

Far fewer employees at FE Utilities and even fewer at the operating company fell above the midpoint, as compared with corporate level personnel. All groups showed movement that demonstrated attention by employees and those who supervise and manage them in assessing performance. The 2021 calibration process examined a broad range of factors linking performance levels with compensation, quantifying many of them. The factors included:

- Comparison of performance levels and base compensation increases for managers and above are consistent with those for exempt and non-exempt employees
- Analysis of the data to evaluate potentially disparate treatment due to race, ethnicity, generation, gender, age, veteran, LGBTQ+ or disability
- Comparison of the base compensation increases the top performing 20 percent of employees versus the middle 70 percent (1.88 times in 2021)
- Comparison of current and prior year increases for employee blocks
- Numbers of employees not receiving increases
- Rewarding strong performers who already have high compa-ratios.

Surveying and comparisons employ both utility-specific panels of comparable companies and a panel of general industry companies. Utilities typically use both, recognizing that they compete in some cases for personnel specializing in the electric utility industry (*e.g.*, system design and operations) while in others, (*e.g.*, finance and human resources) they compete more generally with other large enterprises to secure and maintain personnel.

A broad series of surveys and comparisons to market have guided compensation analysis and decisions. The next table summarizes those used since 2018.

Compensation Surveys and Comparisons Used

Survey	2018	2019	2020	2021	Description
American Electric Power (partnering with Aon)			July	Feb.	Pay/benefits practices for mechanic, technician, jobs
Aon Hewitt – 2021 Policies & Pay Practices				Sept.	Industry group policies & pay practices (non-bargaining & incumbents only)
Aon Hewitt – IEHRA Utility Specific & Energy Services				May	Energy services and utility comp. & pay practices (Ind. Energy HR Association sponsored)
Aon Hewitt Salary Increase Survey				March	Published salary increase and turnover data from 3,271 organizations in 135 countries
Aon Hewitt Total Comp. Measurement	April	May	April	June	3,000+ jobs, 1,000+ combinations, at corp., region, division, plant levels (non exec./sr. mgmt.)
Aon Hewitt Total Comp Measurement	June	May	May	June	Executive and senior management version of prior entry - - the two were combined in 2021
AON-Covid19 Survey			March		COVID impact on workplace & rewards practices to prepare for the impact of this outbreak.
Culpepper		March	August		Current/ projected budgets for increases, variable pay, budgeting strategies, cost containment
EAPDIS - Energy Technical, Craft & Clerical (ETCCS)	June	June	July		Database covering compensation, benefits, labor, and other HR issues
Empsight (exec)				Nov.	Summary of corporate legal compensation
Equilar (Exec)	May	May	July	July	Comp. data for "Top 5" executives from proxy filings; allows benchmarking of leadership team
Gallagher		May		March	Salary Planning practices (*e.g.* , budgets, salary structure changes, promotions, variable pay)
Labor Management Solutions (Exelon)		April			Survey of 34 gas and electric distribution bargaining unit classifications
Merdian (Exec)	May				Compensation trends/developments to identify directions exec. Comp. & corporate governance
National Assoc. of Stock Plan Professionals - Deloitte (Exec)		April			Stock plan plan administration, communication, insider trading, stock ownership
National Business Aviation Assoc. (NBAA)		April	June	March	Aaviation dept. makeup, benefits, policies, comp. packages
NJ Utilities Association	Sep.				Member survey of comp. practices governing rewards
PayFactors/PayScale			June	August	Survey covering salary trends, providing insights into increases, budgets, and structure
Pearl Meyer-Cyber Security Survey			March		Comp. and practices data for cyber, artificial intelligence, robotics professionals
Quest (Customer Service Survey)		July			Customer survey offering customer service position insights/trends
Willis Towers Watson General Industry Salary Budget	May	June	May	Sept.	Aggregated data on increase percentages for past, current, and projected year.
Willis Towers Watson US Energy Services (Exec)	May	May	May	April	Executive compensation data and detailed reports
World At Work	April	April	Jan.	June	Incentive pay practices of publicly-traded companies
Willis Towers Watson (WTW) Exelon STIP survey			Oct.	August	Summary of a custom survey of short-term incentive design and costs

Two of the leading firms in the compensation consulting business, AON and WTW (formerly Willis Towers Watson) have extensive databases that offer a wide range of information categories related to compensation.

The Employee Compensation group in FESC HR has responsibility for benchmarking compensation of non-executive management personnel (Tiers 4-5) across FirstEnergy. This benchmarking adds the LTIP compensation component, which produces a measure termed Total Direct Compensation. Tiers 4 and 5 in the FirstEnergy hierarchy of employee positions consist of managers and directors. Employee Compensation uses the AON and WTW data to construct comparison groups - - utility and general industry. Employee Compensation compares the medians of its compensation ranges for each position it addresses with market measures for what it determines as comparable positions of the two groups. The comparisons made consider short-term compensation (STC) and its principal components, which consist of base salary and target STIP percentages and dollar amounts. The Director, Total Rewards (to whom Employee Compensation reports) and the Chief Human Resources Officer (CHRO) have responsibility for signing off on this work.

For most executive positions (Tiers 1-3), Executive Compensation, a different group under FESC's Total Rewards organization, benchmarks compensation. Executive Compensation also uses utility proxy data for the FirstEnergy CEO and CFO positions. The CHRO and CEO oversee the compensation work for vice president and equivalent positions. However, an independent compensation consultant prepares for consideration by the FirstEnergy Corp. board's Compensation Committee comparisons and recommendations for the top FirstEnergy officers, who form its Executive Council. This consultant does the same for Section 16 officers, which require full board approval.

9. Benefits Organization

FirstEnergy benefits, as does compensation, lie under the direction by the same Director, Total Rewards in the FESC HR organization. A Manager, Benefits oversees a staff of 15 who have responsibility for benefits and for the HR Service Center. Large companies like FirstEnergy employ information and communications systems (such as intranet portals) that permit employees through self-service or contact with HR personnel to understand their compensation and benefits, and address other HR issues. A group of seven persons managed benefits FirstEnergy-wide in 2016 and as separate group of 12 managed the HR Service Center.

The FESC Benefits organization (as well as other HR groups) works with HR "partners" (HR personnel working with individual business units and located with them) to communicate information about benefits and respond to employee questions or concerns about them. Management has located these HR partner groups of four to five people within the operating utilities, under the state presidents, employing a dotted-line relationship to FESC HR, but the FE Forward initiative produced a plan to change their reporting to place them directly under the FE-level HR organization. Management did not directly plan elimination of any of the positions now embedded, but the FE Forward process does include potential reorganization of HR with some position eliminations as a result of that process possible.

10. Benefits Plans

FirstEnergy operates common benefits programs, but New Jersey Local 1289 has bargained for an added medical plan. Some retirement benefits also differ for this local and for non-bargaining unit JCP&L employees hired before 2015. We address those differences below. Clear and comprehensive Total Rewards Guides explain benefits for current employees as do Open Enrollment materials for retirees. Employees can also consult an online service, MyFirstRewards.com or call the medical insurance provider directly.

Benefits programs undergo regular cost, value, and comparability review, which has left them fairly stable in recent years. The following paragraphs explain their evolution over time. Particular focuses in more recent years have come in concentrating on "health consumer education" to make their employees better shoppers in exercising their benefits choices, helping them to navigate health care, and in the adoption of a "cancer concierge" program. Other changes management cited as notable include a programmatic wellness effort, delivered by a new vendor 2018 (through a major national provider). A 2019 change also limited to 90 days the length specialty (and thus generally more expensive) medication prescription fills to 30 days.

The benefits available to non-bargaining unit employees include the following for employees and eligible dependents and domestic partners, with each remaining similar over the past several years, except where noted in the following paragraph:

- *Medical*
- *Health Savings Account*
- *Prescription Drug*
- *Dental*
- *Vision*
- *Flexible Spending Accounts*
- *Life Insurance*
- *Healthy Living Program*

Medical and prescription benefits provide three options differing in terms of deductibles and maximum out-of-pocket costs. Those coverages have remained similar since 2017, with employee contributions depending on the option selected. Two ***dental and vision*** options exist, with premium options requiring employee payment but enhancing services and amounts covered. ***Life insurance*** at one times annual base pay comes at no cost to employees, who can also add increased amounts or dependents (with higher maximum coverage amounts by 2021) for an added employee payment. Employees can secure at a cost ***accidental death and dismemberment*** insurance for themselves, spouses, domestic partners, and children. The ***Healthy Living*** Program, administered by a third party, provides identification of health risk, tools to address them, and rewards for making progress.

Paid time off begins at 19 days per year, increasing gradually to 34 days for employees with at least 24 years of service. FirstEnergy also offers ***family care leave*** of up to two weeks for events meeting the requirements of the Family and Medical Leave Act. The ***short-term disability*** program provides for up to 130 days for all employees, with more days at 100 percent of pay (versus a base of 75 percent) as length of service increases. Paid time off also includes 10 holidays per year (up from eight in 2017) and military, jury duty, and bereavement leave.

Employees can participate in the FirstEnergy Corp. ***Savings Plan*** by contributing between one and 75 percent of base pay on the date of hire, and may contribute from 1 to 75 percent of base pay, with the first six percent contributed matched by the company with FirstEnergy stock at 50 cents per dollar. A third party stands available to provide employees with individual investment advice.

A ***cash balance pension plan*** provides for vesting after three years, with contributions based on employee age and years of service. The plan provides for benefits calculated on the basis of annual pay and interest credits.

FirstEnergy offers a ***support and referral program*** that provides professional counselor visits. An educational assistance program offers reimbursement for approved courses, provided employees remain for two years after taking classes. An adoption assistance program provides up to $5,000 in reimbursement. A matching gifts program provides for a company match of up to $3,000 in employee contributions to qualified nonprofit and educational bodies. A voluntary benefits program offers discounts on a variety of purchases, and other forms of insurance.

11. Benefits Unique to New Jersey

Bargained-for benefits for JCP&L Local 1289 members have followed the same general structure, limits, exclusions, and other terms and conditions, but have differed somewhat in recent years in some respects, as contracts with the local have changed.

In 2018, management reinstated and made retroactive to January 1, 2015 retiree medical subsidies for certain JCP&L retirees. Those included were non-bargaining unit employees with at least ten years of service, had worked within the GPU System to at least 55 years of age or older, retired before the merger with FirstEnergy, and otherwise had eligibility for a post-employment health care subsidy. Some other, marginal changes have occurred since 2018:

- Yearly adjustments to conform to Internal Revenue Service regulations (*e.g.,* High Deductible Health Plans and HAS contribution limits)
- Reducing specialty medication supply from 90 to 30 days (2019)
- Eliminating the $25 supplemental vision plan's progressive lens copay
- Changing Local 1289 dental plan provider per new, Fall 2018 agreement
- Expanding eligibility for Basic Vision to all employees
- Adding a Cancer Concierge Program added to all medical plans (2021)
- Adding two additional paid holidays (2021)
- Increasing paid time off for Family Care Leave from 80 hours to 160 hours and expansion of family relationships covered
- Increasing bereavement leave from three to five days.

12. Outside Analyses of Benefits Value and Comparability

FirstEnergy makes use of a number of outside surveys, analyses, and data, making use of leading providers. The information available makes comparisons of offerings, their value to employees, and their cost to employers. FirstEnergy regularly consults outside sources. In the past five years, the Manager, Benefits cited as examples:

- AON analyses of discounts available from health insurance providers
- A biennial AON Benefits Index comparing what FirstEnergy offer to what others do
- Participation in a number of benefits surveys yearly
- Yearly AON analyses of benefits cost growth and expected costs for coming year
- AON benchmarking of health and prescription costs
- Market checks for prescription costs.

Management also secures market information about benefits costs through annual competitive solicitations (RFPs) through which it secures commercially underwritten life insurance, long-term disability, and accidental death & dismemberment/business travel accident insurance. Analysis of the offers received, supported by a leading outside firm, showed due attention to costs and other differences in the offers. Management also reviews annually analyses of medical and prescription drug rates and summaries of recent historical claims experience, analyzing trends and recommending funding rates for the coming year.

The prescription market checks become available through FirstEnergy's membership in the Employers Health Coalition, an employer-led business group that focuses on human resource, legal, finance, and procurement issues in delivering health benefits.

The biennial AON analyses have provided FirstEnergy with regular benchmarking against utility and general industry groups of benefits value to employees. The utility group comprises a grouping of 16 large utilities (mostly utility holding companies) and an industry group of 20 general industry companies. The most recent study (for 2019) showed FirstEnergy lower than 12 of the 16 utility group members (with benefits value at 4.1 percent below the average). Against general industry, FirstEnergy showed different results - - fifth highest and at a value of eight percent above the 20-member group average. The study showed utility industry benefits value fourth highest among the more than 30 industry groupings listed (13 percent above average) - - making the comparison with the utility industry more apropos. Between the 2017 and 2019 studies, the value of FirstEnergy benefits provided fell marginally, by 2.1 percent. In all but one category, FirstEnergy fell behind half or more of the 16 utility group members, with the following numbers of the 16-member group entities above it in employer value:

- *Retirement Income (11)*
- *Active Health Care (4)*
- *Retiree Health & Welfare (8)*
- *Active Welfare (9)*
- *Time Off with Pay (12)*
- *All Case-Based Benefits (15)*

C. Conclusions

1. A sound organization structure and staffing manages compensation and benefits for all FirstEnergy organizations

The size of FirstEnergy's operations supports the effective and efficiently deployed compensation and benefits expertise, centralized at the Exelon level. Two groups operating under the FESC HR organization address compensation, with one responsible for executive compensation and the other for remaining employees. A third manages benefits. Appropriate approvals apply to establishing compensation levels and to the data employed to compare compensation to market levels. Staffing levels have not increased over the period we examined.

FirstEnergy makes proper use of outside consultants and its size gives it the ability to add significant value to market analysis through its internal efforts. Executive management and the FirstEnergy Corp. board and management play sound roles in approving compensation components, benchmarks, and levels, informed by the use of industry-accepted approaches to and providers of data and analysis concerning benchmarking.

2. FirstEnergy employs effective practices and methods to set compensation levels and keep them competitive with relevant markets

At its broadest level, FirstEnergy's compensation approach seeks to pay employees for performance in a manner that considers internal value and the external market, while maintaining equitable salary relationships across the employee population. Job level and time in the position guide compensation amounts. Nearly all positions have established salary ranges extending from a low of 85 percent of measured market rates to a maximum of 120 percent. The range for the 10 top FirstEnergy executives (the "Executive Council," whose compensation the FirstEnergy Corp. board of directors approves) runs from 80 to 120 percent of market.

The compensation process seeks to accommodate employee movement through that range in a manner that tracks increasing levels of performance and contribution. Employees new to a position and those performing at lower levels get compensated at the low end of the range, with the high end reserved for employees demonstrating exceptional performance on a sustained basis.

FirstEnergy uses the industry-standard "compa-ratio" to express current compensation amount as a percentage of market rate for each employee's position. For example, an employee with a compa-ratio of 0.95 has compensation five percent below the measured market value for the position held. A merit review process for non-bargaining-unit employees permits management to relate base pay to individual performance levels, guided by measures for maintaining pay equity broadly. FirstEnergy has adopted and it applies a well-structured process for defining positions, establishing competitive compensation benchmarks, and applying them to set compensation.

The goal of compensating personnel at the median of the applicable markets conforms to general experience and meets FirstEnergy and JCP&L needs with reasonable overall economy. The balance of base, STIP, and LTIP elements also conforms generally to industry experience. Overall increases in the base compensation portion have kept pace with the industry and tying individual increases to a performance measurement system uses appropriate methods, practices, and systems.

Management regularly examines its positions and uses a comprehensive process for matching them to comparable positions in the marketplaces where it competes for personnel. The results of that matching support comparison of compensation levels (in total and by major component) to those offered in those marketplaces for similar positions. Management sets a reasonable minimum-to-maximum range for those positions and regularly measures how FirstEnergy compensation compares to the mid-point of those ranges - - mid-points that reflect the market compensation medians by position. Substantial databases, including those offered by leading outside compensation service provide a foundation for these activities.

We also found appropriate attention to providing employees with regular, clear, and consistent communications designed to ensure understanding of how the compensation system works, what compensation-affecting roles managers and supervisors have with respect to those reporting to them, and what individuals can expect in its application to them.

3. **Overall FirstEnergy, service company, and JCP&L compensation levels compare favorably with the market generally, but appear comparatively high for LTIP participants.** *(See Recommendation #1)*

The processes applied in assessing individual performance and in setting incentive targets include adequate focus and emphasis on objective measures substantially tied to ensuring effective and efficient performance on behalf of JCP&L. Overall, compensation levels within FirstEnergy, FESC, and JCP&L stand at compa-ratios generally at or marginally below 100 percent, when compared to market comparators generated through a comprehensive and appropriately executed process. However, the ratios for those qualifying for LTIP participation have overall surpassed the 100 percent level and the gap has grown since 2019.

With the exception of the most senior officers, all other LTIP participants had group compa-ratios above 100 percent in 2019. All but one group has experienced a notable increase since 2019. These increases have come across a period that has witnessed substantial financial and human and operational performance issues at FirstEnergy. Moreover, the increases do not appear to have been shared with lower-level personnel who participate in the STIP but not the LTIP.

It is conceivable that different performance levels have contributed to the gaps observed here, as the next conclusion addresses.

4. **FirstEnergy comprehensively calibrates performance rankings and compensation, but a large gap exists between the measured performance levels of FE Utilities and operating company personnel and those performing corporate and service functions.** (*See Recommendation #1*)

HR's two compensation groups annually perform a comprehensive and appropriate process of calibrating measured performance levels and compensation decisions (*e.g.*, individual pay-for-performance driven increases to base compensation). The reported data shows a very large disparity between operations and corporate service personnel in the percentage of employees operating at mid-point or higher performance levels. Operating company personnel (which includes JCP&L) have a percentage notably below the next lowest group and far below those with the highest percentages. FE Utilities personnel outside the operating companies have notably low percentages as well. For example, the 85.9 percent average of the corporate and service groups in 2018 exceeded the operating company value (73.4 percent) by 17.0 percent. That gap grew markedly by 2020 to 28.9 percent. A drop in operating company personnel above mid-point performance (to 68.6 percent) accompanied by a rise in the average value for corporate and service groups to 88.4 percent drove that increase.

5. **The Short-Term Incentive Program ties sufficiently to utility performance goals, provides a sound range of targeted and quantified performance levels, and opportunities escalate in reasonable proportion to increasing responsibility as position levels increase.**

A mix of corporate and business unit and of financial and operational goals drive the STIP. Several that drive rewards for JCP&L personnel tie specifically to the utility's operational results. All goals have quantified values that span a reasonably broad range from threshold performance (the minimum required for payouts) to stretch levels (supporting maximum payouts). STIP opportunities apply, as is very broadly typical, as a percentage of base compensation. The percentage of base compensation awardable increases with position level, producing a range of percentages that we also found within a range we have commonly seen. Recent year performance against the goals shows them sufficiently challenging to avoid becoming "expected" in advance. The program treats JCP&L positions the same as it does corporate ones.

6. **FirstEnergy employs a reasonably typical LTIP program, whose measures do not focus on utility service performance.** (*See Recommendations #1 and #2*)

The opportunities available under the program are generous, but not fundamentally out of line with peers. FirstEnergy limits them to a fairly typical number of participants. The measures focus strictly on investor interests; they do not directly encourage customer-affecting aspects of performance. Industry participants find such measures necessary to attract and retain talent. Despite the prevalence of their uses, some jurisdictions have limited recovery through retail rates of amounts awarded solely on the basis of bottom-line shareowner measures. We have found the existence or absence of such limitations to comprise generally settled matters of regulatory policy in jurisdictions where we have worked, although those policies differ. Therefore, we intend here simply to conclude that the LTIP KPIs used (as opposed to those forming part of the STIP) have a shareowner focus and no direct consideration of utility service-affecting factors.

7. Benefits levels, values, and costs undergo regular analysis and have remained competitive, while adapting to changing market conditions and employee needs.

Benchmarking performed regularly and with the benefit of a leading outside provider shows competitiveness with offerings by other comparable enterprises. Overall stability (and therefore predictability for employees) has remained, with adjustments made to reflect changing circumstances and offerings (for example wellness and cancer programs and limiting the fill durations for specialty medicines).

D. Recommendations

1. Determine the reasons for the large gap in performance ratings between corporate service groups versus FE Utilities and Operating Company performance levels and for high compa-ratios for the higher-level employees who participate in the LTIP. (*See Conclusions #3, #4, and #6)*

First, we found higher percentages of corporate and service group personnel have performance ratings at above average levels as compared with the percentages of those working in common FE Utilities organizations or directly at the operating companies. The gaps are surprisingly large and continuing. Second, it is not clear why the compa-ratios should be higher for LTIP participants or why they have generally increased further since 2019.

Data underlying each of these conditions require analysis. The two may prove related. If the gaps results from performance measurement bias, then a significant compensation anomaly exists. If they result from differences in skill, experience, and performance levels, then the operating companies simply are not getting the same level of contribution relative to job requirements that service company and corporate groups are.

Both represent problems that require focused attention. If either proves true after analysis, or if both work together to produce gaps, either or both of compensation (if performance is underrated) and performance (if actual percentages operating above mid-point performance levels are as measured) should more closely converge.

These two phenomena should raise concern, as they indicate that compensation may be mis-balanced between levels, or that, for some reason(s), personnel at lower levels or assigned to utility operations may be performing at levels well below those of corporate and service personnel. Valid reasons may exist, *e.g.*, significantly different levels of experience, particularly given the impacts of the large early retirement program offered as part of FirstEnergy's transition out of the commercial power and energy business. However, it will take detailed analysis to identify the root causes and then to determine whether conditions result either from understandable causes, or from performance measurement, compensation component balance, or systemic underperformance. If understandable, those causes nevertheless will need to be considered in reaching long term compensation and performance balance. If not, more immediate action will need to be taken to adjust compensation or performance measurement, or to address the root causes of systemically lesser performance at FE Utilities and operating company level.

The *Staffing* chapter of this Phase Two report addresses concern about measurements of performance effectiveness at JCP&L. Some of that concern relates to what management measures and how. However, it also arises from what appear to be significant gaps in measured performance effectiveness and efficiency.

The analysis recommended should reach specific compensation and performance rating conclusions that address the two gap areas. Moreover, those conclusions need specifically to address JCP&L compensation and performance rating conclusions as well. If factors specific or unique to JCP&L get identified, they need to be addressed with specific reference to measures that will enhance compensation, performance rating, and performance efficiency of New Jersey resources.

Management should examine the gap between ratios of these participants and those of the generally lower-level management groups who participate in the STIP but not the LTIP. The LTIP has created for JCP&L annual costs as high as $7.7 million in recent years. Moreover, the compa-ratios result not just from LTIP-generated compensation, but from base and STIP components as well.

2. **Treat LTIP costs as indicated by BPU policy regarding incentive compensation awarded strictly based on shareowner-focused factors.** (*See Conclusion #6*)

Our scope does not include recommendations on policy. However, recognizing that policies on treating compensation of this type differ among jurisdictions, we seek only to describe the nature of LTIP compensation with respect to the principal way in which policy diverges in our experience. The annual JCP&L shares of such compensation (for all LTIP participants) have ranged between $3.1 and $7.7 million in the past three years.

3. **Recognize the compensation of the FirstEnergy Vice Chair and Executive Director as shareowner, not customer costs.**

The decision to create this hybrid position had and continues through this report to have a sound foundation. FirstEnergy faced extreme circumstances and the individual retained has very strong credentials in the industry generally and specifically in dealing with challenged organizations. However, the challenges arose from a combination of non-utility financial circumstances and from behaviors and a “tone at the top” not a proper function of utility management.

The parent board is already unusually large, as we discuss in the *Executive Management and Governance* chapter of this Phase Two report. Moreover, the incumbent’s additional role in executive management does not appear to have displaced any executive positions that would exist in the absence of the executive functions carried out by the incumbent. The incumbent performs functions pertinent to meeting utility requirements and customer needs and expectations.

However, without his position, a structure fully capable of doing so exists already. Should it face any inability to do so effectively, the reasons arise from the circumstances surrounding the creation of the position, not from usual utility holding company governance or top leadership needs. As with the direct costs imposed in connection with the Deferred Prosecution Agreement, the costs of a position created in large measure to address its aftermath are not normal, reasonable, recurring utility costs. To the extent remaining adverse financial circumstances contributed to creation and continuation of the position, they too reflect circumstances not a function of utility operations.

An annual value of approximately $5.5 million represents total 2021 compensation costs for this position.

Chapter VIII: Accounting and Property Records Table of Contents

Chapter VIII: Accounting and Property Records

A. Background

This chapter deals with the primary financial systems and the policies and procedures related to FirstEnergy accounting, with a particular emphasis on plant accounting and accounting internal controls. The chapter on cost allocation deals with the costs direct billed or allocated to JCP&L from the FirstEnergy Service Company (FirstEnergy SC or FESC). That chapter also addresses the result of our examination of affiliate billing and transaction paths.

Accounting processes and the underlying systems, if not carried out properly, can have a negative effect on the financial statements presented by the company - - statements relied on by investors and utility regulators to ensure the integrity of the financial data used to set rates. Controls must appropriately ensure the proper recording of transactions in correct accounts and to the proper companies, to provide an accurate basis for management's internal purposes and for accuracy and completeness in setting rates and further in making costs to serve customers and their sources and justifications transparent to regulatory process authorities and stakeholders to provide confidence in utility operating accounts and in the lack of cross subsidization among entities.

Prior to the end of our audit, the FERC issued an audit report addressing some issues we examined in this chapter and as part of our Phase One work. This chapter addresses that FERC report.

This chapter also addresses the element of our work scope covering methods JCP&L uses to estimate the usage upon which it bases requested revenue changes and how those estimates have compared with subsequent actual usage. JCP&L determines a "base case" of electric usage upon which it recovers BPU-approved revenue changes as part of its base rate case filings, most recently for test years 2016 and 2020. The company has provided electric usage by customer class for 2017 through 2021, as well as actual usage data comparable with that included in base rates.

B. Findings

1. Organization and Staffing

The FirstEnergy Vice President, Controller & Chief Accounting Officer (CAO) has executive responsibility for accounting functions. FirstEnergy performs them on a consolidated basis for all of its businesses, entities, and operations, while assigning resources to work directly with operating companies, including JCP&L. Four Assistant Controllers report to the CAO. ***First***, the resources in the organization of the Assistant Controller - Corporate (50 in total) include among them a 28-person group assigned general accounting (which includes accounts payable and regulatory accounting), a 13-person group assigned to property accounting, a 6-person group assigned to financial reporting, and a 3-person group assigned to accounting research.

A ***second*** Assistant Controller – FEU heads three principal groups. One of them, a 36-person Utility Business Services group, divides into three operating company regions and regulated generation. JCP&L falls into a region that also includes West Virginia and Maryland and which has 8 persons. This Assistant Controller also serves as the Controller for JCP&L. Ohio and Pennsylvania individually make up the other two regions. The other two groups reporting under the Assistant Controller – FEU include an 11-person transmission business services group and a 7-person utility reporting group. The team under the ***third*** Assistant Controller – Tax divides into three sections, one for federal one for state and local income taxes and one for tax accounting. The ***fourth*** Assistant Controller – Finance Transformation has a single report.

The next table summarizes recent year changes in staffing. It separates the controller's group resources operating centrally from those assigned to address individual businesses. It also shows changes in tax and treasury functions that also report to the CAO. The reductions between 2017 and 2019 reflect the elimination of the need to serve commercial power and energy businesses exited.

Changes in Controller's Resources

FESC Group	Year			Change	
	2017	2019	2021	#	%
Controller (at FESC)	144	107	105	-39	-27%
Controller (embedded)	80	34	22	-58	-73%
Controller (Total)	224	141	127	-97	-43%
Tax	23	17	19	-4	-17%
Totals	**247**	**158**	**146**	**-101**	**-41%**

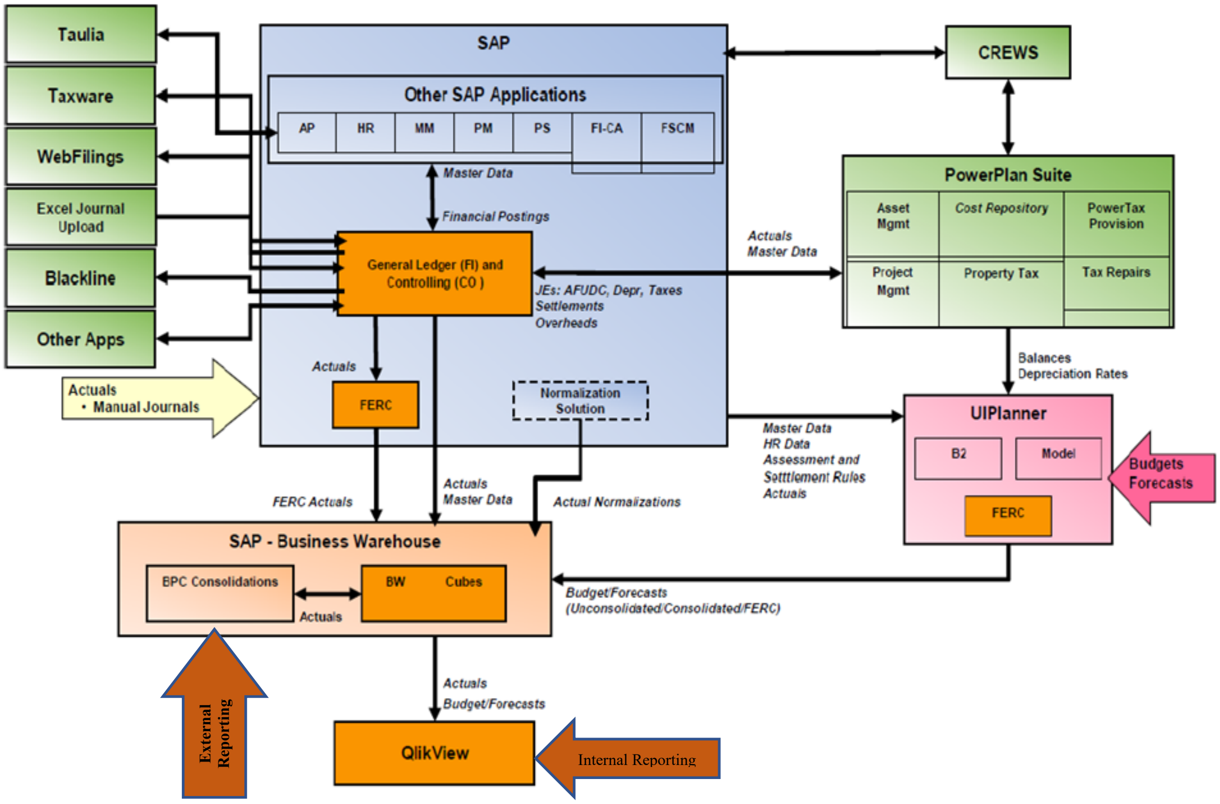
2. *Accounting Systems*

We found the books and records of FirstEnergy kept in compliance with Generally Accepted Accounting Principles (GAAP), Section 13(b)(2) of the Securities and Exchange Act of 1934, and FERC regulations.

FirstEnergy's primary accounting system is SAP, first implemented at FirstEnergy in April 2003 after JCP&L became part of the FirstEnergy holding company system. Prior to that time, JCP&L used the GPU version of SAP. The primary property accounting system is PowerPlan, which includes the Continuing Property Records (CPR). JCP&L began using the current PowerPlan system at the same time as it began using the current version of SAP.

SAP, an Enterprise Resource Planning System (ERP) contains the General Ledger and FERC accounting details. A number of other systems work in conjunction with SAP to produce FirstEnergy 's financial records and reports and to house and manage the data that underlie them. The next figure depicts the interaction of SAP, PowerPlan, and the other systems that feed into or take output from SAP.

FirstEnergy Financial Systems Map



We reviewed this depiction with management to clarify how the primary systems function and interact. External financial report production occurs in BPC Consolidations. QlikView supports internal management reporting. UIPlanner serves as the budget and forecasting system. The map includes only one system that FirstEnergy has custom designed, CREWS, used to manage the Work Management System.

We also examined and discussed with company finance representatives a detailed list of all main system components within and interacting with SAP. Several system components underwent changes in 2014 as part of FirstEnergy's Financial Transformation Project. The charter for that project disclosed a purpose to update systems to enhance efficiency, allow time savings in creating outputs like spreadsheets to make more time available for analysis, reducing SAP system customization needs, and providing a single budget and planning tool. Implementing a new version of the SAP General Ledger resulted. This version provided additional integration between accounting and financial reporting and planning and internal management. The new General Ledger version also sped the closing process and provided better capability to drill down into data details. Other changes from the transformation project included adoption of UIPlanner as the budget and forecasting tool, the addition of QlikView for internal management reporting, and a new consolidation system within SAP (BPC Consolidations).

3. Work Order Management

FirstEnergy's Work Order Management Process accumulates costs by project, on-going activity sets, and supports project, program, and activity control and monitoring. Work order systems accumulate costs (both capital and expense) from various sources, including employee time sheets and expense reports, overheads, allocations, vendor invoices, and journal entries. Separate and distinct accounting elements maintain these costs, allowing aspects of FirstEnergy's SAP capabilities to drive costs to the right accounts in the right company. SAP employs three types of cost collectors used in these manners at FirstEnergy.

The first collector, ***Cost Centers***, consists of units that have assigned responsibility for costs, generally conforming to employee locations; every employee falls into a specific, assigned cost center. The *Affiliate Relationships and Cost Allocations* Chapter of this Phase Two report explains, however, that employees can and should charge their time and expenses to a cost center other than their own; *i.e.*, to the one(s) for whom they perform work. The second collector, ***Orders***, includes sales, service, and other orders to associate specific cost center activities with specific purposes. The third collector, ***WBSs***, collects costs for capital projects or for other projects exceeding defined dollar thresholds or durations. The term "WBS" derives from the name of a tool, work breakdown structure, used to define, categorize, break down, and organize complex work into a structure that supports successful delivery of the expected output(s).

The SAP system also automatically captures the home (service providing) entity and the charged (service receiving entity). Recording transactions using these entity codes and cost collectors provides the ability to maintain and separate the books and records of each affiliate. This basic structure, as supported by controls discussed later in this chapter, seeks to ensure complete and accurate books for each entity and to enable cost charging, assignment, and allocation that avoids cross-subsidization among entities. Each transaction enters SAP with a unique document number that provides a reference supporting an audit trail.

4. Monthly Book Close Process

We examined documentation of the monthly books close process. A Financial Closing Schedule Summary lists all activities required for the closing, identifies responsible organizations by activity, and provides a time schedule for each activity. The General Accounting group uses a detailed Closing Log to perform the monthly detailed SAP transactional closing process of the General Ledger. JCP&L operates under a monthly checklist of activities it performs in support of General Accounting's monthly close activities.

Minutes of the Monthly Pre-Closing meetings for each of the quarter ending months in 2020 disclosed meetings of key representatives from a range of departments to prepare for upcoming close activities. Preparation includes a review and confirmation of the schedule and an identification of specific milestones for each day of the process. Representatives discuss any new or unusual accounting items likely to affect the upcoming close, to ensure understanding of the needs they impose. Each participant has the opportunity to report on activity anticipated to affect the upcoming close.

5. *Accounting Policies and Procedure*

Management cited 23 policy and procedure documents as applicable to corporate accounting. We initially selected six applicable to Property, Plant and Equipment for more detailed examination. The ***Capitalization Policy*** calls for capitalization of costs resulting in additions or permanent improvements adding value. It applies to items having a useful life of greater than one year and costs greater than $1,000. Computer software costs exceeding $5,000 become capitalized. A second document we reviewed addresses ***Allowances for Funds during Construction*** (AFUDC). It calls for the application of AFUDC on borrowings or capital used to construct an asset where three conditions exist: (a) expenditures have occurred, (b) activities necessary to prepare the asset for intended use remain in progress, and (c) interest cost is being incurred. Interest capitalization ceases when any one of these three conditions end or when the asset becomes ready for intended use. FERC Electric Plant Instruction Number 3 governs calculation of the rate.

The third document we reviewed addresses ***Asset Impairment***. This document calls for measurement of an impairment loss in cases where the carrying amount of the long-lived asset exceeds estimated undiscounted future cash flows related to it. A discounted cash flow model determines the extent by which carrying value exceeds fair value. The fourth document we examined addresses ***Capital Spares***. Newly acquired or refurbished equipment must meet specific criteria to warrant classification as a capital spare. Equipment so classified becomes capitalized as Plant in Service, rather than Materials and Supplies. The fifth document we examined addresses ***Software***. The document calls for capitalizing and amortizing qualifying costs of developing or obtaining computer software for internal use. Only costs incurred during the Application Development Stage of a project qualify for capitalization. The last of the six documents related to property, plant and equipment we examined addresses ***Transmission Corridor Clearing***. The document calls for capitalizing costs incurred in connection with the initial clearing and grading of land associated with the construction of transmission and distribution facilities and for capitalizing expenditures associated with widening an existing corridor clearing zone.

We reviewed a number of other accounting-related policy and procedure documents as well. The ***General-Approval of Accounting Policies*** document calls for CAO approval of all accounting policies and procedures used to record transactions that may have a material impact on the financial statements of FirstEnergy Corp. and its subsidiaries. A ***General-Balance Sheet Account Recs*** document instructs the accountants assigned to each account in performing account reconciliations, which then undergo review and approval by the CAO Officer or Assistant Controller as delegee. A ***General-Time Charging*** document calls for direct charging where possible and, where not, for charging indirect costs to the employee's cost center.

An ***Industry-Regulatory Accounting Policy*** defines regulatory assets and liabilities and calls for the evaluation of them for quarterly recoverability/repayment. We tested application of this policy to deferrals in the *Deferral of Costs* Chapter of this Phase Two report. Provisions applicable to ***Assets – Inventory*** define accounting treatment for Materials and Supplies deemed excess and obsolete. (See the *Supply Chain* Chapter of this Phase Two report). A ***General – Maintaining COA*** document defines objectives and responsibilities in creating new General Ledger accounts and revising existing ones. We also examined the Intercompany Tax Allocation Agreement. The

Affiliate Relationships and Cost Allocation Chapter of this Phase Two report describes our examination of the policy for Inter-Company Billing.

Accounting guidance for ***Depreciation*** calls for applying measures consistent with GAAP, FERC, and state regulatory policies. Allocation of an asset's cost less salvage occurs over its useful life. FirstEnergy uses the group method of depreciation. Depreciation begins when placing the asset in service. Section 6.1.3.1 of that policy describes a 2003 rate case ruling regarding cost of removal, calling for adherence to the ruling "until another rate case was performed." Three subsequent rate cases have occurred since then, with no apparent revision to the policy. Noting that the policy was outdated, management stated that no change occurred in accounting treatment until January 2021. However, the policy remains unchanged, with management noting that it expects to complete a review of all corporate accounting policies by December 31, 2022.

A number of the policy and procedure documents described above bore dates since 2018, but five (including the one addressing depreciation) bear dates between 2008 and 2011, making them more than a decade old. Management reported that no procedure requires periodic review of such documents with reliance on current appropriateness, relying instead on awareness of changes to GAAP or FERC accounting guidance or other circumstances warranting consideration of changes.

6. Accounting Controls

The *Controls, SOX, Auditing, and Listing Requirements* Chapter of this Phase Two report addresses our examination of the overall internal control environment and more specifically of SOX controls. A number of our requests for information about systems, policies, and procedures produced multiple references to controls in place to assure adherence to policies. We examined a number of the controls cited, concluding generally that a substantial control environment applies to accounting procedures. We selected six of those controls for more detailed review.

The first we examined, Financial Statement Checklist (ANR-CTL-1054-00), provides detailed guidance for review of income statements and balance sheets included in financial reports. A detailed peer review tests whether each statement employs proper source documents, ties to SAP, undergoes accuracy verification, and demonstrates consistency with other statements, among other tests. We reviewed this checklist for each quarter from Q1 2019 through Q3 2021.

The second accounting control we examined, Consolidated Data Validation Report (ANR-CTL-1115-00) performs two checks for total consolidated FirstEnergy as well as for each subsidiary. The first is that total assets equal total liabilities and capitalization on the balance sheet. The second check ensures that the current year profit/loss line of the balance sheet equals the total net income on the income statement. We reviewed this report for each year end from 2017 through 2020.

The third accounting control we examined, GAAP Checklist (ANR-CTL-1057-00) – Accounting Research, makes use of the GAAP checklist in reviewing draft financial statements, comparing to all appropriate accounting pronouncements, and to verify that appropriate accounting treatment. We reviewed the checklist for each quarter of 2020.

The fourth accounting control we examined, Intercompany Out of Balance (ANR-CTL-1081-01), addresses the General Accounting Department's running of SAP Intercompany report ZFICO to confirm that all inter-company payable/receivable accounts are in balance, and to resolve any out of balance situations before completing the monthly close. We reviewed the ZFICO reports for each month of 2020 and 2021 through September.

The fifth accounting control we examined, Intercompany Netting (ANR-CTL-1083), applied after verifying on-balance inter-company accounts, involves netting individual company inter-company payable/receivable accounts by trading partner to the appropriate inter-company payable or receivable account, producing only one relationship shown on the General Ledger balance sheet at the end of the month. We reviewed the netting report for each month of 2020 and through September 2021.

We discussed earlier in the Monthly Book Close Process section of this chapter the sixth of the accounting controls we examined, the Month-end pre-close meeting (ANR-CTL-1101-00).

7. *Accounting Related Internal Audits*

The *Controls, SOX, Auditing, and Listing Requirements* Chapter of this Phase Two Report describes our overall examination of the Internal Audit function. We supplemented that examination with a review of a sample of internal audit reports addressing accounting matters. [redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]

[redacted]

8. *Financial Reporting to the BPU*

JCP&L annually files five financial reports with the BPU:

- Annual Financial Report - - a FERC Form 1 with additional required information
- FirstEnergy's SEC Form 10-K
- The separate non-registrant financial statements for JCP&L prepared in accordance with GAAP
- FERC Form 60 reports for the FirstEnergy Service Company
- FERC Form 60 report for Allegheny Energy Service Corporation.

The company also files four quarterly reports with the BPU:

- JCP&L Financial Report prepared in accordance with GAAP
- JCP&L non-registrant financial statements

- FirstEnergy's SEC Form 10-Q
- FERC Form 3-Q for JCP&L.

Our examination of a sample of them showed no evident gaps or other concerns. Our sampling successfully tied 2020 FERC Form 60, Schedule XVI total charges from FirstEnergy SC to data previously provided. We also tied Depreciation and Amortization from Schedule XV to data previously provided. Plant in Service and Accumulated Depreciation from Schedules II and III also appeared reasonable when compared with data previously provided for June 2021. We also observed that Schedule XXI's list of allocation methods included seven allocators not listed in the CAM. We address that issue in the *Affiliate Relationships and Cost Allocation* Chapter of this Phase Two report.

We also examined the schedule used to create the June 30, 2020 12-month-ended income statement filed as Exhibit JC-4, schedule CAP-1, Col 1 (unadjusted total company) in the 2020 base rate case and tied the source data to the 2019 and 2020 FERC Forms 1.

9. Continuing Property Records

Continuing Property Records (CPR), created using PowerPlan, contain all information for the company's in-service property, plant and equipment, including retirement unit, quantity, original cost, vintage, utility account, and assigned depreciation group. An updating process conforms CPR asset records to in-service, creating CPR asset records based on work order completion. Unitization appropriately categorizes all asset attributes for CPR recording and addresses retirement upon asset removal from service.

Our examination of year-end CPR reports for 2018, 2019 and 2020 found the expected information present in the CPR. We also examined a reconciliation of the three years' CPR reports to the General Ledger for Account 101 Plant In-Service.

10. Placing Assets in Service

Account 107 – Construction Work in Process includes capitalized costs during an asset's construction phase. As construction continues, the asset accrues capitalized financing costs (AFUDC). Procedures call for transfer to account 106 – Completed construction not classified at construction completion, when the asset becomes ready for placement in service. At this point, an analysis of the project precedes unitization and transfer to Account 101 – Plant in Service Classified. Unitization assigns each new asset to the proper asset group and sets its depreciation rate. Our examination of the AFUDC rate calculation for 2021 found it proper.

The last management and operations audit found the timeliness of unitization an issue. Management tracks how long assets remain in Account 106 (in-service, but pending unitization), using nine months as a benchmark. It has made progress in reducing the backlog, but it remains sizeable. The value of backlogged assets has dropped from $184 million at the end of March 2017 to $60 million at the end of September 2021. No policy addressing or timetable for eliminating the backlog exists. However, management expects that an in-progress update to PowerPlan, which will permit it to automate unitization, should further reduce backlog.

11. Overheads

The two broad categories of cost overheads employed apply to payroll and to direct capital project costs. The payroll overheads cover benefit, payroll tax and incentive compensation costs. Three overhead costs centers accumulate them for each subsidiary that has employees. Accounting applies them on the basis of the payroll expenses of those entities.

The overhead category applicable to capital work covers costs of many types. They include Supervision, Engineering, Administrative and General, Stores, Pension Service, Other Post-Employment Benefits (OPEB) Service, Company Owned Life Insurance (COLI), and Interest on Executive Deferred Compensation Plans/Supplemental Executive Retirement Plans.

We examined flow charts showing the flow of costs into the overhead pools and their subsequent distribution to capital accounts. We also reviewed the Overhead Process documents that address calculation and distribution of each overhead cost type. Different processes apply to developing the rates for each type, with all intended to reflect cost causation. For example, in addressing Supervision overheads, interviews with groups who provide supervision and time study form key elements in developing the percentage of labor that such groups dedicate to support for capital projects.

Our examination of overhead development and rates included a review of the supporting documentation, interviews with those responsible, and a walkthrough of documentation from an internal audit that reviewed controls in place to monitor and maintain the overheads process. A recent FERC audit, discussed below, made findings regarding the overheads assigned to capital projects.

12. Asset Sales and Impairments

We examined the detail for four assets sold by JCP&L since 2017:

- Sale of buildings in Allenhurst, NJ on March 7, 2019, with a net gain of $1.0 million
- Sale of property in South Brunswick, NJ on November 27, 2019, with a net gain of $6.7 million
- Sale of JCP&L's portion (25 percent) of the assets associated with Three Mile Island Unit 2, at a net loss of $2.4 million
- Sale of JCP&L's portion (50 percent) of the Yards Creek Pumped Storage Hydroelectric Generation Facility, with a net gain of $108 million.

Three asset impairments (two JCP&L and one FirstEnergy SC) have been recorded since 2017:

- JCP&L Transmission Regulatory Asset Impairment of $27.9M in 2017, due to the settlement of a transmission rate case that did not allow for recovery of certain regulatory assets, primarily Storm costs and Vegetation Management Assets.
- JCP&L Genon Sublease payments impairment of $.8M in 2020, related to Genon subleases of a portion of JCP&L's rights under the Merrill Creek lease; Genon's bankruptcy in June 2019 reduced the future payments.

- FirstEnergy SC Products Software Impairment of $1.9M in 2019, due to removal of software from service prior to the end of its useful life, which produced an allocation to JCP&L of $375,870.

Documentation for each was complete and appeared to be accurate.

13. FERC Audit

FERC issued its audit report of FirstEnergy's compliance with:

- Cross-subsidization restrictions on affiliate transactions under 18 C.F.R. Part 35
- Service company accounting, recordkeeping, and FERC Form No. 60 reporting requirements under 18 C.F.R. Parts 366, 367, and 369
- Accounting and reporting requirements prescribed for public utilities pertaining to transactions with affiliated companies under 18 C.F.R. Parts 101 and 141
- Preservation of records requirements for holding companies and service companies under 18 C.F.R. Part 368, on February 4, 2022.

The report raised a number of compliance concerns and made a series of recommendations. Management has reported largely accepting the findings and recommendations of the audit report. One compliance issue concerned a fuel accounting issue not relevant for JCP&L. A second addressed accounting for vegetation management costs. A third addressed amortization of regulatory assets. It involved improper amortization of regulatory assets related to vegetation management costs. A fourth compliance issue addressed the inclusion of two minor accounts in the equity component of the AFUDC calculation. We noted that the AFUDC calculation was applied appropriately, but did not examine the make-up of the equity component. FERC did not require FirstEnergy to recalculate AFUDC for the audit period, but rather, to revise procedures going forward

That leaves three issues on which we focused. One of those issues concerns service company billing, which we address in the *Affiliate Relationships and Cost Allocation* Chapter of this Phase Two report. The two remaining compliance issues raised by the FERC audit concern:

- Allocation of Overheads to CWIP
- Accounting for Lobbying Costs, Donations, & Costs that Lacked Proper Supporting Documentation.

The FERC audit found use of improper methods for allocating overheads to capital projects. The company has stated that it considers its methods for allocating overheads justifiable, but has expressed willingness to change them going forward. However, it seeks to avoid applying the change retroactively. We understand that the JCP&L's portion of the [redacted].

It appears that the FERC-found issues with respect to lobbying costs, donations, and costs that lacked proper supporting documentation may have some connection with the kinds of issues addressed in our Phase One report regarding circumstances connected with and following the criminal investigation by the U.S. Attorney's Office. At the least they may have origins in the same gaps. We understood management's views to hold that internally initiated reviews have already found all that there is to find with respect to lobbying costs, donations, and other costs allocated to operating companies without sound justification.

However, shortly after the release of the FERC audit report, we learned that an additional review of other costs in question remained in progress, raising the potential for eventual disclosure of yet more costs incurred or allocated improperly.

We sought more detail on the circumstances, findings, conclusions, and recommendations of the FERC audit, but management declined to provide the requested copy of the company implementation plan apparently due for filing by March 6 (30 days after the date of the audit report). Management declined to provide it, citing it as "confidential, non-public, and protected from disclosure under the Federal Power Act." Those limitations appear waivable by the FERC; however, management only cited their base applicability, citing no attempt on its part (as a party directly involved in the audit) to secure permission to share them, confidentially or otherwise, for our work on behalf of the BPU.

14. Actual Usage Compared to Values Underlying Base Rate Filings

JCP&L based the rates it proposed in its 2016 base rate case on actual sales from the test year employed. JCP&L used "12 + 0" test year usage with weather-adjustments to the billing determinants to arrive at electric usage by customer category. The next table shows the resulting usage calculations for the test year used in the 2016 filing. Management employed a similar method in its 2020 filing. The table also shows the resulting usage that formed the basis of this more recent filing. The subsequent lines in the table compare weather adjusted actual usage to those underlying the 2016 rate filing, following which new rates went into effect on January 1, 2017.

Actual vs. Base Rates Electric Usage

Year	Residential		Commercial		Industrial		LTG		Total	
Rate Filing Test Year Usage Values										
2016	9,132,541		8,838,620		2,289,566		89,064		20,349,790	
2020	9,489,857		8,414,736		2,162,577		91,631		20,158,802	
Weather Adjusted Actual Usage (compared to 2016 Filing Test Year Value)										
2017	9,350,938	2.4%	8,907,524	0.8%	2,209,820	-3.5%	88,055	-1.1%	20,556,337	1.0%
2018	9,191,492	0.6%	8,816,245	-0.3%	2,225,964	-2.8%	90,011	1.1%	20,323,712	-0.1%
2019	9,301,581	1.9%	8,741,446	-1.1%	2,149,079	-6.1%	91,377	2.6%	20,283,483	-0.3%
2020	9,829,958	7.6%	8,073,393	-8.7%	2,050,475	-10.4%	91,109	2.3%	20,044,934	-1.5%
Weather Adjusted Actual Usage (compared to 2020 Filing Test Year Value)										
2021	9,618,003	1.4%	7,683,706	-8.7%	1,923,377	-11.1%	90,557	-1.2%	19,315,643	-4.2%

JCP&L also weather-adjusted actual electric usage for by customer category to result in actual usage comparable to the base rate usage for each year from 2017 through 2021. The following annual comparisons, using the data from the table above, use weather-adjusted usage for both the 2016 base rates, as well as for the actual usage recorded.

Total 2017 electric usage was 1.0 percent greater than the 2016 test year usage included in rates. Usage increases of 2.4 percent and 0.8 percent in 2017 for the residential and commercial categories, respectively, offset industrial usage decline of 3.5 percent. Total 2018 electric usage also came close to the test year value in the 2016 rate filing, falling 0.1 percent less than the test year value. An increase of 0.6 percent in residential usage roughly matched the impact of decreases of 0.3 percent and 2.8 percent in commercial and industrial usage, respectively. A similar pattern followed in 2019, with total electric usage 0.3 percent less than the test year value. The effect of decreases of 1.1 percent and 6.1 percent in commercial and industrial usage, respectively essentially offset an increase of 1.9 percent in residential usage.

A much different pattern emerged in 2020, with the onset of the COVID-19 pandemic, with impacts varying widely by customer category. Commercial and industrial usage fell far below test year values - - commercial use by 8.7 percent and industrial by an even larger at 10.4 percent lower. With residential customers home-bound, usage in that category ran 7.6 percent more than the test year value from the 2016 filing. That significant increase served to produce total 2020 usage only 1.5 percent lower than the test year value.

As the effects of COVID-19 continued, variances between usage assumed in the 2020 rate filing and actual 2021 remained, with actual commercial usage lower by 8.7 percent and industrial by 11.1 percent. Residential usage, however, failed to have the significant counterbalancing effect seen in 2020. Its value exceeded that of the test year by only 1.4 percent, producing a net shortfall of 4.2 percent in total usage.

C. Conclusions

1. FirstEnergy employs accounting systems whose capabilities properly maintain and separate financial data.

SAP, a state-of-the-art system used by many other electric utilities and other entities, provides the backbone for FirstEnergy finance and accounting systems. PowerPlan, another widely used system does the same for plant accounting. FirstEnergy has effectively integrated them, along with a number of other systems that feed or take data from SAP. We found overall system architecture well-designed, and a Financial Transformation Project completed in 2014 brought enhancements to SAP and supporting systems.

2. The Work Order Management Process appears well designed and effective in assigning costs to the correct company and account.

The three cost collectors utilized by FirstEnergy work in conjunction with SAP to drive costs to the correct accounts and companies. This design is important to ensure that no cross-subsidization from the regulated utilities to the unregulated companies exists. Process design also seeks to provide a complete audit trail of all transactions. As noted in the *Affiliate Relationships and Cost Allocation* Chapter of this Phase Two report, enhancements could better provide monthly summaries of affiliated charges, however nothing came to our attention that the underlying capture of costs in the right accounts and companies was not accurate. We also note that while management designed the systems to capture costs correctly, the actual results depend on the inputs to the systems. The issues noted in other chapters of this report related to the DOJ, SEC, FERC, and internal investigations resulted largely from inputs into those systems.

3. FirstEnergy performs accounting functions and activities on a consolidated basis, using a common organization that promotes effectiveness and consistency and the ability to

leverage the size of its combined operations without sacrificing focus on and attention to JCP&L.

We found responsibilities and accountabilities for accounting sufficiently defined and separated and consistent with effective use of finance and accounting systems. The controller's organization assigns resources to operating company activities. Staffing has fallen substantially in recent years, driven in major part by FirstEnergy's exit from the commercial power and energy businesses.

4. We found appropriately designed and adequately implemented monthly book close processes.

We found the process well documented, comprehensive, soundly sequenced and effectively executed. The 2014 Financial Transformation Project brought enhancement to the close processes and activities.

5. We found accounting policies and procedures generally sound and complete, but insufficiently reviewed for continued applicability. *(See Recommendation #1)*

We found clear, detailed accounting policies and procedure documents supported by proper citations. However, they do not undergo planned or frequent reviews designed to ensure continued applicability, with one acknowledged by management as "outdated." Limiting review to circumstances such as new and changed GAAP or FERC accounting guidance does not provide sufficient assurance of continued applicability and effectiveness. Management has indicated that it expects to complete a review of all corporate accounting policies by the end of 2022.

6. We found accounting subject to comprehensive and appropriate controls subject to regular evaluation and testing.

As noted in the *Controls, SOX, Auditing, and Listing Requirements* Chapter of this Phase Two report, the system of internal controls appears well established, and regularly tested through internal audits and the SOX review process. We noted no failure or design flaws in the controls we examined. Internal Accounting regularly reviews accounting matters; its examinations have not produced significant findings. Our examination of the list of examinations performed found them frequent and substantial. Those we selected for detailed review from the period 2017-2021 indicated no significant findings noted.

7. Financial Reporting to the BPU appears timely and accurate.

Our examination of a sample of reports filed with the BPU found them timely. We also traced a sample of data contained in the reports to previously provided data and found no discrepancies. We also had success in tracing data contained in the 2019 and 2020 Forms 1 to the exhibit used in the filing of the 2020 base rate case. The 2020 FERC Form 60 did list seven allocators not listed in the CAM. We addressed the inconsistency between CAP-defined allocators and those actually used in the *Affiliate Relationships and Cost Allocations* Chapter of this Phase Two report.

8. We found adequate systems, procedures, and processes for ensuring complete and accurate CPR, which contain intended information and which we sufficiently reconciled to plant in service balances.

Our examination of CPR for three years found them reflective of all asset information intended. A similar three-year reconciliation of CPR to balances in account 101 – Plant in Service disclosed only minor reconciling differences resulting from timing between PowerPlan and SAP.

9. We found the process for placing assets in service well documented and followed, but a long-standing backlog in clearing Account 106 remains *(See Recommendation #2)*

The overall documented process of accruing the AFUDC and the path from Construction Work in Process (Account 107) to Completed Construction Not Classified (Account 106) to Plant in Service – Classified (Account 101) appears to function adequately. Our testing of AFUDC calculation found no discrepancies.

However, timeliness of the unitization process, which assigns assets to the proper asset group and depreciation rate, remains from the last management audit. Management has succeeded in reducing the backlog significantly, but a backlog of $60 million at the end of September 2021 remained. Management expects an upcoming upgrade to PowerPlan to improve the unitization process, but it has no clear goal and timeframe for eliminating the backlog initially or on a sustaining basis.

10. We found the processes governing the application of payroll and capital overheads adequate.

Our examination of the overhead clearing process revealed no significant issues. We also reviewed a walkthrough of documentation from an internal audit that reviewed controls in place to monitor and maintain the overhead process. That audit found no significant issues. However, the recently released FERC audit report raises a concern addressed below in Conclusion #12.

11. We found Asset Sales and Asset Impairments documentation proper.

We examined all four asset sales and all three asset impairments that took place during the period from the beginning of 2017 to date. Our review of the documentation found no apparent discrepancies.

12. The FERC audit report dated February 4, 2022 raises several accounting concerns that await resolution *(See Recommendation #3)*

The FERC audit report recently released calls out several issues that are consistent with issues found in our audit, but also raises several additional ones. While accepting a change in overhead methods prospectively, management seeks to limit its application to the future, thus presumably foreclosing potential prior customer overcharges. The FERC audit report notes that overstating capital overheads increases rate base. We would observe that an overstatement in rate base would result in an understatement in O&M costs. Depending on the timing of the costs in question and of rate case test periods, however, the net impacts on revenue requirements would change.

The FERC remains engaged in resolving the issues. We did not succeed in gaining information requested about the audit, news of which came late in our process. It remains important for the BPU to secure detailed information about the application of similar overhead calculation methods that form part of the base for calculating JCP&L retail rates.

13. Total actual usage from 2017 through 2020 roughly corresponded to the test year value underlying the 2016 base rate filing, but 2021 witnessed a greater deviation from the value underlying the 2020 filing.

The weather-adjusted electric usage actual results for 2017 through 2019 were 1.0 percent above, 0.1 percent below, and 0.3 percent below the usage calculated by JCP&L and included in rates for the three respective years. The two most significant variances resulted from overestimation of industrial usage and from the sizeable impacts of the pandemic, which had widely differing 2020 impacts as between residential customers, on the one hand, and commercial and industrial customers on the other hand. Anticipated rebounds in commercial and industrial usage failed to materialize in 2021, as effects of the pandemic continued.

D. Recommendations

1. Complete the planned, full review of all corporate accounting policies by June 2023 and set a schedule calling for periodic, continuing reviews. *(See Conclusion #5)*

Management needs to plan and schedule the planned review within the time noted and promptly make any changes required. This review should comprise the first of regularly scheduled periodic reviews of those policies to ensure continued applicability.

2. Establish a reasonable timetable for elimination of the Account 106 backlog, and implement a process established for preventing backlog recurrence. *(See Conclusion #9)*

Assets moving from under-construction to in-service remain in Account 106 until completion of unitization. They eventually transfer to Account 101 - Plant in Service. A resulting “suspense” period will remain, but management should minimize it and prevent future backlogs exceeding whatever duration it establishes. We recommend that management set a firm deadline for ending the current backlog and the identification and implementation of measures to prevent its recurrence. We also recommend a target of six months as the point at which items enter backlog status, subject to lessons learned as measures to eliminate and prevent backlogs mature.

3. Make a full accounting of resolution of the issues raised in the FERC audit for the BPU and account for the impacts on current revenue requirements related to ratebase and O&M from the practices eventually changed. *(See Conclusion #12)*

It will be some time until the final resolution is reached regarding the FERC audit. Absent greater transparency from management regarding its implementation plan and other details of the status and expected resolution of the issues, we consider the best course to be to await final FERC resolution of the issues. At that time, JCP&L should provide a full description of how practices changed due to the FERC audit compared with those applicable to assets whose costs New Jersey retail rates recover. JCP&L should also provide a detailed accounting of the JCP&L revenue requirements impacts resulting from application of changed practices up to the time of change. At that time, the BPU may also have the benefit of FERC views on the propriety of retroactive adjustments. JCP&L should thus include in its report to the BPU its views regarding retroactive adjustment, specifically considering any FERC expressions regarding such adjustment.

Commissioning an independent review under the BPU’s authority presents an alternative, but one that appears premature, given what will hopefully be a fairly near-term resolution by the FERC.

The calculation of retail revenue requirement impacts can proceed in the meantime. Management should complete it within six months, at which point, should FERC resolution remain pending, address with the BPU whether that calculation should continue to await filing with the other elements of the full accounting recommended.

Chapter IX: Controls, SOX, Auditing, and Listing Requirements Table of Contents

Chapter IX: Controls, SOX, Auditing, and Listing Requirements

A. Background

This task addresses central aspects of the internal control environment. A complex array of regularly monitored and tested controls needs to exist and be regularly and fully executed to provide reasonable assurances of:

- Financial statement integrity
- Continuity of the operation of internal processes and operations as designed
- Verification that results produced have come from appropriate operation of controls.

Key financial controls undergo routine testing through the Sarbanes-Oxley (SOX) process, described below, with regular Internal Auditing department testing of operations controls as well.

We examined the Committee of Sponsoring Organization (COSO) control framework employed, the process by which FirstEnergy Corp. fulfills its SOX obligations, and the location, structure and operation of the Internal Audit function. We considered Internal Auditing's risk assessment cycle, processes and methods. We also examined what input comes from management and the testing, reporting, and tracking of its findings. Our review included the operation of the First Energy Corp. board of directors Audit Committee (no such committee exists at the JCP&L board), the committee's relationship with Internal Auditing, the process governing the independence of the external auditor, and compliance with NYSE listing requirements.

The COSO Framework provides a broadly accepted, widely used structure for designing, implementing, and evaluating internal control for U.S. enterprises. James Treadway led a commission for creating this framework, in conjunction with five private sector organizations - - the American Institute of Certified Public Accountants, the Institute of Management Accountants, the American Accounting Association, the Institute of Internal Auditors, and Financial Executives International.

Congress passed the SOX legislation in 2002, to protect shareholders. The U.S. Securities and Exchange Commission (SEC) sets compliance requirements for publicly held companies. Specific SOX sections most relevant to our examination here include sections 302 and 404. Section 302 focuses on disclosure controls and procedures and on the personal accountability of signing officers. It requires that the principal Executive and Financial Officers of a company, (typically the CEO and CFO) personally attest to the accuracy and reliability of financial information. These officers must make these attestations as part of quarterly (10-Q) and annual (10-K) reports filed with the SEC.

Section 404 requires that companies annually assess and report on the effectiveness of their internal control structure. These reports address management's assessment and testing of the company's internal controls and procedures for financial reporting. Evaluating and reporting on the design and operating effectiveness of controls comprise focus areas of this testing. Management must review testing results, with all control testing failures classified as a "control deficiency," "significant deficiency," or "material weakness." The material weakness classification indicates a significant deficiency or combination of them that creates a more than a remote likelihood of failure to prevent or detect a material financial statement misstatement. A significant deficiency denotes lesser severity than does a material weakness. It constitutes a deficiency unlikely to have material impact on financial statements but important enough to merit attention by those responsible for oversight of financial reporting. A company must report on significant deficiencies and material weaknesses to its board of directors and its audit committee, and 10-K reports annually filed with the SEC must disclose material weaknesses. In addition to the internal control assessment, SOX requirements mandate that an independent external auditor inspect public companies' internal control practices and include an audit report within the company's financial report.

Both the Internal Auditing department and the FirstEnergy Corp. Board's Audit Committee operate under charters governing their responsibilities and requirements.

Companies listed on the New York Stock Exchange (NYSE) must comply with the corporate governance requirements set forth in Section 303A of the NYSE Listed Company Manual. A principal requirement concerns the board of directors, obligating companies to certify annually:

- Board membership comprised by a majority of independent directors
- Regularly scheduled meetings of independent board members
- Employment by the board of nomination/corporate governance, compensation, and audit committees
- Existence of an internal audit function, corporate governance guidelines and a code of business conduct

The requirements include CEO certification of a lack of awareness of any violations of corporate governance listing standards. Companies must file interim certifications in the event of changes in the information provided in the annual certification.

B. Findings

1. Control Framework

FirstEnergy adopted the 2013 COSO Internal Controls – Integrated framework for the year ended December 31, 2014. FirstEnergy's entity level controls and sub-process controls map to the 17 COSO principles within the five key COSO components of Control Environment, Risk Assessment, Control Activities, Information and Communication, and Monitoring to ensure appropriate COSO coverage.

2. Sarbanes Oxley

a. <u>SOX Management Responsibility</u>

The Internal Auditing Department has primary responsibility for managing key SOX processes, working with key business and control owners. Internal Auditing Department Policy 4.0 and its more detailed Policies 4.1 – 4.6 clearly outline this responsibility. These documents detail specific aspects of SOX processes and the role of Internal Auditing in managing them. We confirmed applicability of and familiarity with roles and responsibilities through interviews, including the Manager – Financial & Shared Services Auditing, who has responsibility for process management. Company comments on a draft of this report indicate a title change for this position to Director, Financial & Corp. Svcs. Audit.

b. SOX Process

The Sarbanes-Oxley General Policy (Internal Auditing Department Policy 4.0) and companion detail policies 4.1 through 4.6 comprehensively document the processes for meeting SOX obligations. We confirmed the policy responsibilities and adherence to those policies through interviews and data requests.

FirstEnergy uses a risk-based approach to evaluate internal controls. Control risk comprises the threat that a material misstatement could occur without timely prevention or detection through internal controls. Both the design and operation of the various internal controls affect the nature and level of control risk.

The policy calls for the performance of three main activities:

- An assessment of the design effectiveness of the system of internal control over financial reporting (ICFR) intended to determine the effectiveness of internal controls design in providing reasonable assurance of prevention and detection of errors or fraud that could result in material misstatements
- Annual evaluation of ICFR effectiveness in providing reasonable assurance
- Quarterly certifications of adequacy and effectiveness of internal controls for the quarter.

Design effectiveness undergoes second quarter assessment and updating each year and following significant changes. This effort seeks to confirm understanding of the likely sources of potential misstatement, to confirm understanding of significant transactions and disclosures, to identify control points, and to verify the existence and operation of appropriate controls. Design effectiveness assessments involve a process "walkthrough" consisting of tracing a transaction from origination to the general ledger using inspection, examination, inquiry, and observation.

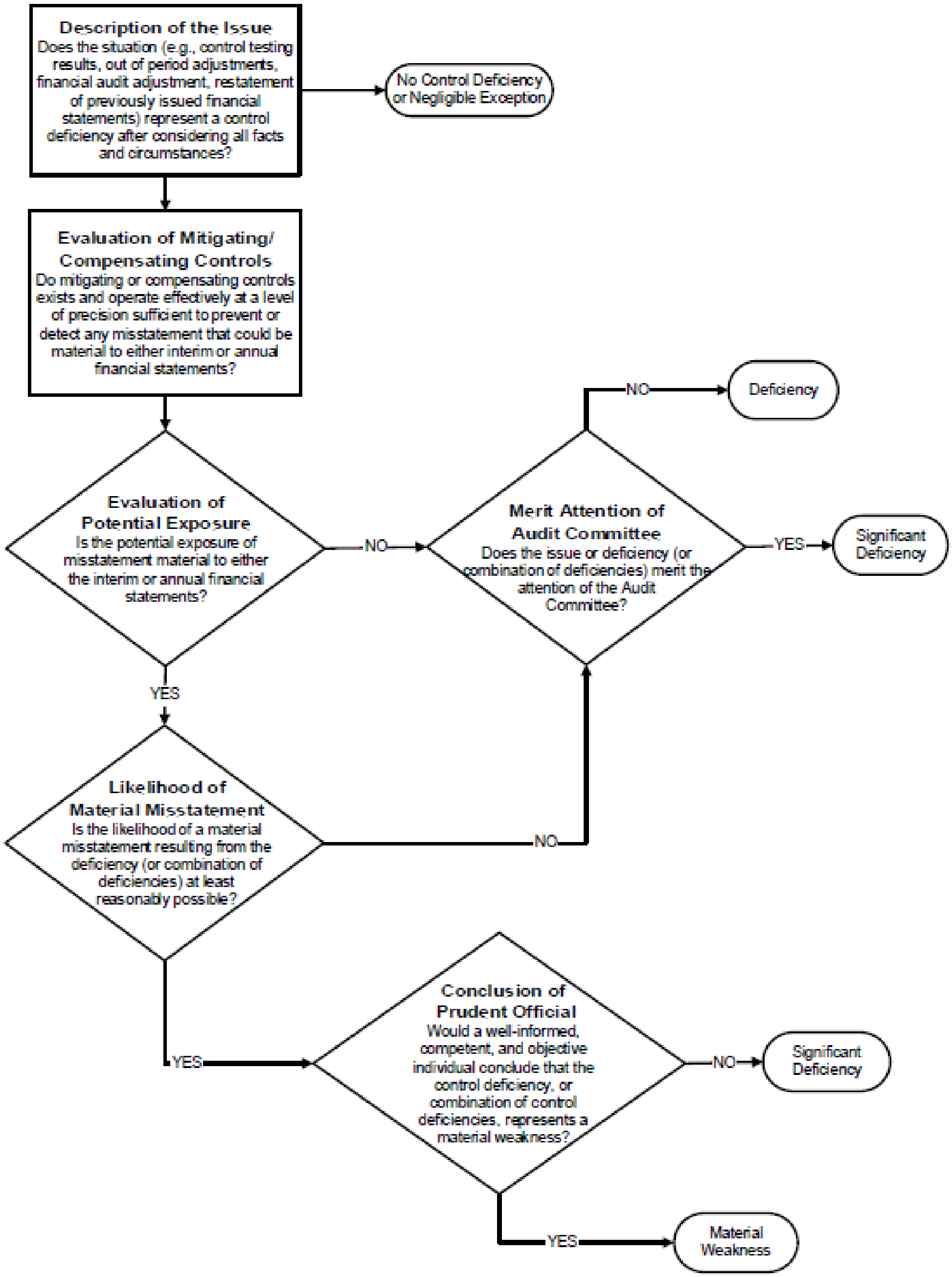
A focus on risk drives the methods for testing key controls. That testing includes various types (*e.g.*, inquiry, observation, inspection, or re-performance), timing (when testing is performed and the time period tested), and extent (number of items to be tested and methods of selection). We describe the quarterly certification process more fully below.

FirstEnergy manages the process using the Governance Risk & Control (GRC) process, which organizes the SOX controls by process. Each control has a list of test steps. Management uses a total of 13 processes and underlying sub processes to map approximately 500 key controls. Every control undergoes testing at least yearly, with some more often.

c. SOX Deficiencies

Internal Auditing begins an investigation following failure of a control in testing, or when Internal Auditing, the external auditors, or the business unit involved has identified an issue or potential deficiency. These investigations seek to identify root causes, in order to support a determination of whether the issue comprises a control deficiency. A finding that a control deficiency exists leads to classification, as described earlier, of the deficiency as a control deficiency, a significant deficiency, or a material weakness, depending on its severity. The following figure depicts the FE Evaluation of Issues Process.

Process for Examining Potential Deficiencies



The process provides for communication about potential and actual deficiencies with the business unit(s) involved. Audit reports provided to Senior Management, and the Audit Committee address actual deficiencies found. The Audit Committee has responsibility for reviewing significant deficiencies and material weaknesses, and financial statements should disclose material weaknesses. The process calls for recognition of deficiencies, whether or not remediated and cleared within the quarter.

Additionally, if a control fails, Internal Auditing tracks remediation and does follow up testing until completion of remediation and successful subsequent testing of the control involved. Quarterly SOX reports detail open deficiencies and continue to show the deficiency until reported as remediated.

Our examination found two active Significant Deficiencies and one Material Weakness, arising from circumstances surrounding investigations related to the Deferred Prosecution Agreement (see Chapter Twelve from our Phase One Report, *External Affairs - - The "DOJ Investigation"*) and from related internal investigations. The Material Weakness was classified as "Tone at the Top," described in the SOX report for the third quarter of 2020 as follows:

> *Former members of senior management, including FirstEnergy's former chief executive officer, violated certain FirstEnergy policies and its code of conduct. Such former members of senior management did not maintain and promote a control environment with an appropriate tone of compliance in certain areas of FirstEnergy's business, nor sufficiently promote, monitor or enforce adherence to certain FirstEnergy policies and its code of conduct.*

While true, this statement does not convey the full depth and seriousness of the issues involved (for the reasons addressed in Chapter Twelve of our Phase One report). One of the significant deficiencies dealt with a control failure consisting of processing payments without a Purchase Order, and the failure to flag large payments split to avoid the Level of Signature Authorization limits. The other permitted individuals with approving or posting authority to the general ledger to change, edit, and post a document without return to the preparer, creating a segregation of duties issue. Our review of SOX reports back to 2017 found no other reported material weaknesses or significant deficiencies.

d. SOX Reporting

The SEC requires all registrants to complete a quarterly certification of the adequacy and effectiveness of internal controls for the quarter. The FirstEnergy Corp. CEO and CFO sign the company's quarterly certifications. The company has designed a certification model that requires designated organization owners to certify on a quarterly basis the adequacy and effectiveness of the controls within their responsibility. These certifications inform those made by the CEO and CFO. Certifications also come from the Executive Council, comprised of top executives (CEO, CFO, Chief Legal Officer, Chief Ethics Officer, Vice President, Investor Relations, Senior Vice President HR, and Chief Accounting Officer). We also examined the 2020 Management Representation Letter to ensure that the deficiencies were disclosed, as required.

3. *Internal Auditing*

a. Organization, Resources, and Costs

FE has centralized the Internal Auditing function for its operating companies at FirstEnergy Service Company (FESC). FirstEnergy's Internal Auditing Charter gives this FESC organization the mission of providing risk-based, independent, and objective assurance, advice, and insight. Internal Auditing defines its role as assisting management by appraising operations and controls objectively, recommending solutions to help management achieve its business objectives. The charter dictates the reporting relationship discussed above, and grants Internal Auditing the authority and responsibility to select and perform audits and financial controls testing. It goes on to list a number of scope items, including the responsibility to develop a risk-based audit plan to submit to the Audit Committee for approval, review of resources with the Audit Committee, and interaction directly with the Audit Committee, including in executive sessions and between Audit Committee meetings as appropriate.

Internal Auditing, operating under the direction of the Vice President, Internal Auditing, continues as it has for an extended time, to report administratively to the head of FE's legal function, currently the Senior Vice President and Chief Legal Officer (whose management and operations the *Legal Services* chapter of this Phase Two report addresses). The Chief Legal Officer also has responsibility for claims, ethics and compliance, and information compliance. The Vice President, Internal Auditing, however, reports functionally to and operates under the direction of the FirstEnergy Corp.'s board Audit Committee. Large corporations commonly use such a dual relationship to promote the independence of the internal audit function. The Institute of Internal Auditors recommends that the Chief Audit Executive report to the CEO, not to the company's chief legal or financial officers.

The Vice President, Internal Auditing must meet with the Audit Committee at all regularly scheduled meetings of the committee, currently set at five per year. Prior to late 2019, the Vice President, Internal Auditing was only required to meet once a year with the Audit Committee. Since the charter change, the meeting has taken place at each of the five meetings, with one 2021 exception that occurred during leadership transitioning in Internal Auditing. The former Vice President Risk & Internal Auditing retired on April 21, 2021 having attended two 2021 meetings. The newly appointed VP, Internal Auditing started on July 12, 2021, attending two meetings in 2021.

Internal Auditing staffing stood at 20 at the time of this report's preparation. That number had remained steady for the last three years. It dropped from 2017's 30-person complement, when FE still operated the large generation and energy business since transferred to a third party as part of bankruptcy proceedings. Company comments on this report noted a currently approved complement of 33.

The following table shows total hours expenditures by employees and contractors on Internal Auditing activities from 2017 through 2021.

Internal Auditing Hours
(table is confidential)

Employee or Contractor	2017	2018	2019	2020	2021*
Contractor	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Employee	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

** 2021 Values annualized from data provided through September 30, 2021*

The numbers of person hours dedicated to the audit function has changed for two main reasons. Management eliminated six open staff auditor positions in September 2018, and separated or transferred four additional staff auditors from Internal Auditing. Reductions came under the FE Tomorrow initiative designed to transform FE into an organization dedicated predominately to electric distribution and transmission operations following the separation of market generation and energy operations. In 2020, four Internal Auditing staff consultants began charging time directly to audits and Internal Auditing obtained some assistance from Corporate Risk and interns. These augmentations continued during internal investigations related to the criminal investigation by the U.S. Attorney's Office.

The next table summarizes changes in the costs of the FESC-level Internal Auditing. The largest change in costs came from the staffing reductions that had occurred by 2019. Outside service costs have increased, with reliance place on outside providers, such as CLEARsulting, a financially focused management consulting firm, which Internal Auditing has used to augment its auditing resources. Personnel and contractor costs account for virtually all the costs incurred at FESC Internal Auditing.

Total FESC Internal Auditing costs have fallen since FirstEnergy's exit from commercial power and energy businesses. JCP&L has continued to bear a reasonably consistent annual level of Internal Auditing's costs over the five years shown.

FESC Internal Auditing Cost History
(table is confidential)

Cost Source	$/%	Year						2017-2020 Change	
		2017	2018	2019	2020	2021 Q3	2021 Est.	$	%
Payroll, Overheads, Benefits	$	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Charges t/f Others (FESC & non-FESC)		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Dues, Fees, Licenses		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
General Business and Travel		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Materials and Equipment		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Other		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Professional and Contractor		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Change from Prior Year	*$*		[redacted]	[redacted]	[redacted]		[redacted]		
	%		[redacted]	[redacted]	[redacted]		[redacted]		
JCP&L Share	*$*	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		[redacted]
Change from Prior Year	*$*		[redacted]	[redacted]	[redacted]		[redacted]		
	%		[redacted]	[redacted]	[redacted]		[redacted]		

b. Planning and Operations

Internal Auditing builds a risk-based audit plan, using a comprehensive risk assessment process designed to identify the areas of greatest risk across FirstEnergy. Enterprise Risk and Internal Auditing meet with business leaders periodically to update existing risks, identify new risks, and discuss mitigation strategies. This information is maintained as part of the Enterprise Risk Management (ERM) process. Using risk information from the ERM process, Internal Auditing determines the significant risks impacting the audit plan year and identifies potential audits based on the mitigation strategies for the significant risks. The Internal Auditing team then prioritizes the potential audits for inclusion in the annual audit plan. The Vice President, Internal Auditing then makes the final determination on the audits to include in the audit plan. The annual plan is approved by the Audit Committee at the December meeting.

Examinations beyond those included as a result of this risk-based process become part of the annual plan. Reasons for their addition include:

- Reservation of significant time for SOX testing
- Audits resulting from separate fraud risk assessments
- Ethics audits performed at the request of the Office of Ethics and Compliance with a scope specific to an allegation
- Management requests for consulting or advisory services
- Internal Auditing determinations that a consulting engagement comprises the appropriate approach to address a risk
- "Mandatory" audits arising from regulatory requirements, from Board or external auditor request, or under contract requirements
- Audits added at the request of management to address a particular initiative
- Audits not completed and carried over from a previous year.

The next table summarizes audit numbers by type for 2019 – 2021.

Internal Audits by Type

Category	2019	2020	2021
Resulting from Risk Assessment Process	22	28	31
Mandatory Audits	12	14	11
SOX Compliance	44	43	41
Resulting from Fraud Risk Assessment	5	6	10
Addressing Key Initiatives	5	5	6
Carried Over from Previous Year	19	17	20
Ethics Projects	10	9	15
Management Requests	12	20	13
Total	129	142	147

Two of the mandatory audits specifically address JCP&L regulatory requirements - - an audit of Affiliate Relations Standards and Associated Transactions every three years and a Manufactured Gas Plant Sites Invoice Review every four years.

We reviewed the list of audits from 2013 through the present, confirming a substantial number of audits that relate to utility operations and specific to JCP&L. We requested and reviewed a sample of those audits. We also confirmed that the mandatory audits discussed above appeared on that list.

The annual Internal Audit risk assessment process, including the fraud risk assessment, comprises the foundation of the annual audit plan process. On average [redacted] of the audits in the past three years occurred as a result of that process.

FirstEnergy utilizes a TeamMate suite of applications. TeamMate provides an end-to-end audit management software that has several modules that work interactively to assess risk, develop the audit program, document workpapers, track time, and track management responses. Internal Auditing also uses TeamRisk, an advanced risk assessment system that enables development of a risk-based audit plan. This module helps generate a risk-ranked list of the business units and processes with identified audit projects for use in building the audit plan. A third, desktop tool, TeamAdmin, assists in administering the TeamMate suite's database. TeamEWP assists in identifying, planning, and executing audit projects. TeamCentral comprises the implementation management portion of the TeamMate software suite. It includes an implementation tracking and reporting tool for both audit and management to manage the follow-up of audit recommendations.

c. Audit Recommendation Follow-up

Internal Audit communicates potential audit findings to management to confirm findings, determine whether consensus can be reached on causes and effects, and develop an agreed upon recommendation and action plans with due dates for corrective action.

TeamCentral aides in tracking and monitoring recommendations through their completion. Automatic notices generated in TeamCentral notify management of action items coming due.

Internal Auditing does not close audit recommendations until the lead auditor performs a follow-up with the person responsible for implementing the recommendation, to confirm recommendation implementation and documentation. A monthly Open Recommendations Report generated from TeamCentral identifies all open recommendations.

We reviewed a sample of the 2021 Open Recommendations reports. Open recommendations display color coded Green, Yellow, or Red indicators designating whether the remediation recommended is on target or behind. We found most recommendations coded Green, with clear notes indicating regular contact and understanding of any delays present or threatened.

d. Significant Restrictions on Our Access to Audit-Related Documents

During the audit, we became aware of a number of audits and ethics investigations conducted under Attorney/Client Privilege. We first received a list that indicated 25 audits from 2017 to 2020 planned for performance under and subject to attorney-client privilege. Management advised that some of them appeared in plans for multiple years, making for 17 distinct scopes. We received titles to five that management determined as related to JCP&L, four not complete at the time of our request and the fifth cited as subject to attorney-client privilege.

We also received a response to a data request that indicated that from 2013 to the present, eight audit reports and one ethics investigation specific to JCP&L existed. Management identified the topics, but denied access to the reports citing attorney-client privilege. Similarly, initial responses to our requests for presentations to the Audit Committee in support of its meetings produced a number of objections. Our continuing requests for access to them produced documents often with very substantial redactions of apparently substantive materials.

e. Performance Effectiveness

Every five years the Internal Auditing Department undergoes third-party quality control review under standards of the Institute of Internal Auditors (IIA). According to information obtained during an interview, the team always receives the highest rating. We examined the latest report from November 2019. The team received the highest rating in each of eleven audit standards. The IIA also cited strengths as "Strong collaboration with the business, Top-down risk assessment, and Appropriate credentials." They also noted that the FE team was at the high end of staffing and budget per their benchmarking.

4. Audit Governance

The FirstEnergy Corp.'s board's Audit Committee Charter outlines the responsibilities and authorities of the committee. This thirteen-page document addresses the Audit Committee's:

- Purpose and function
- Composition
- Responsibilities and authorities
- Engagement of the independent auditor
- Oversight of the independent audit function
- Oversight of financial statements and external reporting
- Oversight of internal controls over financial reporting
- Oversight of the internal auditing function
- Oversight of the ethics and compliance program
- Risk management
- Reporting to the board
- Meeting schedules.

The Audit Committee has the power to hire/fire, compensate, and oversee the independent auditor and to maintain appropriate limits on other corporation compensation of Audit Committee members. The committee has access to resources to retain its own advisors. Provisions exist to ensure sufficient financial expertise among committee members and to control the type and amount of non-audit work by independent auditors, and to require prior approval of such work by the committee.

FE has selected the same independent auditor since 2002, most recently at the May 18, 2021 Shareholder's annual meeting. The Audit Committee, in conjunction with FE executive leadership, conducts an annual evaluation of performance. A fee comparison versus per companies occurs as part of the review process, the latest of which took place in December 2021.

5. NYSE Requirements

In addition to the requirements outlined in the background section of this chapter, the NYSE monitors the timely filing of SEC documents. We examined annual filings for 2020 and 2021, as well as five interim filings during those two years, finding no reason to conclude that FirstEnergy Corp. failed to meet NYSE requirements.

We did find a violation notice with regard to the delayed filing of the third quarter 2020 10-Q report with the SEC. In response to our request to provide documentation of any violations of NYSE requirements since Jan 1, 2017, management produced a November 17, 2020 letter from the NYSE citing failure to file timely a third quarter 10Q. After meeting all the requirements of that letter, the Company filed the 10-Q on November 19, 2020. The company explained the delay as arising from a desire to fully evaluate the material weakness described earlier in this chapter, in order to support a proper filing. FirstEnergy had filed a Form 12b-25 with the SEC on November 9, 2020 to November 16, 2020. The NYSE sent a letter on November 19.2020, acknowledging resolution of the matter.

C. Conclusions

1. First Energy operates under an appropriate control framework.

FirstEnergy has operated under the 2013 Updated COSO framework since 2014. The COSO framework represents a broadly accepted and widely used structure for designing, implementing and evaluating internal control for U.S. enterprises. We examined the mapping of entity level controls and sub-process controls to the 17 COSO principles within the five key COSO components of the framework, and found that management appropriately used the COSO framework.

2. The Internal Auditing department plays an appropriate role in managing SOX processes.

FirstEnergy has placed appropriate SOX process responsibilities with Internal Auditing. Both the SOX process and the overall Internal Auditing process, discussed below, rely on investigation, testing and reporting of the effectiveness of the control environment. The SOX process focuses on financial controls affecting company financial statements; the broader responsibilities of Internal Auditing also address operations and procedures that may not implicate financial statements directly. The nature of the tasks, focus, and skill sets required to execute SOX activities effectively make Internal Auditing a sound place for locating the SOX responsibilities given to it.

3. We found well-documented processes for meeting SOX obligations and evidence that those involved follow them.

The SOX policies, as documented in the Sarbanes-Oxley General Policy (Internal Auditing Department Policy 4.0) and companion detail policies 4.1 through 4.6 provide broad and detailed identification of and responsibility designations for activities required for complying with SOX requirements. We found those responsibilities and activities appropriately carried out by responsible individuals.

4. We found the identified control deficiencies reported, in one major case incomplete. *(See Recommendation #1)*

Our examination found the significant deficiencies to be reported. However, we did not find the description of the "Tone at the Top" material weakness clear or comprehensive. FirstEnergy Corp. had become subject to a Deferred Prosecution Agreement with the Office of the U.S. Attorney for the Southern District of Ohio. Under it, the company's CEO acknowledged a series of facts engaging senior leaders in what federal criminal authorities categorized as wire fraud and for which the authorities secured a payment approaching a quarter of a billion dollars. Termination or separation of an extensive number of top executives and of legal, external affairs, and regulatory personnel resulted from the activities involved. Leadership at the top certainly failed to promote a proper tone, but the broad failings of such a large range of senior personnel extended well beyond merely setting the tone for those they led to follow.

Descriptions of the weaknesses involved had too general a nature and conveyed a narrow expression of the underlying issues, diluting leadership's claim to promote "transparency" in addressing the aftermath of the events and circumstances involved. Even more telling in that regard, as Chapter Twelve of our Phase One report details, have been efforts to avoid providing details about those events and circumstances.

5. We found reporting compliant with SOX requirements

All the quarterly and annual requirements for SOX reporting appear to have been completed according to requirements, and on time. The reports provide evidence of the required testing, with exceptions highlighted and reported until remediated.

6. FESC Internal Auditing operates under a sound structure that provides services at effective costs.

We found the organization professionally staffed and effectively operated. Management has taken significant steps to contract resources following previous resource reduction efforts. JCP&L's costs for internal auditing have remained stable for a number of years. We found department and other interviewees knowledgeable about the audit process; external periodic peer review has highly rated the organization.

7. The functional reporting relationship of the Vice President, Internal Auditing to Audit Committee of the FirstEnergy Corp Board of Directors is appropriate, but administrative reporting should change from the Chief Legal Officer to the CEO. *(See Recommendation #2 and #4)*

The more significant reporting relationship lies in the functional reporting of Internal Auditing to the Board of Directors. Administrative reporting to the chief legal officer exists at other enterprises, but comprises a minority practice. Reporting to the CEO has become more prevalent and the most common practice, reported by some as increasing from about a quarter to one half just between 2013 and 2016, for example. The IIA recommends this approach today.

Thus, practice in steady-state operations commends the change in reporting here. Even more significantly, FirstEnergy considers itself engaged in a comprehensive program to change its "tone at the top." The parent has experienced substantial departures from expected practice in ensuring sound controls. Soundness in this area depends significantly on an independently organized and functioning internal auditing organization. FirstEnergy (as Chapter Twelve of our Phase One Report explains) has found itself engaged in significant litigation surrounding controls and other issues associated with conduct that led to the Deferred Prosecution Agreement, related internal investigations, and litigation settlements. The parent board has comparatively very strong representation by lawyer members, increased by the creation of a committee dedicated to addressing matters associated with such litigation.

Combining these factors with an historically and unusually strong use of legal privilege as a bar to even confidential disclosure (as requested by us in this engagement) gives more significance to the need for ensuring full independence of the function. This engagement has made clear in a number of ways how FirstEnergy operates in a manner that overstresses legal barriers to providing information. We consider its reluctance to share information and its use of legal barriers an important and unfortunate business cultural dimension. Moving Internal Auditing to the more prevalent reporting structure would better ensure a number of changes in order at FirstEnergy, such as:

- Changing the tone at the top
- Preventing the recurrence of actions that have engaged a range of leadership at many functions (including legal, regulatory, ethics and compliance, and external affairs)
- Promoting transparency (whose dimensions include measured and protected provision of information to regulators and not just generally public openness).

The key to the IIA recommendation is that direction should come from the Board, which is the case here, but acknowledging the need to have an administrative person to report to, it is generally recommended that it be to the highest person in the organization to best avoid any organizational bias.

8. Internal Auditing operates under an appropriate charter and supports its operation with effective tools.

An internal audit charter, outlining key roles and responsibilities exists. We found it reasonably comprehensive, detailed, and effective. The TeamMate software suite effectively integrates Internal Auditing's functions and activities. A demonstration of TeamMate found it intuitive, and inclusive of the entire end to end auditing process.

9. We found the audit planning process effective, but insufficiently successful in guiding audit work actually performed. *(See Recommendation #3)*

Internal Auditing uses risk assessment effectively informing audit planning. We found the process used to assess risk well run and documented. The risk assessment process run by the risk organization (ERM) undergoes continuing refreshment and Internal Auditing uses it as an important input to TeamMate. However, the annual Internal Audit risk assessment process, including the fraud risk assessment, has driven somewhat less than [redacted] of audits performed in three most recent planning periods.

10. Internal Audit has consistently employed an effective process for tracking and closing audit recommendations.

The TeamMate suite offers strong capabilities to support tracking. By automating the process of following up on promised remediation and timelines for doing so, the chance of an audit recommendation being ignored or slipping through the cracks is effectively eliminated.

11. The Audit Committee Charter comprehensively and adequately documents its responsibilities and activities.

The document scope is appropriate and contains standard expected language regarding the Audit Committee's responsibilities and governance functions over the internal and external audit processes, which prescribe clear duties and actions and which give the committee sufficient control over its agenda, operation, and resources on which it can call.

12. First Energy has complied with NYSE requirements.

The only violation discovered was a minor timing issue with the filing of the Q3 2020 10-Q. The issue was explained and quickly resolved without penalty.

D. Recommendations

1. Adopt a more expansive conception and means of expression for addressing profound failings like those that produced the Deferred Prosecution Agreement for what federal criminal authorities consider wire fraud and that produced a payment of $230 million. (*See Conclusion #4*)

In more than three decades of examining public utility management and operations, what has happened by the hand of a broad swath of FirstEnergy top leadership and other senior executives and management stands out. We take no issue with how actions and circumstances get "classified" from a controls deficiency perspective, but we do take significant issue with using broad classifications generally worded to restrict insight into the details that make clear the transparency lost by consigning the ills that have transpired into a "tone at the top" compartment. Specifically, our efforts to examine the details necessary to assess robustly the implications and consequences for JCP&L of affairs managed for and costs assigned to it was too much restricted by expressions crafted with an eye to public perception and even more so to minimizing civil litigation exposure.

At the least, management should work with the BPU to develop a plan that will provide more comprehensive, open, and transparent dialog about issues, circumstances, and events like those addressed here.

Moreover, as a matter of managing effectively, it is hard for us to see how comprehensive and lasting solutions to cultural and reportedly criminal behavior can occur without candid and robust acceptance of responsibility for all the sources that lie at the root of the attitudes and behaviors at issue. We find it simply quite impossible to determine what management considers the full gamut of those root causes. Management and the board may have a broad and deep understanding of those root causes and their implications for costs and service provided in New Jersey, but it will not share them meaningfully. FirstEnergy is not in a sound position to ask for trust without verification, but that is essentially what it has asked in this engagement.

We leave to others the question of whether the litigation stakes are so high as to make this approach a practical necessity. We also do not contend that its efforts at addressing its problems are shallow or insincere. We also cannot say that management has failed to ensure that costs inappropriately assigned or allocated to JCP&L have failed to be corrected entirely. What we can say is that:

- Whether or not necessitated by ongoing or threatened litigation, the lack of information beyond the very general level leaves us unable to answer important questions about how good a steward central management is of the interests of New Jersey customers and stakeholders.
- We have insufficient information from which to assure the BPU that management does have a full handle on and forceful dedication to addressing the root causes of the problems that have plagued its leadership and senior management.
- It is not possible to determine whether management's efforts to determine improper charges to JCP&L have been sufficiently comprehensive, candid, and corrective.

2. Move administrative reporting of FirstEnergy's top internal audit officer from the chief legal officer to the CEO. (See Conclusion #7**)**

Functional reporting to the Audit Committee of the FirstEnergy Corp. Board of Directors, which exists already, comprises the more important reporting relationship. However, more common general practice, reinforced by the particular history of FirstEnergy, makes clear that administrative reporting should be to the CEO. This change also conforms to IIA recommendations, growing and now most common practice, and, in our view, best practice.

