

September 16, 2019

**VIA ELECTRONIC MAIL**

Aida Camacho  
Secretary of the Board  
New Jersey Board of Public Utilities  
44 South Clinton Avenue  
Trenton, NJ 08625  
[EMP.comments@bpu.nj.gov](mailto:EMP.comments@bpu.nj.gov)

Re: Comments on Draft 2019 Energy Master Plan

Dear Energy Master Plan Committee members,

I write on behalf of the member companies of the New Jersey Utilities Association (NJUA) in response to the Board of Public Utilities' ("BPU" or "Board") request for comments on the Draft 2019 New Jersey Energy Master Plan (Draft EMP). NJUA is the statewide trade association for New Jersey's investor-owned utilities that provide essential electric, natural gas, telecommunications, water, and wastewater services to customers throughout the state. NJUA's comments represent the consensus views of our member companies. Each NJUA member reserves the right to submit comments on an individual basis. As the BPU conducts its hearings and receives comments on the Draft EMP, we respectfully urge you to consider the following.

**I. Establish Policies that Incentivize Investment and Consider Grid Impact**

***Incentivizing Investment in a Resilient Energy Grid***

Governor Murphy has set highly ambitious goals to move New Jersey towards a clean energy future and NJUA members appreciate the substantial undertaking required to work toward achieving these goals. New Jersey's investor-owned utilities are leaders in investment in renewable energy, primarily, although not exclusively, solar photovoltaic systems. Regardless of the sources of generation that serve New Jersey's load in the future, the utility industry's energy transmission and distribution infrastructure will play a critical role in the state's future. Capital investments necessary for a safe, reliable, and resilient utility energy transmission and distribution system are, and will continue to be, of paramount importance to the state, its residents, and its economy. And, as we look to the possibility of substantially increased electrification in the building and transportation sectors envisioned in the Draft EMP we must consider the investments necessary to enable the significant increase in electricity load that would be placed on the grid. Also, given the distribution grid's nature, electric utilities will need to invest and develop a bi-directional power flow system to support accelerated deployment of distributed energy resources and provide additional reliability, resiliency, and efficiency benefits for customers. At the same time, as the

distribution system transitions to accommodate multiple power flow, the transmission system will need to be modernized in order to integrate and realize the full locational net value of distributed energy resources. Utilities should have flexibility in developing Integrated Distribution Plans as called for in the Draft EMP<sup>1</sup>, as it will take careful coordination to maximize the value for both the distribution and transmission system.

Significant investment in aging utility infrastructure is also critical to ensuring the economic well-being of our state.<sup>2</sup> It is estimated that the average cost of power outages nationwide caused by severe weather events is between \$18 billion and \$33 billion per year.<sup>3</sup> It follows that in a year with significant storms, the costs would be much higher.<sup>4</sup> A number of NJUA member utilities have sought and are seeking BPU approval to implement programs that, in the aggregate, will invest billions of dollars to protect and strengthen electric and gas systems. Electric utilities have enhanced system automation, upgraded circuits, raised and hardened substations, and undergrounded certain utility lines. As noted below, natural gas utilities have replaced hundreds of miles of aging cast iron and bare steel pipes, raised gas meters and regulators, and installed excess flow valves. These efforts have and will continue to support the availability of New Jersey's electricity and natural gas supply, which is necessary if any significant steps are to be taken toward the State's 2050 energy goals. These capital improvement programs continue to be job creators and have enabled construction of improvements designed to mitigate economic losses that will occur in relation to future storms. The BPU has a history of support for these storm hardening projects, but there is considerable work left to be done. Investment in energy utility resilience is likely to mitigate utility programmatic costs over time, resulting in significant savings to the State's economy and reducing the hardship and inconvenience customers experience as a result of outages. Thus, it is important that the final EMP expressly recognize the benefit of incentivizing utility distribution system investment and the significant economic and environmental costs associated with delaying or abandoning needed investments.

Along with a recognition of the necessity and benefits of utility infrastructure investment must come support for timely cost recovery of investments and innovative rate making methodologies that provide transparency, accountability, and incentives, while lessening disincentives for deployment of renewable energy and energy efficiency programs. The BPU has taken laudable steps in this area. Now, NJUA's members are further empowered to maximize the benefits of that investment by proposing up to five-year infrastructure improvement programs. That is because the BPU recently adopted new rules at N.J.A.C. 14:3-2A<sup>5</sup> which allows utilities to file for an infrastructure improvement program (IIP) "for a

---

<sup>1</sup> See Draft EMP, pgs. 73-74.