3. Place greater weight on work identified through the risk assessment process in final audit plans. (*See Conclusion #9*)

One of the strengths of Internal Auditing processes is the integration of the ERM into the process of determining audit program work based on risk assessment. However, final audit plans do does not correspond well with work identified through that process.

4. End the predisposition to find ways to inhibit the flow of information (protected as required by legitimate needs for confidentiality) to the BPU. (*See Conclusion #7*)

We encountered an unprecedented degree of claims of legal privilege as reasons for denying access to audit work. We encountered similar claims in gaining access to presentations to the Audit Committee, with continued efforts to secure the information producing highly redacted documents. We have also found an unusually high degree of legally based objections in examining other areas within the scope of this engagement. We found such objections in areas seemingly outside topics apparently connected to current litigation.

It does not appear that personnel based at JCP&L or even rates and regulatory personnel assigned from FESC to JCP&L have substantial influence in making judgments about what to provide. We have concluded that the culture those who make decisions about disclosure significantly discounts the common sense of providing information when legal resources can formulate a legally based argument for denying it.

Chapter X: Affiliate Relationships and Cost Allocation Table of Contents

Chapter X: Affiliate Relationships and Cost Allocation

A. Background

Several primary principles should guide proper charging of costs incurred at a service company or other entity that benefits more than one other entity:

- Costs identifiable as specifically benefitting a single entity should get directly charged to that entity
- Residual costs should get assigned or allocated to the entities benefitting from the costs by a method that best represents the causes of those costs
- When specific cost causation cannot be reasonably measured, general allocators, usually representative of the size of the entities may be used as a last resort
- Management should take particular care to ensure that the cost allocation method used prevents cross-subsidization by utility entities of affiliates
- Comprehensive, clear, approved, documented methods, usually in the form of a Cost Allocation Manual (CAM) and a Service Agreement between the service company and the entities it serves should govern costing for transactions among affiliates.

Two significant issues not generally encountered also guided our examination:

- The bankruptcy in 2018 and separation in 2020 of the commercial power and energy business from FirstEnergy
- The ongoing circumstances surrounding and the aftermath of the investigation (the DOJ Investigation) of criminal conduct by the Office of the U.S. Attorney for the Southern District of Ohio and related matters.

It proved difficult for management to provide without significant manual effort information summarizing total billings from each affiliate to each other affiliate. Management did provide all costs charged to and from JCP&L. The following table summarizes this information, with a number of exclusions or adjustments:

- We removed billings and payments information to FirstEnergy Corp.; they consisted primarily of dividends paid to equity contributions received from the parent
- We excluded the results to and from FirstEnergy Service Company (FirstEnergy SC or FESC) which management reported to include significant values for items not within the types of values we sought to examine here (*e.g.*, cash receipts from customers and PJM less invoices paid by FirstEnergy SC on behalf of JCP&L primarily for purchased power, payroll, tree trimming, insurance, taxes and storm costs, if applicable), and also the cost allocations from FirstEnergy SC related to inter-company billing and cost settlements with FirstEnergy SC
- We grouped into an "Other" category all affiliates for which no billings to or from JCP&L in any year exceeded $50,000
- Note 1 in the table indicates net payments to FirstEnergy Generation, driven primarily by inter-company cost assessments related to Yards Creek

- Note 2 in the table indicates net payments to MAIT for transmission charges under a power pooling agreement between MAIT and JCP&L beginning in 2017 (prior to 2017 JCP&L's counterparty was Met-Ed)
- Note 3 in the table indicates net payments to MetEd for the transmission charges noted above and payables to MetEd for facilities rent for the Pottsville Pike and the Bethel Warehouse.

Net Billings to and from JCP&L and Affiliates

Affiliate	2012			2013			2014		
	Billings to	Billings from	Total	Billings to	Billings from	Total	Billings to	Billings from	Total
FirstEnergy Solutions Corp	$2,857	($161,662)	($158,806)	$772,430	$0	$772,430	$3,459	$0	$3,459
FirstEnergy Generation, LLC[1]	$1,048,069	($13,408,088)	($12,360,019)	$5,717,491	($12,413,649)	($6,696,158)	$28,246	($15,678,151)	($15,649,905)
FirstEnergy Nuclear Oper Co	$17,919	($192,840)	($174,920)	$3,357	($179,841)	($176,483)	$7,529	($117,645)	($110,116)
GPU Nuclear, Inc	$2,051	($968,529)	($966,478)	$10,201	($848,723)	($838,522)	$531,551	($673,546)	($141,995)
American Transmission Systems, Inc.	$10,927	$0	$10,927	$690,543	($399,560)	$290,983	$15,269	($1,338,017)	($1,322,749)
FirstEnergy Transmission, LLC	$0	$0	$0	$0	$0	$0	$0	$0	$0
Trans-Allegheny Interstate Line Company	$9,398	($31,622)	($22,224)	$46,222	($15,270)	$30,952	$14,106	($11,976)	$2,130
Mid-Atlantic Interstate Transmission, LLC[2]	$0	$0	$0	$0	$0	$0	$0	$0	$0
FE Properties Inc	$173	($221,505)	($221,332)	$176	($127,919)	($127,743)	$174	($111,650)	($111,476)
Cleveland Electric Illuminating Company	$120,761	($352,852)	($232,091)	$109,196	($124,335)	($15,139)	$96,263	($860)	$95,403
JCP&L Transitn Fund LLC	$371,019	$0	$371,019	$0	($156,640)	($156,640)	$0	($663,022)	($663,022)
JCP&L Trans. Fund II LLC	$226,504	$0	$226,504	$136,446	$0	$136,446	$0	($237,223)	($237,223)
Metropolitan Edison Company[3]	$530,179	($5,571,469)	($5,041,290)	$1,291,611	($6,329,877)	($5,038,265)	$1,323,017	($6,279,011)	($4,955,995)
Monongahela Power Company	$46,012	($541,494)	($495,481)	$40,284	($673,274)	($632,989)	$31,725	($456,348)	($424,623)
Ohio Edison Company	$672,903	($9,585)	$663,318	$25,383	($7,605)	$17,778	$26,740	($127,720)	($100,980)
Potomac Edison Company	$2,851	$0	$2,851	$4,073	($390,661)	($386,588)	$9,473	($109,624)	($100,151)
Pennsylvania Electric Company	$723,345	($244,687)	$478,658	$2,211,683	($1,471,343)	$740,340	$1,871,458	($1,506,052)	$365,405
Pennsylvania Power Company	$3,694	$0	$3,694	$4,023	$0	$4,023	$22,793	($204)	$22,589
Allegheny Energy Service Corp	$1,432,676	($999,222)	$433,454	$0	$0	$0	$0	$0	$0
Toledo Edison Company	$8,533	$0	$8,533	$7,998	($48,958)	($40,960)	$7,997	($424)	$7,572
West Penn Power Company	$62,133	($544,674)	($482,541)	$48,905	($642,186)	($593,281)	$211,562	($780,646)	($569,083)
Other	$33,042	($4,636)	$28,406	$33,161	($4,636)	$28,525	$33,680	($2,461)	$31,219
Total	**$5,325,046**	**($23,252,865)**	**($17,927,818)**	**$11,153,183**	**($23,834,475)**	**($12,681,292)**	**$4,235,042**	**($28,094,582)**	**($23,859,540)**

Affiliate	2015			2016			2017		
	Billings to	Billings from	Total	Billings to	Billings from	Total	Billings to	Billings from	Total
FirstEnergy Solutions Corp	$729,891	$0	$729,891	$2,454	($4,234)	($1,780)	$13,700	($96)	$13,605
FirstEnergy Generation, LLC[1]	$16,294	($9,031,490)	($9,015,197)	$185,720	($8,963,456)	($8,777,736)	$1,093,175	($8,905,229)	($7,812,054)
FirstEnergy Nuclear Oper Co	$16,242	($178,697)	($162,455)	$6,823	($104,604)	($97,782)	$3,932	($71,109)	($67,176)
GPU Nuclear, Inc	$249,052	($835,823)	($586,771)	$201,092	($886,458)	($685,366)	$305,140	($804,574)	($499,434)
American Transmission Systems, Inc.	$13,948	($1,964,360)	($1,950,411)	$20,535	($2,045,404)	($2,024,869)	$17,703	($2,102,115)	($2,084,412)
FirstEnergy Transmission, LLC	$0	$0	$0	$0	$0	$0	$0	($768,472)	($768,472)
Trans-Allegheny Interstate Line Company	$1,998	($24,536)	($22,538)	$6,684		$6,684	$3,249		$3,249
Mid-Atlantic Interstate Transmission, LLC[2]	$0	$0	$0	$0	$0	$0	$1,981,384	($5,477,438)	($3,496,054)
FE Properties Inc	$173	($108,593)	($108,420)	$160	($108,593)	($108,432)	$138	($114,548)	($114,411)
Cleveland Electric Illuminating Company	$208,399	($302,115)	($93,716)	$61,831	($82,850)	($21,019)	$2,886,897	($141,347)	$2,745,550
JCP&L Transitn Fund LLC	$434,378	$0	$434,378	$143,066	$0	$143,066	$4,924,721	$0	$4,924,721
JCP&L Trans. Fund II LLC	$0	$200,516	$200,516	$0	($277)	($277)	$0	($471,320)	($471,320)
Metropolitan Edison Company[3]	$1,673,210	($9,521,346)	($7,848,136)	$1,470,405	($6,155,392)	($4,684,988)	$260,992	($1,648,446)	($1,387,454)
Monongahela Power Company	$25,462	($491,010)	($465,548)	$38,058	($528,818)	($490,760)	$11,494	($589,806)	($578,312)
Ohio Edison Company	$48,166	($2,053,544)	($2,005,378)	$30,028	($206,100)	($176,073)	$21,736	($173,147)	($151,411)
Potomac Edison Company	$11,273	$0	$11,273	$10,090	$0	$10,090	$7,640	($72,174)	($64,534)
Pennsylvania Electric Company	$2,058,733	($1,473,901)	$584,832	$3,424,128	($1,557,166)	$1,866,963	$845,344	($636,395)	$208,949
Pennsylvania Power Company	$2,865	($986,019)	($983,154)	$19,824	($164,880)	($145,056)	$479,835	($479,988)	($154)
Allegheny Energy Service Corp	$0	$0	$0			$0	$0	$0	$0
Toledo Edison Company	$31,984	($1,671,088)	($1,639,105)	$11,070	$0	$11,070	$53,770	($2,694)	$51,076
West Penn Power Company	$11,980	($827,349)	($815,369)	$89,014	($851,490)	($762,476)	$15,270	($920,871)	($905,601)
Other	$36,074	$0	$36,074	$29,159	($119)	$29,040	$24,885	$0	$24,885
Total	**$5,570,122**	**($29,269,355)**	**($23,699,234)**	**$5,750,142**	**($21,659,841)**	**($15,909,699)**	**$12,951,005**	**($23,379,768)**	**($10,428,763)**

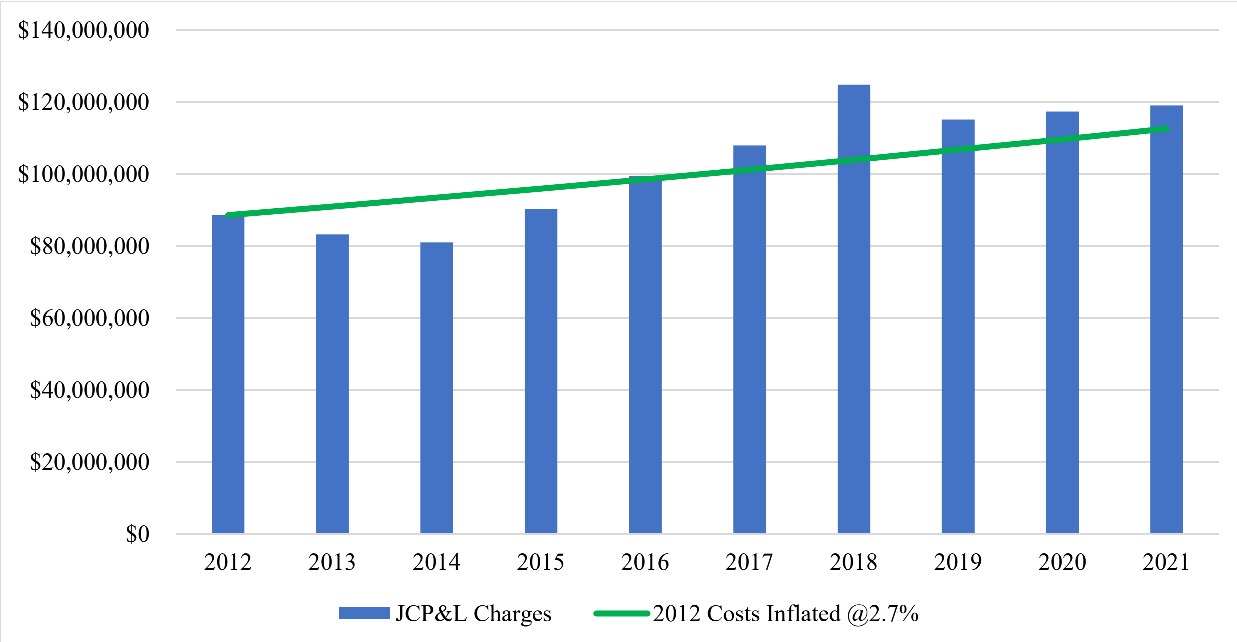
Affiliate	2018			2019			2020		
	Billings to	Billings from	Total	Billings to	Billings from	Total	Billings to	Billings from	Total
FirstEnergy Solutions Corp	$1,613	($366)	$1,246	$1,606	($263)	$1,344	$275	($3,887)	($3,612)
FirstEnergy Generation, LLC[1]	$7,766,375	($16,383,901)	($8,617,526)	$122,988	($18,204,861)	($18,081,873)	$53,198	($6,056,840)	($6,003,642)
FirstEnergy Nuclear Oper Co	$6,394	($4,568)	$1,827	$4,204	($1,672)	$2,533	$656	($6,377)	($5,721)
GPU Nuclear, Inc	$980,292	($763,736)	$216,555	$563,753	($2,635,110)	($2,071,357)	$1,367,191	($4,026,761)	($2,659,570)
American Transmission Systems, Inc.	$2,296,117	($1,705,798)	$590,318	$1,017,732	($2,141,081)	($1,123,349)	$1,471,224	($3,065,885)	($1,594,661)
FirstEnergy Transmission, LLC	$5,500	$0	$5,500	$0	$0	$0			$0
Trans-Allegheny Interstate Line Company	$1,018,864	($12,461)	$1,006,404	$449,911	($155,704)	$294,207	$533,446	($729,649)	($196,203)
Mid-Atlantic Interstate Transmission, LLC[2]	$2,159,611	($5,230,769)	($3,071,158)	$326,435	($3,867,358)	($3,540,923)	$510,024	($4,232,374)	($3,722,351)
FE Properties Inc	$136	($118,531)	($118,395)	$136	($222,784)	($222,648)	$949	($334,195)	($333,246)
Cleveland Electric Illuminating Company	$25,651	($40,883)	($15,232)	$2,000,020	($188,145)	$1,811,875	$77,401	($387,558)	($310,158)
JCP&L Transitn Fund LLC	$0	$1,999	$1,999	$0	$0	$0			$0
JCP&L Trans. Fund II LLC	$0	($1,707,028)	($1,707,028)	$0	$367,050	$367,050	$0	$31,376	$31,376
Metropolitan Edison Company[3]	$33,311	($1,133,228)	($1,099,917)	$26,743	($1,085,694)	($1,058,951)	$7,207,528	($8,258,687)	($1,051,159)
Monongahela Power Company	$99,860	($831,000)	($731,139)	$89,804	($747,502)	($657,698)	$90,363	($809,435)	($719,073)
Ohio Edison Company	$20,175	($170,058)	($149,883)	$19,715	($190,617)	($170,902)	$83,809	($143,298)	($59,489)
Potomac Edison Company	$6,671		$6,671	$509,626	($499,988)	$9,638	$34,375	($11,147)	$23,228
Pennsylvania Electric Company	$447,143	($171,750)	$275,393	$180,918	($166,952)	$13,966	$3,685,851	($4,047,425)	($361,574)
Pennsylvania Power Company	$5,969		$5,969	$3,147	$0	$3,147	$12,584	($4,289)	$8,295
Allegheny Energy Service Corp	$0	$0	$0	$0	$0	$0	$0	$0	$0
Toledo Edison Company	$11,720	($2,445)	$9,275	$10,961	($458)	$10,503	$30,261	($9,789)	$20,471
West Penn Power Company	$18,554	($826,584)	($808,030)	$10,718	($816,234)	($805,515)	$56,762	($981,828)	($925,066)
Other	$24,555	$0	$24,555	$24,571	($2,600)	$21,971	$4,597	($62,866)	($58,269)
Total	**$14,928,511**	**($29,101,106)**	**($14,172,595)**	**$5,362,989**	**($30,559,971)**	**($25,196,983)**	**$15,220,493**	**($33,140,917)**	**($17,920,424)**

Affiliate	2021		
	Billings to	Billings from	Total
FirstEnergy Solutions Corp	$0	$0	$0
FirstEnergy Generation, LLC[1]	$0	$0	$0
FirstEnergy Nuclear Oper Co	$0	$0	$0
GPU Nuclear, Inc	$32,463	($27,148)	$5,314
American Transmission Systems, Inc.	$1,866,184	($7,315,987)	($5,449,803)
FirstEnergy Transmission, LLC		($1,388,142)	($1,388,142)
Trans-Allegheny Interstate Line Company	$514,266	($1,216,162)	($701,895)
Mid-Atlantic Interstate Transmission, LLC[2]	$578,998	($4,333,087)	($3,754,090)
FE Properties Inc	$1,503	($558,953)	($557,451)
Cleveland Electric Illuminating Company	$120,892	($1,318,103)	($1,197,212)
JCP&L Transitn Fund LLC	$0	$0	$0
JCP&L Trans. Fund II LLC	$0	$4,006,958	$4,006,958
Metropolitan Edison Company[3]	$84,095	($1,100,156)	($1,016,060)
Monongahela Power Company	$146,791	($893,001)	($746,210)
Ohio Edison Company	$143,480	$0	$143,480
Potomac Edison Company	$70,710	$0	$70,710
Pennsylvania Electric Company	$766,898	($1,791,565)	($1,024,667)
Pennsylvania Power Company	$22,022	$0	$22,022
Allegheny Energy Service Corp	$0	$0	$0
Toledo Edison Company	$47,784	$0	$47,784
West Penn Power Company	$114,519	($983,311)	($868,792)
Other	$937	$0	$937
Total	**$4,511,540**	**($16,918,658)**	**($12,407,118)**

The following table and chart show annual charges from FirstEnergy SC to JCP&L. The green line we inserted inflates 2012 costs at an annual rate of 2.7 percent for each subsequent year.

Service Company Billings to JCP&L

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
$88,614,254	$83,274,777	$81,018,195	$90,365,407	$99,558,380	$107,976,508	$124,832,950	$115,140,845	$117,373,605	$119,101,592



2021 charges of $119.1 million exceeded the inflation adjusted 2012 value (by $6.5 million, or 5.7 percent).

The following three charts summarize total FirstEnergy SC annual costs billed to each affiliate. The three charts show:

- Total FirstEnergy SC charges to ***each affiliate*** and the percent of those costs directly charged
- Total FirstEnergy SC charges to ***each affiliate*** and the percent of the annual FirstEnergy SC total costs each affiliate paid
- Total FirstEnergy SC charges to certain ***affiliate groupings*** and the percent of the annual FirstEnergy SC total costs each paid:
    - JCP&L and each other FirstEnergy utility operating company individually
    - The combined annual utility operating company total
    - The combined annual Nonregulated Generation affiliate total
    - The combined annual Transmission affiliate total
    - The combined annual Other affiliate total.

Service Company Charges to Each Affiliate Total and Percent Direct Charged

Entity	2017		2018		2019		2020		2021	
	Total	% Direct	Total	% Direct	Total	% Direct	Total	% Direct	Total	% Direct
AET PATH Company, LLC	$16,223	100.0%	$12,895	100.0%	$11,618	100.0%	$19,434	100.0%	$3,974	100.0%
Allegheny Energy Supply, LLC	$50,011,646	60.5%	$53,244,999	65.1%	$40,938,568	69.1%	$8,609,342	48.3%	$1,363,852	70.7%
Allegheny Generating Company	$313,552	83.2%	$289,491	100.0%	$300,763	100.0%	$220,486	100.0%	$213,791	99.5%
Allegheny Pittsburgh Coal			$34,972	100.0%						
Allegheny Ventures	$15,025	6.9%	$15,764	6.1%	$17,327	20.0%	$72,992	1.6%	$66,834	10.0%
ATSI	$68,473,592	66.1%	$82,060,278	60.3%	$91,723,555	57.4%	$98,893,724	56.5%	$102,591,472	52.5%
Bay Shore Power Company	$1,250,939	100.0%	$61,741	100.0%	$391	100.0%	($982,171)	100.0%		
Buchanan Energy, VA LLC			$161,826	100.0%	($2,816)	100.0%				
FE Generation, LLC	$79,322,973	31.3%	$99,056,972	29.8%	$34,396,569	15.2%	$8,001,694	10.2%		
FE Nuclear Generation, LLC	$33,607,077	6.5%	$31,893,772	1.8%	$26,223,456	0.0%	$8,806,310	0.0%		
FE Nuclear Operating Co	$46,374,968	26.5%	$72,674,365	21.5%	$26,714,809	28.1%	$4,098,948	26.0%		
FE Solutions Corp	$14,351,372	62.1%	$15,465,712	61.2%	$7,799,442	54.5%	$4,011,089	74.5%		
FirstEnergy Corp.	$24,525,647	75.4%	$25,904,076	75.3%	$22,417,173	69.3%	$23,538,448	69.4%	$23,871,167	68.8%
FirstEnergy Properties, Inc.	$449,449	51.1%	$505,451	56.8%	$477,940	53.5%	$827,154	45.9%	$712,114	36.4%
FirstEnergy Transmission, LLC	$2,411,987	100.0%	$85,301	100.0%	$33,513	100.0%	$51,591	100.0%	$25,239	100.0%
FirstEnergy Ventures Corporation	$325,691	70.4%	$444,988	80.2%	$425,128	80.6%	$505,544	59.0%	$429,032	32.0%
GPU Nuclear, Inc					$77,823	100.0%	$14,076	100.0%	$604	100.0%
JCP&L	$107,976,508	27.2%	$124,832,950	26.8%	$115,140,845	29.3%	$117,373,605	34.0%	$119,101,592	32.6%
Metropolitan Edison Company	$51,782,985	29.3%	$60,760,869	30.3%	$52,802,125	29.3%	$50,094,653	28.2%	$49,395,623	25.7%
Mid-Atlantic Interstate Transmission, LLC	$35,098,604	74.5%	$38,422,157	61.8%	$41,607,227	64.1%	$49,633,825	57.0%	$52,986,206	51.9%
Monongahela Power Company	$66,739,266	35.5%	$77,574,815	34.5%	$68,232,677	41.0%	$74,144,824	44.7%	$78,514,078	45.9%
Ohio Edison Company	$86,793,750	20.4%	$97,389,364	17.4%	$78,969,389	19.4%	$87,615,486	26.5%	$90,964,757	27.4%
PATH Allegheny Maryland Transmission Co, LLC	$2	0.0%	$40,736	0.0%	$261	100.0%			$140	100.0%
PATH Allegheny Trans. Co	$170,343	100.0%	$58,703	100.0%	$31,874	100.0%	$32,612	100.0%	$12,322	100.0%
PATH Allegheny VA Trans	$2	0.0%							$124	100.0%
PATH, LLC, AYE Series	$1,840	100.0%	$800	100.0%	$1,817	100.0%	$63,437	100.0%		
Pennsylvania Electric Company	$55,809,931	24.3%	$66,467,502	27.8%	$58,045,066	29.4%	$55,265,621	27.1%	$55,188,000	26.4%
Pennsylvania Power Company	$15,280,802	34.2%	$17,095,315	31.6%	$14,735,767	33.8%	$14,699,823	33.5%	$14,889,335	32.1%
Suvon, LLC					$207,248	100.0%	$3,366,666	100.0%	$4,077,098	100.0%
The Cleveland Electric Illuminating Company	$61,933,278	19.5%	$74,012,047	17.4%	$60,761,643	18.9%	$67,892,534	25.4%	$70,037,339	27.0%
The Potomac Edison Company	$42,701,422	29.9%	$48,036,419	29.1%	$42,837,772	30.1%	$44,228,875	33.7%	$46,944,603	33.1%
The Toledo Edison Company	$28,049,761	19.8%	$32,457,671	18.0%	$25,991,709	19.7%	$28,840,926	26.1%	$30,063,059	28.4%
Trans-Allegheny Interstate Line Company	$17,996,695	27.3%	$20,244,487	21.8%	$20,926,625	22.5%	$22,078,946	22.4%	$22,366,049	23.8%
Warrenton River Terminal			$24,552	100.0%	$53,588	100.0%				
West Penn Power Company	$71,357,622	33.0%	$81,832,251	33.6%	$77,858,166	36.2%	$74,288,347	31.8%	$73,157,268	31.0%
Total	**$963,142,951**	**35.0%**	**$1,121,163,241**	**32.8%**	**$909,759,060**	**35.0%**	**$846,308,842**	**36.8%**	**$836,975,672**	**36.6%**

Certain entities received all costs via direct charging for various reasons. FirstEnergy Transmission is the largest such entity in terms of dollars charged - - it receives no allocated charges as management assigns them to individual entities operating under it. The 2012 cancellation of the PATH project resulted in certain legacy Allegheny companies having some residual charges, none of which management allocates to other entities. GPU Nuclear charges get assigned to its former owners, JCP&L, Met-Ed, and Penelec. Management reported that Suvon's size effectively rounds its cost allocation percentage factor to zero.

Service Company Charges to Each Affiliate and Percent of Total

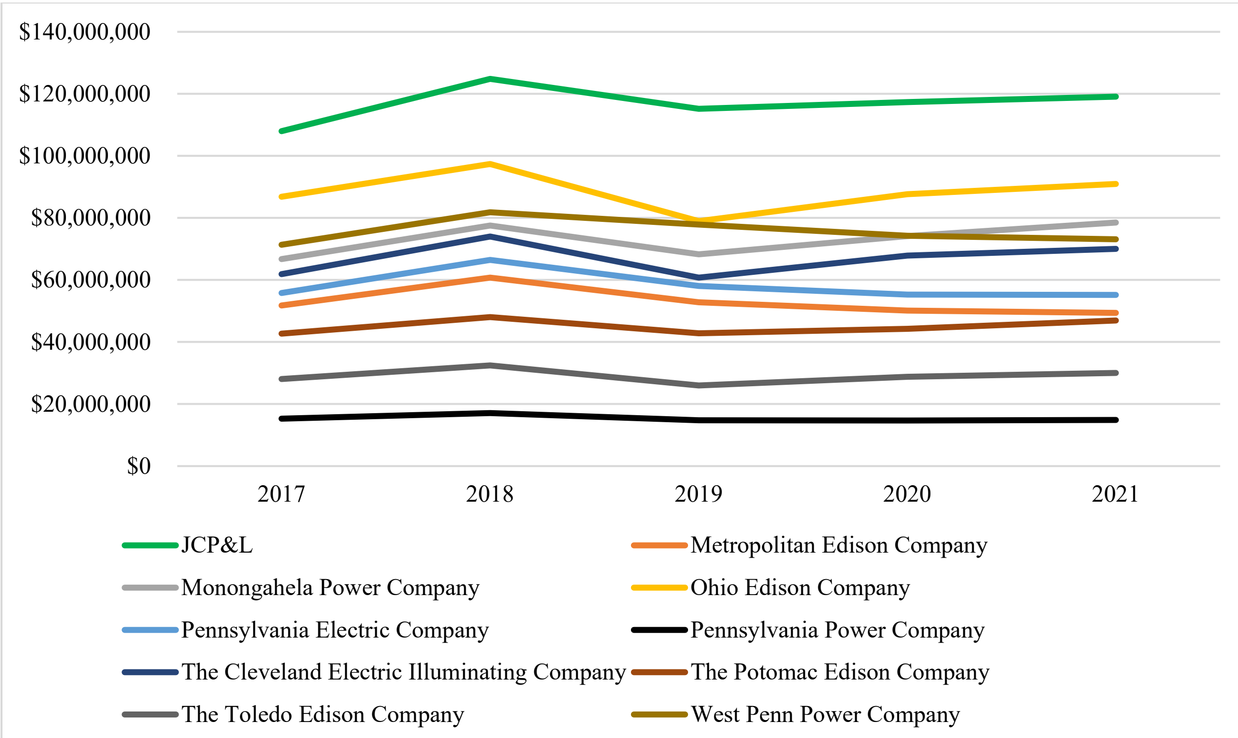
Entity	2017		2018		2019		2020		2021	
	Total	% of Total	Total	% of Total	Total	% of Total	Total	% of Total	Total	% of Total
AET PATH Company, LLC	$16,223	0.0%	$12,895	0.0%	$11,618	0.0%	$19,434	0.0%	$3,974	0.0%
Allegheny Energy Supply, LLC	$50,011,646	5.2%	$53,244,999	4.7%	$40,938,568	4.5%	$8,609,342	1.0%	$1,363,852	0.2%
Allegheny Generating Company	$313,552	0.0%	$289,491	0.0%	$300,763	0.0%	$220,486	0.0%	$213,791	0.0%
Allegheny Pittsburgh Coal		0.0%	$34,972	0.0%		0.0%		0.0%		0.0%
Allegheny Ventures	$15,025	0.0%	$15,764	0.0%	$17,327	0.0%	$72,992	0.0%	$66,834	0.0%
ATSI	$68,473,592	7.1%	$82,060,278	7.3%	$91,723,555	10.1%	$98,893,724	11.7%	$102,591,472	12.3%
Bay Shore Power Company	$1,250,939	0.1%	$61,741	0.0%	$391	0.0%	($982,171)	-0.1%		0.0%
Buchanan Energy, VA LLC		0.0%	$161,826	0.0%	($2,816)	0.0%		0.0%		0.0%
FE Generation, LLC	$79,322,973	8.2%	$99,056,972	8.8%	$34,396,569	3.8%	$8,001,694	0.9%		0.0%
FE Nuclear Generation, LLC	$33,607,077	3.5%	$31,893,772	2.8%	$26,223,456	2.9%	$8,806,310	1.0%		0.0%
FE Nuclear Operating Co	$46,374,968	4.8%	$72,674,365	6.5%	$26,714,809	2.9%	$4,098,948	0.5%		0.0%
FE Solutions Corp	$14,351,372	1.5%	$15,465,712	1.4%	$7,799,442	0.9%	$4,011,089	0.5%		0.0%
FirstEnergy Corp.	$24,525,647	2.5%	$25,904,076	2.3%	$22,417,173	2.5%	$23,538,448	2.8%	$23,871,167	2.9%
FirstEnergy Properties, Inc.	$449,449	0.0%	$505,451	0.0%	$477,940	0.1%	$827,154	0.1%	$712,114	0.1%
FirstEnergy Transmission, LLC	$2,411,987	0.3%	$85,301	0.0%	$33,513	0.0%	$51,591	0.0%	$25,239	0.0%
FirstEnergy Ventures Corporation	$325,691	0.0%	$444,988	0.0%	$425,128	0.0%	$505,544	0.1%	$429,032	0.1%
GPU Nuclear, Inc		0.0%		0.0%	$77,823	0.0%	$14,076	0.0%	$604	0.0%
JCP&L	$107,976,508	11.2%	$124,832,950	11.1%	$115,140,845	12.7%	$117,373,605	13.9%	$119,101,592	14.2%
Metropolitan Edison Company	$51,782,985	5.4%	$60,760,869	5.4%	$52,802,125	5.8%	$50,094,653	5.9%	$49,395,623	5.9%
Mid-Atlantic Interstate Transmission, LLC	$35,098,604	3.6%	$38,422,157	3.4%	$41,607,227	4.6%	$49,633,825	5.9%	$52,986,206	6.3%
Monongahela Power Company	$66,739,266	6.9%	$77,574,815	6.9%	$68,232,677	7.5%	$74,144,824	8.8%	$78,514,078	9.4%
Ohio Edison Company	$86,793,750	9.0%	$97,389,364	8.7%	$78,969,389	8.7%	$87,615,486	10.4%	$90,964,757	10.9%
PATH Allegheny Maryland Transmission Co, LLC	$2	0.0%	$40,736	0.0%	$261	0.0%		0.0%	$140	0.0%
PATH Allegheny Trans. Co	$170,343	0.0%	$58,703	0.0%	$31,874	0.0%	$32,612	0.0%	$12,322	0.0%
PATH Allegheny VA Trans	$2	0.0%		0.0%		0.0%		0.0%	$124	0.0%
PATH, LLC, AYE Series	$1,840	0.0%	$800	0.0%	$1,817	0.0%	$63,437	0.0%		0.0%
Pennsylvania Electric Company	$55,809,931	5.8%	$66,467,502	5.9%	$58,045,066	6.4%	$55,265,621	6.5%	$55,188,000	6.6%
Pennsylvania Power Company	$15,280,802	1.6%	$17,095,315	1.5%	$14,735,767	1.6%	$14,699,823	1.7%	$14,889,335	1.8%
Suvon, LLC		0.0%		0.0%	$207,248	0.0%	$3,366,666	0.4%	$4,077,098	0.5%
The Cleveland Electric Illuminating Company	$61,933,278	6.4%	$74,012,047	6.6%	$60,761,643	6.7%	$67,892,534	8.0%	$70,037,339	8.4%
The Potomac Edison Company	$42,701,422	4.4%	$48,036,419	4.3%	$42,837,772	4.7%	$44,228,875	5.2%	$46,944,603	5.6%
The Toledo Edison Company	$28,049,761	2.9%	$32,457,671	2.9%	$25,991,709	2.9%	$28,840,926	3.4%	$30,063,059	3.6%
Trans-Allegheny Interstate Line Company	$17,996,695	1.9%	$20,244,487	1.8%	$20,926,625	2.3%	$22,078,946	2.6%	$22,366,049	2.7%
Warrenton River Terminal		0.0%	$24,552	0.0%	$53,588	0.0%		0.0%		0.0%
West Penn Power Company	$71,357,622	7.4%	$81,832,251	7.3%	$77,858,166	8.6%	$74,288,347	8.8%	$73,157,268	8.7%
Total	**$963,142,951**	**100.0%**	**$1,121,163,241**	**100.0%**	**$909,759,060**	**100.0%**	**$846,308,842**	**100.0%**	**$836,975,672**	**100.0%**

Service Company Charges to Affiliates by Type Total and Percent of Total

Entity	2017		2018		2019		2020		2021		2021 vs. 2017 Change	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
JCP&L	$107,976,508	11.2%	$124,832,950	11.1%	$115,140,845	12.7%	$117,373,605	13.9%	$119,101,592	14.2%	$11,125,084	10.3%
Metropolitan Edison	$51,782,985	5.4%	$60,760,869	5.4%	$52,802,125	5.8%	$50,094,653	5.9%	$49,395,623	5.9%	($2,387,362)	-4.6%
Monongahela Power	$66,739,266	6.9%	$77,574,815	6.9%	$68,232,677	7.5%	$74,144,824	8.8%	$78,514,078	9.4%	$11,774,812	17.6%
Ohio Edison Company	$86,793,750	9.0%	$97,389,364	8.7%	$78,969,389	8.7%	$87,615,486	10.4%	$90,964,757	10.9%	$4,171,008	4.8%
Pennsylvania Electric	$55,809,931	5.8%	$66,467,502	5.9%	$58,045,066	6.4%	$55,265,621	6.5%	$55,188,000	6.6%	($621,931)	-1.1%
Pennsylvania Power	$15,280,802	1.6%	$17,095,315	1.5%	$14,735,767	1.6%	$14,699,823	1.7%	$14,889,335	1.8%	($391,467)	-2.6%
Cleveland Electric Illuminating	$61,933,278	6.4%	$74,012,047	6.6%	$60,761,643	6.7%	$67,892,534	8.0%	$70,037,339	8.4%	$8,104,062	13.1%
Potomac Edison	$42,701,422	4.4%	$48,036,419	4.3%	$42,837,772	4.7%	$44,228,875	5.2%	$46,944,603	5.6%	$4,243,180	9.9%
Toledo Edison	$28,049,761	2.9%	$32,457,671	2.9%	$25,991,709	2.9%	$28,840,926	3.4%	$30,063,059	3.6%	$2,013,298	7.2%
West Penn Power	$71,357,622	7.4%	$81,832,251	7.3%	$77,858,166	8.6%	$74,288,347	8.8%	$73,157,268	8.7%	$1,799,645	2.5%
Opco Subtotal	$588,425,324	61.1%	$680,459,203	60.7%	$595,375,159	65.4%	$614,444,695	72.6%	$628,255,653	75.1%	$39,830,329	6.8%
Nonregulated Generation Subtotal	$223,668,036	23.2%	$272,335,820	24.3%	$136,072,844	15.0%	$33,527,383	4.0%	$1,363,852	0.2%	($222,304,184)	-99.4%
Transmisison Entities Subtotal	$124,169,288	12.9%	$140,925,357	12.6%	$154,336,491	17.0%	$170,773,569	20.2%	$177,985,526	21.3%	$53,816,237	43.3%
Other Affiliates Subtotal	$26,880,303	2.8%	$27,442,861	2.4%	$23,974,566	2.6%	$27,563,196	3.3%	$29,370,640	3.5%	$2,490,338	9.3%
Total	**$963,142,951**	**100.0%**	**$1,121,163,241**	**100.0%**	**$909,759,060**	**100.0%**	**$846,308,842**	**100.0%**	**$836,975,672**	**100.0%**	**($126,167,279)**	**-13.1%**

The following chart shows the dollars charged each year to each FE utility operating company.

FirstEnergy SC Utility Operating Company Charges



The following tables show total FirstEnergy SC charges to JCP&L by function, the amount of the total FirstEnergy SC charges to all FE entities that total represented, and total FirstEnergy SC charges to JCP&L by function and by charge method.

Service Company Charges to JCP&L (in 000s)

Cost Description	2017		2018		2019		2020		2021 (Sept.)	
	Dollars	%	Dollars	%	Dollars	%	Dollars	%	Dollars	%
Accounting Support and Tax	$0	0.0%	$0	0.0%	$0	0.0%	$9,517,236	12.2%	$9,659,131	14.8%
Assets Carrying Charges	$1,280,408	6.7%	$1,198,370	7.2%	$1,142,008	7.1%	$3,292,613	14.2%	$3,532,365	15.3%
Business Development	$284,577	10.7%	$281,121	9.8%	$484,032	14.2%	$0	0.0%	$0	0.0%
Business Development and Strategy	$0	0.0%	$0	0.0%	$0	0.0%	$1,268,721	15.3%	$796,266	14.8%
Chairman of the Board	$294	6.6%	$117	7.2%	$761	10.0%	$0	0.0%	$0	0.0%
Communications	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$822,249	15.2%
Compliance & Reg. Services	$2,150,530	17.7%	$1,851,206	16.7%	$2,179,986	18.3%	$2,356,613	19.1%	$1,510,702	17.2%
Controller	$7,769,399	10.3%	$7,167,195	9.8%	$7,836,192	10.7%	$0	0.0%	$0	0.0%
Corporate Affairs & Community Involvement	$1,334,870	11.6%	$1,263,613	11.3%	$1,234,654	11.7%	$1,331,241	12.9%	$1,102,006	15.3%
Corporate Risk	$774,594	10.9%	$667,727	10.1%	$585,370	10.5%	$927,683	13.7%	$871,941	15.2%
Corporate Services & CIO	$20,552,387	13.7%	$21,817,259	12.9%	$21,710,772	13.4%	$23,428,444	14.3%	$14,118,165	14.4%
Corporate, Real Estate, Records Management	$3,355,654	10.5%	$3,098,317	9.3%	$3,730,071	12.5%	$3,820,063	12.8%	$2,832,787	13.4%
Customer Service	$14,061,233	17.8%	$14,831,313	18.3%	$15,400,779	17.9%	$15,718,021	17.7%	$12,277,987	18.2%
Energy Efficiency	$155,548	1.2%	$339,592	2.6%	$502,130	3.8%	$1,021,171	7.3%	$1,612,943	15.4%
Environmental	$1,045,305	6.0%	$937,153	7.9%	$1,018,101	9.2%	$963,623	9.7%	$1,090,781	14.6%
EVP & Chief Financial Officer	$0	0.0%	$202,158	9.7%	$191,944	10.0%	$0	0.0%	$0	0.0%
EVP & Chief Financial Officer, Strategic Planning & Operations	$126,873	10.2%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%
External Affairs	$0	0.0%	$0	0.0%	$0	0.0%	$100,738	14.1%	$13,826	14.4%
External Affairs & Communications	$3,118,573	9.9%	$2,292,927	9.6%	$3,124,901	11.8%	$0	0.0%	$0	0.0%
FE Generation & CNO	$278,566	0.4%	$1,509,833	2.0%	$2,770,776	5.6%	$0	0.0%	$0	0.0%
FE Tomorrow	$0	0.0%	$0	0.0%	$226,774	14.7%	$0	0.0%	$0	0.0%
Federal Affairs & Energy Policy	$446,497	8.0%	$299,949	6.0%	$242,936	7.2%	$315,035	9.0%	$184,553	9.3%
Generation Related Support	$0	0.0%	$0	0.0%	$0	0.0%	$1,661,668	7.6%	$211,770	1.5%
Human Resources	$14,856,653	11.8%	$24,967,655	10.5%	$7,396,700	11.2%	($9,503)	4.9%	($2,750,608)	17.5%
Innovation Center	$0	0.0%	$0	0.0%	$0	0.0%	$316,527	14.1%	$784,219	14.5%
Integrated System Planning & Development	$238,720	12.4%	$230,192	10.0%	$465,509	14.6%	$0	0.0%	$0	0.0%
Internal Auditing	$557,337	11.5%	$425,613	9.5%	$514,938	13.3%	$503,181	14.0%	$416,053	15.7%
Legal	$3,627,039	8.4%	$4,603,218	9.8%	$4,557,874	16.2%	$4,049,080	17.9%	$3,220,017	17.0%
Local Affairs & Economic Development	$318,995	3.7%	$249,413	3.1%	$189,294	2.6%	$225,148	2.2%	$68,505	1.0%
Marketing & Branding	$1,085,030	11.0%	$1,225,448	13.1%	$1,468,609	16.3%	$2,721,497	12.8%	$663,007	12.8%
President & CEO, FirstEnergy Service Company	$317,799	9.9%	$306,415	10.4%	$308,124	9.9%	$773,776	13.2%	$2,773,284	14.6%
President, FE Generation & CNO	$605	0.1%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%
President, FE Utilities	$523,981	14.5%	$832,328	15.4%	$743,835	16.6%	$1,163,257	15.5%	$591,212	15.6%
Rates & Regulatory Affairs	$1,799,901	17.8%	$1,678,539	17.5%	$1,610,666	22.0%	$1,778,117	21.5%	$1,850,665	26.6%
State Affairs	$380,150	6.1%	$492,612	7.3%	$375,348	6.1%	$571,886	9.4%	$371,294	13.2%
Supply Chain	$534,308	4.2%	$558,999	4.2%	$676,418	5.9%	$747,265	9.8%	$527,390	12.1%
SVP & Chief Financial Officer	$0	0.0%	$0	0.0%	$0	0.0%	$159,773	5.8%	$151,112	7.6%
Transmission, Distribution Support	$26,374,254	13.1%	$30,917,408	13.6%	$33,295,770	13.7%	$37,442,952	14.0%	$25,568,778	13.4%
Treasury	$446,894	6.7%	$369,476	7.5%	$385,783	8.0%	$373,216	15.2%	$338,550	15.6%
Utility Operations	$179,535	9.0%	$217,784	9.0%	$769,787	12.0%	$834,562	11.4%	$1,046,053	13.1%
Total	**$107,976,508**	**11.2%**	**$124,832,950**	**11.1%**	**$115,140,845**	**12.7%**	**$117,373,604**	**13.9%**	**$86,257,007**	**14.3%**

Service Company Charges to JCP&L by Function and Method (in 000s)

Cost	2016		2017		2018		2019		2020		2021 (June)	
	Direct	Indirect	Direct	Indirect	Direct	Indirect	Direct	Indirect	Direct	Indirect	Direct	Indirect
Accounting Support and Tax	$0	$0	$0	$0	$0	$0	$0	$0	$600	$8,796	$301	$6,531
Assets Carrying Charges	($4,007)	$0	$1,280	$0	$1,198	$0	$1,142	$0	$3,293	$0	$2,323	$0
Business Development	$3	$238	$0	$285	$0	$235	$0	$484	$0	$0	$0	$0
Business Development and Strategy	$0	$0	$0	$0	$0	$0	$0	$0	$82	$1,187	$0	$561
Chariman of the Board	$0	$0	$0	$0	$0	$0	$0	$1	$0	$0	$0	$0
Communications	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$104	$1,028
Compliance & Regulated Services	$472	$1,447	$173	$1,977	$169	$1,683	$183	$1,997	$172	$2,185	$67	$979
Controller	$490	$7,076	$443	$7,326	$527	$6,686	$522	$7,314	$0	$0	$0	$0
Corporate Affairs & Community Involvemen	$0	$1,435	$0	$1,335	$15	$1,249	$3	$1,232	$0	$1,331	$0	$798
Corporate Risk	$6	$820	$5	$770	$3	$665	$8	$578	$2	$926	$0	$473
Corporate Services & CIO	$7,432	$11,408	$7,706	$12,846	$9,324	$12,493	$8,742	$12,969	$9,048	$14,381	$3,766	$5,564
Corporate, Real Estate, Records Managemer	$858	$2,540	$813	$2,543	$761	$2,337	$862	$2,868	$856	$2,964	$503	$1,385
Customer Service	$1,916	$12,460	$1,628	$12,433	$1,565	$13,267	$1,508	$13,893	$1,481	$14,237	$526	$7,559
Energy Efficiency	$68	$112	$12	$143	$180	$159	$168	$334	$871	$150	$838	$117
Environmental	$725	$431	$690	$355	$410	$527	$358	$660	$468	$496	$307	$423
EVP & Chief Financial Officer	$0	$0	$0	$0	$0	$202	$0	$192	$0	$0	$0	$0
EVP & Chief Financial Officer, Strat. P&O	$0	$120	$0	$127	$0	$0	$0	$0	$0	$0	$0	$0
External Affairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$101	$0	$14
External Affairs & Communications	$0	$2,629	$14	$3,105	$239	$2,054	$3	$3,122	$0	$0	$0	$0
FE Generation & CNO	$0	$0	$115	$163	$1,039	$470	$2,330	$441	$1,128	$274	$0	$0
FE Tomorrow	$0	$0	$0	$0	$0	$0	$0	$227	$0	$121	$0	$0
Federal Affairs & Energy Policy	$7	$407	$12	$435	$31	$269	$8	$235	$7	$308	$3	$125
Generation Related Support	$0	$0	$0	$0	$0	$0	$0	$0	$453	$45	$173	$31
Grand Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$8,275	$19,629
Human Resources	$289	$15,655	$377	$14,480	$174	$24,794	$304	$7,093	$218	($228)	$104	($2,779)
Innovation Center	$0	$0	$0	$0	$0	$0	$0	$0	$0	$317	$0	$481
Integrated System Planning & Development	$62	$184	$63	$176	$23	$207	$44	$421	$0	$0	$0	$0
Internal Auditing	$38	$420	$105	$453	$6	$419	$9	$506	$20	$483	$39	$237
Legal	$2,072	$746	$2,807	$820	$3,464	$1,140	$3,321	$1,236	$3,187	$862	$1,589	$579
Local Affairs & Economic Development	$19	$117	$19	$300	$15	$235	$5	$184	$33	$192	$0	$53
Marketing & Branding	$0	$105	$0	$1,085	$1	$1,224	$2	$1,466	$13	$2,708	$2	$467
President & CEO, FirstEnergy Service Comp	$0	$286	$0	$318	$36	$270	$0	$308	$0	$774	$0	$1,845
President, FE Generation & CNO	$1	$0	$1	$0	$0	$0	$0	$0	$0	$0	$0	$0
President, FE Utilities	$0	$462	$0	$524	$9	$824	$0	$743	$0	$1,163	$0	$442
Rates & Regulatory Affairs	$1,567	$205	$1,596	$204	$1,480	$198	$1,390	$221	$1,467	$311	$1,071	$162
State Affairs	$521	$0	$380	$0	$493	$0	$305	$70	$466	$105	$213	$44
Supply Chain	$74	$476	$137	$397	$167	$392	$251	$425	$257	$490	$98	$244
SVP & Chief Financial Officer	$0	$0	$0	$0	$0	$0	$0	$0	$0	$160	$0	$89
Transmission, Distribution Support	$10,335	$16,233	$10,980	$15,394	$12,133	$18,785	$12,267	$21,029	$15,793	$21,411	$6,396	$10,468
Treasury	$6	$416	$3	$444	$3	$366	$4	$382	$5	$368	$2	$224
Utility Operations	$0	$178	$0	$180	$7	$211	$34	$735	$0	$834	$0	$238
Total	**$22,954**	**$76,604**	**$29,359**	**$78,618**	**$33,470**	**$91,363**	**$33,774**	**$81,367**	**$39,922**	**$77,451**	**$26,701**	**$58,010**

The scope of our engagement included certain specific transmission and generation subjects. We address our examination of them in other chapters of this Phase Two report and the accompanying Phase One report, as the next paragraphs summarize.

We addressed the overall scope of our engagement as it concerns capital planning for JCP&L distribution and transmission projects, programs, and initiatives in the *Planning and Budgeting* chapter of this Phase Two report. That chapter's broad treatment of planning and budgeting addressed whether JCP&L goals and objective result from processes and reflect values independent of affiliate interests and strictly focused on optimizing cost and service quality for customers. That chapter also addressed whether JCP&L transmission and distribution resource allocation decisions seek to optimize benefits for and avoid negative impact on JCP&L's customers. It addressed planning for enhancement to the electricity delivery systems.

With respect to generation-specific subjects, our scope includes examinations of:

- Whether generation portfolio investment, retention, and divesture decisions have negatively JCP&L and its customers (See the *Non-Rate-Related Revenues* Chapter of this Phase Two report)
- Whether generation portfolio decisions have had any impact on JCP&L cost allocations (summarized in this chapter).

Chapter Eleven, *Financial Risks and Consequences of Parent and Affiliate Operations* of the accompanying Phase One report addressed the impacts that affiliation with FirstEnergy's generation-intensive and now gone commercial power and operation business had for JCP&L. Other chapters of this Phase Two report address the other aspects of these generation subjects:

- The *Organization and Executive Management* and *Planning and Budgeting* chapters of this Phase Two report address how FirstEnergy approached and managed the transition of the entities engaged in commercial power and operations through and shortly following bankruptcy, which produced their transfer to an enterprise created by creditors.
- The *Affiliate Relationships and Cost Allocation* and *Non-Rate-Related Revenues* Chapters of this Phase Two report address affiliate relationships and allocations involving operations in the commercial power and energy business
- The *Non-Rate-Related Revenues* Chapter of this Phase Two report addressed the recent sale of Yard's Creek, which until recently comprised JCP&L's remaining interest in generation, although its output moved commercially through wholesale markets, rather than assignment directly to JCP&L customer load.

Our scope also included an examination of whether the interests of JCP&L customers drive engagement in PJM and FERC activities, policies, and positions affecting JCP&L with respect to capacity and energy markets, transmission cost allocation, and the PJM Tariff. The *Power Supply and Market Conditions* chapter of this Phase Two report addresses consideration of those New Jersey interests PJM and FERC matters. That chapter also addressed PJM sales and found none occurring outside the markets overseen by PJM.

This chapter provides the results of our examination of the remaining transmission-specific topics within our scope, specifically:

- Supplemental transmission project allocations and benefits for customers
- The allocation of costs on shared site projects
- Sharing of cost allocation data regarding JCP&L's formula rates for transmission projects with the Service Corporation

Methods and processes for approvals of JCP&L supplemental transmission projects and their ability to ensure cost effective benefits for customers.

B. Findings

1. Governing Documents

a. Cost Allocation Manual

The Cost Allocation Manual (CAM) provides the primary source of governance and guidance for charging costs among affiliates. Management began use of the current FirstEnergy CAM as a result of the combination of General Public Utilities (GPU) and FirstEnergy Corp., following U.S. Securities and Exchange Commission approval in June 2003. GPU Service, Inc. had operated as a direct service company subsidiary of GPU. FirstEnergy SC was organized to operate as the service company subsidiary of FirstEnergy in 2001, beginning to direct service activities in that year. Full service company consolidation, however, did not come until June 1, 2003, with GPU Service, Inc. merged into the corporate structure that followed merger approval.

The CAM consists of eight sections:

1) Introduction: this section recites foundational matters that include:
    a) The intention to keep of books and records of FirstEnergy SC in compliance with the Uniform System of Accounts for centralized service companies subject to the provisions of the Public Utility Holding Company Act of 2005 (PUHCA 2005)
    b) A statement of the CAM's purpose to document FirstEnergy SC methods, policies and procedures in performing services for affiliate companies to assure compliance with PUCHA 2005
2) Definitions
3) Description of Services: provides definition of services provided by FirstEnergy SC, organized by major responsibility areas, or provider departments
4) Corporate Organization: provides an overall summary of the entire organizational structure, ownership among affiliated entities and a description of the related business activities
5) Transactions with Affiliates: details the nature, frequency and terms of transactions for services provided by FirstEnergy SC to affiliates
6) Cost Allocation Methods: this section (a primary focus of our work efforts in this audit) lists methods for allocating costs, which include:
    a) ***Multiple Factor- All***: (applicable to indirect costs that benefit the entire FirstEnergy enterprise) five percent of costs allocated using this factor remain at the parent, with the remaining 95 percent first allocated among the utility subsidiaries and the non-utility subsidiaries, based on FirstEnergy's equity investment in the respective groups. The portion of the 95 percent that goes to the utility subsidiaries under this method then gets allocated among them based on the Multiple Factor – Utility method, described below. A similar approach apportions the non-utility portion of the 95 percent among that group's members, using upon the Multiple Factor – Non-Utility method.

b) ***Multiple Factor – Utility and Non-Utility***: this factor operates in the same fashion as the Multiple Factor – All, except that no five percent allocation to the parent precedes its application.
c) ***Multiple Factor – Utility***: each utility receives a portion of indirect costs based on the sum of the weighted averages of the following factors:
   i. Gross transmission and/or distribution plant
   ii. Operating and maintenance expense excluding purchased power and fuel costs
   iii. Transmission and/or distribution revenues, excluding transactions with affiliates
d) ***Multiple Factor – Non-Utility***: each non-utility subsidiary receives costs based on its total assets.
e) ***Direct Charge Ratio***: direct charges for a particular product or service to an individual subsidiary as a percentage of the total direct charges for a particular product or service to all subsidiaries
f) ***Number of Customers Ratio***: the number of particular distribution customers for a utility receiving the product or service divided by the total number of customers for all receiving utilities
g) ***Number of Participating Employees – General***: the number employees of a particular entity receiving the product or service divided by the total number of employees for all receiving entities
h) ***Number of Participating Employees – Utility and Non-Utility***: Utility and Non-Utility subsidiaries split based on FirstEnergy's equity investment, then further allocated based on number of employees
i) ***Server Support Composite***: The average ratio of Unix gigabytes, SAP gigabytes and Intel number of servers for a subsidiary receiving the service
j) A series of remaining allocation factors applying a ratio approach similar to that of the above-described customers ratio, substituting for customer numbers the following:
   - Square Footage Used Ratio
   - Number of Shopping Customers
   - Gigabytes Used Ratio
   - Number of Computer Workstations Ratio
   - Number of Billing Inserts Ratio
   - Number of Invoices Ratio
   - Number of Payments Ratio
   - Daily Print Volume
   - Number of Intel Servers
   - Application Development Ratio

7) Time Distribution – Brief explanation of time distribution process (covered later in this chapter)
8) State Requirements.

We sought to verify whether the CAM reflected up-to-date and complete methods and sought to determine its suitability for testing the performance of allocations during the audit period. Our testing found differences between factors the CAM describes and those actually in use (as explained subsequently in this chapter):

- The CAM lists 19 factors, but the Service Agreement (described immediately below) only 18
- Current practices do not employ the Direct Charge Ratio as described in the CAM
- Terminology for several factors in use differ from what the CAM states
- We found a number of factors no longer in use.

Only CAM Section IV, which describes the corporate organization, has changed since 2010. Management has not updated the CAM factors since it began using it in 2003. No review of the CAM occurred in 2014, when management undertook a Financial Transformation Project. Finding ways to use technology to improve finance and accounting process efficiency and effectiveness served as a prime goal of that project. No subsequent review of CAM cost allocation factors has occurred since, although SOX controls produce annual reviews of allocation factors.

Management reported work underway by the Legal Department with the organization under the Vice President Compliance (both FirstEnergy wide common service groups) to create a policy calling for annual CAM review and update, with a recommendation expected in the third quarter of 2022. Current expectations anticipate no changes to the allocation factors, however.

b. Service Agreement

The Service Agreement governs corporate services and operational support services from FirstEnergy SC to the various other subsidiaries of FE Corp., including JCP&L. The New Jersey Board of Public Utilities (BPU or Board) approved the Service Agreement in 2005. The currently effective version bears the date of January 31, 2017. This agreement covers all such services with one exception - - direct assistance between two operating companies for storm response or other “one-off” projects. It operates as the contract among affiliated service providers and recipients. The CAM includes it as an attachment. The Service Agreement’s content parallels that of the CAM, adding approval signatures of the participating companies, and providing the indirect allocation methods associated with the products and services to which they apply.

We found aspects of the Service Agreement, like the CAM, outdated. Our review found the basis for some allocations not self-evident. The personnel with whom we discussed some of them could not explain the basis for the method for allocating some products and services. They did not, however, consider the Service Agreement determinative or its description of methods and factors no longer used material. They cited annual reviews (discussed later in this chapter) as the basis for defining the methods and factors used. Those reviews consider and, where deemed appropriate, change methods and factors, but not under a requirement that governing documents such as the Service Agreement and the CAM change with them.

The Service Agreement contains two other provisions that vary from actual practice. First, Item 6 calls for rendering of Service Company bills as soon as practicable after the close of the month. However, no organized billing that summarizes or details charges, physical or electronic, occurs.

The enterprise platform (in FirstEnergy's case SAP) manages charges without preparation of physical bills or electronic equivalents.

The second variance between Service Agreement requirements and actual practice concerns Item 5, which addresses annual service lists. This provision states that the:

> *Client Company and the Service Company will prepare a Service Request on or before September 30th of each year, listing the services to be provided to the Client Company by the Service Company.*

JCP&L, a client company does not submit service requests, instead considering the annual cost center review as the vehicle for requesting services.

c. Mutual Assistance Agreement

A Mutual Assistance Agreement governs the charging of costs when operating companies provide each other assistance, for example in responding to and recovering from major weather events. The current Mutual Assistance Agreement bears the date of January 31, 2017. Often bilateral, assistance can however come from or to multiple operating companies. Providing companies allocate costs in such cases under a method recommended by FirstEnergy SC, from a list we found to match that contained in the Service Agreement.

Three general pricing methods apply, with their differentiation based on whether and how services involve operating companies:

- Billings from one operating company to another use cost, or, in the cases of assets, cost less accumulated depreciation
- Billings from an operating company to FirstEnergy SC or to a non-utility affiliate price at the higher of cost or market price
- Billings from a non-utility entity to an operating company price at the lower of cost or market price.

2. Affiliate Transactions

a. Transaction Paths

All transactions since 2017 between JCP&L and any other FirstEnergy affiliate have involved FirstEnergy SC or have come under the Mutual Assistance agreement. Our examination of transactions related to facilities found them occurring under the Shared Service or the Mutual Assistance Agreements as well. JCP&L has not leased to or from any affiliates over this period.

A single transaction path comprises charges that flow between two given affiliates. Charges can flow in both directions across a single path - - where the two affiliates vis-à-vis each other both provide and receive products and services. Our request for a table showing total amounts for 10 years from each FirstEnergy affiliate to each other affiliate produced an initial response that provided a table of net charges; *i.e.*, not disaggregated into the two directions combining to produce the net charge.

We needed to examine both directions; a small net can result, for example, from very large amounts flowing in each direction. Moreover, examining transaction dollar flows has importance even for paths that do not directly concern JCP&L. For example, finding a significantly sized affiliate who takes common services but bears only small FirstEnergy SC costs would call for further inquiry. For another example, a finding that JCP&L bears significantly higher or lower service-company costs as compared to others, adjusting for size, would also likely produce reason for inquiry into the unique factors driving such a difference.

Management accompanied the detailed information with the observation that the SAP gathering, categorizing, and accumulating costs results from transactions reflecting daily activity across a large number of transaction paths. The SAP processes produce total net due and payable amounts between affiliate companies by aggregating very voluminous, individual intercompany transactions monthly.

The first response left us unable to determine whether net billings (unintentionally) masked large cost dollar flows in opposite directions. Additionally, the data did not permit a threshold review to identify for further questioning any charges to JCP&L disproportionate on a size-adjusted bases to those of the other operating companies. Comments on a draft of this report indicated that management has more recently begun to issue a monthly MS Excel workbook providing FirstEnergy SC billing source cost collector data and FERC account information.

We learned that a response providing all the information we requested would produce great burden, in part due to the lack of a true physical or electronic "monthly bill" that would provide itemization from which to provide what we requested. Management's configuration of its underlying SAP capabilities allows it to track inter-affiliate transactions and record them to the general ledger as they secure whatever approvals their nature and dollar size may require. Discussions with management about best means for providing what we needed indicated that visibility into monthly totals of billings to or from any affiliate does not exist. As a result, we asked that management supplement its first response (which it did) by providing gross billings to/from JCP&L to/from each of the other affiliates. Accordingly, we could not perform what we had envisioned as a threshold review of the relative size of costs to JCP&L in comparison with those to the other operating companies.

Superficially, the amounts for the JCP&L - FirstEnergy SC transaction path clearly did not reflect the size of service received from the service company. A footnote explained the principal reasons. First, the path includes customer cash receipts that, for ease FirstEnergy SC initially handles by making what many industry sources term "convenience" payments, and then credits to the operating companies. Second, FirstEnergy SC also takes responsibility for making certain payments that are specifically for individual operating companies, again for ease and convenience. These "convenience payments" and receipts do not comprise allocations in the common sense, but rather consist of items normally considered internal to and solely for an operating company - - using FirstEnergy SC as a processor to simplify matters.

We asked management to break costs for these cash receipt and disbursement items from those representing true cost allocations. The amounts provided appeared reasonable, and our review enabled us to tie the portion assigned to allocations to previously provided cost allocation data.

We also found the convenience approach reasonable and in accord with what we have seen in similar reviews involving other individual utilities and their holding companies.

We examined high level explanations for transactions between JCP&L and other utilities; the items questioned consisted primarily of facility rents, accounting adjustments, and power pooling arrangements. We selected a sample whose costs appeared outlying; management's explanations proved sufficient to justify the amounts. We also selected transactions between JCP&L and non-utility and non-FirstEnergy SC affiliate Management explained the charges as arising from lease of facilities between the two entities.

b. Service Company Assets/Shared Facilities

Both shared-services personnel and those working directly for JCP&L use corporate facilities owned by affiliates. Charges for that use by non-owning affiliates begin from a calculation of the square footage occupied by the cost center of the employees occupying the space, and then allocates costs according to the allocation method chosen by that cost center. The costs collected for this "rent" calculation include depreciation, property taxes, facility maintenance and a company specific cost of capital.

The following table summarizes, by building, allocated charges to JCP&L for FirstEnergy and FirstEnergy SC-owned buildings. Key variances in 2017 through 2021 amounts include:

- New 2021 charges for the Center for Advanced Technology
- New 2020 and 2021 charges for the Fairmount Corporate Center
- The absence (through September) of 2021 charges for the Fairlawn Call Center
- Increased 2020 (and 2021 on-pace) charges for the Greensburg Corporate Center and West Akron Campus.

Building Costs Allocated to JCP&L

Building	2017	2018	2019	2020	2021 (9 mos.)
Akron Control Center	$1,454,618	$1,157,515	$1,097,732	$1,074,729	$795,558
Bethel Warehouse	$132,557	$131,013	$131,361	$166,440	$202,018
Center for Advanced Energy Tech.	$0	$0	$0	$0	$661,614
Fairlawn 5	$0	$0	$0	$0	$37,391
Fairlawn Call Center	$169,674	$170,058	$170,541	$114,093	$0
Fairmont Call Center	$521,950	$539,074	$543,336	$524,849	$549,199
Greensburg Corporate Center	$912,812	$826,104	$808,512	$962,286	$747,214
Pottsville Pike	$753,854	$751,358	$749,709	$699,173	$448,970
Wadsworth Control Center	$615,287	$520,251	$500,927	$526,934	$642,121
West Akron Campus	$114,548	$118,531	$222,784	$333,682	$417,418
Fairmont Corporate Center	$0	$0	$0	$232,481	$521,487
Stow Engineering & Meeting Ctr.	$1,001,722	$875,004	$860,881	$979,557	$926,757
Total	$5,677,022	$5,088,908	$5,085,783	$5,614,226	$5,949,747

FirstEnergy SC also makes use of a variety of assets in providing services. Charges for those served include a monthly depreciation expense and a FirstEnergy SC carrying charge related to those assets. The intent is to include costs for all assets used in the provision of utility service, regardless of where the asset resides, for rate recovery. Accordingly, the depreciation charge derives from the original cost of the asset, with carrying charges the same were the asset on the local utility's books. Calculations use the pre-tax weighted average cost of capital approved in the most recent rate proceeding, applied to net plant in service, less accumulated deferred income taxes.

The provided list of FirstEnergy SC assets at June 30, 2021 totaled $910,036,768, with an associated depreciation reserve of $549,339,402. Our questions about the details raised no concerns about the calculation of these amounts. We observed depreciation expense for the month of June 2021 on the FirstEnergy SC assets of $5,440,502, with $832,513 allocated to JCP&L. The 15.3 percent these factors produce conforms to typical JCP&L allocation percentages. Management has reported that JCP&L applies the requirements of Section 14:4-4.5 by:

- Excluding allocated FirstEnergy SC plant carrying charges from operating expense
- Including FirstEnergy SC plant in rate base
- Making an adjustment to allocated FirstEnergy SC depreciation expense to correspond to JCP&L's depreciation rates.

We requested and received information about all facilities owned by an affiliate utility that utilized shared services employees or employees that did work directly for JCP&L. We examined monthly rental charges to JCP&L and to FirstEnergy SC, finding nothing unusual, except for questions about the allocation factors used (addressed in Section B.3.a).

We reviewed total depreciation and carrying charges billed by FirstEnergy SC and the amount billed to JCP&L for 2017 through 2021. JCP&L's share of total depreciation charges has increased in recent years. It rose from 10.54 percent in 2019 to 12.26 percent in 2020 and to 15.29 percent in 2021. Management explained the increases between 2018 and 2020 as resulting from the greater percentages borne by all the operating companies due to reductions allocations to the commercial power and energy affiliates (*e.g.*, FirstEnergy Solutions and Nuclear Operating Company). Those entities transitioned through bankruptcy during this period and exited under third-party ownership in 2020. They reduced services taken through that transition and ended them entirely by mid-2020. We address this percentage increase in depreciation charged to JCP&L below in the *Commercial Power and Energy Separation* section of this chapter.

We examined asset transfers between JCP&L and affiliates. They have proven nominal - - amounting on a net basis to JCP&L transfers of $217,297 between January 1, 2010 and May 31, 2021. The bulk of these transfers arose from operational considerations, involving transfers of capital spare equipment for which one operating company had a near-term need that another could provide without threat to its own operations.

c. Mutual Assistance Payments

Amounts flowing to and from JCP&L under the Mutual Assistance Agreement have exhibited wide variability - - expected, given the circumstances for which management designed the agreement. For example, in the past five years, amounts paid from JCP&L ranged from about $770 thousand in 2017 to $11.7 million in 2020. Amounts paid to JCP&L ranged from about $450 thousand in 2019 to $3.4 million in 2017. We selected amounts paid to JCP&L in 2017 and from JCP&L in 2020 as a sample, for which we sought the most significant payment drivers. The amounts paid to JCP&L in 2017 arose in connection with Cleveland Electric Illuminating Company storm restoration costs in March and May of 2017. Tropical Storm Isaias in August of 2020 comprised the main driver for the amounts paid from JCP&L in 2020. Management reported that only the operating companies provided or received services and witnessed costs under the Mutual Assistance Agreement in the past 10 years.

d. Affiliate Billing

Processes performed using SAP provide a seamless, automated process for calculating charges among affiliates - - without, as described above producing electronic or physical bills that would typically apply to relationships with outside providers, where regular bills provide detailing and categorizing of charge sources. The configuration enables tracking products and services from transaction source to posting of payment, which occurs through money pool operation (addressed in the *Finance and Cash Management* Chapter of this Phase Two report and Chapter Eleven, *Financial Risks and Consequences of Parent and Affiliate Relationships* of the accompanying Phase One report). Transactions for all affiliates enter SAP companies via journal entries supported by various source inputs such (*e.g.*, payroll, PowerPlan for fixed assets, cash receipts, and cash disbursements). SAP generates an inter-company payable/receivable entry for each inter-company transaction. Charges from FirstEnergy SC create receivables at FirstEnergy SC and a corresponding charge at the designated benefitting entity. Netting of all inter-company payable/receivable accounts by entity to the appropriate inter-company payable or receivable account produces one general ledger balance at the end of the month for each. General Accounting validates that inter-company payable/receivable accounts remain in balance.

3. Allocation Factors

a. CAM-Specified Factors

We noted earlier in this chapter that the CAM lists 19 allocation factors, but the Service Agreement only 18. Management explained Square Footage, the factor in question, while listed in the CAM distinctly did not apply as a separate factor, but instead a basis for determining one of the CAM's applicable Direct Charge ratios.

We reviewed the calculations resulting in each currently used fact or as listed in Section VI of the CAM. The calculations we reviewed supported 15 different allocations (eight referred to as primary allocations and seven others). We observed a number of significant differences between those 15 and the CAM's list of 19. The following table provides a reconciliation between the CAM list of 19 and the 15 supported by calculations. The principal differences fell into four categories.

First, we found a wide gap in IT-related factors between the 15 calculations and the provisions of the CAM. Management stated that it no longer uses five of the IT factors set forth in the CAM. IT leadership appears to have determined that factors other than these now better reflect the circumstances in which it operates. Management observed that development of the now unused factors came in an area when enterprises typically dedicated servers and associated storage devices to single applications or business areas. FirstEnergy has modified the configurations of its data centers as technology and methods have come increasingly to favor shared server and pooled storage. Accepting the logic of moving beyond outdated allocation methods, doing so without accompanying CAM changes becomes the question. Moreover, enterprises like FirstEnergy should seek to maximize the use of cost causation in determining allocation factors. The non-CAM factors now used do better reflect system configurations, but in making the transition, management did not identify a more cost-causative factor, instead it continued the use of the multi-factor general allocator. We discuss later in this chapter observations about the extent to which FirstEnergy apportions costs under this general allocator.

Second, the 15 calculations included three of the CAM's four Multi-Factor allocations. Worksheets provided data for calculating the Multi-Factor Non-Utility factor, but not the factor's actual calculation. ***Third***, the 15 calculations provided included five for Direct Charge Ratios; the CAM provides only one. The calculation labeled as "Direct Charge – Square Footage" matches the CAM's "Square Footage" factor. However, as noted just above management advised that the CAM's Square Footage item does not comprise a "factor." The other four direct charge ratio calculations have no express CAM foundation, a situation we address below in more detail. ***Fourth***, the 15 calculations represented as one single factor two separate ones from the CAM (Daily Print Volume and Number of Billing Inserts).

CAM Allocation Factor Calculation Summary

Allocation Factor	In CAM	Calculation Provided
Multi-Factor-All	1	1
Multi-Factor- Utility	1	1
Multi-Factor-Non-utility	1	
Multi-Factor-Utility & Non-Utility	1	1
# of Customers	1	1
# of Shopping Customers	1	1
Headcount (Participating Employees-General)	1	1
Daily Print Volume/# of Bill Inserts	2	1
# of Computer Workstations	1	1
Direct Charge-Square Footage	1	1
Other Direct Charge Ratios	1	4
# of Payments	1	1
Participating Employees-Utility & Non-Utility	1	1
Gigabytes Used	1	
# of Invoices	1	
# of Intel Servers	1	
Application Development	1	
Server Support Composite	1	
Total	**19**	**15**

We found several additional examples of differences between allocation factors detailed in the CAM and those used in practice. First, we reviewed a management-provided comparison of 2020 versus 2021 allocation percentages. The response provided data for only six factors, which management explained as resulting from comparison of only the "major factors." Moreover, the six factors provided included one for the "Transmission Factor," which the CAM does not list, nor did management include it in the 15 calculations provided. Second, management reported that it uses "Prospective Capital Spend," another factor that does not appear in either the CAM or the 15 calculations, to allocate costs for space in several facilities. Third, the FERC Form 60 for 2020 Section XXI listing the methods of allocation included six factors not included in either the CAM or the list of 15 calculations (Transmission Factor, Stores Factor, Environmental Factor, Development Work, Workstation Support, and Network Services).

b. Minimizing General Allocator Use

Best allocation practice revolves around three principles applied in descending order of importance:

- Directly charging as much as possible
- Allocating as much of the remaining costs as possible under factors that directly relate them to what causes their incurrence
- Holding to a minimum the residual costs apportioned under general allocators costs not capable of any reasonable connection to cause.

We found appropriate emphasis on, attention to, and levels of direct charging. However, we found its use of general allocators very high, calling into question its use of the second principle, which calls for using cause-based allocators wherever applicable, after first maximizing direct charging. Examining quarterly reports of FirstEnergy SC charges to JCP&L disclosed 2020 direct charges of $39,922,127 (34 percent) and indirect allocations (consisting of those shown in the next table) of $77,451,479 (66 percent).

We also analyzed the total charges from FirstEnergy SC for the years 2017 through 2021. The results, shown in the following table, reveal some concerns about the level of reliance on the multi-factor allocator. Specifically, the table shows that on average, over the past 5 years, over 60 percent of the indirect allocations made by FirstEnergy SC use the multi-factor allocations. In addition, the percentage rose from 48 percent in 2018 to 72 percent in 2021. Thus, the amount of indirect cost allocations based on cost causative factors is only 28 percent in the most recent year completed.

The use of the multi-factor has increased, as the next table shows. We asked specifically for an explanation the increase from 48.3 percent in 2018 to 68.5 percent of charges indirectly allocated in 2020. Management attributed that increase to the fact that costs in cost centers that use the multi-factor increased more than did costs in centers that do not use it. Management also noted performance of annual cost center review to validate factors used by each cost center. The 2020 cost center review for factors for use in 2021 appears to have produced a change in 40 cost centers to multi-factor allocator use from other indirect allocators. Only one appears to have changed in the other direction. By comparison, in the previous two years a net change of only one cost center to multi-factor use occurred - - eight to and seven from multi-factor use..

Among the indirect allocation factors, excluding the multi-factor, headcount or customer numbers, the most obviously connected to cost causation, made up the large majority (75 percent) of the remaining allocations, further indicating rare use of cost causative allocation, apart from headcount and customer numbers.

FirstEnergy SC Direct and Indirect Charges Summary

Charge Type		2017	2018	2019	2020	2021	Total
Direct Charges	**Total**	**$29,358,958**	**$33,469,695**	**$33,733,541**	**$39,922,127**	**$38,856,630**	**$175,340,951**
Indirect Allocations	Multi-Factor (MF)	$41,730,702	$44,153,712	$49,721,087	$53,038,196	$57,971,296	$246,614,993
	Headcount	$14,407,987	$24,353,118	$7,393,571	$626,507	($1,694,862)	$45,086,321
	Customers	$12,942,834	$14,377,962	$15,957,653	$15,634,220	$17,210,061	$76,122,730
	Direct Charge Ratios	$7,146,441	$5,490,264	$6,053,397	$6,189,065	$6,308,241	$31,187,408
	Other	$2,389,586	$2,988,199	$2,281,596	$1,963,491	$450,224	$10,073,096
	Total	**$78,617,550**	**$91,363,255**	**$81,407,304**	**$77,451,479**	**$80,244,960**	**$409,084,548**
Less Multi-Factor	Total Indirect less MF	$36,886,848	$47,209,543	$31,686,217	$24,413,283	$22,273,664	$162,469,555
	Multi-Factor % of Total Indirect	53.1%	48.3%	61.1%	68.5%	72.2%	60.3%
	Headcount and Customer % of Indirect less MF	74.1%	82.0%	73.7%	66.6%	69.7%	74.6%

c. Direct Charge Ratio

The CAM includes “Direct Charge Ratio” among its 19 allocation factors, defining this factor as follows:

The ratio of direct charges for a particular product or service to an individual subsidiary as a percentage of the total direct charges for a particular product or service to all subsidiaries benefitting from such services. Indirect costs are then allocated to each subsidiary based on the calculated ratios.

This description offers a logical allocation method for costs centers with large percentages of direct charges. Allocating the remaining costs based on a ratio of the direct charges, as the description defines, makes sense in such cases. However, management does not calculate the factors labeled “Direct Charge Ratios” in that manner.

Management initially appears to have used in 2021 five Direct Charge Ratios not calculated as the CAM provides. “Direct Charge Ratio-Square Footage Used,” one of those five factors appears similar to the CAM’s Square Footage factor. The other four apply different measures particular to certain cost types. We found them reasonable, but not contemplated by the CAM. Management’s explanation of each of them repeated the CAM’s definition of Direct Charge Ratio, but went on to describe them in ways that differed from that definition. Moreover, management later indicated that it added six more Direct Charge Ratios in 2021.

Management observed that the CAM treatment “intentionally left broad” the Direct Charge Ratio to allow cost centers to interpret it as they felt appropriate.

d. Factor Calculations

We tested factor calculation using those applicable in 2021 through review of supporting work sheets and interviews with personnel familiar with the calculations. We found the worksheets provided supportive of the factors used, with all those examined exhibiting a reasonable allocation basis, but again, with a number of deviations from the CAM. We did not find these anomalies indicative of inappropriate or incorrectly calculated factors. They do show, however, that the CAM, whose purposes include governing allocations, no longer fully and accurately reflects actual practice.

For example, the "Participating Employees" factor uses per-company headcount of those participating in any of the Pension Plan, the Non-Qualified Pension Plan, or the Savings Plan. Employees participating in more than one get counted more than once. Management reported that the headcount factors used here came from sources differing from used for the Headcount factor. The JCP&L employees participating in the Pension Plan (1,366) exceeded the total number (1,314) used for the Headcount factor.

Other deviations included:

- We found the data required for the Multi-Factor Non-Utility factor, but no actual calculation of the factor itself
- We found a calculation for "Headcount," - - not a factor specified in the CAM, which addresses a "Participating Employees-General" that management described as the equivalent
- The worksheet for 2021 factors included "Number of Payments," which management described as not used anywhere
- The worksheets include the calculation of a "Transmission Multiple Factor" used in 2021; the CAM does not identify such a factor
- As noted above, calculations of the various Direct Charge Ratios did not conform to the CAM provisions.

We also found, as good practice entails, specification of the different applications of the multi-factor allocators; *i.e.*, sometimes to all entities, and in other cases to only those benefitting from particular products or services whose costs management has deemed not subject to direct charging or to more cost-causative factors.

The Multi-Factor-All factor assigns five percent of the costs it allocates to the parent, making the other entities to which it applies responsible for only their calculated share of the remaining 95 percent of the costs apportioned by that allocator. Quantifying five percent as the exclusion did not result from cost analysis, but as described by management, reflects a legacy of the GPU/ FirstEnergy merger, reflected in documents filed with the U.S. Securities and Exchange Commission in 2003. Management has observed that the 2005 BPU order approving the Service Agreement encompassed the five percent allocation.

A Multi-Factor-Utility factor apportions 100 percent of the costs to which it applies to the operating companies. A Multi-Factor-Non-Utility operates similarly for costs so apportioned only to non-utility operations. The CAM does not specify when or how to apply the Multi-Factor's All, as opposed to the Multi-Factor Utility and Non-Utility factors, leaving that discretion to individual cost centers when choosing the factor to apply to their costs.

e. Off-Cycle Changes to the Factors

The allocation factors normally undergo annual updating, following finalization of second quarter financial results. These updates apply the most current data to make changes that become effective at the start of the next calendar year. Adjustments during a year may undergo analysis and become effective in the case of major business change; *e.g.*, addition or disposition of entities or lines of business. Management reported three principal in-year changes since 2010:

- March 1, 2011 FirstEnergy's combination with Allegheny Energy, Inc
- February 1, 2017 adjustment to reflect creation of Mid-Atlantic Interstate Transmission LLC (MAIT)
- July 1, 2020 adjustment to reflect agreement to provide FirstEnergy's commercial power and energy businesses in bankruptcy to continue taking services from FirstEnergy SC through June 30, 2020.

A [redacted] internal audit report addressed documentation regarding events triggering in-year allocation factor changes. Management reported the addition of a presentation for management review of the results of the annual cost-center review and of a procedure instituted in December 2020 to govern review and approval of any in-year factor requested by any FirstEnergy SC cost center. While both represent positive changes, neither address the recommendation for identification of triggering events warranting in-year factor reviews and changes.

f. Allocation of Cyber Security Costs

Management has employed six different measures for apportioning FirstEnergy SC cybersecurity costs. Three reflect Multi-Factor variations that affect JCP&L. Another, Transmission Factor described above, drives costs allocated to the transmission companies. The last two consist of direct charges. Management described the direct charge to FirstEnergy SC as arising under a capital project providing functionality and benefit to all affiliates. Annual BPU cybersecurity costs account for the other direct charge.

4. Time Reporting

Management generally described FirstEnergy SC and JCP&L time reporting policies since 2021 by observing that "employees are expected to report their time regularly and accurately," and that "new employees are expected to be trained concerning time reporting within a month of hire by their supervisor or a co-worker as defined in the new hire onboarding materials." Six specific documents applicable to time reporting include:

- Time Entry for New Employee, addressing mechanics of time entry, including how to set up time defaults, and how new employees can learn their default cost center from their supervisor
- Time Entry for Employee Quick Reference Card, providing a shortened version of the Time Entry document and noting the importance of setting up defaults for regular time entry
- Time Report Approval Process, providing detailed steps in supervisory approval of time reports
- Time Report Approvals, defining the workflow of the time approval process

- Manual Timesheet Correction Process, addressing how to make necessary corrections to time reports
- Manual Timesheet Correction, providing a form for making corrections.

These documents provide appropriate instructions, but include no treatment of the importance of accurate time reporting or of direct charging where possible. Rather, the document's focus on use of time coding addresses the use of "pre-coded" or default values to reduce time spent in time reporting.

5. Training and Communication

We examined how management communicates and underscores the importance of appropriate time and expense coding for charging and allocation purposes. Management provided a statement of its expectation that supervisors or co-workers will train new hires in their first month as defined in onboarding materials. Management also described time-sheet approval as a decentralized process, under which persons managing or supervising employees ensure that:

- Their employees make time sheets entries for direct project or cost collector codes when "performing work for a specific entity"
- Remaining time in each employee's cost center gets "allocated through SAP based upon the FirstEnergy Service Company CAM."

In addition to the time-reporting documents listed above, management offered three similar instructional documents addressing how to report expenses and the approval process. Management also provided a procedure document describing the calculation of allocation factors. Again, providing useful instruction and background, the documentation offered did not address the importance of appropriate time and expense coding and of maximizing direct charging. One of the documents provided (Employee Expense Entry Training Guide) noted its use as a supplement to instruction led training.

Management does not provide programmed classroom or on-line training for time recording. It relies instead on discussions and review with new hire supervisors and peer advisors to promote understanding of the documents that guide time and expense reporting. Management does not require representations or other documentation acknowledging the provision or receipt of the expected supervisor and peer training. A request for periodic training and communications about time charging elicited three, apparently "one-off" occasions:

- 2014 training on "how to direct charge time for Corporate departments"
- 2019 training "to certain FirstEnergy SC employees regarding direct vs. indirect costs"
- 2021 training to the Legal Department "on direct charging time."

The 2014 training did cite direct charging as the best approach, but highlights Multi-Factor-All as the most common method. Management reported that the 2014 training has remained "available as an ongoing resource for employees to reference." The 2021 Legal Department instance goes the furthest, citing direct charging as the best method and noting the importance of doing so in lieu of defaulting to the overall department cost center. It also stated that direct charging produces more accurate alignment of costs among entities served.

Nevertheless, no regular program for reinforcing sound time recording habits has existed. However, management reports the 2021 Legal Department training as a pilot for future use and stated that, in contrast to historical experience, it will move to mandatory annual training to all employees on direct versus indirect coding through live instruction or on-line internally through the Map My Learning module that tracks employee learning and development. Management reports completion of the training by External Affairs personnel with expected completion FirstEnergy SC-wide by mid-2022.

6. *Internal Control / Audits*

a. Controls

We examined the SOX compliance audit reports and supporting detail around each of these cost allocation SOX controls. Two SOX controls addressed below give responsibility to General Accounting to address cost allocation processes for affiliate transactions. ANR-CTL-1171-00- GA Review of Allocation Factors describes the annual review and approval process for allocation factors. ANR-CTL-1088-00 – GA Review of Cost Centers describes a review of all FirstEnergy SC cost centers to ensure that the allocation of residual costs employs appropriate allocation methods and charges the appropriate companies. Other SOX controls address timely approval of all timesheets and complete charging out of all costs for each FirstEnergy SC cost center each month. Other operational controls address timesheet approval and mutual assistance transactions.

b. Internal Audits

Our request for copies of all internal audit reports regarding affiliate transactions or cost allocations conducted since 2010 generated [redacted] reports. A number of them did not have implications for JCP&L. We examined [redacted] relevant JCP&L Affiliate Relations and Associated Transactions audits - - [redacted] each from [redacted]. Internal Audit found the underlying cost allocation processes well controlled in all [redacted] instances. We examined audit workpapers documenting key data, including the risk control matrix, issues identified, and field work results. Management reported the performance of full, comprehensive cost allocation audits every [redacted] and the conduct of cost allocations testing as part of SOX audits. These audits also address direct charges under the Mutual Assistance agreement.

c. Annual Review of Factors

Calculation of allocation factors for the ensuing year apply data for the twelve month period ending June 30 of the current calendar year. Similarly, they use June 30 for balance sheet accounts. The General Accounting Service Supervisor conducts a preliminary review to validate agreement between the data and support schedules and to consider calculation accuracy and reasonableness. A secondary review performed by the Manager-General Accounting Service also occurs. Generation of a report ensures verification of all allocations and that all allocation percentages combined equal 100 percent. After use of the new percentages for the first time in January, General Accounting selects a ten percent sample of the cost centers for review to ensure that the allocations match the updated percentages.

Our review of 2020 allocation factors showed evidence of required approval and disclosed data supporting the 10 percent sample review performed by General Accounting for the 2020 factors.

That review covered 124 cost centers, as compared with the 94 required to reach 10 percent. Our review found that 81 of the cost centers used the Multi Factor – All allocator and the remaining 43 used the Multi-Factor Utility allocator. The review did not include any cost causative factors. Management explained that its testing of only these two Multi-Factor allocations resulted from their having the largest residual costs dollar value.

d. Annual Cost Center Review

The presentation packages documenting the 2016 through 2020 Annual Service Company Cost Center Reviews of factors proposed for the subsequent year proved reasonably complete and informative. Materials included a list of review participants, statistics detailing the number of cost centers, the number of changes requested by the cost centers, reasons for the requested changes, and calculation of the financial impact of the requested changes. We raised specific questions about them with personnel engaged in their preparation.

We found a significant amount of change from year to year in the number of cost centers and the allocation methods employed by them. The following table depicts that churn, measured by number of cost centers *Added*, *Closed*, *and Changed*, either by the *Allocation Method* used, or by the *Entity Supported* by the cost center. Management cited changing business needs as the cause. The presentation packages explained some of the larger changes, which have continued to remain significant.

Cost Center Changes by Type

	Added	Closed	Allocation Method	Entity Supported
2017	152	155	73	32
2018	62	67	9	31
2019	28	35	7	40
2020	22	40	59	24
Average	66	74	37	32

7. *Impact on JCP&L*

a. Charges to JCP&L

We examined JCP&L's share of the total allocations from FirstEnergy SC over time to identify whether their proportions changed materially. The next table shows the results from 2017 through 2021. The JCP&L share has increased steadily since 2018. The largest increases are from 2018 to 2019 (13.7 percent), and from 2019 to 2020 (9.6 percent). That result appears directionally correct, considering the transition undergone in the FirstEnergy commercial power and energy businesses over that period. As service levels to them diminished, the base of other entities over which to spread them dropped as well, making the resulting percentage shares of the remaining entities larger. Correspondingly, a reduction in costs should over time accompany those diminished services. If so, a smaller total cost to spread moderates the effect of the increased percentage.

Management explained the increased JCP&L percentage share from 2018 to 2019 to three principal factors - - two adding costs and one reducing them. JCP&L's share of allocated O&M (one factor in the Multi-Factor allocation) rose due to higher tree trimming contractor costs and an increase in labor and employee benefit costs. JCP&L also experienced an increase in Direct charges from FirstEnergy SC for capital IT project and transmission program management costs. Lower storm costs offset these two increases in both capital and O&M categories.

The mix of factors explaining the continuing increase from 2019 to 2020 changed somewhat. Directly charged capital costs increased, driven by IT projects, transmission program management, energy-efficiency projects, and substation and service-order projects costs. Storm cost experience reversed from the prior year, producing an increase in 2020. The separation of the entities that emerged from bankruptcy in early 2020 and that stopped taking services from FirstEnergy SC by mid-year reduced the base of entities over which to spread indirect costs from cost centers using the Multi-Factor-All, Multi-Factor-Utility/Non-Utility and Headcount allocation methods. That reduced base left all the operating companies with a source of increase in their shares of such costs.

As one would expect directionally, total cost reductions as FirstEnergy transitioned out of serving the needs of its commercial power and energy business meant that a higher percentage share to JCP&L nevertheless produced lower total costs from FirstEnergy SC from 2018 through 2020. Many factors have affected JCP&L costs from FirstEnergy SC over the years as the following table shows. Changes in those factors make direct observations about cost reasonableness from just cost trends incautious. However, the 2.5 percent compound growth rate in charges to JCP&L from 2017 through 2021 does not appear anomalous from the perspective of allocation bases, particularly considering that increasing consolidation of central services has produced one categorical source of increase in total service company costs.

Allocations from FirstEnergy SC to JCP&L

Year	Total FESC	TO JCP&L		JCP&L Change	
	Allocations	Dollars	Percent	Dollars	Percent
2017	$963,142,951	$107,976,508	11.2%		
2018	$1,121,163,241	$124,832,950	11.1%	$16,856,442	15.6%
2019	$909,759,060	$115,140,845	12.7%	($9,692,105)	-7.8%
2020	$846,308,842	$117,373,604	13.9%	$2,232,759	1.9%
2021	$836,975,672	$119,101,592	14.2%	$1,727,988	1.5%
Period Change				**$11,125,084**	**10.3%**

b. JCP&L Review of Allocations

We inquired into what information and activities ensure, from a JCP&L perspective, that charges and allocations to the company from FirstEnergy SC occur fairly and reasonably. Virtually all those responsible for developing, approving, reviewing, analyzing, applying, and changing allocation factors work under FirstEnergy SC direction. Such personnel also manage the data and calculations that produce the resulting charges, which come through an SAP process that does not provide monthly bills in a form typical of product and service billings in the marketplace. Testing of these factors exists, but not at a level managed by JCP&L leadership or personnel.

FirstEnergy SC management cited JCP&L review of affiliate costs charged to it through the "monthly financial close process." Management identified Business Services personnel assigned to JCP&L as those responsible for conducting that review. Business Services personnel work under the direction of the FirstEnergy-level Vice President, Controller & Chief Accounting Officer. From within this organization, a Director, Utility Business Services has responsibility for a three-analyst team that provides a variety of controller-related functions for the states of New Jersey, Maryland, and Maryland combined. The Business Services member identified as responsible for JCP&L matters for these three states reported that reviews of New Jersey financial information takes an overall perspective, analyzing fluctuations from period to period and against budget for management reporting purposes. That review does not encompass a review of FirstEnergy SC allocation processes or the development and application of allocation factors or their specific cost consequences for JCP&L. Nor does this role extend to a review of the many cost centers whose costs JCP&L bears except for providing input to this. We ultimately understood management to agree that no JCP&L group or individual has responsibility for or conducts analyses or reviews of the allocations from FirstEnergy SC to JCP&L.

8. NJ BPU Cost Allocation Requirements

The BPU's December 14, 2005 order in Docket No. EM02100777 requires that JCP&L file two periodic cost allocation reports. The first, a quarterly report, displays FirstEnergy SC charges to JCP&L by functional group, split between direct charges and indirect charges. The second comprises an annual comparison of new allocation factors with those of the prior year, accompanied by explanation of any year-to-year variations exceeding five percentage points. We examined the reports from 2016 through the first quarter of 2021.

9. Commercial Power and Energy Separation

A March 31, 2018 filing brought FirstEnergy's entities engaged in commercial power and energy operations under Chapter 11 of the United States Bankruptcy Code. Those entities included FirstEnergy Solutions Corp. (FES) and FirstEnergy Nuclear Operating Company (FENOC). The Chapters that address *Organization and Executive Management* and *Planning and Budgeting* of this Phase Two report describe structural, contractual, and other efforts to continue to provide these entities with common services, pending bankruptcy resolution. Those chapters also describe the FE Tomorrow initiative, launched in January 2018 to redefine and restructure the resources providing common services as FirstEnergy transitioned to a business model essentially dedicated to electricity transmission and distribution. Actions taken to support that transition included a large-scale Voluntary Enhanced Retirement Program (VERP).

Actions like the VERP reduced personnel-related FirstEnergy SC charges, but had an opposite effect on costs related to the assets FirstEnergy SC used to supply services. The next table shows depreciation costs for FirstEnergy SC assets from 2017 to 2021 and portions charged to affiliates. The table shows a fairly consistent amount of total depreciation on FirstEnergy SC assets from 2017 through 2021. However, a significant shift in who took responsibility for shares of those costs occurred in 2021, the first full year in which the entities that had emerged from bankruptcy no longer took services from and therefore had no allocations from FirstEnergy SC.

The operating companies bore about two thirds of the relevant depreciation costs from 2017 through 2020. That share rose to more than 97 percent in 2021. JCP&L's share of those costs rose by $3.1 million (compared to its 2019 costs - - a 44 percent increase.) Management reported no material sales or other disposals of depreciable assets, given that their costs arose predominately from systems that remained necessary for use by the operating companies even after departure of the commercial power and energy business. Consequently, JCP&L, like the other operating companies had responsibility for legacy costs for assets designed and operated with that former business in mind.

Depreciation Charges for FirstEnergy SC-Owned Assets

Item	2017	2018	2019	2020	2021
Total Billed from FESC	$69,326,335	$68,739,693	$67,178,489	$60,516,672	$66,903,621
Billed to Operating Companies	$44,715,485	$44,461,279	$43,626,558	$40,144,412	$65,034,969
Billed to Other Subsidiaries	$24,610,850	$24,278,415	$23,551,931	$20,372,260	$1,868,652
Billed to JCP&L	$7,480,108	$7,010,302	$7,082,868	$7,421,749	$10,229,589
Operating Company % of Total	64.5%	64.7%	64.9%	66.3%	97.2%
JCP&L % of Total	10.8%	10.2%	10.5%	12.3%	15.3%

10. DOJ, FERC, SEC, and Internal Investigation Implications

a. Initial Vendor Examination

Management provided an "Overview of Certain Payments and Discussion of Customer Refunds" dated March 17, 2021. Management reported cost misallocations among the sources of the payments and the subject of the refunds. We sought to ensure that a full, complete, and objective examination and identification of amounts properly subject to refund had occurred. Management proved unwilling to provide us with meaningful detail about the circumstances leading to internally directed efforts in these regards (explained in Chapter Twelve, *External Affairs - - The "DOJ Investigation"* of the accompanying Phase One report). We did not know then the nature or breadth of the circumstances leading to the initiation of those internally initiated efforts. Lack of transparency on the part of FirstEnergy leaves us in essentially that same position.

A robust examination of affiliate transactions and costs generally and an interest in consequences for JCP&L customers specifically associated with events leading to and following the investigation by the Office of the U.S. Attorney for the Southern District of Ohio forms a material part of our work scope. Validating the sufficiency of those internally initiated efforts to identify and propose customer-focused remedies would go far in addressing the affected elements of our work scope.

We sought to obtain information from which we could determine whether sufficient assurance existed to place confidence in the completeness of company-made adjustments to amounts specifically included in revenue requirements underlying JCP&L rate filings. Moreover, we consider other issues of corresponding importance:

- Whether accounting information (whether or not underlying a rate filing) treats affiliate costs fairly, objectively, accurately, completely, and timely
- Whether systemic account classification or cost allocation issues existed or remain

- The responsiveness of any revised policy, procedure, and practice remediation
- A failure to consider those issues leaves open the question of what may happen to rates, which circumstances about what has happened show as a real risk for JCP&L
- We have received representations that comprehensive, objective, sufficient review supported by outside expertise occurred and that it has proven sufficient to address not only known but potential problems.

We have no independent basis for agreeing with those representations, however. As the immediately following section of this chapter describes, recently disclosed circumstances reinforce the need for independently validating them.

b. Additional Internal Review Recently Commenced

We learned after completing the accompanying Phase One report of new affiliate cost and lobbying concerns under internal review. They arose in response to inquiries made in connection with this Phase Two report and addressing outside costs for the formerly consolidated external affairs and communications functions at the FirstEnergy level.

Historically, the communications function reported commonly with external affairs under FirstEnergy's Senior Vice President, External Affairs. FirstEnergy terminated this executive, along with its CEO and lead marketing and branding executive, in October 2020, following an investigation regarding Ohio legislative matters and eventually forming part of the events disclosed in connection with the Deferred Prosecution Agreement later entered with the Office of the U.S. Attorney for the Southern District of Ohio. We asked management on January 14, 2022 to provide a breakdown detailing the Communications and External Affairs organization changes that produced the large drop in costs and a mapping of costs by category to those new organizations.

We also sought that information to provide a framework for examining cost changes by source (*e.g.*, payroll, professional and contractor, material and equipment, among others). The leadership of these groups by the Senior Vice President, External Affairs for much of the period and the circumstances surrounding that executive's departure gave importance particularly to the large share of costs assigned to a catchall "other-than-labor" category for which discretion exists in determining where to capture non-labor costs not assigned to other defined categories such as those listed earlier in this paragraph. The next table shows those amounts as large in the absolute, particularly so as a percentage of the total costs of the groups involved. Note that they exclude consultants and professional service providers, expected to provide services in organizations like those involved. Costs assigned to the category established for these resources averaged only about $10,000 per year.

FirstEnergy External Affairs and Communications Costs

Category	2017	2018	2019	2020	2021 Q3
Other Other than Labor	$19,612,951	$12,144,905	$17,038,781	$10,514	$958
Total	$31,377,592	$23,791,630	$26,427,156	$716,111	$96,134
Other Other than Labor Share	***63%***	***51%***	***64%***	***1%***	***1%***

As we explain below, a sizable portion of the 2020 drop shown in the table resulted from the move of Communications out of the organization that housed it in the preceding years shown in the table. We concluded, as Chapter Twelve: *External Affairs - - The "DOJ Investigation"* of our Phase One report addresses, that management failed to disclose sufficient information to give confidence that what has been described as the Vendor Invoice examination was sufficiently comprehensive to identify and address all sources of improper or insufficiently substantiated charges to JCP&L (see Conclusion #6 from that chapter).

Given the nature of the work of the organizations here and their operation under the Senior Vice President, External Affairs, we anticipated that the breakdown of costs requested would provide a test for examining if and how management reviewed the organization's large body of miscellaneous other-than-labor costs. The table shows a large drop in those costs in 2020 and further in 2021 as events unfolded following the June 2020 U.S. Attorney's announcement of a federal grand jury indictment of the Speaker of the Ohio House of Representatives. That indictment alleged violation of the racketeering statute by honest services wire fraud and receipt of millions of dollars - - with underlying events and circumstances later tied to the Deferred Prosecution Agreement. The request we made in January of 2022 sought information from which we could:

- Distinguish sources of costs as between organization changes and reductions in certain categories of those costs
- Provide a foundation for examining the nature of the miscellaneous other-than-labor costs.

We received no answer until May 11, 2022. It showed the changes in costs arising from movement of the Communications group to another organization (Marketing & Branding) in 2020 and then to the CFO's organization in 2021. The response cited reductions in advertising and sponsorship costs as the principal source of reduction in Communications other than labor costs from 2019 to 2020. Management attributed further reductions in this category occurring from 2020 to 2021 primarily to reduced advertising costs and commencement of assigning sponsorship costs to a cost center that holds them to the FirstEnergy Corp. level (*i.e.*, ends charging subsidiaries, including JCP&L, for them). The response added that:

> *FirstEnergy is also in the process of conducting a review of Lobbying, Sporting and Other Marketing Agreements, Advertisements, and FE Products and FE Home and, in particular, how costs were included in customer rates.*

This review appears to have begun after what we understood as already completed earlier efforts that included the Vendor Invoice examination designed to identify costs inappropriately charged to JCP&L and the other operating companies. New factors arising since completion of those earlier efforts include our January 2022 request described above and a FERC audit (described below) recommending action with respect to lobbying costs and their allocations. The review now underway concerns functions and thus cost sources under the responsibility of the two senior vice presidents terminated in October 2020. That factor opens to question why the costs at issue would not have formed part of the earlier completed reviews. The origins of those earlier reviews include events and circumstances associated with the terminated senior executives.

We understood efforts to identify and address improper or insufficiently substantiated charges to JCP&L as completed by the time of our January 2022 inquiry. Ten days following our January request, a confidential, January 24, 2022 letter from counsel for FirstEnergy Corp. confirmed the position that the investigation was both comprehensive and sufficient enough to identify and address the completeness and propriety of cost charged to JCP&L. We attach those portions of the confidential letter describing actions undertaken in reaching that position.

The examination remains underway and without an estimated end date provided. That a new examination, as opposed to recourse to the one described as comprehensive and conclusive, has lately proven necessary, further emphasizes the concern raised in the Phase One report regarding the inability to place confidence in the scope, detail, conduct, completeness, and accuracy of the findings of that earlier work. The circumstances that existed when we expressed that concern thus remain, augmented by the facts just made available. It thus remains important for FirstEnergy to disclose details necessary for finally sharing its confidence that it has performed examinations sufficient to conclude that it has discovered all occasions and amounts of improper charges and allocation to JCP&L.

We continue to consider transparency from the company and verification of its confidence in order. During an executive FirstEnergy interview, counsel responded to our expression of this point by stating that we (presumably meaning the BPU) could undertake its own review to secure that verification. With concerns and lack of access to needed information continuing, that time consuming, expensive exercise, perhaps repeated across multiple jurisdictions over or through a coordinated effort may prove the only way to secure transparency and confidence. Consuming the time and effort that would take would be unfortunate.

The response to the information request discussed above noted that the recently initiated review includes lobbying. Management also responded recently to another request that cited a review of lobbying undertaken in response to the FERC audit cited above. We asked recently about plans to comply with recommendations of a February 2022 FERC audit report that, among other things, would require an analysis of internal and external lobbying costs and an addressing of those "improperly charged to utility operating accounts." The response cited federal statutory and FERC regulatory provisions as precluding the provision of information at present, but promises to provide the BPU, after its completion, "*details about the refund report, as relevant to JCP&L*" and "*details, as relevant to JCP&L*" regarding final submission to FERC regarding overall compliance with audit recommendations. It remains uncertain when the materials will reach final form and what portions the BPU will receive (as opposed to summarized in FirstEnergy's words).

Before receiving this response, we considered the BPU's awaiting of an opportunity for direct review of materials from the FERC audit as an option for determining next steps in assessing potential JCP&L retail rate consequences from related accounting issues. However, the familiarity of the response's tone and preservation of company options does not (given how management has so far viewed transparency) provide confidence that eventual disclosures of the types quoted above will prove particularly helpful, as compared with proceeding now to require an independent examination, should the BPU find the need for further closure.

c. JCP&L Responsibility for Related Costs

Chapter Twelve, *External Affairs - - The "DOJ Investigation"* of our accompanying Phase One report addressed large costs more directly associated with circumstances leading to and following the criminal investigation by the U.S. Attorney's Office. We here examined other sources of costs to verify that JCP&L has not borne costs also more properly assignable to those matters. We considered several cost sources relevant:

- Costs of remediation incurred to correct the issues leading to the investigations and their aftermath
- Actual costs of examination and investigation related to the circumstances leading to and following the investigation and actions by the U.S. Attorney's Office and FERC and Securities and Exchange Commission (SEC) actions and proceedings, incurred by employees and outside resources
- Cost incurred by employees and outside resources expended in connection with this engagement to prepare for and attend interviews, to prepare responses to data requests that related to the first two sources.

Management has reported the charging of remediation and enhancement actions to the Office of Ethics and Compliance, making 14.54 percent of them allocable to JCP&L. Management has stated that it has accounted for internal and external costs related to investigation and actions by the U.S. Attorney's Office and FERC and (SEC) actions and proceedings so as to keep them at the FirstEnergy Corp. level, without charges or allocations to JCP&L.

The portions of this engagement that examine matters related to the investigation and actions by the U.S. Attorney's Office and FERC and (SEC) actions and proceedings have the same cause as those addressed in the second bullet above. Cost treatment for JCP&L purposes should follow that same causation. However, management stated that:

> *the cost of audits or investigations, including internal labor costs, related to each state regulatory proceeding are being charged to the respective utility.*

Efforts to confirm this approach produced a response that the cost of "time related to any drafting, processing or reviewing of data requests, outside counsel participating in senior executive and Board of director interviews and certain document productions as part of the BPU Management Audit" will remain at the parent.

The following table summarizes 2020 and 2021 costs charged to costs collectors established by FE to respond to the DOJ, SEC, and FERC matters and investigations.

Charges for DOJ, SEC, and FERC Matters

Cost Element	2020	2021	Total
Direct Labor	$0	$615,000	$615,000
Dues, Fees, Licenses	$29,415	$2,670	$32,085
General Business and Travel	$2,665	$121	$2,785
Labor Allocations	$929,680	$965,272	$1,894,952
Materials and Equipment	$5,399	$16,854	$22,253
Other OTL Total	$575,183	$3,686,404	$4,261,587
Professional and Contractor	$22,210,789	$63,863,284	$86,074,073
Total	$23,753,130	$69,149,606	$92,902,736

JCP&L, however, will bear costs normally incurred in a management audit. Management also reported that it has:

> *not tracked nor estimated costs related to interviews, data requests, and other activities for any specific portion of the NJ BPU audit.*

11. PJM and FERC Roles in Transmission Planning

PJM long conducted transmission planning processes transferred to it by transmission owners in the PJM region (including JCP&L) under FERC jurisdiction in fundamental respects. PJM has also coordinated a process for incorporating stakeholder input into planning other, "Supplemental" projects to meet local needs. The PJM authority to form plans as it determines appropriate applies to areas specifically transferred to it by the transmission owners. It does not extend to areas where it has a role in the stakeholder process. In the latter case PJM may override any supplemental projects that conflicts with the plan over which it does have authority. However, for supplemental projects, the transmission owner(s) involved retain control over what they propose to place into their transmission plains.

The planning authority of PJM extends to projects designed to address reliability criteria violations, operational performance issues, and congestion constraints. The supplemental projects include those that address related, but distinguishable needs:

- <u>Equipment Material Condition, Performance, and Risk:</u> addressing degraded equipment performance, material condition, obsolescence, equipment failure, safety, and environmental impact to ensure safe and reliable transmission system operation
- <u>Operational Flexibility and Efficiency:</u> optimizing configuration, duty cycles, and restoration capability; and minimizing outages to reduce exposure to outages or to improve restoration times, taking advantage of opportunities thereby presented to bring components to current standards and design principles
- <u>Infrastructure Resilience:</u> anticipating and reducing magnitude and length of customer impacts from disruptive weather, geo-magnetic, physical and cyber security challenges, and critical infrastructure reduction
- <u>Customer Service:</u> accommodating new, increasing, or future load reliably
- <u>Other Drivers:</u> meeting other objectives, such as industry recommendations, potential generation retirements, technological pilot projects, and state policy objectives.

PJM conducts a Regional Transmission Expansion Process (RTEP). FirstEnergy's Transmission Planning and Protection department (TPP) and FirstEnergy Transmission Services identify projects for submission to PJM under the regional transmission organization's RTEP. PJM's RTEP process applies to baseline projects under its planning authority and to supplemental projects.

The FERC opened in August 2016 a proceeding to examine PJM transmission owner compliance with Order No. 890 obligations regarding planning for Supplemental Projects. That order requires coordinated and open local and regional planning processes that give stakeholders opportunity for meaningful input. PJM and the transmission owners in its region filed PJM Tariff amendments, including Attachment M-3 revising methods and procedures for addressing those obligations. The FERC compelled changes it deemed necessary to make Attachment M-3 provisions compliant with Order No. 890, accepting revised M-3 planning process provisions in September 2018.

M-3 process design seeks an "open and transparent framework" for planning supplemental projects. It employs a defined sequence of events designed to bring together the PJM transmission owners, which include JCP&L, and stakeholders:

- PJM transmission owners describe for stakeholders the criteria, models, and assumptions they use for planning at an "Assumptions Meetings"
- Transmission owners present transmission needs and discuss them and stakeholder needs at a "Needs Meeting"
- Transmission owners present to Stakeholders potential solutions to those needs at a "Solutions Meeting"
- Stakeholders have an additional opportunity for input
- "Local Plans" documenting solutions become part of the integrated PJM RTEP.

We reviewed JCP&L's approved transmission capital budgets for 2016 through 2022, showing separately the PJM Supplemental transmission subset. The table below on the first line shows budgeted transmission isolating the Supplemental portion for each year since 2016.

Transmission Capital Budget Summary

Category	2016	2017	2018	2019	2020	2021	2022
Total	$188,668,736	$174,275,134	$156,066,112	$140,000,003	$173,483,065	$174,953,398	$322,571,418
Supplemental $	$153,431	$71,327	$3,003,978	$5,187,071	$51,319,557	$34,891,029	$51,726,477
Supplemental %	0.1%	0.0%	1.9%	3.7%	29.6%	19.9%	16.0%

The significant increase in JCP&L costs for this work in 2020 (from 2019's $5 million to $51 million) reflects advancement of the PJM planning for such projects. Transmission operators develop and provide proposed Supplemental projects to PJM, offering 310 proposals through the first 11 months of 2020. PJM incorporated 116 projects in to its RTEP.

PJM's governing board does not approve the local plans that address individual transmission owner supplemental projects. Unlike the base RTEP components, transmission owners retain authority for proposing these supplemental projects. PJM's roles lie in facilitating and coordinating the Attachment M-3 process and in ensuring no conflicts between the owner-proposed projects and those that form part of base RTEP elements.

Beyond the base and supplemental project components of the RTEP, transmission owners also plan a variety of "asset management projects." This work includes facility maintenance, repair, and replacement. Replacements include PJM transmission facilities reaching the end of their useful life ("EOL Needs"). Other needs include enhancing infrastructure security or system reliability and incorporating automation. A 2020 change approved by the FERC brought certain asset management projects within the scope of the Attachment M-3 process, while retaining at the transmission owner level final authority for proposing them. No change occurred to the allocation of costs, which Schedule 12 of the PJM Tariff governs.

12. FirstEnergy Transmission Planning

FirstEnergy's Transmission Planning and Protection department (TPP) has planning responsibility for all transmission in which affiliates have interests, including JCP&L. Management cites as providing safe, secure, and reliable transmission service to customers as the overall goals of transmission planning, identifying projects based on the operational and reliability guidelines and criteria to build a capital program that serves transmission needs and objectives.

Three TPP documents provide primary guidance in transmission planning for JCP&L and the other operating companies: Transmission Planning (TP) Criteria, Energizing the Future (EtF) methods, and End of Life (EOL) methods.

TPP prepares the document that outlines applicable criteria, and the group also has responsibility for its maintenance and implementation. The TP document in effect since November 5, 2019 calls for application of North American Electric Reliability Corporation (NERC), Reliability First (RF), and PJM requirements as planning standards. Transmission planning criteria and related documents address:

- *Voltage level*
- *Voltage and transient stability*
- *Load curtailment*
- *Voltage regulation*
- *Reactive power*
- *Short circuit*
- *Facility Ratings*
- *Transmission Connected Facilities*
- *System Protection Designs*

A program that FirstEnergy terms EtF (Energizing the Future) identifies transmission system investments. EtF programs seek to improve the health, reliability, and capacity of the system in meeting existing and new loads. EtF guides efforts to meet FirstEnergy company obligations under the PJM Regional Transmission Expansion Planning (RTEP) process and to

- *Evaluate system health and inventory*
- *Upgrade equipment condition*
- *Enhance system performance*
- *Improve operational flexibility*
- *Improve network IT infrastructure*
- *Address cyber and physical security*

The EtF program establishes project identification and assessment guidelines for six project types that address several types of needs:

- *System Condition*
- *System Performance*
- *Operational Flexibility*
- *Communications: Reliability, Capability, and Resilience*
- *Security*
- *Transmission Asset Health & Inventory*

Where deemed appropriate, management may propose work identified through the EtF process to PJM as Supplemental Projects.

Management applies its EOL guidelines to address larger (100kV and above) transformers and lines. The Transmission and Substation Services department applies them to assess the health and condition of assets approaching the ends of their useful lives to determine failure risk, growing costs of maintenance, and technological obsolescence. Factors considered include performance and maintenance histories, equipment criticality and risks, age, and other considerations that may apply to specific facilities.

Typical elements of EOL review for larger transformers include:

- Alarm and device testing
- Bushing age, failure history, and existence of monitoring capability
- Grounding issues
- Dissolved gas in oil
- Insulation power factor
- Clamping, blocking, steel core, and core and coil support structure inspection
- Loading and fault history
- Other moisture content, oil, oxygen, cooling, combustible gas, turns ratio, environmental considerations, or tap changer status.

EOL considerations for transmission structures include factors such as:

- Access to the structure
- Structural steel components
- Wood components
- Weathering
- Hardware (*e.g.*, insulators and clamps)
- Grounding
- Foundations.

EOL considerations applied to transmission line conductor replacement include age (50-60 years of service life) and other factors such as the number of splices, conductor core/strands, connectors, corrosion, heat damage, span length, metal type and shield wires.

We asked for details about all electric transmission projects submitted to and reviewed by FirstEnergy for approval since 2010. Management changes in tracking software made management unable to provide details for projects pre-dating 2017. The details we sought included, among other elements, project descriptors, justifications, and impact on supply, economics, and reliability. The response listed more than 330 numbered projects with initial estimates totaling $310 million. Our review of the justifications, while in summary form, identified reasons consistent with the reasons commonly used to justify transmission capital expenditures.

13. Allocation of Transmission Costs

Capital investments in JCP&L transmission projects include investments in reliability projects, the Supplemental projects discussed above, and other categories. Management reports that it charges all transmission plant-in-service capital costs 100 percent to project owners. JCP&L does not share ownership in transmission assets, meaning that it bears responsibility for all of their costs and no costs for assets owned by others. JCP&L has no shared transmission sites or projects.

C. Conclusions

1. The FirstEnergy CAM requires significant revision to conform it to actual practice. *(See Recommendation #1)*

As a governing document establishing the appropriate allocation factors to use, the CAM should, but does not, reflect actual cost charging and allocation methods, factors, and calculations. The CAM fails to reflect factors actually used and describes factors no longer used. The CAM provisions for the Direct Charge Ratio do not conform to how management uses it. The failure to review the CAM for updating since first use in 2003 has contributed to the mismatch with actual practice. Even apart from the actual inconsistencies found here, good practice calls for regular CAM updating and the failure to do so speaks ill of the diligence paid to ensuring fair, complete and accurate cost charging and allocation. Management has stated plans for annual CAM review and update of the CAM, but without an intent to include changes to the allocation factors. We do not find prejudging that result consistent with the kinds of regular CAM review and updating that good practice contemplates.

2. The current Service Agreement and Mutual Assistance Agreements also require revision. *(See Recommendation #2)*

The current Service Agreement and the Mutual Assistance Agreement underwent revision in 2017, but only to address organizational changes. The sections dealing with the cost allocation factors exhibit the same inconsistency between their content and actual practices as does the CAM. Moreover, the CAM fails to include a section that the Service Agreement and Mutual Assistance Agreement use to detail allocation methods by product or service. We did not find clear explanations from management when discussing this section, encountering observations about its outdated and irrelevant content, because each cost center retains the flexibility to determine governing practice in the annual cost center reviews. In addition, the Service Agreement describes company bills and annual service requests in manners inconsistent with actual practice.

3. The lack of a "bill" for affiliate transactions hinders the ability of JCP&L to influence the accuracy of transactions whose costs it pays. *(See Recommendation #3)*

FirstEnergy's enterprise system, SAP, automatically tracks affiliate transactions, and provides for recording transactions to the General Ledger as approved. System controls exist to provide a level of assurance regarding the completeness and accuracy of inter-affiliate transactions, but JCP&L should get monthly billing information that permits its independent analysis at the detailed level.

4. Our examination of inter-affiliate transactions revealed no unexplained issues or anomalies.

The limits of the SAP processes in producing billing detail make cumbersome the analysis of individual transactions. Working around them as best we could, however, we found data and explanations provided reasonably connected to and consistent with our examinations related to transaction paths generally and to shared facility and mutual assistance transactions that we examined more specifically.

We also tested transactions (including time reporting and external costs) in connection with examinations reported in other chapters (for example legal and vehicle costs addressed respectively in the *Legal Services* and *Surface and Air Fleet Management* Chapters of this Phase Two report). Moreover, as the Chapter that addresses *Organization and Executive Management* of this Phase Two report describes, we reviewed cost trends allocation factors, and service level change requests for services provided to the affiliates and operations engaged in commercial power and energy businesses as they transitioned through bankruptcy and through their first months after bankruptcy emergence, when services to them ended. Those reviews also found no anomalies. One exception, addressed in this chapter and remaining under internal examination exists in the case of External Affairs and Communications.

5. **Allocation factors actually used differ in many respects from those the CAM lists.** *(See Recommendation #4)*

Our examination of the factors used, where different from the CAM, indicated reasonable allocation bases and factors. However, good practice calls for the making of their allocation choices from those documented by an approved, regularly updated CAM. Business needs can call for new or changed allocation factors, but the CAM should reflect them, and they should result from change procedures soundly addressed by the CAM.

6. **FirstEnergy SC cost centers make overly heavy use of the choices permitted by the Multi-Factor set of factors.** *(See Recommendation #4)*

Direct charging should apply in every case possible. When that option does not exist, indirect allocations should, whenever possible, occur under a factor that reflects cost causation of the product or service at issue. General allocators, like FirstEnergy's Multi-Factor set of allocators should see use only where adequate cost causation cannot be determined; *i.e.*, when one has only general measurement of size remaining as an option. Multi-factor allocations have a role and will likely drive a significant portion of cost apportionment, but should remain a last resort and be discouraged, lest their use become a too convenient default. The predominance of its use at FirstEnergy reflects insufficient attention to identifying and encouraging the use of cost causative factors.

7. **As practiced, use of the "Direct Charge Ratio" does not conform to CAM provisions addressing it.** *(See Recommendation #4)*

"Direct Charge Ratios" as actually employed comprise eleven different factors that produce various allocation methods, none of them applying what the CAM states. This factor has become, in practice, a catch-all that individual costs centers identify, even though not in the CAM.

8. **Worksheets supporting the annual calculation of allocation factors appear complete and accurate but do not conform to the CAM and factor definitions.** *(See Recommendation #5)*

Our examination of the supporting calculations of the factors used revealed no errors or illogical calculations. However, the worksheets should match revisions made to the calculation of factors or to the terms used to describe the factors, consistent with revisions to the CAM or Service Agreement.

9. Off-cycle changes to the CAM occurring during the audit period appear appropriately and adequately documented, but management has not made clear the implementation of enhancements committed to in the last management audit. *(See Recommendation #6)*

Management responded to an internal audit report by committing to address triggering events that should require mid-cycle changes to the allocation factors. Management described for us two other allocation process changes made, but neither responded to the triggering event issue. Clarity and specificity would better serve the need for timely response, should major business, operations, or other changes render existing factors unreflective of cost causation.

10. Management allocates cybersecurity costs using reasonable methods and factors.

Our examinations of allocations for Cybersecurity costs found them sound and logically related to the work of the cost centers involved and those who benefit from the activities performed and capabilities provided.

11. FirstEnergy focuses appropriately on ensuring understanding of and execution of time reporting procedure and process mechanics, but has not sufficiently emphasized the importance of direct charging in those documents or in training provided. *(See Recommendation #7)*

All documents management provided as "time reporting policies" comprised "how-to" documents instructing employees on reporting time and approving it. We did not find emphasis on the importance of direct charging time rather than using default values whenever possible. Particularly given the lack of that emphasis, communicating to employees that using the default code in place saves time in reporting, stands out as counter to the message that employees should get.

Until recently, training and communication regarding the importance of accurate time reporting and direct charging operated as a decentralized process that relied on employee supervisors and peers. Management reported early efforts underway to extend mandatory training to all Service Company employees by mid-2022.

12. Adequate controls address cost allocation processes.

Our review of controls around cost allocation, the related SOX review and the review of selected internal audit reports disclosed no issues, concerns, or gaps.

13. Management conducts generally appropriate annual reviews of allocation factors, but relies on an insufficiently diverse sample review. *(See Recommendation #8)*

The 10 percent sample review performed by the General Accounting department for the 2020 factors encompassed 124 cost centers reviewed. Combined, those centers used only one of two factors - - both general allocators from the Multi-Factor set. This concentration resulted from applying dollar value as the criterion for selecting the sample. The annual reviews seek to ensure agreement between data and support schedules and to verify the accuracy of calculations. Restructuring the sample to include a wider range of factors would better serve the purpose of the testing. It should prove possible to test most, if not all factors without compromising the dollar size of those selected.

14. The annual cost center review does not make sound use of the CAM as a control over changes to allocation methods and factors. *(See Recommendation #9)*

Annual cost center reviews call for reviews by each cost center of changes that may render existing allocation factors sub-optimal in aligning costs with causes and beneficiaries. Management carries out that process, but uncontrolled by the need for cost centers to limit themselves to allocators the CAM authorizes. Cost centers have the ability to identify allocation details not necessarily consistent with methods authorized. The CAM can change where needed, but a mature and stable version subject to clear and timely change control should serve as a control on how readily and freely individual cost centers can diverge.

15. The shares and amounts of FirstEnergy SC costs allocated to JCP&L do not show anomalous trends.

We examined changes in FirstEnergy SC cost percentages and dollar amounts borne by JCP&L. We sought explanations for changes over recent years, finding them reasonable. JCP&L's share and dollar amounts appear directionally correct and consistent with the timing of those changes. Our reviews of major service company organizations, functions, and costs (both internal and external) employed testing of the drivers of costs and of particular transaction sets. That testing also generally found logical and appropriate reasons for identifying JCP&L as a beneficiary and for determining the shares of costs the utility has borne. Overuse of general allocators generally (see Conclusion #6) stands as an exception, as do open issues regarding the pending review allocations, among other circumstances (see Conclusion #20).

16. JCP&L does not have a sufficient role in development of allocation factors, in their application to FirstEnergy SC costs, or in examining the resulting costs charged to JCP&L. *(See Recommendation #10)*

All those engaged in development of allocation factors, their application to FirstEnergy SC costs, and the resultant charges to JCP&L operate under FirstEnergy SC direction. No JCP&L independent review of the results of the cost allocation process focused on ensuring fair treatment for New Jersey customers takes place.

17. FirstEnergy complies with the procedural requirements applicable to NJ BPU cost allocation reporting.

Our review of a sample of filed reports revealed no missed dates or lack of required information. Resources knowledgeable about the required data engage in the preparation of those reports.

18. The separation of the commercial power and energy business largely drove a shift of some $3 million in annual depreciation costs to JCP&L. *(See Recommendation #11)*

The separation of the commercial power and energy business left FirstEnergy SC with a substantially smaller base over which to shift the costs of carrying assets (principally consisting of large systems) that it did not transfer with that business to new owners and which FirstEnergy SC could not transfer.

Management designed and has operated those systems to accommodate joint *i.e.,* operating company and non-utility business use. The arrangements for charging their costs clearly anticipated annual fluctuations in the factors driving the costs of those assets, for which the non-utility entities had responsibility for about $20 million in annual depreciation (about one third of total depreciation on those assets). Subject to those adjustments, however, it appears clear that the assumption behind joint design and use was or at least should have been that both sets of users were going concerns. That did not turn out to be the case here. Moreover, it is generally true that such non-utility enterprises impose greater financial risks than do utility operations. Experience in the industry also shows that those risks, always at least marginally greater, can become severe.

The question becomes whether the asset value lost or stranded by the failure of the entities involved should become utility customer costs. The generating facilities did not, nor would system costs were they to have been owned or installed directly by the failed entities or ownership apportioned as their costs were. It is not clear why a failure to protect JCP&L from failure risk should leave its customers exposed to the cost consequences. Nor is it clear why the mere decision not to apportion ownership of the assets in the first place should produce the same effect.

We do not find convincing the notion that simply spreading the depreciation over the remaining regulated entities, has a sound foundation. That result would not have occurred under and arms'-length relationship between unaffiliated parties duly sensitive to financial risk. It would not have happened had the failed entities made their own investments in the assets. It would not have happened had asset ownership sharing occurred in a sound way between the operating and the failed companies. The question is whether it should happen simply because FirstEnergy chose a service company as the home for the assets without creating the kinds of financial protections against business failure (as opposed to normally expected annual fluctuations in measures driving allocations) that it appears would have been commercially reasonable in an arms'-length relationship.

19. Management has taken an inconsistent approach to making JCP&L responsible for costs arising from or otherwise attributable to circumstances associated with the criminal investigation of the U.S. Attorney's Office and with related FERC, SEC, and court actions. *(See Recommendation #12)*

Cost collectors exist to retain at the FirstEnergy Corp. level costs related to circumstances arising from, related to, and following the investigation by Office of the U.S. Attorney for the Southern District of Ohio and the Deferred Prosecution that followed. It has done the same for costs incurred in response to related inquiries from and matters before the FERC and the SEC. It has also done the same for the costs of defending shareowner and other related court litigation. It will not allocate to the operating companies the large dollar penalty under the Deferred Prosecution Agreement or presumably settlements or awards under the court litigation.

These plans are appropriate, albeit expected. However, the same logic for doing so applies to other cost sources for which JCP&L will pay.

First, costs related to remediation and enhancements are being charged to the Office of Ethics and Compliance. Much of the remediation and enhancement concerns follow an extensive list of actions and verifications to which FirstEnergy Corp. has agreed under the Deferred Prosecution Agreement, making that agreement the initiating cause for the actions and costs involved. Moreover, to the extent that substantial costs have occurred and will continue to create what should have already existed or to verify that it does exist, it remains unclear why those are considered JCP&L utility costs. In other circumstances one might postulate colorable arguments to the contrary. However, here they arise from conduct that produced criminal charges, acknowledgement of the truth of allegations underlying those charges, and a severe financial penalty. Resulting remediation and enhancement costs under those circumstances do not bear a relationship to what comprise normal and reasonable utility costs for JCP&L.

Second, some portion of the costs management has borne in connection with our engagement here relate to responses to information requests and preparation for and conduct of interviews directly connected to addressing the elements of our scope that relate to the consequences and implications of the same actions and matters described above. To the extent inquired into by the U.S. Attorney's Office, the FERC, or the SEC, FirstEnergy Corp. has deemed them unavailable for allocation to JCP&L. Engagements like this one do not ordinarily include inquiries into such matters and the requirement to do so here arises from the same circumstances that produced inquiry by those other authorities.

The interests of the BPU in the circumstances and their aftermath may not be identical to those of those other authorities, but they are equally valid. We do not see a reason for distinguishing them for regulatory accounting purposes.

A related issue arises in connection with distinguishing between employee time and costs involving outsiders does not have a basis. By whomever employed in the FirstEnergy family of companies, all personnel have the duty to charge time to the proper activity. The same foundation that calls for isolating outside costs for regulatory accounting purposes applies to internal time.

20. Concerns about the ability to verify the sufficiency of internal examination of cost allocations remain and the need to initiate another such examination underscores them. (*See Recommendation #13*)

Chapter Twelve, *External Affairs - - The "DOJ Investigation"* of the accompanying Phase One report described the importance of verifying that review such as that performed under what has been termed the Vendor Invoice examination had scope, depth, objectivity, candor and completeness sufficient to identify all sources of inappropriate and misallocated costs. Management has not provided the transparency needed for an independent assessment of those aspects of internally initiated reviews. Replicating them in a manner that would give the BPU confidence in the results would take a very extensive effort well beyond the scope of this engagement and requiring more resources than the whole of this engagement allows.

We had hoped that the transparency we sought would have enabled verification that internally initiated examinations were sufficient to provide confidence that all that was material and to be found had been found and corrected, with appropriate accounting adjustments. Management's representations were that internally initiated reviews had those characteristics and proceeded under methods and activities conservatively defined, robustly executed, and candidly overseen. Given the nature of the actions and circumstances underlying them, the engagement of top leadership in those actions, the reputational exposure, and (not least) the large financial litigation exposure still looming, we did not find those representations alone a sufficient basis for confidence in reporting the "mischief managed."

No greater transparency about the earlier reviews has come. Instead, tangible reason for questioning their sufficiency has emerged. Another, examination has commenced, commencing following the recently completed FERC audit and a long-delayed response to our inquiry regarding outside external affairs and communications costs. It remains unclear why completed reviews described as comprehensive and conclusive yield to a further one.

21. Transmission planning for JCP&L employs sound criteria consistent with PJM planning scope, standards, and considerations.

TPP, the central FirstEnergy transmission planning group has responsibility for the content and execution of Transmission Planning Criteria, Energizing the Future, and End of Life documentation that guides transmission planning for JCP&L and the other operating companies: These documents together identify the methods, bases, criteria, and factors that drive transmission planning, including that required for Supplemental projects. PJM, under direction provided by the FERC has responsibility for baseline and supplemental transmission planning in the region it oversees.

PJM performs that role as part of its overall responsibility for coordinating the movement of wholesale electricity across New Jersey as part of a 13 state PJM region that also includes the District of Columbia.

The PJM Board of Managers does not approve Supplemental Projects. It does perform a "do-no-harm" analysis seeking to verify no negative impacts from such projects on regional transmission system reliability.

22. We did not find indication of concern about supplemental or shared-site transmission project costs.

Management reports the charging of actual transmission project plant-in-service capital costs 100 percent to the transmission project owner for all types of transmission projects. Management further reported all JCP&L transmission projects as wholly owned by the utility, obviating the need for allocations regarding their costs. PJM's RTEP include Supplemental Projects, with their costs allocated 100 percent to the zone in which the transmission facilities are located.

D. Recommendations

1. Update the CAM to match the factors currently in use and conduct an annual review thereafter to ensure continued applicability. *(See Conclusion #1)*

One should accept that that changing the factors requires regulatory approval, and thus entails some administrative burden. Nevertheless, disconnects between the CAM and cost allocation practice renders the current CAM an historic relic, without meaningful connection to the practice it is intended to govern. An annual review, after an initial overhaul, is an appropriate vehicle to maintain relevance.

2. **Update the Service Agreement and Mutual Assistance Agreement to be consistent with the CAM and the annual cost center review process.** *(See Conclusion #2)*

Attachment 1 in the Service Agreement, and in the Mutual Assistance Agreement are outdated and inconsistent with the annual cost center review process. In order to make the documents consistent with practice, the Service Agreement and Mutual Assistance Agreements would need updating annually to match changes to the annual cost center review process or eliminate Section 1 from the Service Agreement and Mutual Assistance Agreement and insert language describing the process and controls around the annual cost center review process.

3. **Explore what changes must occur to enhance SAP configuration to allow for the production of a monthly summary of transactions from one affiliate to another.** *(See Conclusion #3)*

The current system configuration has system controls to assure the completeness of transactions, but creation of a monthly affiliate to affiliate summary would provide useful gains in assurance of accuracy of each transaction.

4. **As part of the revision of the CAM, undertake, a thorough review to determine the most logical and cost causative factors for each cost center.** *(See Conclusion #5, #6, and #7)*

Each cost center should take a fresh look at possibilities for allocation bases that represent a logical and cost causative way to allocate its costs, without being bound by the current CAM. Allowing for the development of an allocation method that best fits the nature of the costs in a given business center may help to reduce the churn in cost centers that change their allocations from year to year.

5. **Revise allocation factor calculation worksheets to align with other changes in methods or language in the CAM and Service Agreement.** *(See Conclusion #8)*

While the existing worksheets do an adequate job of supporting the current factors, the language and references do not fully align with the current CAM and will need adjustment for any changes made as a result of the recommended review of factors.

6. **Implement the enhancements committed to in the 2011 Management Audit regarding the identification of triggering events that would require a mid-cycle change to the allocation factors.** *(See Conclusion #9)*

Enhancements offered by the Company were not responsive to the issue raised in the last management audit.

7. **Create a time reporting policy document that emphasizes the policy of direct charging and the reasons why it is the most appropriate way to charge time when possible and**

establish a formal, recurring training and communications program. *(See Conclusion #11)*

The documents provided by the Company as "policy" documents took the form of procedure documents that, while important, do not identify the policy issue of direct charging.

Ensure that the newly developed time reporting training completes the planned roll out to all Service Company employees and provide for required annual training thereafter. Further, new hire materials should specifically and emphatically address the importance and reasons for direct charging. Management should stress proper time reporting and the importance of direct charging where possible, and the concept's critical importance, at the beginning of a new hire's employment, with regular reinforcement via mandatory annual training.

8. **Employ in the annual review of allocation factors a sampling selection method that ensures broader coverage of different allocation methods.** *(See Conclusion #13)*

Testing only two factors limits the effectiveness of the control that this review can provide. The effectiveness of the control depends on the coverage of many factors. While the impact of a particular factor is influenced by the number of cost centers using the factor, the amount of costs using the factor and amount of the costs flowing from large cost centers, diversity is more important than size in measuring the effectiveness of this control.

9. **Following a thorough review and modification of the CAM, strengthen the cost center review process to ensure that cost centers use only allocations detailed in the CAM.** *(See Conclusion #14)*

With a revised CAM that better reflects the nature of the costs in the business, the level of churn observed should reduce.

10. **There should be a review of the development and application of cost allocation factors and the resultant changes to JCP&L by someone whose focus is JCP&L costs and protection of New Jersey customers.** *(See Conclusion #16)*

We detected no bias suggesting an unfair allocation of costs to JCP&L, but consider having a JCP&L employee with a JCP&L-only focus an effective additional control to ensure that New Jersey customers pay their fair share of FirstEnergy SC costs.

11. **Consider holding the depreciation and carrying charges associated with the portion of FirstEnergy SC assets previously charged to FES and FENOC at the parent company, rather than increasing the allocation to the regulated entities.** *(See Conclusion #18)*

Having failed to provide for the possibility of bankruptcy in the Service Agreement and having failed to recover the stranded costs as a result of the FES & FENOC bankruptcy and having failed to sell or otherwise dispose of any assets, circumstances left FirstEnergy SC with a large body of asset-related costs the same as those before departure of the commercial power and energy businesses. New Jersey customers should not pay for those entities' shares of return of and on those assets. FirstEnergy Corp. should account for those costs in a manner that does not subject JCP&L to portions of them.

12. Capture and hold all remediation costs and current management audit costs related to the DOJ, SEC, FERC, and internal investigations at the parent company. *(See Conclusion #19)*

The Company has acknowledged, by its creation of the cost collector at the parent, that it is fundamentally wrong to charge the investigation costs to regulated utility customers. That logic should extend to remediations and enhancement costs as well as to costs embedded in the current management audit related to the same investigations.

13. Defer consideration of the need for a detailed, comprehensive examination of allocations pending the results of current internally initiated examinations and the ultimate transparency FirstEnergy provides about them and previous ones. (*See Conclusion #20*)

The initiation of further reviews to examine the propriety of costs as allocated to the operating companies underscores the continuing need for transparency that FirstEnergy continues to decline to provide. An examination like the one we have performed in this engagement can examine the sufficiency of company efforts to provide proper control over costs reasons, sources, amounts, and allocations to operating companies like JCP&L. We sought to do so, given the originating circumstances of those reviews and their connection to controls issues. The seriousness of those circumstances make such review appropriate.

What an examination of the scope applicable to ours cannot do, however, is perform the activities necessary to confirm independently that JCP&L customers have not borne further costs inappropriately either through inappropriate conduct or through misallocation of costs incurred in good faith. The transparency so far lacking would most likely permit conclusions about the confidence the BPU and stakeholders can place in findings made by internally initiated examination and review. In its absence, and in the face of even more review following efforts management cited as already conclusive, only trust in the company stands in support of placing such confidence.

Should the BPU require a stronger foundation for having that confidence, a “respite” to await the hopefully nearing end of litigation imposing large financial risk and completion of further internal reviews of costs in areas like lobbying, sponsorships, advertising and their allocation may yield to a FirstEnergy attitude more consistent with state regulatory interests than it has so far shown.

If not, the choices at that time appear limited to simply moving on without further resolution of uncertainty or commissioning an independent review. To have utility, that review would entail far greater resources than made available for the whole of our review of all the matters within our scope, perhaps calling for multi-jurisdictional support to make it feasible from both an information gathering and cost perspective.

Such a respite would allow time for a change in company attitude, as the balance between litigation and state regulatory risks changes. It may also disclose more information from which the BPU can assess risks to New Jersey customers in moving forward.

For our part, we do not find the totality of circumstances productive of the confidence it takes to conclude that FirstEnergy has as yet put the matter of inappropriate costs and inappropriate cost allocations to rest. We can undertake no efforts consistent with the scope and resources of our engagement to do so. Whether there will remain need and interest for doing so therefore raises questions for others to resolve.

Chapter XI: Cost Deferrals Table of Contents

Chapter XI: Cost Deferrals

A. Background

This chapter presents the results of our examination intended to verify compliance with BPU policy and orders regarding the deferral of storm related costs and other cost deferrals.

Storm-related costs, and other costs can, at the discretion of regulators, be recovered over time, rather than when incurred. The justification for doing so often lies in the belief that such costs may unfairly burden existing customers if recovered currently. Storm related costs offer a good example; weather events that produce substantial costs may occur during a rate case test period. Costs normally recognized in net income in one period (in test period net income, as relevant here), but instead deferred for recognition as an expense in a later period become "regulatory assets." Companies can defer costs and record them as regulatory assets if it appears probable that future revenues will result from inclusion of those costs in a rate-making proceeding. Similarly, regulatory liabilities become created to reflect an obligation owed to customers or when a regulator provides for recovery in current rates of expected future costs.

We sought to validate that JCP&L accounted for and recorded storm costs properly. We also examined other regulatory assets and liabilities. We examined the components of the regulatory asset and regulatory liability accounts at December 31, 2020 and at June 30, 2021. We examined account activity from January 2011 to the present for storm costs and for other regulatory assets recovered by base rates. We tied the timing of deferrals and the timing and amount of amortization back to base rate case orders, where possible, or to internal documents maintained to track regulatory assets. This approach generated a detailed review of 59 percent of the balance in the Regulatory Asset account at December 31, 2020. Another 16 percent of the account relates to the Remediation of Manufactured Gas Plant sites, covered in the *MGP Remediation* Chapter of this Phase Two report.

We also evaluated adherence to policy and to the provisions of the BPU base rate case orders from the 2012, 2016, and 2020 rate cases, seeking to verify whether JCP&L accounted for storm costs in a manner consistent with two orders specifically related to storm costs

- I/M/O the Board's Establishment of a Generic Proceeding to Review the Prudence of Costs Incurred by New Jersey Utility Companies in Response to Major Storm Events In 2011 and 2012, dated March 18, 2015
- I/M/O the Board's review of the Prudency of the Costs Incurred by New Jersey Utility Companies in Response to Major Storm Events in 2011 and 2012, dated October 22, 2014.

B. Findings

1. Storm Damage

The BPU first authorized deferred accounting for storm damage expense in 1983 in Docket 831-110. The Stipulation of Settlement stated that "the Company will defer actually incurred storm damage expenses on its books and that the appropriate amortization period for such expenses will be addressed on a rate case by rate case basis." The schedule of activity management provided shows a balance of deferred costs at January 1, 2011, of $20,266,843.

The 2012 base rate case order increased the annual amortization on existing deferred balances, and approved recovery of $81,912,314 of 2011 major storm costs, amortized over six years with a carrying charge of 2.52 percent on the unamortized balance. The Storm Recovery Charge provided for the recovery of 2012 major storm costs. The 2016 base rate case order accelerated recovery of the 2012 major storm expenses to achieve full recovery by December 31, 2019, via the Storm Recovery Charge. In addition, JCP&L increased its amortization of storm related costs to $11,304,343, based on a company request not contradicted in the settlement.

The 2020 base rate case order increased the annual amortization to $29,000,000. The 2020 order also provided for application of:

- The gain from the sale of the Yards Creek generating station, estimated at $109.1 million, to reduce the deferred storm cost balance
- A $12 million deferred tax regulatory liability associated with the sale of JCP&L's interest in the Three Mile Island Unit 2 to reduce the storm cost balance.

Our examination of the schedule of activity management provided successfully traced the amounts described above. The balance in the storm damage deferred cost account amounted to $459,797,649 at December 31, 2020, and $342,113,425 at June 30, 2021.

2. *Other Deferrals in Base Rates*

a. <u>COVID-19</u>

The July 2, 2020, BPU order in Docket A020060471 authorized the creation of a COVID-19 regulatory asset to defer incremental costs related to COVID-19 prudently incurred from March 9, 2020 through September 30, 2021, or "60 days after Governor Murphy issues an order, proclamation, or similar announcement that the Public Health Emergency is no longer in effect." All utilities had to file a petition by December 31, 2021, either addressing recovery or requesting deferral to future rate cases. The September 14, 2021 BPU Order in Docket A020060471 extended the deferral period to December 31, 2022. First recording of associated costs in the deferral account came in June 2020. No amortization has yet occurred, pending presentation of the costs for recovery in a rate proceeding. The balance in this account stood at $15,322,859 as of December 31, 2020, and $18,192,535 as of June 30, 2021.

b. <u>Management Audit</u>

New Jersey Register, Section NJR 4812-164 sets forth guidelines relating to management audits. The May 17, 2004 BPU order in the 2002 base rate case addressed recovery of management audit expenses. The cost for the 2011 management audit became approved in the 2012 base rate case for amortization over four years. Similarly, the 2016 rate case produced a continuation of that amortization and approval of the amortization of an operations audit expense of $1,335,165 over four years. Completion of those amortizations came by the end of 2020, leaving a zero balance in the account at that time. JCP&L accrued the cost of this audit in May 2021. Pending presentation of the costs of this audit for recovery in a base rate case, no amortization has yet been recorded. The balance at June 30, 2021 amounted to $1,469,584.

c. Rate Case Expense

The BPU first approved rate case expense recovery in the 2002 base rate case. The 2012 base rate case produced an approved annual expense of $401,013, representing a 50/50 sharing of costs with customers, and an amortization period of four years. A stipulation led to resolution of the 2016 base rate case. The assumed treatment, based on the requested amount (with no specific language to the contrary in the order) comprised a charge of $1,297,000, shared 50/50 of $648,500 and amortized over four years. However, because of the stipulation resolving the 2016 case, JCP&L did not spend the entire estimated rate case amount. Therefore, applying the approved amortization brought the balance in the account to zero in March 2019. The 2020 base rate case authorized an annual amortization of $156,039. The balance in the account amounted to $211,293 at December 31, 2020, and $133,273 at June 30, 2021.

d. OPEB Settlement

On August 7, 2017, two retired GPU employees filed a petition with the BPU, alleging that former JCP&L employees serving as employees of GPU at the time of the merger had an entitlement to the same benefits as JCP&L employees. On April 6, 2018, JCP&L and the settling parties to the dispute executed a settlement agreement under which JCP&L agreed to certain changes to the calculation of other post-employment benefits (OPEBs). Further, JCP&L committed to applying certain changes to any eligible retiree. The settlement agreement addressed deferred accounting and recovery by JCP&L of the incremental costs of the expanded eligibility criteria, incurred to January 1, 2015. The settlement provided for the accrual of a total OPEB amount of $4,750,000 over 10.6 years, beginning January 1, 2019. The 2020 base rate case order approved recovery of this asset over a ten-year period, with no interest. The balance of this deferred asset amounted to $896,200 at December 31, 2020, and $882,750 at June 30, 2021.

e. VMS

The stipulated order in the 2016 and 2020 base rate cases authorized the amortization of $1,094,530 and $9,940,322, respectively over four years. The 2020 base rate case parties also agreed to an annual revenue requirement of $31 million for vegetation management. The order precluded JCP&L from seeking recovery in its next base rate case of any additional deferrals, subsequent to the date of the order, unless specifically authorized by the Board. Additional deferrals came between this filing and the final order. Thus, the amortization granted will not reduce the account balance to zero. The remaining balance will require review and resolution in the next filed rate case. The balance in this account amounted to $14,817,906 at December 31, 2020, and $13,574,646 at June 30, 2021.

f. Cost of Removal

By Order dated August 1, 2003, the BPU required the Company to reduce existing depreciation rates and related recovery of depreciation expense to exclude the embedded cost of removal component, and the separate expensing of actual cost of removal required. The resulting excess depreciation provision related to past recovery of cost of removal became recognized as a regulatory liability subject to review in future base rate cases. The 2012 base rate case authorized the amortization of $107.2M over 28.5 years. The 2016 base rate case produced a revision in average remaining life of the property to 34.3 years. Amortization underwent adjustment to $260,346 per year, effective January 1, 2017. The 2020 base rate case provided for amortization of the cost of removal regulatory liability at December 31, 2020 to income in an accelerated manner between January 1, 2021, and October 31, 2021. This provision offset the base rate increase that otherwise would have occurred in this period. The balance in this account amounted to $(86,195,994) at December 31, 2020, and $(41,531,275) at June 30, 2021.

g. Gain on Sale

BPU orders dated December 5, 2005, and November 14, 2005, required return of half the gains on sales of company assets to customers in future rate proceedings. The BPU order in the 2012 base rate case required amortization of the gains associated with the sale of the Bernardsville office, the Lakewood Garage, and the Belford Operating Headquarters (total $2,103,929) over a five-year period, effective April 2015. That amortization completed in March 2020. An additional sale of the Allenhurst property closed on March 8, 2019, leading to recognition of a gain of $1,019,956. Consistent with past policy, amortization of one half of this gain ($509,978) will occur over a five-year period beginning January 2021. The balance in this account amounted to zero at December 31, 2020, and $(458,980) at June 30, 2021.

3. Compliance with Policies and BPU Orders

The BPU does not have separate regulations governing the accounting or ratemaking treatment of deferred storm costs or other deferred costs. Rather, the BPU determines the appropriate treatment of such costs on a case-by-case basis. The last two base rate cases (2016 and 2020) both concluded with a stipulated settlement. In such settlements, final orders do not fully detail contributions of all issues, unlike what ordinarily occurs in fully litigated cases. In such cases, JCP&L takes the position, in the absence of contrary information, that the dimensions of issues, as filed by the company, become approved parts of the stipulation.

A company Regulatory Accounting Policy defines the guidelines and procedures for establishing regulatory assets and liabilities, and the ongoing evaluation of the amounts of those assets and liabilities for each quarterly reporting period. The policy outlines the basis for establishing a regulatory asset or liability. Two key documents apply. An Interpretation Memo (IM) drafted by the Rates department leads to creation of a new asset/liability or a change to an existing asset/liability when a triggering event occurs. In addition, an Accounting Guidance Memo prepared by Regulatory Accounting after the IM becomes final, provides detailed accounting instructions.

A Regulatory Accounting and Review Committee meets monthly to review any activity by regulators or the company that might affect regulatory accounting. These meetings provide for ongoing assessment of these assets and liabilities. A quarterly report prepared by General Accounting undergoes review by the committee. The report details beginning and ending balances, and activity in the quarter for each asset/liability.

4. Account Activity Tracing

The selection approach we employed supported for each asset/liability selected an examination of a schedule of activity in the account, from January 1, 2011, to September 30, 2021. We verified the reason for the asset/liability and traced the activity in each account to: (a) BPU Orders, where details existed in the orders, and (b) the Interpretation Memos maintained for each account. We also traced the balances at December 31, 2020, and June 30, 2021, to the 2020 Annual Financial Report to the BPU and the Year To Date June 2021 Financial Report to the BPU.

The next table summarizes regulatory assets and liabilities at December 31, 2020, and June 30, 2021. The Storm Damage, Other Assets – Base Rates and Other Liabilities – Base Rates categories comprised the accounts we subjected to more detailed review. We address accounting for manufactured gas plant costs in the *MGP Remediation* Chapter of this Phase Two report. DOE Spent Nuclear Fuel and Basic General Service rider activity predated the timeframe of this audit.

Other Regulatory Assets and Liabilities Summary

Other Regulatory Liabilities				
	12/31/20		06/30/21	
	Balance	%	Balance	%
Storm Damage	$ 459,797,649	55%	$ 342,113,426	50%
Other Assets - Base Rates[1]	$ 31,248,258	4%	$ 34,252,788	5%
MGP	$ 78,504,473	9%	$ 81,470,500	12%
MGP Insurance Recovery	$ 55,059,500	7%	$ 48,155,036	7%
2017 Tax Act	$ 119,891,278	14%	$ 106,081,686	15%
Basic Gen. Serv. Rider	$ 38,396,144	5%	$ 35,451,669	5%
Other	$ 52,568,978	6%	$ 43,245,720	6%
Total	$ 835,466,280	100%	$ 690,770,825	100%
[1] *COVID, Rate Case Expense, OPEB Settlement, VMS, Management Audit*				
Other Regulatory Assets				
	12/31/20		06/30/21	
	Balance	%	Balance	%
Other Liab.-Base Rates[2]	$ 86,195,994	9%	$ 41,990,355	5%
2017 Tax Act	$ 623,194,370	68%	$ 601,636,963	70%
DOE Spent Nuclear Fuel	$ 97,898,946	11%	$ 102,871,337	12%
Other	$ 111,067,772	12%	$ 110,955,123	13%
Total	$ 918,357,082	100%	$ 857,453,778	100%

[2] *COR, Gain on Sale*

5. *Access to Internal Auditing Work Addressing Storm Cost Deferrals*

As has proven true on a significant number of occasions in this engagement, we could not examine here Internal Auditing documents that appeared relevant to the scope of our examination. Our requests for them encountered claims of protection under attorney-client privilege. Lack of access constrained our review of storm damage expenses. The materials claimed as subject to privilege included two reports related to BPU storm damage proceedings:

- New Jersey Board of Public Utilities' Storm Order Requirements Project – Privileged and Confidential – Prepared at the Request of Counsel," dated August 2, 2013
- New Jersey Board of Public Utilities' Hurricane Irene and Hurricane Sandy Orders – Privileged and Confidential – Prepared at the Request of Counsel," dated June 24, 2014.

We asked for the reasons for conducting two audits involving BPU orders regarding storm damage subject to attorney-client privilege. Management's response stated that their performance came as part of a legal proceeding before the BPU and were undertaken at the direction of counsel.

Management has stated that the audits regarded "the Company's responses to the recommendations, in accordance with the timelines, contained in the BPU Orders." Management identified the proceedings to which they referred as:

- I/M/O The Board's Review of the Utilities' Response to Hurricane Irene in BPU Docket No. E011090543, order dated January 23, 2013
- I/M/O The Board's Review of the Utilities' Response to Hurricane Sandy, BPU Docket No. E0012111050, Order dated May 29, 2013.

C. Conclusions

1. JCP&L appropriately classified the costs incurred for storm damage and other costs deferred for future recovery as Regulatory Assets and Regulatory Liabilities.

Our review of the detail in the storm damage subaccount and other subaccounts in the regulatory asset and regulatory liability account, combined with the information contained in the two storm damage orders, and the three rate cases during the time period examined revealed no exceptions to terms prescribed by the BPU orders or company policy or procedure documents, or any indication that the rules for the establishment and amortization of regulatory assets and liabilities were not properly followed.

2. Company financial statements properly recorded the balances and amortizations of the recorded regulatory assets.

We examined the subaccounts in the Regulatory Assets and Regulatory Liabilities accounts at December 31, 2020, and June 30, 2021, and conducted a more detailed review of the storm costs subaccount and those asset and liability accounts recovered in base rates. We also traced the amortization amounts in the activity schedules to the appropriate income statement accounts. We found no exceptions.

3. Management has employed a thorough and effective process for evaluating and classifying costs as regulatory assets and liabilities.

We interviewed personnel responsible for establishing and monitoring the regulatory assets and liability accounts, finding them very knowledgeable and able to create analysis documents that captured all the activity in the account over the past 10 plus years. In addition, the Interpretation Memos and Accounting Guidance Memos, along with the quarterly review and reporting on activities impacting the proper recording of the asset and liability accounts indicated a strong and effective control of the process.

D. Recommendations

We have no recommendations regarding cost deferrals.

Chapter XII: EDECA Table of Contents

Chapter XII: EDECA

A. Background

This chapter describes the results of our examination of compliance with the affiliate standards (The Standards) that the BPU has adopted to enforce the New Jersey Electric Discount and Energy Competition Act, N.J.S.A. 48:3-49 *et seq*. (The Act or EDECA). We also performed a review of cost allocation and assignment, topics which form a principal focus of EDECA. The report (see the *Affiliate Relationships and Cost Allocation Methods chapter of this Phase Two report*) of that examination addresses our examination of the cost allocation and assignment requirements of the Standards and the governing documents and controls and procedures management has in place surrounding them. The specific categories into which we divided the work addressed in this chapter comprise:

- *Holding Company Retail Competitive Services*
- *Non-Discrimination*
- *Separation*
- *Dispute Resolution*
- *General Administration of the Standards*
- *Information Disclosure*
- *Regulatory Oversight*
- *Violations and Penalties*

The Standards contemplate five principal types of entities:

- Electric or gas public utilities
- Related competitive business segments of the electric or gas public utilities
- Public utility holding companies
- Related competitive business segments of the public utility holding companies
- Service companies.

The Act organizes the principal components of the Standards we reviewed as follows:

- Non-Discrimination (Section 14:4-3.3)
- Information Disclosure (Section 14:4-3.4)
- Separation (Section 14:4-3.5)
- Utility Retail Competitive Business Segment Standards (Section 14:4-3.6)
- Regulatory Oversight (Section 14:4-3.7)
- Dispute Resolution (Section 14:4-3.8)
- Violations and Penalties (Section 14:4-3.9).

The application of these components depends on the types of relationships and transactions involved. For example, the Sections 14:4-3.3, 14:4-3.4 and 14:4-3.5 standards apply to transactions between a utility, on the one hand, and its public utility holding company (PUHC) or a related competitive business segment (RCBS) of its public utility holding company that is offering or providing retail services to customers in New Jersey, on the other hand. These three sections, however, do not apply to transactions between a utility and an RCBS under its ownership. Conversely, the Section 14:4-3.6 standards do apply to transactions between a utility and its own RCBS; however, they do not apply to transactions between a utility and its public utility holding company or an RCBS of its public utility holding company. Nevertheless, substantial overlap exists among the standards set forth in Sections 14:4-3.3, 14:4-3.4, and 14:4-3.5. Similarly, overlap exists between them and the Section 14:4-3.6 standards.

Many Sections of the Standards have implications that we reviewed as part of our work examining JCP&L or FirstEnergy management functions (*e.g.*, Customer Service, Accounting and Controls, Service Company Operations and Cost Allocation and Affiliate Relationships). For these areas, this chapter focuses on management's treatment of the Standards that apply to them and the company's treatment of them in annual Compliance Plans (the Plan), and provides references to the other chapters of this in the report where audit work (data reviews and analysis, interviews, for example) took place. Representative examples include:

- Discussion of FirstEnergy-level internal controls, internal audit, compliance, and ethics, and how management applies these to JCP&L: included in the *Controls, SOX, Auditing, and Listing Requirements, Organization and Executive Management, and Governance* Chapters of this Phase Two report
- Broad discussion of cost allocation, transaction paths, and cost assignment issues, and key governing documents, such as the cost allocation manual: *Affiliate Relationships and Cost Allocation* Chapter of this Phase Two report
- Issues associated with books and records and chart of accounts requirements: included in the *Accounting and Property Records* Chapter of this Phase Two report
- Customer service performance and training: included in the *Customer Service* Chapter of our Phase One report
- Finance and money pool issues: included in the *Finance and Cash Management* Chapter of this Phase Two report
- Independence and segregation of utility/non-utility planning: included in the *Affiliate Relationships and Cost Allocation*, *Organization and Executive Management*, *Governance*, and *Planning and Budgeting Chapters of this Phase Two report*, and our Phase One Report Chapter XI, *Financial Risks and Consequences of Parent and Affiliate Operations*
- Information technology protocols and management: included in the *Information Technology* Chapter of this Phase Two report.
- Affiliate energy transactions and relationships: included in the *Power Supply and Market Conditions* Chapter of this Phase Two report.

B. General Administration of the Standards

1. Background

This section addresses management's general administration of compliance with the Standards. Sound administration requires a formal approach, a focus on training and communication, and the dedication of resources sufficient to assuring a proper environment for assuring compliance with the Standards.

2. Findings

Responsibility for JCP&L's Compliance Plan and its enforcement historically rested with the FirstEnergy-wide Legal and Regulatory Affairs Departments, who received support from other functional groups as various types of transactions contemplated by the Standards dictated their involvement. The Corporate Secretaries of JCP&L and FirstEnergy Corp. served as signatories and provided the legal certifications that the Standards required:

- That they have read the contents of the Plan, have familiarity generally with its "mechanisms and procedures," and that these "reasonably ensure" JCP&L compliance
- The adequacy of the Plan's "mechanisms and procedures" to ensure JCP&L compliance:
    - Generally
    - With specific reference to Section 14:4-3.5(i) and that the joint corporate support services did not serve as "a conduit to circumvent" the Standards.
- The adequacy of the Plan's "mechanisms and procedures" to ensure JCP&L Compliance
- That, pursuant to Section 14:4-3.5(j) (which we discuss in a subsequent section of this chapter) they can reasonably ensure no usage of shared officers and directors in violation of the Standards.

After the close of the EDECA audit period, FirstEnergy consolidated responsibility for compliance with the Standards under a Vice President, Compliance and Regulated Services, FirstEnergy Service Company. FirstEnergy assigned to this individual similar responsibility for state-specific compliance with affiliate relationships and transaction rules in each other jurisdiction where FirstEnergy utilities operate. The job description provided listed responsibilities for FERC compliance, FERC and PJM transmission policy and relationship management, PJM customer load, billing and invoice assignments, and wholesale commodity management for each of the ten FirstEnergy electric utility operating companies.

We reviewed the JCP&L Compliance Plans in effect from January 2010 through December 2020 (the EDECA audit period). The Plans reviewed remained largely consistent across that period, with annual revisions as necessary to acknowledge changes in FirstEnergy's roster of affiliates, and in the entities that management considered as RCBSs covered by the Standards. Management organized the Plans in effect during the EDECA audit period in a consistent manner. The first eight versions of the Plan we reviewed indicated no substantive changes to its provisions, with the following outline generally applicable to each:

- A cover letter, noting the filing of the annual plan and including JCP&L's identification of employee transfers to and from JCP&L and a FirstEnergy RCBS (as required per Section 14:4-3.5(r) of the Standards, and discussed in more detail in Section F.18 of this chapter)
- A cover page
- An "Introduction"
- An "Overview" section addressing elements of the overall FirstEnergy/JCP&L approach to the Standards and the Plan itself, including:
    - A statement that FirstEnergy required employee compliance with all applicable laws and standards
    - A statement that "comprehensive procedures" exist to ensure implementation of overarching FirstEnergy policies and that the implementation of Standards compliance will occur in a manner consistent with FirstEnergy's Business Practice Manual and Corporate Policies
    - JCP&L's commitment to educate employees and promote awareness of the Standards and the intent of its provisions
    - A statement that management will train employees, on a mandatory basis, regarding the provisions and prohibitions contained in the Standards, and make available information regarding applicable Codes of Conduct

  - A reference to maintenance of a confidential, toll-free phone reporting system staffed by a third party where employees can express concerns regarding the Standards
  - A statement that intentional violations of the Standards have consequences, including potential termination
- A "Scope" section which summarizes the applicable portions of the Standards and identifies key, defined terms per the Standards including the identification of RBCSs
- A "Definitions" section (included, as the Plan notes, to maintain numbering consistency with the Standards)
- Portions corresponding to the following Sections of the Standards, 14:4-3.3: Nondiscrimination, 14:4-3.3: Information Disclosure, 14:4-3.5: Separation, 14:4-3.6 Competitive products and/or services offered by a utility or related competitive business segments of a utility, 14:4-3.7: Regulatory Oversight, 14:4-3.8: Dispute Resolution, 14:4-3.9: Violations and Penalties

NOTE: *These sections proved most critical to our review - - for each we sought to determine whether the Plan (the current versions and its predecessors) adequately included and addressed the Standards and whether JCP&L, FirstEnergy, FESC, and its RCBSs complied with them*

- An Appendix A&B containing the FirstEnergy and JCP&L Corporate Secretary verifications and signatures previously described
- An Appendix C containing the required list of FirstEnergy affiliates and associated information.

Each of the other states home to a FirstEnergy operating company applies affiliate standards and relations rules addressing transactions and relationships. As we have found with other reviews of utilities operating in holding companies with multiple states, including Atlantic City Electric, overlap exists in these regulations. Even in instances where an individual jurisdiction's rules and regulations may prove more prescriptive, and include more details surrounding specific elements and requirements, we typically find general commonality in their intent. JCP&L and FirstEnergy and its affiliates should therefore be well positioned to accommodate the Standards imposed by the BPU, give them with due accord in training, and make compliance a central element of corporate culture. There can exist conflicts in rules and regulations, or more likely, confusion for employees with job responsibilities across more than one jurisdiction. However, we found their commonality broad, observing primary differences consisting of standards simply not applying in a given state. West Virginia, for example has no customer choice. We observed appropriate company guidance (as explained below) to differentiate, where necessary, the rules and protocols appropriate for each respective jurisdiction. The breadth of FESC-provided services makes this factor significant, particularly in key areas where the standards would apply. Examples of those areas include shared call center and customer communications functions, often the "front line" for the customer information and separation issues (as examples) that the New Jersey Standards govern.

We typically inquire into the Internal Audit activities and reviews of the types of transactions and other activities prescribed by New Jersey's EDECA Standards. We requested a list of all internal audits conducted during the EDECA audit period regarding affiliate transactions or cost allocations relevant to either JCP&L or any other FirstEnergy entity. Management identified 14 such audits as responsive and provided copies of the reports addressing them, as the next table summaries.

Internal Audits with Affiliates-Related Scope Elements
(table is confidential)

[redacted]

The three New Jersey-specific audits, "Audit of Jersey Central Power & Light Affiliate Relations Standards & Associated Transactions," focused on JCP&L cost allocations - - a significant element of the Standards. The cost allocation reviews performed for and of other operating companies also have relevance for New Jersey insofar as they examined cost collection and assignment methods by the same service company that performs similar activities for JCP&L. The "Audit of Federal Energy Regulatory Commission Standards of Conduct & Affiliate Restrictions" also addressed topics common to the Standards, in that some overlap exists between FERC rules regarding affiliate transactions and data protection.

3. Conclusions

1. Management's recent consolidation of responsibility for the Standards and the Compliance Plan under a Vice President, Compliance and Regulated Services,

FirstEnergy Service Company is sound, but there remains a need for greater definition and clarity in key responsibilities. *(See Recommendation #1)*

Legal and Regulatory groups had responsibility for ensuring compliance with the Standards, but JCP&L had not previously consolidated overall authority under an executive-level individual until after the end of the EDECA audit period (in August 2021). That executive's responsibilities include FERC compliance and various PJM and FirstEnergy utility load information. This vice president has the same state-specific oversight in the other jurisdictions in which a FirstEnergy electric utility operates. FirstEnergy and JCP&L Corporate Secretaries provided the annual certifications and signatures in the Plans that we reviewed.

The Plan does not indicate the officers or work groups with specific oversight and responsibility for each section and sub-section of the Standards; we consider this an important element of ensuring that Compliance Plans effectively communicate to employees the "who" and the "how" enforcement will occur.

2. **JCP&L prepared and filed Compliance Plans on an annual basis as required by the Standards; we found them generally comprehensive and responsive to the Standards, though subsequent Sections of this chapter identify needed amendments.** *(See Recommendation #1)*

We found JCP&L's audit period Compliance Plans for the most part compliant and responsive to the Standards. As subsequent sections of this chapter discuss, management should revise the next version of the Plan in the areas we identify, in order to make all sections of it responsive, and to provide the type of summation and employee guidance necessary. Standards compliance requires the resources of a number of work groups and functions.

3. **Management conducted internal audits of compliance with some requirements of the Standards; these should continue, but need to add topics.** *(See Recommendation #2)*

Management performs internal reviews of cost allocation and assignment, including three such reviews specific to JCP&L transactions during the period we examined. Internal Audit also performed 2013 and 2018 reviews of FERC Regulations and Affiliate Restrictions. Such audits, which go beyond mere allocations of costs, indicate appropriate attention to areas relevant to the Standards. Nevertheless, internal audits of the Non-Discrimination, Information Disclosure, and Separation Standards would better support management's self-testing of compliance for areas outside of cost allocations or FERC rules.

4. Recommendations

1. **Include in the next version of the Compliance Plan information stating where oversight, responsibility, and enforcement for each section of the Standards lie.** *(See Conclusion #1 and #2)*

The broad scope of the Standards requires a significant number of departments, resources, and governing documents to maintain compliance effectively and continually. Including in the Plan an identification of each group having direct responsibility for specific sections would better ensure compliance by making it clear who must perform what roles. Management's recent assignment of responsibility for Standards compliance represents an appropriate and necessary improvement to is approach. Coupled with the recent dissolution of significant portions of its non-regulated businesses, that assignment presents a good opportunity to refresh a Plan that has not undergone substantial review or revision in quite some time. The broad responsibilities of that individual, both with respect to FERC and PJM duties, and for compliance with state requirements in multiple other jurisdictions, further highlights the need for establishment of guidance and accountability within the Plan to ensure the understanding of roles and responsibilities across individuals, groups, and functions at JCP&L, FirstEnergy, and FESC.

2. Make additional elements of the Standards subject to Internal Audit review. *(See Conclusion #3)*

The Standards impose a comprehensive set of rules and provisions governing a broad range of utility and holding company affiliate transactions and relationships. Cost allocation reviews and FERC rules-focused examinations have formed subjects of previous internal audits. Management should make other elements contemplated by the Standards subject to internal review, including a more robust roster of topics and ensure the effectiveness of the policies and procedures and enforcement activities it applies to the Standards.

C. FirstEnergy and JCP&L Competitive Services

1. Background

A first effort of our examination sought to determine those affiliates management considered subject to the Standards. The Standards define a Related Competitive Business Segment (RCBS) in the following ways:

- *"Related competitive business segment of an electric public utility or gas public utility" means any business venture of an electric public utility or gas public utility including, but not limited to, functionally separate business units, joint ventures, and partnerships, that offers to provide or provides competitive services.*
- *Related competitive business segment of a public utility holding company" means any business venture of a public utility holding company, including, but not limited to, functionally separate business units, joint ventures, and partnerships and subsidiaries, that offers to provide or provides competitive services, but does not include any related competitive business segments of an electric public utility or gas public utility.*
- *"Affiliate" means a "related competitive business segment of an electric public utility or a related competitive business segment of a gas public utility" or a "related competitive business segment of a public utility holding company" as defined in this section and in the Act.*

Our prior performance of EDECA audits for the BPU has disclosed wide variation in how holding companies determine which affiliates the Standards cover. The identification of covered affiliates comprises an important baseline element in assessing compliance. We examined how management made such decisions.

2. *Findings*

a. First Energy Competitive Service Offerings

Our prior audits have disclosed product and service offerings made by New Jersey utility company parents that compel their treatment as RCBSs in cases where the company did not consider them so. We requested that management provide separately for JCP&L and each of its affiliates a list of the products and services it offered from January 1, 2010, through December 31, 2020. This information would allow us to review each service to ensure that the company appropriately considered each a competitive service, or not. Management's response included the following objection:

> *JCP&L objects to this request to the extent it seeks information back to 2010, a period beyond the scope of this audit.*

The EDECA review period runs from January 2010 through December 2020. How management determined otherwise is unknown to us. It simply objected to the period questioned. Moreover, it commonly made the same objection to multiple requests addressing this audit task.

JCP&L's Compliance Plans identified, by the period that each covered, the entities management considered to constitute a holding company RCBS pursuant to the Standards. The plan in effect at the close of the EDECA audit period identified Suvon LLC (Suvon) as the lone remaining RCBS. Previous Plans included two entities since sold or dissolved (First Telecom Services, LLC and FirstEnergy Solutions) as RCBSs.

Suvon has provided services through two lines of business - - FirstEnergy Home and FirstEnergy Advisors. FirstEnergy Advisors services include acting as a licensed electricity broker and aggregator in Ohio, Pennsylvania, and Virginia and as a licensed natural gas broker in Virginia. It also provides energy consultation and procurement services to commercial customers, industrial customers, and customers taking service as part of government aggregating agreements. Management reports that it offers none of these services to New Jersey customers. A recent state supreme court ruling in Ohio left FirstEnergy Advisors' operating status seemingly uncertain.

FirstEnergy Home, however, does conduct business actively in New Jersey. Offerings there and in other states include an online marketplace for home energy management related products and services, such as:

- Electrical Surge Protection - - protection against damage to selected home devices for a monthly fee
- Internet, TV, and Home Phone Services - - access to offerings from internet, television, phone, and home security vendors
- Home Security and Networking Devices - - home network devices, smart devices for home security including cameras, doorbells, and locks, and smoke, carbon dioxide, and water leak detection devices
- Smart Home Products - - including those summarized in the following bullet
- Bundled Offerings - - packages of indoor home smart products and energy efficiency kits and outdoor security
- Installation Services - - supporting generally the Smart Home product types offered.

The next table itemizes available offering in New Jersey

First Energy Home Product Offerings in New Jersey

Smart Garage Hub	Smart Home Light Bulb	Smart Home Sensor
Smart Home Bridge	Smart Home Light Bulb Kit	Smart Home Smoke & CO Detector
Smart Home Button	Smart Home Light Kit	Smart Home Speaker
Smart Home Cable	Smart Home Light Strip	Smart Home Sprinkler Control
Smart Home Camera	Smart Home Light Switch	Smart Home Thermostat
Smart Home Dimmer Switch	Smart Home Lock	Smart Home Thermostat and Sensor
Smart Home Doorbell	Smart Home Motion Sensor	Smart Home Voice Assistant
Smart Home Hub	Smart Home Outlet	Smart Home Water Leak Sensor
Smart Home Key Fob	Smart Home Plug	Smart Home Wi-Fi Bridge
Smart Home Keypad	Smart Home Range Extender	Smart Home Wi-Fi Extender
Smart Home Leak Detector	Smart Home Router	Smart Water Monitor
Smart Home Leak Sensor	Smart Home Security Kit	

FirstEnergy formed Suvon in September 2017. It has offered services in New Jersey since 2018 through FirstEnergy Home. Revenues have remained modest - - ($2,468), $172,608, and $497,604 for 2018, 2019, and 2020, respectively. Management stated that Suvon does not have employees, BUT USES FESC personnel to conduct its operations. Management identified approximately 40 employees as engaged by Suvon from 2017 through 2020.

For most of the audit period, First Energy Solutions (FES) also operated as an RCBS, performing as a third party supplier (TPS) of electricity, licensed in New Jersey and other states. Two subsidiaries provided FES ownership interest in unregulated fossil and nuclear generating facilities - - FirstEnergy Generation and FirstEnergy Nuclear Generation. FES also offered HVAC repair service through a relationship with an unaffiliated entity, HomeServe, but discontinued doing those operations in 2012. During its operation, FES had very substantial size, as the next table summarizes.

FES Employee Count and Revenue and Net Income

	2010	2011	2012	2013	2014	2015	2016	2017
Employees	274	273	276	234	143	125	77	56
Revenues (in millions)	$5,828	$5,477	$5,894	$6,173	$6,144	$5,005	$4,398	$3,098
Net Income (in millions)	$231	($59)	$187	$60	($244)	($2,391)	($5,455)	$82

A third RCBS, First Telecom Services, LLC (FTS), operated in the early portion of our EDECA audit period, providing communications services. By December 2012 FirstEnergy sold its remaining interests, making FTS no longer an RCBS per the Standards.

Another FirstEnergy affiliate, FirstEnergy Transmission, LLC holds a 9.9% interest in Grid Assurance, LLC. Grid Assurance, LLC provides transmission equipment subscription services, which JCP&L takes pursuant to BPU approval by a February 27, 2019 Order in BPU Docket No.

EM18090985. This agreement gives JCP&L the ability to acquire spare transmission equipment at Grid Assurance's original cost. The BPU's Order found the agreement in the public interest.

b. JCP&L Competitive Service Offerings

JCP&L began in 1993 to provide a tariffed electronics protection service called Consumer Electronics Protection Services (CEPS). JCP&L considers this service to fall under the "existing products and/or services" definition of the Standards. JCP&L received BPU approval to provide this service under its tariff in two relevant Orders, the first in October 1993 and the second in a September 1994 Supplemental Order. The applicable provision defines "existing products and/or services" as those offered prior to January 1, 1993, or that have been approved by the BPU prior to February 9, 1999.

JCP&L closed enrollment to any new customers on March 3, 1999. JCP&L continues to provide the service to pre-existing customers, which decreased from 11,374 in 2010 to 5,318 in 2020. Revenues from the program declined from $490,610 to $284,698 during that same period. The closing of the offering to new customers makes some EDECA requirements inapplicable and removes incentives for or benefits from undertaking a number of others. We generally found compliance with those that remain after excluding these subsets, except for the regular filing of reports required under §14:4-3.6, which requires timely filing of semi-annual and annual financial performance reports for each public utility or RCBS competitive product or service, reflecting most current cost information.

Management provided copies of annual reports to the BPU regarding CEPS activities. We found gaps in the filings. For example, the July 30, 2021, report, the first filed in over three years, included 2018, 2019, and 2020 reports. Management provided this documentation in response to an audit data request we issued a number of weeks earlier - - on July 2, 2021. Other reporting gaps occurred in 2012 and 2015.

3. Conclusions

4. JCP&L had a small number of holding company RCBS active in New Jersey during the audit period, with sales and cessation of operations leaving Suvon as the only remaining one.

The most significant FirstEnergy RCBS change during the audit period came in connection with the 2018 bankruptcy affecting FES. The Standards impose a wide scope of provisions covering a very broad set of topics and transactions. Transactions with affiliated TPSs such as FES, comprise major ones. FirstEnergy sold another RBCS, FTS, which had active operations from 2010 to 2012. Suvon remained the only an active FirstEnergy RCBS as 2020 ended, making one of its two service offers available in New Jersey. These offerings produced annual New Jersey revenues of less than $500,000 in 2020.

5. The BPU's approval of JCP&L's agreement with Grid Assurance, LLC addressed pricing and affiliate relationships issues such as those arising under EDECA requirements.

JCP&L sought and received approval for its subscription service with Grid Assurance, LLC, owned in part by FirstEnergy Transmission. The BPU's Order approving the agreement found it consistent with the Standards and imposed a requirement for JCP&L to seek approval for any potential extension of the agreement's initial five-year term.

6. JCP&L has failed to provide regular, timely reports for its CEPS offering, which produces small and declining revenues given closure to new participants for more than two decades. *(See Recommendation #3)*

JCP&L closed its CEPS offering to additional services over 20 years ago. About 5,000 customers have continued to take service under the program. We did not find other EDECA violations under this contracting program, but JCP&L has failed on a number of occasions to provide annual reporting to the BPU. For example, it only filed reports for 2018, 2019, and 2020 after we inquired about CEPS operations.

4. Recommendations

3. Institute measures to secure regular, timely filing of EDECA reports and undertake a review designed to determine the root causes of failure to timely file reports, and to identify any gaps in compliance measures or rigor in executing them. *(See Conclusion #6)*

We encountered a repeat reporting gap in connection with the CEPS offering. The program is small and declining, having stopped accepting new entrants more than two decades ago. Moreover, we did not find problems in complying with other EDECA measures still directly applicable or concerning which non-compliance might produce benefit.

Nevertheless, annual reporting comprises a threshold requirement of EDECA and one essential to producing the transparency on which effecting application of its requirements depends. JCP&L should institute measures to ensure no more gaps in reporting and, given the centrality of reporting overall, should undertake an examination to determine whether structural gaps or inattention to detail in administering EDECA fully exist.

D. Non-Discrimination Standards (Section 14:4-3.3)

Section 14:4-3.3 of the Standards applies to interactions between a utility and its affiliates, any RCBS of its holding company, or the holding company itself, if it offers or provides competitive services to retail customers in New Jersey. Separate standards, which Section G of this chapter addresses, apply to interactions between utilities and their internal RCBSs. These particular standards do not apply to an internal RCBS within the utility itself, or to transactions between the utility and such an RCBS.

1. Affiliate Preferences

a. Statement of Applicable Requirements

Section 14:4-3.3 of the Standards provides that:

> *(a) An electric and/or gas public utility shall not un-reasonably discriminate against any competitor in favor of its affiliate(s) or related competitive business segment.*
>
> *(b) An electric or gas public utility shall not represent that, as a result of the relationship with the electric and/or gas public utility or for any other reason, a related competitive business segment of its public utility holding company, or customers of a related*

competitive business segment of its public utility holding company will receive any different treatment by the electric and/or gas public utility than the treatment the electric and/or gas public utility provides to other, unaffiliated companies or their customers.

(c) An electric or gas public utility shall not provide a related competitive business segment of its public utility holding company, or customers of a related competitive business segment of its public utility holding company, any preference (including, but not limited to, terms and conditions, pricing, or timing) over non-affiliated suppliers or their customers in the provision of products and/or services offered by the electric and/or gas public utility.

b. <u>Summary of Audit Activities</u>

This standard set forth in Section 3.3(a) and many of the standards that follow it address the issue of discrimination. Those that follow tend to apply to very specific cases. See for example the requirements of Section 3.3(e), which later sections of this report address. Subsections (b) and (c) set forth two more general rules. Specifically, these two subsections prohibit two particular forms of favoritism to affiliates:

- (b) Making representations that any RCBS of its holding company or that any customers of such an RCBS will be treated differently by the utility
- (c) Providing preferences to any RCBS of its holding company or RCBS customers with respect to terms, conditions, pricing, timing, or other aspects of utility services.

Our examination of discrimination under this subsection tested:

- Whether the paths used for regular customer communications include any direct or implied representations that selection of an RCBS would bring advantage to the customer in terms of utility service
- Whether JCP&L's website makes any direct or implied representation that selection of an RCBS would bring a customer any utility service advantage
- Whether JCP&L's Compliance Plan adequately addresses the requirements of this subsection.

We identified the regular channels used to communicate with JCP&L customers during the EDECA audit period - - by electronic and physical documents. We reviewed the substance of communications for evidence of prohibited discrimination. We also reviewed JCP&L's Compliance Plans to determine standards of conduct imposed with respect to employee representations to customers. This review examined materials of FirstEnergy, JCP&L, and utility and other affiliates.

c. <u>Findings</u>

We requested a copy of all print, radio, and television advertisements run by FirstEnergy, JCP&L, or any affiliate. Management was able to provide materials for all but the first year of the EDECA audit period, citing the lack of availability of 2010 information. The next table summarizes the campaigns, their purposes, and the years active.

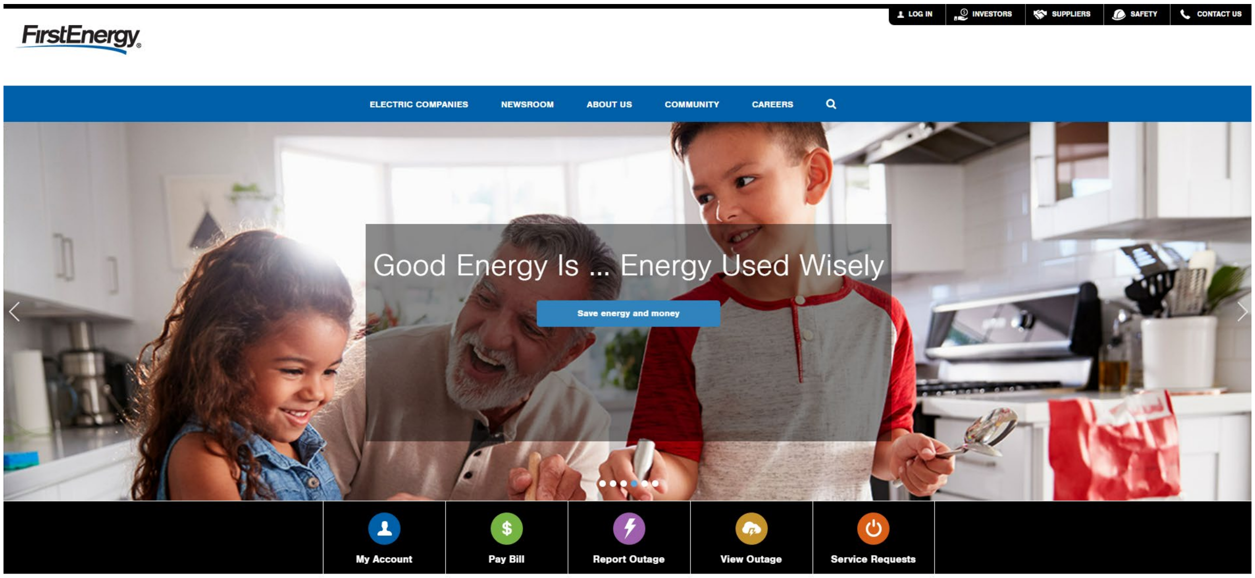
FirstEnergy and JCP&L Advertising Summary

Advertising Campaign	Years Active	Description
Storm Advertising	2011-2020	Run across the various FE Opco service territories before, during, and after major weather events; communicated safety guidance, restoration plans, and contact and communication methods
Game Time	2013-2014	Campaign to highlight FE's naming rights sponsorship of the Cleveland Browns stadium
Power Center Stay Connected	2013-2014	Ads highlighting outage communication and contact methods - - state specific
WARM Program	2013-2021	Campaign to increase awareness and add participants in the PA-specific program which provided energy use and savings programs
Power to Help	2014-2015	Ads highlighting FE employees community involvement - - Habitat for Humanity
PA Smart Meter	2014-2019	Campaign to educate PA customers about the replacement of meters with smart meters
Browder Field	2015-2016	Campaign highlighting restoration work to a football field in Cleveland
Energizing NJ Hometown Energy Team	2015-2016	Ads showing JCP&L employees to highlight company work and impact on customers
eBill	2016	Campaign to increase customer awareness and enrollment in eBill program
Ohio Promise PPA	2016	Materials describing an ad explaining FE's proposed plan for Ohio expenditures for matters including the nuclear plant subsidization; company materials note a counter to "dubious claims" from other parties
Switch Is On	2016	Campaign highlighting FE sustainability commitments
SmartMart	2017	A $2 million+ campaign to introduce customers to an online shop for home products and services
You First	2017-2018	Campaign to highlight customer service and non-tariffed company product and services offerings
Brighter Future	2018-2020	Ads focusing on future focused efforts of FE and using individual employees to highlight these efforts
Energy Efficiency	2019	OH EDC billboards focusing on energy efficiency programs available to customers
IBEW	2019-2020	Campaign promoting FE-IBEW partnership and system modernization impacts
Thankful for Customers	2019	NJ-specific ads observing outages and thanking community stakeholders
OH Smart Meter	2019-2021	Campaign to educate OH customers about the replacement of meters with smart meters
Bill Assistance	2020	Information on customer bill assistance programs
Public Safety	2020-2021	Safety awareness campaign
Various JCP&L	2021	Various ads with safety tips and a congratulatory ad for JCP&L's President

Management did not provide information for three entities operating as RCBSs during the period requested - - FES, FTS, and Suvon. The former two no longer exist as affiliates. We sought to review advertisements and other relevant materials to verify compliance with the Standards. Management provided FES advertising materials in response to a follow-up request, noting that none aired or ran in New Jersey. Management also reported no FTS or Suvon advertisements placed in New Jersey either.

We observed the following from a review of the web pages of the relevant FirstEnergy entities, including JCP&L. FirstEnergy's www.firstenergycorp.com webpage focuses on the types of utility parent/holding company items typically found at other similar entities, with prominent items of potential relevance here including information about FirstEnergy's "Electric Companies," its "Newsroom," an "About Us" link, "Community", and "Careers." The top right includes a customer log-in portal for account management and payment and billing functionality, a link to investor relations materials, a link for potential suppliers to FirstEnergy, a safety page providing extensive information about customer-focused safety initiatives, and a contact page. The next illustration depicts the home page.

FirstEnergy Home Page Depiction



Below those features, at the time of our audit field work, a scrolling set of images included six items:

- Coronavirus information for customers
- Highlights of selected employees "who work to deliver safe, reliable power"
- Transmission projects, including state-specific information
- Home and business energy savings programs, applicable to each state in which FirstEnergy utility operating companies provide service
- A careers page including the option to view jobs available system-wide
- Communications reminders for various outage and other communication paths available to customers.

Visitors to the site would not encounter products and services outside electricity delivery until scrolling past the initial home page. Our review of these product listings and availability indicated none available in New Jersey.

Home page links to Suvon's FirstEnergy Home and FirstEnergy Advisors connect to their respective websites:

- www.firstenergyhome.com/
- www.firstenergyadvisors.com/firstenergyadvisors.html

Both sites include the following disclaimer at the bottom banner of the home page, which FirstEnergy Home includes in each subsequent page of its website, but FirstEnergy Advisors (not active in New Jersey) does not:

FirstEnergy Home Webpage Disclaimer

FirstEnergy Home, is an unregulated subsidiary of FirstEnergy Corp. FirstEnergy Home, is not the same company as FirstEnergy Corp. The prices of FirstEnergy Home, products and services are not regulated by the state utility commissions. You do not have to purchase any product and/or service from FirstEnergy Home, in order to receive the same quality regulated services from FirstEnergy Corp.'s regulated electric utilities – Ohio Edison Company, The Cleveland Electric Illuminating Company, The Toledo Edison Company, West Penn Power Company, Pennsylvania Power Company, Pennsylvania Electric Company, Metropolitan Edison Company, Jersey Central Power & Light Company, Monongahela Power Company, and The Potomac Edison Company.

FirstEnergy Advisors Webpage Disclaimer

Suvon, LLC, d/b/a FirstEnergy Advisors, is an unregulated subsidiary of FirstEnergy Corp. Suvon, LLC d/b/a FirstEnergy Advisors, is not the same company as FirstEnergy Corp. You do not have to purchase any product and/or service from Suvon, LLC, d/b/a FirstEnergy Advisors, in order to receive the same quality regulated services from FirstEnergy Corp.'s regulated electric utilities – Ohio Edison Company, The Cleveland Electric Illuminating Company, The Toledo Edison Company, West Penn Power Company, Pennsylvania Power Company, Metropolitan Edison Company, Pennsylvania Electric Company, Jersey Central Power & Light Company, Monongahela Power Company and The Potomac Edison Company.

The disclaimers convey a message consistent with those used by other New Jersey utility affiliates. We observed no links or connection to these sites on either the FirstEnergy or the JCP&L page. Archived versions of the FES website similarly appeared to include a similar disclaimer on each page. We could not locate archived webpages for FTS, but management reported that "FirstEnergy did not publish web sites or web pages for FCI or FTS that would have included such disclaimer." We requested copies of past website materials for FES or the source files that produced the information those websites would have shown in the past. Management reported that it maintained neither, and that it transferred the books and records of FES to its new owner. It provided archived web pages for FES similar in nature to those we found publicly.

Later in this chapter we discuss other customer communications, including supplier choice inquiries, and bill, eBill, and billing envelope communications.

Our review addressing print and website materials in connection with Standards Section 14:4-3.3(c) indicated no JCP&L offers of rebates of the type prohibited; management confirmed that it made no such offerings.

The 2020 version of the Compliance Plan acknowledges the prohibitions against JCP&L's "discriminating against any competitor in favor of" one of its RCBSs. It also provides similarly responsive material to Sections 14:4-3.3(a), (b), and (c) of the Standards.

d. <u>Conclusions</u>

7. JCP&L and its affiliates, including its holding company RCBSs, did not for the portion of the EDECA audit period from which management provided materials, represent in print or television ads or in any other written customer communications that any RCBS or RCBS customers would receive any type of preferential treatment; however, management could not produce all audit period materials.

We reviewed all materials that management provided in its initial response to requests for print, television, and radio advertisements. None of these materials indicated any prohibited favoritism toward or preference regarding a JCP&L or FirstEnergy affiliate. Management proved unable to provide information for 2010. We cannot address compliance for that year.

We reviewed current versions of website pages for JCP&L, FirstEnergy, and affiliates. Current and existing FirstEnergy and JCP&L pages complied with the Standards. Management could not comply with our request for archived web pages and source materials for the RCBSs no longer active (FTS and FES). We were able to locate archived examples of the FES web page which appeared to indicate appropriate use of the required disclaimer. However, we cannot verify the consistency of its use for the full EDECA audit period. Our review of the websites for the only current holding company RCBS, Suvon, disclosed nothing suggesting lack of compliance with the relevant requirements.

8. FirstEnergy, JCP&L, and affiliates' websites created no affirmative implication of preference, and websites for operations in New Jersey set forth an appropriate disclaimer.

The current and available archived versions of company websites gave no indication of preference. Each contained appropriate disclaimers sufficient overall and largely common to those included by other New Jersey utilities and affiliates that we have examined. The FirstEnergy Advisors site includes the disclaimer only on its home page, but its services are not offered in New Jersey.

9. JCP&L's Compliance Plan adequately addresses Section 14:4-3.3 (a), (b), and (c) of the Standards.

Current and previous versions appropriately interpret the relevant sections of the Standards and state an intention to comply with them.

e. <u>Recommendations</u>

We have no recommendations regarding these sections of the Standards.