<sup>2</sup> According to a 2010 Rutgers study, the work itself has a significant economic benefit as the benefits in earned income for workers, tax revenue and gross state product are enormous and clearly a major economic driver for New Jersey. The study posited that every \$1 million spent on natural gas infrastructure in New Jersey results in the creation of 10.2 jobs, \$573,807 in income, \$27,709 in state tax revenues, \$33,635 in local tax revenues, and \$766,727 in gross state product.<sup>2</sup> As this study was based upon older assumptions about average earnings per job, and the like, the projects noted above could produce even greater benefit per dollar invested. The study is available at [http://ceeep.rutgers.edu/wp-content/uploads/2013/11/2010NJNG\\_Economic\\_Impact\\_Report.pdf](http://ceeep.rutgers.edu/wp-content/uploads/2013/11/2010NJNG_Economic_Impact_Report.pdf). Figures include direct, indirect, and induced amounts.

<sup>3</sup> President's Council of Economic Advisers and the U.S. Department of Energy's Office of Electricity Delivery and Energy Reliability Economic Benefits of Increasing Electric Grid Resilience to Weather Outages (August 2013), pg. 3. Prepared with assistance from the White House Office of Science and Technology, available at [http://energy.gov/sites/prod/files/2013/08/f2/Grid%20Resiliency%20Report\\_FINAL.pdf](http://energy.gov/sites/prod/files/2013/08/f2/Grid%20Resiliency%20Report_FINAL.pdf)

<sup>4</sup> See *ibid.* at pg. 3 finding that the cost estimates related to Sandy ranged from \$27 billion to \$52 billion nationally.

<sup>5</sup> BPU Docket Number AX1750469

period of five years or less”<sup>6</sup> and allows that the utility may file its subsequent base rate case “not later than five years after the Board’s approval...”<sup>7</sup> The IIP rules require the filing of five-year capital expenditure budgets and actual capital expenditures for the prior five-year period.<sup>8</sup> This was accomplished with recognition of the benefits associated with longer-term, five-year infrastructure programs. As the NJUA noted in our comments during the stakeholder process associated with these rules, by encouraging utility proposals for BPU authorization of investment programs of up to five years for utility hardening, modernization and improvement programs, the BPU would be supporting more efficient, longer-term utility capital planning and a regulatory process that will benefit utility customers. Utilities will likely be able to engage contractors for longer periods of time, purchase necessary components in larger quantities, and maximize the efficiency of infrastructure planning, engineering, and construction. We would assert that, the larger the program, the greater the total benefit that will accrue as a result of the efficiencies inherent in New Jersey infrastructure investment programs. Also notable is the fact that the infrastructure improvement program rules provide for semi-annual rate recovery adjustments, which in practice the BPU should support to diminish regulatory lag and help to attract capital investment.

The need for infrastructure investment is echoed by our member water utilities. They rely on safe, reliable, and resilient electric and natural gas transmission and distribution infrastructure to ensure service to their own customers. In addition, a significant portion of energy generated in this country is used for the movement and treatment of water, with one study concluding that water use represented 12.6 percent of national primary energy consumption in 2010.<sup>9</sup> Thus, investment in water infrastructure is quite relevant to the EMP. Fortunately, water utilities in New Jersey benefit from the Distribution System Improvement Charge (DSIC), an accelerated infrastructure improvement program similar to the IIP, and we encourage continuance of this program and expansion to wastewater. Investor-owned water utilities have also relied on incentives available through energy efficiency programs to help make their own energy efficiency projects financially feasible. We ask that the final EMP includes a call for continuation of cost-effective incentives through energy efficiency programs.

### ***Rate Considerations Regarding Energy Efficiency Investments***

It is important to remember that New Jersey’s energy utilities recover the cost of their investments in the distribution system largely through volumetric rates, charged per kWh or per therm. There is thus a fundamental disincentive in New Jersey’s ratemaking process and designs to invest in renewable energy and energy efficiency programs. Deployment of both behind the meter renewables, such as solar, and energy efficiency programs result in lower throughput (sales) on the distribution system, while the costs of providing electric and gas distribution service (*e.g.* capital investment, and operation and maintenance expense) of the electric and gas distribution systems do not decrease. The language and structure of the Clean Energy Act and section 13 of the Regional Greenhouse Gas Initiative (N.J.S.A.48-3-98.1), along

---

<sup>6</sup> NJAC 14:3-2A.4(a)

<sup>7</sup> NJAC 14:3-2A.6(f)

<sup>8</sup> NJAC 14:3-2A.5(b)

<sup>9</sup> Kelly T. Sanders and Michael E. Webber, “Evaluating the energy consumed for water use in the United States,” *Environmental Research Letters*, vol. 7, 034034 (2012).

with the historic treatment of public utility energy efficiency investment in New Jersey, is clearly consistent with the utilities earning a rate of return on these investments.<sup>10</sup>

To start, N.J.S.A.48:3-87.9e.(1) provides that each electric public utility and gas public utility shall file annually with the board a petition to recover on a full and current basis through a surcharge *all reasonable and prudent costs incurred* as a result of energy efficiency programs and peak demand reduction programs required pursuant to this section, *including but not limited to recovery of and on capital investment*, and the revenue impact of sales losses resulting from implementation of the energy efficiency and peak demand reduction schedules, *which shall be determined by the board pursuant to section 13 of P.L. 2007, c. 340 (C.48:3-98.1)*. (Emphasis added).

Following the provision cited above, N.J.S.A.48:3-87.9e.(2) and N.J.S.A.48:3-87.9e.(3) require, respectively, that the Board establish incentive and penalty structures. Next, N.J.S.A.48:3-87.9e.(4) states:

The adjustments made pursuant to this subsection may be made through adjustments of *the electric public utility's or gas public utility's return on equity related to the energy efficiency or peak demand reduction programs only, or a specified dollar amount*, reflecting the incentive structure as established in this subsection. The adjustments shall not be included in a revenue or cost in any base rate filing and shall be adopted by the board pursuant to the Administrative Procedure Act. (Emphasis added).

This provision confirms that the utility will have a return on equity “related to” its energy efficiency programs. Similarly, section 13 of RGGI, (N.J.S.A.48:3-98.1), includes the following cost recovery language in subsection b. and in the definition of “program costs” in subsection d.:

b. An electric public utility or a gas public utility seeking cost recovery for any program pursuant to this section shall file a petition with the board to request cost recovery. In determining the recovery by electric public utilities and gas public utilities of program costs for any program implemented pursuant to this section, the board may take into account the potential for job creation from such programs, the effect on competition for such programs, existing market barriers, environmental benefits, and the availability of such programs in the marketplace. . . . *Ratemaking treatment may include placing appropriate technology and program cost investments in the respective utility's rate base, or recovering the utility's technology and program costs through another ratemaking methodology approved by the board, including, but not limited to, the societal benefits charge . . . All electric public utility and gas public utility investment in energy efficiency . . . programs may be eligible for rate treatment approved by the board, including a return on equity, or other incentives or rate mechanisms that decouple utility revenue from sales of electricity and gas.* (Emphasis added).

---

<sup>10</sup> The Draft EMP notes that the Market Potential Study undertaken by Optimal Energy and accepted by the BPU in June will inform the final EMP (see Draft EMP, pg. 99). Despite the Optimal Energy study presenting some suggestions related to cost recovery, it is critical that the study and the BPU acknowledge that New Jersey statutes are clear that utilities shall earn a return on energy efficiency investments. It was clear from the public discussion at the BPU Agenda meeting when the Optimal Energy report was presented that the commissioners recognized there was a considerable amount of work to be done regarding the recommendations.

d. ... “Program costs” means all reasonable and prudent costs incurred in developing and implementing energy efficiency, conservation, or Class I renewable energy programs approved by the board pursuant to this section. *These costs shall include a full return on invested capital and foregone electric and gas distribution fixed cost contributions* associated with the implementation of the energy efficiency, conservation, or Class I renewable energy programs until those cost contributions are reflected in base rates following a base rate case if such costs were reasonably and prudently incurred. (Emphasis added).