2. Prohibited Transactions

a. <u>Statement of Applicable Requirements</u>

Section 14:4-3.3(d) of the Standards provides that:

> *Transactions between an electric and/or gas public utility and a related competitive business segment of its public utility holding company shall be prohibited, except for the following…*

Subsection (d) then lists the following exceptions to the prohibition on transactions:

- Tariffed products or services
- Sales and purchases made generally available to all market participants through open and competitive bidding
- Joint purchases allowed by Sections 14:4-3.5(g) and (h)
- "Shared corporate support functions" allowed by Sections 14:4-3.5(i) and (j), which extend to the sharing of "joint corporate oversight, governance, support systems and personnel"
- Competitive products or services offered by an RCBS within the utility, as allowed by Sections 14:4-3.6(a) through (f).

The Standards do not include "corporate support" among its defined terms, but do define two related terms:

- *"Services that may not be shared" means those services which involve merchant functions***,** *including, by way of example: hedging and financial derivatives and arbitrage services, gas and/or electric purchasing for resale, purchasing of gas transportation and storage capacity, purchasing of electric transmission, system operations, and marketing.*
- *"Shared services" means administrative and support services that do not involve merchant functions, including by way of example: payroll, taxes, shareholder services, insurance, financial reporting, financial planning and analysis, corporate accounting, corporate security, human resources (compensation, benefits, employment policies), employee records, regulatory affairs, lobbying, legal, and pension management.*

b. Summary of Audit Activities

The effect of this provision is to prohibit a utility and an RCBS of its holding company from engaging in any form of transaction not specifically authorized by the Standards. The first, second, and fifth exceptions have in common the fact that transactions generally available to all comers, whether affiliated or not, can occur to the extent governed by standard or uniform prices, terms, and conditions. The third and fourth exceptions recognize the right to use internal economies of scale or scope to provide an affiliate with services not made available to outsiders.

Our examinations under this Section of the Standards focused on whether JCP&L made available non-tariffed transactions (except for permitted common services for purchasing and corporate support) to all market participants. We did not examine pricing questions here, but did under Sections 3.3(f) through (i), which cover discounts, charge waivers, and strict tariff enforcement in transactions between a utility and a holding company RCBS. We applied as our standard of review here whether JCP&L made available to a holding company RCBS opportunities to purchase or sell goods or services (apart from the allowed common purchasing and support service) not also made available to other market participants.

We sought to identify the flow of goods and services between JCP&L and its affiliates in the portion of our work explained in the *Affiliate Relationships and Cost Allocation* and *Power Supply and Market Conditions* Chapters of this Phase Two report. As part of this work, we examined the transaction information provided for compliance with the review standard set forth immediately above, incorporating inquiries into JCP&L involvement in any audit period transactions other than those allowed.

c. Findings

The data gathering and field work summarized in the *Affiliate Relationships and Cost Allocation* and *Power Supply and Market Conditions* Chapters of this Phase Two report summarize our review of the transactions between JCP&L and affiliates. We examined whether those transactions violated the requirements of this provision of the Standards.

The Plan summarized this section of the Standards, and noted overall compliance with them, noting that with "certain exceptions, transactions between JCP&L and its RCBS are prohibited by the Standards" and continued to describe the exceptions allowed and the governing provisions.

d. Conclusions

10. We found no non-compliant transactions between JCP&L and RCBSs during the audit period.

We found no evidence of prohibited and non-compliant transactions between JCP&L and its RCBSs. The *Affiliate Relationships and Cost Allocation* and *Power Supply and Market Conditions* Chapters of this Phase Two report describe in detail our review of specific transaction types and their results.

11. The Compliance Plan adequately addresses this section of the Standards.

The Plan appropriately interprets the relevant sections of the Standards and states an intention to comply with them.

e. Recommendations

We have no recommendations with respect to this provision of the Standards.

3. Access to Information and Services

a. Statement of Applicable Requirements

Section 14:4-3.3(e) of the Standards provides that:

> *An electric and/or gas public utility shall provide access to utility information, services, and unused capacity or supply on a non-discriminatory basis to all market participants, including affiliated and non-affiliated companies…*

b. Summary of Audit Activities

This section's anti-discrimination provisions generally follow those set forth in Section 14:4-3.3(a). What makes this section different is its imposition of the following requirement regarding public posting of offerings made by a utility:

> *1. If an electric and/or gas public utility provides supply, capacity, services, or information to a related competitive business segment of its public utility holding company, it shall make the offering available, via a public posting, on a non-discriminatory basis to non-affiliated market participants, which include competitors serving the same market as the related competitive business segment of the electric and/or gas public utility's holding company.*

This standard, unlike the one set forth in preceding subsection (a), introduces the concept of utility provision of "information" as a possible source of preference or discrimination. We address our examination of utility performance in making information available is in other sections of this chapter; *e.g.*, 3.3(m), 3.4(a), 3.4(b), 3.4(d), 3.4(e), 3.5(e), 3.5(j), 3.5(s), which address the sharing of information among affiliates.

The relationship of this subsection with the preceding one led us to perform our audit work on the two provisions together. Relevant here, which the previous section of this report discusses in detail, is whether JCP&L made a public posting of all offerings of services (if any) made available to a holding company RCBS.

c. Findings

The findings set forth for Section 14:4-3.3(b), (d), and (e) in the report sections that immediately precede and follow this one fully address those relevant here.

d. Conclusions

The conclusions set forth for Section 14:4-3.3(b), contained in the immediately preceding section of this chapter fully address those relevant here.

e. Recommendations

We have no recommendations regarding the requirements of this provision of the Standards.

4. Short-Term and Long-Term Sales of Surplus Energy or Capacity

a. Statement of Applicable Requirements

Section 14:4-3.3(f) of the Standards provides that:

> *An electric and/or gas public utility selling or making an offer to sell surplus energy, kWh and/or Dth, respectively, and/or capacity, kW or therms, respectively, on a short term basis to its PUHC or a related competitive business segment of its public utility holding company, shall make the offering available on a non-discriminatory basis to non-affiliated electric or gas marketers, via a public posting.*

Section 14:4-3.3(g) of the Standards provides that:

> *An electric and/or gas public utility selling or making an offer to sell surplus energy, kWh, and/or Dth, respectively, and/or capacity, kW or therms, respectively, on a long term basis to its PUHC or a related competitive business segment of its public utility holding company, shall make the offering available on a non-discriminatory basis to non-affiliated electric or gas marketers, via a public posting.*

b. Summary of Audit Activities

These portions of the Standards require that a utility offering to sell surplus energy or capacity to its PUHC or an RCBS of its PUHC on a short-term basis (transactions of 31 days or less), must make the offering available to non-affiliated companies via a public posting. The sections addressing short- and long-term sales are similar; therefore, we examined both types through the same audit activities. We first sought information from JCP&L about its selling of excess energy and capacity on both a short-term and long-term basis. We also reviewed the Plan, specifically addressing any portions dealing with surplus energy and capacity. Our work examined whether:

- The Compliance Plan adequately addresses the requirements applicable to offerings made to an RCBS
- JCP&L made a public posting of all offerings (if any) made available to a holding company RCBS.

c. Findings

The Plan summarizes the applicable Standards and acknowledges the posting requirements necessary in the event of a supply, capacity, service, or information offering by JCP&L to

FirstEnergy or a FirstEnergy RBCS. Management reported no qualifying sales or offerings from JCP&L of either a short- or long-term nature from 2010 through 2020.

Management did acknowledge EDECA audit period offerings of its Yards Creek facility and its NUG offerings through sales into PJM markets and auctions. This approach obviated the need for the types of postings the Standards requires. This report's chapter on *Power Supply and Market Conditions* describes in more detail work surrounding these broader issues surrounding JCP&L's purchases and sales of electricity. We report in that chapter that no affiliate energy transactions relevant to these provisions of the Standards occurred from 2010 through 2020.

d. Conclusions

12. The Compliance Plan adequately addresses this section of the Standards.

The Plan correctly recites the restrictions regarding short- and long-term energy and capacity offerings and utility information and services offerings. We found appropriate the Plan's interpretation of this Section of the Standards appropriate. It included explanatory text conforming to the intent of these provisions.

13. JCP&L did not engage in any audit period offerings or transactions that required posting.

FES operated as a holding company RCBS for the majority of the EDECA audit period but made no energy and capacity transactions with JCP&L before its sale. The *Power Supply and Market Conditions* chapter explains our finding of no bi-lateral transactions or any pursuant to the BGS auction process.

e. Recommendations

We have no recommendations with respect to this provision of the Standards.

5. Discounts or Waivers of Fees or Charges

a. Statement of Applicable Requirements

Section 14:4-3.3(h) of the Standards provides that:

Except when made generally available by an electric and/or gas public utility through an open, competitive bidding process, an electric and/or gas public utility shall not offer a discount or waive all or part of any other charge or fee to a related competitive business segment of its public utility holding company, PUHC, or offer a discount or waiver for a transaction in which a related competitive business segment of its public utility holding company is involved unless the electric and/or gas public utility shall make such discount or waiver available on a non-discriminatory basis to other market participants.

1. *An electric and/or gas public utility shall not give its PUHC or a related competitive business segment of its public utility holding company involved in energy supply or marketing a preference with respect to tariff provisions that provide for discretionary waivers of fees, penalties, etc., unless offered to all others on a non-discriminatory basis.*

b. Summary of Audit Activities

This section prohibits a utility from offering a discount or waiver of any charge to or for the benefit of an RCBS of its holding company, unless it makes the same concessions to non-affiliated entities. We sought first to identify any instances during the audit period when JCP&L may have offered a discount or waiver to an RCBS. Upon encountering any, we would then determine whether JCP&L made the same concessions available to non-affiliates through an open process. As a first step, we formally asked whether JCP&L provided any discounts, waivers, or the like to its holding company or to an RCBS of its holding company during the audit period.

In addition to the work summarized in this chapter, through the data gathering in our Cost Allocation Methods field work we obtained substantial information about transactions between JCP&L and its affiliates. We examined that information for evidence of any discount, waiver, rebate, or similar concession to or for an affiliate. We would examine any found for evidence of offering to non-affiliates.

Specifically, we sought to determine whether:

- The Plan adequately addresses obligations under this section
- In the event that there were any covered transactions, similar offerings were made to non-affiliates.

c. Findings

The Plan notes that the Standards govern any discounts or waivers of charges or fees from JCP&L to an RCBS. JCP&L provided no tariffed services to any affiliates during EDECA audit period, nor did it provide any discounts, rebates, or waivers to any affiliate., Neither FirstEnergy or JCP&L offered to customers of any of RCBSs charging or financing of products or services on JCP&L customer bills.

d. Conclusions

14. JCP&L offered no audit period discounts or waivers to tariffed services provided to affiliates.

JCP&L did not provide tariffed services to any affiliates during the EDECA audit period; it offered no discounts or waivers.

15. The Compliance Plan adequately addresses this section of the Standards.

The Plan states management's understanding of the prohibitions regarding its offering of discounts or discretionary waivers to affiliates, absent the defined exceptions prescribed by the Standards.

e. Recommendations

We have no recommendations regarding the requirements of this provision.

6. Documentation of Discount Bases

a. Statement of Applicable Requirements

Section 14:4-3.3(i) of the Standards provides that:

An electric and/or gas public utility shall document the cost differential underlying the discount to its PUHC or a related competitive business segment of its public utility holding company in the Affiliate Discount Report described in (q) through (s) below.

b. Summary of Audit Activities

This section requires that JCP&L document the basis for any discount offered to the holding company or an RCBS of its holding company. We first sought to determine those instances during the audit period when JCP&L may have offered a covered discount or waiver. We planned next to determine whether JCP&L accompanied any offered with a properly documented basis.

c. Findings

We explained in the preceding discussion under Section 14:4-3.3(h) that JCP&L did not offer discounts or waivers to RCBSs of its holding company. The absence of offerings that qualify negated any reporting and documentation. The Compliance Plan summarizes this section of the Standards where it addresses 14:4-3.3(h) and confirms JCP&L's understanding that in the event that such offerings do occur, it must document the cost differential made available to any affiliate in the Annual Discount Report.

d. Conclusions

16. The absence of any EDECA audit period JCP&L offerings of discounts and waivers to affiliates negated the need for compliance with the documenting and reporting requirements of the Standards.

JCP&L made no such discounts or waivers to an affiliate during the EDECA audit period; therefore, it had no obligation with respect to this provision of the Standards.

17. The Compliance Plan adequately addresses this section of the Standards.

The Plan states management's understanding that its offering of a discount to an RCBS triggers documentation and reporting requirements per the Standards.

e. Recommendations

We have no recommendations regarding the requirements of this provision.

7. Non-Discriminatory Tariff Enforcement

a. Statement of Applicable Requirements

Section 14:4-3.3(j) of the Standards provides that:

An electric and/or gas public utility shall apply tariff provision(s) on a non-discriminatory basis to its PUHC or related competitive business segments of its public utility holding company and to other market participants and their respective customers if the tariff provision allows for discretion in its application.

b. Summary of Audit Activities

This provision prohibits a public utility from discriminating in favor of its holding company or an RCBS of its holding company in the following two ways:

- Failing to enforce tariff requirements fully
- Giving an affiliate relatively greater benefit where a tariff may allow the exercise of latitude.

As a threshold matter, we sought to determine the nature and extent of tariff services provided by JCP&L to affiliates during the EDECA audit period. We would then determine whether JCP&L had engaged in any activity covered by the requirements imposed by this provision. If so, we would then identify and carry out any test activities considered appropriate in testing compliance with those requirements. We sought to determine whether:

- The Compliance Plan adequately addresses its obligations under this standard
- In the event of any covered transactions, whether JCP&L made similar offerings to non-affiliates.

c. Findings

We found, as described above in addressing Section 14:4-3.3(h) of the Standards, that JCP&L provided no tariffed services to any affiliate during the EDECA audit period. The Compliance Plan notes JCP&L's requirements to apply the provisions of its tariff on a non-discriminatory basis. It goes on the state that JCP&L will do so.

d. Conclusions

18. We found no evidence of discriminatory application by JCP&L in applying tariffs to affiliates.

JCP&L did not provide affiliates with tariffed services during the EDECA audit period; therefore, no occasions existed for the restrictions of the type envisioned by this Section of the Standards.

19. The Compliance Plan adequately addresses Section 14:4-3.3(j) of the Standards.

The Compliance plan addresses Section 14:4-3.3(j) of the Standards in the same portion where it does so for Section 14:4-3.3(k). It addresses each of these two items accurately and distinctly.

e. Recommendations

We have no recommendations regarding the requirements of this provision.

8. Strict Tariff Enforcement

a. Statement of Applicable Requirements

Section 14:4-3.3(k) of the Standards provides that:

> *An electric and/or gas public utility shall strictly enforce a tariff provision if the tariff provision does not allow discretion in its application.*

b. Summary of Audit Activities

This provision corresponds to the previous standard set forth in Section 14:4-3.3(h). However, that previous standard applies to enforcement of tariff provisions that allow JCP&L to exercise discretion, whereas this one applies to the enforcement of tariff provisions whose implementation does not allow utility discretion. Given the similarity in requirements, we conducted the same activities and applied the same performance standards as set forth above under our discussion of Section 14:4-3.3(h).

c. Findings

The Compliance Plan acknowledges JCP&L's requirements to apply its tariff provisions to all market participants on a non-discriminatory basis. It further states that management will in fact do so. As we have noted, JCP&L provided no waivers or discounts to affiliates for tariffed services during the EDECA audit period.

d. Conclusions

20. We found no evidence of JCP&L failing to strictly enforce the provisions in its.

JCP&L did not provide affiliates with tariffed services during the EDECA audit period and we observed no instances of discretionary application of tariff provisions.

21. The Compliance Plan adequately addresses Section 14:4-3.3(j) of the Standards.

The Compliance plan addresses Section 14:4-3.3(j) of the Standards in the same portion where it does so for Section 14:4-3.3(k). It addresses each of these two items accurately and distinctly.

e. Recommendations

We have no recommendations regarding the requirements of this provision.

9. Processing Affiliate Service Requests

a. Statement of Applicable Requirements

Section 14:4-3.3(l) of the Standards provides that:

> *An electric and/or gas public utility shall process all requests for similar services provided by the electric and/or gas public utility on a non-discriminatory basis for its PUHC or a related competitive business segment of its public utility holding company and for all other market participants and their respective customers.*

b. Summary of Audit Activities

These provisions prohibit a public utility from discriminating in favor of its holding company by giving affiliates faster, cheaper, or technically superior service when they request new service, a change in existing service, or cessation of service. As a baseline matter, we sought to identify all service requests from affiliates during the audit period, intending next to determine whether JCP&L engaged in any activity covered by the requirements imposed by this section of the Standards. We would then identify and carry out any test activities considered appropriate in determining compliance with those requirements. We sought to determine whether:

- The Compliance Plan adequately addresses obligations under this section of the standards
- Whether there is any indication that JCP&L offered its holding company or any holding company RCBS a preference in responding to service requests.

c. Findings

We requested a list of all new or changed service requests that JCP&L received from any holding company RBCS during the EDECA audit period. Management responded that no RBCS made such a request. Further, management stated that it provided no services to FES or Suvon during the EDECA audit period. Management did report that JCP&L charged [redacted] performed under a standard agreement under which all [redacted]. JCP&L invoiced [redacted] for the services. Management reported that it did not believe that [redacted].

The Compliance Plan acknowledges this provision of the standards, and states that JCP&L must process all request for service on a non-discriminatory basis.

d. Conclusions

22. We found no audit-period occasion that would create the potential for a violation of Section 14:4-3.3(l) of the Standards.

Management reported no requests for new or changed services from an RCBS during the period.

23. The Compliance Plan adequately addresses Section 14:4-3.3(l) of the Standards.

The Plan states that JCP&L will process all requests for services from an affiliate or any other market participant on a non-discriminatory basis.

e. Recommendations

We have no recommendations regarding this provision.

10. Tying Arrangements

a. Statement of Applicable Requirements

Section 14:4-3.3(m) of the Standards provides that:

> *An electric and/or gas public utility shall not condition or otherwise tie the provision of any products and/or services provided by the electric and/or gas public utility, nor the availability of discounts of rates or other charges or fees, rebates, or waivers of terms and conditions of any products and/or services provided by the electric and/or gas public utility to the taking of any products and/or services from its PUHC or a related competitive business segment of its public utility holding company.*

b. Summary of Audit Activities

This section prohibits a utility from tying the provision of goods or services, discounts, rebates or waivers to the taking of products or services from its PUHC RCBS. Our work here focused on verifying that:

- Regular customer communications did not directly or indirectly indicate that the availability of or the conditions associated with taking any utility service have any connection to the taking of service from an affiliate
- The Compliance Plan offer employees explicit instructions with respect to avoiding direct or implied statements that tying is necessary for securing utility services or advantageous with respect to the terms and conditions applicable to utility service.

We reviewed utility customer communications, including information provided to customers inquiring about Energy Choice, utility bill inserts, advertising, and FirstEnergy entities' websites for any representation or implication with respect to tying the taking of goods or services from a PUHC RCBS to the provision of utility services. We also reviewed the Plan to ensure inclusion of the prohibition against tying utility products or services to the taking of products or services from an affiliate.

c. Findings

The discussion earlier in this chapter addressing Section 14:4-3.3(a) of the Standards describes our finding that JCP&L did not represent in its customer communications (including web and advertising material we reviewed) an implication of preferential treatment for any PUHC RCBS or the customers of any PUHC RCBS. We address later (in Section F.14 of this chapter) related findings from our review of bill inserts and eBill materials, as subsequent portions of the Standards apply specific prohibitions to customer bills. These conclusions also apply to any conditions or tying of the provision of utility services or discounts to the taking of any products from a PUHC RCBS.

We reviewed material that management provided regarding Energy Choice inquiries. Customers typically pose such inquires through phone calls to the call center, website inquiries, and in some instances, by mail. A series of procedures in effect during the EDECA audit period provided instruction and guidance to JCP&L and FESC personnel on the relevant areas of concern identified by the Standards. The materials address the need for fair treatment of non-affiliated suppliers, and the need to treat customer information as confidential unless and until JCP&L obtains the types of releases identified by the Standards. The information we reviewed includes state-specific definitions and terminology for concepts that should typically arise in these types of customer interactions. The policies identify by name, and include a hyperlink to, the appropriate version of the state-specific rules and regulations (*i.e.*, for New Jersey, the Standards), the Code of Conduct, and each state commission's web site. Inclusion of the following four specific points emphasize the guidance provided:

- If a customer specifically requests certain information about an individual supplier, for example, address or phone number, that type of information may be provided to the customer
- Employees cannot recommend any one supplier over another even if the customer asks for help in making a selection
- Employees cannot steer customers toward, or away from any supplier whether that supplier is related to FirstEnergy Corporation or not. Employees cannot provide preference or advantage to any electric generation supplier

- Employees may not release any proprietary customer information (*e.g.*, individual customer load profiles or billing histories) to a supplier or an affiliate without proper authorization from the customer.

A "Quick Referral Guide" provides employees with a state-specific grid that summarizes key points regarding the TPS options available to customers in each FirstEnergy state. Management also administers a training course to Customer Service Representatives specifically targeted to supplier choice. Management also instructs its lesser experienced representatives to transfer customers with more detailed supplier choice questions to colleagues possessing more experience.

JCP&L provided no tariffed services to any affiliates during the EDECA audit period, nor did it provide any discounts, rebates, or waivers to any affiliate.

The Compliance Plan includes discussion of this provision of the Standards, and includes language stating that JCP&L shall not tie the provision of any products or services or the availability of any discounts, rebate or waivers to the receipt of products or services from any retail affiliate.

d. Conclusions

24. JCP&L does not specify or imply in its customer communications, nor do it or any of its affiliates through their websites specify or imply the tying of the provision of utility goods and services to the taking of products and services from its PUHC RCBS.

We reviewed various customer communication paths including print, TV, radio, and other advertisements, utility and affiliate web sites, and the policies and procedures management employs relevant to these matters. We observed no instances, either specific, or by implication, that would suggest an attempt by JCP&L or an affiliate to tie its service to one another. Management's procedures adequately emphasized the need for fair treatment toward non-affiliated suppliers.

25. JCP&L's Compliance Plan treats Section 14:4-3.3(m) of the Standards adequately.

The Plan includes coverage of this Section of the Standards, interprets it correctly, and observes management's commitment to avoid the condition or tying of its products and services, or any discounts related to them, to the offerings of an RCBS.

e. Recommendations

We have no recommendations regarding the requirements of this provision.

11. Customer Assignments

a. Statement of Applicable Requirements

Section 14:4-3.3(n) of the Standards provides that:

> *An electric and/or gas public utility shall not assign customers to which it currently provides products and/or services to any related competitive business segments of its public utility holding company, whether by default, direct assignment, option or by any*

other means, unless that means is equally available to all competitors on a non-discriminatory basis.

b. Summary of Audit Activities

This provision prohibits a public utility from discriminating in favor of RCBSs of its holding company if and when assigning customers. We addressed the following items in examining implementation of this provision:

- Adequacy of Plan information to employees in describing their obligations under this provision
- Whether any customer assignments took place during the EDECA audit period
- If so, the existence of clear and convincing evidence that no discrimination against competitors occurred in making such assignments.

We reviewed the Plans in effect during the EDECA audit period and sought to identify all cases where JCP&L may have assigned customers to any party, affiliated or not. We would use this information to determine whether JCP&L engaged in any activity covered by the requirements imposed by this section of the Standards. We would then identify and carry out any test activities considered appropriate in examining testing compliance with those requirements.

c. Findings

JCP&L's Compliance Plan recites this provision of the Standards and notes its obligation to make any customer assignments on a non-discriminatory basis only. JCP&L reported that it made no assignments of customers to any of its RBCSs during the EDECA audit period.

d. Conclusions

26. The Compliance Plan adequately addresses this section of the Standards.

The Plan addresses this provision of the Standards and acknowledges JCP&L's requirements regarding any transfers of customers to an RBCS.

27. JCP&L made no customer assignments to an RCBS during the audit period.

The lack of customer transfers from JCP&L to an RBCS in the EDECA audit period negated a need for further inquiry to assess whether the transfer(s) complied with Section 14:4-3.3(n) of the Standards.

e. Recommendations

We have no recommendations regarding this provision of the standards.

12. Customer Enrollment, Marketing, and Business Development

a. Statement of Applicable Requirements

Section 14:4-3.3(o) of the Standards provides that:

Except as otherwise provided by these standards, an electric and/or gas public utility shall not provide any assistance, aid or services to its PUHC or related competitive business *segment of the PUHC if related to customer enrollment, marketing, or business development unless offered to all competitors on a non-discriminatory basis.*

b. Summary of Audit Activities

The section lists the following examples of prohibited assistance to the PUHC or to an RCBS of the PUHC:

- Providing leads
- Soliciting business
- Acquiring information on behalf of the PUHC or an RCBS of the PUHC
- Sharing market analysis reports or other types of proprietary reports
- Sharing customer usage or end-use equipment information
- Requesting authorization from its customer to pass on customer information exclusively
- Representing or implying that JCP&L speaks on behalf of the RCBS or that the customer will receive preferential treatment as a consequence of conducting business with the RCBS
- Representing or implying that the RCBS speaks on behalf of the public utility.

These provisions prohibit a public utility from assisting its holding company or the RCBSs of its holding company in customer enrollment, marketing, and business development. We reviewed the Plan for adherence to these provisions. In addition, we reviewed business plans, training for customer-service representatives, information recipients, marketing materials, bill inserts, customer and competitor complaints, and information acquisition and dissemination. This review was to ensure that JCP&L was not participating in any prohibited activity involving its holding company or holding company RCBSs.

We sought to determine whether:

- The Compliance Plan adequately addresses the requirements of this provision of the Standards
- There exist controls adequate for assuring compliance with the requirements of this provision
- JCP&L scrupulously avoided conduct that provides assistance, support, or services that aid RCBSs, unless offered to other market participants.

c. Findings

As summarized in the *Planning and Budgeting* chapter of this Phase Two report, we reviewed the relevant JCP&L and FirstEnergy strategic and business plans for adherence to these provisions, and found that the plans complied with this provision of the Standards. We also reviewed the information provided during the planning process to ensure that competitively sensitive information such as market analysis, customer usage information, and end use information are not inappropriately shared.

Section D.10 above which includes our findings regarding the tying prohibitions in the Standards and JCP&L's compliance with them includes our discussion of communications paths with customers. JCP&L reported no known instances of competitor complaints made during the EDECA audit period related to key elements of the Standards such as facilities, employees and resources, marketing information, products or services. Management reported that it offered no incentive programs or other rewards for regulated employees to provide leads to or enroll new customers in the product and service offerings of non-regulated affiliates. Our efforts to seek additional information regarding how management ensures compliance with this Section of the Standards returned a response that stated that certain materials cannot be shared with as management considered them "subject to attorney client privilege and work product doctrines." Management's response went on to say that it implemented post-EDECA audit period changes regarding Suvon, in December of 2021. Claimed benefits of these changes include efforts to "bolster the Company's commitment to structural separation of Suvon, and to ensure compliance with the various States' Codes of Conduct, include the New Jersey Affiliate Standards."

The Compliance Plan summarizes management's interpretation of this provision and addresses it requirements correctly. The Plan notes that employees must respond to customer inquiries that:

> *due to NJBPU regulations the only advice [they] may impart to a customer is the internet address of the BPU website (www.bpu.state.nj.us).*

d. Conclusions

28. The Compliance Plan adequately addresses this section of the Standards.

The Plan appropriately summarizes this provisions of Section 14:4-3.3(o) and includes a JCP& L statement that it will not offer the marketing assistance contemplated by the Standards unless offered on a non-discriminatory basis to others. It includes specific guidance on the limitations governing customer inquiries regarding affiliate services, that employees must limit responses to such questions to directing customs to the BPU website.

29. Our examination disclosed no instances of JCP&L non-compliance with Section 14:4-3.3(o) of the Standards, but management declined to provide information whose review is material in more fully addressing compliance with this provision. *(See Recommendation #4)*

We observed no instance of customer communications, websites, or planning documents that offered the type of customer enrollment, marketing, or business development limited by this provision of the Standards. Management reported no instances of these activities during the EDECA audit period.

However, uncertainty nevertheless exists regarding the activities of Suvon during the period we examined. We asked directly how management assures compliance with this provision of the Standards. An examination for the Public Utility Commission of Ohio recently found concerns about mingling of resources engaged in FirstEnergy utility and Suvon activities in that state. Management declined to respond fully to this request, citing legal privilege.

Lack of separation presents a principal gap through which exchanges limited by this provision can pass. Engagement of counsel in such matters and 2021 structural changes increasing separation of Suvon resources from groups responsible for managing and conducting utility activities, and the decision at that time to remove non-Suvon activities from FESC personnel raise questions about circumstances applicable to JCP&L and this provision of the Standards. Section F.18 of this chapter addresses those changes. As we found many times in the conduct of this audit, however, FirstEnergy's consignment of so many matters to attorneys again precludes transparency useful in determining what may have happened with regard to compliance with this provision of the Standards in and for New Jersey.

A May response to a request for information we issued in January 2022 disclosed that management has underway an examination of inclusion of costs of FE Products (utility-offered in Ohio) and FE Home (Suvon-offered in New Jersey and in other states) in customer rates, leaving open questions about EDECA compliance with respect to their operations.

e. Recommendations

4. Provide to the BPU a full report of the findings and conclusions made in connection with all reviews and evaluations (regardless of the specific jurisdiction or operating company involved) of Suvon structural separation, common work assignments, and sharing of utility information, and address their implications for historical compliance with Section 14:4-3.3(o) and any other applicable standards. *(See Conclusion #29)*

FirstEnergy took an approach common for it in making attorneys responsible for examinations of conduct and then declining to provide information about circumstances of audit relevance based on claims of privilege. Doing so here impaired review of circumstances that led to material changes in organization and work assignments that had come into question in Ohio, under the same entity (a Suvon-managed operation) who operates in New Jersey.

In order to resolve questions about compliance with this and other provisions of the Standards that may be implicated, JCP&L should secure from those responsible for conducting them a full explanation of the findings, conclusions, and recommendations of all studies, evaluations, or other assessments of the operations of Suvon in each state, including but not limited to Ohio, where reason exists for concern about mingling of resources. Such report should encompass the structure, resources, common use of personnel, opportunity for transfer of restricted information, and possession of restricted utility information by persons by virtue of common work on or access to information regarding Suvon and utility matters subject to disclosure or sharing restrictions or limits.

The report should also address:

- Any known violations of this or any related provision of the Standards for the EDECA audit period
- Any material opportunity for violations to have occurred by virtue of organization structure and comingling of utility and Suvon activities and responsibilities
- All measures taken before the 2021 change in Suvon reporting structure and resource responsibility separation to ensure compliance with the Standards
- An identification of all gaps or weaknesses in those measures and actions taken to resolve them in 2021
- All costs for the provision of non-regulated activities inappropriately included in customer rates.

JCP&L should also conduct an annual assessment and report annually (until such time as the BPU determines such reports to be no longer required) on the measures taken to ensure Suvon compliance with the Standards, state conclusions about their effectiveness, and identify any weaknesses or gaps discovered and measures taken to address them.

13. Customer Advice or Assistance

a. Statement of Applicable Requirements

Section 14:4-3.3(p) of the Standards provides that:

> *Provided it is in compliance with these standards, and subject to the provisions of N.J.A.C. 14:4-3.4(g), an electric and/or gas public utility may offer or provide customers advice or assistance with regard to a related competitive business segment of its public utility holding company and/or other product and/or service providers upon the unsolicited request of the customer, so long as such advice or assistance is provided with regard to other competitors on a non-discriminatory basis.*

b. Summary of Audit Activities

These provisions assure equal treatment of all providers of goods and services offered by an RCBS of the PUHC and promote public awareness of the existence of alternative suppliers of utility-related products and services or of products and services of any related competitive business segment of its holding company. We sought to verify the following:

- That regular customer communications do not offer advice or assistance about any RCBS of its holding company
- That the Plan offers employees explicit instructions that: (a) limit them to providing such advice or assistance to cases where solicited by customers, and (b) instruct them that such advice must include other competitors on a non-discriminatory basis.

We reviewed JCP&L's website, materials that it provides in response to customer inquiries about Energy Choice, and the Plan with regard to this provision of the Standards.

c. Findings

We examined customer call center interactions (see our Phase One report Chapter Ten, *Customer Service*) finding no instances of advice or assistance offered regarding relevant customer inquiries. The findings set forth in Section E.3 of this chapter discuss the issues surrounding this provision of the Standards as they pertain to supplier choice.

Other sections of this chapter provide additional, related findings:

- Section D.1 adressing14:4-3.3(a) through (c)
- Section D.10 addressing 14:4-3.3(m)

The Plan summarizes this section of the Standards, and includes the guidance that employees must direct customers who make inquiries regarding services provided by JCP&L affiliates to the BPU website.

d. Conclusions

30. The Compliance Plan adequately addresses Section 14:4-3.3(p) of the Standards.

The Plan adequately summarizes this provision of the Standards and provides direction to employees in the event that customers make inquiries regarding service provisions of affiliated entities.

31. We observed no occasions of JCP&L non-compliance with Section 14:4-3.3(p) of the Standards.

Our Phase One examination of customer service and our examination of customer communications disclosed no examples of the types of advice or assistance contemplated by this provision of the Standards. FirstEnergy and JCP&L apply appropriate guidance and employee communications regarding this and related provisions of the Standards.

e. Recommendations

We have no recommendations with respect to this provision of the Standards.

14. Posting Discounts, Rebates, and Waivers

a. Statement of Applicable Requirements

Section 14:4-3.3(q) of the Standards provides that:

If a discount, rebate, or other waiver of any charge, penalty, or fee associated with products and/or services provided by an electric and/or gas public utility is offered to its PUHC or a related competitive business segment of its public utility holding company, the electric and/or gas public utility shall provide the following information within 24 hours of the time of the transaction, via a public posting:

1. *The name of its PUHC or related competitive business segment of its public utility holding company involved in the transaction;*
2. *The rate charged;*
3. *The maximum rate;*
4. *The time period for which the discount, rebate, or waiver applies;*
5. *The quantities involved in the transaction;*
6. *The delivery points involved in the transaction;*
7. *Any conditions or requirements applicable to the discount, rebate or waiver, and a documentation of the cost differential underlying the discount as required in (d) or (e) above; and*
8. *Procedures by which a non-affiliated entity may request a comparable offer.*

b. Summary of Audit Activities

These provisions require that JCP&L provide to non-affiliated entities the details of any discount, rebate, or other waiver of any charge provided to RCBSs of its PUHC through public posting. Such posting must include information on how a non-affiliate can request a comparable offer. We sought to determine:

- Whether the Plan offers employees explicit instructions that address compliance with this provision
- The posting of any discounts, rebates, or waivers offered as required.

We asked for information about any discounts, rebates or waivers offered by JCP&L. We requested copies of any posting required to comply with this section and examined the company's website for any relevant postings.

We also reviewed JCP&L's Plan to examine management's intended method of complying with this provision of the Standards.

c. Findings

We noted earlier in this chapter that our examination found no JCP&L provision of tariffed services and no discounts, rebates or waivers of charges to affiliates during the EDECA audit period. The Plan discusses this provision of the Standards and addresses its application to any discount, waivers of charges, penalties, or fees offered to an RBCS. The Plan includes in its discussion of this provision of the Standards the relevant posting and reporting requirements and data elements those must include.

d. Conclusions

32. We found no indication that JCP&L offered discounts or waivers to any affiliate during the audit period to which Section 14:4-3.3(q) would apply.

As management made no such offers to an affiliate, no required data reporting and posting requirements applied to during the EDECA audit period and management made none.

33. The Compliance Plan adequately addresses Section 14:4-3.3(q) of the Standards.

The Plan correctly interprets this provision of the Standards and the requirements applicable in the event it makes any offers to an affiliate that would apply.

e. Recommendations

We have no recommendations relating to this provision of the Standards.

15. Information Retention for Discounts, Rebates, and Waivers

a. Statement of Applicable Requirements

Section 14:4-3.3(r) of the Standards provides that:

> *An electric and/or gas public utility that provides its PUHC or a related competitive business segment of its public utility holding company a discounted rate, rebate, or other waiver of a charge, penalty or fee associated with services offered by the electric and/or gas public utility shall maintain, in compliance with N.J.A.C. 14:4-5.2 or longer if required by another government agency, for each billing period, the following information:*

The standard goes on to recite seven categories of information that must be retained.

b. Summary of Audit Activities

These provisions ensure that JCP&L maintains adequate documentation regarding details of any discount, rebate, or other waiver of any charge it provided to its PUHC or to RCBSs of its PUHC.

We applied the same standards of review set forth above for Section 14:4-3.3(q).

c. Findings

The findings set forth in the discussion of our examination under Section 14:4-3.3(q) apply here.

d. Conclusions

The conclusions set forth in the discussion of our examination under Section 14:4-3.3(q) apply here.

e. Recommendations

We have no recommendations relating to this provision of the Standards.

16. Compliance with FERC Record Keeping Requirements

a. Statement of Applicable Requirements

Section 14:4-3.3(s) of the Standards provides that:

> *All records maintained pursuant to the standards in (o) and (p) above shall also conform to FERC rules where applicable.*

b. Summary of Audit Activities

This provision requires that records maintained regarding discounts, waivers and rebates offered by a utility to its PUHC or to an RCBS of its RCBS conform to FERC rules. Our audit activities were the same as those set forth for Section 14:4-3.3(q).

c. Findings

JCP&L made no offering of discounts, rebates, or waivers to any customers, including its PUHC and RCBSs of its PUHC, during the EDECA audit period, therefore Section 14:4 3.3(q) did not apply. We reviewed JCP&L's Compliance Plan and found no reference to this section of the Standards.

d. Conclusions

34. JCP&L made no audit period offerings requiring compliance with Section 14:4-3.3(s) of the Standards.

JCP&L made no qualifying offerings addressed by Section 14:4-3.3(q) and (r)of the Standards. Therefore, this related provision of the Standards did not apply to any JCP&L activity during the EDECA audit period.

35. The Plan adequately addresses the two related Sections of the Standards but does not specifically include guidance on FERC rules conformity should any specific offering disclose a need for additional information to reach that conformity. *(See Recommendation #5)*

This provision of the Standards does not in and of itself suggest that additional records conformity provisions will necessarily apply. A minor update to the Plan to include reference to this specific portion of the Standards and to express JCP&L's need to ensure FERC rules conformity if and as necessary, would better align the Plan with all elements of the Standards.

e. Recommendations

5. Update the next version of the Compliance Plan to include discussion of the potential for FERC rules records conformity as included in 14:4-3.3(s) of the Standards. *(See Conclusion #37)*

We found no indication of JCP&L offerings of the type covered in this or related provisions of the Standards. Nevertheless, inclusion of the FERC rules conformity provisions of the Standards would ensure management attention to this matter in the event that future activity does occur that would trigger this provision of the Standards. This minor revision would close one of the few matters (all relatively minor) arising in an otherwise complete and comprehensive JCP&L Plan.

E. Information Disclosure Standards (Section 14:4-3.4)

Section 14:4-3.4 of the Standards applies to interactions between a utility and an RCBS of its holding company or the holding company itself if it offers or provides competitive services to retail customers in New Jersey. These standards do not apply, however, to an internal RCBS within the utility itself or to transactions between the utility and such an RCBS. Separate standards, which Section G of this report addresses, apply to interactions between utilities and their internal RCBSs.

1. Providing Customer Proprietary Information

a. Statement of Applicable Requirements

Section 14:4-3.4(a) of the Standards provides that:

> *An electric and/or gas utility may provide individual proprietary information to its PUHC or a related competitive business segment of its public holding company only with the prior affirmative customer written consent or as otherwise authorized by the Board and only if it is provided to unaffiliated entities on a non-discriminatory basis with prior affirmative customer written consent, or as otherwise authorized by the Board.*

b. Summary of Audit Activities

These provisions provide protection to customers and competitors by preventing affiliate use of information and data generated by the public utility. The holding company and its RCBSs could gain competitive advantage by:

- Inappropriately sharing customer specific information
- Using information gained through the operation of the utility system to gain competitive advantage in identifying market opportunities or problems
- Using non-public information provided to the public utility by unaffiliated suppliers to gain competitive advantage
- Inappropriately using or exclusively exchanging proprietary data to preclude unaffiliated suppliers from obtaining information available to the PUHC and its related competitive business segment.

We focused on the following aspect of administering this provision:

- JCP&L should have adequate methods for controlling the release of customer information in accord with the standard
- The Compliance Plan should adequately address employee obligations under this standard.

Our initial review of customer proprietary information sought to determine if JCP&L released customer proprietary information either to a holding company or RCBS during the EDECA audit period. We planned next to determine if all customer-proprietary information releases that did occur came after proper customer authorization or other approval by the BPU. We requested information regarding formal or informal complaints concerning the use or release of customer proprietary information during the EDECA audit period.

We also reviewed utility customer-service processes to ensure that adequate methods existed to control access and protect customer proprietary information from inappropriate disclosure or access. In particular, we reviewed training material for customer service personnel and controls on access to customer information. We conducted our examination here in conjunction with our work explained in the *Customer Service* Chapter in our Phase One Report.

c. Findings

JCP&L's Plan acknowledges this provision's restrictions and describes them completely and accurately. Sections D.1, D.2, and E.5. of this chapter discuss controls applicable to requests by affiliates for access to customer information. The Plan further requires the provision of any such data to occur under the same terms and conditions for all parties, including affiliates.

We requested an explanation of the types of information interpreted as requiring customer permission before release to an affiliated entity. Management cited the definition described in N.J.A.C. 14:4-1.2:

> *"Customer information"" means information specific to a particular customer, which a regulated entity has acquired or developed in the course of providing services as authorized under this chapter. This term includes, but is not limited to, a customer's name, address, telephone number, usage habits or history, peak demand and payment history.*

Management also cited N.J.A.C. 14:4-7.8 provisions surrounding Retail Choice Customer Protection.

FirstEnergy maintains a Sensitive Information Policy (FirstEnergy Corporate Policy 808), dated November 2, 2018. Its purpose consists of providing "guidance to personnel for classifying and appropriately controlling FirstEnergy information to ensure compliance with all applicable laws and regulations." The policy incorporates RIM Standard 2.05, dated October 1, 2017, which furthers this discussion and includes a Customer Information section identifying the types of information requiring protection and appropriate handling and references customer consent requirements. Elements addressed include:

- *Customer's name, address, telephone number, date of birth, credit card information, banking information, account number & balances, Social Security Number, Tax ID, load profiles, electric billing history, driver's license number, energy usage, customer special service requirements, premise number, and demand levels*
- *Sales and distribution (SD) account number*
- *Business partner number*

- *Infrastructure information related to serving the customer*
- *Capacity factor*
- *Spouse's name*
- *Vendor financial information, credit card information, number of customers, types of customers, sales levels, and billing information.*

Two recent Internal Audits examining, among other issues, the data classification policies in Corporate Policy 808 and RIM Standards 2.05, found them well defined and requiring no enhancement.

This FirstEnergy website link allows TPSs to request customer information of these types:
https://www.firstenergycorp.com/supplierservices/nj/request_account_information.html
The site includes a state-specific Customer Information form, in PDF (depicted below).

New Jersey <u>Customer Information Authorization</u>

CUSTOMER USAGE INFORMATION AUTHORIZATION

Supplier/Consultant Information (please print):

Name: ________________________ Company: ________________________
Address: ____
Email: _______________________________ Phone: (   ) ______ - ________
Name of Utility company: _______________________________

Please place your initials beside the type of data selected to be provided to your Third Party Supplier (TPS). If you select both, you will be charged for each.

_____ Sixty (60) minute interval data (if available) provided in ASCII text file
_____ Monthly billing information (provided if interval data is unavailable)
<u>NOTE:</u> Billing information will typically cover the most recent twelve-month period.

20 Digit Customer Number(s):

_____________________________ _____________________________
_____________________________ _____________________________
_____________________________ _____________________________
_____________________________ _____________________________
_____________________________ _____________________________

I hereby authorize my electric utility to act on my behalf for the purpose of obtaining information about my historical energy usage and billing information and consent to the release of same. Customer usage information is considered confidential.

_________________________________ ____________________
Business Representative's Signature Date

This authorization is valid for 90 days from the above date.

Management cited five authorized paths for providing customer information to TPSs:

- Electronic Data Interchange, which provides requested customer usage information after a TPS enrolls a new customer and requests such information
- A Letter of Authorization, which third parties access via the above link and submit to JCP&L's Supplier Services group

- Interval data files and sync lists, whose access is limited to those who obtain a user ID and password, and which also require registration with the BPU and JCP&L and execution of a Non-Disclosure Agreement. This process also requires a TPS to enroll a new customer before obtaining the information
- Government Aggregation requests also permit such a release; these requests require no customer authorization, but customers do have an option to opt out and the supplier must agree to confidentiality
- A monthly arrears report identifies to suppliers their customers behind in payment.

Management reported that it provided no non-proprietary customer information to an affiliate during the EDECA audit period and that it made no unauthorized releases of customer proprietary information to any TPS.

Management reported several types of communications and training offered to employees regarding affiliate rules and affiliate transactions. Some of the offerings applied to provisions of the Standards that address customer information. FirstEnergy administered corporate-wide *FERC Affiliate Restrictions Communication* training in 2010, 2012, 2013, 2015, and 2017. Management described this training as addressing regulations regarding:

- Affiliate abuse between regulated utilities and their competitive marketing affiliates
- Improper pricing of transactions between regulated and competitive affiliates
- Improper sharing of regulated company market information.

All persons at the manager level or above at each FirstEnergy affiliate receive this training. FES, no longer a FirstEnergy affiliate, nevertheless was the RCBS affiliate most affected impacted by these issues over the EDECA audit period. Additional FirstEnergy groups receiving the training included persons with “marketing function” responsibilities (those at FES in Unit Dispatch, Sales, Wholesale and POLR Transactions, Load Forecasting, and Structuring & Pricing groups) - - using 2017 as an example. The groups involved comprised 83 percent of total FES employees. No training occurred in 2018, 2019, or 2020; no annual requirements exist. Management explained this absence as part of a focus on ensuring that it made no transfer of customer information during its separation of FES data from FirstEnergy IT systems after its sale. Management next delivered this training in 2021.

Additional, and mandatory (annual) training occurred to address *FERC Standards of Conduct: Communications* topics relating to interactions between transmission providers and marketing affiliates. Management confirmed that this training occurred annually. All new hires with relevant job duties took it as did all continuing employees via refresher training. Those subject to the annual training under this offering included all FirstEnergy employees within transmission-related and marketing groups (defined previously), and included officers, directors, supervisory employees, in addition to any personnel “likely to become privy to transmission function information.”

FirstEnergy issued corporate-wide *Certificate of Compliance Communications*, which took the form of an employee confirmation of a range of corporate policies and requirements. The subjects included conflicts of interest, the Code of Business Conduct, and other related compliance and ethics-related policies. The need for transactions to occur with “integrity and ethics,” the protection of sensitive information, and the reporting of “inappropriate or unlawful” actions were also included. This process required each non-bargaining unit, non-physical employee to certify review of the relevant policies (including each states' code of conduct) and to make the following attestation:

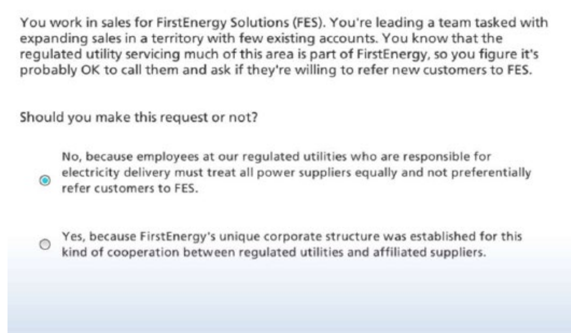
1. *I have read each policy and fully understand the contents of each.*
2. *I have had the opportunity to ask any questions to and/or seek clarification from appropriate Company representatives regarding these policies.*
3. *To the best of my knowledge and belief, I have not engaged in any activities over the last twelve months, to which management is not already aware, that are inconsistent with or in conflict with these guidelines.*
4. *To the best of my knowledge and belief, my answers and disclosures provided on this form are complete, truthful and accurate.*

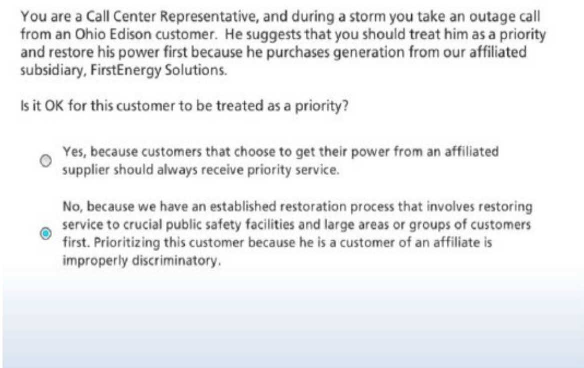
Management also cited State Regulatory Code of Conduct Training given to all new hires covering:

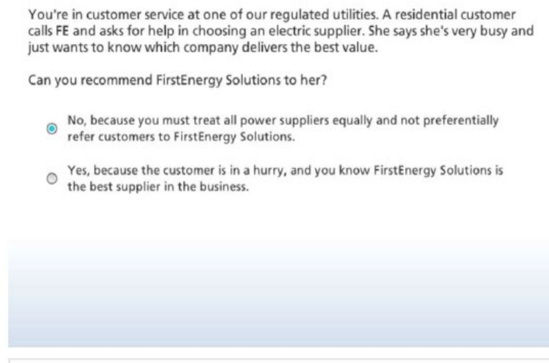
- The Ohio Corporate Separation Rule
- The Pennsylvania Public Utility Competitive Safeguards Code
- The New Jersey New Jersey Board of Public Utilities Regulations, Fair Competition and Accounting Standards – or Affiliate Relations Standards.

Our review of these training materials disclosed coverage of key, relevant topics icluding customer information matters, contacts with customers and suppliers, and transmission and generation sytem information. The training materials explain codes of conduct, why they exist and their principles, guidelines for compliance, and specific examples of the situations employees may encounter. The following extracts from these materials demonstrate additional items included. We selected them as representative of the New Jersey-specific topics and particular guidance to employees regarding certain Standards-specific issues or questions which may arise.

State Regulatory Codes of Conduct Training Examples







We reviewed the procedures and written guidance that management offered as existing at FirstEnergy, JCP&L, and affiliates and addressing limits on the sharing of information among affiliates. FirstEnergy's FERC & State Regulatory Compliance Department maintains a FERC Affiliate Restrictions Compliance Program that consolidates rules and procedures regarding FERC's affiliate restrictions. A FERC Standards of Conduct Compliance Program includes a detailed treatment FirstEnergy's controls to ensure compliance. Although not limited to information sharing guidance, each document does include advice and instruction regarding prohibitions and against affiliate information sharing. The information focuses on FERC rules, but has applicability to provisions of the New Jersey Standards. We describe in Section D.10 of this chapter (*Tying Arrangements*) a Supplier Interactions – MD, NJ, OH, PA procedure. It provides guidelines on each relevant Code of Conduct and other affiliate restrictions in the FirstEnergy states where customers can choose energy suppliers. Specific guidance included addressed prohibitions against "releasing any proprietary customer information (*e.g.*, individual customer load profiles or billing histories) to a supplier or an affiliate without proper authorization from the customer."

FirstEnergy Business Practice #3.2, dated November 2, 2018, addresses Regulatory Codes of Conduct and Affiliate Transactions. This document includes a summary of the reasons for codes of conduct and other transaction and information sharing restrictions. It includes references to multiple FirstEnergy, FERC, and state (NJ, MD, OH, PA, WV) regulations and associated policies and procedures.

Additional New Jersey-specific items include:

- Circumstances stemming from the FirstEnergy/GPU settlement agreement, separate from, but largely inclusive of the types of restrictions described in the Standards and the various policies, procedures, and restrictions cited above
- Summary of New Jersey Board of Public Utilities' Affiliate Relations, Fair Competition, and Accounting Standards - - a short, one-page summary of the New Jersey rule
- New Jersey Board of Public Utilities' Affiliate Relations, Fair Competition, and Accounting Standards Questions and Answers - - a two-page "QandA" document on the Standards.

JCP&L reported no unauthorized release of customer proprietary information during the EDECA audit period to TPSs or affiliates. Management did disclose an inadvertent potential disclosure of customer proprietary information in early 2020. An employee error in the processing of 1099-

MISC forms for customers subject to net metering credits or payments rendered the forms undeliverable, and therefore potentially mis-delivered or not delivered. The forms included customer information, including social security numbers. Management also reported an additional incorrect mailing involving customers owning property that had Trans-Allegheny Interstate Line (TrAIL) activity. The initially disclosed mailing involved 15 New Jersey customers (of 51 total FirstEnergy-wide) while the TrAIL mailing involved 153 total customers, one of whom had a New Jersey mailing address for a West Virginia property.

JCP&L reported no known instances of competitor complaints made during the EDECA audit period related to key elements of the Standards such as facilities, employees and resources, marketing information, products or services.

d. Conclusions

36. The Compliance Plan adequately addresses Section 14:4-3.4(a) of the Standards.

The Plan correctly observes the Standards restrictions regarding the release of customer proprietary information and includes discussion regarding the need for customer permission before making the types of releases permissible.

37. JCP&L made no releases of customer proprietary information during the audit period to RCBSs, though a disclosure of such information did occur in a manner outside the scope of the Standards.

FirstEnergy employs various policies and procedures and provides various training to employees regarding affiliate transactions rules and standards generally and the customer information sharing elements of these specifically. We found the policies, the guidance, and the training sound and consistent with what we have seen in place at other New Jersey utilities.

A potential disclosure of customer proprietary information did occur. But it was not done in direct violation or indirect circumvention of the Standards.

e. Recommendations

We have no recommendations with respect to this provision of the Standards.

2. Providing Other Non-Public Information

a. Statement of Applicable Requirements

Section 14:4-3.4(b) of the Standards provides that:

> *An electric and/or gas public utility shall make available non-customer specific non-public information acquired as a result of operating the public utility's distribution system, including information about an electric and/or gas public utility's natural gas or electricity purchases, sales, or operations or about an electric and/or gas public utility's gas-related goods or services, electricity-related goods or services, to a related competitive business segment of its public utility holding company only if the electric and/or gas public utility makes such information available, via a public posting, to all other service providers on a non-discriminatory basis, and keeps the information open to public inspection.*

1. *An electric or gas public utility is permitted to exchange proprietary information on an exclusive basis with its PUHC or a related competitive business segment of its public utility holding company, provided it is necessary to exchange this information in the provision of the corporate support service permitted by N.J.A.C. 14.4-3.5(i) and (j).*
2. *The PUHC's or related competitive business segment's use of such proprietary information is limited to its use in conjunction with the permitted corporate support services, and is not permitted for any other use.*

b. Summary of Audit Activities

These provisions provide protection to competitors by preventing affiliate exploitation of information and data generated by the public utility. The PUHC and the related competitive business segments could gain competitive advantage by:

- Using information gathered through the operation of the utility system to identify market opportunities or barriers
- Inappropriately using or exchanging proprietary data to preclude unaffiliated suppliers from obtaining information available to the PUHC and its related competitive business segment.

The Plan should adequately address employee obligations under this standard. Moreover, any release of covered information should meet the posting and continuous availability requirements of the standard. We sought to determine if the holding company or a holding company RCBS received non-customer-specific information acquired by JCP&L in the operation of its distribution system, and whether it was then made available to other service providers via a public posting. To the extent that non-specific customer information resides on a website readily accessible by competitors, we believe that JCP&L would meet the requirements of the standard. We reviewed JCP&L's planning processes to determine if any RCBS acquired non-specific information during the planning process, and reviewed management's practices concerning the use of non-specific customer information.

In examining exclusive exchange of proprietary information between JCP&L and its holding company or a holding company RCBS necessary for corporate support services, we sought to identify whether such information had been exchanged. To the extent that such data are required for the provision of support service pursuant to and permitted by N.J.A.C. 14.4-3.5(i) and (j) it would meet the requirement.

c. Findings

JCP&L's Plan acknowledges the existence of the restrictions surrounding the provision of non-customer specific non-public information. The Plan describes the nuances included in this provision of the Standards, the instances the Standards permit, and the posting requirements required. Management reported that it made no releases of non-customer specific non-public information acquired to any affiliated entity or competitive business segment.

d. Conclusions

38. The Compliance Plan addresses Section 14:4-3.4(b) of the Standards.

We found the Plan's treatment of this provision of the Standards sufficient. It accurately interpreted the intent and the Plans' description of the rules and provisions applicable included the circumstances where it may provide non-customer specific information of a non-public and non-proprietary nature and the sharing and posting requirements in effect, should it make such a provision to an affiliated entity.

39. JCP&L made no releases of information covered by this provision of the Standards.

As no releases to an affiliate occurred, no required data reporting and posting requirements applied during the EDECA audit period.

e. Recommendations

We have no separate recommendations pertaining to this provision of the Standards.

3. Providing Lists of Generation or Gas Service Providers

a. Statement of Applicable Requirements

Section 14:4-3.4(c) of the Standards provides that:

> *When an electric and/or gas public utility makes available a list of electric generation and/or gas service suppliers (suppliers), said list shall only contain those suppliers who are duly licensed by the Board and comply with the electric and/or gas public utility's Board-approved tariff to operate on its distribution system. Said list shall be maintained in alphabetical order, and not highlight or otherwise promote any particular supplier.*

b. Summary of Audit Activities

This provision limits utility-provided lists of competitive suppliers of electric generation and gas service to those licensed by the BPU, and it precludes any form of emphasis on a particular supplier on such lists. We focused on determining:

- Whether supplier lists contained all those licensed by the BPU and only those licensed
- Whether any emphasis existed by virtue of location, print, or other identifiable features drawing particular attention to any suppliers on the list
- Whether the Plan adequately addresses the release requirements of this provision.

Sections 14:4-3.3(n), 14:4-3.4(c), 14:4-3.4(f), and 14:4-3.4(g) are related. We conducted the same activities in examining them.

c. Findings

The Plan identifies the need for JCP&L's supplier lists to comply with this provision of the Standards and suggests that management's practice involves providing customers with the BPU's own list as "the best method of assuring that all of the Board's expectations are met," including the requirement that provided materials alphabetize approved suppliers. We summarize findings about other customer choice issues in Section D.10 of this chapter (regarding Section 14:4-3.3(m) of the Standards).

We requested a list of TPSs provided to customers during the January 2010 through December 2020 timeframe that comprised the EDECA audit period. Management provided a copy of each monthly list in effect from January 2010 through May 2017, and from July 2020 through the end of the EDECA audit period, reporting an inability to find the updates in effect from June 2017 through June 2020. An affiliate TPS, FES, remained in operation during a portion of the period of missing records. We reviewed the files management did provide, finding them appropriate in their alphabetical listing of the available suppliers and for the portion of the audit where FES was an active and available supplier. We observed no highlighting or promoting of any supplier, including FES. We also reviewed the "Supplier List" portion of the website, which included a link to a monthly file of current licensed suppliers available to serve JCP&L customers (https://www.firstenergycorp.com/customer_choice/new_jersey/supplier_list.html). As with the historical files management was able to provide, we found the list appropriate in its alphabetical listing of suppliers. We did observe that management, through March 2022, continued to list FirstEnergy Solutions Corp on its list of approved suppliers. Management corrected this inaccuracy after we sought an explanation of it, citing an oversight.

d. Conclusions

40. The lists of suppliers provided to customers and JCP&L's website complied with the Section 14:4-3.4(c) of the Standards, though management could not produce lists for a portion of the audit period. *(See Recommendation #6)*

JCP&L's website includes information for customers that identifies licensed and active TPSs. The website complied with Section 14:4-3.4(c) of the Standards by listing the TPSs in alphabetical order and not highlighting any individual entity. We similarly found the lists of suppliers provided to customers in compliance for these same reasons, although management could not locate the lists for some 37 months of the EDECA audit period. An affiliate and RBCS, FES, served as an active TPS in New Jersey during this period.

41. The Compliance Plan adequately addresses the requirements of this provision of the Standards.

The Plan included discussion of this provision of the Standards and contained sufficient guidance which reflected the intent of the Standards.

e. Recommendations

6. Ensure the archiving of all supplier lists to permit future reviews for compliance with Section 14:4-3.4(c) of the Standards. *(See Conclusion #40)*

Management acknowledged its inability to produce the list of TPSs provided to suppliers for June 2017 to June 2020. FES existed as an active TPS in New Jersey and as an affiliate and RCBS during some of this time. We therefore could not review them for compliance with this Section of the Standards to verify whether the lists provided presented suppliers in a manner that did not promote or highlight any.

4. Soliciting or Providing Affiliates Information Concerning Unaffiliated Suppliers

a. Statement of Applicable Requirements

Section 14:4-3.4(d) of the Standards provides that:

An electric and/or gas public utility may provide non-public information and data which have been received from unaffiliated suppliers to its PUHC or a related competitive business segment of its public utility holding company or other non-affiliated entities only if the electric and/or gas public utility first obtains written affirmative authorization to do so from said unaffiliated supplier.

Section 14:4-3.4(e) of the Standards provides that:

An electric and/or gas public utility shall not solicit the release of such information exclusively to its PUHC or a related competitive business of its public utility holding company in an effort to keep such information from other unaffiliated entities.

b. Summary of Audit Activities

This provision provides protection to competitors by preventing exploitation of confidential non-public information and data provided by an unaffiliated supplier to JCP&L. The PUHC and related competitive business segments could gain competitive advantage by:

- Using non-public information provided to the public utility by unaffiliated suppliers to improve the holding company and RCBS understanding of market conditions
- Restricting the use of non-public information provided by an unaffiliated supplier to only the PUHC or related competitive business segment.

We applied the following criteria in examining this provision of the Standards:

- Non-public information and data received from unaffiliated suppliers by the electric or gas public utility can be provided to either the holding company or a related RCBS absent non-affiliated supplier authorization for the public utility to release the information
- There should have been no provision of information received from unaffiliated suppliers absent written permission
- The JCP&L Compliance Plan should adequately address the release requirements of this provision.

We first determined if non-affiliated information and data sharing occurred between JCP&L with the holding company or any holding company RCBS. If information and data sharing did occur with the holding company or RCBS, then we would review the unaffiliated supplier's written authorization for release of the information. To the extent that a signed release was provided, we would then consider this provision met.

c. Findings

We requested each instance where JCP&L provided non-public customer information it obtained from an unaffiliated supplier to either FirstEnergy or a FirstEnergy RCBS. Management reported that it has not provided and does not provide such information to FirstEnergy or any non-utility affiliate, including FirstEnergy RCBSs. We therefore had no reason to address the affirmative authorization requirement.

The Plan responds to Section 14:4-3.4(d) of the Standards and includes an adequate and appropriate interpretation and explanation regarding what JCP&L must do to remain compliant.

The following excerpt demonstrates the Compliance Plan's treatment of this provision of the Standards:

> *Section 4, §(d). JCP&L is restricted in the dissemination of certain non-public supplier information and data.*
> *JCP&L may receive non-public information and data from unaffiliated suppliers. JCP&L will only provide such information and data to its RCBS, or to non-affiliated entities, if the unaffiliated suppliers in question have given JCP&L written or electronic affirmative authorization to do so.* ***JCP&L will not solicit the release of such information exclusively to its RCBS in an effort to keep such information from other unaffiliated entities****. (emphasis added)*

The emphasized portion of the quote from the Plan responds directly to the next provision of the Standards, Section 14:4-3.4(e), which reads:

> *An electric and/or gas public utility shall not solicit the release of such information exclusively to its PUHC or a related competitive business segment of its public utility holding company in an effort to keep such information from other unaffiliated entities.*

The JCP&L Plan does correctly emphasize and interpret Section 14:4-3.4(e) of the Standards, regarding the release of information "exclusively" to FirstEnergy or a FirstEnergy RCBS. Nevertheless, the Plan should reference part (e) of the Standards to ensure clarity as to where the Plan guides compliance with respect to this Section's requirements.

d. Conclusions

42. JCP&L made no provision or release of non-public information subject to Section 14:4-3.4(d) from any unaffiliated supplier to affiliates nor did JCP&L solicit the release of information exclusively to its PUHC or an RBCS as forbidding in Section 14:4-3.4(e).

Management reported no such instances during the EDECA audit period. Therefore JCP&L remained compliant with the Standards and no required authorizations occurred and required our verification.

43. The Compliance Plan adequately addresses Section 14:4-3.4(d) of the Standards.

The Plan acknowledges that restrictions exist regarding its provision of non-public information and data to an affiliate and that JCP&L will seek and receive the required authorization before doing so. The Plan also confirms that JCP&L will not seek information from others for the purpose of sharing it with an RBCS.

44. The Compliance Plan addresses Section 14:4-3.4(e) of the Standards in its interpretation of the Standards, but an administrative adjustment would align the Plan to the relevant Standards provision. *(See Recommendation #7)*

Management accurately includes treatment of Section 14:4-3.4(e) of the Standards in its Plan, which interprets it correctly. The Plan describes it jointly with a discussion of Section 14:4-3.4(d). JCP&L's placement of the reference in the Compliance Plan to Section 14:4-3.4(e) of the Standards is mislocated. Instead of placing the reference in the portion of the Plan digesting its requirements (14:4-3.4(d)), management includes in its discussion of the next two subsections of the Standards - - 14:4-3.4(f) and (g) - - which address rules prohibiting the highlighting of any service offered by an RCBS, as shown in the following excerpt:

> *Section 4, §§(e), (f) & (g). JCP&L is restricted in the scope of permissible statements it may make about affiliated product and/or service providers.*

e. Recommendations

7. Change the Plan to align the reference to Section 14:4-3.4(e) to where the Plan provides a summation of and guidance regarding this provision. *(See Conclusion #44)*

This re-alignment will clarify where the Plan addresses the requirements of Section 14:4-3.4(e) of the Standards. The plan contains adequate guidance for personnel, but not in the correct location.

5. Soliciting Release of Information Concerning Unaffiliated Suppliers

a. Statement of Applicable Requirements

Section 14:4-3.4(e) of the Standards provides that:

> *An electric and/or gas public utility shall not solicit the release of such information exclusively to its PUHC or a related competitive business of its public utility holding company in an effort to keep such information from other unaffiliated entities.*

b. Summary of Audit Activities

This provision addresses asymmetric access to information requested from unaffiliated suppliers. We first determined whether JCP&L has shared non-affiliate information and data with its holding company or holding company RCBS. If so, we would then determine whether JCP&L provided such information and data to other suppliers. We next planned to review any such solicitations to determine any design to limit information distribution.

c. Findings

During the EDECA audit period, JCP&L neither solicited non-public data or information from unaffiliated suppliers for release to an affiliate nor did it release any such information. The current Compliance Plan recites this provision of the Standards. Also see our findings in Section E.4.

d. Conclusions

Conclusions #42, 43, and 44 in Section E.4 address this provision.

e. Recommendations

See Recommendation #7 in Section E.4.

6. Highlighting Affiliates in Lists of Providers

a. Statement of Applicable Requirements

Section 14:4-3.4(f) of the Standards provides that:

> *Except upon request by a customer or as authorized in (c) above or otherwise by the Board, an electric and/or gas public utility shall not provide its customers with any list of product and/or service providers, which highlights or otherwise identifies its PUHC or a related*

competitive business segment of its public utility holding company, regardless of whether such list also includes the names of unaffiliated entities.

b. Summary of Audit Activities

Sections 14:4-3.3(n), 14:4-3.4(c), 14:4-3.4(f), and 14:4-3.4(g) are related. We performed the same activities described in our discussion Section 14:4-3.3(n).

c. Findings

The findings described under Section 14:4-3.3(n) apply here.

d. Conclusions

The conclusions described under Section 14:4-3.3(n) apply here.

e. Recommendations

We have no recommendations regarding this provision of the standards.

7. Supplementing Information About Affiliated Providers

a. Statement of Applicable Requirements

Section 14:4-3.4(g) of the Standards provides that:

If a customer requests information about any affiliated product and/or service provider, the electric and/or gas public utility may acknowledge that such affiliated product and/or service provider exists, but shall provide no additional information unless it provides a list of all providers of gas-related, electricity-related, or other utility-related products and/or services in business in its service territory, including the related competitive business segment of its public utility holding company.

1. Any such list shall include all suppliers licensed by the Board.

2. Where maintaining such list would be unduly burdensome due to the number of service providers, the electric and/or gas public utility shall not provide a list and may direct the customer to a generally available listing of service providers, for example, the Board, the telephone directory or Internet.

b. Summary of Audit Activities

Sections 14:4-3.3(n), 14:4-3.4(c), 14:4-3.4(f), and 14:4-3.4(g) are related. We performed the same activities described in our discussion Section 14:4-3.3(n).

c. Findings

The findings described under Section 14:4-3.3(n) apply here.

d. Conclusions

The conclusions described under Section 14:4-3.3(n) apply here.

e. Recommendations

We have no recommendations regarding this provision of the standards.

8. *Record Keeping Concerning Transactions with Affiliates*

a. Statement of Applicable Requirements

Section 14:4-3.4(h) of the Standards provides that:

> *An electric and/or gas public utility shall maintain complete and accurate records, documenting all tariffed and non-tariffed transactions with its PUHC and a related competitive business segment of its public utility holding company, including but not limited to, all waivers of tariffed or contract provisions.*

b. Summary of Audit Activities

These provisions require a utility to keep complete and accurate records of all transactions with its holding company and related RCBSs. We reviewed documentation for numerous transactions between the JCP&L and its affiliates. In addition, we requested all contracts between the regulated and unregulated affiliates and reviewed the services provide pursuant to agreements in place.

The criteria we applied in examining performance under this standard are set forth in the Chapter of this report that addresses *Affiliate Relationships and Cost Allocation*.

c. Findings

The Plan covers subsection (h) of this portion of the Standards jointly with its discussion of the following two subsections (i) and (j). All three deal with elements of document retention and other record keeping requirements. The Plan states that:

> *JCP&L will maintain complete and accurate records of all tariffed and non-tariffed transactions with its RCBS, including all waivers of tariff or contract provisions. Such records will be available for review by the Board and/or the Division of Rate Counsel on 72 hours notice. JCP&L will maintain them in accordance with the requirements of N.J.A.C. 14:5-5.2, or longer, if another government agency so requires.*

This Plan does not specifically include reference to all transactions with JCP&L and its PUHC (FirstEnergy); the subsection of the Standards does make address transactions with such entities, which include its PUHC.

d. Conclusions

45. The Compliance Plan does not include reference to JCP&L's transactions with FirstEnergy Corp. in its discussion of the requirements of Sections 14:4-3.3(h), (i), (j), and (k) of the Standards. *(See Recommendation #8)*

The Standards make clear that these subsections apply to transactions not just with an RBCS (which JCP&L's Compliance Plan acknowledges) but also those with a PUHC (which JCP&L's Plan does not address).

46. We observed no instances of JCP&L non-compliance with Section 14:4-3.4(h), (i), (j), and (k) of the Standards.

The information provided by management during the course of our audit indicated that it maintained books and records of its transactions. Section 14:4-3.4(h) of the Standards includes an emphasis on "waivers of tariffed or contract provisions." No such waivers occurred during the

EDECA audit period. Sections 14:4-3.4(i), (j), and (k) include provisions regarding the timeframe applicable to either the retention of materials or the availability of materials for review.

e. Recommendations

8. Update the next version of the Plan to make clear management's understanding of the PUHC requirements included in Sections 14:4-3.3(h), (i), (j), and (k) of the Standards. *(See Conclusion #45)*

The Compliance Plan's omission of Section 14:4-3.3(h), (i), (j), and (k) of the Standards' inclusion of transactions with its PUHC represents a contrast to most portions of the JCP&L Plan, which typically do cover all elements of the Standards.

9. Record Retention Requirements for Transactions with Affiliates

a. Statement of Applicable Requirements

Section 14:4-3.4(i) of the Standards provides that:

> *An electric and/or gas public utility shall maintain such records in compliance with the time frame required by N.J.A.C. 14:5-5.2 or longer if another government agency so requires.*

b. Summary of Audit Activities

These provisions require that the records of transactions between JCP&L and its holding company or holding company RCBSs be maintained in accordance with the period specified in N.J.A.C. 14:5-6.2, which include by reference the National Association of Regulatory Utility Commissioners' (NARUC) "Regulations to Govern the Preservation of Records of Electric, Gas and Water Utilities." The broad scope of our audit and its two phases resulted in our review of a very large number of documents of the types included in the NARUC regulations. Management's responses to our requests for information were not limited by an inability to produce materials due to the age or vintage of the requested data.

c. Findings

The applicable NARUC regulations prescribe minimum category and sub-category retention requirements to documents under the following classifications:

- Corporate and General
- Information Technology Management
- General Accounting Records
- Insurance
- Operations and Maintenance
- Personnel
- Plant and Depreciation
- Purchases and Stores
- Revenue Accounting and Collecting
- Tax
- Treasury
- "Other" reports

The other reports include items such as regularly prepared financial, operating and statistical reports, budgets and forecasts, various types of corporate correspondence, records of predecessor companies, and reports to federal and state regulatory commissions. Minimum retention requirements ranged broadly, from destruction dates "at the company's option" through the entire life of the corporation.

The Plan includes discussion of this provision of the Standards along with a statement from management regarding its commitment to act in compliance.

d. Conclusions

47. We found no indications of non-compliance with this provision.

The Standards include by reference a broad and specific set of category-specific types of reports and records and associated retention periods. The scope of our audit activities comprised a broad range of topics, which included materials that fell into each of the categories the NARUC regulations contemplate. We did not encounter any instances of management's inability to provide data due to its failure to retain information in a way that violated this provision of the Standards.

48. The Compliance Plan adequately addresses the requirements of this provision of the Standards.

The Plan included discussion of this provision of the Standards and contained sufficient guidance which reflected the intent of the Standards.

e. Recommendations

We have no specific recommendations regarding this provision, but note that Recommendation #8, set forth in our discussion of Section 14:4-3.4(h) also applies here.

10. Inspection of Records

a. Statement of Applicable Requirements

Section 14:4-3.4(j) of the Standards provides that:

> *An electric and/or gas public utility shall make such records available for Board and/or Rate Counsel review upon 72 hours' notice, or at a time mutually agreeable to the electric and/or gas public utility and the Board and/or Rate Counsel.*

b. Summary of Audit Activities

These provisions require that transaction records be made available for BPU and the New Jersey Division of Rate Counsel review upon 72 hours' notice. We solicited input from the BPU about any difficulties in gaining access to such information. During conduct of the audit, we sought access to records and documents pertaining to transactions involving JCP&L, its holding company, and affiliates (including, but not limited to, holding company RCBSs).

c. Findings

This provision requires JCP&L to make transaction records available for BPU and Ratepayer Advocate review upon 72 hours' notice. Neither the BPU nor the Division of Rate Counsel reported any meaningful restrictions and limitations in dealings outside of this audit.

During conduct of its audit, we continually sought access to records and documents pertaining to transactions involving JCP&L, FirstEnergy, and affiliates. Our findings in this area do not necessarily pertain to management's timeliness in making requested materials available, but instead include broader, more impactful failures. We report these findings in Section F.4 of this chapter.

d. Conclusions

49. Neither the BPU nor the Division of Rate Counsel Staff reported concerns regarding management's compliance with this provision of the Standards.

As reported to us, the experience of the Staff of both entities did not disclose any shortcomings of import.

50. The Compliance Plan adequately addresses the requirements of this provision of the Standards.

The Plan included discussion of this provision of the Standards and contained sufficient guidance which reflected the intent of the Standards.

e. Recommendations

We have no specific recommendations regarding this Section of the Standards, but note that Recommendation #8, set forth in our discussion of Section 14:4-3.4(h) also applies here.

11. Bid and Contract Records

a. Statement of Applicable Requirements

Section 14:4-3.4(k) of the Standards provides that:

> *An electric and/or gas public utility shall maintain a record of all contracts and related bids for the provision of work, products and/or services to and from the electric and/or gas public utility to and from the PUHC or related competitive business segments of its public utility holding company in compliance with N.J.A.C. 14:5-5.2 or longer if another government agency so requires.*

b. Summary of Audit Activities

This provision requires JCP&L to maintain records of all contracts with the holding company and holding company RCBSs in accordance with N.J.A.C. 14:5-6.2.

During audit data reviews, interviews, and other work sessions as well, we reviewed the available documentation for numerous transactions between JCP&L and its affiliates.

c. Findings

The findings presented in our discussion of Section 14:4-3.4(h) and (i) apply here.

d. Conclusions

The conclusions presented in our discussion of Section 14:4-3.4(h) and (i) apply here.

e. Recommendations

See Recommendation #8, set forth in our discussion of Section 14:4-3.4(h).

F. Separation Standards (Section 14:4-3.5)

Section 14:4-3.5 of the Standards applies to interactions between a utility and an RCBS of its holding company or the holding company itself if it offers or provides competitive services to retail customers in New Jersey. These standards do not apply, however, to an RCBS within the utility itself and to transactions between the utility and such an RCBS. Separate standards, which Section G of this report addresses, apply to interactions between utilities and their internal RCBSs.

1. Separate Corporate Entities

a. Statement of Applicable Requirements

Section 14:4-3.5(a) of the Standards provides that:

An electric and/or gas public utility, its PUHC and related competitive business segments of its public utility holding company shall be separate corporate entities.

b. Summary of Audit Activities

These provisions require that JCP&L, its PUHC, and the non-regulated RCBSs of the holding company be separate corporate entities. We examined whether JCP&L existed as a legal entity separate and distinct from its holding company and any RCBS of its holding company. We considered relevant filings with the Securities and Exchange Commission, organization charts, a variety of data requests and interview results to assess whether the required corporate separation existed between JCP&L and any holding company or holding company RCBSs.

c. Findings

JCP&L existed and operated as a distinct corporate entity during the EDECA audit period, as it has historically, and as it will most likely do in the future. Our examinations in several other audit tasks, including *Executive Management and Corporate Governance* and *Affiliate Relationships and Cost Allocation Methods*, discuss our findings and conclusions regarding the sufficiency of management's organization structure and utility, particularly JCP&L-specific. The current Plan includes discussion of this provision of the Standards, notes the requirement for JCP&L to exist as a separate corporate entity, and includes a statement that JCP&L and its RCBS are and will remain organized as separate entities.

d. Conclusions

51. JCP&L and FirstEnergy's structure and operations complied with Section 14:4-3.5(a) of the Standards during the audit period.

JCP&L existed as its own corporate entity during the EDECA audit period as did FirstEnergy and its various affiliates, including the RCBSs active at various times. JCP&L operations involved large levels of service company support typical of other New Jersey EDCs and LDCs operating in a holding company structure, and did so in a manner appropriate regarding the Standards generally and this portion of them specifically.

52. The Compliance Plan adequately addresses the requirements of Section 14:4-3.5(a) of the Standards.

The plan includes coverage of this provision of the Standards, and its interpretation of it and commitment to abide by it evidence that management appropriately contemplates these provisions.

e. Recommendations

We have no recommendations regarding the requirements of this provision.

2. Separate Books and Records

a. Statement of Applicable Requirements

Section 14:4-3.5(b) of the Standards provides that:

> *An electric and/or gas public utility and related competitive business segments of its public utility holding company shall keep separate books and records.*

b. Summary of Audit Activities

This provision requires that the holding company keep separate books and records for the utility and for its affiliates. We examined whether utility books and records remained fully separate and distinct from those of the holding company and any holding company RCBS.

c. Findings

We found separate books and records for the required entities. JCP&L's Plan discusses this provision jointly with the next two sections, which also pertain to books and records maintenance.

d. Conclusions

53. FirstEnergy and JCP&L complied with the provisions of Section 14:4-3.5(b) of the Standards during the audit period.

Each affiliate's books and records were kept separately. The *Accounting and Property Records* Chapter of this Phase Two report further addresses accounting books and records.

54. The Compliance Plan adequately addresses the requirements of Section 14:4-3.5(b) of the Standards.

The Plan states that all books and records of JCP&L and affiliates must remain separate.

e. Recommendations

We have no recommendations with respect to this provision of the Standards.

3. Conformity of Books and Records with USOA

a. Statement of Applicable Requirements

Section 14:4-3.5(c) of the Standards provides that:

Electric and/or gas public utilities' books and records shall be kept in accordance with applicable Uniform System of Accounts (USOA), 18 CFR Part 101, as amended and supplemented, which is incorporated by reference herein.

b. Summary of Audit Activities

This provision requires that the utility maintain books and records in accordance with USOA. We did not undertake a full-scale examination of conformity with each USOA requirement. We found during our assessment of management and operations that the company generally complied with the USOA requirements. We address this issue most directly in the *Accounting and Property Records* Chapter of this Phase Two report. Other chapters made use of a variety of accounting information, about which we found no indication of material failure in use of required accounting.

c. Findings

The JCP&L chart of accounts is consistent with USOA. The current Plan covers Sections 14:4-3.5(b), (c), and (d) jointly. Our discussion above of Section 14:4-3.5(b) addresses these provisions. We found the Plan's coverage of each of these three sections appropriate.

d. Conclusions

55. JCP&L complied with the requirements of Section 14:4-3.5(c) during the audit period.

Our work in examining the Accounting and Property Records portion of this audit's scope found management's maintenance of books in records in accord with the USOA.

56. The Compliance Plan adequately addresses the requirements of Section 14:4-3.5(c) of the Standards.

The Plan's joint treatment of this portion of the Standards with those addressing books and records maintenance, includes reference to this specific provision of the Standards and states JCP&L intent to comply with them.

e. Recommendations

We have no recommendations with respect to this provision.

4. Availability of Books and Records for Examination

a. Statement of Applicable Requirements

Section 14:4-3.5(d) of the Standards provides that:

The books and records of its PUHC or a related competitive business segment of an electric and/or gas public utility's holding company engaged in transactions, interactions and relations with the electric or gas public utility shall be open for examination by the Board.

b. Summary of Audit Activities

This provision requires that the holding company provide access to its books and records and to those of its non-regulated RCBSs. During the conduct of its audit, we sought access to a host of records and documents pertaining to the utility, utility holding company, and holding company

RCBSs. We tested compliance by assessing whether all requests for information necessary to verify compliance with the standards subject to this audit produced substantially complete responses.

c. Findings

The Compliance Plan discusses Section 14:4-3.5(d) of the Standards and states that JCP&L's books and records are open for examination by the BPU, as are the books and records of its RCBS, to the extent necessary to ascertain compliance with the Standards with respect to its transactions, interactions, or relations with JCP&L, if any. Absent from the plan is JCP&L's acknowledgment of transactions with its PUHC - - which the Standards do include as relevant.

Management provided documentation and records regarding numerous JCP&L transactions with FirstEnergy and various affiliates. It also in several important areas of this audit's scope, declined to provide us with requested information, citing attorney-client privilege, redacted materials, or otherwise presented a general unwillingness to provide items related to the investigations summarized in Chapter Twelve of our Phase One Report, External Affairs - - "The DOJ Investigation." Some of this material took the form of Internal Audits which management reported as performed at the direction of counsel. See also the *Controls, SOX, Auditing, and Listing Requirements* Chapter of this Phase Two report. Other material denied included items responsive to elements of the DOJ, SEC, and Vendor Payments investigations. Management also made use of claims of legal privilege to an unprecedented extent in our experience in conducting work of this type.

d. Conclusions

57. The Compliance Plan does not include reference to JCP&L's transactions with FirstEnergy in its discussion of the requirements of Section 14:4-3.5(d) of the Standards. *(See Recommendation #9)*

The Standards state clearly that PUHC (and therefore FirstEnergy) transactions are open for review by the BPU, not just transactions with an RBCS. While JCP&L's Plan acknowledges the RBCS transactions, it does not include mention of PUHC transactions.

58. JCP&L (or FirstEnergy) declined to make extensive amounts of information available in response to requests for information during our audit field work. (*See Recommendation #10)*

Management in many cases has declined to provide information relevant to the scope of this audit, as we explain in a number of chapters in this Phase Two report and the accompanying Phase One report. We did receive extensive accounting information regarding transactions with affiliates. However, management declined in numerous cases to provide information it has or has prepared regarding the reasons, nature, and substance of those transactions (*e.g.*, the provision of services for and paid for by JCP&L). Often it has denied access to information on the basis of various legal privileges. FirstEnergy appears to engage attorneys in an unusually large number of internal reviews and examinations, and frequently used that engagement to decline access to information we would typically expect.

We also encountered an extraordinary claim made without connecting it to legal privilege. JCP&L asserted that it could not provide us with information about actions undertaken by affiliates serving it, and for whose costs it pays, because the information was in the possession of an affiliate (such as parent FirstEnergy Corp.) and beyond the knowledge of JCP&L. We see no sound logic in the notion that placing a function performed for a utility within an affiliate has any bearing on whether the utility can escape accountability for providing information by claiming it resides at an entity with which it has contracted to perform utility-related functions for which it pays. Use of that excuse provides opportunity to avoid transparency needed for effective utility regulation.

We had substantial success in securing a wide variety and large volume of accounting information, but the categories cited above make a finding of compliance inappropriate.

e. Recommendations

9. Update the next version of the Compliance Plan to include acknowledge management's understanding of the PUHC requirements included in Sections 14:4-3.4(d) of the Standards. *(See Conclusion #57)*

The Compliance Plan's omission of this provision of the Standards' inclusion of transactions with its PUHC is a contrast to most portions of the JCP&L Plan, which typically do cover all elements of the Standards.

10. Deep-seated, corporate cultural barriers have prevented conformity to levels of transparency typical of other holding company/utility cases we have witnessed - - our interaction with FirstEnergy throughout this audit shows that major efforts remain to eliminate those barriers. *(See Conclusion #58)*

With lessons that should already have been learned still seemingly not, we do not see circumstances that give confidence in the ability to secure cultural change necessary to produce a healthy level of transparency while FirstEnergy remains absorbed with legal exposure and willing to elevate legal excuses for denying access to information over regulatory relations and therefore strong business interests for providing access.

With even top governance and executive structure and composition now being driven by a desire to end litigation, we see no avenue for constructive change initiated from within. Perhaps the eventual passage of major litigation from the scene will present more opportunity than exists now. In part that will depend on a strong change of attitude, not the least of which will have to be a sound distinguishing of legal arguments that can be made from those that should.

5. Sharing of Space, Services, and Equipment

a. Statement of Applicable Requirements

Section 14:4-3.5(e) of the Standards provides that:

> *An electric and/or gas public utility shall not share office space, office equipment, services, and systems with a related competitive business segment of its public utility holding company, except to the extent appropriate to perform shared corporate support functions permitted under this subsection or as follows:*

1. *An electric and/or gas public utility may access the computer or information systems of a competitive related business segment of its PUHC or allow a related competitive business segment of its PUHC to access its computer or information systems, for purposes of the sharing of computer hardware and software systems and may share office space, office equipment, services and systems, provided adequate system protections are in place to prevent the accessing of information or data between the utility and its affiliate(s) which would be in violation of this subchapter.*
   i. *Prevention of unauthorized access to computer and information systems must be specifically addressed as part of an electric and/or gas public utility's compliance plan submitted pursuant to N.J.A.C. 14:4-3.7(b).*

b. Summary of Audit Activities

These provisions allow a utility and an RCBS of its PUHC to share office space, office equipment, services and systems where required as part of providing permitted shared corporate support functions. In such cases, adequate system protections must exist to prevent the accessing of data that would violate other provisions of the Standards (a number of them addressed in earlier sections of this chapter).

This provision effectively allows shared space, services, systems, and equipment, provided that security against data exchange proves adequate. Given the breadth of this exception, our examination of performance under this standard sought to determine whether, in cases where sharing has existed, adequate measures apply to prevent inappropriate information exchange.

We requested information regarding the sharing of Information Technology services between JCP&L, its holding company, and holding company RCBSs.

c. Findings

We sought to review the guidance given to and oversight exercised over database owners regarding access to their databases to ensure compliance with the provisions of the Standards addressing information sharing among affiliates and organizational units.

FESC manages overall IT security on a FirstEnergy-wide basis. Management identified its corporate-wide Sensitive Data Tracking System and indicated its use to identify the business owner of each sensitive system and which IT group maintained ownership responsibility. Management used Microsoft Identity Manager to assign access and designate security groups and allowable accounts. Quarterly separations and transfer reports inform database owners of the necessary reviews they must perform to ensure the appropriateness of individuals with access to each system as employee additions, subtractions, or movements occur.

Management identified an SAP-based employee classification approach as the primary method used to ensure data and database related compliance with both the Standards and applicable FERC Standards or Conduct regulations. FirstEnergy's Central Security Administration and the First Energy Compliance Group monitor the assignment of employee access to files and folders stored on the system. The first step in this process governs the classification of each employee to determine that the physical locations they access and the information access management provides them aligns with their job functions and duties.

Before accessing a specific protected database, an employee's name is entered into the FirstEnergy ITHub, which alerts via email the database owners with approval rights. This method allows each owner to verify and either approve or reject the new employee's permission, based on the included department and FERC Code of that employee, to access the data. Management updates the SAP database of each FirstEnergy employee's FERC code on a daily basis to ensure it remains current.

Management noted that to the best of its knowledge, it gave no exception-based access to databases during the EDECA audit period. Management provided copies of the separations and transfer reports, including those covering the transfer of employees between JCP&L and FirstEnergy's RCBSs.

Section E.1 of this chapter summarizes two data classification policies employed by management to appropriate protect and segregate data - - Corporate Policy 808 and RIM Standards 2.05. Two recent Internal Audits found them well defined and requiring no enhancements. Section F.10 below discusses in more detail management's methods, policies, and procedures related to the Standards provisions regarding protections in place surround sensitive data when employee transfer or other movement occur. Management reported that FirstEnergy RCBS employees and JCP&L employees did not utilize the same work space at its work locations and facilities, including:

- Morristown General Office
- Akron Control Center
- Bethel Warehouse
- Fairlawn Call Center
- Fairmont Call Center
- Fairmont Corporate Center
- Greensburg Corporate Center
- Pottsville Pike
- Wadsworth Control Center
- West Akron Campus

The Plan acknowledges this portion of the Standards and notes JCP&L's commitment to comply with them. The Plan summarizes all relevant provisions and includes discussion of the required data and IT compliance.

d. Conclusions

59. Management utilizes appropriate systems of access and controls over its applications and databases and its physical locations.

We found the FirstEnergy-level procedures and controls comprehensive and appropriate for ensuring the protection of information and management gave appropriate care and attention to ensuring that it segregated both physical and electronic (computer systems and data) appropriately. Internal Audits conducted in 2019 and 2020 (the last two years of our audit period in this task) found key procedures sound in their identification and protection of customer information. The *Physical Security* Chapter of this Phase Two Report summarizes our findings surrounding the badging process used to control employee access at physical work locations.

60. The Plan adequately addresses this Section 14:4-3.5(e) of the Standards.

The Plan appropriately covers the provisions of this Section of the Standards, and JCP&L includes the required explanation of computer and information system access information.

e. Recommendations

We have no recommendations regarding this provision of the Standards.

6. Authorized Joint Products and Services

a. Statement of Applicable Requirements

Section 14:4-3.5(f) of the Standards provides that:

Subsection (e) above does not preclude an electric and/or gas public utility from offering a joint product and/or service, provided such joint product and/or service is authorized by the Board and is available to all non-affiliated product and/or service providers on the same terms and conditions, for example, joint billing services.

b. Summary of Audit Activities

The purpose of the provisions is to ensure that any joint products and or services offered by the utility are offered to non-affiliated providers on the same terms and conditions. We focused on determining, in the event of any utility-offered products or services jointly with a holding company RCBS, whether they were offered to non-affiliated providers on the same basis. We reviewed the utility's tariffs to determine whether the company had any competitive products and services. In addition, we asked whether JCP&L offered any competitive services, and gathered information on the product offerings of the RCBS who provide services at retail in New Jersey.

c. Findings

JCP&L offered no joint products or services with a related competitive business segment of its public utility holding company during the time period specified. Therefore, we had no need to examine the terms and conditions of any such offerings for compliance. The Compliance Plan includes Section 14:4-3.5(f) of the Standards in a grouping that discusses its approach to joint purchases - - which subsections (g) and (h) of the Standards introduce. The Plan does not however include discussion of joint product and services offerings.

d. Conclusions

61. JCP&L made no structured joint product or service offerings with an RCBS during the audit period.

No offerings of joint products or services with an RCBS occurred. The absence of such offerings left no terms and conditions to review to ensure compliance with the Standards.

62. The Compliance Plan does not include discussion of joint JCP&L and RBCS product and services offerings of the kind contemplated by the requirements of Section 14:4-3.5(f) of the Standards. *(See Recommendation #11)*

Section 14:4-3.5(f) set forth specific restrictions regarding joint product and services offerings by a utility and a utility RCBS:

Subsection (e) above does not preclude an electric and/or gas public utility from offering a joint product and/or service, provided such joint product and/or service is authorized by the Board and is available to all non-affiliated product and/or service providers on the same terms and conditions, for example, joint billing services.

The Plan, as shown below, in its heading for its joint coverage of Section 14:4-3.5(f), (g), and (h) of the Standards notes:

> *Section 5, §§(f), (g) & (h). JCP&L is required to comply with requirements and limitations applicable to Joint Purchases.*

Neither the heading, its summary statement, or the subsequent support text discuss the notion of Joint Purchases. No mention of Joint Products or Joint Services can be found in the Plan.

e. Recommendations

11. Update the next version of the Compliance Plan to acknowledge management's understanding of the PUHC requirements included in Sections 14:4-3.5(f) regarding joint product and joint services offerings. *(See Conclusion #62)*

The Compliance Plan should address the particular concepts of joint products and services and joint purchases distinctly. Its failure to do so, and its grouping these concepts with Joint Purchases serves to leave the Plan silent on Joint Products and Services. The inclusion of these concepts, statements regarding management's understanding and interpretation of the Standards restrictions should a joint offering occur, and a statement of management's intentions with respect to them will give employees guidance on topics which the Plan at present does not provide.

7. Joint Purchases

a. Statement of Applicable Requirements

Section 14:4-3.5(g) of the Standards provides that:

> *An electric and/or gas public utility and its PUHC or related competitive business segments of its public utility holding company may make joint purchases of products and/or services, but not those associated with merchant functions.*

b. Summary of Audit Activities

This provision of the standards confirms the general permissibility of joint purchases, which we address in the ensuing section of this chapter. However, the provision also imposes a strict prohibition against joint purchases that relate to the merchant function. We sought to verify that JCP&L made no merchant-function related purchases jointly with a holding company or holding company RCBS. We requested copies of all joint purchasing agreements that included both the regulated utility and a holding company or holding company RCBS. Our examination summarized in the *Supply Chain* Chapter of this Phase Two report also sought detailed information about how JCP&L makes purchases and what transactions took place among it and affiliates during the EDECA audit period, regardless of whether the affiliates were RCBSs or not.

c. Findings

Section 14:4-3.2 of the Standards provides the following definitions relevant to Section 14:4-3.5(g):

> *"Joint purchases" means purchases made by a parent or holding company or affiliate thereof for use by one or more affiliates, the fully allocated costs of which are allocated to be paid proportionally by the affiliates, based upon utilization.*

"Joint purchases allowed" means purchases not associated with merchant functions, examples of which would be joint purchases of office supplies and telephone services.

"Joint purchases not allowed" means purchases associated with merchant functions, examples of which would be gas and electric purchasing for resale, purchasing of gas transportation and storage capacity, purchasing of electric transmission, system operations and marketing.

"Merchant functions" means the marketing and/or the provision of electric generation service and/or gas supply service to wholesale or retail customers, as opposed to the marketing and/or provision of transmission and distribution services, by an electric and/or gas public utility.

Management reported that it had no joint purchasing agreements with any entity providing competitive service in New Jersey; *i.e.*, that JCP&L engaged in none and that FESC did not engage in any on JCP&L's behalf. Management's response indicated that no joint purchases of the type not allowed by the Standards occurred, using the same Standards definition of "Joint purchases not allowed" summarized above. FESC did engage in procurement and supply chain services activities for FirstEnergy and affiliates as a whole (including JCP&L). Management reported that all such purchases occurred pursuant to the Service Agreement between JCP&L and FESC and segregated JCP&L appropriately as to not expose it to any joint liability. Management defined these purchases using the same "Joint purchases allowed" definition above, per the Standards.

The plan summarizes this provision of the Standards jointly with subsection (f) and (h); as described in Section F.6 above, the former is not applicable to this provision, although the latter does lend itself to joint treatment as it also relates to joint purchases. The Plan includes discussion of the limitations on the types of joint purchases in which management can engage that involve JCP&L in addition to the pricing and reporting requirements dictated by the Standards. The Plan further observes that transfer pricing rules may apply as well.

d. Conclusions

63. JCP&L complied with Section 14:4-3.5(g) of the Standards regarding joint purchases associated with merchant functions; no covered purchases took place during the audit period.

No transactions occurred pursuant to the "merchant function" definition of the Standards. See the *Power Supply and Market Conditions* Chapter of this Phase Two Report, which describes the energy and capacity transactions made by JCP&L during the EDECA audit period.

64. The Compliance Plan adequately addresses the requirements of Section 14:4-3.5(g).

The Plan's discussion of this subsection includes correct and appropriate interpretation of the intent of the Standards. The Plan notes that JCP&L does not "currently make" any of the types of joint purchases not allowed between a utility and its RCBS, and includes further guidance that should such purchases occur in the future, management acknowledges and will comply with the pricing and allocation provisions of Section 14:4-3.5(g) of the Standards.

e. Recommendations

We have no recommendations regarding the requirements of this provision.

8. Pricing and Reporting of Joint Purchases

a. Statement of Applicable Requirements

Section 14:4-3.5(h) of the Standards provides that:

> *The electric and/or gas public utility shall insure that all such joint purchases are priced, reported, and conducted in a manner that permits clear identification of the electric and/or gas public utility's portions and its PUHC or the related business segment's portion of such purchases, and that direct costs of the joint purchase(s) as well as the indirect purchasing costs are apportioned between the electric and/or gas public utility and the related competitive business segment of the public utility holding company in direct proportion to the relative amounts of the purchased products(s) and/or services(s) received and/or utilized, respectively, in accordance with these standards and other applicable Board allocation and reporting rules.*

b. Summary of Audit Activities

This provision seeks to ensure for all joint purchases proper record keeping, pricing, and assignment of direct and indirect costs between a utility and its RCBS. The provision's two principal requirements include the ability to segregate the utility portion of joint purchases and the allocation of both the direct and indirect costs of purchases to the utility on the basis of its portion of the purchases. Therefore, we focused on the following in examining performance under this standard:

- Whether recordkeeping and reporting of jointly made purchases provides for accurate identification and segregation of the utility portion of purchases made through common efforts
- Whether the costs that the utility pays for purchases made through common efforts are in strict proportion to the amounts purchased for its use.

c. Findings

See the findings in Section F.7. above regarding the lack of any EDECA audit period transactions of the type that would apply to this portion of the Standards. The Compliance Plan summarizes the provision of the Standards, including the treatment of costs associated with any such purchases.

d. Conclusions

65. No transactions subject to this portion of the Standards occurred during the audit period.

As we described in Section F.7 above, JCP&L made no, and FirstEnergy engaged JCP&L in no transactions that would trigger this portion of the Standards.

66. The Compliance Plan adequately addresses the requirements of Section 14:4-3.5(h).

The Plan includes discussion of this portion of the Standards, noting that while no qualifying transactions occur, management will ensure compliance should they occur in the future.

e. Recommendations

We have no recommendations regarding the requirements of this provision.

9. Shared Services

a. Background

Section 14.4-3.5(i) of the Standards provides that:

> *An electric and/or gas public utility, its public utility holding company and related competitive business segments, or separate business segments of the public utility holding company created solely to perform corporate support services may share joint corporate oversight, governance, support systems and personnel. Any shared support shall be priced, reported and conducted in accordance with N.J.A.C. 14:4-3.4 and this section, as well as other applicable Board pricing and reporting rules*

b. Summary of Audit Activities

The provision of and charging for common services falls among the topics addressed in the *Affiliate Relationships and Cost Allocation* Chapter of this Phase Two Report. We limited our discussion of this portion of the Standards in this chapter to the adequacy and appropriateness of JCP&L's Compliance Plan. The Compliance Plan acknowledges this portion of the Standards, summarizing it jointly with the portion immediately following it. The related nature of these two portions of the Standards render appropriate such joint coverage. The Plan notes that the Standards permit sharing of JCP&L corporate oversight, governance, support systems, and personnel between JCP&L, FirstEnergy, and any FirstEnergy RCBS. The plan also notes that pricing and reporting rules apply (in addition to additional restrictions, chiefly those centered around information sharing). We address those rules in Section F.10 which immediately follows).

c. Conclusions

67. The Compliance Plan adequately addresses the requirements of Section 14:4-3.5(i) of the Standards.

The Plan includes a detailed discussion of this provision of the Standards, and includes the types of shared service company support it can provide to JCP&L and simultaneously to affiliates, including FirstEnergy RCBSs. We found this discussion comprehensive and consistent with the types of services the Standards allow.

See the *Affiliate Relationships and Cost Allocation* Chapter of this Phase Two Report which provides detailed findings regarding the pricing and reporting of affiliate services.

d. Recommendations

We have no recommendations regarding the requirements of this provision.

10. Protection of Confidential and Market Information

a. Statement of Applicable Requirements

Section 14:4-3.5(j) of the Standards provides that:

Such joint utilization shall not allow or provide a means for the transfer of confidential customer or market information from the electric and/or gas public utility to a related competitive business segment of its public utility holding company in violation of these standards, create the opportunity for preferential treatment or unfair competitive advantage, lead to customer confusion, or create significant opportunities for cross-subsidization of a related competitive business segment of the public utility holding company. In the compliance plan required pursuant to N.J.A.C. 14:4-3.7(a) through (e), a senior corporate officer from the electric and/or gas public utility and public utility holding company shall verify the adequacy of the specific mechanisms and procedures in place to ensure the electric and/or gas public utility follows the mandates of this subchapter, and to ensure the electric and/or gas public utility is not utilizing joint corporate support services as a conduit to circumvent this subchapter.

b. Summary of Audit Activities

This provision prohibits the utility from sharing confidential customer and market information with holding company related competitive business segments. The prohibition seeks to prevent opportunities for cross-subsidies, customer confusion, and unfair competitive advantage. Cross-subsidies and unfair market advantages could occur in ways such as the following:

- Identification of new market opportunities
- Information concerning strategic direction of the company
- Acquiring market sensitive and related information
- Providing an opportunity for customer confusion between the identity of the utility and its PUHC or its RCBS.

In examining compliance, we focused on the following factors:

- Sufficiency of controls to protect competitively sensitive information regarding joint services
- Compliance plan treatment of market sensitive information when providing joint services
- Conduct of joint planning in a manner that protects competitively sensitive information.

This provision addresses the transfer of both customer and market information. A number of other provisions in the Standards address the protection of customer information. We address the sufficiency of those protective efforts in connection with its discussion of those standards. Therefore, we focused on marketing, seeking to determine whether:

- Adequate steps prevent the transfer of protected information during planning and marketing activities
- Whether the Compliance Plan adequately addresses responsibilities imposed by this provision of the Standards.

Through the use of data requests and interviews, we reviewed and analyzed the planning process at JCP&L and FirstEnergy as it relates to this provision of the Standards. We sought to determine whether competitive sensitive information was shared during the planning cycle, and what controls were in place to ensure that competitive sensitive information generated at the utility was not used by affiliates.

As its initial step, we reviewed the Compliance Plan and its procedures for complying with the Standard. We attempted to identify opportunities in joint processes between the utility and its PUHC or RCBS where inappropriate sharing of information could occur. We then reviewed and analyzed processes to ensure that adequate controls were in place to protect competitively sensitive information. To assess the controls, we reviewed the information flows, the granularity of the information, which personnel had access, and how the information was used. Because of the amount of data and its competitive sensitivity, we placed particular emphasis on the planning process at the utility and the PUHC.

c. Findings

We conducted the activities described in our examinations under other provisions (see, for example, Sections E.3, E.12, and F.5.), to address the issues relevant to this provision as well. The findings in those sections address our review standards for this portion of the Standards. We carried out elements of our work in this area in other portions of the management audit, which we documented in the *Affiliate Relationships and Cost Allocation* and *Planning and Budgeting* Chapters of this Phase Two report. We reviewed the strategic and business plans of JCP&L. We found the business plans separate from those of affiliated companies and we did not identify any use of JCP&L information by affiliates in their plans and found no indication of inappropriate commingling of information or analysis during the planning processes.

The Compliance Plans in effect during the EDECA audit period included certifications by JCP&L and FirstEnergy officers, affirming or verifying:

- That they read the contents of the Plan, had familiarity generally with its "mechanisms and procedures," and that these "reasonably ensure" JCP&L compliance
- The adequacy of the Plan's "mechanisms and procedures" to ensure JCP&L compliance:
  - Generally
  - With specific reference to Section 14:4-3.5(i) and that the joint corporate support services did not serve as "a conduit to circumvent" the Standards.
- The adequacy of the Plan's "mechanisms and procedures" to ensure JCP&L Compliance
- That, pursuant to Section 14:4-3.5(j), which we discuss in a subsequent section of this chapter, measures reasonably ensure no usage of shared officers and directors in violation of the Standards.

The following table summarizes the FirstEnergy and JCP&L signatories to the plan with respect to Section 14:4-3.5(i) and (j) of the Standards. Note 1 in the table indicates a change in the individual holding the position; note 2 indicates a change in the title of the individual holding that position.

Compliance Plan Signatories

Year Plan Filed	FE Signatory	JCP&L Signatory
2010	Corporate Secretary	Corporate Secretary
2011	Corporate Secretary	Corporate Secretary
2012	Corporate Secretary	Corporate Secretary
2013	Corporate Secretary	Corporate Secretary
2014	Corporate Secretary	Corporate Secretary
2015	Corporate Secretary	Corporate Secretary
2016	VP, Corporate Secretary & Chief Ethics Officer[1,2]	Corporate Secretary[1]
2017	VP, Corporate Secretary & Chief Ethics Officer[1]	Corporate Secretary
2018	Vice President, Deputy General Counsel, Corporate Secretary and Chief Ethics Officer[1,2]	Corporate Secretary
2019	Vice President, Deputy General Counsel, Corporate Secretary and Chief Ethics Officer	Corporate Secretary[1]
2020	Vic President, Corporate Secretary[1,2]	Corporate Secretary

d. Conclusions

68. We found no evidence that the FirstEnergy or JCP&L utilized the provision of allowable joint corporate oversight, governance, support systems, and personnel in a manner that violated this provision of the Standards.

Of the materials management did provide during the course of our audit field work, we observed nothing that indicated a violation of this portion of the Standards. The Plan includes signatures from JCP&L and FirstEnergy officers whose seniority complied with the provision.

69. The Compliance Plan adequately addresses the requirements of Section 14:4-3.5(j).

We found the Plan's description complete and appropriate.

e. Recommendations

We have no recommendations with respect to this section of the standards.

11. Use of Utility Name and Logo

a. Statement of Applicable Requirements

Section 14.4-3.5(k) of the Standards provides that:

A related competitive business segment of a public utility holding company shall not trade upon, promote, or advertise its relationship with the electric and or gas public utility, nor use the electric and/or gas public utility's name and/or logo in any circulated material, including, but not limited to, hard copy, correspondence, business cards, faxes, electronic mail, electronic or hardcopy advertising or marketing materials, unless it discloses clearly and conspicuously or in audible language that:

1. *The PUHC or related competitive business segment of the public utility holding company "is not the same company as the electric and/or gas public utility";*
2. *The PUHC or related competitive business segment of the public utility holding company is not regulated by the Board; and*

3. *"You do not have to buy products in order to continue to receive quality regulated services from the electric and/or gas public utility.*

b. Summary of Audit Activities

These provisions address how a holding company RCBS may promote itself, particularly if it shares a similar name or logo with the regulated utility. A holding company RCBS may not use its connection with the utility to promote itself, nor may it use the utility's name or logo in any form of communication, unless it clearly and conspicuously provides the required disclaimer. The disclaimer applies only with regard to the use of the utility's name or logo in New Jersey.

We examined the use of logos, trademarks and service marks, in order to determine whether any shared use of the utility name or logo has occurred, and, if so, whether the required disclaimer was prominently displayed. We reviewed utility and affiliate logos, trademarks and service marks and details of where the marks were used. We also reviewed the websites and utility compliance plan for adherence to this provision.

c. Findings

Section D.1 of this chapter summarizes our review of the FirstEnergy entities' website and use of the disclaimer prescribed by the Standards. Management stated that neither FES nor Suvon used or traded upon JCP&L's name or logo in its advertising and other related material. Our review of websites and marketing material observed no such occasions. Management's response did not provide the requested production of business cards. In response to a follow-up request seeking them, management observed that all employees that support Suvon are FESC employees, and provided samples of officer and non-officer FESC business cards. Management also provided one sample of an FES business card. We observed no use of JCP&L's logo on the provided items.

JCP&L's Compliance Plan includes coverage of Section 14.4-3.5(k) of the Standards - - discussing it jointly with the following two sections [parts (l) through (0)] which deal with other provisions regarding logo use, advertising, customer communications, and joint marketing.

d. Conclusions

70. We observed no instances of RCBS website or other material making use of JCP&L's name or logo.

The Suvon (FirstEnergy Home and FirstEnergy Advisor) logos do not resemble that of JCP&L, nor did any of their website or marketing material do so or otherwise promote or advertise any relationship with JCP&L. We found that the FES website and other circulated material similarly complied with the provision of this provision of the Standards.

71. The Compliance Plan adequately addresses Section 14.4-3.5(k) of the Standards.

The Plan acknowledges the existence of elements of the Standards that govern the use of corporate identification and logo use in customer communication. The Plan's treatment of this provision includes an appropriate interpretation of the intent of the Standards and includes a statement that JCP&L and its RBCSs will comply with them.

e. Recommendations

We have no separate recommendations regarding this provision of the Standards.

12. Non-New Jersey Use of Utility Name and Logo

Section 14.4-3.5(l) of the Standards provides that:

> *The requirement of the name and/or logo disclaimer set forth in (k) above is limited to the use of the name and/or logo in New Jersey.*

This section of the standards does not establish an auditable conduct standard. It merely narrows the restrictions imposed by Standard Section 14:4-3.5(k). JCP&L's Compliance Plan appropriately notes this requirement.

13. Promising or Implying Preferred Treatment

a. Statement of Applicable Requirements

Section 14:4-3.5(m) of the Standards provides that:

> *An electric and/or gas public utility, through actions or words, shall not represent that, as a result of its PUHC or a related competitive business segment of the public utility holding company's relationship with the electric and/or gas public utility, its affiliate(s) will receive any different treatment than other product and/or service providers.*

b. Summary of Audit Activities

The requirements of this provision are similar to those of Sections 14:4-3.3(a) and (c). We performed for this provision the same activities described in our discussion of Sections 14:4-3.3(a) and (c).

c. Findings

The findings we made in relation to Sections 14:4-5.3(a) and (b) regarding affiliate preferences and communications with customers apply here. The Plan's heading for its joint treatment of Section 14:4-3.5(k) through (o) of the Standards references Section (m), but its support text includes no reference or guidance to this particular portion of the Standards.

d. Conclusions

72. The Compliance Plan does not address directly Section 14:4-3.5(m) of the Standards or provide direct guidance regarding its provisions. *(See Recommendation #12)*

The Plan's joint treatment of this Section of the Standards does not in and of itself present an issue. The other, related portions of the Standards indirectly inform Section 14:4-3.5(m); however, direct treatment of it would improve the Plan and its communications and guidance to employees regarding this provision.

e. Recommendations

12. Update the next version of the Compliance Plan to include direct discussion of the Section 14:4-3.5(m) of the Standards. *(See Conclusion #72)*

This minor revision to the next version of the Plan would ensure distinct and direct acknowledgement of this portion of the Standards and provide instruction to employees regarding compliance.

14. Use of Utility Advertising Space

a. Statement of Applicable Requirements

Section 14:4-3.5(n) of the Standards provides that:

> *An electric and/or gas public utility shall not offer or provide to its PUHC or a related competitive business segment of its public utility holding company advertising space in the electric and/or gas public utility's billing envelope(s) or any other form of electric and/or gas public utility's written communication to its customers unless it provides access to all other unaffiliated services providers on the same terms and conditions.*

b. Summary of Audit Activities

These provisions prohibit joint marketing activities between the utility and an RCBS of its holding company. The utility may not promote the holding company RCBS in its billing envelope or in other written communication without offering competitors the same opportunity. We examined whether, in any case of providing space to an RCBS in any written communications to utility customers, JCP&L similarly provided it to others. We requested information about all joint marketing activities pertaining to compliance with these provisions of the Standards. We also requested a copy of all utility bill inserts. We also reviewed the JCP&L Plan with regard to this section of the Standards.

c. Findings

We reviewed copies of JCP&L customer bill insert materials provided by management from 2010 through 2020. These comprised the types of materials we have typically seen in our review of other New Jersey EDCs and LDCs. We observed no references to services offered by FirstEnergy or non-utility affiliates. The materials covered items such as:

- Communications Paths (phone information, website links, and for later periods social media contacts)
- Safety Issues, Tips, and Warnings (dig safe, downed power lines, storm and cold weather)
- Bill Payment Options and Payment Assistance Programs
- Life-Sustaining Equipment Registration and Information
- Notifications of Future Field Work (e.g., vegetation management)
- Guidance to Customers on Understanding their Bill (meter reading, sample bills with explanations)
- Information Summarizing the BPU's "Bill of Rights."

Management reported that it offered no space in its billing envelope or in other written communications to FirstEnergy or an FirstEnergy RCBS, with one exception. A BPU-approved Electronic Document Interchange (EDI) protocol allows TPSs to enroll new customers and share usage and billing determinants between them and the EDCs. A working group of representatives from the BPU, New Jersey EDCs and LDCs, active New Jersey TPSs, and consumer groups meets to create communications standards and protocols. Management reported that the working group agreed upon a process that permitted TPS space on customer bills to communicate their own message to customers, typically pricing and billing related messages with customers already enrolled with that provider. As a result, JCP&L has permitted since late 2012 any TPS, whether affiliated or not, to communicate with its enrolled customers in this manner, where they have registered to do so and have completed necessary testing on the EDI communication tool. Management reported that they neither review nor alter these messages. Management reported that it offered no other space in its billing envelope to its holding company or any RCBS of its holding company during the EDECA audit period. As described previously our review of utility bill inserts management provided for the period from January 1, 2010 through December 31, 2020, disclosed no references to or mention of any affiliated entities offering competitive services - - including the period when FES was active and when Suvon was active.

The Plan addresses this portion of the Standards and notes the provisions of the Standards that forbid the inclusion of RCBS promotional material in the JCP&L billing envelope and in any written communications with customers, absent offering the same access to non-affiliated entities pursuant to the same terms and conditions as those offered to the RCBS.

d. Conclusions

73. JCP&L did not provide advertising space for its Holding Company or any RCBSs in its billing envelope or in other customer communications during the audit period.

Our review of billing inserts and sample customer bills disclosed no advertising or other promotions related to an RCBS. Bills for JCP&L customers that chose FES as its TPS necessitated identification of them as the supplier, and did so in a manner consistent with non-affiliated TPSs.

74. The Compliance Plan adequately addresses the requirements of Section 14:4-3.5(n) of the Standards.

The Plan observes that this section of the Standards includes provisions regarding the inclusion of RBCS promotional materials to JCP&L customers through written communications and the JCP&L billing envelope and includes a statement that JCP&L will not do so in a manner not permitted by the Standards.

e. Recommendations

We have no recommendations with respect to this provision of the standards.

15. Joint Advertising or Marketing

a. Statement of Applicable Requirements

Section 14:4-3.5(o) of the Standards provides that:

> *An electric and/or gas public utility shall not participate in joint advertising or joint marketing activities with its PUHC or related competitive business segment of its public utility holding company which activities include, but are not limited to, joint sales calls, through joint call centers or otherwise, or joint proposals (including responses to requests for proposals) to existing or potential customers.*

1. *The prohibition in (o) above notwithstanding, at a customer's unsolicited request, an electric and/or gas public utility may participate, on a nondiscriminatory basis, in non-sales meetings with its PUHC or a related competitive business segment of its public utility holding company or any other market participant to discuss technical or operational subjects regarding the electric and/or gas public utility's provision of distribution service to the customer;*
2. *Except as otherwise provided for by these standards, an electric and/or gas public utility shall not participate in any joint business activity(ies) with its PUHC or a related competitive business segment of its public utility holding company which includes, but is not limited to, advertising, sales, marketing, communications and correspondence with any existing or potential customer;*
3. *An electric and/or gas public utility shall not participate jointly with its PUHC or a related competitive business segment of the PUHC in trade shows, conferences, or other information or marketing events held in New Jersey; and*
4. *An electric and/or gas public utility shall not subsidize costs, fees, or payments with its PUHC or related competitive business segments of its public utility holding company associated with research and development activities or investment in advanced technology research.*

b. Summary of Audit Activities

These provisions prohibit joint marketing activities or the joint funding or support of research and development activities between the utility and an RCBS of its PUHC. Joint advertising or marketing activities between the utility and the PUHC RCBS, may include (but are not limited to):

- Joint sales calls
- Joint call centers
- Joint proposals or responses to RFPs
- Joint advertising, marketing, communications, or correspondence
- Joint participation in trade shows, conferences, or other information or marketing events held in New Jersey
- Joint business activities.

JCP&L may at the customer's unsolicited request participate in non-sales meetings with its holding company RCBS in order to discuss technical or operational subjects regarding the provision of distribution services, provided it offers the same participation on a nondiscriminatory basis to competitors. The provision also prohibits JCP&L subsidization of PUHC RCBS R&D costs, fees, or payments.

We applied the following review standards in examining performance under this provision:

- Except in the case of unsolicited customer requests, JCP&L should not engage in any of the proscribed joint marketing and sales activities
- JCP&L should not participate with its holding company or a holding company RCBS in joint funding of research and development activities in a manner that fails to assign a proper share of the costs to the holding company or holding company RCBS.

We requested information on all joint marketing, promotional, and advertising programs that benefited both regulated and competitive services. We asked about space sharing at trade shows, and requested information on practices and policies for utility participation in non-sales meetings with affiliates or non-affiliates. We have also reviewed the JCP&L Plan for its procedures regarding this provision.

We requested information on the amount of research and development and advanced technology expenditures by JCP&L and the PUHC or a PUHC RCBS.

c. Findings

The Plan summarizes this portion of the Standards and the four listed sub-parts. JCP&L states that it will not engage in the types of join activity excluded by the Standards, and that it does not subsidize research and development or advanced technology research costs or fees.

We requested a list of all trade shows, conventions, fairs and similar events, charitable events, promotional events, foundation events, sporting or other entertainment events attended commonly by JCP&L and any affiliate for the period from January 2010 through December 2020. Management's response provided a list of events, which indicated FirstEnergy External Affairs as the organization that most commonly participating with JCP&L in these types of events. External Affairs performed functions for all FirstEnergy operating companies (not just JCP&L), but none for RCBSs (FTS, FES, Suvon). While unable to answer with certainty, management replied to our request for a description of the efforts made to separate the location and participation of employees (per the Standards) that "to the best of their knowledge, any attendance or participation by employees was in compliance" with the restrictions.

Management also provided a separate list of 2013 through 2020 events funded by the JCP&L Corporate Affairs & Community Involvement budget. It explained the lack of pre-2013 data by noting a lack electronic data from that time. Regarding separations, the response indicated that JCP&L employees may have attended these events, but no documentation of attendance occurred nor did any logging of other attendees occur.

As we reported in Chapter Nine of our Phase One Report, *Customer Service*, FirstEnergy makes use of joint call centers for its utility operating companies. No common call center use occurred for JCP&L and Suvon, nor did any other joint use of call center employees or contractors occur for calls regarding JCP&L customers and those of FirstEnergy RCBSs.

In addition its statement in the Compliance Plan, JCP&L indicated no instances of subsidization of research and development costs or advanced technology research.

d. Conclusions

75. We observed no JCP&L and PUHC and RCBS engagement in any joint marketing or joint advertising activities prohibited by 14:4-3.5(o) of the Standards, but some data limitations preclude a full conclusion on this matter. *(See Recommendation #13)*

Management indicated that it did not fully track and log join JCP&L and other party attendance during the types of events identified by this portion of the Standards. FirstEnergy did not utilize joint call centers between JCP&L and a FirstEnergy RCBS during the EDECA audit period.

76. JCP&L did not fund or support any R&D or advanced technology efforts that benefited an RCBS.

Management reported that it maintains separate accounting records for each of its entities, including the regulated utilities and each affiliate.

77. The Compliance Plan adequately addresses this provision of the Standards.

We found the Plan's discussion of this provision sufficient.

e. Recommendations

13. Create a plan to log and track joint JCP&L and RCBS attendance at the types of events described in Section 14:4-3.5(o) of the Standards. *(See Conclusion #75)*

JCP&L should institute a process to ensure the any attendance or participation by any FirstEnergy RCBS personnel at a JCP&L event occurs pursuant to the separation requirements of this portion of the Standards. This change will improve management's ability to track compliance.

16. Joint Employees

a. Statement of Applicable Requirements

Section 14:4-3.5(p) of the Standards provides that:

> *Except as permitted in (i) and (j) above, an electric and/or gas public utility and its PUHC or related competitive business segments of its public utility holding company which are engaged in offering merchant functions and/or electric related services or gas related services shall not employ the same employees or otherwise retain, with or without compensation, as employees, independent contractors, consultants, or otherwise.*
>
> 1. *Other than shared administration and overheads, employees of the competitive services business unit of the public utility holding company shall not also be involved in the provision of non-competitive utility and safety services, and the competitive services are provided utilizing separate assets than those utilized to provide non-competitive utility and safety services.*

b. Summary of Audit Activities

We sought to determine whether:

- Any holding company RCBS employee was provided to the utility as an employee, consultant, or independent contractor for the performance of non-competitive utility or safety services
- Any sharing of employees or assets between the utility and a holding company RCBS engaged in the merchant function occurred during the EDECA audit period.

We requested and analyzed information from management identifying which, if any, employees of affiliates (other than a service company and the holding company) provide non-competitive utility or safety services.

c. Findings

The Plan notes the employee-sharing restrictions of this provision and that no RCBS may use JCP&L assets or assets common to JCP&L in the provision of non-competitive utility and safety service.

Management reported that no use of joint employees occurred outside of permitted use to provide services whose costs get billed or allocated to the entities which receive their services.

The only joint use assets management identified for were various office buildings and call centers owned by an affiliate and at which JCP&L paid rent or at JCP&L's Morristown General office, where affiliates paid rent for the portion of the space they utilized.

d. Conclusions

78. We found no instances or sharing of employees or assets covered by Section 14:4-3.5(p) of the Standards.

We found no instances of the types of employee and asset sharing governed by this provision.

79. The Compliance Plan adequately addresses Section 14:4-3.5(p) of the Standards.

The plan indicates that no sharing of personnel between JCP&L and its RCBS may occur except as allowed per the Standards

e. Recommendations

We have no recommendations regarding this provision.

17. Common Directors and Officers

a. Statement of Applicable Requirements

Section 14:4-3.5(q) of the Standards provides that:

An electric and/or gas public utility and the PUHC or related competitive business segments of its public utility holding company shall not have the same persons serving on the Board of Directors as corporate officers, except for the following circumstances:

1. *In instances when these standards are applicable to public utility holding companies, any board member or corporate officer may serve on the holding company and with either the electric and/or gas public utility or a related competitive business segment of the public utility holding company, but not both the electric and/or gas public utility holding company and a related competitive business segment of the public utility holding company.*
2. *Where the electric and/or gas public utility is a multi-state utility, is not a member of a holding company structure, and assumes the corporate governance functions for the related competitive business segments, the*

prohibition against any board member or corporate officer of the electric and/or gas public utility also serving as a board member or corporate officer of a related competitive business segment shall only apply to related competitive business segments operating within New Jersey.

i. In the case of shared directors and officers, a corporate officer from the electric and/or gas public utility and holding company shall verify, subject to Board approval, in the electric and/or gas public utility's compliance plan required pursuant to N.J.A.C. 14:4-3.7(a) through (d), the adequacy of the specific mechanisms and procedures in place to ensure that the electric and/or gas public utility is not utilizing shared officers and directors in violation of the Act or this subchapter.

b. Summary of Audit Activities

We requested a list of Directors and Officers for each FirstEnergy entity and an identification of each position changes made during the EDECA audit period. We also reviewed the Compliance Plan.

c. Findings

The Plan addresses this portion of the Standards and acknowledges the restrictions it imposes on the sharing of officers and directions between JCP&L and a holding company RCBS. The Plan states that JCP&L will not share officers or directors in a manner that violates this portion of the Standards.

We requested a list that identified for the EDECA audit period each FirstEnergy entity's directors and officers, including their name, title, and the date and nature of each change. After receipt of the requested information, we screened that data and identified eight individuals who, at ***any*** point during the EDECA audit period served as an officer or director of JCP&L and of a FirstEnergy RCBS. Our review indicated that only one of those individuals served in an officer/director role simultaneously with JCP&L and a FirstEnergy RBCS. This person served as JCP&L's Controller from August 4, 2009, through October 13, 2010. During that period, the individual also served as the FES Assistant Controller from September 26, 2010, through November 25, 2012. The information supplied by management indicated each of these roles as an Officer, producing a period of 17 days where simultaneous service of the type forbidden by the Standards occurred.

d. Conclusions

80. An individual served as an Officer of both JCP&L and an RBCS, placing the company out of compliance with Section 14:4-3.5(q) of the Standards for a minimal time during of the audit period. *(See Recommendation #14)*

In 2012 one individual served simultaneously as an officer of both JCP&L and an RCBS (FES). Management's Plan in effect at the time and the most recent version correctly interpret the Standards to forbid such occurrences of shared Officers. The period of shared service occurred for a very limited duration and occurred some time ago. We observed no subsequent re-occurrence. FES is no longer a FirstEnergy affiliate.

81. The Compliance Plan adequately addresses Section 14:4-3.5(q) of the Standards.

Both the most recent version of the Compliance Plan and the version in effect for the period of the shared officer we observed correctly interpret this provision of the Standards and state that no such sharing will occur.

e. Recommendations

14. Increase diligence in ensuring full conformity with Section 14:4-3.5(q) of the Standards. *(See Conclusion #80)*

Outside of one instance of brief non-compliance, we observed no others. Management should exercise diligence when positions change to ensure no overlap prohibited by this provision.

18. Employee Transfers

a. Statement of Applicable Requirements

Section 14:4-3.5(r) of the Standards provides that:

All employee transfers between an electric and/or gas public utility and its PUHC or related competitive business segments of its public utility holding company providing or offering competitive services to retail customers in New Jersey which are engaged in offering merchant functions and/or electric related services or gas related services shall be consistent with following provisions:

1. *The electric and/or gas public utility shall make a public posting of all employee transfers within three working days.*
2. *An electric and/or gas public utility shall track and report annually to the Board all employee transfers between the electric and/or gas public utility and such related competitive business segments of its public utility holding company.*
3. *Once an employee of an electric and/or gas public utility is transferred to such related competitive business segment of its public utility holding company, said employee may not return to the electric and/or gas public utility for a period of one year, unless the related competitive business segment of the public utility holding company to which the employee is transferred goes out of business or is acquired by a non-affiliated company during the one-year period.*
4. *In the event that an employee is returned to the electric and/or gas public utility, such employee cannot be transferred for employment by a related competitive business segment of the public utility holding company which is engaged in offering merchant functions and/or electric-related services or gas-related services for a period of one year.*

b. Summary of Audit Activities

This provision limits the competitive impact on unaffiliated suppliers of utility employee movement from or to the PUHC or an RCBS. Should transfers occur, the provision makes such transfers visible. These limitations prevent a PUHC or RCBS from gaining competitive advantage through inappropriate transferring of employees to or from the public utility. Advantages could be gained in the following manners:

- Frequent transfer of employees with special expertise or knowledge

- Joint use of employees with special expertise or knowledge
- Transferring employees utilizing knowledge or transporting information gained at the utility for the benefit of the PUHC or related competitive business sector or vice versa.

We sought to determine if employee transfers from JCP&L to a holding company or holding company RCBS occurred during the EDECA audit period. Such transfers require JCP&L to publicly post these within three working days. Had such transfers occurred, we would then seek to determine if any transferring employee was provided proper instructions on the employee's use of retained information. We also determined if JCP&L made any required annual filing of employee transfer information with the BPU.

In addition, we sought to verify whether any employee that did transfer from JCP&L to the holding company or holding company RCBS and vice-versa met the one-year requirement on transferring back to the previously held job at the affected entity. As a part of this evaluation we would confirm whether any such employees were properly instructed on confidential, competitively-restricted information prior to and after the transfer.

c. Findings

The following employee transfers to and from JCP&L occurred during the EDECA audit period.

Employee Transfer Summary

Transfer Path	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	AP Total
To JCP&L												
FE Solutions			1	1								2
FE Generation, LLC	2							2				4
FESC	7	10	18	13	4	4	14	12	11	16	12	121
Sub Total	*9*	*10*	*19*	*14*	*4*	*4*	*14*	*14*	*11*	*16*	*12*	*127*
From JCP&L												
FE Solutions			1									1
FE Generation, LLC						1						1
FESC	8	5	14	5	6	11	12	13	9	14	15	112
Sub Total	*8*	*5*	*15*	*5*	*6*	*12*	*12*	*13*	*9*	*14*	*15*	*114*
Total	**17**	**15**	**34**	**19**	**10**	**16**	**26**	**27**	**20**	**30**	**27**	**241**

Transfers from JCP&L to an RCBS and vice versa activate additional provisions of the Standards. Eight such transfers occurred during the EDECA audit period, as the previous table shows. The first requires management to make a public posting and do so withing three business days. Management has no records indicating it made the required public postings at all, let alone within the required time period. The second requires that JCP&L make annual reports to the BPU addressing all such transfers. JCP&L complied with this requirement, through its annual Compliance Plan filing. Management reported three of the eight transfers in the plan filed subsequent to each transfer. For the other five, management did not believe the type of transfer warranted reporting. The last two concern prohibitions against making additional, subsequent transfers of a previously-transferred employee, barring subsequent transfer back to JCP&L for at least one year.

These transfers also make applicable Sections (r)(3) and (4) of the Standards, which prohibit the transfer back, within one year, of any employee transferred to or from JCP&L to an RCBS. No employees transferred from JCP&L to a FirstEnergy RCBS transferred back to the JCP&L within one year.

During the EDECA audit period management reported that Suvon had no employees. FirstEnergy considered all those working for Suvon as FESC employees. It charged costs for these employees to Suvon cost centers. FirstEnergy only recently (December of 2021) changed these employees to a status under which they dedicated all their work to Suvon.

The Compliance Plan acknowledges the restrictions that govern the types of employee transfers addressed by Section 14:4-3.5(r) of the Standards. The Plan notes JCP&L's willingness to act in compliance with them, make the required postings within three business days for each applicable transfer, make the required reporting of them to the BPU, and refrain from transferring employees back to JCP&L for a least one year.

d. Conclusions

82. JCP&L and its RCBSs had audit period transfers of employees of the type covered by Section 14:4-3.5(r) of the Standards; management did not in all instances make the required annual reporting of them to the BPU and cannot for any transfer demonstrate that it made the required public posting or did so within the three-day requirement. *(See Recommendation #15)*

Audit period transfers that occurred between JCP&L and its RBCSs activated provisions of the Standards. Management cannot demonstrate that it made the required public postings pursuant Section 14:4-3.5(r)(1) either in accord with the three-day period required or later.

Annual compliance plans included notifications pursuant Section 14:4-3.5(r)(2) for only three of the eight transfers. Management stated that, while not believing that all eight transfers required posting and reporting, it did acknowledge that it failed to make required postings in at least one instance. It has stated that the new FESC executive responsible for such matters will review them matters to ensure "timely tracking, posting, and reporting of" employee transfers.

83. FirstEnergy's treatment of Suvon employees as FESC employees creates an opportunity for transfers of the type subject to Section 14:4-3.5(r) of the Standards to occur without required reporting. *(See Recommendation #16)*

Suvon exists as a FirstEnergy RCBS. Treating Suvon employees as FESC employees therefore permits transfers between JCP&L and it to occur without public posting, annual reporting to the BPU, and further limitations on transferring employees back to JCP&L within one year. Management reported post-audit period changes which dedication of all those who work on "Suvon matters" to Suvon only, with no work performed on regulated utility matters.

84. The Compliance Plan adequately addresses Section 14:4-3.5(r) of the Standards.

The Plan includes discussion of this portion of the Standards, accurately interprets the restrictions imposed by them on transfers of employees to and from JCP&L and an RCBS, and states that management will act in compliance.

e. Recommendations

15. Institute measures for ensuring the timely public posting of employee transfers covered by Section 14:4-3.5(r) of the Standards. *(See Conclusion #82)*

There has been a failure to make required postings in the past. The commitment to address this gap is encouraging; management should correct the situation with dispatch.

16. Treat all employees working on or for Suvon, except those providing Standards-permitted shared services functions, as Suvon employees - - either organizationally or for Standards tracking and compliance purposes; apply similar treatment to any future RBCS which FirstEnergy may have. *(See Conclusion #83)*

Management acknowledges post-audit period efforts to enhance compliance in this area, but these efforts do not fully address transfers of personnel between JCP&L and a FirstEnergy RCBS (for now Suvon, but potentially for other RCBSs in the future). Application of reporting requirements and other provisions of the Standards surrounding employee transfers and other employee-related requirements (*e.g.*, employee separation rules) should not be avoidable by treating personnel largely dedicated to utility or RCBS work as FESC employees. For example, if every employee of FirstEnergy were considered a service company employee, then there would be no employee transfers when switching responsibilities. Moreover, there would be no RCBS employees to whom information restrictions apply.

Functional responsibilities, not nominal designation of which affiliate technically serves as employer, should apply in interpreting provisions whose application depends on employer.

19. Use of Utility Information after Employment Transfers

a. Statement of Applicable Requirements

Section 14:4-3.5(s) of the Standards provides that:

> *Employees transferring from an electric and/or gas public utility to a related competitive business segment of the public utility holding company are expressly prohibited from using any information gained from the electric and/or gas public utility to the benefit of the related competitive business segment of the public utility holding company or to the detriment of other unaffiliated product and/or service providers.*
>
> 1. *Any electric and/or gas public utility employee hired by a related competitive business segment of the public utility holding company shall not remove or otherwise provide information to said affiliate which said related competitive business segment of the public utility holding company would otherwise be precluded from having pursuant to these standards.*
> 2. *An electric and/or gas public utility shall not make temporary or intermittent assignments, or rotations to related competitive business segments of its public utility holding company.*

b. Summary of Audit Activities

The first provision prohibits inappropriate use of utility information by transferred employees. The second prohibits rotations that would have the effect of making such information available without permanent transfer. As a threshold matter, we first sought to determine if employee transfers from the utility occurred during the EDECA audit period. We reviewed utility employment practices, and analyzed severance or exit procedures used when an employee transfers to an affiliate. We also inquired whether any public utility employees held temporary or intermittent jobs with the holding company or holding company RCBS. We reviewed the utility compliance plan and examined information concerning temporary assignments, transfers, and rotations.

c. Findings

Management reports no occasions during the EDECA audit period where it made temporary assignment of a JCP&L employee to an affiliate or when it gave a JCP&L employee temporary employment by an affiliate. Management employs procedures and controls to prevent the unauthorized use of utility information by employees who move from employment with JCP&L to an affiliate. The *Monitoring of Employee and Contractor Transfers with FERC Indicator Changes* policy, applied. This "Monitoring…" policy incorporates another, Corporate Policy 302, *FirstEnergy Regulatory Compliance Access Policy Addressing Employee and Contractor Transfers & Separations,* which assigns responsibility to the Manager of FirstEnergy's FERC Compliance Unit (FCU) to ensure adherence to the rules and regulations the policy stipulates in the event of employee transfers.

FirstEnergy implemented the "Regulatory Compliance Access Policy…" to address regulatory access requirements and to ensure controls over protected information (*i.e.*, sensitive customer information, transmission information, market information, and others) and critical assets. The policy covers all individuals working at FirstEnergy, both employees and contractors. FirstEnergy designed the policy to respond to multiple sets of regulatory requirements, including the FERC Standards of Conduct and Affiliate Restrictions, NERC Critical Infrastructure Protection standards, Sarbanes-Oxley, Sensitive Customer Information, and state regulatory requirements.

The FCU maintains overall responsibility for adherence, but the policy assigns additional responsibilities to individuals more directly involved in the transfer. Each individual subject to transfer and that individual's existing and potential future direct supervisor must complete a Regulatory Compliance Access Checklist (if a FirstEnergy entity employee) or a "ToDo List" (if a contractor). The policy requires the completion of some elements of these checklists and contractor lists at least five business days before the effective date of the transfer. The following graphic depicts this process.

FirstEnergy's FERC Critical Transfer Monitoring Process

1. The FCU receives emails from the Regulatory Access Authorization Database ("RAAD") for pending FERC Critical Transfers (also referred to as Critical FERC Transfers) that permit less access to FERC sensitive information than they had in their former position. Note that contractors are not permitted to transfer in CIMS if the new position has a different FERC Classification or if the incoming and outgoing Engagement Owners report to a different manager. In such cases, the contractor must be separated and re-engaged to ensure the removal of any restricted information and keep contractor information up to date.
2. The FCU will email the *Regulatory Compliance Access Checklist for Employee Transfers* to the transferring employee and their outgoing supervisor with instructions to complete and return it to the FCU prior to the effective date.
3. FERC Critical Transfers are monitored by the FCU to verify completion of a *Regulatory Compliance Access Checklist for Employee Transfers* by the transferring individual and their outgoing supervisor on a timely basis.
4. The FCU will enter the transfer details and effective date in its FERC Compliance Log.
5. The FCU will work with the business units, as necessary, to assist the transferring individual and outgoing supervisor with completion of the transfer checklist as required.
6. The FCU will retain a copy of completed checklists for employee FERC Critical Transfers in FCD files and record the completion in the FERC Compliance Log accordingly. Similarly, CIMS retains copies of completed Separation ToDo Lists for all contractor transfers.
    a. The FCU will identify any occurrence of non-compliance with *the Regulatory Compliance Access Policy Addressing Employee and Contractor Transfers & Separations* and make a record. Any issues of non-compliance may be escalated to the Director and/or CCO for resolution, as necessary.

Policy 302 also prescribes a six step process that the FCU utilizes to monitor for any potential "cycling" of employees - - the transfer of employees from one entity to another, and then back again. The process includes the maintenance of a master listing of all transfers of individuals between transmission and marketing function roles, and between regulated and competitive marketing functions. The policy assigns responsibility to the FCU to identify any employees or contractors transferred within the previous 12 months and report any subsequent pending transfer of that individual. Any proposed transfer of this type requires review by the Chief Compliance Officer or Director, FERC & State Regulatory Compliance, who will discuss the expressed business need for the transfer and any compliance risks the transfer would introduce, before making an approval of the transfer. The FCU records the results of all such pending transfers and the approval/denial decision the Chief Compliance Officer or Director, FERC & State Regulatory Compliance made regarding the transfer.

The document contained a sample "Regulatory Compliance Access Checklist for Employee Transfers" which identifies both the required actions and the department process owner for each action. The following extract from the document notes example of database access activities required per the checklist.

Regulatory Compliance Access Checklist for Employee Transfers

If employee has access in the Regulatory Access Authorization Database (RAAD) and the ELM form has been submitted in a timely manner, RAAD will: • Request all RAAD access be removed when the transfer is a FERC Critical Transfer; or • Request the incoming supervisor to complete any re-approval requests for RAAD as soon as possible if the employee needs to retain their access. If there is no response or the re-approval is denied RAAD will remove the access per the access removal date indicated on the ELM form.	**Timely submission of the ELM form is critical.**	☐
If employee has access to any <u>external</u> business systems that are NOT tracked in RAAD ensure that access is removed.	BEFORE effective date.	☐

Regulatory Access Authorization Database (RAAD)	FirstEnergy application that manages access authorization (grants, reapprovals, and removals) for employees to CIP assets, and other identified external business systems. It also manages the notifications to FERC Compliance for FERC Critical Transfers.

As we reported in Section G.18 *Employee Transfers,* we reviewed sample copies of completed checklists for employees transferred between JCP&L and FES during the EDECA audit period and found them consistent with the requirements of the policy and completed per requirements. Additional materials provided for additional transfers involving FESC employees (those we selected as they represented movement by those whose duties included customer service and New Jersey power supply) also proved sufficient.

Management reports weekly to FirstEnergy's VP, Compliance & Regulated Service (the FESC officer with recent overall responsibility for compliance with the Standards on each instance where a transfer triggers a change in an employee's FERC status.

The Plan summarizes this portion of the Standards - - both the restrictions against the sharing of information learned from previous employment prior to transfer (and that exit interviews with transferred employees will emphasize these matters) and that JCP&L will not make the type of temporary assignments that are forbidden.

d. <u>Conclusions</u>

85. JCP&L has reasonable procedures and controls in place to prevent prohibited transfers of information.

The application of corporate policies appropriately address the concerns regarding this portion of the Standards. Management demonstrated that it subjected transferred employees to the corporate policies and procedures in place, including the use of checklists to verify required activities occur to help protect the integrity of sensitive data.

86. The Compliance Plan adequately addresses Section 14:4-3.5(s) of the Standards.

The Plan includes discussion of this provision of the Standards and interprets it correctly. It includes additional discussion of emphasis given during employee exit interviews upon transfer from JCP&L.

e. <u>Recommendations</u>

We have no recommendations regarding the requirements of this provision of the Standards.

20. Service Transfers

a. <u>Statement of Applicable Requirements</u>

Section 14:4-3.5(t) of the Standards provides that:

All transfers of services not prohibited by these standards shall be subject to the following provisions:

1. *Transfers from the electric and/or gas public utility to a related competitive business segment of its public utility holding company of services produced, purchased or developed for sale on the open market by the electric and/or gas public utility will be priced at no less than the fair market value.*
2. *Transfers from a related competitive business segment of the public utility holding company to the electric and/or gas public utility of services produced, purchased or developed for sale on the open market by the related competitive business segment of the public utility holding company shall be priced at no more than fair market value.*
3. *Prices for services regulated by a state or Federal agency shall be deemed to be the fair market value.*
4. *Services produced, purchased or developed for sale on the open market by the electric and/or gas public utility shall be provided to related competitive business segments of its public utility holding company and unaffiliated company(ies) on a nondiscriminatory basis, except as otherwise required or permitted by these standards or applicable law.*
5. *Transfers of services not produced, purchased or developed for sale on the open market by the electric and/or gas public utility from the electric and/or gas public utility to related competitive business segments of its public utility holding company shall be priced at fully allocated cost.*
6. *Transfers of services not produced, purchased or developed for sale on the open market by a regulated competitive business segment of the public utility holding company from that related competitive business segment of the public utility holding company to the electric and/or gas public utility shall be priced at the lower of fully allocated cost or fair market value.*

This provision sets the following pricing rules:

- For “open market” services the utility provides to an RCBS of the PUHC - - no less than fair market value and their provision on a nondiscriminatory basis (note that regulated services price at fair market value)
- For “open market” services an RCBS of the PUHC provides to the utility - - no more than fair market value (note that regulated services price at fair market value)
- For “Non-open” market services the utility provides to an RCBS of the PUHC - - fully allocated cost
- For “Non-open” market services an RCBS of the PUHC provides to the utility - - the lower of fully allocated cost or fair market value.

b. Summary of Audit Activities

The provision of and charging for common services falls among the topics addressed in the *Affiliate Relationships and Cost Allocation C*hapter of this Phase Two report.

21. Utility Asset Transfers

a. Statement of Applicable Requirements

Section 14:4-3.5(u) of the Standards provide that:

> *All transfers, leases, rentals, licenses, easements or other encumbrances of utility assets to a PUHC or related competitive business segments of a PUHC not prohibited by these standards shall be subject to the following pricing provisions, consistent with all other applicable Board rules:*
>
> 1. *Transfers, leases, rentals, licenses, easements or other encumbrances of utility assets from the electric and/or gas public utility to a related competitive business segment of its public utility holding company shall be recorded at fair market value or book value as determined by the Board.*
> 2. *Transfers, leases, rentals, licenses, easements or other encumbrances of assets from a related competitive business segment of the public utility holding company to the electric and/or gas public utility shall be recorded at the lesser of book value or fair market value.*

This provision addresses the pricing of assets transferred between affiliates, and generally require asymmetric pricing:

- Transfers from the utility to a PUHC RCBS are to be priced and recorded at fair market value or book value as determined by the BPU.
- Transfers from a PUHC RCBS to the utility are to be priced at the *lesser* of book or fair market value.

b. Summary of Audit Activities

The provision of and charging for common services is addressed in the *Affiliate Relationships and Cost Allocation* Chapter of this Phase Two report. Management identified agreements in place with FTS from 2010 through 2012 that qualified as licenses or easements under this Section of the Standards. JCP&L granted these to FTS pursuant to a 1998 BPU Order in Docket No. EE9705035 and they included a Capacity Use and Service Agreement, a Facilities Lease and indefeasible Right-of-Use Agreement, and an Agency Agreement. No other licenses, easements, or other encumbrances of utility assets between JCP&L and FirstEnergy RCBSs occurred during the EDECA audit period.

The Plan addresses this provision of the Standards and acknowledges the requirements it imposes on transfers, leases, rentals, licenses, easements, and other encumbrances of assets. The Plan states that JCP&L will comply with the book and fair market value provisions in the event that any relevant activity occurs.

c. Conclusions

87. The Compliance Plan adequately addresses Section 14:4-3.5(u) of the Standards.

The Plan includes discussion of this provision of the Standards and interprets it correctly. It includes a statement by management's confirming its intent to comply.

88. The only relevant activities associated with this portion of the Standards occurred early in the EDECA audit period and were subject to a BPU Order.

Management sought and received BPU approval for agreements which occurred in 2010 through 2012 with a now defunct RCBS. No subsequent types of activity involving any other RCBS occurred since.

d. Recommendations

We have no recommendations regarding the requirements of this provision of the Standards.

G. Utility RCBS Standards (Section 14:4-3.6)

Section 14:4-3.6 of the Standards applies to any competitive services offered by the utility or a related competitive business segment of the utility.

1. Statement of Applicable Requirements

Section 14:4-3.6 of the Standards provides that:

> *Competitive products and/or services offered by a utility or related competitive business segments of a utility…* [several pages of associated requirements and prohibitions follow]

2. Findings

About 5,000 JCP&L customers continued to take service under the Conditioned Power Services program, which closed to new customers on March 3, 1999. See Conclusion #6 and Recommendation #3 in Section D above.

H. Regulatory Oversight (Section 14:4-3.7)

Section 14:4-3.7 of the Standards applies to the annual filing requirements for the Compliance Plan, its contents, and audits of compliance with the Plan.

1. Statement of Applicable Requirements

Section 14:4-3.7 of the Standards provides that:

> *(a) Each electric and/or gas public utility shall file its compliance plan with the Board and provide a copy of said plan to the Rate Counsel at least once in every 12-month period or upon changes to the plan, and thereafter, within 12 months of the revised plan.*
> *(b) Said compliance plan shall demonstrate that there are adequate procedures in place to ensure compliance with this subchapter and shall include the electric and/or gas public utility's dispute resolution procedure pursuant to N.J.A.C. 14:4-3.8(a).*
>
> *1. Said compliance plan shall contain an accurate list of all affiliates of an electric and/or gas public utility, including the business name and address, name and business telephone number of at least one officer of each affiliate and a brief description of the business of each affiliate.*

i. The information required by (b)l above shall be updated within five business days of any change(s) thereto, and a public posting of the information shall also be made within that time period.

(c) Absent Board action to the contrary, the electric and/or gas public utility's compliance plan shall be in effect between its filing and the Board's decision.

(d) Upon the creation of a new affiliate that is covered by this subchapter, the electric and/or gas public utility shall immediately notify the Board, as well as make a public posting thereof.

(e) Every two years, or more often at the discretion of the Board, the electric and/or gas public utility shall have an audit prepared by an independent auditor, to be selected by the Board, which verifies that the electric and/or gas public utility is in compliance with this subchapter.

1. The scope of the audit shall be established by the Board and shall take into consideration the electric and/or gas public utility's level of activity with its affiliates.

(f) An audit performed by an independent auditor shall be at the electric and/or gas public utility's expense.

2. Findings

JCP&L made the required annual Compliance Plan filings. Our review of the Plans in effect during the EDECA audit period found them to be reasonably complete and consistent with the intent of the Standards, but we did, as explained earlier in this chapter, recommend some changes or additions in subsequent versions. The Plan summarizes this portion of the Standards.

3. Conclusions

89. The Compliance Plan adequately addresses this Section 14:4-3.7 of the Standards.

The Plan discusses this portion of the Standards and notes the requirements of annual filings and the inclusion of a list of affiliates.

4. Recommendations

We have no recommendations regarding the requirements of this provision.

I. Dispute Resolution (Section 14:4-3.8)

1. Statement of Applicable Requirements

Section 14:4-3.8 of the Standards provides that:

(a) An electric and/or gas public utility shall establish and file annually with the Board a dispute resolution procedure, including the establishment of a telephone complaint hotline, to address complaints alleging violations of this subchapter.

1. The procedure shall be included in the electric and/or gas public utility's annual compliance plan.

(b) At a minimum, the procedure shall designate a person to conduct an investigation of the complaint and communicate the results of the investigation to the complainant in writing, within 30 days after the complaint is received, including a description of any action taken.

> *(c) An electric and/or gas public utility shall report any violation of this subchapter to the Board, with a copy provided to the Rate Council within five business days of becoming aware of any such violation(s).*
> *(d) The electric and/or gas public utility shall maintain a log of all resolved and pending complaints. The log shall be subject to review by the Board and Rate Counsel and shall contain, at minimum, a summary of the complaint, the manner in which the complaint was resolved, or an explanation why the complaint remains pending.*

2. Findings

The current version of the Plan responds to the four items listed under this provision of the Standards. The information is in all cases responsive to what the Standards prescribe with respect to this issue. FirstEnergy tracked and logged complaints throughout the EDECA audit period. For most of the period FirstEnergy maintained a log of complaints and their status and outcome in an Excel spreadsheet. FirstEnergy implemented a new tracking software in April of 2020 to enhance and modernize efforts in this area.

3. Conclusions

90. The Compliance Plan adequately addresses this Section 14:4-3.8 of the Standards.

The Plan summarizes this provision of the Standards and includes discussion of the relevant provisions.

91. FirstEnergy tracks and logs complaints received and captures the status and resolution of its investigation into each occurrence.

FirstEnergy performed the required tracking and logging of complaints throughout the EDECA audit period, and made enhancements to these efforts starting in April 2020.

4. Recommendations

We have no recommendations regarding the requirements of this provision.

J. Violations and Penalties (Section 14:4-3.9)

1. Statement of the Applicable Requirements

Section 14:4-3.9 of the Standards provides that:

> *(a) If, as a result of an audit conducted pursuant to N.J.A.C. 14:4-3.7(e) through (g) or by any other means, the Board determines that an electric and/or gas public utility has committed violations of N.J.A.C. 14:4-3.3, 3.4, 3.5, 3.7 or 3.8, which are not substantial violations as described in (b) below, the Board is authorized to impose a penalty of up to $ 10,000 for each such violation upon said electric and/or gas public utility.*
> *(b) If, as a result of an audit conducted pursuant to N.J.A.C. 14:4-3.7(e) through (g) or by any other means, the Board determines, after providing the electric and/or gas public utility notice of a public hearing and an opportunity to be heard, that an electric and/or gas public utility has committed violations of N.J.A.C. 14:4-3.3, 3.4, 3.5, 3.7 or 3.8, which are substantial in nature so as to result in unfair competitive advantages for an electric or*

gas public utility, the Board is authorized to take some or all of the following actions:[a list of several follows]

2. Findings

The current version of the plan includes a statement acknowledging awareness of the BPU's ability to take action as described in the Standards and that fiscal penalties for violations are a potential course of action.

3. Conclusions

92. The Compliance Plan adequately addresses this Section 14:4-3.9 of the Standards.

The Plan acknowledges the BPU's authority to impose a fine for proven violations of the Standards and JCP&L's requirements to pay any fine levied.

4. Recommendations

We have no recommendations regarding the requirements of this provision.

Chapter XIII: Human Resources Organization Table of Contents

Chapter XIII: Human Resources Organization

A. Background

The scope for this engagement includes a number of subjects that engage HR functions. We have addressed a number of them in other chapters of this Phase Two report:

- *Compensation and Benefits* describes the results of our examination of compensation and benefits practices and how the HR organization and resources engage in direction, execution, support, and oversight of program structure, content, application, and competitiveness
- *Staffing* does the same for recruitment, training, development, evaluation, and diversity and inclusion.

This chapter addresses overall the structure, resources, and costs of the HR group and how HR functions divide between the largely common approach managed by FirstEnergy Service Company and JCP&L. It also addresses Human Resources Information System(s) (HRIS) that enterprises with large numbers of employees, compounded by an especially large number of individual electric utility distribution companies, must operate effectively. Finally, and ultimately most significantly, it addresses the state and quality of the relationship between management and the bargaining unit that represents a very large portion of employees who work in New Jersey.

B. Findings

Human resources responsibilities and functions fell under a FirstEnergy Senior Vice President and Chief Human Resources Officer (CHRO), reporting to the FirstEnergy CEO. The direct reports to the CHRO include a Vice President, Talent Management, whose 32-person group had responsibility for recruiting, learning and development and providing support to the operating companies and FirstEnergy Service Company groups on HR-related matters. Recruiting activities under Talent Management addressed professional and hourly personnel, however bargaining unit field positions continued to be handled by HR "Business Partner" resources embedded at the operating companies. Company comments on a draft of this report indicated significant movements from the operating companies to the central organization as result of a September 2022 centralization of HR functions.

The other reports to the CHRO include four directors for:

- Total Rewards: a 31-person group employing three teams have responsibility executive compensation, compensation for remaining employees and payroll, and employee benefits
- Labor, Employee Relations, & Corporate Safety: a 17-person group divided into two teams
- HR Technology and Analytics: a 10-person group that has responsibility for the HRIS and for reporting and analysis of HR data and information
- Diversity, Equity & Inclusion: a small group with responsibility for supporting employee and community engagement and learning programs.

The CHRO also had executive responsibility for Corporate Services (addressed in the *Corporate Services* Chapter of this Phase Two report).

Talent Management provides resources to support the operating utilities, in what management terms "HR Business Partner" organizations. These resources have a dotted line relationship to the

FirstEnergy-level HR organization. Management currently locates them (groups of four to five people) within the operating utilities, under the state presidents. However, the FE Forward initiative, which began in HR last December, has produced plans to relocate them directly into the FE-level HR organization.

The next table shows changes in HR costs in recent years. We made a number of adjustments to our more typical approach to presenting the costs of the major groups and functions we address in this report. By virtue of its engagement in HR activities, this organization uniquely bears initial responsibility for very large and highly variable costs associated with compensation and benefits applicable to other functions generally - - not just its own. Annually, those costs have run in amounts both greater than $110 million and less than negative $10 million. These costs, which FirstEnergy bears for its larger employee population do not bear directly on the focus of our interest in this chapter; *i.e.*, what costs HR imposes through performance of the functions for which it is responsible. We thus eliminated significant costs that end up being allocated to other cost areas on the basis of their employee numbers and compensation. These exclusions strip out HR's share of these costs, but the resulting amounts nevertheless reflect overall cost trends in the performance of HR's activities. The major exclusions arise from the following cost sources:

- Costs of benefits for FirstEnergy Service Company employees
- Accruals of payroll taxes associated with the Short-Term Incentive Compensation program
- Costs, gains, and losses associated with company-owned life insurance
- Interest costs for the Executive Deferred Compensation plan.

HR Cost Changes

Cost Source	Year						2017-2021 Change	
	2017	2018	2019	2020	2021 Q3	2021 Est.	$	%
Payroll	$13,070,941	$65,161,500	$11,453,470	$11,134,081	$9,094,161	$12,125,548	($945,394)	-7.2%
Charges t/f Others (FESC & non-FESC)	$229,809	$12,641	($13,043)	($389,498)	($508,663)	($678,218)	($908,026)	-395.1%
Dues, Fees, Licenses	$926,124	($288,204)	$98,994	($419,254)	$25,751	$34,335	($891,789)	-96.3%
General Business and Travel	$1,929,370	$1,930,064	$1,832,915	$1,407,693	$1,807,577	$2,410,102	$480,733	24.9%
Materials and Equipment	$376,401	$1,116,281	$618,732	$187,244	$116,505	$155,340	($221,060)	-58.7%
Other Other than Labor	$2,089,831	$3,588,583	$2,194,160	$2,540,049	$1,515,623	$2,020,831	($69,000)	-3.3%
Professional and Contractor	$1,108,430	$3,097,669	$1,645,318	$2,387,453	$1,327,968	$1,770,624	$662,194	59.7%
Total	**$19,730,905**	**$74,618,534**	**$17,830,546**	**$16,847,769**	**$13,378,922**	**$17,838,562**	**($1,892,342)**	-9.6%
Change from Prior Year		**$54,887,630**	**($56,787,988)**	**($982,778)**		**$990,794**		
		278.2%	**-76.1%**	**-5.5%**		**5.9%**		

The next table summarizes staffing changes over this period.

HR Staffing Changes

HR Group	2017	2019	2021
Total Rewards	53	34	32
Talent Management	30	29	34
Labor/Emp Relations & Corp. Safety	29	19	17
HR Technology	9	9	10
Diversity, Equity & Inclusion	4	2	2
HR & Corporate Services	12	3	2
Total	**137**	**96**	**97**

1. Locally Assigned HR Resources

The FE Forward initiative includes and assessment of the effectiveness and efficiency of virtually all of FirstEnergy management and operations. Management has engaged in a review of centralizing responsibility and increasing self-service options for performing HR transactional and duplicative activities performed in the field to produce "efficiencies and economies." The concept under examination included leaving smaller numbers of resources in the field to serve in a more consultative and strategic role working with operating company leadership. Benchmarking in the first phase of FE Forward identified the opportunity to save about $600,000 per year FirstEnergy-wide. Management has completed the business case for centralization and the implementation schedule calls for the change to occur by the end of 2022.

Management described the roles of these resources as to offer strategic and situational counsel, participate in staff meetings, facilitate Talent Talks and performance calibration sessions, and serve as primary contacts between personnel in the field and in support organizations and corporate HR resources. These HR Business Partners include a JCP&L HR manager on site at JCP&L. HR has dedicated a group of more than 35 persons assigned to meeting the HR needs of the operating companies and regulated generation operations. Those assigned to each operating company report directly to the HR Business Partner for Operations. They ensure that HR-related decisions and activities at the operating company conform to corporate policies, procedures, programs, and initiatives. They also carry out at their locations routine, repeat administrative and transactional activities suitable for performance by generalists and most efficiently addressed at their locations, rather than at corporate HR.

2. Goals and Objectives and Measurement of Success in Meeting Them

HR reports that it operates under an overall vision and strategy document with its outline of priorities set annually through HR leadership team meetings. The elements of that document consist of (as quoted from the document):

- ***VISION***
  - *Human Resources creates solutions that drive a high-performance organization powered by innovative, engaged and diverse employees*
- ***STRATEGIC OBJECTIVES***
  - *Optimize Organizational Performance*
  - *Drive Talent Strategy*
  - *Enhance the Employee Experience*
- ***PEOPLE STRATEGIES***
  - *Ensure all employees return home safe every day*
  - *Emphasize Core Values & Behaviors that define the culture of the organization*
  - *Optimize leadership development and succession management*
  - *Focus on career management through priority alignment, individual development, feedback and coaching*
  - *Recognize and fairly differentiate performance, investments and rewards*
  - *Ensure a diverse and inclusive environment that values all employees' contributions*
  - *Define and reinforce a compelling Employee Value Proposition*
  - *Recruit, develop, engage and retain the very best talent*

- *Sustain strong and collaborative relationships with union leadership at all levels*
- ***WE…***
  - *Create One team across Corporate and Field HR*
  - *Create cross-functional opportunities to develop HR talent*
  - *Recognize, reward and celebrate successes across HR*
  - *Connect current and prospective employees to FirstEnergy's Employee Value Proposition (EVP)*
  - *Demonstrate and expand our effectiveness around the FE core values and behaviors*
- ***WITH A FOCUS ON…***
  - *Courage*
  - *Trust*
  - *Openness*
  - *Teamwork*
  - *Diversity, Equity & Inclusion*

Our request for tangible ways by which HR gauges success in meeting its goals, objectives, and priorities produced only the barest of tangible measures. Responses to our requests focused significantly back on the vision and strategy document. Despite treating well the subjects it includes at a high level, it does not contain objectively measurable indicators of performance.

Management reported that senior managers in HR report their results at year end to the CHRO, who summarizes them at a high level with the CEO. Management did not provide documentation of either its internal reporting or of CHRO reporting to the FirstEnergy CEO. Feedback from the groups and employees that HR serves comes primarily through ongoing interaction with the HR Business Partners assigned to business units support on HR matters.

An outside firm conducted an Organizational Health Index (OHI) survey in early 2021, seeking to provide feedback on "success in cultivating a healthy, high-performing organization." The subject areas it addressed included: direction, work environment, accountability, coordination and control, capabilities, motivation, innovation and learning, external orientation, and leadership. Management did not provide the actual results, instead providing brief bullet points - - five each for strengths and "areas to focus and improve." It later provided findings limited to JCP&L. The FirstEnergy Corp. board commissioned a separate Culture Fitness Diagnostic surveying bargaining unit and non-bargaining unit personnel. Management declined to provide it claiming privilege on the basis of its conduct at the direction of attorneys for the board. We found this an unusual circumstance for work of this type, but consistent with the broad use FirstEnergy makes of legal privilege claims. The lack of transparency regarding this diagnostic removes what may prove an important source of insight and perspective on what apparently has become an overly strained relationship with those who represent bargaining unit employees in New Jersey.

Given the frequency with which we encountered similar claims, we chose this as a case for determining the level at which our request for information was declined, asking, among other things specifically for an identification of "the most senior member(s) of management or the Board who has agreed that non-waiver of any applicable legal privilege is in the best interests of the company." The response did not acknowledge this separately identified part of the request or respond to it.

There have been recent surveys of employee perceptions and attitudes, but our lack of access to their results makes an examination of what they show or what needs they create non-transparent. We found the lack of access to the results of the Culture Fitness Diagnostic particularly troubling for two reasons. First, it appears to have addressed matters pertinent to the circumstances surrounding and the aftermath of the federal criminal investigation that led to the Deferred Prosecution Agreement (See Chapter Twelve: *External Affairs - - "The DOJ Investigation"* of the accompanying Phase One report). Second, it engaged bargaining unit personnel, making the information it shows about them important in providing added perspective on the nature and extent of what we consider an unusually significant labor relationship problem. The board commissioned the diagnostic following the triggering events and circumstances described in Chapter 12 of the Phase One report. It employed in doing so FirstEnergy's unusually broadly applied approach of having it directed by counsel, followed by claims of privilege regarding its results.

3. *Human Resources Information Systems*

Human Resource Information Systems (HRIS) serve a central role in managing and supporting the use of the great volumes of information it takes to manage human resources issues timely and effectively in large organizations. Management has employed for two decades SAP-based on-premise capabilities, supported by more recently acquired, cloud based capabilities that comprise the HRIS and provide for access to it from personnel across the FirstEnergy footprint. It addresses the typical spectrum of needs, including Total Rewards (compensation and benefits) and Talent Management (*e.g.*, performance review and management). Transition to a cloud-based Oracle system has been underway.

The Analytics group of HR has responsibility for managing and operating the HRIS. Commensurate with the Spring 2023 expiration of agreements applicable to the current on-site system and the end of vendor support for other components, FirstEnergy began a process for considering HRIS alternatives. Its examination of those alternatives has valued replacement capabilities that simplify and improve HR processes including reporting, analytics, self-service and mobile technology use.

Documentation justifying a change to a new provider also cited tracking contractors and securing a "full organization head count picture" as problematic under the current system, described also as not "device agnostic" or "mobile friendly" - - two increasingly notable features as technology has advanced. The system precludes access by some employees, has required supplemental purchased and created systems to support reporting, benefits, compensation, and other activities. The current system also has suffered from untimely vendor support for needed integration and work ticket resolution.

FirstEnergy conducted a competitive solicitation, with guidance from Supply Chain and outside HRIS expertise. The documentation of that process shows attention to comparable pricing, vendor commitment, and system capabilities offered. The documentation available to us show IT approval at the vice presidential level and Supply Chain approval in April 2021, with a March 2023 go-live date for the cloud-based Oracle Fusion Cloud Human Capital Management solution.

4. Labor Relations

Management reports a team of three Labor Relations Representatives, operating under a director, as responsible for contract negotiation leadership, contract administration, and facilitation of Level 2 grievances through arbitration, if required. This team supports JCP&L leadership in matters requiring interpretation of the collective bargaining agreement, ensuring consistent agreement application, assisting with required memoranda of understanding or agreement with the bargaining unit, and ensuring compliance with labor laws.

Management has not used metrics to track effectiveness in labor/management performance, instead considering, "the quality of the relationship between the union and management to be a much better indication of the performance of labor and management." It does, however, track the numbers of grievances filed by year. The next tables summarizes the numbers involving JCP&L and the service company (through mid-year for 2021).

Grievances Involving JCP&L and FirstEnergy SC

Year	Number	Year	Number	Year	Number
2017	10	2018	4	2019	23
2020	11	2021	5	***Total***	***53***

The scope set for our engagement, acknowledging the value in gaining input from more than just interaction with management, included securing it from non-exempt personnel of whom, in the case of JCP&L, a substantial proportion include bargaining unit personnel. We met twice with bargaining unit leadership, developing additional information between and following those meetings. Those meetings disclosed a relationship problem of very significant dimensions; *i.e.,* greater than what we have generally found and by any measure outside the range of what one could consider an effective one.

Leadership presented a large range of issues about which it felt management had not shown a willingness to engage robustly. A number of them concerned lack of responsiveness, with examples including an inability to secure support in resolving individual employee benefits action and in securing information supporting close-out of a matter raised with the ethics and compliance organization. The issues raised also included substantive matters, with examples being excessive overtime levels and their impacts on productivity, numbers of available field personnel, and instructions calling for customer service personnel to act in violation of retail New Jersey tariff requirements.

Investigation of the individual issues raised falls beyond the scope of this engagement. However, we did find points raised about excessive overtime, productivity impacts, and base staffing levels consistent with conclusions we reached independently before the bargaining unit sessions. The *Staffing* Chapter of this Phase Two report addresses them. Overtime generally makes a material contribution to bargaining unit member compensation in the electric utility business, making member concern about its excessiveness and degradation of productivity not common. In addition, we consider unresolved the propriety of the cited temporary billing procedure to address estimated billing backlogs that grew during meter reading limitations during Covid-19 restrictions. Thus, one cannot dismiss the substantive concerns raised.

Moreover, the responsiveness issue has grown in the wake of the elimination of the JCP&L Vice President, Operations position, which has led to a change in the alignment of the director positions below and in their now reporting directly to the JCP&L President. Another change in the role of this executive involves removal of responsibility for local external affairs resources to management at the central level.

5. Policies and Procedures

HR applies a set of 69 policies and procedures to both FirstEnergy Service Company and JCP&L. The following tables summarize these documents by the three categories into which management groups them: Corporate Policies, Business Practices, and HR Letters.

FESC/JCP&L Corporate Policies

101: Code of Business Conduct	301: Employee Concerns Line
102: Anti-Fraud Policy	302: Regulatory Compliance Access Policy
103: Corporate Compliance Program	303: Electronic Recordings
201: Conflict of Interest	

FESC/JCP&L Business Practices

3.5: Ethics and Business Conduct	4.6: Employee Background Verifications
3.6: Employee Concerns Line	4.7: Training Practices
4.1: Diversity and Nondiscrimination	5.1: Health and Safety
4.2: Harassment	5.2: Environment
4.3: Drug and Alcohol Impairment and Substance Abuse	6.4: Conflicts of Interest
4.4: Workplace Violence	6.5: Gifts and Gratuities
4.5: Hiring Practices	

FESC/JCP&L HR Letters

101: Equal Employment Opportunity -Affirmative Action Policy	210: Background Investigation Procedure	413: Theft Policy
102: Sexual-Harassment Policy	211: Managing Contracted Labor and Services	501: Total Compensation Program
103: Discriminatory Harassment Policy	301: Problem-Resolution Procedure	502: Job Pricing
104: Employment of Individuals with Disabilities	302: Guidelines for Supervisors for Referring Employees to the EAP	503: Base Pay
105: Affirmative-Action Program for Minorities and Women	303: Company Position on Use or Possession of Alcohol and Drugs	504: Short-Term Incentive Program
106: Affirmative-Action Program for Individuals with Disabilities	304: Company Drug and Alcohol Testing Policy	505: Hiring Rates
107: Internal Discrimination Complaint Procedure	305: Employee Clubs	506: Promotions & Acting Assignments
201: Employment Relationships and Policy	306: Condolence Expression	507: Temporary Promotion to Supervisor
202: Hiring Process	307: Employee Service Recognition	508: Compensation Impacts on Employees
203: Co-Op Intern Program Policy	308: Employee Attendance Policy	509: Exempt Extra Hours Compensation
204: Relocation Program for Current Employees	401: Health & Safety Policy	510: Non-Exempt Extra Hours Compensation
205: Relocation Program for New Hires	402: Physical Examinations	511: Shift Premiums for Non-bargaining Employees
206: Temporary Work Assignment	403: Fire Prevention and Emergencies Policy	512: Celebrate Success
207: Flexible Work Arrangements	404: No-Smoking Policy	513: Non-bargaining Discretionary Awards
208: Access to Employee Records	405: Safety Eyewear and Footwear	601: Extended Medical Absences
209: Employee Referral Bonus Program	411: Handling Bomb Threats	602: Catastrophic Assistance and Relief for Employees
	412: Position Regarding Violence in the Workplace	

C. Conclusions

1. FirstEnergy has been effective in structuring and controlling HR resources, making substantial reductions with departure of the commercial power and energy entities and operations.

We found the HR organization that FirstEnergy operates centrally typical of large utility holding companies. It has made a logical division of responsibilities, supporting focused attention on the variety of needs that such an organization meets and permitting specialization that takes advantage of the large size that the 10 operating companies provide. Our examination of the use of external resources found the areas of outside expertise appropriate and reasonably moderate. In particular, the use of outside expertise reflects the magnitude of the efforts that FirstEnergy has made to restructure and resize its common support functions beginning with the transition of the commercial power and energy entities and operations and continuing even today.

We also found the use of HR Partners to support the execution of repeat administrative and transactional HR-related tasks at each operating company appropriate. Those resources also have provided a means for ensuring that actions at the operating company conform to enterprise-wide values, goals, policies, and procedures, and occur through consistent means supported by common information sources.

2. Changing the reporting and responsibilities of HR Partner resources engaged in support of JCP&L is not sound short or long term. (*See Recommendation #1)*

JCP&L has had and should continue to have responsibility for managing the operations and customer service functions and activities in New Jersey. Chapters Two through Ten of the accompanying Phase One report address those functions and activities. Removing responsibility for day-to-day management of the HR Partners serving JCP&L would both diminish local direction of efforts important to its functioning with respect to operations and customer services activities. JCP&L's share of FirstEnergy-wide cost savings in the range of $600,000 are de minimis when compared with the appearance (and likely accompanying reality to at least a material extent) of disconnecting local leadership's power to direct work from the ability to address the human aspects involved in performing it.

Ensuring that HR activities in New Jersey operate in ways consistent with enterprise-wide guidance does not require direction of day-to-day HR-related activities from remote locations, even where relationships with local resources remain on a sound footing.

That footing does not exist at present at JCP&L. A very large percentage of the resources that local leadership manages comprise bargaining unit employees. Their leadership considers management unresponsive across a wide spectrum of issues material to their membership. Examples cited include work practices, excessive overtime, failure to address individual benefits concerns timely, direction to customer service representatives to operate in contradiction to retail tariff requirements, and unresponsiveness to concerns raised with the organization responsible for ethics and compliance.

We are not in a position to conduct the review necessary to resolve any different views that management may have on the individual instances cited. The point here is that bargaining unit leadership has fundamentally lost confidence in local management. However the specifics of particular incidents shake out, their number and perceptions about management's willingness to engage on them have brought the relationship with bargaining unit leadership in representing its members to what appears headed to crisis proportions if not addressed.

Significantly, concerns have grown at a time when other consolidation efforts (addressed in the *Organization and Executive Management* Chapter of this Phase Two report) have deprived JCP&L leadership of an executive position (Vice President, Operations) relied upon by the JCP&L

President to direct operations. That change occurred after preparation of our Phase One report addressing New Jersey operations. Neither it nor reduction in or removal of local direction of HR Partners serves the interests of JCP&L management and operations.

3. HR operates under a sound and well communicated set of overall objectives and priorities.

The vision and strategy document provided by HR expresses its objectives and priorities, and connects them to corporate values. The document undergoes annual revision and annual statements of priorities disseminated to employees effectively communicate how what HR does and what it seeks to accomplish relate to them in tangible ways that span a sound range of subjects.

4. HR made available to us an unusually short set of performance metrics by which it gauges its performance and by which FirstEnergy measures broader measures of how effectively matters in which it engages get reflected in employee performance and attitudes. (*See Recommendation #2*)

Our experience includes a wide range of measured performance attributes by organizations responsible for HR in holding company structures. What management provided here places it at the very low end of the range. We have seen instances where tangible, objective measures of performance run to 50 or more. Such measures include those directly applicable to HR's performance of activities it directly performs or manages. They also include measures of how employee populations at large reflect conditions and attitudes that corporate leadership seeks to create or instill through activities in which HR groups engage. An entity with such a large number of operating companies should also break down a reasonably comprehensive set of metrics by operating company.

5. Management's planning of the transition to a new source of HRIS capabilities provides an occasion for development of a materially enhanced set of performance measures, regular reporting of their results, and analysis of measures to improve both HR and operational performance. (*See Recommendation #2*)

Management has performed a comprehensive process for analyzing its alternatives as the end of contractual commitments underlying its current HRIS capabilities looms. Management's evaluation, supported by both the competitive rigor of Supply Chain involvement and the HRIS expertise brought by an experienced outside provider has addressed economy, performance, and vendor commitment to and support for offerings provided. Management has focused appropriately on reporting and analysis capabilities and on access from all locations across the FirstEnergy footprint. The documentation provided indicate a movement to a widely used cloud-based solution, timed appropriately to produce as smooth a transition as possible by the March 2023 end of agreements supporting current HRIS capabilities.

Transitioning to a new solution, particularly given the focus those engaged in examining alternatives have placed on reporting and analytics, gives an opportunity to undertake a broad review of the metrics that will provide a much more comprehensive "scorecard" for measuring HR performance. It provides a similar opportunity to determine what kinds of data, reporting, and analysis can better support operational measurements related to human factors at the individual operating company level, and perhaps even at the regional level within operating companies.

6. **HR operates under a comprehensive set of policies and practices whose documentation provides sound guidance in performing its responsibilities and in communicating to employees how they are affected and what behaviors are expected.**

We found a reasonably typical and suitably broad range of corporate policies and business practices. Moreover, the use of HR Letters provides for employees clear guidance and set clear expectations for a broad range of behaviors and actions.

D. Recommendations

1. **Give local leadership continuing direction of the HR Partner resources assigned to supporting JCP&L operations.** (*See Conclusion #2)*

FirstEnergy should provide for common and local direction not only of the work performed by resources under the direction of JCP&L leadership but for the support required to address day-to-day transactional, administrative, and other HR aspects of maintaining a sound relationship with local employees. Estimates of savings to JCP&L from greater centralization have emerged. By contrast, significant concerns about relationship with the bargaining unit members already exist and at a level that should produce substantial concern. Circumstances cited as underlying that relationship concern include matters for which HR has responsibility, knowledge, or access to information and resources helpful in their resolution.

Those concerns, which FirstEnergy will hopefully resolve very promptly, add to the need for keeping HR Partners day-to-day direction under JCP&L leadership now. However, we believe that long term considerations also point to the value of ensuring from the local level that HR responsiveness is optimized, including in the conduct of labor relations.

2. **Develop commensurate with the transition to new HRIS capabilities a much more comprehensive set of performance measures for gauging HR performance and attainment of workforce characteristics and expectations.** (*See Conclusions #4 and #5*)

The metrics information management provided in response to our requests produced an unusually small set of measures. It may be that limitations in current HRIS capabilities inhibit meaningful expansion. Even if so, the transition to a system that will become more capable in reporting, analysis, and accessibility gives an opportunity to move to the state that we have seen elsewhere, where literally dozens of metrics apply and where they can be measured at the individual operating company level, or even lower where useful.

FirstEnergy should develop such a robust list of metrics and incorporate the ability to collect, retrieve, report, and analyze it regularly. From this list, HR should develop specific performance and group performance targets, and work with senior FirstEnergy leadership to identify the subset of those metrics most important in allowing that leadership to assess and engage with HR leadership in assessing performance regularly.

The metrics need to include two types:

- Measuring HR success in performing discrete activities for which it is responsible
- Measuring how measures to which HR substantially contributes have penetrated or are represented in the employee population

The provider of the HRIS capabilities to which FirstEnergy is transitioning emphasizes KPIs that use of its solution(s) enable, making it, along with recourse to best industry practice, good sources of metric development. We expect that the transition already includes efforts along this line, given the emphasis given to reporting, analytics and ubiquitous availability in committing to the transition. Nevertheless, the substantial lack of current measures warrants underscoring the importance of ensuring that those efforts are comprehensive and in accord with the schedule for moving to the new solution.

Appendix One: List of HR Policies and Procedures

HR Letters

101: Equal Employment Opportunity -Affirmative Action Policy
102: Sexual-Harassment Policy
103: Discriminatory Harassment Policy
104: Employment of Individuals with Disabilities
105: Affirmative-Action Program for Minorities and Women
106: Affirmative-Action Program for Individuals with Disabilities
107: Internal Discrimination Complaint Procedure
201: Employment Relationships and Policy
202: Hiring Process
203: Co-Op Intern Program Policy
204: Relocation Program for Current Employees
205: Relocation Program for New Hires
206: Temporary Work Assignment
207: Flexible Work Arrangements
208: Access to Employee Records
209: Employee Referral Bonus Program
210: Background Investigation Procedure
211: Managing Contracted Labor and Services
301: Problem-Resolution Procedure
302: Guidelines for Supervisors for Referring Employees to the EAP
303: Company Position on Use or Possession of Alcohol and Drugs
304: Company Drug and Alcohol Testing Policy
305: Employee Clubs
306: Condolence Expression
307: Employee Service Recognition
308: Employee Attendance Policy
401: Health & Safety Policy
402: Physical Examinations
403: Fire Prevention and Emergencies Policy
404: No-Smoking Policy
405: Safety Eyewear and Footwear
411: Handling Bomb Threats
412: Position Regarding Violence in the Workplace
413: Theft Policy
501: Total Compensation Program
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511: Shift Premiums for Non-bargaining Employees
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601: Extended Medical Absences
602: Catastrophic Assistance and Relief for Employees

Business Practices

3.5: Ethics and Business Conduct
3.6: Employee Concerns Line
4.1: Diversity and Nondiscrimination
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4.6: Employee Background Verifications
4.7: Training Practices
5.1: Health and Safety
5.2: Environment
6.4: Conflicts of Interest
6.5: Gifts and Gratuities

Corporate Policies

101: Code of Business Conduct
102: Anti-Fraud Policy
103: Corporate Compliance Program
201: Conflict of Interest
301: Employee Concerns Line
302: Regulatory Compliance Access Policy
303: Electronic Recordings

Chapter XIV: Corporate Services Table of Contents

Chapter XIV: Corporate Services

A. Background

We examined the organization structure for and resources applied to the real estate and facility and land management activities conducted in common by FirstEnergy's Corporate Services group. We examined the policies and practices for managing the activities involved, reviewed changes in JCP&L leasing, ownership, occupancy of facilities housing its personnel, and air fleet. We also examined changes in configuration and costs of facilities employed in serving the operating companies commonly. The *Affiliate Relationships and Cost Allocation* Chapter of this Phase Two report reports our examination of the means for assigning and allocating those costs to JCP&L.

B. Findings

1. Corporate Services Organization

A FirstEnergy Senior Vice President, Chief Human Resources Officer, and Corporate Services has responsibility for three groups:

- Real Estate (23 persons)
- Administrative Services: a group numbering in the 50s, with the bulk of that number aligned as follows:
  - Mail services (6 persons)
  - Building services (32 persons divided among 5 locations)
  - Food Services (5 persons)
  - Facility planning and projects (6 persons)
- Flight Operations (described in the *Surface and Air Fleet Management* Chapter of this Phase Two report).

Real Estate, Facilities, and Right-of-Way groups fell under the Director, Real Estate & Facilities in 2017, accounting for 85 of the director's 100 total resources at that time. Facilities services, which had responsibility for planning management, and supervision of general facilities and for food services at that time accounted for 74 of the director's 2017 resources.

FirstEnergy has continued to house a small, six-person right of way group in the organization responsible for transmission line siting. It operates under the direction of the Manager, Siting, Survey & ROW located in the Transmission and Substation Design group that falls under the FirstEnergy Senior Vice President, Operations.

The resources assigned to facilities management have responsibility for capital projects at facilities, creation and administration of facility maintenance contracts, managing food service practices at principal office locations, and for emergency events. Its three goals have remained consistent from year to year, focusing on performance against budget. Documented practices address outside service contracts. The service contract provisions require specification and technical requirement identification, expiration date tracking, timelines to ensure timely execution of contracts, adherence to purchase order requirements, competitive bidding for contracts exceeding $50,000 in expected costs, justification of sole-source awards, and support in addressing contract scope changes.

Documented procedures also apply to the following activities performed by facilities management:

- Managing a help desk used to log, prioritize, and process requests and work tickets for facilities maintenance requests
- Capital work identification, classification, ranking, evaluation, approval, and spend projections
- Planning work space utilization, creating occupancy plans and specifying required equipment, developing work space standards, executing relocations, specifying and procuring work space furniture and equipment and managing their inventories, managing work space renovation projects
- Planning and executing emergency event food services at corporate offices.

Administrative Services personnel fell by about one-fourth between 2017 and 2021 and Real Estate personnel by somewhat less than 10 percent. By the end of 2021 Real Estate personnel increased to 22 persons. Company comments on a draft of this report observed that Administrative Services personnel numbers have increased. First Energy's continuing efforts to centralize services have thus reportedly caused a drop in personnel formerly performing activities now existing in central organizations.

2. Administrative Services Cost Changes

The next table shows changes in Administrative Services costs between 2017 and 2021. They fell as the FirstEnergy entities engaged in commercial power and energy businesses transitioned through bankruptcy to eventual ownership by creditors.

FESC Administrative Services Costs

Cost Source	Year						2017-2021 Change	
	2017	2018	2019	2020	2021 Q3	2021 Est.	$	%
Payroll, Overheads, Benefits	$7,713,489	$7,063,377	$5,235,299	$5,294,119	$3,830,292	$5,107,056	($2,606,433)	-33.8%
Charges t/f Others (FESC & non-FESC)	$42,399	($18,336)	$80,811	$127,205	$66,174	$88,232	$45,833	108.1%
Dues, Fees, Licenses	$6,148	$7,913	$11,761	$17,374	$11,240	$14,986	$8,838	143.7%
General Business and Travel	$372,567	$515,133	$412,357	$261,556	$142,265	$189,686	($182,880)	-49.1%
Materials and Equipment	$581,542	$477,039	$537,425	$336,105	$210,917	$281,223	($300,319)	-51.6%
Leases and Rentals	$7,034,492	$8,890,985	$8,175,534	$7,163,601	$5,840,714	$7,787,619	$753,127	10.7%
Other	$1,099,575	$1,782,257	$1,572,616	$1,823,661	$1,469,099	$1,958,799	$859,224	78.1%
Professional and Contractor	$3,804,759	$4,174,121	$4,884,625	$4,134,407	$2,767,498	$3,689,998	($114,762)	-3.0%
Total	**$20,654,971**	**$22,892,489**	**$20,910,428**	**$19,158,028**	$14,338,199	**$19,117,598**	($1,537,373)	-7.4%
Change from Prior Year		**$2,237,518**	**($1,982,061)**	**($1,752,400)**		**($40,430)**		
		10.8%	**-8.7%**	**-8.4%**		**-0.2%**		

3. Real Estate Cost Changes

The next table shows changes in real estate organization total costs since 2017; they have fallen substantially. Staffing has changed nominally since elimination of the need to provide services to the now-gone commercial power and energy businesses (transferred to a third-party, creditor-formed group of enterprises as a result of bankruptcy proceedings). Services to support those businesses prior to that time were reportedly limited, for example, in providing services related to real-estate related payables.

FESC Real Estate Costs

Cost Source	Year						2017-2021 Change	
	2017	2018	2019	2020	2021 Q3	2021 Est.	$	%
Payroll, Overheads, Benefits	$3,485,498	$2,854,486	$2,282,121	$2,707,186	$2,067,392	$2,756,523	($728,975)	-20.9%
Charges t/f Others (FESC & non-FESC)	($79,985)	($50,350)	($805)	($2,727)	($18,051)	($24,067)	$55,918	-69.9%
Dues, Fees, Licenses	$2,380	$2,232	$3,089	$390,241	($388,566)	($388,566)	($390,946)	*
General Business and Travel	$21,313	$37,030	$36,823	$13,597	$7,034	$9,379	($11,934)	-56.0%
Materials and Equipment	$11,535	$15,630	$11,009	$8,303	$2,462	$3,283	($8,251)	-71.5%
Leases and Rentals	$531,909	$530,003	$870,347	$1,459,447	$695,815		($531,909)	
Other	$21,925	$95,303	($59,940)	$11,978	$10,072	$13,429	($8,496)	-38.7%
Professional and Contractor	$78,615	$7,318	$120,379	$4,635	$986	$1,315	($77,300)	-98.3%
Total	**$4,073,189**	**$3,491,652**	**$3,263,024**	**$4,592,660**	**$2,377,145**	**$3,169,527**	($903,663)	-22.2%
Change from Prior Year		**($581,538)**	**($228,628)**	**$1,329,637**		**($1,423,134)**		
		-14.3%	**-6.5%**	**40.7%**		**-31.0%**		

4. *JCP&L Real Estate Use*

The next table summarizes recent year JCP&L facility leases. JCP&L operates out of one large, leased office and two much smaller ones. JCP&L moved its employees, numbering 155 from the 439,191 square foot Redbank Operating Headquarters in 2017. They now operate from the leased Holmdel Office. The lease there commenced in 2016, with rent beginning in 2018. The real estate costs in the table listed for 2021 do not include Holmdel chargeable operating expenses for the last five months, but they appeared on an annual trajectory of about $1.9 million for a combination of rent and office expenses. The Red Bank lease did not extend past April 2017. Allenhurst includes office and walk-in facilities.

JCP&L Facility Lease Costs

Facility	Square Feet	Persons	Lease Amount			
			2017	2019	2020	2021
Holmdel Office	69,850	155	$40,476	$1,885,804	$1,922,524	1,089,533.53
Red Bank Operating HQ	439,191		$719,348	$0	$0	$0
Toms River Service Center	3,690	36	$0	$63,000	$126,000	$126,000
Allenhurst Office/Walk-in Ctr.	2,000	21	$65,184	$76,379	$79,446	$75,868
Trenton Office	2,051	2	$65437	$69,183	$65,780	$65,432
Total	**516,782**	**214**	**$890,445**	**$2,094,366**	**$2,193,750**	**$1,356,834**

JCP&L operates from a much larger group of owned premises (34 of them), comprising 1.62 million square feet (an average of 46,381) and a total book value of $45.6 million (an average of $1.34 million). The net book value of this portfolio of owned premises has grown by 11 percent ($4.5 million) from the end of 2017 through mid-2021, with two large offices (Morristown and Holmdel) accounting for $3.9 million of that amount. Management reported no vacant owned or leased buildings and buildings and current use at their capacities.

FirstEnergy SC uses facilities in serving JCP&L, which bears shares of costs for them. The next table summarizes JCP&L costs for such facilities. The *Affiliate Relations and Cost Allocations* Chapter of this Phase Two Report addresses the means for charging and allocating those costs to JCP&L. The subtotal line shows a growth rate of about three percent. It excludes the facilities added or substantially modified (listed below), which proved the largest source the increase of about $2.3 million in JCP&L costs over the period the table includes.

Building Costs Allocated to JCP&L

Building	2017	2018	2019	2020	2021*	Change
Akron Control Center	$1,454,618	$1,157,515	$1,097,732	$1,074,729	$1,060,744	($393,874)
Bethel Warehouse	$132,557	$131,013	$131,361	$166,440	$269,357	$136,800
Greensburg Corp. Center	$912,812	$826,104	$808,512	$962,286	$996,285	$83,473
Pottsville Pike	$753,854	$751,358	$749,709	$699,173	$598,627	($155,227)
Wadsworth Control Ctr.	$615,287	$520,251	$500,927	$526,934	$856,161	$240,874
West Akron Campus	$114,548	$118,531	$222,784	$333,682	$556,557	$442,009
Stow Eng. & Meeting Ctr.	$1,001,722	$875,004	$860,881	$979,557	$1,235,676	$233,954
Subtotal	*$4,985,398*	*$4,379,776*	*$4,371,906*	*$4,742,801*	*$5,573,408*	*$588,010*
Advanced Tech. Center	$0	$0	$0	$0	$882,152	
Fairmont Corp. Center	$0	$0	$0	$232,481	$695,316	
Fairmont Call Center	$521,950	$539,074	$543,336	$524,849	$732,265	
Fairlawn 5	$0	$0	$0	$0	$49,855	
Fairlawn Call Center	$169,674	$170,058	$170,541	$114,093	$0	
Total	**$5,677,022**	**$5,088,908**	**$5,085,783**	**$5,614,224**	**$7,932,996**	**$2,255,974**

**Annualized using third quarter values*

Key variances in 2017 through 2021 amounts include:

- New 2021 charges for the Center for Advanced Technology
- New 2020 and 2021 charges for the Fairmont Corporate Center
- The absence (through September) of 2021 charges for the Fairlawn Call Center
- Increased 2020 (and 2021 on-pace) charges for the Greensburg Corporate Center and West Akron Campus.

C. Conclusions

1. The organization and resources applied to real estate and facility management activities promote efficiency and effectiveness and have produced declining costs.