As described above, the law in New Jersey clearly allows for utilities to receive a return on energy efficiency investment.

### ***Acceleration of Distributed Energy Resources***

We must emphasize the *essential* role of the distribution and transmission systems operated by our energy members and urge you to consider the utilities’ statutory obligation to serve their customers safely, reliably, and at reasonable rates.<sup>11</sup> As the State seeks to establish policies that will lead to the transition to a bidirectional power flow, it is critical that utilities, in partnership with the BPU, have a primary role in developing safeguards to ensure safety, grid reliability, data security, and effective customer service. Candidly, the utilities’ role goes well beyond that of an “air traffic controller”. Rather, the utilities are the entities that are ultimately responsible for the integrity of the systems they operate and the cost of service. It therefore follows that entities benefitting from accelerated deployment of distributed energy resources (DER) must have accountability for their systems and any impact they might have on utility systems. The level of regulatory scrutiny and financial obligations to which DER developing entities are subject should match the safety, reliability, and cost factors attributed to their impact and allowances. Likewise, the utilities must be enabled to ensure, on a project by project basis, that DER proposals are not in conflict with statutory obligations and that industry safety standards and proper cybersecurity measures are in place. In particular, we ask you to recognize that the nation’s adversaries and strategic competitors have increasingly used cyber-attacks in attempts to disrupt critical infrastructure.<sup>12</sup> As DER penetration increases, the electric distribution system will become more complex and so it will be necessary for utility engineers to perform the due diligence sufficient to fully understand and plan for the cumulative impact of DER resources on the system. Maintaining safety and reliability of the distribution system is a top priority for our members and their customers, and should be a top priority of the EMP.

### ***Prudence of Natural Gas Investments***

The Draft EMP rightly states that natural gas contributes important reliability services to the grid. There is also recognition that the transition from other fuel sources to natural gas has led to a lower emissions portfolio, while also lowering the cost of electricity.<sup>13</sup> Yet, it is apparent that a key theme of the Draft is to move away from policies that enable investment in natural gas infrastructure and increase in capacity.

---

<sup>11</sup> See, respectively, N.J.S.A.48:2-23 and N.J.S.A.48:2-21

<sup>12</sup> United States. Cong. Senate. Senate Select Committee on Intelligence. *Worldwide Threat Assessment of the U.S. Intelligence Community Jan. 22, 2019*. (statement for the record. Daniel R. Coates, Director of National Intelligence. Retrieved at: <https://www.dni.gov/files/ODNI/documents/2019-ATA-SFR---SSCI.pdf>

<sup>13</sup> Draft EMP, pg. 43

Notably, the Draft EMP states that the Integrated Energy Plan, the modeling study being conducted by the Rocky Mountain Institute to inform the final EMP, will “equip the state with information necessary to evaluate the necessity *or financial prudence of future gas infrastructure projects* in light of a presumptive decrease in demand of natural gas possible stranded assets within the next three decades.” (Emphasis added).<sup>14</sup> We urge the State to reconsider basing a determination of prudence on a broad-based study. Rather, we recommend that the BPU adjudicate each proposal on its individual merits while utilizing sound ratemaking principles that enable utilities to fulfill their statutory obligation.

Moreover, we must advise that your consideration of the prudence of investment in natural gas infrastructure should take into account that significant reduction in emissions are being achieved by NJUA’s natural gas members through annual capital construction and by the implementation of accelerated infrastructure replacement programs. The programs involve replacement of cast iron, wrought iron, bare steel, and unprotected coated steel distribution pressure mains. Collectively, the companies have invested billions of dollars in New Jersey’s natural gas distribution infrastructure through these programs since 2010.<sup>15</sup> The accelerated infrastructure replacement programs were initiated by the companies and approved by the BPU in response to the State’s call for the BPU and New Jersey’s investor-owned energy utilities to aid in economic recovery; subsequently programs were added to address resiliency and reliability.<sup>16</sup> Since then, each company has created hundreds of good paying jobs through these programs.<sup>17</sup>