The organization provides for centralized management of the responsibilities and activities involved, but locates resources at facility locations. A central approach to planning and controlling physical work to facilities and for managing contracts for facilities services exists. Personnel resources and costs fell through 2021, in part due to elimination of service needs of departed commercial power and energy business operations. Company comments on a draft of this report stated that continuing centralization of services has increased staffing at FirstEnergy Service Company, while producing reductions in personnel who had performed the centralized functions at the operating company level previously. Documented practices apply to space planning and reconfiguration. Management reported no vacant or substantially unused JCP&L space warranting disposition or other significant adjustment.

The location of a small right-of-way organization in the operations organization responsible for line siting places it in an effective position.

2. JCP&L leased and owned facilities have remained fairly stable in numbers, locations, and lease/ownership costs, apart from the large Morristown and Holmdel offices.

Apart from the two office buildings, the remainder of the premises leased and owned by JCP&L have remained stable. Overall, the change in total lease costs and book values have experienced only moderate escalation.

3. Changes in costs charged to JCP&L for commonly used facilities have grown at roughly the rate of inflation, apart from new and reconfigured facilities, which have caused increases.

JCP&L's share of costs for facilities commonly used has grown $5.7 to $7.9 million from 2017 through 2021 (annualizing the last year's values using totals through the third quarter). Adjusting for what appear to be new or substantially reconfigured facilities produces an annual growth rate in the range of three percent.

4. FirstEnergy charges for building occupancy and use on a basis that bears a reasonable relationship to the entities for whom the occupants provide services.

FirstEnergy bills carrying charges on the buildings (depreciation, taxes, return, maintenance, for example) for buildings occupied by common service providers. Management makes allocations for such building occupancy and use based on the cost center(s) occupying the space commonly using one of the multi-factor allocators described in more detail in the *Affiliate Relationships and Cost Allocations* chapter of this Phase Two report.

D. Recommendations

We have no recommendations in the corporate services (real estate and administrative services) areas.

Chapter XV: Information Technology Table of Contents

Chapter XV: Information Technology

A. Background

Information Technology (IT) systems and applications support a wide variety of needs, extending for example from financial and customer operations to an increasingly significant role in managing transmission and distribution network planning, maintenance, operation, and even restoration. A number of other chapters of this report show the breadth of IT application and criticality to operating success. These other chapters address important aspects of IT design, capabilities, and use. Examples include the "Utility Operations" Chapters (Chapters Two through Nine) and Chapter Ten, *Customer Service* of the accompanying Phase One report. Protecting the integrity of those systems and preserving the confidentiality of the information they house has become increasingly important. Chapter Eight of that Phase One Report, *Cyber Security and System Vulnerability* address cyber security approaches and measures applied to provide that protection. The EDECA Chapter of this accompanying Phase Two report addresses protection of information and ensuring limits its use to permitted purposes. Beyond these broader applications of important IT systems and applications, other chapters address their use for specific purposes; *e.g.*, managing work and costs of outside counsel or ensuring document retention for required time periods.

This chapter does not seek to repeat the discussion of IT-created capabilities and uses, but to address how FirstEnergy, which manages IT on an enterprise-wide basis, organizes, staffs, structures, prioritizes and plans, develops, acquires, and maintains capabilities that depend on IT. Hardware no longer represents the largest cost element of major systems and measures of the value of systems increasingly focus on increased efficiency in conducting the processes and activities they support.

The acquisition history that has produced FirstEnergy has created major opportunities for the integration of different systems used by the legacy enterprises. GPU has comprised part of FirstEnergy for two decades now, with Allegheny Energy in the fold for more than a decade. The recent FE Forward initiative has noted the historical emphasis on addressing those legacy systems, while seeking to chart a path that will move FirstEnergy forward, with a more integrated set of backbone capabilities now in place.

We conducted our examination recognizing the need for IT leadership and management to focus on improving efficiency and effectiveness at the common-service level and with respect to JCP&L as an operating company. We considered factors such as:

- Responsiveness to user needs
- Management of project queues to avoid significant backlogs
- Planning to meet users' future needs
- Methods for identifying, ranking, acquiring/developing, and implementing recent technology and applications
- Organization structure and resource level changes over time.

We examined the organizational approach to IT and the resources applied, processes used to develop and acquire systems and applications software, disaster-recovery programs, budget priorities and development, methods to keep abreast of user needs, measures of performance effectiveness and costs, and opportunity for and use of JCP&L feedback and participation in planning and feedback on performance effectiveness.

B. Findings

1. Organization and Staffing

FirstEnergy provides information technology services to each of its entities through a common organization headed by the Vice President & Chief Information Officer. This executive has three reports:

- Vice President, Information Technology, who heads an approximately 540-person IT organization
- Vice President, Cyber & Physical Security, whose approximately 65-person organization Chapter Eight *Cyber Security and System Vulnerability* of the accompanying Phase One report addresses
- Vice President, Innovation & Digital, who heads a newly-created, 12-person organization described by the company as a "think tank" focusing on new processes, problem-solving, and collaboration.

Six Directors report to the Vice President, Information Technology, heading groups dedicated to:

- Transmission Systems: a 156-person group that addresses EMS, GMS, SCADA, and CIP Compliance systems and transmission-related business solutions
- Distribution Systems: a 55-person organization that addresses distribution-related SCADA and business solutions
- Network Engineering: a 93-person organization that has responsibility operations of certain systems, Operations Technology (OT) networks, and WAN, LAN, and fiber networks
- Customer Systems: a 75-person organization responsible for customer-related business solutions
- End User Services: a 65-person organization responsible for planning and project managing solutions, end user computing, and analytics
- IT Enterprise Technologies, a 94-person organization responsible for UNIX, database, cloud, server and storage, and for business solutions.

Resources under the Vice President & Chief Information Officer have dropped significantly since 2017, from 702 to 614, counting the Physical and Cyber Security and Innovation & Digital groups. The predominant source of the reduction came through the Voluntary Early Retirement Program forming part of restructuring centrally provided services to reflect elimination of the need to service FirstEnergy commercial power and energy market business operations. Those reductions produced a reduction of some 120 positions, followed by bringing on 22 persons to meet other IT needs, generating a net change of 98, or 15 percent. Removing the security and innovation personnel and the net 98 positions following the early retirements and subsequent additions produces a number of 560 for 2017 and 538 for 2021. Roughly speaking, this change indicates about a four percent drop between 2017 and 2021 in the IT resources serving roughly the same scope of entities and operations (*i.e.*, today's predominately electricity transmission and distribution businesses).

2. *Staffing and Cost Changes*

The next table shows changes in staffing from 2017 through 2021. The "Adjusted IT" line removes the reduction of 120 under the Voluntary Early Retirement Plan and the 22 added back subsequently (a net of 98) to restore staffing to what management has described as a sound measure of IT needs after adjustment for elimination of the need to serve the departed commercial power and energy operations and entities. The table shows large reductions on a gross basis. Moreover, the 550 person level reached for the IT-only portion in 2021 shows further reductions from applying as a proxy value for 2017 management's view of the overall level of resources needed to support all FirstEnergy IT needs after adjustment for the departure of the commercial power and energy operations and entities. Chapter Eight *Cyber Security and System Vulnerability* of the accompanying Phase One report addresses management and operations of cyber and physical security functions and activities.

FirstEnergy Service Company IT Personnel Changes

FESC Group	Year			Change	
	2017	2019	2021	#	%
IT	670	559	550	-120	-17.9%
Cyber Security	32	34	39	7	21.9%
Security	29	24	25	-4	-13.8%
Adjusted IT	***572***	***559***	***550***	***-22***	***-3.8%***

The next table shows changes in costs from 2017 through the third quarter of 2021 and annualizes 2021 costs we estimated by adding another quarter of costs at the rates incurred through the first three quarters.

FirstEnergy Service Company IT Costs

Cost Source	Year						2017-2021 Change	
	2017	2018	2019	2020	2021 Q3	2021 Est.	$	%
Payroll, Overheads, Benefits	$80,615,022	$84,666,661	$75,672,450	$81,677,907	$60,124,938	$80,166,584	($448,439)	-0.6%
Charges t/f Others (FESC & non-FESC)	($11,649,669)	($10,391,810)	($8,633,279)	($14,377,274)	($11,289,669)	($15,052,891)	($3,403,222)	29.2%
Dues, Fees, Licenses	$109,573	$65,080	$121,218	$138,923	$81,277	$108,369	($1,204)	-1.1%
General Business and Travel	$401,407	$598,636	$374,728	$117,257	$83,788	$111,717	($289,690)	-72.2%
Materials and Equipment	$1,417,064	$1,167,647	$1,050,922	$828,680	$618,946	$825,262	($591,802)	-41.8%
Leases and Rentals	$921,825	$812,293	$526,654	$466,772	$313,733	$418,311	($503,514)	-54.6%
Other	$39,579,421	$46,580,346	$43,541,486	$43,295,598	$20,456,953	$27,275,937	($12,303,484)	-31.1%
Professional and Contractor	$9,937,682	$12,566,348	$22,459,498	$21,532,527	$7,567,121	$10,089,494	$151,813	1.5%
Total	**$121,332,326**	**$136,065,201**	**$135,113,677**	**$133,680,389**	**$77,957,087**	**$103,942,783**	($17,389,543)	-14.3%
Change from Prior Year		**$14,732,875**	**($951,524)**	**($1,433,288)**		**($29,737,606)**		
		12.1%	**-0.7%**	**-1.1%**		**-22.2%**		

3. *Annual IT Planning*

Information Technology conducts system, technology, and project planning activities on an enterprise-wide level, making the operation of most systems, the planning and execution of most projects, and the application of most technologies and projects applicable across operating companies and jurisdictions. Multiple factors, updated annually provide for the allocation of costs of such multi-operating company systems, projects, and technology applications and equipment. (the *Affiliate Relationships and Cost Allocations* of this Phase Two report describes the allocation process and factors used). Personnel related costs for IT have dropped, but, as that chapter describes, the departure of the commercial power and energy businesses also served by IT resources and functions left JCP&L to bear increased costs for depreciation that includes information systems.

Information Technology has overall responsibility for the licensing of system hardware and software enterprise wide. It maintains an inventory of existing licensing arrangements, requirements applicable to them, and their renewal frequencies. IT analysts and directors review alternatives, considering costs and capabilities, as those arrangement change or when renewal approaches. Their analysis identifies, selects, and presents alternatives for review with vice presidents from IT, Cyber & Physical Security and Innovation & DigitalEnablement. Approved alternatives become part of the IT capital plan.

Information Technology addresses over 500 different applications (categorized in the next table), each assigned overall to one of four IT Directors, and more directly to IT Managers assigned to nearly all of them. Director and manager assignments to applications give them responsibility over related application areas and applications.

A wide range of assets require planned replacement (*e.g.*, servers, PCs, radios). Information Technology has responsibility for the IT asset replacement plan, which uses dates driven by asset in-service dates and estimated productive lives. Annual IT planning, again overseen by the same vice presidential group noted above verifies replacement cycles or makes changes to them based on performance data.

IT Application Summary

Application Area	Number	Application Area	Number
Customer Back Office	33	Customer Interaction	38
Enterprise Technologies	5	Meter & Device	50
Outage & Advanced Distribution	38	Transmission	271
Work Management & GIS	82		

The IT capital plan incorporates projected costs resulting from licensing and replacement review, analysis, and approval, using best available cost estimates. That plan includes cost forecasts and budgets that undergo updating as required. UI Planner, a widely used tool in the utility industry for these purposes provides a solution used for budget and forecast preparation, execution, reporting, and performance measurement.

Information Technology engages the operating companies in addressing enhancements that may prove needed to support their operations and business unit target achievements. This engagement includes meetings with individual operating companies, including JCP&L, as part of annual capital planning.

4. *IT Project Authorization*

Information Technology uses four categories (Mandatory, Maintain, Improve, and Value Add) to assign pre-authorization justification requirements for individual IT projects, defined as follows:

- Mandatory: non-discretionary; required by law, order regulatory commitment, or duty to serve (*e.g.*, new business).
- Maintain: undertaken to sustain existing infrastructure and performance levels, driven by specific operational performance and financial tracking measures

- Improve: undertaken to improve existing infrastructure or performance beyond performance metric commitments, driven by specific operational performance and financial benchmark targets
- Value Add: undertaken on a non-recurring basis to support a defined initiative to improve or expand existing infrastructure or create new business opportunities, yielding hard dollar benefits or directly improving earnings per share.

Mandatory and maintain projects do not require a financial justification. Financial justifications prepared for each Improve and Value Add project undergo business unit management review, with each business unit having a force-ranking for such projects. A FirstEnergy Project Authorization planning system compiles the full list of mandatory, maintain, improve, and value adding projects for review by the vice presidential group identified above and management of each business unit. An overall capital plan results, incorporating projects from the first two categories and those of the last two that overall corporate budget targets can accommodate.

IT managers upload information regarding the projects that make the approved list into UI Planner. The uploads identify information important in managing timely and efficient project planning and execution. Inputs include a WBS (work breakdown structure - - a tool that breaks projects into smaller components to support logical, timely, and effective work execution) labor costs for participating business unit and IT personnel, outside resource needs, and other costs.

The next table summarizes enterprise-wide Information Technology costs in the major categories.

FESC Information Technology Costs by Major Category

Type		2021	2020	2019	Change $	Change %
Administration		$2,941,313	$3,181,450	$3,745,136	($803,824)	-27.3%
Communications		$50,150,412	$49,349,802	$57,010,119	($6,859,707)	-13.7%
Data Processing		$4,464,218	$3,284,846	$4,466,899	($2,680)	-0.1%
Hardware		$32,427,054	$22,712,249	$28,787,019	$3,640,035	11.2%
Software		$96,461,973	$98,151,549	$98,009,677	($1,547,704)	-1.6%
Tech Support		$2,484,579	$11,692,847	$10,182,914	($7,698,335)	-309.8%
Vehicle		$948	$397,519	$141,718	($140,771)	-
Total		***$188,930,497***	***$188,770,263***	***$202,343,483***	($13,412,985)	-7.1%
JCP&L Share	$	$36,784,768	$35,922,981	$40,731,743	($3,946,975)	
	%	19.5%	19.0%	20.1%		-0.7%

The next table breaks down software costs (the largest cost category) by types, which consist of those internally developed, vendor developed, and prepackaged (or “out-of-the-box”).

Software Expenditures by Major Type

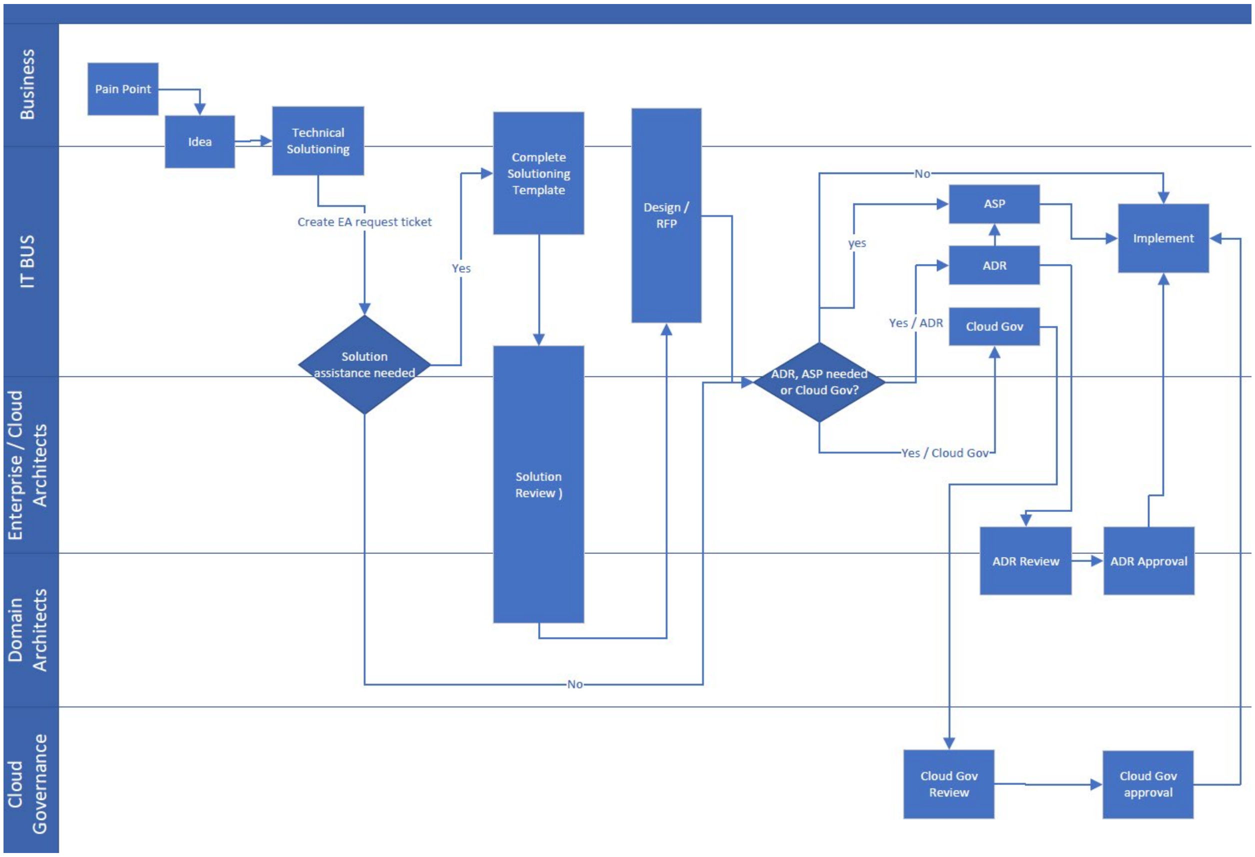
Type	2021	2020	2019	Change	
				$	%
Internal	$24,080,586	$34,383,574	$39,760,603	($15,680,017)	-65.1%
Prepackaged	$10,324,574	$24,840,473	$16,084,824	($5,760,249)	-55.8%
Vendor	$62,056,813	$38,927,502	$42,164,250	$19,892,563	32.1%
Total	***$96,461,973***	***$98,151,549***	***$98,009,677***	***($1,547,704)***	***-1.6%***

Central IT operations and JCP&L personnel directly have access to a total of about 6,400 IT devices. Data processing equipment (PCs, servers, printers, and storage devices) number about 4,000 and communications equipment (RTUs, phones, switches, routers, radio, DWDM) about 2,400. Microprocessor-based RTUs (remote terminal devices) monitor and control field devices employing connections to SCADA systems. Optical fiber multiplexing, DWDM (dense wavelength-division multiplexing), combining data signals from multiple sources while keeping them separate. DWDM thereby increases the data-carrying capacity of fiber networks.

5. Building and Acquiring Applications

Business units work with IT groups assigned to support them to address IT-related concerns or issues. This engagement begins the process of assessing needs for development of new or enhancement of existing software applications at the business unit level. Discussions at this level identify needs and solution-concepts for addressing them. The IT resource assigned to the business unit then works with one of IT's Enterprise Architects to determine whether a potential solution sounds promising enough to review with an IT Solutioning Council, consisting of a group of subject matter experts. Review and concept development at this stage address capability to build a solution internally and the need for doing so as compared with an outside development or package acquisition. The next chart depicts the key steps in the process.

Application Solution Development



Internal development employs an established Application Development Methodology guided by an internal website that provides extensive detail.

6. IT Performance Metrics

Metrics reporting changed substantially at the beginning of 2021, becoming much clearer in presenting performance targets and measuring performance against them as it progressed through the year. The newly established monthly IT Value Report replaced what had been a series of data sets that did not consistently show targets or progress against them clearly or as they developed and trended through the year. The Value Report's institution has brought clear identification of targets, tracking of performance against them over the year, clarity in where performance stands qualitatively and quantitatively against targets, and, where appropriate, distinctions in operating company results. The monthly distribution of the reports to top FirstEnergy leadership and to the FirstEnergy Corp. Board of Directors provides them with a clear and concise, yet reasonably detailed view of where IT performance stands across a reasonably broad set of metrics.

The reports also provide notes on areas of improvement. Chapter Ten, *Customer Service* from our Phase I report addresses many of the metrics that the Value Report incorporates. We did not find issues among the other areas raising significant concerns about IT performance.

7. Information Technology Benchmarking

Management has undertaken two IT department benchmarking efforts since the beginning of 2018:

- 2018 costs and staffing
- October 2019 through September 2020 expenditures.

The 2018 benchmarking found spending as a percent of revenue and Full Time Equivalents as a percent of total company employees very low (first quartile) and spending per employee low (second quartile, and approaching the first). [redacted].

The notes cited the need to address legacy systems and redundant applications (not an uncommon problem in holding companies that have made acquisitions) - - a factor tending to weight expenditures toward systems. The notes also cited flat IT spending resulting from "[y]ears of austerity measures."

8. Protection of Information Assets

Chapter Nine, *Cyber Security and System Vulnerability* of the accompanying Phase One report addresses Cyber Security more generally. Information assets comprise a major focus of security plans and actions. Business Practice 9.3 (Electronic Security) addresses FirstEnergy's Enterprise Cyber Security Program. [redacted]

The areas covered by supporting and detailed FirstEnergy policy and other documentation include in addition to one specifically addressing the BPU's Cyber Security Program and ADMS New Jersey Procedure:

- *Universal Network Requirements*
- *Remote Access Security*
- *Universal Cryptographic Requirements*
- *Transmission System Ops Center*
- *Authorization & Authentication*
- *End-User Info Asset Security*
- *Security While Traveling*
- *External Systems and Service Providers*
- *Cyber Security Incident Response*
- *Data Breach*
- *Website Compromise*
- *CSIRT Organization Assignments*
- *Internet Access Controls*
- *Wireless Network Security*
- *Universal Logging Requirements*
- *Risk Assessment & Vulnerability Life Cycle*
- *Awareness and Training*
- *Removable Media and Peripherals*
- *Document Digital Signatures*
- *Mobile Phone Requirements*
- *Malware Execution*
- *Denial of Service*
- *Cyber Security Incident Briefing*
- *CSIRT Activity Log*

Disaster recovery plans for services provided by Information Technology also exist. Annual reviews examine and where appropriate update the detailed steps in disaster recovery and the resources needed to restore the infrastructure and systems for which Information Technology has recovery responsibility.

9. Audits of Information Technology

Internal Auditing has conducted nearly 40 audits of aspects of Information Technology's operations and performance since the beginning of 2019, many of them addressing application creation or revision, system and process controls sufficiency, management of assets, process automation, and system and data security. The pre-release reviews of new and changed applications have demonstrated sound processes for developing them. Overall, we observed no "Poorly Controlled" findings; *i.e.*, requiring immediate attention. Findings of some need for improvement came most frequently in the area of system and data security. However, it is clear that Internal Auditing has worked closely with Information Technology in identifying and securing commitment to needed change.

C. Conclusions

1. FirstEnergy's centralized approach to managing the activities required to provide appropriate IT availability and support has promoted efficiency and the application of common systems, applications, and planning and development.

The organization employs a sound division of responsibility, dedicating resources to key areas of operations, corporate and support, enterprise-wide, and individual end users. Assigning responsibility for transmission, distribution, and customer IT needs promotes specialization that reflects their individual needs, and it better ensures that each gets appropriate focus and attention. Distinguishing responsibility for enterprise-wide systems and applications, for communications systems that support the massive flows of data required to operate in today's electric utility environment, and for supporting use of technology at the individual level (through desktops and hand-helds for example) does the same.

FirstEnergy's approach also enhances the ability to apply common systems, equipment, planning and development/application project management, procurement, and other efforts to optimize needs identification and their timely and cost effective deployment.

Resources dedicated to IT have fallen significantly. Those reductions began with large reductions from the Voluntary Early Retirement Program, offset partially by restoration of a number of positions found needed, and then by further small reductions thereafter. Overall costs of the IT organization have fallen significantly as well. Costs fell in essentially all categories that drive them, including both for internal and contracted work, where one often sees offsets between them given variability in work contracted, particularly on larger developments. The cost table above shows the substantial impact that charging out of costs to client departments (seen in other cases for IT groups in the industry) has on IT costs. However, ignoring the table's *Charges t/f Others (FESC & non-FESC)* line still produces a significant total IT cost drop over the years included.

2. IT takes an appropriate approach to identifying and prioritizing user needs.

Large projects with common utility among the operating companies and corporate and support groups significantly drive IT capital projects. However, FirstEnergy is making fiber network installations designed to replace reliance on the large outside carriers whose services and capabilities have supported operating company and central service provider communications network needs in transferring very large amounts of data reliably. We found sound attention to addressing JCP&L's needs in this regard.

More generally, FirstEnergy applies a comprehensive annual planning process that addresses system, technology, and capital project prioritization, planning, and budgeting. It includes sound measures for tracking pending license renewals at intervals that permit sound analysis of needs for continuing the capabilities they provide, of alternatives for replacing them and their relative costs, benefits, and risks. Assignment of the hundreds of different applications for which IT has material responsibilities to individual directors ensures informed and focused evaluation of their capabilities and costs against currently defined needs. Planned replacement programs exist for assets regularly requiring change-out, with replacement cycles reviewed.

The planning process aggregates renewal and replacement needs along with other potential needs for use in structured, application-assisted processes for analyzing them, prioritizing them, forecasting their costs, supporting final commitments, managing/executing needed development and other projects, and reporting variances in costs to complete. A formal process for authorizing projects divides them into logical categories, requiring financial justification for the categories designed to go beyond maintaining existing capabilities - - by improving performance or producing "hard" dollar value net benefits.

3. **IT has performed with reasonable effectiveness in planning and executing what it does do, but a lengthy period of "austerity" in spending underscores the need for emphasis on identifying gaps in capturing benefits from newer technology and approaches. (***See Recommendation #1***)**

The processes described in the preceding conclusion support development of a soundly based and properly prioritized IT plan incorporating material user input and clear and well directed process guides application solution development. IT engages with the end users in assessing, designing, reviewing, approving, and executing IT solutions. Frequent examinations by Internal Auditing have confirmed overall soundness of application creation and development, controls sufficiency, and asset management. None of these examinations have made findings requiring immediate attention, and those less significant gaps found appear successful in securing management agreement to needed changes.

We did not find material indication of backlogs or delays in execution on planned and budgeted projects. However, we did not find the metrics under which management had been measuring IT performance comprehensive, clear, or actionable. Changes made at the beginning of 2021 have produced substantial expansion of those metrics, which we found clear and comprehensive.

However, management's own examination of the potential for improvement in IT made several observations of note, among them:

- Comparatively low spending levels (in or approaching the lowest quartile of a comparison group)
- An historic focus on addressing legacy systems and redundant applications that produced a greater than usual (again by comparison) weighting of expenditures toward systems
- Flat IT expenditures resulting from an extended period of austerity measures.

Thus, while, as noted above, costs have actually declined, it is important to ensure at this point that cost control has not come by failing to make advances in technology application. Measures like the creation and use of the Innovation group in IT point to a current commitment to focusing on capabilities beyond those that have had historical focus. The FE Forward initiative also augurs well for continued attention to finding ways to better use technology to improve service delivery in ways that will produce economy, to expand the capabilities of existing resources to perform, and to make service delivery improvements visible to customers.

D. Recommendations

1. Provide progress reporting to the BPU on IT-related plans made and progress achieved resulting from FE Forward or other programs, initiatives, or activities affecting IT plans, forecasts, and budgets. (*See Conclusion #3*)

We observed encouraging signs regarding both the measurement of current levels of IT performance and attention to examining ways to make better use of it to improve performance effectiveness and economy. As with FE Forward more generally, however, much remained to be done to turn its goals and objectives into concrete action plans with firm execution/implementation schedules. New Jersey has created significant expectations about industry change, management has recognized prior austerity in IT expenditures, and the potential exists for material expenditures. A loss of emphasis on the IT aspects of FE Forward creates a risk of lost opportunity as well, given its in-process nature as we completed this report.

A report to the BPU by the end of the first quarter of 2023 of plans, forecasts of benefits and costs, and implementation schedules and progress with respect to changes in IT capabilities would do much to promote early understanding of how planned measures support state goals (economic, environmental, and otherwise), what service enhancements can be expected, and what customer cost consequences are forecasted.

Finally, although not necessary for reporting to the BPU, management should continue the regular reporting of metrics begun in 2021. They provide for senior leadership and the board a more useful set of data comparing IT performance to objective measures of operations effectiveness.

Chapter XVI: Insurance and Risk Management Table of Contents

Chapter XVI: Insurance and Risk Management

A. Background

This chapter examines the organizations, resources, costs, approaches, methods, and practices that operate under the FirstEnergy Vice President and Chief Risk Officer. Enterprise Risk Management and corporate insurance comprise major elements of those operations and represent the two main groups operating under this executive. Boards of directors, typically operating principally but not solely through their audit committees, provide overall oversight and direction of corporate risk management. That oversight should incorporate clear policies, procedures, practice requirements, and systems and tools, much as do other groups with defined functions to plan, manage, and execute. However, a better view of enterprise risk management sees it as creating a framework that seeks to promote "ownership" of risk and its management at the organizational or business-unit levels where it arises - - units such as JCP&L for example. We examined:

- How FirstEnergy has built and operated under such a framework
- Where it has located responsibility for ensuring broad participation in risk identification and management
- How it supports the exercise of those responsibilities with training, support, and adoption of appropriate methods for assessing and quantifying risks using a common "risk language," tools, and methods
- How it monitors effectiveness in avoiding undesired risks and in mitigating those necessary to meeting business objectives
- How well risk management incorporates clear and comprehensive identification, assessment, and avoidance and mitigation planning and effectiveness monitoring for the risks that JCP&L faces in providing electricity delivery service in New Jersey.

We also examined the resources, methods, and decisions of the group that assesses, procures, and administers commercial insurance, purchased, as is common in similar holding company structures, for all the business units of FirstEnergy. Our review included a review of means for assessing the value obtained from commercial insurance in relation to the costs it requires. We sought to verify that commercial insurance lines and amounts have reflected clear risk management strategies based on a current, quantitative evaluation of loss and premium alternatives. We examined the use of brokers and the processes for ensuring competitive solicitations for new purchases and renewals We considered claims made and, if any significant ones, how they have affected loss prevention and changes in commercial coverage. We also examined the means for assigning and allocating the costs involved to JCP&L, in order to ensure that those means bore a close relationship to its risks in common with and different from those of affiliates.

B. Findings

1. Organization and Staffing

FirstEnergy manages and conducts ERM and Insurance activities on a centralized basis, employing a separate group (ERM & Risk Control and Insurance) for each. Both had reported to the Vice President, Risk & Internal Auditing, who retired effective April 1, 2021. FirstEnergy decided to create a Vice President, Chief Risk Officer, reporting to the FirstEnergy CFO. ERM & Risk Control and Insurance would come under the new Chief Risk Officer, slated to begin with

FirstEnergy in mid-August 2021. The Responsibilities of the two groups remained the same. While distinct in roles and responsibilities the two groups work together in matters where ERM and decisions about commercial insurance coverage intersect.

The first of the two direct reports to the Chief Risk Officer (the Manager, ERM & Risk Control) has responsibility for Enterprise Risk Management. Five employees, four analysts and one consultant report to this Manager. Two of the analysts maintain the risk database and support the function's reporting. One analyst has responsibility for maintaining and operating risk modeling. The remaining analyst and the consultant work across all functions of the group.

These five group members have significant experience in risk management, each having a minimum of 14 years in the field, all with FirstEnergy entities. Their principal training and refresher sessions come through attendance at industry conferences and include certification by the Project Management Institute as "Risk Management Professionals" (PMI RMP).

The two organizations carrying out these functions employ an overall structure similar to that of 2017, but on a streamlined basis that has produced significant resource reductions. They have come largely from the now gone 15-person group headed by the then Director, Risk Control, following elimination of commercial power and energy operations and the significant risks (*e.g.*, credit and transactional) that such business creates and that take structured, and significant control systems and resources. Excluding that group's elimination, similar resource levels in the Insurance and Enterprise Risk Management functions remain from 2017, with small resources (*e.g.*, credit risk, now under Insurance)

The Manager, Insurance leads the second group under the Vice President, Chief Risk Officer. This manager's group has responsibility for corporate insurance and credit risk. It manages assessment, placement, and administration of commercial insurance, property-loss prevention, credit risk, and the surety bond program. The group's eight members consist of the Manager, four analysts, two consultants, and an intern.

Credit risk management involves independently assessing customer, vendor, and counterparty creditworthiness and ensuring adequate cash flow to cover all company liabilities. Credit risk management assesses risks to earnings or capital from failure to perform as committed by those with whom the business deal. Credit risk management involves a number of activities; *e.g.,* coordinating execution of commodity documents, performing credit risk evaluations, approving credit limits and exposures, obtaining needed credit enhancements, monitoring those with beneath-investment-grade credit ratings, and keeping credit risk ratings current with events and changes.

2. *Costs*

The next table shows trends in costs for the organization operating under the Chief Risk Officer. This organization has responsibility for insurance activities addressed here and for enterprise risk management and insurance.

FirstEnergy Corporate Risk Costs

Cost Source		Year						2017-2020 Change	
		2017	2018	2019	2020	2021 Q3	2021 Est.	$	%
Total Costs									
Payroll, Overheads, Benefits		$3,956,385	$3,643,576	$2,978,041	$2,877,723	$2,104,665	$2,806,220	($1,078,661)	-27.3%
Charges t/f Others (FESC & non-FESC)		($123,260)	($23,134)	$351	$56,033	($229)	($306)	$179,294	-145.5%
Dues, Fees, Licenses		$329,929	$318,964	$491,549	$230,713	$177,427	$236,569	($99,216)	-30.1%
General Business and Travel		$45,215	$65,084	$51,663	$13,234	$4,628	$6,171	($31,981)	-70.7%
Materials and Equipment		$7,068	$3,854	$4,597	$99,327	$17,099	$22,799	$92,259	1305%
Other Non-Labor		$3,148,416	$2,517,022	$1,872,168	$3,017,064	$3,437,863	$4,583,817	($131,352)	-4.2%
Professional and Contractor		($241,719)	$89,675	$188,205	$481,717	$13,157	$17,542	$723,435	-299.3%
Total		**$7,122,033**	**$6,615,041**	**$5,586,575**	**$6,775,811**	**$5,754,609**	**$7,672,812**	**($346,222)**	**-4.9%**
Change from Prior Year	*$*		*($506,992)*	*($1,028,467)*	*$1,189,237*		*$897,001*		
	%		*-7.1%*	*-15.5%*	*21.3%*		*13.2%*		
JCP&L Share									
JCP&L Share	*$*	*$774,594*	*$667,727*	*$585,370*	*$927,683*	*$871,941*	*$1,162,588*	*$153,089*	*19.8%*
	%	*10.9%*	*10.1%*	*10.5%*	*13.7%*	*15.2%*	*15.2%*		*4.3%*
Change from Prior Year	*$*		*($106,867)*	*($82,356)*	*$342,313*		*$234,905*		
	%		*-13.8%*	*-12.3%*	*58.5%*		*25.3%*		

3. *Enterprise Risk Management Governance and Coordination*

Four principal sources of oversight and coordination of ERM activities exist at FirstEnergy:

- The FirstEnergy Corp. Board of Directors, operating primarily through its Audit Committee, which provides overall direction
- An executive-level ERM Committee, providing under accountability to the Audit Committee, management oversight of risk management activities and adherence to ERM policy and program requirements and expectations
- A Chief Risk Officer, serving as the chair of the ERM Committee and, directing the specialists under the Manager, ERM & Risk Control, having responsibility for assisting the FirstEnergy CEO, the FirstEnergy Corp. Board of Directors Audit Committee, and the ERM Committee by:
    - Ensuring ongoing, candid discussion and communication of risk across the business units
    - Examining risk on a coordinated basis across those units
    - Applying an enterprise-wide perspective employing "the company's overall risk tolerance"
    - Securing regular assessment of risks throughout FirstEnergy using a systematic approach to identifying and quantifying risks and methods for mitigating them.
- The business units (which includes JCP&L), having responsibility for:
    - Developing unit-specific risk management processes, procedures, reports and limits
    - Developing additional required policies, subject to ERM Committee approval
    - Performing with Corporate Risk at least annual assessments of business unit risks, identifying, ranking, and communicating them, and developing plans for managing them
    - Providing their employees with information and training in policy execution
    - Prohibiting activities inconsistent with unit plans and risk management objectives
    - Managing unit credit risk.

a. <u>ERM Policy</u>

An overarching policy document has guided ERM governance and performance. At the time of our field work addressing risk management (July 2021), a September 2020 Corporate Risk

Management Policy provided that guidance, supported by a series of underlying policies addressing specific areas of risk exposure. The Risk Policy Committee (RP Committee) at that time (imminently to be renamed as the ERM Committee) was redrafting the Corporate Risk Management Policy (to be renamed as the ERM Policy) and preparing a charter to guide its operation. As these efforts proceeded through the second quarter of 2021, the Chief Risk Officer position remained open, but FirstEnergy announced appointment of a well-experienced risk professional and executive slated to begin work in mid-August 2021. As noted earlier, the Manager, ERM & Risk Control had previously reported to the Vice President, Risk & Internal Auditing, whose retirement began at the beginning of April 2021.

Following restructuring of the top executive position responsible for risk management, FirstEnergy remained in mid-2021 still engaged in bringing on the new Chief Risk Officer and reviewing the policy document addressing ERM and the charter of the senior-executive committee overseeing the ERM program and activities. Thus, FirstEnergy continued at this time to operate under the September 2020, enterprise-wide Corporate Risk Management Policy. The policy set forth reasonably typical statements of purpose, objectives, and goals, beginning with acknowledgement that effective risk management contributes to overall FirstEnergy success by "managing its exposure to uncertainty to an acceptable level." Policy objectives encompass identifying internal and external business risks, electing whether to avoid, accept, or transfer them, managing residual (post mitigation and avoidance) efforts, and fostering an effective culture for managing risk.

The goals set forth by the policy address a broad range of areas subject to risk, including unnecessary costs and liabilities, asset values, risk premiums for energy and related services, capital allocation optimization, response to market activity and opportunity, company reputation, and successful performance under key indicators. These goals also called for incorporation of key processes and activities to manage risk, including implementing management practices to mitigate risk, fostering a sound culture by empowering employees to act independently under clear guidelines, employing a common risk "vocabulary" to identify and define risks, employing approved methods to measure risk, monitoring and systematically reporting on risks, and promoting communication and execution of consistent practices for managing risk.

b. <u>ERM Program Governance and Structure</u>

The Corporate Risk Policy in use in mid-2021 classified the applicable "Risk Universe" into four categories:

- ***<u>Strategic</u>***: Current or prospective impact on earnings or capital arising from adverse or improperly executed business decisions or unresponsiveness to industry changes
- ***<u>Operational</u>***: Ineffective or inefficient resource use or safeguarding of assets producing an adverse impact on meeting objectives
- ***<u>Compliance</u>***: Failure to comply with applicable laws and regulations leading to adverse operations, financial condition, cash flow, reputation, or credibility consequence
- ***<u>Financial</u>***: Untimely, unreliable, or non-transparent internal or external dissemination of financial information or reporting failing to meet stakeholder obligations and expectations.

The Corporate Risk Management Policy required that the Audit Committee approve any changes to the document. The policy called for the Chief Risk Officer and the RP Committee (later renamed the ERM Committee) to report to the Audit Committee. The Chief Risk Officer also had to report to the full FirstEnergy Corp. board annually on the ERM program and top risks. The Corporate Risk Policy gave to two other board committees narrow, specific risk oversight roles commensurate with the duties their charters imposed on them.

The Corporate Risk Management Policy required RP Committee membership as a minimum to include at least five FirstEnergy executive management team members. Mid-2021 membership consisted of the following (listing their positions as titled at the time):

- Manager, Enterprise Risk Management (interim, pending naming of Chief Risk Officer)
- Senior Vice President & Chief Legal Officer
- Senior Vice President & Chief Financial Officer
- President, FirstEnergy Utilities
- Chief Ethics & Compliance Officer
- Chief Human Resources Officer
- Vice President, Customer Service
- Vice President, Investor Relations & Communications
- Vice President, Internal Audit.

A series of risk management policies have specifically addressed risk-related responsibilities, requirements, and activities across a range of business operations:

- FE Utilities Commodity Risk Management Policy
- FE Utilities Credit Risk Management Policy (Ohio, Pennsylvania, New Jersey, Maryland, and West Virginia)
- FE Corp. Treasury Interest Rate & Short-Term Investment Risk Management Policy
- FE Corp. Treasury Pension Liability Risk Management Policy
- FE Corp. Corporate Risk Management Policy
- Allegheny Energy Supply Wholesale Risk Management Policy
- FE Corp. Transmission Risk Management Policy

c. Enterprise Risk Operations

An enterprise risk database serves as the hub for managing risk and for reporting to the board's Audit Committee and the executive-level ERM Committee. The group maintains a comprehensive risk register. The group participates in regular meetings with the corporate and operating company risk "owners" to keep the register current, ensuring regular assessment of risk levels (frequency of occurrence times occurrence consequence), and of means for mitigating them and gauging the residual risk levels remaining after mitigation. The group does so on cycles that differ by risk owner. For example, meetings (termed "risk interviews") with JCP&L take place at least twice yearly. They include the JCP&L president and those personnel the president deems material to the discussions about risks and mitigating them. Many of the operating risks facing JCP&L are common to other or all First Energy operating utilities, but provisions exist for identifying and determining management measures unique to an individual operating company.

We examined the agendas and minutes from the RP Committee for the first half of 2021. The committee did not meet in 2020. The committee has had nine members most years, dropping to six in 2020. The meetings in 2021 generally included five member attendees. The items and the discussion of them appeared to focus more on developmental than on execution matters. We found recurring reference to charter preparation and still-pending retention of outside expertise. For example, as late as July of 2021, the minutes reflect the following items of discussion:

- Approval of a draft committee charter and a list (by position title) of future members
- Renaming of the committee to ERM Committee
- An update of "next steps in ERM program development, primarily focused on engaging external consulting, a proposal to update the risk scoring mechanism, and training of business unit leadership"
- Update on renewal of excess liability insurance renewal
- Update on timeline for annual Risk Policy Review.

We also reviewed the documentation from the semi-annual reviews of risk management with the JCP&L team, coordinated by Enterprise Risk Management personnel. The notes showed substantive discussion of particular JCP&L risks. We also examined the existing risk register for JCP&L, finding it extensive, comprehensive, structured as anticipated based on the ERM program, and reasonably clear in measuring risk likelihood and consequence and in identifying mitigating actions.

d. Risk Appetite

We found the process for determining and the documentation addressing "risk appetite" fairly general. Determining "risk appetite" (the types and amounts of risk an enterprise is broadly willing to take in seeking to create value) comprises a key element in managing risks, by linking it to development of plans, strategies, programs, and other activities and in measuring effectiveness of them. Management reported that senior FirstEnergy leadership "regularly evaluates and sets guidance for risk appetite," but not as of the time of our review and not through a structured process that produces specific results. Senior FirstEnergy leadership also decided what types and levels of risk to retain, informed Corporate Insurance's engagement work with brokers to price coverage with varying deductibles for use in optimizing risks transfer (insured) and cost (premium spend).

4. Corporate Insurance

In determining how to cover risk, the group examines a broad variety of approaches, including the use of traditional forms of commercial insurance, owner-controlled insurance programs (OCIP), use and size of a Self-Insured Retention and the use of contract provisions to transfer risk. Such retentions comprise the amount an insured pays before the insurer responds to a covered loss. OCIPs employ a unified plan and purchasing of coverage for those participating to cover a wide variety of risks generally covered through separate policies (*e.g.*, general, excess, and umbrella liability, workers' compensation, builders' risk). Use of contracts to transfer risk include, for example, imposing insurance requirements on vendors and managing them, and contractor safety programs.

Management uses ratings from A.M. Best to guide its selection of commercial insurers it employs, seeking a rating of A or better from this nationally recognized, widely used source. Management reports all carriers as having this minimum rating. A.M. Best ratings provide independent, forward-looking opinions of insurer creditworthiness based on balance sheet strength, operating performance, and business profile, among other factors. The second highest of seven insurer financial strength ratings, A.M. Best describes it as "assigned to insurance companies that have, in our opinion, an excellent ability to meet their ongoing insurance obligations."

Management's practice calls for its brokers to solicit bids when placing all major coverages. Placements involve competitive bidding, except for those offering no alternatives (*e.g.*, Nuclear Property Insurance) and those difficult to replicate (*e.g.*, Excess Liability). Management and the brokers evaluate those programs not competitively bid for effectiveness in transferring risk and optimizing pricing options, such as coverage limits and Self-Insured Retention. The Insurance group employs the services of two major, widely used brokers, who solicit, evaluate, analyze, and make recommendations regarding insurance:

- [redacted] for liability, directors & officers, fiduciary liability, crime, and excess workers compensation coverage
- [redacted] for Cyber, property, and nuclear coverage.

The two brokers have worked with FirstEnergy for more than two decades each. JCP&L may request different coverage, working through the Corporate Insurance group to ensure no coverage overlap, but has not done so.

a. <u>Commercial Insurance Coverage</u>

The Insurance group considers loss history and expectancies, benchmarking, and analytics to determine the optimum levels of commercial insurance coverage, self-insured retentions, premiums, and policy durations. It reviews recommended purchases with FirstEnergy leadership before making them. The next chart shows the commercial insurance coverage maintained since 2015. Changes have occurred in the number and identity of providers and coverage levels as management has continued to examine risk levels and market alternatives, terms, and conditions for addressing them.

FirstEnergy Commercial Insurance Coverages
(table is confidential)

Coverage	2016	2017	2018	2019	2020	2021	Δ
	Amout	Amout	Amout	Amout	Amout	Amout	
[redacted]							

Self-Insured Retention amounts under these coverages have remained constant since 2016, with the exception of Fiduciary Liability coverage, which dropped to its current level from [redacted] in 2016. Retention amounts by program are:

- Cyber [redacted]
- Directors & Officers Liability [redacted]
- Fiduciary Liability [redacted]

- Liability [redacted]
- Nuclear Property [redacted]
- Property [redacted]
- Workers' Compensation [redacted].

Management has cited a holistic application of loss experience and expectancy, market conditions, and budget expectations as criteria for determining how to employ each line of insurance to maximize the efficiency of risk transfer. Management cited, for example, significant loss activity in the past decade in the liability, directors and officers, and property lines, leading to priority on maintaining coverage limits and terms "at the expense of higher premiums and changes in retention." The next table summarizes commercial insurance costs FirstEnergy-wide for recent years. Total values represent annual amortized insurance premiums including discounts and insurer distributions.

FirstEnergy Commercial Insurance Costs
(table is confidential)

Program	Year				Change	
	2018	2019	2020	2021	$	%
[redacted]						

The next table shows the JCP&L share of costs by program and the basis for allocating each program's costs to the FE entities involved.

JCP&L Share of Commercial Insurance Costs
(table is confidential)

Program		Year				Change
		2018	2019	2020	2021	$
[redacted]						

Directors & Officers liability premiums have increased substantially for public companies in 2020 and 2021, but by much more for FirstEnergy as discussed below. The industry has experienced growth in liability premiums as well, but FirstEnergy's 2021 increase of about [redacted] percent well exceeds the somewhat less than 10 percent being experienced in the industry as 2021 progressed.

Since 2019, the Insurance group has used a commercial application to track insurance policies and data that includes factors such as expiration date, coverage limits, and Self-Insured Retentions. FirstEnergy does not employ any key performance measures to assess insurance cost and performance effectiveness.

A February 2021 "Portfolio Analysis Risk Financing Optimization" conducted by a leading firm provided an analysis of risk financing optimization. The analysis considered the range of commercial insurance employed by FirstEnergy:

- *Directors & Officers*
- *Cyber Liability*
- *Fiduciary Liability*
- *Workers Comp*
- *General Liability*
- *Auto Liability*
- *Property*
- *All other Perils*

The analysis began with using FirstEnergy risk profile that provided an evaluation of the enterprise's propensity for loss before and after insurance (*i.e.*, ground-up versus retained/transferred loss profiles). This analysis departed from the more traditional Total Cost of Risk approach, which comprises three components: (a) expected size of loss amounts retained, (b) premiums, and (c) administrative costs. The analysis used an Economic Cost of Risk approach, which adds to these three elements a value reflecting the possibility of unexpected loss (*e.g.,* losses exceeding coverage limits).

The resulting baseline analysis of the corporate insurance program assessed insurance program efficiency and sought to provide insight into the setting of appropriate insurance limits. The analysis found that FirstEnergy's purchase of insurance reduced its overall risk costs [redacted] net of insurance costs including distributions and credits from its insurers. The analysis also addressed insurance efficiency, finding it at a [redacted], again considering premium costs after distributions and credits. The firm's modeling assessed FirstEnergy's capability to bear risk at [redacted].

Efficiency levels of FE's insurance varied by program. With a level of 100 percent as the threshold for producing efficiency in risk transfer, property insurance [redacted]. Workers Comp efficiency [redacted] and Directors & Officers at [redacted]. The firm, however, found the inefficiency in Workers Comp (rated at [redacted] percent efficient) fairly common, given the statutory foundation of that program and Directors & Officers (rated at [redacted] percent efficient) within its recommended range, given challenges in the current market for that coverage. The analysis cited two areas as specifically subject to potential savings:

- [redacted]
- [redacted].

Management analyzes changes in coverage limits, retentions, and terms when commercial protections come due for renewal. That analysis led to no changes in the following lines about which the February 2021 made efficiency findings. Management's analysis found the size of premium savings attainable insufficient to warrant changes:

- Reducing cyber limits
- Increasing fiduciary retention and reducing limits
- Improving workers comp efficiency
- Improving directors and officers efficiency.

The next table shows that, apart from D&O insurance, [redacted] (provided subsequently to the amounts shown above). However, the table shows that the [redacted] for some years in D&O insurance continued through 2021, as circumstances previously associated with commercial power and energy business financial failure became augmented by events following the 2020 announcement of the federal criminal investigation and following events and circumstances.

Changes in Insurance Line Costs
(table is confidential)

Insurance Line	2020			2021			Change	
	Total Cost	JCP&L Share		Total Cost	JCP&L Share		Total Cost	
		%	$		%	$	%	$
[redacted]								

b. Captive Insurance Company

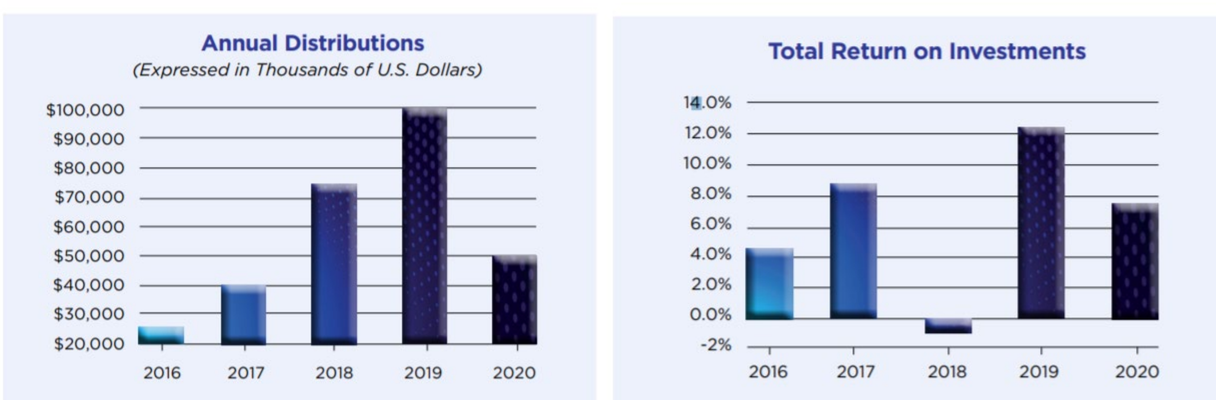
As do many large corporations, FirstEnergy has set up a captive insurance operation. FirstEnergy set up its FirstEnergy Captive Cell through Energy Insurance Services (EIS), a wholly owned subsidiary of Energy Insurance Mutual (EIM). EIM makes membership available to utilities and energy services providers meeting its underwriting standards. EIM or its subsidiaries focus on providing excess liability insurance to members, now providing coverage to more than 160 companies in the United States and beyond. EIM has operated for more than 35 years since its founding following a meeting among 67 electric companies convened to address a scarcity in commercial underwriters of excess general and directors & officers liability coverage.

EIS operates as a sponsored cell captive insurance company that makes itself available only to EIM members. EIM permits EIM members, which include FirstEnergy Corp. to establish Mutual Business Programs (MBPs) to meet specific member needs, with each MBP separated from others formed under EIS. EIS has designated the cell in which FirstEnergy participates as MBP 2. EIS manages MBP accounting, administrative and compliance functions, with all policies issued oversight by the South Carolina Insurance Commission. No other entity shares FirstEnergy Corp's interest in the MBP, but insureds under the policies written can include its subsidiaries.

Neither FirstEnergy Corp. nor any other entity made any investments or payments, apart from premiums for insurance, to the captive for at least the past 20 years. FirstEnergy has procured substantial coverages through the captive insurance [redacted]. [redacted] from policies in effect for 2016-2017 to those for 2020-2021 - - moving from [redacted] of total coverage limits between the two years. The table's values exclude EIM's portion of 2018-2019 property coverage provided under another lead insurer.

EIM has made substantial returns to its members in recent years, as the next table summarizes. Those returns have been driven largely by returns on investments that EIM has made. Those returns averaged 6.3 percent for the five years ending December 31, 2020. The accompanying table below shows them by year.

Captive Insurer Distributions and Returns to Members



Reporting of EIM's second quarter 2021 financials shows stronger performance, with a surplus of $1.28 billion, investment income of $71 million, and essential balance between underwriting revenues and expenses (the latter comprised predominantly of reserves for losses and loss adjustments). EIM made a March 2021 distribution of $50 million to members.

The only reported distribution reported since 2019 amounted to [redacted], paid in October 2021 and arising in connection with issuance of a new liability policy. Management reported that it allocates gains, losses, distributions, and other financial results produced through particular lines of insurance using the same factors applied in allocating the costs for such insurance. It allocates proceeds from general results using a general allocator.

c. Damage Assessment and Prevention

Primary responsibility for identifying and mitigating personal injury and property damage risks lies with the group most directly responsible for operations that produce those risks. The Claims organization works with the operations groups to investigate incidents. A Manager, Contractor & Public Safety, part of FE Utility Operations, coordinates preventive outreach and education, working with External Affairs, Communications, and Operations personnel. Industry peer groups (*e.g.*, the Utility Public Safety Association and the Edison Electric Institute Public Safety Working Group) provide resources to aid in efforts to address public risks.

Public outreach takes many targeted forms, among them:

Public Safety Outreach Programs:

- Conducted in 2021
  - At Risk Contractor Web and Mail Based Program
  - First Responder Web and Mail Based Program
  - K-6 School Age Web and Mail based program
  - Public Safety Software Platform
  - In Person First Responder Program-Live Wire Electrical Safety Trailer
  - In Person School Age Program (4th grade students) - - June 2021 pilot program
  - Stop.Look.Live activity book for K-6
  - Public Safety Brochure-The Power of Safety
  - Public Safety External Stop.Look.Live Website
  - Bill Inserts-'Downed Wire' Public Safety Message
  - Bill Inserts-Quarterly Public Safety Message Insert
  - Media Ad Campaign-Electrical Safety Outreach (digital advertising, billboards, radio, broadcast. Paid social- in feed video, media markets)
- Planned for Roll-Out in 2022
  - K-6 Outreach YouTube Video – Moore Syndication
  - Drone Safety Campaign
  - Live Wire Electrical Safety Trailer Video
  - Down Power Line Safety- Line on Your Vehicle
  - Electrical Safety Tips Video
  - Contractors Exposed to Overhead Risks-Targeted Mailer Culver
  - Fiber Optics Installation Contractors-Targeted Mailer Culver
  - Tree Workers and Landscapers- Targeted Mailer Culver
  - Primary Campaign Effectiveness Research-Culver.

d. Non-Distribution Utility Work by Corporate Insurance

The 2021 objectives of the Corporate Insurance group include a number that appear to concern non-utility or non-JCP&L operations. Our review of them found appropriate efforts to assign their costs to entities other than JCP&L. Examples included:

- Closed plant inspection program - - program examines property risk loss control at ten closed generating stations, none involving JCP&L, which will bear no costs for the inspections
- Property loss control program
- Solar Project loss control opportunities - - Corporate Insurance analysis of risk factors involving a potential West Virginia solar project; cost collectors used assign no costs to JCP&L
- Wind down of expired nuclear OCIP - - assistance in resolving the last claim under a 2019-cancelled workers compensation insurance program for nuclear outage work, with no costs charged to JCP&L
- Managing securities class action and shareholder derivative claims resulting from the DOJ investigation.

The reduction in the generation fleet has led to a shift in the property loss control program from production facilities. Management plans to add high-value transmission and distribution locations to its program of inspections seeking opportunities to property risks.

Securities class action and shareholder derivative litigation has followed the investigation by the U.S. Attorney's Office for the Southern District of Ohio (See the *Organization and Executive Management and Governance* chapter of this Phase Two report which addresses the Request for Proposal's review of major litigation). Corporate Insurance assists in coordination of filing the claims under the directors and officers liability policy. FirstEnergy uses the Multi-Factor allocator to distribute the costs of this policy, producing 2021 costs to JCP&L through November of [redacted]. Management has reported that Corporate Insurance charged in the fourth quarter of 2020 only a nominal amount (roughly [redacted]) directly to actions associated with the U.S. Attorney's Office investigation.

5. Risk Assessments

Corporate Insurance has participated in a Public Safety Working Group since its 2020 inception. Corporate Insurance also works with one of the principal carriers in conducting periodic risk assessments of operating company third-party liability risks.

We reviewed the most recent such assessment, prepared October 5, 2020. This assessment made eight suggestions, none of them high priority. We found the assessment comprehensive in identifying operating risks and reasonably detailed, encompassing a broad range of operations areas. The examination found no or at most a few moderate risk reduction suggestions. The subject areas addressed included:

- *Substation Design, Construction, Inspection*
- *Distribution Design, Construction, Inspection*
- *Transmission Design, Construction, Inspection*
- *Vegetation Management*
- *Pole Inspections*
- *Public Safety and Awareness*

- *Joint Pole Use Practices/Ownership*
- *Downed Wire Dispatch Procedures*
- *Occupational Safety*
- *Call Handling Practices and Procedures*
- *Environmental Programs*
- *Contractor Safety Review and Evaluation*

Corporate Insurance also uses a large provider of third-party vendor safety verification to ensure that vendor certificates of insurance demonstrate inclusion of all required coverage. The 2020 assessment discussed a prior one from five years earlier. That 2015 assessment made seven suggestions, six of them high priority. Management implemented five of them. The two noted as not accepted and implemented comprised:

> *Consider the benefits of properly grounding perimeter chain link fence and barbed wire strands to meet the requirements of NESC Rule 092.E. A low resistance grounding connection is necessary.*
>
> *Ensure that line patrolmen and other operations employees are trained to identify and report improperly configured anchor guys. Anchor guys must be grounded or insulated. Once reported, establish scheduling guidelines for correcting these defects.*

Management determined that its procedures and practices conformed to the National Electric Safety Code Rule 092.E fence-grounding requirements, providing secure connections to corner fence posts that connect directly to the substation ground grid. Management also noted that its distribution inspection and maintenance program and practices (addressed in Phase I Chapter IV, *Asset Management*) make pole guying a required inspection element and that training in this program for employees performing overhead line inspections occurs, most recently at JCP&L in November 2021.

C. Conclusions

1. Staffing in the risk organization fell after elimination of commercial power and energy operations from FirstEnergy's business operations.

ERM and Insurance staffing have remained stable in recent years, but total risk organization staffing has fallen largely due to the elimination of a 15-person group headed by a Director, Risk Control. FirstEnergy's needs in that area fell after the bankruptcy-induced transfer of FirstEnergy Solutions power and energy assets and operations. Our examination of the ERM and Insurance groups showed their activities typical of those expected, given their responsibilities. It may be that the agenda facing the new Chief Risk Officer will strain the ERM resources available, at least on a temporary basis as the ERM framework, programs, tools, and activities proceed through development, but we saw no immediate reason for concern, particularly given the availability and expected use of consulting assistance.

2. FirstEnergy has made positive changes in organizational focus on and experience in Enterprise Risk Management.

With its Vice President, Risk & Internal Auditing retiring after more than two decades of FirstEnergy service, management decided to separate executive responsibility for internal auditing and for risk management. Combining this separation with appointment of an individual with a long management and executive record of accomplishment focused on risk management. improved both the focus and the experience brought to ERM. At the same time, FirstEnergy has maintained as staff of reasonably experienced risk professionals to assist in providing consistent, objective, and complete assessment, identification, and quantification of risks, supporting concrete plans to mitigate or avoid them and to remain abreast of changing conditions affecting those risks and mitigation and avoidance effectiveness.

3. FirstEnergy has been slow to develop a structured approach to defining and expressing its appetite for risk in a manner consistent with emerging practice. (*See Recommendation #1*)

Management reported what appears to be a comparatively unstructured approach to assessing and developing a risk appetite for use in establishing business objectives, identifying and choosing from among alternative strategies for meeting them, setting clear measures and triggers, and for monitoring performance and business context to make adjustments in strategies employed. FirstEnergy's major setbacks related to the operations of its commercial power and energy operations and to conduct that produced extensive executive and senior management departures and a deferred prosecution agreement, have caused it severe disruption in the nature of its business operations, its finances, and its reputation.

Management should make use of more structured and formal approaches and processes for developing and using a sufficiently scoped, defined, and specific appetite for risk.

4. FirstEnergy's ERM framework and its execution appropriately assign ownership of business risks to those whose operations affect and are affected by it, producing sound engagement of JCP&L leadership in management of its risks.

Assigning to JCP&L key responsibilities for assessing, identifying, quantifying, and addressing its risks comprises best practices. Our review of semi-annual assessments of risks engaging JCP&L management and coordinated by central ERM resources and of the roster of New Jersey utility risks showed them to be broad, comprehensive and well structured.

5. Commercial insurance acquisition has occurred through a comprehensive set of processes and actions that produce economical results.

Management regularly assesses markets and offerings, seeking to balance key terms (such as coverage limits and retained amounts). Management makes effective use of brokers with whom it has long experience and who operate as leaders in the industry to assess market changes and the competitiveness of offerings in the product lines it considers and uses. It benchmarks the product lines in which it makes purchases, including pricing. All renewals consider competitive offerings, using the services of its brokers. Management has used a captive cell, arranged through membership in a mutual enterprise that makes membership available to utilities and energy services providers to secure some excess liability coverage.

6. The costs allocated to JCP&L for D&O insurance include a substantial sum related to FirstEnergy risks not related to those that ownership and operation of JCP&L have produced. (*See Recommendation #2*)

Overall D&O insurance premium increases ran in the range of 40 percent in 2020. Measures of annual increases taken at each quarter for 2021 showed annual increase rates beginning in the range of 25 percent, then decreasing to 10 percent and then less as 2021 progressed. FirstEnergy's increase has proven much larger in these two years - - by 81 percent in 2020 and in 2021 (per the immediately preceding chart) by 119 percent. There is no reason for attributing any portion of that differential to JCP&L utility operations.

Taking total FirstEnergy 2019 D&O costs as a base and escalating them by more typical rates of 40 percent in 2020 and 2021 produces an imputed cost of [redacted]. Applying 2021's JCP&L allocation factor of 15.31 percent to those costs produces [redacted] less than and 42 percent of the costs actually born by JCP&L. Given the circumstances involving FirstEnergy Solutions, it may also be the case that 2019 costs already include a cost premium having to do with factors outside those affecting the D&O risks that JCP&L has imposed on FirstEnergy.

Changes in Insurance Line Costs
(table is confidential)

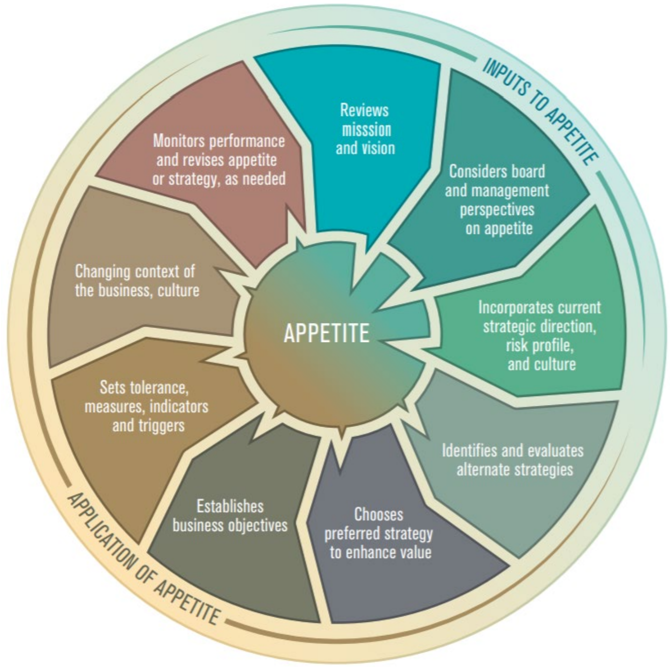
Insurance Line	2020			2021			Change	
	Total Cost	JCP&L Share		Total Cost	JCP&L Share		Total Cost	
		%	$		%	$	%	$
[redacted]								

D. Recommendations

1. **Adopt and continuously employ a structured approach to determining appetite for risk and use it to guide the establishment of objectives, the identification of and selection from among strategies to meet those objectives, and monitor performance and the external business environment to identify the need for strategy revision.** (*See Conclusion #3*)

COSO (the Committee of Sponsoring Organizations of the Treadway Commission) offers an extended and illustrative guide addressing the criticality of a well-defined and applied risk appetite in charting a path to success. Its May 2020 "Risk Appetite – Critical to Success" explains how to take risk appetite formulation and expression to a form and in a nature that can make it an important contributor to forming and analyzing alternative strategies, setting objectives and strategies, measuring and setting trigger levels for threats that emerge in executing them, monitoring performance, revisiting risk appetite and strategies when they become imbalanced, and tangibly addressing changes in the business and the environment in which it operates.

Risk Appetite Development and Application



Senior leadership clearly does, as responses to our data requests indicate, engage in providing guidance about risk appetite. Those responses go on to imply that an intent to provide that input through a more structured process of development and in ways more directly considerable, executable, measurable, and adaptable. An approach like that described above serves as a sound starting point for FirstEnergy development of an appropriate means for determining and applying risk appetite.

2. **Restructure the basis for allocating D&O insurance costs to JCP&L to avoid charging it amounts arising from risks to which it does not contribute.** (*See Conclusion #6*)

The very high premium that FirstEnergy has paid and continues to pay for D&O insurance relate to risks that do not arise from JCP&L ownership or operation. D&O insurance rates have risen across industry, but by much lower factors than FirstEnergy has experienced across a period beset by risks that arise at the parent level, from non-utility operations, and litigation following the events and circumstances exposed at the time of and arising subsequent to awareness of the Deferred Prosecution Agreement. Continued use of a general allocator to charge JCP&L for D&O insurance has caused it to bear costs both well in excess of general rates of increase for such insurance and for reasons to which it does not contribute.

Ideally, FirstEnergy should charge JCP&L amounts consistent with those of a panel of large enterprises that consist overwhelmingly only of distribution utilities. It is not clear, however, that creation of such a panel having transparent insurance pricing per unit of coverage can be constructed. If it can, FirstEnergy should use it to establish pricing for JCP&L. If it cannot, then a rising FirstEnergy should (for use in any BPU proceeding or matter of ratemaking consequence):

- Identify and justify for BPU review a reputable source (its own brokers are potential candidates, given their strong position in the relevant marketplace) for determining general rates of premium increase each year since 2019 and going forward
- Apply those rates to those actually paid in 2019
- Limit rate recoverable amounts for D&O insurance premiums to amounts generated by applying 2019 actual premiums so escalated.

This approach should apply until such time as the company can demonstrate that a substantial penalty in premiums for D&O insurance no longer exists. As of 2021, application of this approach would indicate a reduction of between [redacted] in annual JCP&L costs for 2021 were there any proceeding or matter of ratemaking consequence.

Chapter XVII: Legal Services Table of Contents

Chapter XVII: Legal Services

A. Background

FirstEnergy provides its entities legal services through a central organization (FE Legal) headed by a Senior Vice President & Chief Legal Officer (Chief Legal Officer). The organization has undergone significant change due in significant part to the events and circumstances made public by and following the mid-2020 reporting of the criminal investigation by the office of the U.S. Attorney for the Southern District of Ohio (U.S. Attorney). Chapter XII, *External Affairs - - The "DOJ Investigation"* of our Phase One report discusses that investigation and its aftermath. The period following that reporting also brought significant outside counsel costs associated with the U.S. Attorney's criminal investigation, FirstEnergy's own investigations, and defense of resulting legal actions.

This chapter examines the structure, operations, resources, costs, and effectiveness of FE Legal in serving JCP&L directly and by serving those central FirstEnergy organizations on which JCP&L relies. It examines the charging, assignment, and allocations of legal costs, serving in that regard also as a sample for testing these methods that bring affiliate costs to JCP&L. (The *Affiliate Relationships and Cost Allocation* Chapter of this Phase II report addresses allocations more generally). Our examination of costs also provided a means for testing the measures taken by management to avoid inappropriate charges to JCP&L for costs associated with the U.S. Attorney's Office investigation, resolution of criminal charges, FirstEnergy's own reviews and examination of the matters and circumstances involved, and related reviews by other regulatory agencies, such as the FERC and the U.S. Securities and Exchange Commission.

B. Findings

1. *FirstEnergy Legal Organization*

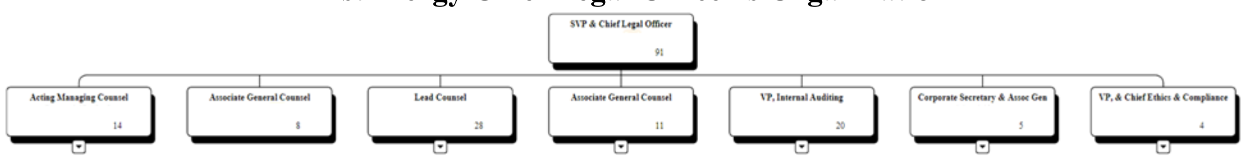
The Senior Vice President & Chief Legal Officer (Chief Legal Officer) has overall responsibility for legal functions across all FirstEnergy companies and operations. The holder of that position came to FirstEnergy in January 2021, following the involuntary "separation" of the top two legal executives. FirstEnergy separated its chief legal officer and the general counsel and chief ethics officer (who reported to the former) in November 2020, "due to inaction and conduct that the board determined was influenced by the improper tone at the top." The Deferred Prosecution Agreement, addressing a criminal wire fraud charge against FirstEnergy describes underlying executives' actions, the factual accuracy of which FirstEnergy acknowledges. However, the company has denied requests for descriptions of the specific facts and circumstances for which terminations of and separations from employment have occurred.

The current incumbent, whose organization the following chart depicts, has responsibility for legal affairs, internal auditing, and, in conjunction with the board of directors' audit committee oversight of ethics and compliance. The *Internal Controls, SOX, and Auditing* Chapter of this Phase Two report explains the split reporting relationship of Internal Auditing to the FirstEnergy Corp. Board of Directors, acting principally through its Audit Committee, and to the Chief Legal Officer administratively. We found such a split both typical and appropriate, as that chapter describes, but believe that both best practice and the particular circumstances of FirstEnergy call for moving administrative reporting of Internal Auditing to FirstEnergy CEO.

Chapter XIII, *External Affairs Organizations* of the Phase One report also addresses the creation of revamped Regulatory Affairs organization led by an attorney holding a top-level executive position directly under the FirstEnergy Corp. CEO as well, responsible for an organization that combines the legal and technical resources responsible for managing relationships, communications, and matters before regulatory authorities. FirstEnergy has dispersed those functions across far too wide a group of responsible organizations. The significance of that move for FE Legal arises from the movement of the group of attorneys responsible for state utility regulatory proceedings for the operating companies, including JCP&L. This chapter's examination addressed that group, but, from a prospective basis, the Phase One report sets forth our conclusions and recommendations with respect to its location and operation.

The following chart shows the organization of these functions through mid-2021. Risk management moved at that time from under the Vice President, Risk & Internal Auditing the organizations headed by the FirstEnergy CFO.

FirstEnergy Chief Legal Officer's Organization



We found the legal organization in the midst of significant change at this time; we therefore updated it more fully than we did for most other functions, for which mid-2021 reflects the vintage of most data we considered for the Phase Two areas we examined. Note, however, that comments to the draft of this report state the number of resources under the chief legal officer has essentially doubled since then. The change did not materially affect the number of direct reports to the Chief Legal Officer at present, although plans call for resource additions for handling state utility regulatory matters are planned. The changes in titles, responsibilities, and resources for them, moving from left to right in the chart include:

- Acting Managing Counsel (15 resources), now reportedly named as an Associate General Counsel, with one person added
- Associate General Counsel (8 persons) no personnel change
- Lead Counsel (28 resources), now Associate General Counsel, personnel growth to 69
- Associate General Counsel (11 resources), personnel reduction to 8
- Corporate Secretary and Associate General Counsel, no resource changes
- Internal Audit, no resource changes
- Vice President, Chief Ethics & Compliance Officer, no resource changes.

a. <u>Background to Changed Responsibility for Rate and Regulatory Legal Matters</u>

The attorney who manages the group that oversees operating company state regulatory legal matters, organized largely under state-based teams that support each other when a particular company's needs require. The Acting Managing Counsel position followed the February 2021 separation from employment of the Associate General Counsel, State Regulatory. The separation of that Associate General Counsel came as a result of inaction with respect to a 2015 amendment to a consulting agreement that began in 2013. The "Statement of Facts" accompanying the Deferred Prosecution Agreement, acknowledged as true by FirstEnergy Corp.'s CEO illustrate a long-term and profound failure to meet basic standards under which the utility regulatory process should operate, specifically:

- A 2015 amendment a 2013 consulting agreement financially benefitting an individual "…coincided with and was made in exchange for [the individual's] industrial group withdrawing its opposition to a 2014 PUCO Electric Security Plan settlement package involving FirstEnergy Corp.'s Ohio electric distribution subsidiaries"
- The amendment increased the individual's retainer and supplemental payments through 2024
- FirstEnergy Corp. made payments in accord with the amendment through June 2018, although it appears to have gone unexecuted
- Invoices under the agreement were structured to avoid the required internal levels of approval for the amounts involved
- By December 2018, the terms of the amended agreement covered $4,333,333, but with no obligation for FirstEnergy Corp. to pay them
- On December 18, 2018, one day after the individual forwarded an announcement of the intent of the Public Utilities Commission of Ohio to seek a new Chairman, company executives discussed the remaining payments under the agreement
- Thereafter, "certain FirstEnergy Corp. executives pushed to have [the individual] appointed as the PUCO chairman"
- The individual received payment of the remaining $4,333,333 under the amended agreement in January 2019.
- The individual received an appointment as PUCO Chairman on February 4, 2019.

The FirstEnergy Cop. CEO has acknowledged that:

> *FirstEnergy Corp. paid the entire $4,333,333 to Company 1 for Public Official B's benefit with the intent and for the purpose that, in return, Public Official B would perform official action in his capacity as PUCO Chairman to further FirstEnergy Corp.'s interests relating to passage of nuclear legislation and other specific FirstEnergy Corp. legislative and regulatory priorities, as requested and as opportunities arose.*

The failure to adhere to fundamental notions of proper behavior in 2018 and 2019 were profound. Moreover, the roots and their connection to legal and regulatory performance extended back years earlier to an agreement amendment questionable in its own right.

b. Current Responsibilities for Rate and Regulatory Legal Matters

The change from Acting Managing Counsel to permanent, Lead Counsel position in September 2021 came with no change in the incumbent. Her work prior to these two management roles focused on New Jersey matters. The state regulatory legal resources have aligned largely by state and continue to do so. At the time of this report, this group also had responsibility for regulatory matters involving a several thousand customer New York electric distribution operation. Pennsylvania-based FE operating company Penelec provides these upstate New York customers service, pending a transfer to a New York-based electric cooperative in process at the time of the preparation of this report.

c. Other Legal Department Work Groups

The 8-person Associate General Counsel's group (second from left in the preceding organization chart) includes four attorneys (and one vacant attorney position at the time of the preparation of this report, noted by management as filled subsequently) and two legal specialists. This group handles federal regulatory legal matters, consisting largely of transmission and Federal Energy Regulatory Commission matters.

The 69-person Associate General Counsel's group (third from left in the preceding organization chart) has responsibility for labor, real estate, environmental, litigation, bankruptcy and claims matters. The group includes four attorneys who report to the Associate General Counsel, one for labor matters. One of the direct reports, a Supervising Counsel manages two lawyers and two Legal Specialists (with an additional attorney position open) who specialize in matters involving emerging technology, litigation and products.

A 53-person Claims group under the Director, Claims (later changed in title to the Manager, Liability Claims) formed the largest group under this Associate General Counsel, with management's comments to this draft report noting that the number has since fallen to 46. This group increased from 16 earlier in 2021. The reports to the group's lead include:

- A 12-person collections group (up from 8, but reportedly down to 11 subsequent to the preparation of this report) under a Supervisor, Claims
- Four additional Supervisor, Claims positions, each with staffs from six to 9 and responsible for liability claims.

The four supervisors had been managed locally previously, for example, in New Jersey under the Operations organization.

This Associate General Counsel also manages a six-person group headed by the Manager, Information Compliance. The *Records and Information Management* chapter of this Phase Two report describes our review of records management. That group moved from the next group.

The other 8-person Associate General Counsel's group (fourth from left in the preceding organization chart), now down from a former 11 positions, focuses on corporate, commercial transactions and information compliance matters. The staff includes three attorneys, two Legal Specialists, and an open position for a Director, Records & Information.

The 5-person Corporate Secretary and Associate General Counsel's group continues in the same role, as does Internal Audit, each with no resource changes since earlier in 2021. The reports to the Vice President, Chief Ethics & Compliance Officer now include Director, Ethics & Compliance and a person on special assignment, with open positions for A Manager, Ethics & Compliance and a Manager, Ethics Compliance Training & Communication.

d. <u>2016 Legal Organization</u>

The organization of legal affairs has changed substantially since 2016. At that time, an Executive Vice President, Markets & Chief Legal Officer headed a more than 550-person organization responsible for a variety of functions. The six executives reporting to this Executive Vice President included a Vice President & General Counsel, with a staff of 71. The other groups under this Executive Vice President in 2016 included:

- Vice President, Rates & Regulatory Affairs -- - 60 persons
- Vice President, Corporate Security and Chief Ethics Officer - - 164 persons
- President FirstEnergy Solutions - - 128 persons
- Senior Vice President, External Affairs - - 99 persons
- Senior Vice President, Strategy - - 32 persons.

2. *Legal Staffing Changes*

The next table summarizes staffing changes in the FE Legal organization well into 2021, when this report was prepared.

FE Legal Staffing Resources

Function	Year			Change	
	2017	2019	2021	#	%
Lead Counsel State Regulatory[1]	27	17	15	-12	-44%
Claims	19	15	16	-3	-16%
Information Compliance[2]	9	5	6	-3	-33%
Ethics and Compliance			4	4	
Internal Audit	30	20	20	-10	-33%
Other Legal	31	30	31	0	0%
Total	**116**	**87**	**92**	-24	-21%

[1] State Regulatory group has added 2 persons in 2022 with 5 positions still open

3. *Legal Costs*

Legal's budget process aligns with FirstEnergy's overall budget process and timing. Legal budgeting builds from a cost compilation consisting of seven actual months (*e.g.*, ending July) of actual costs and a five month forecast, incorporating expected changes for the coming budget year. Corporate Business Services from Finance provides a template categorized by each Associate General Counsel for completion by the Legal group's Advanced Legal Specialist, who coordinates the Legal department's budgeting process. The Associate General Counsels and the Lead Attorney examine their portions and the General Counsel reviews the compilation of them. Completed templates go back to Corporate Business Services for review and a check for consistency with expected results. Overall results by department then flow through the same steps that apply to other functions as part of the overall company-wide budget review process.

The next table summarizes changes in Legal costs since 2016.

FE Legal Department Costs

Cost Source		Year						2017-2020 Change	
		2017	2018	2019	2020	2021 Q3	2021 Est.	$	%
Total Costs									
Payroll, Overheads, Benefits		$13,822,823	$12,837,904	$11,936,615	$12,819,981	$9,458,717	$12,611,622	($1,002,842)	-7.3%
Charges t/f Others (FESC & non-FESC)		($855,973)	$42,934	($143,417)	($151,185)	($201,433)	($268,578)	$704,789	-82.3%
Dues, Fees, Licenses		$16,249	$238,133	$228,176	$591,387	($6,173)	($8,230)	$575,137	3539.5%
General Business and Travel		$414,604	$377,944	$492,998	$187,073	$295,651	$394,201	($227,532)	-54.9%
Materials and Equipment		$53,959	$43,697	$158,870	$87,146	$90,128	$120,171	$33,186	61.5%
Other Non-Labor		$435,120	$657,502	$301,322	$277,663	$156,298	$208,398	($157,457)	-36.2%
Professional and Contractor		$29,470,097	$32,949,918	$15,077,867	$8,764,264	$9,120,433	$12,160,578	($20,705,833)	-70.3%
Total Other		$4,954	$4,584	$4,571	$4,033	$2,886	$3,848	($920)	-18.6%
Total		**$43,361,833**	**$47,152,615**	**$28,057,001**	**$22,580,360**	**$18,916,508**	**$25,222,011**	($20,781,473)	-47.9%
Change from Prior Year	*$*		*$3,790,781*	*($19,095,614)*	*($5,476,641)*		*$2,641,651*		
	%		*8.7%*	*-40.5%*	*-19.5%*		*11.7%*		
JCP&L Share									
JCP&L Share	*$*	*$3,627,039*	*$4,603,218*	*$4,557,874*	*$4,049,080*	*$3,220,017*	*$4,293,356*	*$422,041*	*11.6%*
	%	*8.4%*	*9.8%*	*16.2%*	*17.9%*	*17.0%*	*17.0%*		*8.7%*
Change from Prior Year	*$*		*$976,178*	*($45,343)*	*($508,794)*		*$244,276*		
	%		*26.9%*	*-1.0%*	*-11.2%*		*6.0%*		

The FE Forward process included cost comparison of FE legal services with those of similarly sized utilities. The review identified first quartile (most competitive) costs at FE. The review found the potential for some further centralization of claims functions, but not at a level that would have produced material savings for JCP&L, even if eventually feasible.

4. *Time Reporting and Internal Legal Hours Charged*

Legal personnel use an SAP-based time reporting system. A "First Level Approver" (supervisor) reviews and approves time entries made by employees. Employees can charge time directly to specific cost collectors - - or charge numbers. To the extent that they do not, daily work hours not directly charged default to the reporting employee's designated cost center. That cost center designation governs assignment and allocation of the costs associated with default-coded hours.

The next table shows total internal legal hours billed and the portions borne by JCP&L. The first row shows hours charged to JCP&L individually or as part of a small subset of FE entities. The third row shows charges a portion of which JCP&L bore, but whose justification for charging JCP&L was not clear from the summary description of the charges. We did not inquire into them given their very low numbers. The last column shows changes between 2019 and 2021, doubling the second quarter 2021 hours a proxy for the full year.

Internal Legal Hours Charged

Hours Charged	Year						19-21 Δ[1]
	2019		2020		2021 (Q2)		
to JCP&L or Subgroup Directly	76%	10,366	73%	8,248	73%	4,436	-14%
By General Allocation	23%	3,198	26%	2,885	27%	1,612	1%
JCP&L Justification not Clear	0%	52	1%	96	0%	14	-48%
Total Hours to JCP&L	***13,616***		***11,229***		***6,061***		***-1,493***
Total Hours to All Entities	62,380		58,933		28,320		-5,739
JCP&L Share	***22%***		***19%***		***21%***		***-0.4%***

5. *Outside Costs*

Nearly 40 outside law firms have charged costs assigned entirely to JCP&L from 2017 through 2020. The next table summarizes those borne totally by JCP&L and the following table those borne in part by JCP&L.

Outside Counsel Costs Charged Entirely to JCP&L

Category	2017	2018	2019	2020	Average
Bankruptcy	$61,864	$42,157	$24,194	$33,934	$40,537
Claims	$662,446	$1,083,516	$2,143,484	$1,946,547	$1,458,998
Commercial Litigation	$120,481	$101,352	$6,840	$123	$57,199
Corp /SEC / Treas. / Fuels / Commercial	$0	$0	$11,872	$0	$2,968
EMT / Products / Supply Chain	$30	$1,950	$333	$0	$578
Environmental	$1,183	$16,972	$9,712	$4,806	$8,168
Federal Regulatory	$0	$25,020	$43,218	$563	$17,200
Labor / Employment	$297,419	$180,385	$185,324	$172,334	$208,866
Real Estate	$103,934	$98,447	$88,835	$104,538	$98,938
State Regulatory	$606,032	$931,325	$491,275	$350,705	$594,834
Tax	$13,821	$2,401	$3,941	$0	$5,041
Total	**$1,867,211**	**$2,483,524**	**$3,009,026**	**$2,613,549**	**$2,493,327**

Outside Counsel Costs Charged Partly to JCP&L

Category	2017			2018			2019			2020		
	Total	JCPL		Total	JCPL		Total	JCPL		Total	JCPL	
Bankruptcy	$299,945		0.0%	$249,469		0.0%	$376,345	$1,405	0.4%	$218,151	$286	0.1%
Claims	$2,485,991	$269,702	10.8%	$4,361,460	$287,588	6.6%	$3,641,824	$2,153	0.1%	$4,509,693	$2,647	0.1%
Commercial Litigation	$5,856,325		0.0%	$6,332,705		0.0%	$1,557,502		0.0%	$1,844,602		0.0%
Corp/SEC/Treas/Fuels/Commercia	$2,143,722		0.0%	$2,361,500	$23,430	1.0%	$1,119,345	-$2,500	-0.2%	$1,618,290		0.0%
EMT / Products / Supply Chain	$224,303	$863	0.4%	$262,935	$572	0.2%	$332,776	$753	0.2%	$413,784	$92	0.0%
Environmental	$424,464		0.0%	$194,944		0.0%	$203,324		0.0%	$114,751		0.0%
Federal Regulatory	$6,665,221	$62,187	0.9%	$6,813,205	$128,236	1.9%	$2,445,669	$13,392	0.5%	$2,771,957	$48,590	1.8%
Labor / Employment	$2,135,345	$8,655	0.4%	$1,122,869	$6,364	0.6%	$686,019	$2,535	0.4%	$695,371	$5,580	0.8%
Non-Legal	$583,472		0.0%	$193,812		0.0%	$251,005		0.0%	$560,876		0.0%
OH - Akron Legal Staff	$109,704	$9,305	8.5%	$153,996	$10,691	6.9%	$233,340	$7,795	3.3%	$143,411	$12,718	8.9%
Real Estate	$220,498		0.0%	$500,440		0.0%	$207,183		0.0%	$166,404		0.0%
State Competitive	$82,879		0.0%	$43,677		0.0%	$0		0.0%	$0		0.0%
State Regulatory	$1,302,861	$5,847	0.4%	$1,781,722	$7,994	0.4%	$1,027,227	$8,567	0.8%	$597,239	$3,722	0.6%
Tax	$4,670		0.0%	$0		0.0%	$6,185		0.0%	$0		0.0%
Transmission Rate Case Work	$0		0.0%	$0		0.0%	$574,219		0.0%	$1,048,055		0.0%
VP Legal	$392		0.0%	$327,229		0.0%	$185,632		0.0%	$0		0.0%
TOTAL	**$ 22,539,792**	**$ 356,559**	**1.6%**	**$24,699,962**	**$ 464,876**	**1.9%**	**$ 12,847,596**	**$ 34,101**	**0.3%**	**$ 14,702,585**	**$ 73,635**	**0.5%**

Non-Attorney Costs Charged to JCP&L

Area of Service	2017	2018	2019	2020
Bankruptcy	$690	$2,991	-$2,891	-$239
Claims	$485,143	$563,897	$412,724	$60,852
Commercial Litigation	$16,000	-$16,000	$150	$1,513
Corp/SEC/Treas./Fuels /Commercial	$758	$1,102	$1,976	$456
Environmental	$0	$0	$0	$207
Federal Regulatory	$0	$11,370	$0	$0
OH - Akron Legal Staff	$11,245	$12,579	$13,073	$17,670
Labor / Employment	$19,371	-$17,334	-$57	$15,750
Real Estate	-$8,892	$0	$28,809	$722
State Regulatory	-$4,000	$14,800	-$31,020	- $87,177
Tax	$0	$0	-$3,941	$0
Total	**$520,314**	**$573,404**	**$418,822**	**$9,754**

We examined sources of outside non-attorney costs associated with legal matters. The individual charges we tested and for which JCP&L bore costs showed an appropriate connection to the utility, either in matters solely applicable to it or to a group of which it appeared a logical member.

6. Management of Outside Counsel performance and Costs

The corporate Legal department has operated under documented policies for many years in managing outside counsel use. We reviewed those applicable in 2016 and 2020, finding both clear and comprehensive. The more current version, among other things:

- Addresses identification of potential conflicts of interest involving a firm's other work
- Limits authority to retain counsel, experts and other third parties to the Legal department
- Controls who from the firm may bill and sets rates for each, changeable yearly
- Provides a mechanism for agreement to discounted fees on prompt invoice payment
- Requires budgets for larger matters and notice of budget excess jeopardy
- Strictly controls billing detail, task itemization, and support
- Precludes billing for travel time, administrative matters and equipment costs
- Limits invoices to a single matter.

Management employs a well-recognized, web-based system to support outside counsel work planning, management, billing, and analysis. A department member designated as the matter contact receives invoices electronically and reviews them for correct coding and for review of charges and any items flagged by preset billing guidelines and rules. Those for which this initial review discloses issues get returned for explanation or correction. Invoices passing this initial review go next to the responsible attorney or claims representative for approval. Invoices continue to move electronically through a review process until they secure approval from one with signature authority commensurate with the amount of the invoice. Invoices gaining this level of approval then move directly to invoice payment through a module of FE's SAP-based financial system.

Regular reports provide outside costs by month and year to date, comparing actuals to those budgeted. The reports break costs down by major category, as the next illustration, from the report for November 2021 demonstrates. Procedures require budgets for billings expected to exceed $200,000 or when otherwise requested by the lead in-house counsel.

Monthly Report of Outside Legal Costs

FirstEnergy 2

NJ-ADR-1268-Attachment A
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Legal Contractor Summary – Practice Area

Practice Group	November Actual	November Budget	Month Var.	YTD Actual	YTD Budget	YTD Var.	Annual Budget
Bankruptcy	9,357	16,667	7,310	180,184	183,333	3,150	200,000
Claims	211,967	298,406	86,439	2,287,199	3,282,467	995,267	3,580,873
Commercial Litigation	61,748	98,334	36,586	745,582	744,998	(584)	843,332
CORP/SEC/TREAS/FUEL	(191,014)	49,100	240,114	695,792	540,100	(155,692)	600,200
EmT/Products/Supply Chain	28,753	33,333	4,580	299,147	366,667	67,519	400,000
Environmental	6,065	12,501	6,436	203,391	287,505	84,114	300,000
Federal Regulatory	519,999	252,500	(267,499)	2,129,055	2,777,500	648,445	3,100,000
Labor/Employment	100,035	58,333	(41,702)	537,930	641,667	103,737	700,000
Miscellaneous	57,069	35,000	(22,068)	436,996	385,004	(51,993)	420,004
Real Estate	67,173	66,666	(507)	503,334	733,334	230,000	800,000
State Regulatory	342,765	117,083	(225,682)	2,089,676	1,584,167	(505,510)	2,600,000
Tax	(519)	8,333	8,853	3,117	91,667	88,550	100,000
Grand Total	**$ 1,213,397**	**$ 1,046,257**	**$ (167,139)**	**$ 10,111,403**	**$ 11,618,408**	**$ 1,507,004**	**$ 13,644,409**
Transmission Rate Case	97,168	530,000	432,832	661,959	7,130,000	6,468,041	7,580,000
Transmission Rate Case	**$ 97,168**	**$ 530,000**	**$ 432,832**	**$ 661,959**	**$ 7,130,000**	**$ 6,468,041**	**$ 7,580,000**

7. *Performance Measurement*

Management reported the existence of no specific measures of or reporting on performance effectiveness. It cited the use of less formal methods of taking feedback from client departments during the course of open matters or special communications to department leadership to offer input. There appears to exist no process for regular solicitation of client department views on legal performance. No structured approach exists for incorporating analysis of cost in retaining outside counsel. No structured approach exists for engaging JCP&L directly in determining its legal needs, views of legal services cost and performance effectiveness, identification of possible outside legal resources, reviews of performance by internal and outside counsel, or other matters affecting the availability, quality, and sources of meeting its legal needs.

8. *Separate Representation of JCP&L Interests*

No procedures exist to guide determination of circumstances when JCP&L may require legal representation separate from that provided to other FE entities in common matters, proceedings or circumstances. Management objected to our request for documented policies, procedures, or other guidance, stating that administrative procedures of the type requested would comprise attorney-client privileged information. The response then went on to state, notwithstanding the objection, that none exist, nor, if they did, could they "alter or supersede the requirements of the rules of professional conduct, which are adopted and enforced by a State's highest appellate court." The response went on to say that the:

> *Legal Department and its lawyers are ethically bound to follow the rules of professional conduct as adopted in the relevant jurisdiction and as may be applicable to given facts and circumstances.*

We examined a listing of the FERC proceedings in which any FirstEnergy entity appeared during 2020 and 2021, finding them to number about 150. Most cases involved individual FirstEnergy entities, or its transmission companies, or its operating companies. However, a significant number appear to have included both operating companies and transmission representation. We used the roster of 2020 and 2021 FERC proceedings to test the use of common counsel to represent multiple FirstEnergy entities in manners that appear to have included JCP&L among those affected. We did not find evidence of conflicting interests; instead, the brief descriptions provided appear to have suggested otherwise to the extent they proved extensive enough to form an impression. However, the descriptions often proved too general to rule out potential conflicting interests.

C. Conclusions

1. The central approach employed to manage legal functions has created a generally appropriate organization structure and resource alignment for meeting the legal needs of JCP&L with appropriate attention and focus; the following conclusion addresses concerns about attention to regulatory affairs, which entail significant legal resources.

FirstEnergy has taken advantage of the scope and scale of its operations to centralize management of the legal affairs of its operating companies, including JCP&L. Management has aligned resources under senior attorneys who serve as lead counsel for clearly defined and appropriately scoped areas of legal responsibility. The groupings of functions follow general practice and support specialization as required to maximize effectiveness in bringing experienced and dedicated resources to the types of matters that FirstEnergy must address. The organization's structure has changed appropriately to address elimination of needs to serve merchant power and energy businesses.

Recent changes have moved claims personnel from the central Operations organization (albeit assigned to a number of regional locations across the collective, multi-state operating company footprint) to the senior attorney already responsible for claims-related litigation. A small group moved from Legal to IT. The group that moved has responsibilities for the management, maintenance, and destruction of documents. These activities have becoming increasingly more involved with IT activities and systems, as electronic documents have substantially replaced "paper" versions, thus creating needs and circumstances more amenable to management by systems-oriented specialists. At the same time, retention of responsibility for ensuring compliance with retention and destruction requirements, and for supporting substantial civil and administrative retention and discovery needs provides a control that better ensures compliance with those needs.

2. Legal personnel and outside resource use have dropped substantially following the transfer of FirstEnergy Solutions power and energy operations and assets to a third party following bankruptcy.

Staffing has dropped by about 20 percent since 2017, after adjusting for the movement of claims personnel from the Operations organization. We annualized third quarter 2021 costs provided by management (*i.e.*, by multiplying them by a factor of 4/3). Costs for professional and outside resources (largely outside counsel) dropped even more significantly (by roughly half), with the most notable yearly drop occurring in 2019. Together, compensation-related costs and professional and outside contractor costs comprise virtually all of the costs of FE Legal. JCP&L has experienced low growth in legal costs since 2017 and, following transfer of the FirstEnergy Systems power and energy operations have remained at a fairly constant percentage of total legal costs.

Management used a voluntary early retirement process (VERP) to provide for a realignment it sought to apply generally in moving its central resources to the FE Forward process to a structure focusing nearly totally on electricity transmission and distribution, with a fairly small fleet of generating plants remaining in operation on a vertically-integrated-utility basis. The last of those units operating in New Jersey (Yards Creek) recently transferred to an independent, third party. This VERP proved successful in producing significant reductions, but led to shortages in some areas, including state regulatory legal resources, followed by a period that has produced challenges in backfilling some needed positions.

Continuing efforts to optimize staffing levels recently included a cost comparison of FE legal services costs with those of other similarly sized utilities. That comparison found FE costs especially competitive (in the first, lowest-cost quartile). That comparison comported with our review, which did not find reason to question overall cost levels at the FE or JCP&L level.

3. **FE Legal has used an effectively designed and managed system to record internal legal costs; our review of time reporting found no reason to question time assigned to codes for which JCP&L bore sole or partial cost responsibility.**

We used a test of time reporting to validate the amount and propriety of internal costs charged to JCP&L and as one discrete test of the processes for charging directly, assigning, and allocating costs to JCP&L (the last as part of our review of cost allocations more generally). We found a well-documented, appropriately designed and capable, routinely used, and sufficiently overseen system for charging time by legal resources. We found reasonably justified and appropriate the charges assigned, with the portion whose justification was not immediately transparent almost non-existent in the past two years (and thus too small to warrant more detailed review). The portions charged to JCP&L have remained fairly consistent.

4. **Management has used appropriate methods to manage and control outside counsel costs and performance.**

Comprehensive and well-documented policies have governed the use and management of outside counsel. They address power to approve retention, authorities and responsibilities for managing matters and the outside counsel retained to support them, establishment of budgets for larger matters, billing rates, billing structure and content, itemization requirements, and separate billings for separate matters. Management supports execution of these policies with a widely-used, highly-capable web-based system. Electronic capabilities support the effective management of outside counsel performance, timeliness and costs. These capabilities also support effective marshalling of and access to substantive documentation pertinent to use in the matters involved and in keeping in-house legal personnel timely informed and capable of managing required internal efforts.

5. **Management reports monthly legal costs effectively, but lack other useful performance measures.** (*See Recommendation #1*)

Monthly reports include actual versus budgeted legal costs for the month, year to date and annual legal costs. The reports do so for total legal costs and by more than 10 practice groups. Regular monthly reports also track total legal department costs by major category (the two principal ones addressing internal personnel-related and outside professional and contractor costs). Management pays appropriate attention to its legal cost drivers.

However, other useful measures of performance, particularly for forward-looking purposes find structured use. No regular, structured process exists for soliciting from client departments feedback on either completed engagements or on important matters in progress. Certainly, the relationships existing at the working level between legal and client resources entail discussions of such matters, but not, it appears, in a way dedicated to performance improvement. We also found no regular, structured means for engaging JCP&L directly in determining its expected legal needs for planning purposes.

6. **The lack of a documented formal process for ensuring that JCP&L interests are not best served by separate representation in civil and administrative proceedings or in internal matters where legal advice is solicited does not best serve JCP&L's interests.** (*See Recommendation #2*)

Our requests for other administrative procedures, systems, and tools under which the Legal department conducts its business did not produce objections (for example, management of outside counsel relationships and work and management of internal time), instead proceeding directly to describing and supplying the requested information. Acknowledging that outside rules of conduct address conflicts of interest, it does not follow that administrative procedures for effectively controlling joint representation would, inappropriately, as management stated, "alter or supersede the requirements of the rules of professional conduct."

FirstEnergy includes entities that provide and that make use of transmission services, not all of them in the same markets or under the same conditions and circumstances. Until recently, it included entities that sold power and energy in competitive markets and those that bought them. Sound management makes clear the propriety of mandating a before-the-fact, deliberate, documented process for validating the propriety of common representation for JCP&L and affiliates. Management has cited no authority that would hold the existence of documented procedures for ensuring such validation inconsistent with or negated by ethical responsibilities assigned to attorneys. Good practice requires that the department expect an extremely high degree of care in ensuring that the interests of its individual operating companies do not suffer from a less than diligent attention to examining the potential for them to have not only patently obvious, but more subtle differences of interest in matters in civil or administrative litigation, or in internal debate or discussion engendering legal participation. Doing so comprises part of setting "tone at the top" of the department.

7. **Staffing of the central legal group under FirstEnergy's Chief Legal Officer has reportedly roughly doubled since preparation of this report.**

We have therefore not evaluated the reasons, sources, or consequences of this change. The conclusions and recommendations of this chapter assume the 2021 staffing reported in detail in the findings section of this chapter.

D. Recommendations

1. Establish structured and regular means for engaging JCP&L, Legal, and Rates and Regulatory in reviews of prior performance, status and needs for current matters, and forward-looking needs and resources. *(See Conclusion 5)*

Management should adopt a formal process for promoting candid and regularly scheduled formal sessions soliciting performance feedback through an organized and comprehensive structure. It also requires quarterly meetings among the Chief Legal Officer, the Vice President, Rates and Regulatory Affairs, and the JCP&L President to address recent performance, current and emerging matters of importance, near term and milestones and events, and means for addressing them. These meetings are intended to provide senior leadership of matters intentionally designed to be different from what they get from those who report directly to them on matters from their particular functional perspective and inherently prioritized, homogenized or however, else affected by the needs and issues of nine other operating companies and four other states.

2. Provide for system notation reflecting an in-house counsel opinion concluding that no conflict exists between the interests of JCP&L and any other FirstEnergy entity with whom JCP&L has common legal representation in any civil or regulatory proceeding. (*See Conclusion #6*)

In civil and in administrative agency proceedings that involve appearances by attorneys representing JCP&L along with other FirstEnergy entities, or that include a FirstEnergy entity purporting to participate on behalf of entities that include JCP&L, a review by senior in-house counsel of the potential for interests of JCP&L that may conflict with those of others represented should occur and an opinion stating that no such potential or actual conflicting interests in the proceeding(s) involved should be documented.

Existing department systems and tools provide an efficient method for providing direct acknowledgement by lead attorneys that the necessary diligence has been conducted and that direct responsibility and accountability is being taken for a conclusion that separate representation for JCP&L is not required in matters in which JCP&L is engaged or in which another FirstEnergy purports to speak for its interests or may reasonably be construed as doing so.

3. See Recommendation #2 from the *Internal Controls, SOX, and Auditing* Chapter of this Phase Two report regarding the change in administrative reporting of Internal Auditing from the Chief Legal Officer to the FirstEnergy Corp. CEO.

4. See Recommendation #3 from Chapter XIII, *External Affairs Organizations* of the Phase One report regarding the creation of a senior executive position to head a regulatory affairs department reporting to the FirstEnergy Corp. CEO and combining FE Legal resources now dedicated to state regulatory affairs and technical and liaison persons with state and local agencies now dispersed among a number of FirstEnergy senior executives.

Chapter XVIII: Physical Security Table of Contents

Chapter XVIII: Physical Security

A. Background

We examined the management and operations of those responsible for ensuring physical security. We examined changes in organization, resources, procedures, practices, systems, tools, and measures. Chapter Eight of our Phase One report, *Cyber Security and System Vulnerability,* addressed the operation of the organization responsible for managing cyber security. That organization operates separately from the one addressed in this chapter and responsible for physical security.

B. Findings

1. Organization and Resources

FirstEnergy (FE) had conducted the management of physical and cyber security centrally, under a Vice President, Cyber & Physical Security, reporting to the Vice President & Chief Information Officer. This 65-person organization of the Vice President Cyber & Physical Security divided into two overall groups - - a 26-person group operating under the Director, Corporate Security that had responsibility for physical security across FE and a 38-person group under the Manager, Cyber Security & Transmission Security Operations Center (TSO Center) that had responsibility for security of the transmission system as well. Management's comments on a draft of this report noted that the head position for Cyber Security, including the TSO Center, has been elevated to the executive level, under a Vice President, Cybersecurity and Chief Information Security Officer.

Security resources and reporting have changed since somewhat since 2016. Physical and cyber security at that time both fell under the Senior Vice President, Corporate Services and CIO, which included not only information technology responsibilities as now structured under the CIO, but also supply chain and flight operations.

A 39-person organization operated in 2016 under an Executive Director, Corporate Security, who reported to the Senior Vice President, Corporate Services and CIO. The executive director's organization included a 10-person group headed by the Manager, Site Protection Services, with the remainder of corporate security personnel placed under two other managers having responsibility for IT Services and Compliance and Physical Tech & CIP Compliance.

The 2016 organization placed cyber security and the TSO Center under a separate organization (Security & Infrastructure Operations), also reporting to the Senior Vice President, Corporate Services and CIO, but through a Director, Security & Infrastructure Operation. This director's 112-person organization in 2016 also had responsibility for IT Systems and IT operations, a group of 17 to cyber security and 18 to the TSO Center. Physical security management and operations fell under an Executive Director, Corporate Security.

Changes in organization and responsibilities complicate a direct comparison of resources from year to year, but management has prepared the information shown in the following table, using third-quarter staffing levels and an effort to align the 2021 entry with changes that have occurred in the organization of physical security resources and responsibilities. Corporate Security houses the resources shown in the "Physical" group.

FE Security Resource Changes

Group	Year		
	2019	**2020**	**2021**
Physical	29	24	25
Cyber	32	34	39
Total	***61***	***58***	***64***

Management reported the late 2021 performance of a third-party assessment of the physical security organization. We accepted a general description of the results, given the sensitivity of documentation addressing physical security matters in detail. Management reported that the assessment's benchmarking with industry peers found staffing and costs commensurate with those of peers.

Outside, contracted security guard providers monitor and patrol selected facilities, which in New Jersey include JCP&L's Holmdel and Morristown offices. Contracted services also staff the Security Operations Center [redacted], maintaining in regular contact with New Jersey personnel. Management also uses outside, contracted personnel to provide as needed protection professionals and devices (such as barriers and trailers).

The First Energy Service Company (FESC) Corporate Security organization dedicates a single Physical Security Field Representative to New Jersey, reporting to an eastern region Supervisor, Compliance Field Support & Physical Security. The Field Representative serves as the primary contact for security and compliance issues in JCP&L's territory and travels through the system to ensure corporate and regulatory standards (*e.g.*, NERC critical infrastructure) compliance and verify the status of security equipment. The Field Representative also coordinates internal and external compliance audits. Other responsibilities include investigating and tracking incidents, performing regular equipment maintenance and testing, performing security assessments, and escorting visitors at facilities.

2. *Security Policies*

A broad series of security policies, critical infrastructure plan and program documents and Human Resources letters provide purposes, objectives, and implementation and execution details governing a wide spectrum of activities with physical security implications:

- Security Policy 2.0: Company identification badges
- Security Policy 3.0: Digital, electronic and video recording or photography at transmission control center facilities and critical infrastructure locations
- Security Policy 4.0: Security incident reporting & investigation
- Security Policy 5.0: Facilities Visitor Control
- Security Policy 6.0: Testing cyber, emergency response, disaster recovery, and business continuity plans
- Security Policy 7.0: Physical security
- Security Policy 8.0: Restricting unauthorized possession of weapons on premises
- Security Policy 9.0: Removing tools and materials

- Corporate Security: U.S. DOE and NERC incident reporting
- Human Resources Letter 411: Handling bomb threats
- Human Resources Letter 412: Violence in the workplace
- Human Resources Letter 413: Theft
- FE-CIP-PSEC-PLN-060: BES (Bulk Electric System) Cyber
- FE-CIP-PSEC-PRC-061-01: Physical key management
- FE-CIP-PSEC-PRG-062: Bulk Electric System Cyber systems visitor control program
- FE-CIP-PSEC-PRG-063: Physical access control system maintenance and testing
- FE-CIP-PSEC-PRG-032: Low impact systems physical access control methods.

3. Badging

Corporate Security Policy 2.0 addresses the FE badging policy. FESC-level Corporate Security personnel use a badge administration tool to create badges that control access through the Physical Access Control System. Corporate Security arranges for their delivery directly to employees and contractor representatives or supervisors using through company mail UPS, or in-person. Persons on company property or conducting company business must wear badges visibly displayed on a lanyard. The badges have electronic coding and require replacement following submission of a form by Corporate Security if they become inoperable. The badges display color photos, a FERC indicator, and the employing FE entity.

New Jersey personnel badges include employee signatures and dates of issuance, in accord with New Jersey Revised Statutes, Title 48 Public Utilities, Chapter 3-42 through 47. Contractors requiring access to facilities for more than 30 calendar days get individual badges (and a different colored lanyard) displaying the individual's name and a color photograph, a "Contractor" designation, and the contracting company.

Processes and procedures exist for new employee background checks, and periodic checks occur every seven years for those with access to facilities covered by Critical Infrastructure Protection requirements. Contractors must certify, using a form provided by FE, the performance of background checks for their personnel having access to critical infrastructure. A clear set of slides guides training provided on the critical infrastructure background-check process.

4. Facility Risk Assessments

Management adopted a new security risk assessment program in 2021. The program employs on-site security risk assessments annually for all occupied facilities and high-priority transmission substations (numbering together about 250 locations), with lower priority transmission substations assessed (about 650 in number) biennially. These assessments seek to identify security threats and vulnerabilities, and consider local crime rates, to identify threats, and assess facility technology installed, physical barriers, and security policy considerations. An analytical tool guides these risk assessments. The assessments make use of a template, require supporting narrative, with entry into a Core Risk Assessment system that supports tracking by the Corporate Security field representatives involved. Guidelines for conducting the assessments specify pre-visit information collection, and activities specific to particular security elements at the sites.

Facility assessment prior to the new program's institution took place in conjunction with other security-related activities. Covid-19 protocols led to the deferral of planned 2020 assessments. The list of completed 2019 inspections included some 150 substations and an office and service center location. The approximately 60 assessments performed included the general office, a corporate office, one business office, four district offices, and 22 service centers, with the remainder encompassing both high and lower priority substations.

FE operates a Security Operations Center [redacted], staffing it continually. This center remotely monitors alarms, access control systems, and video. Personnel in the center assess conditions, notify responders, and generate any company-wide emergency notifications. The center also serves as the single reporting location for security incidents at all FE facilities.

5. Physical Security Incidents

A total of 83 recorded security incidents involving JCP&L have occurred since January 2019. The total yearly numbers have remained stable in the past two years (at 20 or fewer), down significantly from 2019 numbers. Physical threats or intimidation (about half by phone) have comprised more than half of the incidents, with the remainder not significantly compromising facilities or operations. Logs of the incidents show follow-up on each.

6. Internal Audits of Security Operations Performance

Internal Auditing has performed three specific examinations of security operations performance since January 2017.

First, an April 2021 Internal Auditing assessment addressed controls regarding badging for access to FE facilities. The assessment found systems and their application generally well controlled, with improvements indicated in generic badge issuance and use, deactivating replacement badges, and monitoring of remote unlocking activity. Second, a contemporaneous April 2021 Internal Auditing assessment examined physical security controls for Low Impact Bulk Electric System cyber system assets. It made no findings or observations, and produced no recommendations.

Third, an October 2021 review sampled Corporate Security's response to a sample of 30 recorded telephone threats against FE employees. Internal Auditing found appropriate application of the guidelines, except for four instances of insufficient documentation to support conclusions reached and notifications required to be made to stakeholders.

C. Conclusions

1. FirstEnergy has consolidated and streamlined responsibilities for physical and cyber security in recent years, providing for a dedicated, reasonably narrowly focused set of resources.

Physical and cyber security have both operated in the organization headed by the Chief Information Officer responsible for IT systems and operations. That senior executive's focus has become narrower with the movement of several other corporate service areas to another executive. This change supports a greater focus at that top level on security, as has the separation of some other IT-related responsibilities from the roles of the two management-level persons separately responsible for physical security. While responsibility realignment did not permit a fully direct comparison, it appears that FE has increased resource numbers dedicated to both physical and cyber security. Those increases reflect increasing security risks and requirements in the industry.

[redacted]. The late 2021 external assessment, however, reportedly found staffing and performance representative in comparison with peers.

2. An appropriate range of procedures and policies guide physical security threat and risk identification and investigation and appropriately address individual conduct and responsibilities, and provide for sound coverage of employee access to facilities.

We found the range of procedures and policies comprehensive and clear in assigning responsibilities and the means for exercising them. They provide for preventive measures to identify threats and to track actions to correct those found. Badging and keying, two principal threat areas, operate under appropriate methods using sound technology.

3. The security risk assessment program significantly advances measures to identify and mitigate physical security risks.

The program replaces one that did not operate independently of other field inspection work. The new program requires scheduling and completion of all assessments, at least annually for occupied and transmission facilities, and not less than every two years for other facilities. The use of an analytical approach, with documented tracking of risks found through remediation reflects best practice.

4. Physical security incidents involving JCP&L facilities and personnel have remained stable, and materially lower in the past two years.

We did not find in the incident logs indication of excessive levels or repetition of avoidable incidents. Logs show tracking and follow-up for all reported incidents.

D. Recommendations

We have no recommendations in the area of physical security.

Chapter XIX: Records and Information Management Table of Contents

Chapter XIX: Records and Information Management

A. Background

Our examination of records and information management addressed the organizations, practices, systems, and procedures governing retention of, access to, and destruction of records and the management of information subject to public requirements and business needs. Records management by public utilities has special relevance that goes beyond the normal business considerations applicable. Statutes and regulations impose significant record retention requirements. A sound organization, clear procedures, and adequate attention to both the keeping and orderly destruction of documents should exist. Modern electronic storage media have provided alternatives that can improve space utilization, longevity, and retrievability of records.

We examined procedures, methods, and systems for managing the retention of records to determine if there is sufficient, but not excess, retention in forms that efficiently and comprehensively meet applicable needs and requirements. Factors our examination considered included:

- Evolution in provisions for storing and retrieving records to keep pace with changing business needs, increasing reliance on information stored on electronic media.
- Comprehensiveness and clarity of policies and procedures for identifying records required to be retained and for how long
- Management systems, resources, and procedures for retaining and retrieving paper documents and digital data.

B. Findings

Management has reported electronic business records numbering over 31million, 63,000 boxes of hard-copy records, annual creation of 300,000 new electronic records, and annual disposition averaging 445 tons.

1. Organization and Staffing

A Records and Information Compliance group in the FirstEnergy-wide Legal department had at an earlier time responsibility for records management and for ensuring compliance with information retention and use requirements across FirstEnergy. The Records and Information Compliance staff worked under an Associate General Counsel. Information Compliance, which remains in the Legal department, has responsibility for ensuring compliance with regulations addressing the management of information. Specific areas encompassed by these responsibilities include email classification and retention, the Information Protection Program designed to comply with NERC CIP-011 R1, processes, the eDiscovery system for managing discovery in proceedings, legal holds regarding documents, Identity Theft Program administration, and computer-based information and records management training modules.

Current Information Compliance staffing, under an Associate General Counsel (responsible for labor, real estate, tax, environmental, litigation, bankruptcy and claims), comprises five analysts. Staffing under this Associate General Counsel position in 2017 for information compliance activities also stood at five persons.

Document collection, retention, and disposal transferred from the Legal department group to Records Services (under the IT organization) in 2018. Responsibility for oversight of related business practices, policies, and ethics training transitioned in 2021 to the reconstituted Ethics & Compliance organization. Staffing in that Legal department group remained roughly the same until the move of the Records Services function. That move brought a drop of three. The *Legal Services* chapter of this Phase Two report describes the split of those responsibilities.

Since the move of Records Services, the group has operated under the Supervisor, Records Services, continuing with a staff of three. This group has responsibility for:

- Managing policies, processes, and tools used to classify index, capture, retain, and dispose of records amassed by FirstEnergy
- Providing guidance and handling solutions to support proper storage of information in the systems that handle documents and data
- Providing records support for discovery in legal proceedings
- Creating and maintaining the company Records Retention Schedule in accord with the requirements of state and federal regulatory agencies.
- Providing records disposal services for some 209 FirstEnergy facilities.

The Supervisor, Records Services reports to the FESC Manager, CIP Compliance Programs & Reliability Standards. This manager's staffing numbers 15 (including the Supervisor, Records Services, and staff of three). The other staff members have responsibility for:

- Developing and implementing a strategy, policy, procedures, and guidelines for compliance with NERC's Critical Infrastructure Protection (CIP) Reliability Standards
- Overseeing and supporting Sarbanes Oxley testing and remediation related to information technology control
- Providing technical support and administration of FE's Regulatory Access Authorization Database (RAAD) and related compliance reports
- Facilitating CIP and FERC Sensitive Information (FSI) and Sensitive Customer Information (SCI) reviews
- Managing the IT Reliability Standards team that supports NERC requirements and internal controls to ensure compliance with IT-related policy and regulatory compliance programs
- Supporting annual reviews of information-technology-related CIP procedures and investigation of potential non-compliance incidents.

The Manager, CIP Compliance Programs & Reliability Standards reports to the IT Transmission Systems & Compliance Director, who reports to the Vice President, Information Systems, who reports to the Vice President &Chief Information Officer. This vice president's approximately 540-person staff manages information technology across FirstEnergy.

2. *Maintenance, Retention, and Destruction Practices*

Records services tracks numbers of records processed, but no measures of its productivity. Management has not benchmarked or otherwise compared its structure, organization, performance, effectiveness, or efficiency in records management since 2017. Records Services annually validates its Records Retention Schedule against applicable regulatory requirements and participates in a review and verification process to confirm the propriety of any document destruction. That process includes a multi-level check against the retention schedule.

Several policies guide the creation, retention, and non-disclosure of records. An Enterprise Records Retention Policy describes what comprises records, addresses their maintenance, describes the responsibilities of their custodians, emphasizes the importance of their accuracy and non-disclosure, and covers their destruction after meeting retention requirements. A Litigation Hold Policy creates obligations and practices for securing litigation-related material from destruction, under the authority of the Legal department. A Sensitive Information Policy divides information into public and three "sensitive" categories, setting up procedures for controlling circulation and release of the sensitive categories:

- Restricted: by specific programs and requirements (*e.g.*, NERC critical infrastructure security standards)
- Confidential: information in highly regulated areas (*e.g.,* customer or HIPAA information, personally identifiable information)
- Internal Use Only: work generated information with low to moderate risk on release (*e.g.*, business plans, contracts, performance reviews, procedures, meeting agendas and notes).

An annual review of state and federal regulatory agency requirements supports annual validation of the Records Retention Schedule. Records Services and the Information Compliance Department provide records management and secure disposal training every other year. Management reports no failures to adhere to its records policy requirements in the past five years.

With respect to documents and records whose retention the BPU specifically requires, the FE portal posts the Retention Schedule. The regulation at N.J.A.C. 14:3-6.1 comprises one of 11 regulatory authorities that drive records retention periods. FE uses the longest period required by any of these regulatory sources of authority. The annual Records Services reviews account for changes in this 11-authority list, with any required updating of retention changes in the systems that ensure retention for electronic and physical records. Records Services stores in these systems by class the documents for which it has responsibility. Records Services controls access to records in the system.

3. Training

All employees of FirstEnergy entities, all contractors, and vendor employees receive "Information and Records Management" training online. The training seeks to make personnel aware of and responsible for practices and policies addressing information management and protection. The interactive training materials cover document and information creation, retention, destruction, and sharing comprehensively and with feedback designed to measure knowledge transferred. Management tracks receipt of the training, and the long lists of participants provided for recent years shows its application to the broad population intended. Records Services also provides access and system training to records custodians in the business units.

4. Digitizing Records

Management has sought to reduce hard copy records by digitizing those that continue to arrive for storage. Records Services is assisting the business units to digitize their hard copy records and has an overall goal to assist business units to convert hard copy records to FE's electronic records management system. Digitizing includes HR records for the purpose of making them more accessible. Records Storage completed the base transfer of stored documents to Energy Harbor in 2021. IT will continue to make additional records pertaining solely to Energy Harbor until 2025; no requests for this service have come to management.

5. Records Destruction Services

Management has used three outside National Association for Information Destruction (NAID) certified providers to perform and validate destruction for documents maintained at records centers, in conformity with NAID standards. For the many other operating locations across the regions served, Information Compliance, working with Supply Chain, issued a 2018 RFP for outside services to eight NAID-certified enterprises. The solicitation set forth vendor requirements, work scope, services requested, and document locations involved. It sought offers for an initial term of three years, with FE options to renew for two additional one-year periods. The offers indicated total costs across the system in the range of [redacted] or less. Examining the awards made for corporate and JCP&L locations found the selections made reasonably competitive.

C. Conclusions

1. FirstEnergy applies a sound organization to manage records and information and it operates efficiently.

The FirstEnergy-wide approach to records and information requirements promotes effectiveness, provides for sound control, and promotes economy. The organizations in Legal and in IT (the latter under the management of the FESC Manager, CIP Compliance Programs & Reliability Standards) provide for sound focus in addressing information management requirements. These requirements arise from a broad group of state and federal regulatory requirements and litigation (actual and potential) and business requirements and needs. The move of records management to the IT organization promotes efficiency and recognizes the increasingly electronic (as opposed to "paper") form that records take. The recent engagement of the restructured ethics organization has been sound as well.

Resources, a primary source of costs in records and information management, have remained stable through the organizational split that produced that organizational move.

2. Appropriate methods exist for ensuring retention and destruction of records and for ensuring the proper management of information.

Clear procedures exist, management provides regular training, and resources exist to ensure destruction of records no longer required at locations across FirstEnergy. Current efforts to digitize records further supports effectiveness in retention and eventual elimination of records.

3. Management maintains a list of retention periods specifically required for JCP&L records and updates it regularly.

Management prepares and updates annually lists of retention requirements of state and federal agencies, including the BPU. Annual Records Services reviews account for changes in retention requirements, with any required updating producing changes in the systems that ensure retention of and controls on access to records. Records Services manages systems that store and ensure retention of covered documents and controls access to those systems.

D. Recommendations

We have no recommendations regarding records and information management.

Chapter XX: Supply Chain Table of Contents

Chapter XX: Supply Chain

A. Background

JCP&L material and equipment needs impose substantial requirements on the Supply Chain organization. Management provided the following summary of total purchase order numbers and associated dollars for JCP&L.

JCP&L Materials Purchases

Year	PO #s	Dollars
2017	6,276	$27,368,622
2018	7,449	$36,002,043
2019	7,408	$44,893,849
2020	7,412	$42,284,656
Total	**28,545**	**150,549,170**

FERC Account 154, Plant Materials and Operating Supplies, addresses those purchased primarily for utility business construction, operation, and maintenance. This chapter deals with the acquisition and management of materials and equipment. FirstEnergy provides for common management at the service company level for acquisition and management of materials and supplies. Realignments in and reductions in resources have proven substantial following elimination of the FirstEnergy commercial power and energy business through bankruptcy. Those changes culminated in the recent consolidation of procurement and materials management (formerly under separate executive direction) under the newly creased Vice President, Supply Chain.

Functional responsibility for procuring materials and equipment for JCP&L use rests in sources that do the same for the other FirstEnergy operating utilities. The same holds true for managing the warehousing and distribution of materials and equipment used for construction, operation, and maintenance in New Jersey. However, JCP&L resources play important roles in identifying procurement needs, instituting requests for their acquisition and distribution to work and other sites of use. The chapter addresses how service company organizations support JCP&L materials and supplies needs, costs for doing so, and effectiveness in providing that support, along with the roles that JCP&L personnel play in ensuring that they get what they need timely and efficiently. It addresses the measures of performance used by management and their implications for cost efficiency and performance effectiveness.

B. Findings

1. Overall Organization

FirstEnergy has conducted the purchasing side of supply chain operations on an enterprise-wide basis, with a central group performing it for all the operating companies and its commercial power and energy operations. After disposition of the latter, two groups divided procurement responsibilities, one directly addressing utility operating company needs and the other the corporate functions supporting utility operations. Until mid-2021, these two organizations, one under a Director, Utility Sourcing and the other under a Director, Corporate Sourcing and Support reported to the Senior Vice President, Corporate Services & Chief Information Officer. Six other functions, encompassing a diverse array of functions, reported to this executive:

- Information Technology, headed by a vice president
- Business Systems, headed by a vice president
- Administrative Services, headed by a director
- Corporate Security, headed by a director
- Flight Operations, headed by a director
- Real Estate, headed by a director.

Centrally directed materials management (operating through a number of dispersed warehousing and storage locations, termed Distribution Centers) operated under a Director, Transmission & Distribution Warehousing & Materials Management. This director reported to one of the operating company presidents (the Ohio-based Illuminating Company), even though this director had responsibility for serving all FE operating utilities, including JCP&L. With 2021 creation of the new Vice President, Supply Chain position, Utility Sourcing and Corporate Sourcing and Support moved under the new organization, with a title change for the former Director, Transmission & Distribution Warehousing & Materials Management to Director, Material Management. This director heads a 298-person Material Operations group. The other two direct reports to the Vice President, Supply Chain comprise a Director, Strategic Category Management (298 positions) and a Director, Solutions/Standards (11 positions).

2. Organization and Staffing

The next table shows changes in Supply Chain Staffing.

FESC Supply Chain Staffing

Supply Chain *(Purchasing & Warehousing)*	**Year**			**Change**	
	2017	**2019**	**2021**	**#**	**%**
Corporate Level	389	350	325	-64	-16%
Regionally Located	56	46	14	-42	-75%
Supply Chain	445	396	339	-106	-24%
Supply Chain[3]	389	350	325	-64	-16%

3. Supply Chain Costs

The next table summarizes changes in supply chain costs since 2017. Changes in organization complicate direct year-over-year comparisons, but the table nevertheless makes clear that substantial reductions have occurred.

FirstEnergy Supply Chain Organization Costs

Cost Source		Year 2017	2018	2019	2020	2021 Q3	2021 Est.	2017-2020 Change $	%
Total Costs									
Payroll, Overheads, Benefits		$13,253,483	$12,251,610	$8,794,563	$6,635,939	$4,462,971	$5,950,628	($6,617,544)	-49.9%
Charges t/f Others (FESC & non-FESC)		($877,744)	($28,934)	$17,432	($15,928)	($347,345)	($463,127)	$861,815	-98.2%
Dues, Fees, Licenses		$60,057	$232,518	$108,667	$116,143	$1,074	$1,432	$56,086	93.4%
General Business and Travel		$76,573	$242,001	$96,644	($13,140)	($12,525)	($16,700)	($89,713)	-117.2%
Materials and Equipment		$68,427	$61,620	$85,429	$32,611	$46,880	$62,506	($35,816)	-52.3%
Other Non-Labor		$139,717	$52,832	$141,265	$259,732	$93,484	$124,645	$120,016	85.9%
Professional and Contractor		$140,199	$756,997	$2,126,008	$681,246	$129,224	$172,298	$541,047	385.9%
Total Other		$0	($60,133)	$211,734	$0	$0	$0		
Total		**$12,860,712**	**$13,508,511**	**$11,581,743**	**$7,696,604**	**$4,373,762**	**$5,831,683**	**($5,164,108)**	**-40.2%**
Change from Prior Year	*$*		*$647,799*	*($1,926,767)*	*($3,885,140)*		*($1,864,920)*		
	%		*5.0%*	*-14.3%*	*-33.5%*		*-24.2%*		
JCP&L Share									
JCP&L Share	*$*	*$534,308*	*$558,999*	*$676,418*	*$747,265*	*$527,390*	*$703,187*	*$212,957*	*39.9%*
	%	*4.2%*	*4.1%*	*5.8%*	*9.7%*	*12.1%*	*12.1%*		*7.9%*
Change from Prior Year	*$*		*$24,690*	*$117,419*	*$70,848*		*($44,078)*		
	%		*4.6%*	*21.0%*	*10.5%*		*-5.9%*		

4. *Purchasing Procedures*

The January 4. 2021 version of an Enterprise Sourcing of Materials and Services procedure (SCPR-SRC001) applies minimum sourcing requirements for creating materials, equipment, and services purchase orders FirstEnergy-wide. The procedure exempts certain purchase categories; *e.g.*, boiler fuels, non-stock items, Purchasing Card (P-Card), and E-Procurement Catalog purchases. Management has significantly streamlined the procedure following elimination of the need to support procurement for commercial power energy operations.

Business Units can issue P-Cards (credit cards) for the purchase of low-risk, low-dollar materials and supplies, subject to FirstEnergy Purchasing Card - Instruction, Policy and Procedures. The E-Procurement Catalog (FirstEnergy's Online Catalog) permits P-Card use to secure office supplies, computer peripherals, safety products and other items through an enterprise software platform (SAP) module.

The procedure requires employees initiating covered requisitions to structure them clearly and sufficiently to support competitive acquisition, secure funding authorization, identify diverse suppliers, detail proper accounting, and support other required reviews (*e.g.*, for safety). Each requisition requires approval at the proper level of authority. FirstEnergy Supply Chain employees prepare and issue procurement documents for properly approved requisitions. An assigned Supply Chain buyer determines the pricing structure to employ and the evaluation criteria for scoring offers.

The Procedure calls for use of an automated sourcing tool (PowerAdvocate), requiring its use for procurements of $50,000 or more, under clear work scopes and with at least two potential suppliers. Procurements of this magnitude require an attempt to secure competitive bids and the inclusion of at least one diverse supplier. All bidders must receive the same information (including standard general terms and conditions) and response deadlines.

A Contractor of Choice Program allows for no-bid awards where required to ensure access to skilled labor for construction projects. It permits awards on a cost-not-to-exceed or lump sum basis at amounts less than or equal to FirstEnergy estimates of costs. A request for documentation of related party transactions and contractor-of-choice awards disclosed an extensive list (for example, over 30,000 individual transactions, most of them of very small dollar amounts). The generation of these lists from the SAP system and the details provided in the system indicate attention to assuring complete lists for reporting and evidence of compliance with requirements associated with Contractor of Choice procurements.

5. Approval Levels

The approval requirements for new purchase orders and change orders escalate with the value of the commitments involved and the procedure prohibits separating orders to produce a lower approval level. The requirements are:

- ≤ $10,000 - - no approval necessary
- $10,001 - $100,000 - - Purchasing Associates
- $100,001 - $1,000,000 - - Buyers/Supervisors
- $1,000,001 - $2,000,000 - - Managers
- $2,000,001 - $5,000,000 - - Directors
- ≥ $5,000,001- - Vice President or Chief Procurement Officer.

Special approval requirements apply for procurements of $120,000 or more that involve a related party. This provision uses the term "related party" as defined for purpose of the U.S. Securities and Exchange Commission Transactions with Related Persons, Promoters and Certain Control Persons regulation.

The procedure also addresses supplier credit review, requiring the Corporate Credit Risk group to review credit of suppliers with whom whose aggregate commitments exceed $5 million

6. Supplier Diversity

The central Supply Chain organization has set and operated under a single goal for diversity-supplier spend as a percentage of total spend for "the entire organization." This goal includes quantified yearly threshold, target, and stretch values, not differentiated by operating company. Supply Chain also tracks spend by the supplier categories required by the U.S. General Services Administration and reports "Tier II" spend (amounts spent on procurement from diverse supplier groups). A Supply Chain analyst manages activities related to diversity spend.

Management observed that growth in minority spend had lagged that in other diverse supplier categories. It responded by initiating in 2021 the FirstEnergy Diverse Supplier Development Program to offer possible minority suppliers unique relationship building and mentoring opportunities. A separate Supply Chain analyst manages this program. The program accepted five participants FirstEnergy-wide in 2021, offering training offered by Supply Chain and participation in bid events.

The next table summarizes threshold, target, and stretch goals for diversity spend in recent years, illustrating that actual performance has reached stretch levels. The table shows specific goals for Potomac Edison, operating in Maryland. The Maryland values reported have exceeded overall FirstEnergy rates, making Potomac Edison's contribution to the corporate totals greater than those of the other states as a whole, and perhaps New Jersey as well. We cannot determine the New

Jersey contribution because the information management provided reported state-level data for only one state - - Maryland.

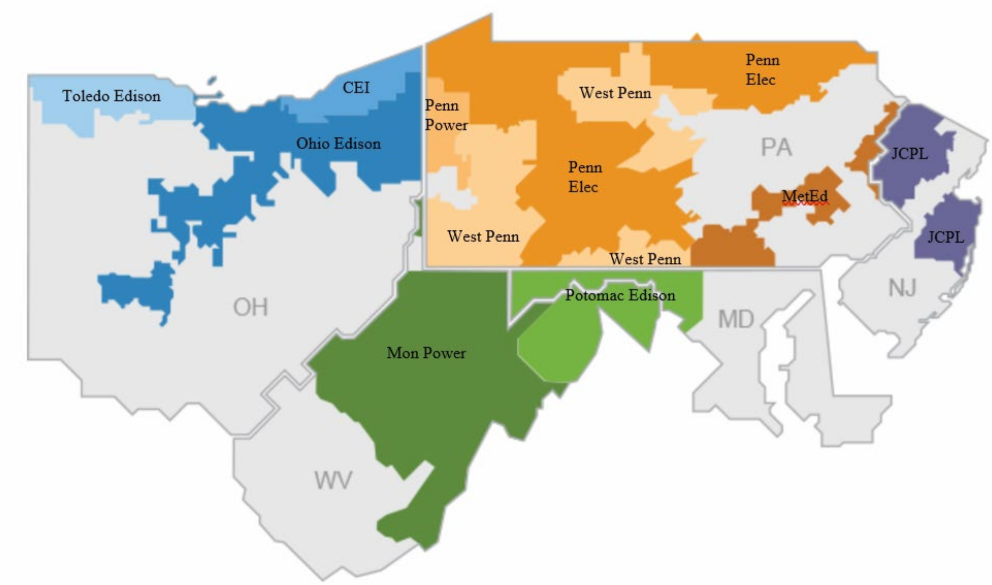
FE-Wide Diversity Spend Goals

Category	2019		2020		2021	
	Goal	Actual	Goal	Actual	Goal	Actual
Target	13.00%	14.11%	12.50%		14.00%	
Stretch	11.75%		14.00%	15.90%	15.50%	16.25%
Threshold	11.25%		16.00%		17.00%	
Maryland	25%	33.44%	25%	26.21%	25%	26.48%

7. *Warehousing and Storage*

The map below shows the geographic footprint of the FirstEnergy operating utilities. The following Distribution Centers serve their warehousing needs (with all three serving the more widely dispersed PennElec operations):

- WDC: Ohio Edison, Penn Power, Toledo Edison, and Cleveland Electric Illuminating
- EDC: JCP&L and Met Ed
- SDC: MonPower, Potomac Edison, and West Penn Power



8. *Materials Management Procedures*

Material Operations has responsibility for carrying out the inventory management procedures and activities. JCP&L personnel have the responsibility for considering the inventory impacts from their work that requires access to inventories materials. A series of procedures guide the operations of materials management for JCP&L

- Procedure MOIM002, FirstEnergy Material Operations Inventory Management, addresses management of FirstEnergy non-fuel inventory, seeking to minimize duplication and excess, while ensuring material availability without unnecessary costs

- An Energy Delivery Capital Spare Control & Use procedure defining guidelines for classifying and accounting for equipment as capital spare equipment
- FEU Material Planning/Stocking Strategy-September 2017 outlining means by which Materials Control Specialists determine appropriate stocking levels
- An FE-INV-M&S policy establishing guidelines for excess and obsolete items, to classify, measure and account for excess or obsolete materials and supplies accurately
- An Energy Delivery OTL Charging procedure that addresses the cost collectors usable for charging of Other-Than-Labor costs for items such as material, mileage, expenses, contractors, non-stock purchases, tools, counter stock, freight, and journal entry adjustments.

Procedure MOIM002 sets minimum requirements for personnel who manage and control non-fuel inventory, request material, and record key information about inventory. A FirstEnergy Stocking/Material Planning Strategy guides the determination of stocking levels that will optimize inventory availability in combination with costs. The strategy includes consideration of historical usage, acquisition lead times, supplier information, and item criticality, calling for unique management of different material types.

Stock items receive codes under a structured process for creating them. These codes support managing and controlling their inventories. Three-level coding permits manage stock by criticality (*e.g.*, critical utility spares secure the highest, "A" categorization). A Material Master provides a comprehensive, central system that supports applications for purchasing, replenishment, and invoice verification. The system and supporting data permit transfer of materials among FE locations where doing so may avoid the need for procuring added amounts.

The Material Requirements Planning (MRP) module of the SAP enterprise software platform drives material requisition and inventory management, considering known and projected needs. MRP uses "types" to determine planning for particular materials and Reorder Points generally set by operations or engineering, based on factors such as failure rates, contracts, and material availability. Mathematical computation of reorder points considers average use levels and lead times and adds "safety stock" to account for variable usage and acquisition times. Features that apply in managing supplier and delivery lead times call for making them binding where possible, for comparing planned to actual durations, and for addressing variances in Supplier Performance Meetings.

The process also sets minimum lot sizes for ordering, considering such factors as agreements with suppliers, or freight requirements, among others. Determining total times to replenish considers durations of the purchasing process, expected delivery times, and receipt processing upon arrival at the warehousing location. A variety of "stock status" codes guide measures applicable to classes requiring special treatment (*e.g.*, obsolete, temporarily deemed defective pending resolution, no longer supplied externally).

Procedure MOIM002 also provides FERC pricing rules that apply cost or market pricing depending on whether the provider and recipient are regulated utilities, service companies, or non-utility affiliates. The procedure requires consultation with state level legal personnel for transactions involving a state-regulated utility but does not include the specific New Jersey requirements.

9. Inventory Levels

Overall levels tracked well against targeted levels for 2017, then remained above targeted levels through 2020. Inventory returned to targeted levels through May 2021. The next table shows how EDC inventory levels compared to their targets and to those of other FE groups.

FE-Wide Inventory Levels

	2017			2018			2019			2020			2021 (through May)		
Group	**Target**	**Actual**	**Δ**	**Target**	**Actual**	**Δ**	**Target**	**Actual**	**Δ**	**Target**	**Actual**	**Δ**	**Target**	**Actual**	**Δ**
WDC	$45,420,000	$46,852,319	3.2%	$45,720,000	$47,313,367	3.5%	$50,968,121	$57,678,251	13.2%	$57,678,251	$84,626,965	46.7%	$76,176,402	$78,829,142	3.5%
EDC	$48,420,000	$48,997,473	1.2%	$49,020,000	$51,567,215	5.2%	$52,761,217	$59,651,518	13.1%	$59,651,518	$61,583,375	3.2%	$62,956,908	$59,144,255	-6.1%
SDC	$36,000,000	$35,660,818	-0.9%	$36,650,000	$37,048,008	1.1%	$38,680,258	$37,835,783	-2.2%	$38,680,258	$43,080,419	11.4%	$44,378,970	$43,221,441	-2.6%
Corp Meters	$14,228,207	$14,499,644	1.9%	$15,300,000	$15,894,460	3.9%	$8,950,000	$9,972,581	11.4%	$14,950,000	$27,346,052	82.9%	$16,150,000	$15,486,795	-4.1%
Transmission	$4,585,300	$1,785,914	-61.1%	$2,400,000	$3,938,781	64.1%	$6,632,000	$4,276,302	-35.5%	$4,576,302	$4,037,831	-11.8%	$3,829,780	$3,336,731	-12.9%
ATSI Sync Cond[1]	$720,000	$677,400	-5.9%	$677,000	$659,871	-2.5%	$7,000,000	$2,201,833	-68.5%	$4,201,833	$3,411,237	-18.8%	$3,634,461	$3,284,431	-9.6%
PA Spare Transmssion[2]	$132,000	$79,641	-39.7%	$80,000		-100.0%	$19,700,000	$20,848,181	5.8%	$20,700,000	$20,796,890	0.5%	$21,378,960	$21,426,212	0.2%
Total	**$149,505,507**	**$148,553,209**	-0.6%	$149,847,000	$156,421,702	4.4%	$184,691,596	$192,464,449	4.2%	$200,438,162	$244,882,769	22.2%	$228,505,481	$224,729,007	-1.7%
Yearly Change				**0.2%**	**5.3%**		**23.3%**	**23.0%**		**8.5%**	**27.2%**		**14.0%**	**-8.2%**	

[1] Category changed to CAET & IT in 2021
[2] Category chnaged to Regulated Generation in 2021

The next table breaks down EDC target and actual inventory levels by functional category.

EDC Inventory Levels Compared to Target

Year	Transmission	Distribution	Distribution Transformer	Meters & Equipment	Substation	Other[1]	Total	Target	Variance $	Variance %
2017	$3,905,597	$23,812,123	$11,770,839	$1,086,849	$5,731,138	$2,690,927	$48,997,473	$48,420,000	$577,473	1.2%
2018	$4,119,304	$24,215,607	$13,499,779	$1,395,641	$5,415,197	$2,921,686	$51,567,215	$49,020,000	$2,547,215	5.2%
2019	$5,903,089	$30,057,105	$14,013,550	$1,305,221	$5,383,382	$2,989,171	$59,651,518	$52,761,217	$6,890,301	13.1%
2020	$5,661,038	$31,227,423	$14,926,676	$1,303,120	$5,058,708	$3,406,410	$61,583,375	$59,651,518	$1,931,857	3.2%
2021	$5,300,461	$29,927,201	$14,178,742	$1,545,368	$4,928,769	$3,263,714	$59,144,255	$62,956,908	($3,812,653)	-6.1%

10. Order Fill Rates

The next table summarizes on-time, complete completion of work orders in recent years by the FE Distribution Centers.

Distribution Center Work Order

DC	2017	2018	2019	2020	2021 [1]
EDC	96%	97%	95%	92%	95%
SDC	90%	95%	95%	96%	96%
WDC	95%	96%	95%	94%	94%
DC Total	**93%**	**96%**	**95%**	**94%**	**95%**

[1] through May

11. Inventory Turns

Inventory turnover measures the rate at which management replaces inventory over a given time period due to issuance for use (or due to sales for many businesses). Inventory turnover ratio measures the value of inventory issued versus the value of inventory maintained. The next table summarizes the cost of EDC issuances and of average inventory values for recent years.

EDC Issuances from Inventory

Item	2017	2018	2019	2020	2021
Value of Issuances	$71,039,533	$67,946,651	$76,927,714	$80,937,832	$71,039,533
Average Inventory Value	$59,144,255	$51,567,215	$59,651,518	$61,583,375	$59,144,255

Specifically, an inventory turnover ratio calculation divides the cost of items issued by the average cost of items in inventory for the same period. Management has calculated this ratio for ten categories of items. The next table shows the summary values for inventory turns by the three Distribution Centers and for meters overall.

Inventory Turn Rates

Entity	2017		2018		2019		2020		2021	
	Total	Net	Total	Net	Total	Net	Total	Net	Total	Net
Total	*1.31*	*1.26*	*1.64*	*1.44*	*1.44*	*1.37*	*1.11*	*1.20*	*1.31*	*1.26*
EDC	1.20	1.27	1.32	1.35	1.29	1.33	1.31	1.44	1.20	1.27
WDC	1.27	1.32	1.35	1.45	1.24	1.30	1.07	1.08	1.27	1.32
SDC	1.19	1.11	1.56	1.48	1.52	1.40	1.25	1.17	1.19	1.11
Metering	2.28	1.44	3.85	1.71	3.26	2.54	0.52	0.91	2.28	1.44

Net columns exclude transformers and meters

12. Inventory Movements

Effectively managing inventory, which varies constantly as items move in and out, requires recording of those movements to ensure optimum stock maintenance levels and sound cost control. The next table summarizes management's recording of those movements in millions of dollars. Management also reported $815,679.50 as the value of JCP&L materials having no usage in the past five years.

Inventory Movements

Year	Purchase & Issuances		Transfers		Returns	Net	Issuances Returned
	Purchases	Issues	In	Out			
2017	$52.78	($64.95)	$5.92	($0.49)	$8.17	$1.43	13%
2018	$64.33	($76.16)	$7.11	($0.38)	$8.33	$3.23	11%
2019	$81.39	($86.51)	$5.47	($0.49)	$10.02	$9.88	12%
2020	$77.78	($89.32)	$5.74	($0.96)	$8.51	$1.75	10%
2021	$22.99	($29.21)	$3.31	($1.64)	$3.06	($1.49)	10%

2021 values through May

13. JCP&L Single and Sole Source Awards

Procedures allow two means for procuring materials and services without competition:

- Single Source: a request for a designated supplier when multiple sources can supply.
- Sole Source when a single approved supplier can supply.

Business units must complete and secure approval using a Supply Chain Non-Competitive (Single/Sole Source) Justification form for requests whose commitment value equals or exceeds

$50,000. The next table shows single and sole source awards made for materials intended specifically for JCP&L use in 2020 and 2021. We examined the approval documentation for the first and third largest, finding it complete, as required by the approval form template. These procurements, low in overall number came from large suppliers of electric system equipment and parts and operating broadly geographically, except for the very small, $3,000 purchase listed in the table.

Single & Sole Source Materials Awards for JCP&L

Created	Vendor	Price	Description
3/27/2020	210045364	$68,160	P# circuit
3/27/2020	210055058	$500,000	Substation Parts
8/12/2020	140031046	$900,000	Substation Parts
1/12/2021	210040211	$50,000	Substation Breakers &Parts
8/11/2021	63840011	$3,000	*None listed*
9/13/2021	141000497	$210,200	Circuit-Switcher
10/4/2021	210044794	$12,576	Grounding Conductors
10/27/2021	210060731	$62,793	Relay Tester
Total		***$1,806,729***	

14. "Make/Buy" Decisions

FESC Business Services Groups assigned to organizations responsible for corporate, utility, and transmission groups participate in annual budget review processes. Their responsibility includes an examination of budgeted outside service costs for budgeting cost centers, including those responsible for providing services to or for JCP&L. Their review, informed by knowledge of historical trends provided by yearly repetition of the reviews, considers adherence to fiscal guidelines set for budgeting and sufficiency in maintaining service levels and in meeting department goals and objectives. JCP&L has responsibility for these reviews for outside services retained at the JCP&L level. No entity has assigned responsibility for conducting periodic reviews of JCP&L, or other FirstEnergy entities serving it, or for making decisions whether to perform activities internally or through outsourcing. Commissioning such reviews lies within the discretion of each unit/organization involved. However, FirstEnergy has undertaken reviews (such as FE Forward and FE Tomorrow) whose focus on improvement in effectiveness or efficiency have considered sources of resources.

C. Conclusions

1. FirstEnergy's consolidation of purchasing and materials management while locating materials distribution centers throughout the regions served by its operating companies has promoted economy and efficiency, without sacrificing JCP&L control over access to what its personnel need to deliver service in New Jersey.

The recent placement of purchasing and materials management responsibilities under a newly created Vice President, Supply Chain has provided for tighter coordination of these interrelated functions, eliminating the previous, anomalous reporting of warehousing and materials management for all the operating companies to an Ohio operating company president.

Significant streamlining has come to management of purchasing and materials management activities, first with the end of the need to serve commercial power and energy operations. More than a ten percent reduction had occurred by 2019. Resource reductions continued thereafter, dropping from the 2019 level of 396 to 339. Overall resources have fallen by 24 percent since 2017.

We examined inventory levels since 2017. They had generally run above target through 2020. However, inventory returned to target levels by mid-2021. The rates of timely and complete order fulfillment for the distribution center serving JCP&L has remained sound, with a small drop having occurred in 2020. Our examination of inventory movements and turn rates since 2017 disclosed no indication of recurring difficulties.

2. The central organization that conducts procurement and materials management for the operating companies, including JCP&L, employs effective policies, procedures, approval limits, systems, and practices to control procurement, warehousing, and distribution, promoting competition and economy.

Purchasing procedures became streamlined since elimination of service to a commercial power and energy business. We found them clear and reasonably concise; they establish objective and executable competition requirements. They permit sound control in exercising material and equipment purchasing, warehousing, and distribution. Industry-typical systems provide efficient, automated means for conducting these activities. Appropriate procedures limit and govern the use of purchasing cards for smaller purchases. We found the levels of management or executive approval operating under an appropriate hierarchy, with limits typical in our experience.

We also found materials management procedures sound in addressing minimization of excess inventory without jeopardizing availability, in providing for the management of spare parts, in determining appropriate stocking levels, in identifying and dealing with excess and obsolete items, and in establishing cost collectors for required work activities and expenditures. An automated system effectively identifies existing items, controls their distribution, guides replenishment, and provides for invoice verification. The system also permits identification of opportunities for transfers among Distribution Centers operating across the combined operating company footprint. Such transfers can reduce purchasing needs.

3. The numbers and values of single and sole source awards were at reasonable levels and performed under the procedures designed to manage their approval.

Adequate procedures exist to ensure review and approval of procurement awards made without soliciting competition. We found such procurements reasonably limited in number and value and processed in accord with justification, review, and approval requirements as provided by those procedures.

4. Consolidation of procurement at the FESC level provides reliable and economical access to materials and goods for JCP&L, while permitting the local utility to exercise effective control over securing what it needs to provide safe, reliable, and cost effective service to New Jersey customers.

The Distribution Center from which JCP&L requisitions equipment and materials is located about 110 miles from Morristown, NJ. It also serves operations in eastern Pennsylvania, which promotes efficient operations without compromise to ready accessibility for JCP&L. Those responsible for New Jersey operations retain sufficient ability to identify their materials needs and institute requests for them from accessible, soundly located distribution facilities. Our review of performance data indicated a reasonable level of timely and complete order filling for JCP&L.

5. **FESC has established and met diversity supplier goals overall, increasing them moderately each year; however, it fails to track diversity spend in New Jersey in any of the documentation it provided.** (*See Recommendation #1*)

A single, FirstEnergy-wide percentage goal for annual diverse-supplier spending, increasing moderately yearly, has applied. Management performance has exceeded the "target" (mid-range) level since 2019. The target percentages have increased each year from 2019 through 2021. Management also established in 2021 a development program to enhance opportunities for participation in competitions by minority suppliers, a group that had shown lagging growth in spend share.

Management, however, does not break goals down by state or operating company or by the diversity categories employed by the U.S. General Services Administration. It does track spend by U.S. GSA category. Lack of state or operating company level tracking leaves an important gap in JCP&L's contribution to diversity spend. Management makes one exception to the lack of state-level reporting. It tracks percentages achieved for Maryland spend against a quantified target. Company comments on a draft of this report stated that the JCP&L President provides diverse spend at periodic BPU meetings.

Reported spend shares in Maryland significantly surpass those achieved under the undifferentiated system-wide target. The differential raises the question of how low spending may be in New Jersey, given that Maryland-reported contribution appears well above the average. The Maryland difference also raised questions about how management sets New Jersey targets, reports against them in a manner visible across all those in the enterprise, and induces performance that meets them.

6. **Business Service Groups play useful roles in controlling the costs of common service providers who support JCP&L operations, but FirstEnergy does not employ a structured process for overseeing make/buy decisions of those serving entities.** (*See Recommendation #2)*

The activities of the Business Service groups assigned to operating companies and to common service and operating groups support budgeting, reporting, and review of costs. Moreover, FirstEnergy has continued to examine and change the structure and resources engaged in serving the electricity transmission and utility operations businesses that remain following exit from of the commercial power and energy businesses. However, a structured program for "make/buy" decisions regarding centrally supplied services does not exist.

Broadly examining many areas of contractor use each year, or repeating examinations frequently is not useful. However, there is value to be gained from performing even a very few number structured reviews more or less annually. Using common methods with the analyses coordinated by sources outside the function involved will assist in creating a culture supporting and a discipline in evaluating where and how to use outside resources.

D. Recommendations

1. Provide for clear New Jersey-specific diversity spend targets, report against them regularly and in a documented manner, and develop and execute plans for bringing it to realistically achievable state levels, should it show persistent gaps from overall measures. (*See Conclusion # 5)*

Increasing diversity spend targets regularly and programs to address lagging supplier categories demonstrate efforts to improve performance. However, combining the results across so many operations into one target can obscure circumstances of individual operating companies. The same devotion to performance improvement should extend across all the regions served by FirstEnergy's operating companies. Circumstances among them certainly differ, making achieving in each region of a single target unrealistic. Notwithstanding, management should gather and report data at a level that permits it to gauge notable lags or particular successes in New Jersey or at JCP&L.

To the extent that state or operating company specific data shows recurring gaps or strengths, management will have the ability to address those, as it began doing in 2021 for the minority supplier category. Performance of procurement on a FirstEnergy-wide basis may complicate spend measurement and assignment, but Maryland reporting shows that management has found means for doing so with a material level of confidence.

2. Assign to the Business Service Groups responsible for the corporate, utility, and transmission sourcing the responsibility for ensuring periodic make/buy reviews by common service providers. (*See Conclusion #6*)

This recommendation neither calls for nor requires a major change in activities or resources. The Business Service Groups at issue already have occasion to develop sound knowledge of the sources and trends in outside costs and their roles that aid common service providers in effectively and efficiently carrying out their activities. They should, using knowledge of trends in costs, changing internal resource requirements, and magnitudes of outside provider costs, periodically task providers with demonstrating the cost and service effectiveness where outside providers play a significant role.

The Business Service Groups should establish general criteria for performing these reviews, tailored as warranted by engagement with the serving entities to adjust them to particular needs and circumstances involved. Performance of multiple reviews yearly or frequent repetition of reviews of particular areas of operation are neither required nor useful. In contrast, a program that supports candid resource alignment revisitation through perhaps as few as one- or two-yearly studies of particular areas of use of a particular form of outside services, using sound analytics and methods, can improve efficiency without imposing significant burdens on the serving entities or added resource requirements on the Business Service Groups.

The Transformation organization offers an additional source of coordination, support, and possibly even management of the small-scale program envisioned by this recommendation.

Chapter XXI: Surface and Air Fleet Management Table of Contents

Chapter XXI: Surface and Air Fleet Management

A. Background

Vehicle management has received increased attention at utilities in recent years; focus on reducing cost increases for investments and maintenance has sharpened and vendors have responded with new options for fleet ownership, maintenance, and vehicle configuration. FirstEnergy operates an enterprise-wide Fleet Services organization that manages acquisition and disposal for all the operating companies, including JCP&L. It also provides the overall structure, processes, tools, systems, and reporting under which operating companies, again including JCP&L, manage the garaging, maintenance, and repair of the vehicles used directly in their operations. We examined the roles, organizations, management, performance, and costs at the central organization and in New Jersey, where JCP&L operates a fleet of over 1,300 vehicles.

We assessed effectiveness in providing efficient transportation service, non-stationary equipment, and vehicles. FirstEnergy also operates, as fewer holding companies do now, an aircraft fleet, under management of a separate organization and consisting of two fixed-wing jet aircraft and two helicopters. We performed a similar examination of air fleet management and operations. We reviewed how JCP&L manages its vehicle assets and resources efficiently while effectively supporting dispersed field operations.

The basic operations of an electric utility make specialized equipment designed for unique uses necessary, with transferability of vehicle use among applications complicated. Nevertheless, benefits from common fleet purchasing, maintenance and disposition have been sought through various consolidation efforts. We examined the extent to which the JCP&L fleet has maximized efficiencies from common transportation management elements, recognizing the need to maintain equipment availability for the high demands placed on fleet units, because of the need to maintain service at reliability levels necessary to meet service demands. Vendors offer alternatives, which management should periodically consider, to company-owned and operated fleet acquisition, maintenance, and disposition. We also examined how management makes use of programs to managing costs and improve vehicle availability.

Areas on which we focused included:

- Fleet acquisition and ownership/leasing practices
- Garage locations, resources, practices, and performance
- Vehicle replacement and addition planning
- Budgeted and actual expenditure consistency with operational requirements
- Vehicle availability
- Policies and practices for vehicle assignment and use
- Preventive maintenance practices
- Fuel-use controls
- Accidents and moving violations
- Continuing evaluations of the effectiveness of maintaining an internal air fleet.

B. Findings

1. Vehicle Fleet Management Organization and Staffing

The central, FESC Distribution Support Fleet Services has responsibility for approving and executing acquisition, retirement, and disposal of all vehicles, trailers, and power-operated equipment for all FirstEnergy operations, including the large fleet operated by JCP&L distribution operations personnel. Its authority extends to acquisition approval and execution. This group coordinates an annual process for identifying operating company vehicle replacements and additions. Acquisitions beyond the annual planning numbers and types use a request process managed by the central group and operate through a process for justifying the underlying need.

Individual operating company groups (FirstEnergy Utility Fleet Services Departments), however, directly manage the maintenance of vehicles assigned to them, using internal creation and approval of work orders, policies, processes, and an order creation system provided and administered by the central group. JCP&L Fleet Services also manages parts availability and third-party servicing and work for its vehicles.

The central, FESC Fleet Services group operates under the overall direction of the Vice President, Distribution (a direct report to the SVP & President, FEU). Its services include vehicle and equipment acquisition, leasing, titling and licensing, permitting, regulatory compliance, and disposal. The group operates a Management Information System. The Manager of Fleet Services directly manages the group, which consists of four technical specialists, a fleet technician, and a business analyst.

The organization responsible for maintaining vehicles in New Jersey operated under a group reporting through the JCP&L Vice President, Operation. A JCP&L Manager of Fleet Services (reporting to the JCP&L Director of Operations Support) used a staff of 55 to maintain fleet equipment in New Jersey. Four Supervisors reporting to this Manager have responsibility for the work of the service technicians and others who inspect, maintain, and repair fleet vehicles and equipment. Staffing consists of 42 fleet services technicians. 4 fleet services chiefs, 1 auto painter, and four clerks. Staffing had grown by two Fleet Services Technicians since 2017. The New Jersey Fleet and Facilities organization took on responsibility as well for Facility and Environmental activities at JCP&L. Those resources have consisted of a group of seven or eight (providing, for example, janitorial, maintenance and repair, and messenger services) and a single environmental coordinator. Company comments on a draft of this report noted that organization structure has changed subsequently in 2022. The reported changes include an increase from four technical specialists to nine.

2. JCP&L Vehicle Fleet

JCP&L has maintained reasonably consistent vehicle fleet characteristics. The next table shows that the fleet has grown by six percent since 2016.

JCP&L Vehicle Fleet Composition

Class	2017	2018	2019	2020	2021	Δ
1 - LIGHT DUTY <=8500 GVW	164	160	160	180	174	10
2 - MEDIUM DUTY 8501-17499	270	265	267	290	293	23
3 - HEAVY DUTY >=17500	50	50	54	60	60	10
4 - AERIAL TRUCKS	244	259	256	263	259	15
5 - DIGGER DERRICKS	73	77	70	69	69	-4
6 - CRANE TRUCKS	19	19	19	16	15	-4
7 - TRAILERS	312	309	312	324	326	14
8 - CONSTRUCTION	59	59	63	65	64	5
9 - MISCELLANEOUS	60	53	65	68	66	6
Total	**1,251**	**1,251**	**1,266**	**1,335**	**1,326**	**75**

The next table shows for the 1,326 vehicles in mid-2021 the portion leased, average age, and numbers of monthly repairs.

JCP&L Vehicle Fleet Characteristics

Class	No.	Leased	Age	Repairs
1 -LIGHT DUTY <=8500 GVW	174	42%	6.2	157.6
2 - MEDIUM DUTY 8501-17499 GVW	293	56%	6.8	310.2
3 -HEAVY DUTY >=17500 GVW	60	87%	10.3	44.2
4 - AERIAL TRUCKS	259	50%	6.6	576
5 - DIGGER DERRICKS	69	91%	5.7	86.4
6 - CRANE TRUCKS	15	100%	8.9	12.8
7 - TRAILERS	326	50%	19.8	90.6
8 - CONSTRUCTION EQUIPMENT	64	14%	13.9	28.4
9 - MISCELLANEOUS	66	2%	13.9	27.4
Total	**1,326**	**51%**	**10.7**	**1,334**

The next table shows JCP&L vehicle fuel use and source for the past several years. Shares of internally- and externally secured supplies have remained roughly the same and total diesel use has dropped significantly.

JCP&L Vehicle Fuel Use

Fuel	Location	2018	2019	2020	2021A	2021E	Change
Gas	Onsite	328,339	308,973	366,521	141,541	339,698	3.5%
	Offsite	113,787	105,709	127,742	50,306	120,734	6.1%
	Total	*442,126*	*414,682*	*494,263*	*191,847*	*460,433*	4.1%
Diesel	Onsite	867,490	811,009	939,181	309,850	743,640	-14.3%
	Offsite	9,065	13,182	29,771	3,167	7,601	-16.2%
	Total	*876,555*	*824,191*	*968,952*	*313,017*	*751,241*	-14.3%

2021A: actual amounts through May *2021 E: May totals annualized (x12/5)*

JCP&L locates its vehicles at 30 "Parking Locations" across the service territory, with the following comprising the largest:

- *Farmingdale: 135*
- *Wharton: 82*
- *Berkely: 76*
- *Wall: 71*

Vehicle counts at the remaining locations average close to 40, excepting one location that includes a single vehicle.

3. *Vehicle Fleet Costs*

The next chart shows stability in JCP&L's fleet services costs for the vehicles it manages. JCP&L's costs have changed at a rate similar to those of the other operating companies overall. FESC fleet costs have also remained stable, with JCP&L's share rising somewhat. However, they remained at a comparatively small $250 thousand for 2021.

Fleet Services Costs

JCP&L Fleet Services

Category	2019	2020	2021	Change $	Change %
Labor & Benefits	$6,318,373	$6,473,739	$7,000,870	$682,497	11%
Materials & Equipment	$6,577,025	$6,940,292	$8,071,670	$1,494,645	23%
Professional & Contractor	$282,121	$330,056	$146,182	($135,939)	-48%
Lease & Rental Payments	$7,409,230	$7,934,614	$7,024,676	($384,554)	-5%
Other Non-Labor	$509,551	$332,120	$49,202	($460,349)	-90%
Total JCP&L Fleet Services O&M	***$21,096,300***	***$22,010,821***	***$22,292,600***	***$1,196,300***	***6%***
Total All Operating Companies	***$113,181,597***	***$110,511,687***	***$120,407,495***	***$7,225,898***	***6%***

FESC Fleet Services

Category	2019	2020	2021	Change $	Change %
Labor & Benefits	$1,426,995	$1,569,944	$1,590,716	$163,721	11%
Materials & Equipment	$32,479	$28,532	$31,419	($1,060)	-3%
Professional & Contractor	$60,756	$5,073	$3,636	($57,120)	-94%
Lease & Rental Payments	-	$899	-	-	o%
Other Non-Labor	$78,244	$35,149	$48,344	($29,900)	-38%
Total FESC Fleet Services O&M	***$1,598,474***	***$1,639,597***	***$1,674,115***	***$75,641***	***5%***
JCP&L Share ($)	*$167,840*	*$243,808*	*$256,307*	*$88,467*	
JCP&L Share (%)	10.5%	15%	15.3%	4.8%	

The next table shows capital spending in recent years and as budgeted through 2023. Central Fleet Services spending has remained stable. As expected, operating companies' spending has proven very substantially larger; they operate the vast majority of FirstEnergy vehicles. JCP&L capital spending for vehicles jumped very substantially in 2021, but much more moderate budgets for the ensuing years produce a multi-year pattern that does not appear extreme and that indicates attention to the New Jersey utility needs. JCP&L's costs for central group vehicle capital spending come in the form of an allocation of annual amortization.

Vehicle Capital Spending

2019	2020	2021	2022	2023	Average
Service Company Fleet Services Capital					
$ 988,414	$ 956,306	$ 1,101,646	$ 1,100,000	$ 1,100,000	$ 1,049,273
Total Operating Company Fleet Services Capital					
$ 9,345,546	$ 6,228,901	$ 11,554,920	$ 5,672,553	$ 9,092,277	$ 8,378,839
JCP&L Fleet Services Capital					
$ 2,266,629	$ 1,731,939	$ 5,478,416	$ 2,435,682	$ 1,091,153	$ 2,600,764

4. *Vehicle Fleet Policies and Procedures*

The following procedures apply to the acquisition, use, and management of company vehicles:

- Fleet Services Policies and Procedures Workflows
- FirstEnergy Vehicle and Equipment Acquisition Policy

- FirstEnergy Use of Company Vehicles and Assignment
- FirstEnergy Employee Assigned Company Vehicle Policy
- FirstEnergy Company Vehicle Mileage Reporting Requirements
- FirstEnergy Company Vehicle and Equipment Hours of Use Reporting Requirements
- FirstEnergy WEX Fuel Card Policy and Procedure.

5. *Vehicle Fleet Management System*

Management employs a third-party system widely used for vehicle life-cycle management. This M5 Fleet Focus Application supports management of each asset's life cycle from acquisition to disposal. The M5 application provides work order and labor tracking, maintenance scheduling, parts and inventory tracking, dashboards and KPIs, maintenance history, fuel management, and a range of other capabilities. Fleet Services initiates work orders in M5. Mechanics who perform work under them use timecards to enter their direct and indirect labor, with subsequent review. Management performs servicing and repairs in-house, except for warranty work and under extenuating circumstances (*e.g.*, cases requiring specialized tools or parts, or where internal resources are limited).

Fleet Services also coordinates purchasing and lease initiation for all vehicles, including those maintained by JCP&L Fleet Services. Defined age and mileage criteria govern replacement for all nine vehicle asset classes used. Fleet Services coordinates an annual vehicle replacement planning process, under which each operating company's Fleet Services group identifies needs and requirements. Additional needs not included in the annual replacement process go through a business case review, producing New Unit Requests. FE utility operating company requests of less than $10,000 require approval by the utility president, with those of greater value also requiring approval by the FEU Vice President, Operations. The procedure governing acquisition addresses accounting for purchased and leased vehicles.

For leased vehicles, Fleet Services makes payment to lessors and manages accounting for costs. JCP&L Fleet Services manages receipt and payment of and accounting for invoices from vehicle parts and service providers for the vehicles it maintains and services. A procedure identifies eligibility for securing assigned vehicles, imposes obligations regarding their care and maintenance, and places limits on their use for personal reasons. Other procedures require and specify the responsibility and means for recording hours and miles of vehicle use and control the use of company fuel cards used for refueling at offsite, commercial locations.

The M5 Fleet Focus System tracks vehicles and equipment, records all work performed, sets preventive maintenance schedules and frequencies, forecasts expected work, and manages recall and warranty issues FE-wide. Each operating company's Fleet Services Department prepares its own detailed work performance plans and approves maintenance work. Use of the M5 application covers all vehicles, trailers and powered construction equipment, forklifts and UTVs. Management uses M5 to track all work performed, using work orders that capture mechanic labor, parts and service costs for each asset. Management has underway an expansion of its M5 use, adding modules for ad hoc reporting, queries, dashboards, and smart applications.

6. *Measuring Vehicle Fleet Performance*

Fleet Services tracks a variety of performance factors. They include:

- Costs per unit
- Maintenance repair factors (MRF)
- Costs per MRF
- Down time hours
- Vehicle availability factor
- Labor hours
- Direct versus indirect labor hours
- Vehicle inventory by asset class
- Full time equivalent personnel
- Preventive maintenance jobs
- Preventive maintenance jobs by mechanic
- Overdue preventive maintenance by location, duration, and priority
- Vehicles with low usage by asset class
- On-site versus off-site fueling quantities.

JCP&L's metrics have in many respects and for a number of years varied substantially from the performance of the other operating companies. JCP&L's performance across a range of categories has regularly proven the most extreme (in a negative direction) among this group. The next table shows JCP&L measurements and compares them to the other companies as a group. Total fleet costs as a function of both the number of JCP&L vehicle/equipment units in total and weighted by repair needs (MRF) have comprised or come close to maximum values, proving well above average. JCP&L ratios measuring numbers of mechanics and total staffing (FTEs) have similarly well exceeded average and often proven the maximum for the operating companies. Preventive maintenance activities performed per employee show a similar pattern. Finally overdue maintenance has consistently exceeded average and low use vehicle factors have more recently come to do so as well.

JCP&L Comparative Fleet Metrics

Area	Metric	2021		2020		2019		2018		2017	
		JCP&L	v. Avg.	JCP&L	v. Avg.	JCP&L	v. Avg.	JCP&L	v. Avg.	JCP&L	v. Avg.
Fleet Services Costs	Total Actual	$22,292,600		$22,010,821		$20,034,258		$20,692,802		$20,002,657	
	Total Plan	$23,193,934		$22,685,891		$22,965,347		$22,076,345		$21,970,280	
	Actual/Plan	96.1%	4%	97.0%	2%	87.2%	0%	93.7%	-1%	91.0%	-5%
	Cost/Unit Actual	$17,374	19%	$17,297	27%	$16,649	14%	$17,603	10%	$16,888	7%
	Cost/Unit Plan	$17,994	15%	$17,621	23%	$19,025	11%	$18,779	12%	$18,549	14%
	Actual/Plan	96.6%	4%	98.2%	3%	87.5%	3%	93.7%	-1%	91.0%	-5%
	Actual Cost/MRF	$5,591	20%	$5,589	28%	***$5,217***	12%	$5,445	6%	$5,441	7%
	Plan Cost/MRF	$5,807	16%	$5,729	25%	***$5,972***	9%	$5,809	8%	$5,810	10%
	Actual/Plan	96.3%	4%	97.6%	2%	87.4%	3%	93.7%	-1%	93.7%	-3%
Availability	Year Average	92.9%	2%	93.2%	2%	92.7%	2%	94.8%	0%	96.1%	1%
Labor Factors	Units/Mechanic	31	-18%	33	-11%	28	-22%	28	-22%	30	-23%
	Units/FTE	25	-17%	26	-13%	23	-21%	20	-26%	23	-15%
	PMs/Mechanic	191	-21%	174	-24%	172	-21%	13	-24%	17	0%
	MRFs/Mechanic	98	-17%	101	-12%	90	-19%	93	-15%	96	-18%
	MRFs/FTE	78	-16%	82	-10%	73	-18%	67	-18%	69	-17%
Maintenance	Units Overdue	14.2%	196%	24.2%	278%	6.9%	35%	14.3%	361%	13.5%	187%
Low-Use Vehicles	≤250 miles	45.6%	1%	49.6%	11%	41.3%	-4%	42.3%	not avail	36.0%	not avail
	0 Miles	42.7%	22%	43.1%	25%	33.5%	2%	30.2%		21.7%	

Highest or Lowest Value | Below Average | Better than Average

Management has conducted no benchmarking or assessing of vehicle fleet management costs or performance since at least 2017.

7. *Vehicle Accidents and Violations*

The total and at fault numbers of vehicle accidents have fallen significantly in recent years, as the next table summarizes. Moving violations have remained at moderate levels.

JCP&L Vehicle Accidents and Violations

Year	Number[1]	At-Fault	Violations
2017	54	26	3
2018	43	18	0
2019	34	10	10
2020	27	12	6
2021	2	1	0

[1] JCP&L, Affiliates, and Contractors
[2] Through May 2021

8. *User Satisfaction with Fleet Vehicles*

Management has not undertaken any studies of employee satisfaction with company vehicles or vehicle support since at least January of 2017.

9. *Air Fleet*

The First Energy fleet of fixed wing aircraft numbered three at the end of 2017 - - two Citation XLS+ I planes bought in 2011 and a three-engine Dassault Falcon 900LX jet purchased in February 2016. By the start of 2020, Flight Operations had added another Dassault Falcon 900LX (bought in December 2018), but disposed of the two Citations. Replacement of the older Dassault Falcon with one purchased in July 2020 left the fixed wing fleet at its current two aircraft. This Dassault model reportedly has a configuration typically accommodating 12 passengers, with costs recently reported in the range of $16 million for a 2010 model and $38 million for a 2021 model. FirstEnergy also acquired two (typically five-passenger) Bell 429 helicopters in the first half of 2021, with recent reports showing the cost of new units at $6.4 million.

A 2018 benchmarking exercise conducted for FE by a leading outside firm as part of an initiative to restructure corporate and service functions to support a narrower, utility-based business found FE in the minority in employing a corporate air fleet:

- Of a benchmark group of eight other electric utility holding companies having between $10-$20 billion in market capitalization, only two had corporate jets
- Of a benchmark group of eight other electric utility holding companies with 5-15 states of operation, three had corporate jets

10. Flight Operations Organization and Staffing

The Director, Flight Operations and a staff of 25 have responsibility for the FE aircraft fleet. The director has three reports who lead multi-person groups:

- Chief Pilot, with a staff of nine
- Chief Pilot, Helicopter, with a staff of three
- Manager, Flight Maintenance, with a staff of five.

Other reports include a flight logistics lead, a flight scheduler, an aerial asset coordinator, an asset consultant, and two assistants. Additional helicopter pilot an aerial coordinator positions remained open at the time of preparation of this report. Staffing has grown by somewhat about one half from 2017's complement of 17. Adding two additional helicopter pilots and resources to address asset control and helicopter administration activities have contributed to the increase in personnel.

Management reported only a small level of service to FES, prior to transfer of its assets and operations to third-party Safe Harbor as a result of bankruptcy proceedings.

11. Flight Operations Costs

The next table summarizes flight operations costs over the past five years.

FirstEnergy Flight Operations Costs

Cost Source	$/%	Year						2017-2020 Change	
		2017	2018	2019	2020	2021 Q3	2021 Est.	$	%
Payroll, Overheads, Benefits	$	$2,635,306	$2,900,210	$3,066,080	$3,388,803	$2,674,314	$3,565,752	$753,496	28.6%
Charges t/f Others (FESC & non-FESC)		$14,231	$30,067	$20,316	$13,346	$28,623	$38,164	($885)	-6.2%
Dues, Fees, Licenses		$43,600	$69,306	$90,898	$113,087	$30,855	$41,140	$69,487	159.4%
General Business and Travel		($2,885,380)	($2,443,017)	($3,189,488)	($1,957,713)	($1,660,432)	($2,213,909)	$927,667	-32.2%
Materials and Equipment		$86,046	$23,727	$45,013	$47,451	$460,041	$613,389	($38,595)	-44.9%
Leases and Rentals		$5,147,217	$4,566,709	$6,550,918	$8,143,131	$6,494,105	$8,658,807		
Other Non-Labor		$3,502,572	$6,955,752	$345,935	$1,165,123	($2,026,006)	($2,701,341)	($2,337,449)	-66.7%
Professional and Contractor		$387,468	$398,477	$454,230	$392,479	$811,314	$1,081,752	$5,011	1.3%
Total		**$8,931,059**	**$12,501,232**	**$7,383,902**	**$11,305,707**	**$6,812,815**	**$9,083,753**	$2,374,648	26.6%
Change from Prior Year	*$*		**$3,570,173**	**($5,117,330)**	**$3,921,805**		**($2,221,954)**		
	%		**40.0%**	**-40.9%**	**53.1%**		**-19.7%**		
JCP&L Share	*$*	**$914,680**	**$1,208,869**	**$1,203,030**	**$1,595,235**	**$824,741**	**$1,099,655**	**$680,555**	**74.4%**
	%	**10.2%**	**9.7%**	**16.3%**	**14.1%**	**12.1%**	**12.1%**		**1.9%**
Change from Prior Year	*$*		**$294,189**	**($5,839)**	**$392,205**		**($495,580)**		
	%		**32.2%**	**-0.5%**	**32.6%**		**-31.1%**		

12. Aircraft Use

Flight Operations had operated a shuttle service between offices in Reading, Pennsylvania and Akron, Ohio, but has suspended that service since the onset of COVID-19. The next table summaries reported 2021 flight hours for the fixed-wing and helicopter fleet (percentages are of non-training flight hours).

2021 Air Fleet Flight Hours

Use	Flight Hours	Use	Flight Hours
[redacted]	[redacted]	[redacted]	[redacted]
Maintenance	65.8 (10%)	Training	55.7 (8%)
Training Flights	54.0 (not app.)	Special	11.4 (2%)

Recommendation III-13 of the management audit reported in June 2011 called for management to:

> *Perform a lease versus own analysis and submit it to the BPU Audit Division to justify the benefits and costs of maintaining and in-house FE flight operation showing various lease/own options. Included among the details should also be included JCP&L's own portion of such benefits and costs.*

Management reported this recommendation's status as completed on November 21, 2013, following submission of a "Flight Operations Analysis." The six page analysis provided to us consisted of a comparison of full ownership, fractional ownership, lease, and jet-card options, with the analysis "…supporting the current ownership structure of the FE aircraft fleet as currently comprised and configured." The study information provided appears to have considered the costs on a total FE basis and not to have considered commercial alternatives. Management reported in response to our January 18, 2021 request that COVID-19 consequences and staff availability had delayed the planned 2020 start of the next, similar study, which had begun the month of our request, with an expectation of completing it in April 2022.

C. Conclusions

1. Centralized management of vehicle acquisition and disposal has offered an effective and efficient means for managing the costs associated with those activities.

The split of responsibilities between the central and the operating company fleet services organizations provides an effective means of controlling and promoting efficiency and economy in vehicle acquisition and disposal. Annual acquisition/replacement/disposal planning coordinated by the central organization has provided an analytically sound means for identifying and meeting fleet requirements, while providing means to address promptly in-year vehicle needs that emerge.

Leaving to JCP&L the responsibility for managing the fleet it employs and placing the functions involved under the JCP&L executive who leads operations at the New Jersey utility keeps management close to the source of operations, while providing a source of oversight and review from Akron.

Surface fleet staffing and cost have remained stable. They have grown by 2.5 to 3 percent yearly since 2019.

2. Fleet services uses sound methods to manage its surface fleet, subjects its performance to regular measurement, and employs a reasonably comprehensive set of metrics to gauge performance in surface vehicle management

Management employs an appropriate array of procedures, a leading fleet management system, and a comprehensive set of performance metrics in managing vehicle acquisition, disposal, and maintenance. The applicable procedures broadly cover the material aspects of fleet management. Management employs and regularly reports on a suitable range of metrics for assessing cost and performance of operating company management, maintenance, and repair and of vehicle numbers and availability by class.

The procedures employed and the metrics used address fuel use. The procedures provide controls to optimize company supplies and control outside purchases. Fuel use data show material reduction in annual diesel fuel use. Management also tracks vehicle accidents and moving violations. Their nature and number in recent years showed no evident reason for concern.

3. Surface vehicle costs for the central group and for JCP&L Fleet Services have both remained stable, but New Jersey cost and performance metrics compare highly unfavorably with those of the other operating companies. (*See Recommendation #1)*

Management has stated that its examination of performance data does not show uncharacteristic performance at JCP&L when compared with the other operating companies. However, our review of performance metrics shows that JCP&L performance consistently from 2017 through 2021 compares notably unfavorably across the range of metrics used to measure performance. Isolated yearly exceptions under specific metrics do not undercut the observation that the data alone evidence a large and sustained performance gap, with JCP&L measures not only well above average, but often the least favorable among the operating companies.

Similarly, labor factors that measure work units performed to personnel show a similar pattern, identifying low productivity as a potential cause for high cost performance. Less dramatically, but still observably, the percentage of JCP&L vehicles exhibiting low use (mileage) has also run above average. Overdue maintenance, however, has comprised an area of very significant underperformance as compared with the other operating companies. Difference in vehicle type and use and approaches to maintenance may account for at least some of the difference, but the variances are large enough to warrant careful study.

Management has not undertaken benchmarking or other comparative assessments of fleet management costs or performance since at least 2017. Nor has it attempted to validate through a structured analysis that internally performed versus contracted fleet services provides the optimum balance of costs and vehicle availability and reliability.

4. Central planning and management processes support the identification and meeting of JCP&L fleet needs and the data show no lack of support for providing sufficient numbers and types of vehicles.

The annual planning process promotes an orderly and analytically sound means for identifying acquisition and replacement needs. A process for responding timely to emergent needs for replacement of additional vehicles exists. The JCP&L vehicle fleet has grown 75 vehicles (six percent) since 2017. A return to historical levels of fleet capital spending for the 2022 and 2023 budget years has followed a one-time increase in 2021.

5. Examination of the cost effectiveness and other advantages of maintaining an air fleet is overdue and needs to consider its elimination. (*See Recommendation #2*)

Flight operations staffing and costs have increased substantially since 2017. Management has not revisited since 2013 its analysis of air fleet costs. Moreover, that 2013 study appears not to have considered elimination of private flight options, limiting itself to ownership, lease, and jet card options for retaining access to private transport. The air fleet, while small, consists of expensive units whose ownership, operation, and maintenance impose substantial costs. For example, the 2021 JCP&L-only share of Flight Operations costs amounted to $1.6 million in the last full year (2020) for which we had information. Costs through the third quarter of 2021 had run at a pace whose continuation would place them in the range of $1.1 million, but still substantially above the 2017 JCP&L cost share of $915,000.

Management reports that it had planned to commence an analysis of costs in 2020, but delayed its commencement to January 2021 - - the month of our inquiry about the subject. The brief and summary information provided about the 2013 analysis suggested that it considered options for providing, but not eliminating private air transport capability. Benchmarking conducted in 2018 for FirstEnergy found it then in the minority in maintaining a corporate air fleet. Adding the substantial costs that JCP&L pays annually for that fleet requires that the study consider not just options for maintaining private air transport but for eliminating it. A shuttle service ferrying employees between Reading and FirstEnergy has not operated recently due to COVID-19 considerations. The cost and other impacts of that suspension form proper elements of the study that has recently begun.

6. The absence of a structured system for user feedback about vehicle performance, availability, and suitability for intended use misses an opportunity to manage the fleet more effectively. (*See Recommendation #3*)

Other metrics provide a comprehensive means for assessing fleet effectiveness. Employees who use vehicles have continuing and direct opportunity to observe vehicle conditions, performance, and suitability. Taking formal input on concerns or problems at the time of an immediately following use would supplement them with information gained by those with direct knowledge of how they perform and what emergent conditions or circumstances should inform management about their care, maintenance, and possibly even fitness for particular circumstances in which they get used.

D. Recommendations

1. Conduct a focused examination of the reasons why JCP&L Fleet Services cost and performance metrics compare unfavorably with those of the other operating companies, accounting for differences among the operating companies. (*See Conclusion #3)*

JCP&L costs per vehicle and per unit of work performed and its units of work performed per person have remained much higher than those of the other operating companies (and very frequently the highest) since 2017.

JCP&L should conduct a detailed analysis of the drivers of its costs (total and unit) and work performance measures to determine if and how they can be improved. That analysis needs to consider not just internal improvement measures, but also the potential for outsourcing components of work now performed in-house.

Apart from the $7-8 million JCP&L incurs yearly for lease and rental payments, its Fleet Services costs amount to $14-18 million. Even moderate savings have the potential to produce lower costs of $1 million or more.

2. **Include in the examination reportedly underway the option of reducing or eliminating the current air fleet.** (*See Conclusion #5)*

FirstEnergy should not take as a given the retention of sources of private air transport in some form as a limiter on its review of costs and benefits. The examination it reports as now underway needs to include a robust examination of the cost changes that would result from partial or total fleet elimination. To the extent that private transport options provide benefits not available through commercial options, their specific nature, the personnel whose travel produces those benefits, and the value of those benefits should be explicitly identified, described, and quantified to support a clear and convincing analysis of the available options.

3. **The absence of a structured system for user feedback about vehicle performance, availability, and suitability for intended use misses an opportunity to manage the fleet more effectively.** (*See Conclusion #6)*

Employee use of vehicles can produce uniquely available information about performance quality, consistency, utility, and emergent issues or problems. Management should develop an easily-used form for reporting such matters as vehicle users find occasion or reason to do so. Compelling regular trip forms would not comprise an effective use of user time, but providing the option to report observations through a structured format easy to complete will provide another source of information useful in optimizing vehicle availability and utility. Management should complement this ad hoc reporting capability with periodic surveying designed to secure more broadly based input about performance quality, consistency, utility, and emergent issues or problems.

Chapter XXII: Power Supply and Market Conditions Table of Contents

Chapter XXII: Power Supply and Market Conditions

A. Background

This chapter addresses a group of power supply and market condition subjects:

- Power supply organization, resources, strategy, operations, and allocation of costs to customer classes
- Market conditions
- Capacity contracts and operating agreements with affiliates
- Affiliate relationships for power supply and representation of JCP&L interests at PJM and the FERC.

We evaluated supply-related and other procurement activities by and for JCP&L generally. We also examined any non-BGS supply elements (*e.g.*, acquisitions to supplement BGS supply, internal generation, supply from qualifying facility (NUG) contracts). We examined where responsibility lies for power supply for JCP&L and its efficiency and effectiveness and its responsiveness to the needs of JCP&L and its customers. We examined the allocation of BGS costs among customer classes.

Many other FirstEnergy businesses play or have played roles in PJM markets and have interests in matters falling under FERC jurisdictions. The affiliates of JCP&L include nine other EDCs, and entities that provide transmission, distribution, and other related delivery services within PJM. We examined how management of PJM- and FERC-related issues considers and applies the distinct interests of JCP&L. We considered the ability to represent JCP&L customer interests within PJM, versus those of its affiliates.

The nature of JCP&L's energy procurement, essentially a function of BGS Auctions, makes the following the principal elements that define the market conditions on which our examination focused:

- Historical BGS Auction prices for JCP&L and the correlation between them and regional energy and capacity prices - - to address whether the supplier pool and auction process have produced Auction prices reflecting market conditions
- Historical BGS Auction prices relative to those of the other New Jersey EDCs - - to understand relative prices for BGS customers
- Information about competitive suppliers (TPS Companies) and associated customer switching data - - to identify and explain or reconcile, where possible, the difference between BGS and TPS Company costs to retail customers.

B. Findings

1. Organization and Staffing

FirstEnergy manages PJM activities centrally, with no direct engagement by JCP&L personnel. Four principal organizations (each headed by a director) have regular PJM responsibilities. All four report to the Vice President, Compliance & Regulated Services, who in turn reports to First Energy's Senior Vice President, Operations. One of these four organizations, Policy and Support, moved from External Affairs into this group in the second half of 2021. The responsibilities of the four Compliance & Regulated Services organizations comprise:

- A ***Regulated Settlements*** group of 15 creates aggregate customer load information for PJM use in making wholesale market settlements, calculates and processes monthly supplier invoices for BGS (and the "non-shopping" customers of the other operating companies with retail competition), and validates PJM invoices for the operating companies
- A ***FERC & RTO Technical Support*** group of 16 communicates and supports the positions of FirstEnergy transmission operations at PJM and serves as the central contact for those seeking to interconnect supply resources with FirstEnergy facilities. This group also provides interconnection support, developing, negotiating and filing agreements with regulatory agencies.
- A ***Policy and Support*** group of 7 communicates and supports FirstEnergy positions on PJM markets-related matters and issues and performs analysis, develops policy, and prepares materials supporting advocacy of "corporate" energy policy at the FERC and at PJM.
- A ***Regulated Commodity*** group of 10 conducts competitive power and renewable procurements for the operating companies, ensures compliance with renewable portfolio standards, manages any required non-utility purchase power agreements, and manages load serving entity requirements in those states that have not introduced retail competition.

The last group, Regulated Commodity, divides into two sections, each under a Manager, one of whom participates in BGS process support and oversight. However, the resources directly engaged in the New Jersey process consist mostly of personnel from the third-party Auction Manager, which has served in the role for more than 20 years. The Regulated Commodity group operates under established procurement plans approved by each individual state's regulatory commission. Regulated Commodity's New Jersey responsibilities include execution of Supplier Master Agreements resulting from BGS Auctions. Should a BGS Auction fail to secure the targeted amount of required load, or a supplier default on a commitment, Regulated Commodity would also have responsibility for executing established plans to ensure adequate supply.

Across FirstEnergy's operating companies, Regulated Commodity duties also include, where applicable:

- Auction Revenue Rights (ARR) and financial transmission rights management
- Development of commodity portfolio risk management strategies and their execution
- Remaining PURPA and NUG agreement management
- Renewable energy credit strategy creation
- For Mon Power only, certain load obligations in the PJM energy and capacity markets.

2. *PJM Participation*

The PJM stakeholder process affects the capacity and energy and the demand response markets across the region. The roughly 1,000 PJM members (about half of them with voting rights) fall into sectors that include Electric Distributor, End-Use Customer, Generation Owner, Other Supplier, and Transmission Owner. FirstEnergy has one vote on the two central committees that operate under the PJM Board of Managers: the Members Committee and the Markets and

Reliability Committee. The 10 FirstEnergy operating companies are non-voting Affiliate Members - - six as Electric Distributors and four (including JCP&L) as Transmission Owners. Mid-Atlantic Interstate Transmission LLC, PATH Allegheny Transmission Company LLC, Trans-Allegheny Interstate Line Company, and ATSI are Transmission Owner members, with Allegheny Energy Supply, L.L.C. a Generation owner member.

PJM states that the Members Committee:

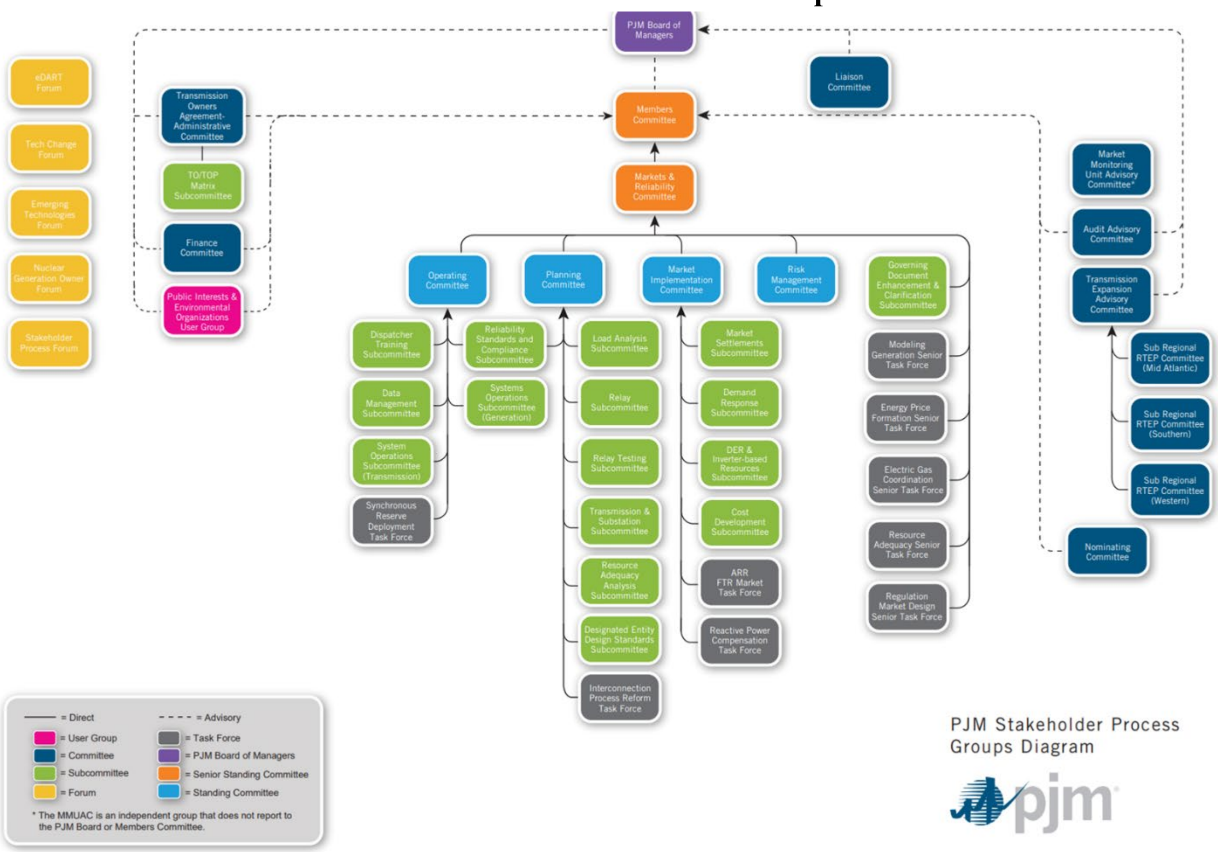
> *reviews and decides upon all major changes and initiatives proposed by committees and user groups. The MC provides advice and recommendations to PJM on all matters relating to:*
> - *the safe and reliable operation of the PJM grid,*
> - *the creation and operation of a robust, competitive and non-discriminatory electric power market, and*
> - *ensuring there is no undue influence over PJM's operations by any member or group of members.*

PJM states that the Markets and Reliability Committee:
ensures the continuing viability and fairness of the PJM markets as well as the reliable operation and planning of the PJM grid. The MRC:
- *works with PJM and other committees on matters related to the reliable and secure operation of the PJM system,*
- *assures the continued ability of member organizations to operate reliably and economically,*
- *ensures the fairness of PJM markets, and*
- *reviews proposed changes to the rules and procedures of the Operating Agreement.*

Under the umbrella of the Board of Managers and these two overarching committees, PJM employs more than 15 committees (and many other subcommittees, task forces, and other bodies) to manage planning and operation of the grid and related functions, with the next chart illustrating the relationships among the sub-entities that guide PJM's operation:
- Audit Advisory
- Finance
- Liaison
- Market Implementation
- Market Monitoring Unit – Advisory
- Markets & Reliability
- Members
- Nominating
- Operating
- Planning
- Risk Management

- Subregional Regional Transmission Expansion Planning (RTEP) Committee - Mid-Atlantic
- Subregional RTEP - Southern
- Subregional RTEP - Western
- Transmission Expansion Advisory
- Transmission Owners Agreement-Administrative.