While the impetus for State support of the programs was economic, there are tangible environmental benefits. A peer-reviewed study<sup>18</sup> led by researchers from Stanford University revealed that U.S. cities with programs calling for the replacement of aging natural gas pipeline have 90 percent fewer leaks per mile than cities without such programs. Likewise, here in New Jersey, we have tangible evidence that these programs significantly reduce emissions as demonstrated by the company estimates stated below:

### PSE&G

PSE&G estimates GHG reduction associated with cast iron and unprotected steel pipe replacement using the current EPA Greenhouse Gas Reporting Program: Subpart W – Petroleum and Natural Gas Systems methodology (EPA Subpart W). At the completion of the first three years of the Gas System Modernization Program (GSMP I)<sup>19</sup>, PSE&G estimates a ***cumulative reduction of 70,500 tons of CO2 equivalent annually*** based on the replacement of:

---

<sup>14</sup> Draft EMP, pg. 24

<sup>15</sup>See I/M/O the Proceeding for Infrastructure Investment and a Cost Recovery Mechanism for All Gas and Electric Utilities, BPU Docket Nos. EO09010049 and GO09010054 and examples of associated orders: South Jersey Gas – Docket No. GO09010051 (April 2009), PSE&G – Docket No. EO11020088, Elizabethtown Gas – Docket No. GO09010053 (April 2009), New Jersey Natural Gas – Docket Nos. EO09010049, GO09010052, and GR07110889 (April 2009), and Atlantic City Electric Docket Nos. EO09010049, and GO09010054.

<sup>16</sup>See, for example, BPU Docket Nos. EO09010049, GO09010052, and GR07110889, regarding New Jersey Natural Gas’s investment program, citing the State’s request of New Jersey’s investor-owned energy utilities to accelerate capital investments and efficiency programs as a means to support economic development and job growth. The State requested that the utilities provide company-specific program proposals.

<sup>17</sup>State law requires that employees who work on public utility construction projects must be the paid prevailing wage for their craft or trade. See N.J.S.A.34:13B-2.1

<sup>18</sup> <http://www.platts.com/latest-news/natural-gas/houston/study-calls-for-us-natural-gas-pipeline-replacement-21167598> citing *Environ. Sci. Technol. Lett.*, 2015, 2 (10), pp 286–291, Publication Date (Web): September 9, 2015

<sup>19</sup> The replacement work was prioritized based on methane emissions data from the Environmental Defense Fund.<sup>19</sup>

- 356 miles of cast iron
- 84 miles of unprotected steel main
- 34,000 unprotected steel services
- 113 district regulators abandoned

At the completion of the five-year Phase II extension of the GSMP, PSE&G *estimates an additional cumulative reduction of 155,000 tons of CO2 equivalent annually* based on the replacement of:

- 755 miles of cast iron
- 175 miles of unprotected steel main
- 80,000 unprotected steel services
- 224 district regulators abandoned

#### South Jersey Gas

South Jersey Gas *estimates a cumulative reduction of 63,708 tons of CO2 equivalent annually* based on the following replacements from 2010-2017:

- 170 miles of cast iron main
- 565 miles of bare steel main
- 33,221 steel services
- 45 district regulators retired

#### Elizabethtown Gas

Elizabethtown Gas *estimates a cumulative reduction of 34,455 tons of CO2 equivalent annually* based on the following replacements from 2010-2017:

- 286 miles of cast iron main
- 6,631 steel services
- 6,558 copper services
- 12 district regulators retired

#### New Jersey Natural Gas

New Jersey Natural Gas estimates a cumulative *reduction of 61,907 tons of CO2 equivalent annually* based on the following replacements from 2010-2017:

- 148 miles of cast iron main
- 515 miles of steel main
- 36,906 steel services

Also, the companies’ replacement programs involve upgrading systems to elevated pressures which supports use of modern high efficiency natural gas appliances and encourages development of emerging technologies.