PJM Stakeholder Process Groups



Other holding companies with a broad range of electric distribution companies and transmission providers (and even generators) operating within PJM have employed procedures that address participation in PJM committees and that address methods for ensuring that positions taken reflect input from the full range of subsidiaries, addressing their unique circumstances and interests. We did not find such guidelines at FirstEnergy. All-told, PJM operates nearly 50 committees, subcommittees, user groups, task forces, and forums. FirstEnergy has not placed any JCP&L employees on any of them, stating that "no JCP&L employees currently address PJM activities."

3. BGS Auctions

Customers of each of New Jersey's four electric distribution companies (EDCs) have the opportunity to choose a TPS Company or remain a supply customer of the EDC through the Basic Generation Service (BGS). Regardless of that supply choice, however, JCP&L delivers it to customers. Supply procurement consists of energy (kWh), capacity, ancillary services, renewable energy credits (RECs) and other components associated with power supply. New Jersey employs a BGS Auction that provides a highly controlled and prescriptive process for BGS supply procurement. Central BGS Auction management and simultaneous execution occurs for all New Jersey EDCs. A third party manages and controls the auction process, with no EDC control or influence. JCP&L therefore does not direct procurement and purchasing of energy to serve its customers supply-related needs. The third party BGS Auction Manager and the third party Auction Monitor, in conjunction with BPU oversight, have responsibility for the procurement of adequate supply to New Jersey BGS customers at prices that reflect market conditions in a competitive environment. JCP&L also plays no role in the supply activities for TPS customers, but does remain responsible for providing seamless delivery regardless of supplier.

The BGS Auction process serves as the cornerstone of power supply at JCP&L and the other New Jersey EDCs as it supplies all energy used by the JCP&L customers who do not chose competitive suppliers. BGS Auction design seeks to produce reliable supply, competitive conditions, and prices that reflect energy and capacity markets. No NUG or other bilateral contracts sources of supply exist. JCP&L transferred in mid-2021 its last remaining source of "in-house" generation, its 50 percent interest in the Yards Creek 420MW pumped-storage hydroelectric plant in Warren County, New Jersey. JCP&L's last NUG purchase obligation ended in early 2017. JCP&L continued to receive an allotment of output from NYPA's St. Lawrence Power Projects through January 2020.

The four New Jersey EDCs (Atlantic City Electric, JCP&L, PSE&G, and Rockland Electric) have procured supply under the BGS process procurement since 2002. The statewide BGS Auction takes place in February of each year and for all four EDCs simultaneously. The BGS Auction secures offers broken into two primary customer segments based on customer type and size:

- Residential and Small Commercial Pricing (BGS-RSCP, previously known as BGS-FP through 2015)
- Commercial and Industrial Energy Pricing (BGS-CIEP).

The following three charts detail 2020 retail load served by JCP&L by revenue (in dollars), energy supplied (in MWh), and peak demand (in MW).

JCP&L Retail Revenue

Customer Class	$	%
Residential	1,096,539,115	67.1%
Commercial	460,284,393	28.2%
Industrial	59,781,440	3.7%
Public Street and Highway Lighting	16,391,083	1.0%
Total	1,632,996,031	100.0%

JCP&L 2020 Energy Sales

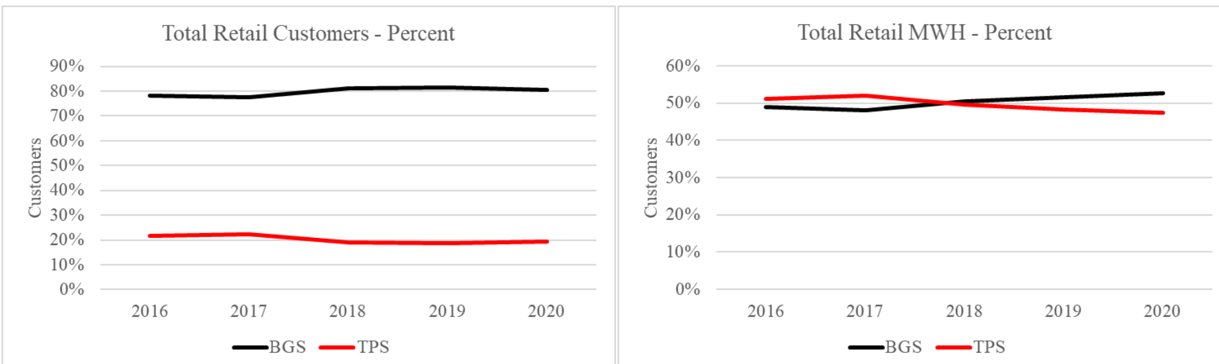
Customer Class	MWh	%
Residential	9,745,754	49.1%
Commercial	8,073,168	40.6%
Industrial	1,958,417	9.9%
Public Street & Highway Lighting	90,830	0.5%
Total	19,868,169	100.0%

JCP&L 2020 Peak Demand

Customer Class	MW	%
Residential	3,304	63.7%
Commercial	1,626	31.3%
Industrial	259	5.0%
Public Street & Highway Lighting	0	0.0%
Total JCPL Zone *	5,190	100.0%

BGS serves some of this load and TPS Companies the remainder. The shares served by TPS Companies have remained stable across the last five years, measured as a percentage of customer numbers (20 percent) and energy (MWh) provided (50 percent). These shares show, as expected, the greater propensity for larger customers to select third party service options.

JCP&L Retail BGS and TPS Customers



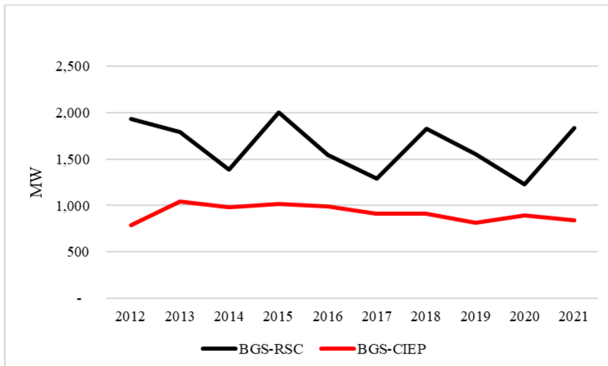
BGS Auctions employ a descending clock auction (DCA) approach - - more complex and iterative than standard sealed-bid auctions or time-limited dynamic auctions that seek specific dollar per MWh bids for supply. The DCA method requires prospective suppliers to win tranches of load by accepting prices paid to serve, a number that "descends" in each round until settling. As the price to serve load declines in subsequent bidding rounds, suppliers may drop out of the competition. This continues until the number of tranches offered by suppliers matches the number of blocks required by each of the EDCs.

By contrast, the single bid approach used in many jurisdictions requires suppliers to offer their best price without the pricing or competitive information that multiple DCA bidding rounds provide. Support for the DCA method generally lies in the belief that it furthers spurs competition among suppliers, if so, leads to lower final auction prices.

It takes year-round preparation and response to make the once-per-year New Jersey BGS Auctions function. Data, systems, supplier interaction, and turning bids accepted into formal contract obligations take substantial work, again, largely performed by the outside Auction Manager's resources.

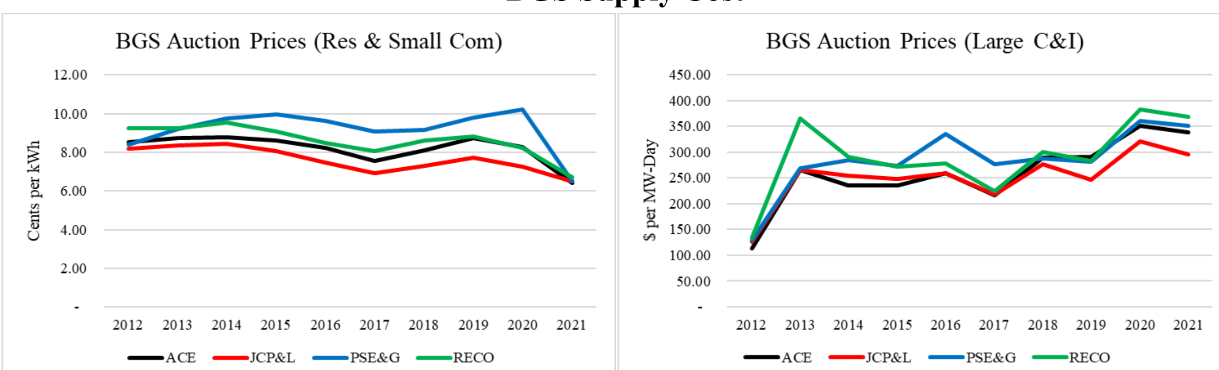
BGS supply for JCP&L takes a "full requirements" scope, covering requirements for the entire BGS load that eventuates. No other source of supply to BGS customers has been used, and the contracts entered cover energy, capacity, ancillary services, renewable energy credits (RECs), and losses to the JCP&L service territory. When it took NUG delivery and before the recent disposition of Yards Creek and St. Lawrence River (NYPA), management moved the power and energy resources they provided in wholesale markets and JCP&L addressed associated revenues and costs through the non-utility generation cost (NCG) rider. The next chart displays the peak load procured through the BGS auctions for service to JCP&L's retail customers.

JCP&L BGS Load



The next figures show the actual cost of this supply, based on the BGS prices achieved at auction.

BGS Supply Cost

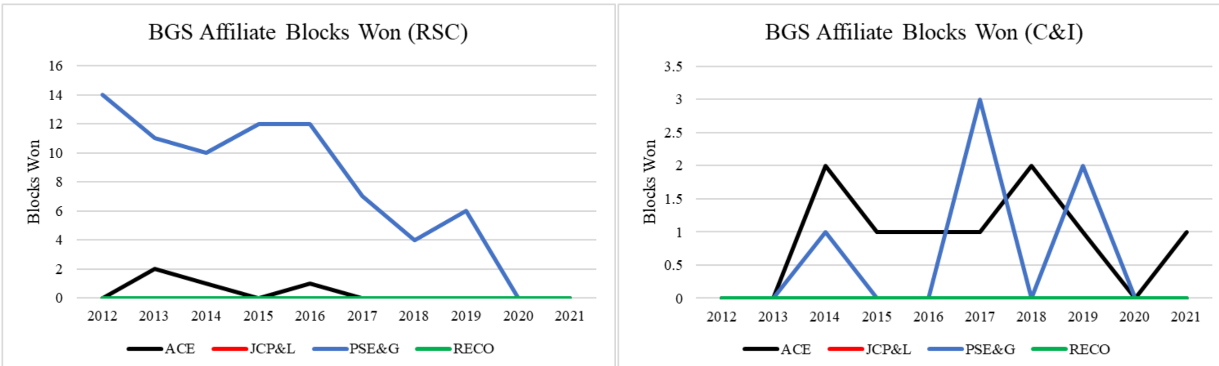


Throughout the period of this data set, up until the results in 2021, JCP&L has been the low-cost provider of BGS supply of the New Jersey EDCs, because it has secured the lowest BGS Auction prices. We found the New Jersey BGS Auction process robust and competitive, attracting a large pool of suppliers bidding and substantial diversity among those who win at each Auction. Thirty different suppliers have served BGS load of the New Jersey EDCs over 10 years. JCP&L BGS load has come from 19 of them over the same period, with seven different ones supplying in 2020 and in 2021. These data reflect a degree of supplier participation and diversity indicative of a competitive market and process.

The BGS process provides results integrity through sound structure and controls. Moreover, JCP&L has no affiliates that have won or, given FirstEnergy's current business composition, are in a position to win BGS competitions. Circumstances differ for other New Jersey EDCs. PSE&G's affiliate PSEG Energy Resources & Trade and ACE's affiliates Exelon Generation

Company and Constellation Energy Commodities Group have each won BGS Auctions to serve customers of their affiliated New Jersey EDCs. The following chart shows blocks of BGS power served by affiliates of each New Jersey EDC over the last 10 years.

Affiliate BGS Blocks Won by Affiliates



No New Jersey LDC had RSC BGS blocks served by affiliates in 2021. Only ACE had BGS blocks served by an affiliate in 2021. Overall, affiliate transactions of BGS procurement are very low within New Jersey, and non-existent at JCP&L.

4. *Allocating BGS Costs*

Procuring supply for BGS customers occurs under the direction of the third-party Auction Manager, but FirstEnergy Compliance & Regulated Services resources (described in the *Organization and Staffing* section above) manage invoice review and payment activities associated with BGS suppliers. A detailed Supplier Purchase Power Invoice Process lays out the process for creating and validating invoices, to reflect actual supply apportioned to each supplier for meeting their shares of BGS load. The process sets timelines and calls for executing defined tasks for each phase of the invoicing procedure.

Two separate riders provide for the recovery of BGS costs:

- Rider BGS-RSCP – Basic Generation Service – Residential Small Commercial Pricing applies to Service Classifications RS, RT, RGT, GS, GST, OL, SVL, MVL, ISL and LED
- Rider BGS-CIEP – Basic Generation Service – Commercial Industrial Energy Pricing applies to Service Classifications GP and GT and certain customers under Service Classifications GS and GST.

JCP&L makes direct allocations of these unique RSCP and CIEP costs, but using different bases for each:

- For Rider BGS-RSCP Service Classifications: to each classification according to its forecasted sales by season, on/off peak and block if applicable, per the NJBPU approved rate
- For Rider BGS-CIEP Service Classifications: by Locational Marginal Price (LMP) for the JCP&L zone, with an addition for plus fixed ancillary costs, and with identical capacity costs charged on a per MW-day basis for all classifications, as determined by the BGS-CIEP auction.

BGS cost recovery also includes:

- Any administrative costs incurred in providing BGS-RSCP and BGS-CIEP service.
- Costs for procuring necessary services capacity, energy, ancillary services, transmission, RPS compliance and other expenses related to the Contingency Plan
- Any offsets received from defaulting suppliers or their providers of credit security
- Payments to PJM for Transmission and Transmission related charges, directly allocated to each classification based on transmission peak load share by voltage.

5. Historical BGS Auction Prices and Market Conditions

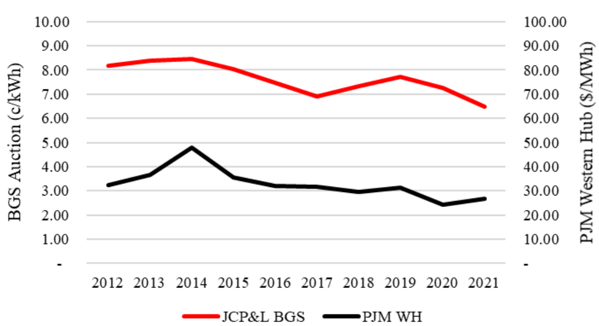
We reviewed market pricing history and developments over the past 10 years of BGS Auction operation for JCP&L Residential & Small Commercial (BGS-RSCP) and for Large Commercial & Industrial (BGS-CIEP) customer groupings. Many market parameters have driven BGS-RSCP Auction prices; *e.g.*, wholesale energy forward prices, PJM capacity prices, and New Jersey REC prices. To a lesser degree, losses as energy travels over distances to customers and auction revenue rights (ARRs) affect Auction prices as well.

Forward wholesale energy prices have proven the most significant price driver for JCP&L's BGS-RSCP pricing. However, the PJM capacity market has had a more significant impact for BGS-CIEP Auctions. Auction prices have reflected the cost of serving the capacity, with an adder for the real-time PJM price for actual energy consumed by CIEP customers.

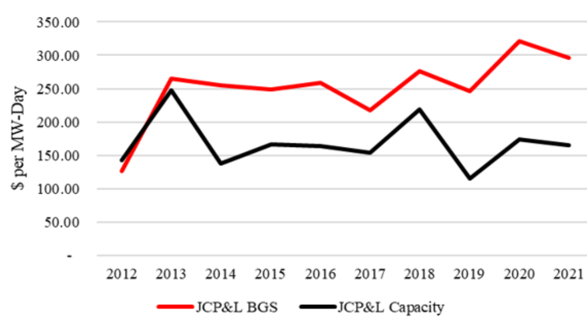
We gathered RSCP and CIEP Auction price results for the past 10 years. We plotted RSCP values against annual average PJM Western hub prices. We show RSCP pricing in cents per kWh and Western Hub forwards in dollars per MWh.

BGS Prices vs. PJM Western Hub Prices

RCSP



CIEP

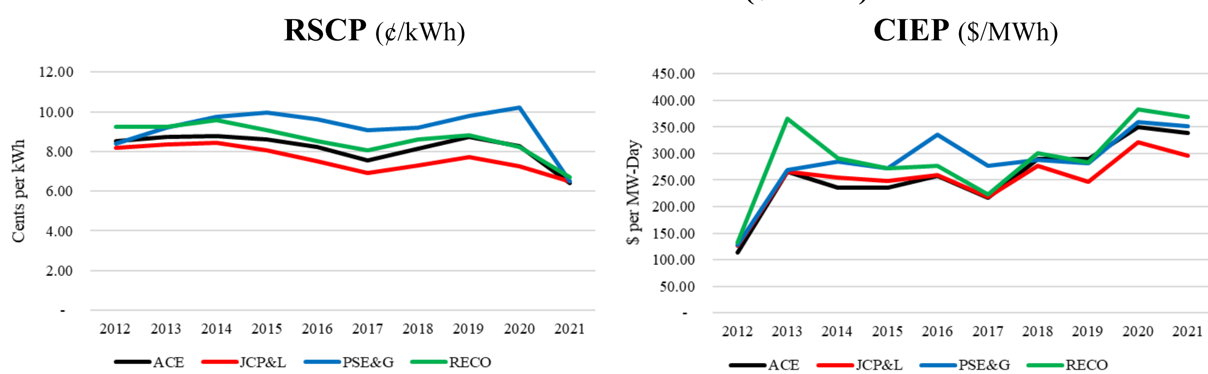


The RCSP chart shows its BGS pricing tracking PJM Western Hub prices fairly well, declining from approximately 8 cents per kWh in 2012 to just over 6 cents per kWh in 2021. The BGS Auction price included transmission service through 2020, but excluded it from the BGS pricing in 2021. This result conforms to trends in wholesale energy prices at the Western Hub. The CIEP chart shows that its pricing in dollars per MW-day primarily reflects the capacity component of the CIEP customer bill, with spot market real time energy price and ancillary service cost and other adjustments made to that base. CIEP Auction prices have proven more volatile than RSCP prices because of two key factors. First, RSCP contracts procured at the Auction employ a rolling three-year basis (one-third of the total portfolio gets replaced each year). This approach tempers the price volatility that buying 100 percent of requirements each year would produce. Second, capacity prices forming the base for CIEP contracts have proven subject to very large changes from year to year. The preceding chart shows the expected tracking of CIEP prices and capacity prices over time.

6. Historical BGS Auction Prices vs. Other NJ EDCs

We also reviewed the 10-year history of prices of the BGS Auction for RSCP and CIEP classes for all New Jersey EDCs, in an effort to gauge the relative prices between the companies. The following two charts display the results.

BGS-RSCP Auction Prices ($/MWh)



The data support two important observations. First, the curves for each of New Jersey's four EDCs run similarly in direction, generally rising or falling each year as a group. This commonality indicates that market parameters have driven pricing for all four similarly. Second, the data show that JCP&L has generally benefitted from the low cost BGS New Jersey supply costs for its BGS-RSCP and its BGS-CIEP groups.

7. Third Party Suppliers

Energy and capacity market conditions affecting JCP&L generally typify those of the PJM Interconnection as a whole. Over the last several years, all of PJM has benefitted significantly from a large generating capacity margin and historically low natural gas prices, driven in very large part by hydrofracking that, at least through the present, has brought abundant supply.

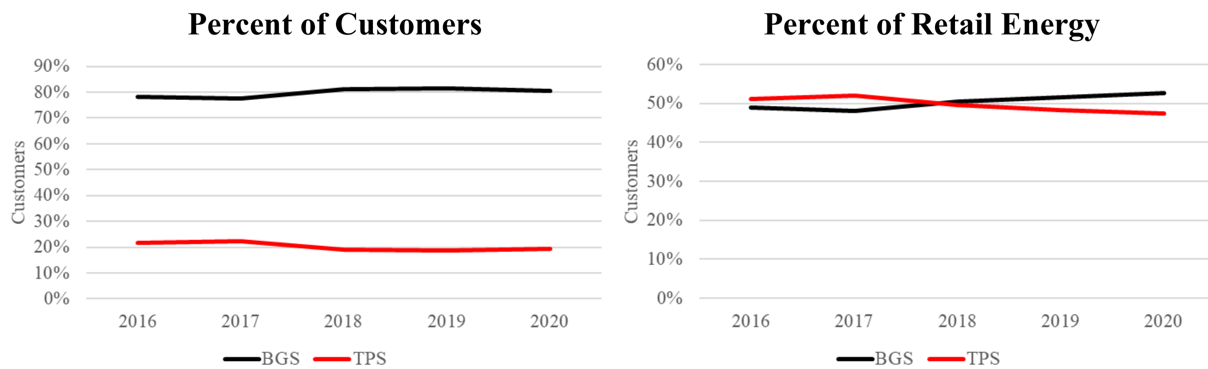
TPS Companies compete for retail load by offering customers an alternative to EDC-offered BGS. Retail customers have a robust set of options; some 80 companies offer supply in the JCP&L service territory. These companies provide, at their discretion, an alternative supply to the Residential, Commercial, and Industrial classes, with most companies serving more than one class. Additionally, TPS Company offerings may seek to compete on a "commoditized" basis, offering prices lower than those available for BGS supply. Alternatively, they may, for example, compete on an environmental premium basis, offering renewable energy as part of supply, generally at a premium price to reflect the higher cost of renewable versus non-renewable energy. Some TPS

Companies use both these approaches to distinguish their offerings. Many of them also offer both 12-month and 24-month contract options.

8. Third Party Suppliers and Customer Communication

Customers who opt out of JCP&L's BGS do so by signing up with a third party supplier for generation service. We reviewed data on customer switching to gauge market penetration. The following two charts show snapshots of the percentages of JCP&L customers and of MWh served by TPS Companies.

JCP&L Customers Served by Third Party Suppliers



Measured both ways, the competitive environment has remained stable. Only small yearly changes have occurred in customer numbers and in energy supplied by TPS Companies. The percentage of retail customers in all classes who have left BGS has hovered at approximately 20 percent. The share of MWh served by competitors has run at a higher level, roughly 50 percent. Larger customers have demonstrated the greater appetite one would expect for non-BGS options.

Of the 80 third party suppliers identified as competing in the JCP&L service territory, 63 serve residential customers, 77 serve commercial customers, and 58 serve industrial customers. JCP&L provides basic information to customers inquiring about third party supply, to support their ability to make informed choices. Further, the BPU provides third-party supply information and links through the "NJ Power Switch" website.

JCP&L's tariff provides specific requirements for JCP&L interaction with its customers relative to TPS and with competitive suppliers. (See BPU No.13 Electric – Part II, Sheet No.36, Section 11, Third Party Supplier Standards). Prospective and existing customers have access to substantial web-based information. That information includes educational material, the price to compare, a licensed generation supplier list, and external energy choice links for customers. See https://www.firstenergycorp.com/customer_choice/new_jersey.html.

Most TPS Companies offer "regular" energy supply consistent with BGS, but ostensibly at a lower price. Many also offer a renewable product comprised of energy produced from renewable sources. Many also provide the option to sign up for either a 12- or 24-month contract term. The following table shows an example of a TPS Company that offers "regular" and renewable options across three of the EDC jurisdictions. This offering is typical.

A Typical 12-Month TPS Contract

EDC	Regular	Renewable
JCPL	11.75	12.25
ACE	14.19	14.69
PSEG	15.79	16.30

(c/kWh)

This example shows first an expected premium for the renewable product (over the regular option) of this provider for the customers of each EDC to whom offered. Second, it shows that prices across the EDCs vary, with pricing for JCP&L's customers the lowest.

9. Capacity Contracts and Operating Agreements

Traditionally, JCP&L, like a broad group of U.S. electric utilities, had contracts with qualifying facilities. The power and energy supplied under those contracts have diminished over time, with all JCP&L obligations terminated or expired by early February 2017. The last contract, terminated at that time was with Manchester Renewable Power Corp. (MRPC). JCP&L regularly reported on measures to mitigate costs under its NUG contracts through April 26, 2017, after the termination of its final contract.

JCP&L also had, along with the other New Jersey EDCs, a pro rata share of a small contract for seven megawatts from the New York Power Authority. It came from the 912MW hydro-powered St. Lawrence/FDR Project on the St. Lawrence River dividing New York from Canada. This very small entitlement ran from February 28, 1990 through January 31, 2020.

JCP&L also had a 50 percent interest in New Jersey's 420MW Yards Creek pumped storage project. JCP&L and PSEG Fossil LLC, the other half-owner, closed on a sale of Yards Creek to U.S. power and energy infrastructure owner LS Power in March 2021.

C. Conclusions

1. The organization and staffing employed to manage power supply procurement for JCP&L is appropriately small, given the process and resources applied to the BGS process and auctions in New Jersey.

BGS procurement operates under a highly prescriptive process outside the control of JCP&L (or any New Jersey EDC) management. A third party Auction Manager has broad responsibility for conducting the Auctions and supporting BGS processes year round, with oversight provided by a third party Auction Monitor. Groups managed at the FirstEnergy Service Company level provide the resources need from JCP&L (*e.g.*, BGS supplier invoice management). FirstEnergy Service Company also provides resources that coordinate and manage the activities required for PJM participation and in representing the interests of FirstEnergy's variety of operations before the FERC and in ensuring compliance with FERC requirements. This centralization of resources, which has been accompanied by reasonable stability in recent years, promotes both economy and effectiveness in the performance of the functions conducted and managed at the FirstEnergy Service Company level.

2. Despite overall effectiveness and efficiency, FirstEnergy does not employ procedures that provide sufficiently for JCP&L participation in development of positions at PJM or before the FERC. *(See Recommendation #1)*

FirstEnergy, as typifies other holding companies operating within PJM, has a single vote on the two central committees. Like those other large holding companies in PJM, FirstEnergy operates (or has operated) businesses that have distinct and different interests in PJM operations and for that matter in issues under the jurisdiction of the FERC. Among such entities precedent exists for employing what we view as best practice and as necessary for ensuring that JCP&L's distinct interests get heard before positions are taken before PJM or the FERC. That precedent and practice calls for formal processes that give JCP&L an ability for direct expression of its own interests as part of the process of forming and then expressing those views. One cannot even equate the interests of all the FirstEnergy distribution companies, let alone equating the interests of JCP&L with transmission and supply operations - - some do and some do not have transmission interests, according to how PJM lists their membership.

3. With JCP&L obligated to procure supply for full requirements for BGS customers through New Jersey's auction process, it has no other material power supply functions.

Power supply procurement at JCP&L occurs through the well-established and effective NJ BGS auction process. Accordingly, JCP&L has no management responsibility for the results of the Auctions. Even when it had sources of generation; *i.e.*, prior to the 2021 sale of its half interest in Yards Creek, it used wholesale markets to make its capacity and energy available.

JCP&L is charged with serving BGS customers with full requirements, but the process by which this is done removes control from the NJ EDCs to a third party Auction Manager. As such, there is no review of the efficacy of the process that indicates a reflection of BGS management.

4. JCP&L's BGS Auction prices have for some time remained the lowest in New Jersey.

The BGS Auction results have remained consistent in that JCP&L receives the lowest cost BGS Auction prices of the four New Jersey EDCs.

5. JCP&L appears to have remained appropriately indifferent to customer choice through TPS Companies; as an EDC, JCP&L has neither control nor interest in "competing" for customers.

JCP&L operates as an energy delivery company that procures its power through the BGS auction, and delivers the power in a regulated wires business what does not face any risk from TPS Companies. Neither our review specific to this chapter nor any other aspect of our work found actions inconsistent with the indifference that comprises a proper stance for the circumstances.

6. Many options exist for retail switching and customers have much information available.

Options are abundant in terms of the number of third-party companies, renewable alternatives, and contract terms. JCP&L follows Board orders for timely and effective communication of third-party options with customers, maintaining an agnostic approach, not recommending BGS vs. TPS, and not recommending any particular provider. Communications make reference to a web-based, Board-sponsored third party supply information repository.

7. JCP&L provides clear, accurate, timely, and easy-to-use communications channels with TPS Companies.

JCP&L's processes and procedures for interacting with TPS Companies are clearly communicated and available online.

8. JCP&L retail customer statistics indicate TPS switching stability.

The relative number of retail customers that are served by BGS and by TPS has remained fairly flat over the last several years, as has the number of MWh served.

9. Smaller customers are more likely to be served by BGS and larger customers are more likely to be served by TPS.

Approximately 20 percent of all retail customers use TPS for supply, but this group represents approximately 50 percent of retail load.

10. JCP&L has no NUGs nor does it have any contracts or operating agreements with affiliates for supply.

The last of JCP&L's legacy NUG contracts ended in 2017. JCP&L had for some time a share in rights to seven megawatts from a large, St. Lawrence River hydro generating facility. Even before the prorating of that small entitlement among the New Jersey EDCs, the amount as not material. In any event, it ended in 2020. No contracts or operating agreements with affiliates exist.

D. Recommendations

1. Establish a formal process, supported by clear procedures, that gives JCP&L a forum for addressing its circumstances, issues, concerns, and recommendations on Market, PJM, and FERC matters on which FirstEnergy may or will take positions, whether publicly or in formal proceedings on matters in which PJM solicits member input. *(See Conclusion #2)*

Best practice recognizes that not all of the subsidiary types in an energy utility with multiple avenues of participation face the same circumstances or have the same interests. Traditional examples include power and energy supply, transmission, and distribution; emergent ones include alternatives like distributed energy resource interconnection. FirstEnergy does not follow that practice; our inquiries did not disclose any substantive or formal means for introducing JCP&L's circumstances and views into the process of forming FirstEnergy positions for public dissemination or presentation in formal proceedings or other fora that invite industry participation.

FirstEnergy should create formal procedures that regularly engage JCP&L personnel in addressing more general subjects and issues that have technical, operating, regulatory, and cost implications for JCP&L retail customers.

That engagement should recognize the interests of New Jersey stakeholders and regulators in what drives services and costs covered by the rates customers pay, whether the source of the underlying costs are distribution-only related or not. At least until the FERC or PJM declare that the voice of distribution utilities or of end-users who foot the bill for transmission costs through retail rates should not be heard, it is important for holding companies to ensure that their corresponding internal voices (their distribution operating companies) are heard in deciding what posture to assume on service and cost affecting issues that agencies like the FERC and bodies like PJM resolve.

The point of this recommendation is not to tilt the balance of resolution of issues that cut in different directions for different parts of the FirstEnergy business. It is only to ensure a process that promotes holistic determination. However, given the interests of the BPU in setting rates for end users, and also recognizing the interests of FirstEnergy in expanding its transmission business to enhance returns, it does become important to document execution of the process through periodic regular reporting to the BPU, in order to demonstrate not the success of JCP&L in controlling internal outcomes, but in contributing to them.

Finally, it will certainly be the case that schedule constraints will in some number of instances at the FERC or at PJM make impracticable the necessarily more deliberative process contemplated by this recommendation. That is why we recommend applying it to emergent issues and open discussions before matters become part of a FERC cases or subject to looming PJM votes, fora, or other "events." That is also why we recommend relocating FirstEnergy's PJM voting authority and combining it with execution of this recommendation generally. Should that happen and become a standard way of doing the business involved here, concern about decisions made on too narrow a basis would become substantially mitigated.

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A. Background

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), passed by the U. S. Congress in late 1980 and patterned to some degree after New Jersey's Spill Compensation and Control Act of 1976, established a broad liability scheme that holds past and current owners and operators of facilities from which a release of a hazardous substance occurs financially responsible for cleanup costs, natural resource damages, and the costs of federal public health studies. Production and purification processes for gas manufactured from coal or oil yielded byproducts and residues that contained several such substances.

JCP&L and its predecessor companies acquired, owned, or operated manufactured-gas plants (MGPs) at various sites throughout New Jersey. JCP&L has engaged in the investigation and remediation of the sites of these plants since 1982, when it first became aware that some of the soil and groundwater at the sites might contain residues from MGP processes. Investigations revealed partial or complete responsibility for 19 sites.

In late 1946 or early 1947, New Jersey Power & Light Company, a predecessor company of JCP&L, sold one of those sites to City Gas of New Jersey, a predecessor of Elizabethtown Gas Company (ETG). Later in 1947, New Jersey Power & Light sold a second site to City Gas. Today, JCP&L conducts remediation for both sites, but ETG pays 40 percent of the costs.

In 1952, JCP&L sold most of its gas operations, including 10 MGP sites, to New Jersey Natural Gas Company (NJNG). In the 1980s, JCP&L and NJNG initiated remediation investigations at those sites under administrative consent orders or memoranda of agreements with the New Jersey Department of Environmental Protection (NJ DEP). At that time, the two companies shared responsibility and costs for the sites - - 60 percent JCP&L and 40 percent NJNG.

By the late 1990s, the two companies began discussing separating responsibility for the sites in order to improve remediation efficiency. They reached a Separation Agreement that became effective on February 1, 2000. Under that agreement, NJNG took responsibility for two sites and JCP&L took the other eight.

Three different entities, the Town of Red Bank, the New Jersey Department of Transportation (part of the site lies under the approach to a bridge), and a private party, own a site in Red Bank. JCP&L has entered late stages of finalizing an agreement to "deed-restrict" the site, leaving the contamination in place. The site undergoes monitoring, and JCP&L may have some responsibility for sampling.

1. JCP&L Responsibility

The following table lists the 19 sites, the current owners, and the entities that share cost responsibility for remediation. The table also provides JCP&L's latest estimate of its ultimate cost responsibility for each site. Costs shown for the Long Branch and Toms River sites, currently owned by and the responsibility of NJNG, comprise JCP&L's costs prior to the Separation Agreement.

JCP&L MGP Sites with Estimated Total JCP&L Costs

Site Name	**Current Owner(s)**	**Remediation Cost Responsibility**	**Estimated Total JCP&L Costs** ($)
Asbury Park	JCP&L, Boys & Girls Club of Monmouth County	JCP&L	11,791.182
Belmar	Borough of Belmar	JCP&L	25,302,737
Boonton	private owner	JCP&L	11,453,116
Cape May	JCP&L, City of Cape May	JCP&L	38,193,271
Dover	JCP&L	JCP&L	37,211,762
Flemington	Elizabethtown Gas Company	JCP&L 60% ETG 40%	9,360,586
Lakewood	JCP&L	JCP&L	19,106,324
Lambertville/LaRochere	private owner	JCP&L	5,596,347
Long Branch	New Jersey Natural Gas Company	NJNG	4,162,580
Newton I	Elizabethtown Gas Company	JCP&L 60% ETG 40%	9,734,362
Newton II	JCP&L	JCP&L	18,041,241
Ocean City	Atlantic City Electric Company	JCP&L	14,714,422
Phillipsburg	private owner	JCP&L	3,900,856
Red Bank	Town of Red Bank, New Jersey Dept. of Transportation, private owner	JCP&L	3,756,763
Sea Isle City	JCP&L	JCP&L	40,843,738
Toms River	New Jersey Natural Gas Company	NJNG	2,245,527
Tuckerton	JCP&L, private owner	JCP&L	5,988,583
Washington	JCP&L	JCP&L	10,880,504
Wildwood	Wildwood Housing Authority	JCP&L	12,302,816

2. *Insurance Recovery*

The Company achieved five settlements with insurance carriers on coverage claims for MGP remediation expenses. Payments under the five settlements have totaled $38.1 million.

Two of the settlements also covered claims for environmental risks to JCP&L and its affiliates unelated to JCP&L's former MGPs. Those claims included potential environmental claims against affiliates MetEd and Penelec in Pennsylvania, and non-MGP environmental claims against JCP&L. GPU Energy allocated $2 million to those claims, with the balance ($36.1 million) credited to JCP&L's MGP deferred balance.

The insurance litigation, settlements and recoveries occurred during the 1990s. The parties to the Company's Remediation Adjustment Clause (RAC) proceedings considered all issues concerning those claims, settlements and recoveries, including crediting recoveries to the Company's deferred RAC balances, in proceedings in the early 2000s. The 2003 RAC Stipulation, approved by the NJ BPU in orders dated August 1, 2003 and May 17, 2003, resolved issues relating to JCP&L's MGP costs and related insurance recoveries for purposes of determining JCP&L's net deferred RAC balance at December 31, 2002.

3. Remediation Progress

The size of a former MGP, the length of its operation, and the number and type of gas holders, contribute to the physical and chemical nature of contamination. Certain contaminants of highest concern (non-aqueous phase liquids, or NAPL) fall under specific regulations regarding their remediation, which makes those requirements an important driver of remediation cost. Property ownership also comprises an important driver; ownership affects access, ability to implement particular options, and schedule. NJ DEP regulations require that the owner of a residential or commercial property agree to the remediation strategy used, which affects the soil and groundwater standards used, and the technology applied.

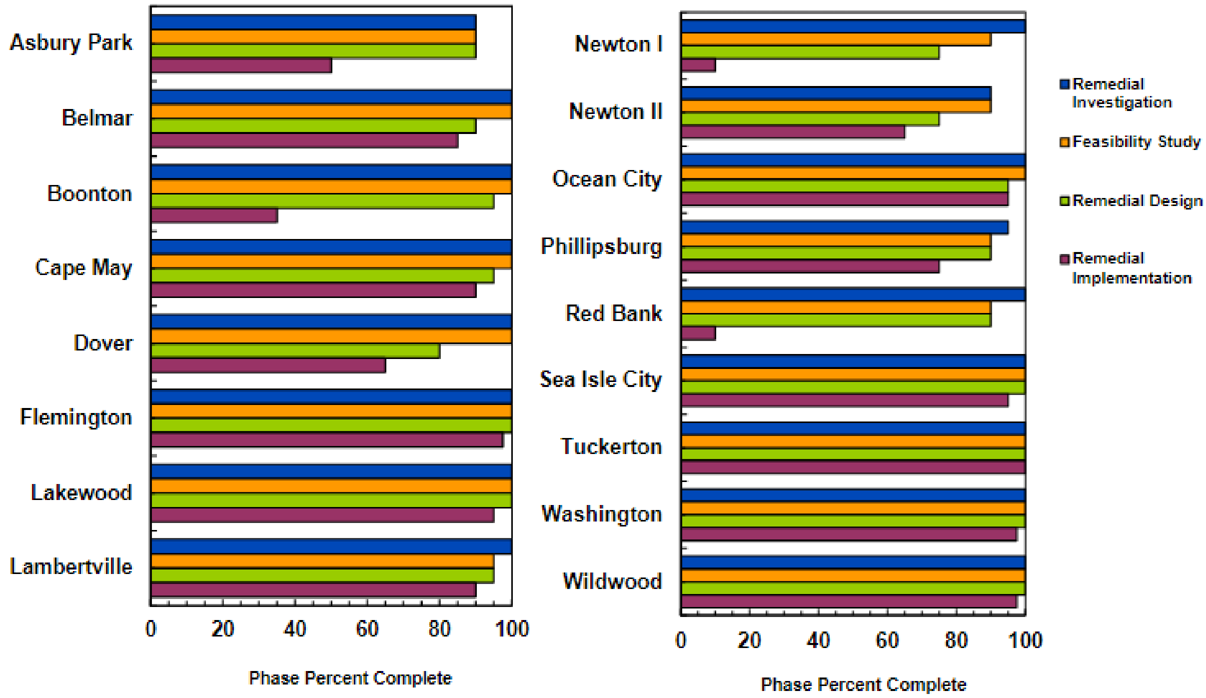
Remediations typically progress through four phases:

- Remedial Investigation
- Feasibility Study
- Remedial Design
- Remedial Implementation.

The Remedial Investigation and Feasibility Study phases often become iterative, with investigations resulting in findings requiring further investigation. Feasibility studies may reveal that a possible solution will not work at a location where it is being tested. Other sites, particularly those since converted to other uses, may require extended negotiations to obtain access necessary to conduct remediation activities. Thus, work at some sites nears completion while others continue to require considerable additional work.

The following chart provides a qualitative description of remediation progress for each of the 17 sites addressed by JCP&L. The appendix to this chapter shows a comparison between the initial budgets and actual expenditures for the year. Note that, as explained below, JCP&L does not report to the BPU budgeted versus actual expenses in this manner.

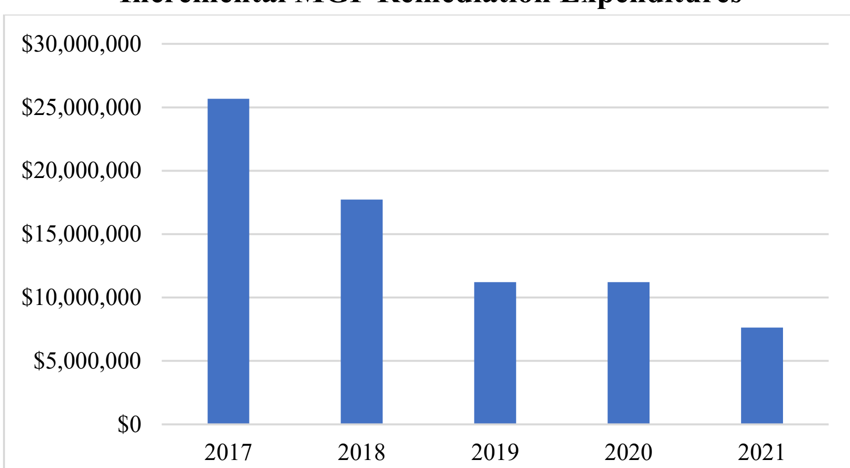
JCP&L MGP Site Status as of February 2022



Notes: Long Branch and Toms River Sites transferred to New Jersey Natural Gas in 2000.

The chart below shows incremental expenditures in each of the past five years. Peak remediation activity occurred in 2017-2018. The Company expects completion of major activity with accompanying expenditures by 2024 or 2025. Operation and maintenance expenditures such as ground-water monitoring will continue for some years after that, with expenditures lower for that phase.

Incremental MGP Remediation Expenditures



FirstEnergy's SEC Form 10-K for 2020 reports estimated remaining expenditures as $67 million.

4. Cost Recovery

The BPU has allowed jurisdictional companies to recover remediation costs since the early 1990s. JCP&L's costs are now recovered through a RAC, which comprises part of its Societal Benefits Charge. Costs accumulate as incurred, with amortization over seven years. Carrying costs bear an authorized interest rate equal to the rate on seven-year constant-maturity U. S. Treasuries, as shown in the Federal Reserve Statistical Release on or closest to January 1 of each year, plus 60 basis points, compounded annually as of January 1 of each year.

Expenditures through 2020 have totaled \$218.8 million, plus \$7.5 million for Program Management. The RAC balance remaining for recovery at year-end 2020 totaled \$67 million. The 2020 Rider RAC petition, filed October 1, 2021, included BPU-approved expenditures through 2019 and requested recovery over seven years of remediation costs of \$11.2 million. The proposed 2020 Rider RAC factor increased slightly from the prior year. The filing for 2020 also provided for recovery of \$11.2 million. JCP&L and the parties to the filing of its Rider RAC component of the Societal Benefits Charge proceedings submitted a Stipulation of Settlement on August 2, 2022, whose terms the BPU approved through its August 17, 2022 Order.

5. NJ BPU Review

The Company files a large amount of information about Program expenditures as part of its annual petition for review and approval of those expenditures. That information undergoes examination over a number of months by the NJ BPU Staff and the New Jersey Division of Rate Counsel. Approval typically comes via a stipulation among the parties regarding recovery of the expenditures. In approving the stipulation, the BPU finds the Company's MGP remediation work prudent, and the resulting costs reasonable and prudent.

6. Prior Management Reviews

The previous management and operations audit addressed the Program in 2011. That review found management of the Program reasonable, but recommended reviewing the Program's project-management method for improvement. It also recommended periodic internal audits. FirstEnergy's Internal Auditing group (IA) now reviews the Company's MGP Remediation Program every three years. In 2021, IA reviewed a sample of invoices from 2019 and 2020, to validate compliance with contract billing terms and conditions, approvals, accuracy and adequate support. The review found overall controls adequate, but identified a relatively minor sales tax issue to address.

7. This Review

The parties to the Company's Societal Benefits Charge proceedings examine Program expenditures in detail. Our review focused on how the Company organizes and executes the Program, tracks costs for budget and management purposes, and captures costs for accounting and regulatory review. Our review proceeded along four major lines of inquiry:

- Program Organization and Staffing
- Company Role in Program Design and Execution
- Program Control and Record-Keeping
- Interaction with Government Authorities.

B. Findings

1. Program Organization and Staffing

a. Within FirstEnergy

A Remediation and Environmental Services Group conducts remediation for all FirstEnergy MGP sites, most of which lie in New Jersey. The Group's Supervisor serves as subject matter expert for groundwater-related environmental matters across FirstEnergy. The Group's purview includes some non-MGP issues, such as non-radiological environmental liabilities at the site of the Company's former Oyster Creek nuclear power plant.

The Supervisor and one of the four Project Managers operate as FirstEnergy Shared Services employees. The other three Project Managers serve as employees of environmental-services contractors assigned full-time to work for JCP&L. The Group also currently includes an administrative assistant, provided through a temporary-employment agency. Two of the individual Project Managers have changed but all other elements of the Group's organization and staffing remain the same as at the time of the previous management audit.

The Supervisor reports to the Manager of Remediation and Environmental Services, the Director of Environmental, and ultimately to FirstEnergy's Vice President, Utility Services. Written monthly reports cover developments at each of the Company's MGP sites, including any discussions with the NJ DEP, community groups, and County and Municipal authorities. Twice a year, the Group provides written reports to JCP&L's Board of Directors. Those reports include brief summaries of expected activities at each MGP site over the next six to nine months, plus brief summaries of any other JCP&L environmental issues.

The four Project Managers report to the Supervisor. Each of the four has responsibility for one or more MGP sites, with occasional assignment to other FirstEnergy environmental projects as needed.

b. Staffing

Staffing remains as at the time of the previous management audit, except that two of the four Project Managers changed -- one left the Company and another retired – and the Group added an administrative assistant.

The Group's professional personnel have strong qualifications. The Group's Supervisor has more than 35 years of experience in management of environmental projects and programs, starting with the company in 1998 and first taking his current role in 2010. The Group has responsibility for the annual rate filing addressing recovery of remediation costs; all costs to date have secured authorization for recovery. The Supervisor did similar work for 13 years before coming to FirstEnergy, with responsibility for more than 100 projects.

The four Project Managers also have strong qualifications. The one FirstEnergy employee has worked with the Group since finishing college in 2009. The three contractors have 20, 30, and 36 years' experience in environmental project design and management. All have at least B.S.-level university degrees in Earth Sciences, and two have M.S. degrees.

The Program also employs a dedicated community-relations consultant. That person works with local officials and interests to disseminate information and organize information sessions and other community meetings as needed. That person also operates a hotline for the Program, to address telephone inquiries, and to respond to telephoned concerns about the Program or about operations at a particular site.

2. *Company Role in Program Design and Execution*

2022 marks 40 years since JCP&L began addressing its MGP remediation liability. In recent years, the organization and staffing of the Remediation Program has remained very constant, with reporting relationships within the Company, and three of the Company's five key managers, remaining in place since at least 2010-2011. As a consequence of this lengthy history and organizational stability, the Company's Remediation Program shows high maturity, as it progresses steadily through its remaining tasks.

JCP&L assigns each site to one of its own Project Managers. That person's responsibilities include the planning, budgeting, permitting and design of investigation and remediation activities at assigned sites and regulatory and community-relations aspects, such as liaison with the NJ DEP, county and municipal officials, and property owners. The Project Managers also provide programmatic support, such as assisting with NJ BPU rate-recovery filings.

The Company's Project Managers build a team for each site to design, plan and implement investigation and remediation activities. The team for each site consists of a Site Lead Consultant with overall responsibility for investigation and remediation activities at that site, plus execution contractors to carry out work that the Site Lead Consultant designs in consultation with the Company's Project Manager.

Since 2012, each site team includes a Licensed Site Remediation Professional (LSRP). Created by New Jersey's Site Remediation Reform Act of 2009, the LSRPs serve as on-site NJ DEP representatives to oversee investigation and remediation activities. The LSRPs effectively administer the laws and regulations governing remediation, and consider all NJ DEP-developed guidance in addressing issues and questions that arise in the course of planning and executing a remediation. The LSRPs also submit "milestone" reports to the NJ DEP as a remediation proceeds.

a. Company Efforts to Circumscribe Liability

The scope of remediation work at each site results from an investigation designed to delineate the impacts directly attributable to that site and the MGP residuals there. Drilling soil borings, installing groundwater monitoring wells, soil and groundwater sampling and analysis, and surface-water and sediment sampling and analysis comprise the principal delineation activities. Vapor intrusion studies, ambient air sampling, private well surveys and identification of potential ecological receptors support assessment of potential pathways of exposure. NJ DEP regulations and guidance govern these activities, but the results define the scope of company responsibility for remediation.

Site investigation involves phases that often prove iterative. The Project Manager and the Site Lead Consultant work together to define phases designed to delineate the extent of MGP-related impacts in all environmental media at each site. For each phase, the Site Lead Consultant develops a work plan and cost proposal for review and execution after company approval.

Following data collection, review, and documentation, the Project Manager and Site Lead Consultant prepare a written report that evaluates identified MGP impacts and defines their extent. The report also covers any pollutants discovered in the investigation that fall outside JCP&L's responsibility. This analysis forms an essential input to design of remedial alternatives.

The NJ DEP does not formally accept or approve these reports. The data and analysis in them form the factual and analytical bases for the LSRPs' milestone reports to the NJ DEP. Other particular reports, such as vapor intrusion investigations, and applications to the NJ DEP for remedial action permits, also use the information in the reports.

JCP&L, as the primary Responsible Party for each MGP site, must identify and investigate any off-site sources of contaminants migrating onto an MGP site, and any non-MGP contaminants found on a site. With data and information from the investigation, a site's LSRP, working on behalf of the Company, and the NJ DEP review the information and decide how to proceed. If comingled impacts cannot be sufficiently identified or distinguished, or are small in nature and extent, the NJ DEP likely would request JCP&L to include those impacts in its site remediation plan. If an off-site source can be located and distinguished, the NJ DEP will direct the Responsible Party to investigate and remediate the source. If that does not prove possible, the NJ DEP may choose to put that source into its publicly funded remediation program.

b. <u>Remediation Design, Planning, Cost Estimation</u>

During the iterative program design and execution stages the Company's Project Manager and the Site Lead Consultant work together to design phases to delineate the extent of MGP-related impacts at each site. For each phase, the Site Lead Consultant develops a task-specific statement of work, with a cost estimate. Bids are then sought from subcontractors to perform the work. After contractor selection, the Site Lead Consultant performs direct oversight of field activities.

With results from investigation phases, the Site Lead Consultant develops remedial alternatives for presentation to the Company's Project Manager and Program Supervisor. Presentations include cost estimates and address factors that include:

- Access
- Schedule
- Ease of implementation
- Potential for long-term operation and maintenance
- Preferences of property owners
- Permanence of remedy
- Known or potential future property use.

Larger or complex sites can involve multiple remedies to meet requirements and circumstances, such as multiple owners and multiple intended uses for portions of a site. JCP&L personnel make final decisions regarding remediation at each site, with input from the Site Lead Consultant and other resources (*e.g.*, FE Legal personnel).

JCP&L considers experience on other sites the principal tool for guiding cost control. Analyzing recent experience drives expectations about what different aspects of investigation and remediation should cost. Company Project Managers and the Supervisor spend considerable time analyzing cost experience.

Positive surprises about costs come from new technologies. One new technology, *in situ stabilization*, eliminates considerable requirements for soil removal, and prevents contamination from migrating through groundwater.

Most negative surprises come from how much of a substance is considered hazardous, and what remaining concentration of a substance constitutes an acceptable remediation. Control strategies have largely become settled, but standards may undergo modification as more becomes known about the effects of particular pollutants on human health. Changes in regulations and standards can create differences in actions needed. For example, between project initiation and completion, there could exist a need for change in applying for soil permits and groundwater permits that are required for specific remediation activities.

c. Remediation Execution

JCP&L's Project Managers manage the involved team of contractors and consultants throughout investigation and remediation activities at each involved site. The Project Managers work directly with the team assembled to manage subcontractors, supervise field operations and quality control/quality assurance programs, and to analyze data produced by the work. Resolution of significant project issues engage the Company's Project Manager and the Site Lead Consultant.

The Company's Project Manager has responsibility for tracking and maintaining each site's budget and expenditures throughout investigation and remediation. The Project Manager reviews consultant and contractor invoices for verification of rates and charges, and provides them to Accounting for coding into the accounting system. Each month's invoice package includes a budget-tracking report, showing the status of the project budget, and a brief description of services and progress report. Out-of-scope activities that might require a budget adjustment undergo discussion to assess their need, budget, and schedule impacts.

d. Contractor Qualification and Selection

Contractor and consultant prequalification considers factors such as:

- Remediation credentials and relevant experience, both firm and primary personnel
- MGP experience
- New Jersey experience
- Utility experience
- Experience with a particular scope of work
- Location relative to project site
- OSHA and other safety ratings
- Financial ratings
- Acceptance of Company terms and conditions.

Prospective contractors submit a written Statement of Qualifications, reviewed by the Remediation Staff and the Supply Chain Group, supplemented where potential interest exists through a presentation to the Remediation staff on qualifications and experience. The Group checks references for both the contractor and the indicated personnel. Favorably received prospects can get added to an upcoming bid list, depending on the tasks to be bid and the number of bidders already on the list. JCP&L puts good performers on bid lists first, followed by previously qualified vendors who have bid unsuccessfully on prior projects, and then new prospects.

Individual tasks, such as drilling services, excavation services, and other small-dollar tasks, may get subcontracted. These tasks may also go out for bid. For such work, the bids undergo review by Company personnel, including Remediation staff and Supply Chain staff, as well as the prime contractor.

The Supply Chain group supports the remediation work by developing contract documents for consultants and contractors. Other support includes updating existing contracts as necessary, increasing funding for purchase orders as necessary, renewing expiring contracts, negotiating terms and conditions, and updating other contract-specific items such as rate schedules, payment terms and contact information.

The Supply Chain Group also assists with project bidding processes by

- Developing sourcing strategies, initiating internal documents for approval of the strategy and award recommendations
- Consolidating and distributing bid documents to potential bidders, including technical specifications and commercial terms
- Coordinating bidders' meetings, including pre-bid meetings, bid clarification and post-bid meetings
- Evaluating bidder proposals, tabulating results and communicating the lowest evaluated commercial proposal
- Negotiating rates, terms and conditions, non-disclosure agreements, etc.
- Coordinating any terms and conditions exceptions among Legal, Remediation staff and a selected supplier
- Obtaining insurance certificates from selected suppliers
- Monitoring supplier performance, developing performance-improvement plans where necessary
- Advising Remediation staff on Supply Chain policies and procedures.

3. *Program Control and Record-Keeping*

a. Accounting for Remediation Costs

All remediation costs are charged to FERC account 182.3 (Other Regulatory Assets). Amortization of the deferred balance is debited to Account 407.3 (Regulatory Debits) and credited to Account 182.3. In addition to costs contained on vendor invoices, reviewed against the budget and approved by the Project Manager, employees directly involved in remediation administration charge their time to specific cost collectors in the Company's SAP financial system. These cost collectors include internal orders specifically designated by MGP site, and cost elements that distinguish the types of cost incurred for each site. Associated overhead costs get settled proportionately to the same internal orders. Employees associated with implementation and oversight of the MGP Program charge all time directly to the Program; thus no costs are allocated based on allocation formulae.

The appropriate accounting for Regulatory Assets depends on orders issued by the BPU; therefore, the Accounting, Legal, and Rates and Regulatory Affairs departments prepare and sign off on Interpretation Memos that document key elements of the various NJ BPU orders relating to the particular deferred cost. We examined "Interpretation of NJ BPU Orders Regarding Deferral Accounting for Manufactured Gas Plant Remediation Costs – Revision #2". A companion Accounting Guidance Memo also contains specific steps for appropriately recording the particular deferred cost. We examined "Accounting Guidance for NJ BPU Final Order Regarding Deferral Accounting for Manufactured Gas Plant (MGP) Remediation Costs – Rev #2."

By order of the BPU, JCP&L may apply carrying charges on the balance of unamortized MGP balances at a rate equal to the seven-year Treasury rate plus 60 basis points. We examined the monthly carrying-charge calculations for 2017 through 2020, verifying the rate used and the calculation of the carrying charge

b. <u>Controls/Internal Audit Reviews</u>

Two primary controls ensure that all remediation costs to be recovered from JCP&L customers get properly identified, documented, recorded in the proper accounts, and summarized in cost-recovery support documents:

- Site Project Managers review their projects' outside vendor invoices for accuracy and proper accounting, after which the Remediation Supervisor approves or rejects following subsequent review
- An SAP financial report run at year-end for each of the cost collectors (internal orders) specifically designated by MGP site addresses all individual charges for each project; the site Project Managers and the Supervisor review and approve each.

Internal Audit has conducted a regular cycle of review addressing the first of these controls. The last management and operations audit recommended periodic audits of remediation contractor invoices. Management reports the use of a three-year cycle for conducting those audits. We examined the three audits conducted since the last management audit. The first covered the period January 2012 through June 2014. The second covered January 2015 through June 2016. The most recent covered January 2019 through December 2020. The most recent audit came four years after its predecessor.

The stated objective of all three audits was to determine whether the contractor invoices complied with applicable contract billing terms and conditions, and tested invoice approval, accuracy, and support. We examined each of the reports. The first two found a "reasonable level of risk assurance" (the highest level on the rating scale). The third audit finding of "Well Controlled" also reflected the highest level of assurance. A minor finding addressed sales and use tax assessments, but Internal Audit found significant controls in place and operating effectively.

With respect to the second control, we examined the SAP financial reports from 2017 through 2020. These reports summarize information from all transactions.

c. Additional Validation and Review

In addition to the reviews conducted by management and Internal Audit, the remediation cost process and related data undergo periodic review by senior management and are provided to the JCP&L Board of Directors twice per year. The FirstEnergy Vice President of Utility Services, receives monthly reports addressing remediation activities at the MGP sites. We examined the December 2021 report. We found it extensive. It provided red, yellow and green status indicators for schedules and budget, and timely information about audits and operational activities.

A report on the remediation activities at the MGP sites goes to JCP&L's Board of Directors in April and October of each year. We examined the October 2021 report. It contains similar status information, albeit at a higher level. It also provided a summary, by site, of the total project expense to date and the additional cost to complete at each site. The report showed that project expense as of October 2021 was [redacted], with [redacted] million remaining to complete.

d. Budget Comparisons

The Remediation & Environmental Services Group prepares cost estimate projections for the MGP sites twice per year. Initial cost estimates issue in December of the preceding year, and a revised projection in June of the current year. We requested any analyses of actual remediation costs compared to planned expenditures conducted since the start of 2017. Management's response provided copies of RAC Filing Attachment E for each year from 2017 to 2020. Those attachments show annual incremental cost for the year compared to the "budget estimate" and the resulting variance, by site and in total.

We noted some rather significant variances by site, ranging as high as 1,048 percent. Management observed that the format of the report required for the RAC filing compared the full-year actual costs with the costs remaining to be spent as of the June re-forecast. Management indicated that explanations provided for the variances are heavily influenced by the fact that actuals are for the whole year, while the budget estimate is for the last half of the year.

Following this explanation, we requested a comparison of the full budget prepared at the beginning of the year to the actual costs, as well as copies of the variance explanations provided to the NJ BPU, based on the filed variances. As expected, the variance explanations received were heavily weighted with explanations about why a full year of incurred costs ran higher than a half year of estimated costs. For example, for the Cape May site in 2018, the submitted budget comparison showed a variance of $2,474,259 - - 431 percent over budget. The related explanation indicated that the remediation took place between January and June 2018. Comparing actual costs to the full year budget showed a variance of ($60,741) - - 2 percent under budget.

For all four years (2017-2020) actual expenses substantially underran the full annual budget.

C. Conclusions

1. JCP&L has given the MGP Program appropriate visibility and emphasis.

JCP&L recognizes the importance of the MGP Remediation Program and provides it with adequate resources and staffing. Monthly reporting to a vice president of the service company provide visibility to further assure any necessary support. Twice-a-year reporting to JCP&L's Board affords important recognition within the New Jersey company.

2. The MGP program operates under a very well-qualified staff.

The qualifications and experience of the individuals in the Remediation and Environmental Services Group match the best we have seen in our evaluations of such programs. Program personnel show high versatility as well, serving as liaison with the NJ DEP, the U. S. Environmental Protection Agency (US EPA), property owners and municipal officials, as well as planning, budgeting, permitting, and design of investigation and remediation of the contamination at each site. Supervisor and staff have proper training, including occasional short courses in technical areas, plus decades of experience in dealing with MGP issues, including both technical issues and community and government-relations issues. The Program's continuity in organization and staffing comprises another notable strength.

3. Company staff have been assigned and take proper responsibility for project development and execution.

Assigning primary responsibility for all aspects of the Remediation Program to Company personnel comprises a central theme of the approach to MGP remediation. A Project Manager has responsibility for each site. That manager assembles a team of contractors for each assigned site and works with that team to design and conduct investigation and remediation programs for each site.

As program execution proceeds, the Project Manager has responsibility as well for field operations including quality assurance/quality control, analyzing data generated by those field operations, preparing necessary internal and external reports, tracking expenditures, and maintaining the budget. The Project Manager also maintains relationships with other interested parties, including government authorities, affected property owners and interested community groups. These managers also participate in preparation of cost-recovery filings to the BPU, and in any necessary explanation of or support for those filings.

The Supply Chain Group provides support to identification and selection of contractors, and to contracting processes, such as preparing necessary documents, developing contract terms and conditions and obtaining appropriate insurance coverages. Legal department personnel support contracting and advise regarding government regulations and negotiation with other interested parties. Rates & Regulatory Affairs takes the lead in preparing and managing processes associated with cost-recovery filings.

Three of the four Project Managers serve as contracted-resources employees, acting as would a regular employee. This arrangement has existed for a decade, and perhaps longer. It allows JCP&L to use highly experienced people for these positions without having to train them, and limits the commitment to those people to the term of its requirement for their skills.

4. Management has effectively addressed those elements of MGP liability that it can control.

The nature of residues from the MGP operations requires JCP&L to conduct investigation and remediation activities at each site where it or a predecessor conducted such operations. Natural gas companies now own some of the sites; JCP&L has worked out arrangements to share the costs for those sites with those companies.

NJ DEP regulations prescribe the investigation process in detail. JCP&L reports that, for most sites, investigation reveals relatively small impacts from non-MGP sources, particularly fuel oil tanks. Where remediation can address those impacts without increasing costs, JCP&L generally does so. Several cases, however, have revealed more substantial impacts from non-MGP sources. In those cases, the Company shared its results with the NJ DEP who, in turn, worked with the Responsible Parties to get those impacts addressed. In at least one case, the NJ DEP used public funds to address non-MGP contamination.

5. Management employs sound planning and cost estimation processes.

Remediation program design and execution occurs through iterative processes that extend through various phases. The Company's Project Managers and Lead Site Consultants work together to design scopes of work for each phase at each site. As each scope of work is completed and costed out, contractors hired through competitive bidding do the field work. These activities remain subject to the ongoing approval of each site's LSRP, and to issuances of particular authorizations by the NJ DEP.

JCP&L presents details of each year's program activities in annual proceedings addressing its RAC filings. It shares plans and cost estimates in those proceedings and presents results of each year's work. Differences between estimated and actual costs undergo exploration in some detail in those proceedings. See, *e.g.*, Discovery Requests RCR-3 and RCR-4 in BPU Docket No. ER21101155.

6. Effective processes apply to contractor selection and engagement.

Program personnel develop the qualifications for contractors for required services, identify candidates, and examine candidates' qualifications. Clear and well-established qualification criteria apply. Sufficient numbers of qualified contractors enable meaningful application of qualification criteria.

The Supply Chain group assists with contract competitions. Supply Chain helps assemble bid documents and conduct competitions. The Company has long used competitive bidding for essentially all field operations. Supply Chain also helps with formalizing relationships with selected contractors. It prepares contract documents and works to ensure that various contract conditions are met. Legal assists as necessary.

7. We found remediation cost accounting appropriate.

With remediation costs deferred and recovered via an annual RAC filing process, the appropriate accounting has become prescribed in detail in interpretation and accounting guidance memos. Our review of recent BPU orders and other Company documents confirmed application of the prescribed accounting.

All costs charged to the Remediation Program arise through invoices or employee-related charges (time) direct-charged to the program. No costs come thorough allocations from the service company.

Carrying charges are being calculated and accrued to the balance of unrecovered remediation costs in accordance with NJ BPU directives.

8. Controls related to the recording and reporting of remediation costs are adequate.

Controls exist and undergo testing every three years by Internal Audit. The reports issued for the last three audits indicate an adequate scope; they found applicable processes well controlled. We did not find the four-year interval (compared to the three recommended) between the last two audits a matter of concern, given the consistent lack of negative findings.

The SAP financial reports, reviewed by the Project Managers and the Supervisor, provide another element of control.

9. Management undertakes budget comparisons periodically and submits them with explanations to the BPU as part of the RAC filings, but the format of the reports could be improved. *(See Recommendation #1)*

Annual budget comparisons prepared and submitted annually come as part of RAC filings. They compare a full year of remediation costs with a half-year of budgeted costs (the remaining costs for the year as determined in the June budget update). The explanations submitted with the RAC filing thus routinely have to explain for each site that part of the variance is due to the different time periods. This practice was represented as the form of the report that has been used for many years.

The appendix to this chapter shows a comparison between the initial budgets and actual expenditures for the year.

D. Recommendations

1. Consider changing the budget/actual comparisons to match the periods covered by each. (*See Conclusion #9*)

Even if the current means of reporting should remain, adding a comparison that matches budget periods used with those employed for actual costs may prove useful in examining sources and amounts of variances from a management and control perspective.

Appendix One: MGP Site Costs

MGP Site Costs Actual vs. Initial Budget

Site	2017		2018		2019		2020		2017	2018	2019	2020
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Variance	Variance	Variance	Variance
Asbury Park	$1,822,408	$3,485,000	$1,166,387	$1,910,000	$745,942	$828,000	$190,747	$418,000	($1,662,592)	($743,613)	($82,058)	($227,253)
Belmar	$481,169	$810,000	$461,839	$808,000	$385,470	$1,585,000	$398,317	$924,000	($328,831)	($346,161)	($1,199,530)	($525,683)
Boonton	$117,332	$175,000	$109,398	$360,000	$531,981	$825,000	$699,986	$1,213,000	($57,668)	($250,602)	($293,019)	($513,014)
Cape May	$8,347,161	$7,541,000	$3,047,259	$3,108,000	$1,468,857	$996,000	$1,160,094	$1,148,000	$806,161	($60,741)	$472,857	$12,094
Dover	$1,829,169	$4,187,000	$7,254,363	$5,696,000	$549,157	$1,456,000	$847,978	$1,571,000	($2,357,831)	$1,558,363	($906,843)	($723,022)
Flemington	$2,928,327	$5,163,000	$296,907	$570,000	$116,679	$379,000	$266,647	$212,000	($2,234,673)	($273,093)	($262,321)	$54,647
Lakewood	$6,255,557	$5,670,000	$387,482	$500,000	$290,296	$335,000	$323,594	$210,000	$585,557	($112,518)	($44,704)	$113,594
Lambertville/LaRoch	($5,846)	$162,000	$70,339	$250,000	$231,144	$420,000	$342,576	$515,000	($167,846)	($179,661)	($188,856)	($172,424)
Long Branch	-	-	-	-	-	-	-	-	-	-	-	-
Newton I	($33,620)	$225,000	$118,519	$850,000	$245,220	$3,311,000	$129,599	$3,647,000	($258,620)	($731,481)	($3,065,780)	($3,517,401)
Newton II	$105,730	$449,000	$122,800	$5,771,000	$2,790,134	$3,026,000	$4,543,963	$4,145,000	($343,270)	($5,648,200)	($235,866)	$398,963
Ocean City	$156,236	$1,635,000	$454,722	$2,165,000	$1,301,765	$2,315,000	$675,060	$880,000	($1,478,764)	($1,710,278)	($1,013,235)	($204,940)
Phillipsburg	$112,670	$380,000	$27,752	$960,000	$403,805	$680,000	$99,657	$140,000	($267,330)	($932,248)	($276,195)	($40,343)
Red Bank	($56,873)	$329,000	$92,746	$450,000	$117,553	$451,000	$22,645	$510,000	($385,873)	($357,254)	($333,447)	($487,355)
Sea Isle City	$1,235,523	$3,336,000	$180,832	$790,000	$739,720	$800,000	$641,175	$980,000	($2,100,477)	($609,168)	($60,280)	($338,825)
Toms River												
Tuckerton	$3,332	$5,000	$4,428	$5,000	$3,503	$5,000	$2,737	$5,000	($1,668)	($572)	($1,497)	($2,263)
Washington	$2,061,677	$4,315,000	$3,445,760	$4,025,000	$188,963	$240,000	$242,782	$148,000	($2,253,323)	($579,240)	($51,037)	$94,782
Wildwood	$188,805	$268,000	$325,753	$760,000	$964,988	$724,000	$477,453	$470,000	($79,195)	($434,247)	$240,988	$7,453
General Program	$123,825	-	$143,031	-	$139,038	-	$145,102	-	$123,825	$143,031	$139,038	$145,102
Total	**$25,672,580**	**$38,135,000**	**$17,710,316**	**$28,978,000**	**$11,214,216**	**$18,376,000**	**$11,210,113**	**$17,136,000**	**($12,462,420)**	**($11,267,684)**	**($7,161,784)**	**($5,925,887)**

Chapter XXIV: Non-Rate-Related Revenues Table of Contents

Chapter XXIV: Non-Rate-Related Revenues

A. Background

This chapter presents the results of our evaluation of management's regulatory treatment of gains and revenues secured through means other than utility rates to determine that its classification of them resulted in appropriate and fair treatment for JCP&L's customers. Transactions such as land and property sales provide examples of such gains and revenues. Profits and losses on non-utility businesses also exemplify the types of entries involved. For all revenues of these types, we verified accurate recording of and accounting for the amounts involved, examined JCP&L's reporting and confirmed that customers received benefits in proper amounts in the last rate case.

B. Findings

1. Actual Results and Accounting

Allowance for Other Funds Used During Construction (AFUDC), Interest and Dividend Income, and Gains on Disposition of Property have accounted for the vast majority of non-rate JCP&L items since 2017. AFUDC values represent financing for construction work in progress (CWIP) between the effective dates of utility base rate cases. AFUDC amounts tend to grow to significant amounts prior to rate case re-sets of CWIP. The following table summarizes these items from 2017 through 2020 and estimated 2021 and 2022 values. The most significant item shown in the table concerns a one-time item - - the 2021 sale of Yards Creek. AFUDC comprises the largest recurring item, ranging $7.4 and $9.5 million before falling as a result of the last base rate case, after which 2022 estimates show a large estimated 2022 increase.

JCP&L Non-Rate-Related Items

FERC Account		2017	2018	2019	2020	2021 Est	2022 Est
Number	*Description*						
415.00	Revenues from Merchandising, Jobbing and Contracting Work	$2,586,248	$5,452,426	$626,213	$2,465,283	$0	$0
416.00	Costs and Expenses of Merchandising, Jobbing and Contracting Work	($2,238,664)	($5,457,474)	($1,005,794)	($2,069,600)	$0	$0
417.10	Expenses of Nonutility Operations	$0	$0	($223)	$0	$0	$0
418.00	Nonoperating Rental Income	($2,945)	($3,178)	($3,497)	($7,438)	($7,438)	($7,438)
418.10	Equity in Earnings of Subsidiary Companies	$7,690	$11,291	$15,818	$4,926	$0	$0
419.00	Interest and Dividend Income	$3,435,022	$4,514,328	$4,950,565	$5,316,821	$2,395,701	$1,722,809
419.10	Allowance for Other Funds Used During Construction	$8,839,677	$1,377,486	$7,369,721	$1,253,018	$18	$9,533,171
421.00	Miscellaneous Nonoperating Income	$1,329,033	$448,643	$1,302,648	$1,555,106	$1,742,178	$1,742,120
421.10	Gain on Disposition of Property	$135,840	$0	$6,703,305	$10,990	$109,609,978	$0
	Non-Rate Revenues/Gains Total	**$14,091,901**	**$6,343,523**	**$19,958,755**	**$8,529,107**	**$113,740,438**	**$12,990,663**

Interest and dividend income grew from $3.4 million to $5.3 million from 2017 through 2020, but fell much lower than management's 2021 and 2022 estimates. Revenues from merchandising, jobbing, and contracting work, typically offset by related costs and expenses, have not produced material net amounts for JCP&L.

2. Gains on Asset Sales

The March 5, 2021 closing of the sale of the company's interest in the Yards Creek generation facility produced a recorded gain of $109.05 million, representing nearly the full amount shown in the preceding table as recorded in FERC account 421.10. Yards Creek consists of a 420 MW pumped-storage hydro facility located in Warren County, New Jersey. It began commercial operation in 1965. JCP&L and PSEG Fossil each owned 50 percent of Yards Creek. The net gain eventually acted as an offset against a JCP&L regulatory asset for storm costs.

The table includes the effects of one other material gain on the sale of utility property. A November 27, 2019 sale of JCP&L's South Brunswick property, consisting of 15.24 acres in South Brunswick Township, Middlesex County, produced a recorded a pre-tax gain of $6.68 million in FERC account 421.10 for JCP&L in 2019.

Substantial revenue arose from disposition of another asset as well - - a March 7, 2019 sale of a 3.34 acre parcel of land, excluding all related electrical distribution and transmission facilities, located in Allenhurst, Monmouth County. The net book value of Allenhurst property approximated $3.55 million, previously included in JCP&L's rate base. The gain on the sale of the Allenhurst property comprised an adjustment in the company's 2020 base rate case. JCP&L proposed to share 50 percent of the gain, with the customers' share amortized over a 5-year period. A "black box" settlement resolved the 2020 base rate case, which JCP&L interpreted as approving this adjustment as filed.

Management reviews the accounting for non-recurring gains from sources other than customer rates as each instance occurs. For example, the FirstEnergy accounting research group reviews significant sales of utility assets, followed by a memorandum documenting the accounting treatment under Generally Accepted Accounting Principles (GAAP) and the FERC uniform system of accounts for such transactions. These reviews take into account New Jersey BPU precedent for the treatment of gains, where applicable.

3. *Customer Impacts and Rate Orders*

The BPU approved on March 27, 2020 the Stipulation of Settlement involving JCP&L and PSEG Fossil regarding the Yard's Creek facility sale. JCP&L's recorded a pre-tax gain of $109.05 million in FERC account 421.10. The October 28, 2020 Order in JCP&L's last rate case included the following:

> *The Parties agree that the entire actual net gain from the sale of JCP&L's interest in the Yards Creek generating station, currently estimated to be $109.1 million, shall be applied to reduce the company's existing deferred storm cost balance. Rate Counsel and Staff shall review the final accounting and the calculation of the actual net proceeds from the Yards Creek sale in the company's next Non-utility Generation Charge filing.*

The BPU Order in Docket No. EM19030357 authorized the pre-tax gain associated with the sale of the South Brunswick property. JCP&L recorded this gain of $6.68 million to FERC account 421.10. The BPU Order approved the sale with provisions for the accounting for net proceeds in accordance with FERC regulations and provided FERC with a copy of the Order.

The $3.55 million gain on the Allenhurst sale involved property previously included in JCP&L's rate base. The gain later became an adjustment in the 2020 base rate case following JCP&L's proposed sharing with customers of 50 percent of the gain, amortized over a five-year period. The proposed annual amortization of $509,978 became effective with new rates established as of January 1, 2021.

AFUDC and dividends and interest income comprise the other major dollar categories for JCP&L non-rate revenues and expenses. JCP&L treated both as below-the-line revenues, and properly recognized and accounted for associated gains. Other revenues and expenses for merchandising and jobbing, non-operating rental income, and miscellaneous non-operating income represented insignificant net amounts for JCP&L in the last five years.

C. Conclusions

1. JCP&L properly analyzed, reflected in FERC accounts, and flowed to customers through base rate adjustments gains on sales of utility assets.

Management performed an internal analysis of the sale of JCP&L's interest in Yards Creek in March 2020. The analysis noted that previous net positive benefits for customers from Yards Creek would fall, given changes in PJM capacity rules. Internal estimates of the net present value to JCP&L customers of retaining Yards Creek ownership ranged between $20 and $25 million, as compared with the $109 million realizable from the sale. The sale of Yards Creek at an attractive price for JCP&L customers and subsequent rate case application in reducing deferred storm costs produced a positive result for customers.

JCP&L recorded the gains from the Yard's Creek, and South Brunswick asset sales in the appropriate FERC accounts. The calculation of JCP&L base rates appropriately considers all of the gains on sales amounts.

2. JCP&L has properly accounted for AFUDC and dividends and interest income, and has had minimal other non-rate revenues and expenses.

AFUDC and dividends and interest income comprise the other major relevant dollar categories. JCP&L treated both as below-the-line income, properly recognizing and accounting for associated gains. No other sources of non-rate-related revenues proved substantial in the past five years.

D. Recommendations

We have no recommendations regarding non-rate-related revenues.

Chapter XXV: Recommendations Made in Previous Examinations Table of Contents

Chapter XXV: Recommendations Made in Previous Examinations

A. Background

Our scope included a review of three previously-performed reports (by separate, outside reviewers) addressing the operations of JCP&L and of affiliates who contribute to its operations. The first report, accepted by the BPU in August 2011 bore the title of *Audit of the Affiliated Transactions between Jersey Central Power and Light Company, First Energy Corporation and its Affiliates and a Comprehensive Management Audit of Jersey Central Power and Light Company* in Docket No. EA09110943. The second, July 2016 report we reviewed examined financial and operational aspects of JCP&L's distribution system. We examined the recommendations made in each of the two reports and the status of actions to implement them. This chapter provides the results of our examinations of these two reports.

The third report comprised a December 2015 company-commissioned ring-fencing study. We examined the continuing viability and merits of that report's findings and recommendations, assessed whether those findings and recommendations represent current best practices, evaluated whether New Jersey customers have had adequate protection, and determined whether management implemented the study's recommendations. Chapter Eleven, *Financial Risks and Consequences of Parent and Affiliate Operations* of the accompanying Phase One report addresses the results of our examination of this third, 2015 report.

We examined the nature of the recommendations made in the 2011 management audit and documentation of the BPU Staff monitored close-out process. We sought to identify and address all recommendations not acknowledged as complete by the Board's Order in Docket No. EA09110943. We also examined the reported status of recommendations from the 2016 management and financial review of JCP&L's distribution system, again, including any recommendations not considered complete. Finally, the team members responsible for each area of this audit for which recommendations from the 2011 and 2016 reports had implications considered those recommendations with continuing applicability in forming their base inquiries. They also examined the recommendations as they approached completion of their work on this engagement to identify any potential gaps in the matters the scope of this engagement addresses.

The scope of the business operations of FirstEnergy has narrowed considerably since those two prior examinations, with the departure of the commercial power and energy subsidiaries and their operations. We considered how ended, changed, and new operations may have affected the continuing relevance of those prior recommendations.

B. Findings

1. *2011 Management and Operations and Affiliates Audit of JCP&L*

The BPU accepted "for filing purposes" the report on the BPU-sponsored management and operations audit and audit of affiliate relationships of JCP&L on August 18, 2011. That June 20, 2011 report included eleven chapters, a two-phased structure, and significant scope element commonality with our engagement. However, our scope included significant expansion, as well. The 2011 audit report contained a total of 86 recommendations, for which management had responsibility to fully address and implement under a process that included review and verification by the BPU Staff. The following table summarizes those recommendations by subject areas that correspond to the report's chapter structure.

2011 Audit Recommendations Summary

Chapter	Number
Affiliated Relationships and Allocation Methods	13
Customer Service	6
Electric Operations	16
Executive Management and Corporate Governance	13
Finance and Accounting	6
Remediation Costs	3
Review of Prior Audit Recommendations	1
Support Services	28
Total	86

Management provided information that documented its efforts to implement each recommendation. This material, for each recommendation, addressed general status tracking information, stated benefits expected following implementation, assigned company responsibility for implementation, and steps necessary to achieve implementation. These materials also included support documentation, which took a variety of natures; *e.g.,* revisions to existing policies and procedures to reflect recommended improvement. We reviewed the provided documentation and verified for each recommendation its:

- Status: implementation completed or not
- Status Date: when management proposed consideration of completion to the BPU
- BPU Staff Signoff: whether the BPU verified completion of its review and when.

The materials provided by management indicated that 75 of the 86 recommendations received BPU Staff signoff in 2013. The remaining recommendations reached that status by August 2016. The following table summarizes this timeline.

2011 Audit Recommendations Summary by BPU Sign Off Date

Chapter	2013	2014	2015	2016
Affiliated Relationships and Affiliate Allocation Methodologies	7	1	1	4
Customer Service	6	0	0	0
Electric Operations	15	1	0	0
Executive Management and Corporate Governance	13	0	0	0
Finance and Accounting	5	1	0	0
Remediation Costs	2	1	0	0
Review of Prior Audit Recommendations	1	0	0	0
Support Services	26	0	2	0
Total	75	4	3	4

The scope commonalities between our engagement and the 2011 audit rendered the major issues and concepts captured in these 86 recommendations subject to our review. We aligned the recommendation areas (by 2011 report chapter) with our structure, which the next table summarizes.

Alignment of 2011 and Current Engagement Subject Areas

2011 Audit	This Engagement	
Chapter	**Phase**	**Chapter**
Affiliated Relationships & Allocations	Two	Affiliate Relationships and Cost Allocation
Customer Service	One	Customer Service
Electric Operations	One	Operations Organization, System Planning & Load Management, Asset Management, Vegetation Management; Contractors, Reliabilty Programs & SmartGrid, Cyber Security & System Vulnerability, System Resiliency & Restoration
Executive Mgmt. & Corp. Governance	Two	Organization, Executive Management, Governance
Finance & Accounting	One & Two	***Phase One*** : Financial Risks & Consequences of Parent & Affiliate Operations; ***Phase Two:*** Finance and Cash Management, Planning & Budgeting, Accounting and Property Records; Controls, Sox, Auditing, & Listing Requirements
Remediation Costs	Two	MGP Remediation
Prior Audit Recommendations	Two	Recommendations Made in Previous Examinations
Support Services	Two	Insurance & Risk Management, Legal Services, Physical Security, Supply Chain, Surface & Air Fleet Management, Land Management &Real Estate, Information Technology, Records & Information Management, Physical Security, Supply Chain

2. 2016 Financial and Operational Review of JCP&L's Distribution System

A March 26, 2015 Order in Docket No. ER12111052 provided for BPU Staff input into a scope of work under which JCP&L would solicit proposals for the performance of a Financial and Operational Review of JCP&L's Distribution System. The report that summarized the results of that audit, dated July 27, 2016 in Docket No. EF15070779, contained 53 total recommendations. The following table summarizes these recommendations by audit area.

2016 Audit Recommendations Summary

Operational Review	
Chapter	**Number**
Evaluation of JCP&L's Reliability Programs	17
Developing a Resilient System	8
Current Restoration Abilities	6
Distribution Planning Criteria and Load Forecasts	7
Capital/Investment and Operations and Management (O&M) Spending	6
Total	**44**
Financial Review	
Chapter	**Number**
Corporate Governance	5
Capital Allocation Among Subsidiaries	1
Human Resources, Staffing, Benefits, and Planning	2
Compliance with Merger Order (BPU Docket No. EM001108701)	0
Review of Financing Activities	1
Total	**9**

The audit report identified what it deemed as eleven "major" recommendations addressing changes that would produce the greatest benefits. These included:

- ***A.1.8-1:*** *Formalize asset management processes and practices for JCP&L's Distribution organization. This recommendation includes several steps and activities to be evaluated and potentially implemented based on benefit versus cost considerations that would include the development of:*
  - *a) A mission statement with regard to asset management principles and objectives at JCP&L;*
  - *b) An overall JCP&L and FEU governance of asset management organization and policies;*
  - *c) Organizational responsibilities within JCP&L for implementing asset management practices;*
  - *d) Guiding principles regarding management of assets over their life-cycle;*
  - *e) New or enhanced systems required for performance assessment and condition monitoring of distribution assets;*
  - *f) Analytic/predictive methods for equipment diagnostics, failure modes and risk assessment;*
  - *g) Asset ranking and prioritization methods for capital investment decisions, including risk versus cost trade-offs that would be incorporated into RPA budgeting processes; and*
  - *h) A continuous improvement process, including post-project review; typically part of the capital management process.*
- ***A.2.3:*** *Prepare a Technology Plan that builds upon findings and successes from Department of Energy Smart Grid Investment Grant (SGIG) pilot programs in New Jersey and other FEU operating companies. The Plan should outline the role of technology applied to JCP&L's distribution system over the short- and long-term. Consider a*

collaborative effort with other New Jersey utilities to identify plans consistent with the New Jersey Energy Master Plan goal for emerging technology: "Improve and Enhance the EDC Smart Grid and Distribution Automation Plans" and related objectives such as Microgrid Distributed Energy Resources.

- ***A.4.3-1:*** *Conduct a study to evaluate updating LFDMS to account for existing and forecast net metered and large solar installations. This includes creation of a database to track solar installations, and if applicable, use of new tools and systems to collect solar profile data to predict net load reduction on distribution feeders and substations.*
- ***A.4.4-1:*** *Conduct a study to develop specific criterion regarding minimum restoration times for single transformer substations that do not have sufficient tie transfer capacity with adjacent substation(s). Conduct study, if needed, to identify substations that have partial tie transfer capability. Study also should include an evaluation of likely mobile substation transport and installation times to identify substations that do not meet the minimum restoration criterion. Develop mitigation plans such as increasing tie transfer capability, changing location of mobile substations or upgrading substation mobile substation connections (and procedures) to achieve minimum restoration targets.*
- ***A.5.1-1:*** *Enhance the capital budget development process to reduce, where possible, the amount assigned to blankets. This should include additional rigor and detail in the development and monitoring of Condition, Forced, and Reliability blanket budgets and spending.*
- ***A.5.2-1:*** *Review and enhance capital budgeting and project prioritization process to determine optimal levels of CAPEX and OPEX to meet reliability and other JCP&L targets and objectives. This includes identifying the level of spending to achieve objectives and meet targets. Application of asset management practices outlined in Recommendations A.1.8 and A.1.9 are needed to properly balance CAPEX and OPEX spending.*
- ***A.5.3-1:*** *Document processes and criteria applied to review and approve capital budget requests for each of Rounds 1 through 3. Include processes under which capital investments are prioritized and criteria applied to approve or reject budget requests.*
- ***A.5.3-2:*** *Modify capital budget development (RPA) process such that projects that typically are evaluated but do not reach Round 1 are included in the review process.*
- ***A.5.3-3:*** *Modify the capital budgeting process to place greater focus on identifying spending levels needed to meet reliability and performance targets, and other JCP&L goals and objectives.*
- ***B.1.12-1:*** *File an annual Results of Operations Report, as may be required by the BPU. JCP&L does not file an annual jurisdictional results of operations (ROO) report with the BPU, as is required of other FE distribution utilities in other jurisdictions158. Currently JCP&L only provides a copy of their FERC Form 1.*
- ***B.1.12-2:*** *Investigate the appropriateness of implementing existing BPU policies on infrastructure recovery mechanisms, as well as other Alternative Regulatory Mechanisms (ARM)159 other than base rate ratemaking. Properly designed ARMs have the potential to: (1) reduce regulatory lag; (2) provide additional incentives to utilities to operate efficiently; (3) provide a mechanism to target investment in areas which are considered a high priority for investment; and, (4) reduce the costs of regulatory proceedings for both the company and the BPU.*

We comprehensively reviewed the subjects into which the first nine of these recommendations fall; *i.e.*, asset management, planning for and incorporating technology into the network, configuring substations and other major facilities to enhance reliability and service restoration, and capital and O&M planning and budgeting. Chapters Two through Nine of the accompanying Phase One report address the other subjects. The *Planning and Budgeting Chapter* of this Phase Two report addresses planning and budgeting. Those chapters provide comprehensive conclusions and recommendations still relevant today and consider the underlying facts, circumstances, and performance drivers relevant to the recommendations of the prior examination. The last two recommendations concern BPU reporting requirements and alternative rate recovery mechanisms, both of which we view as policy matters better suited for BPU resolution.

Management provided summary documentation of its "Evaluation and/or Actions" for each of the 2016 audit's 53 recommendations. As suggested by the eleven major recommendations of the 2016 report, our engagement has a significantly common, but broader scope as compared with the topics addressed by the 2016 report. That report's treatment of compliance with the merger Order in Docket No. EM00110870 represented a notable example of items included in the 2016 review but not in ours. The following table lists where the 2016 report structure receives coverage in this audit's phase and chapter structure.

Current Audit Coverage of the 2016 Audit's Topics

2016 Audit	Current Audit	
Operational Review	**Phase**	**Chapter**
Evaluation of JCP&L's Reliability Programs	One	IV: Asset Management V: Vegetation Management VII:Reliabilty Programs and SmartGrid
Developing a Resilient System	One	IX: System Resiliency and Restoration
Current Restoration Abilities	One	IX: System Resiliency and Restoration
Distribution Planning Criteria and Load Forecasts	One	III: System Planning and Load Management
Capital/Investment and Operations and Management (O&M) Spending	One	II: Operations Organization VII: Reliabilty Programs and SmartGrid
Financial Review	**Phase**	**Chapter**
Corporate Governance	Two	III: Governance
Capital Allocation Among Subsidiaries	One & Two	**Phase One** XI: Financial Risks and Consequences of Parent and Affiliate Operations **Phase Two** V: Planning and Budgeting IV: Finance and Cash Management
Human Resources, Staffing, Benefits, and Planning	Two	XIII: Human Resources Organization VI: Staffing VII: Compensation and Benefits
Compliance with Merger Order (BPU Docket No, EM001108701)	n/a	n/a
Review of Financing Activities	One & Two	**Phase One** XI: Financial Risks and Consequences of Parent and Affiliate Operations **Phase Two** IV: Finance and Cash Management

C. Conclusions

1. Management provided documentation of BPU Staff sign off on all 86 recommendations from the 2011 completed management and affiliates audit of JCP&L.

Management tracked the status of all recommendations through its receipt of BPU Staff sign off that each reached a status indicating successful implementation. The materials provided demonstrate the company manager responsible for implementation, the potential benefits of successful implementation, and the dates of management presentation of close-out materials for BPU Staff review, and of ultimately received BPU Staff signoff. Plans for all 86 recommendations were available, we reviewed them, and found that all received BPU Staff sign off. This audit's scope, while not aligned entirely with the one performed in 2011, maintained several core elements. We thus performed a comprehensive review of the areas of management and operations into which the recommendations fell in the context of the circumstances relevant today and likely into the future, noting where appropriate any gaps or needs existing today with respect to those recommendations and as well to all the responsibilities and activities of the organizations responsible for them.

2. Our examination addressed management and operation of the activities for which the 2016 audit made recommendations; the conclusions and recommendations addressing them in this engagement address underlying circumstances, conditions, and needs fully.

Our engagement included an examination of the management and operational areas into which the recommendations of the 2016 audit fell. We undertook our work with awareness of those recommendations. We examined those recommendations again, in order to identify any material areas of management and operations potentially missed or underemphasized.

Our work confirmed the existence of most of the recommended conditions or sufficient addressing of recommendation intent through other measures appropriate in light of changed circumstances, methods, and practices. We did find continuing needs in a number of operational, planning, budgeting, organizational, and governance areas. We believe that implementation of the recommendations we made in this Phase Two report and the accompanying Phase One report will not leave open any matters or issues of current and likely future material significance.

The specific exclusions to this general conclusion concern recommendations regarding comprehensive, additional reports and consideration of alternate methods of cost recovery through rates. We do recommend in this report several special reports; *e.g.*, to provide transparency for the BPU regarding major uncertainties about important issues or tracking of major changes now underway at FirstEnergy. However, we consider significant additions to broadly applicable reporting requirements best addressed through proceedings involving all New Jersey electricity distribution companies and stakeholders. We also view ratemaking methods techniques as policy matters.

The same is true for significant changes in rate recovery methods. We have examined consistency of certain actions and practices with what we understand to be current (or at least historically applied) methods, but did not interpret our scope as including recommended changes to core ratemaking practices and precedent.

3. We believe that implementation of the recommendations of this engagement will not leave open material issues or needs underlying those prior recommendations.

We gave consideration to the recommendations of all three of the audits whose recommendations we examined. The reports expressing them show careful consideration of the circumstances and issues underlying their recommendations. We found those recommendations constructive and supported, generally offering one of often several appropriate means for implementing them.

We did look at their individual thrust and components, but our principal test in considering them is whether, assuming implementation of the recommendations we have made, any material need is likely to remain unmet. We do not believe any will, excepting a small number of them relating to issues better addressed for all the state's electric distribution companies (*e.g.*, comprehensive new reporting to the BPU) or concerning major changes to ratemaking practice and precedent.

D. Recommendations

We have no recommendations addressing implementation of recommendations from the 2011 and 2016 audits.