In addition to critical infrastructure investments, NJUA member companies have committed to reducing methane emissions through participation in the Natural Gas STAR Methane Program. The Program was founded by the U.S. Environmental Protection Agency, in collaboration with natural gas and oil companies and provides a framework for partner companies to implement methane reducing technologies and practices and document their voluntary emission reduction activities. By joining the Program, partners commit to 1) evaluate their methane emission reduction opportunities, 2) implement methane reduction projects where feasible, and 3) annually report methane emission reduction actions to the EPA. New Jersey Natural Gas, South Jersey Gas, and PSE&G have all made commitments under the Program as demonstrated below.<sup>20</sup>

Partner	Partner Join Date	Segment	Commitment	Rate/Intensity Target	Start Date	Commitment Achievement Year
South Jersey Gas	3/25/2016	Distribution	Mains – Cast Iron and Unprotected Steel	5.0%		
South Jersey Gas	3/25/2016	Distribution	Services – Cast Iron and Unprotected Steel		1/1/2016	2020
PSE&G	3/25/2016	Distribution	Mains – Cast Iron & Unprotected Steel	1.5%		2021
PSE&G	3/25/2016	Distribution	Services – Cast Iron & Unprotected Steel		4/1/2016	2021
New Jersey Natural Gas	9/13/2018	Distribution	Mains – Cast Iron & Unprotected Steel	95%	10/1/2018	2021
New Jersey	9/13/2018	Distribution	Services –		10/1/2018	2021

<sup>20</sup>Full report available at: <https://www.epa.gov/natural-gas-star-program/methane-challenge-partner-commitments>



Natural Gas			Cast Iron & Unprotected Steel			
-------------	--	--	-------------------------------	--	--	--

***Advanced Metering Infrastructure (AMI)***

The NJUA supports seeking ways to ensure that AMI is part of New Jersey’s energy future. AMI allows for time-based tracking of electricity usage recorded in short intervals, such as hourly, or more frequently. It is clear that smart meters themselves are but one part of the whole system that must be developed in order to bring customers the benefits of the smart meter experience. Smart meters and AMI provide a host of potential benefits for both customer and utility. For the customer, the U.S. Department of Energy (USDOE) found that AMI provides, for example:

- “More customer control over electricity consumption, costs, and bills from greater use of new customer tools (e.g., web portals and smart thermostats) and techniques (e.g., shifting demand to off-peak periods).”<sup>21</sup>
- Fewer inconveniences for consumers due to faster restoration after major storm events or disruptions.<sup>22</sup>
- Lower customer costs through decreases in peak demand for electricity.<sup>23</sup> More expensive generation resources are typically dispatched during peak electricity demand, so lowering that peak can drive down the overall cost of the electricity commodity charge for all customers.

For utilities, benefits found by the USDOE include:

- Efficiencies such as fewer truck rolls and improvements in asset utilization and maintenance.<sup>24</sup>
- Improved billing accuracy and faster resolution of billing disputes.
- Identification of “unusual usage patterns in advance of bills”<sup>25</sup> and faster notification to customers of those patterns.
- Improved tamper and theft detection mechanisms.
- Faster isolation of outages allowing “dispatch [of] repair crews more precisely, reducing outage duration, limiting inconvenience, and reducing” associated costs.<sup>26</sup>

AMI also allows implementation of innovative rate mechanisms such as time-of-use rates, critical peak incentives, and the like. The ability to implement rate mechanisms like these will become increasingly important as the State moves to promote deployment of electric vehicles and associated charging infrastructure, energy efficiency measures, and renewable energy technologies. And, customers are increasingly interested in monitoring, analyzing, and increasing the efficiency of their energy use. Utilities are in the best position to help customers manage energy use, and smart meters may enhance

<sup>21</sup> Smartgrid.gov, U.S. Department of Energy Advanced Metering Infrastructure and Customer Systems: Results from the Smart Grid Investment Grant Program (Sept. 2016), available at [https://energy.gov/sites/prod/files/2016/12/f34/AMI%20Summary%20Report\\_09-26-16.pdf](https://energy.gov/sites/prod/files/2016/12/f34/AMI%20Summary%20Report_09-26-16.pdf).

<sup>22</sup> Ibid.

<sup>23</sup> Ibid.

<sup>24</sup> Ibid.

<sup>25</sup> Ibid.

<sup>26</sup> Ibid.

their ability to do so after there has been a systematic deployment of fully functional AMI systems in New Jersey.

Notwithstanding the Draft EMP's recognition of AMI's potential benefits, we must question the assumption<sup>27</sup> that smart meters have reached cost parity with all traditional meters. Information provided by our members does not support this assertion. Moreover, a discussion of cost parity of meters alone is misplaced in the Draft EMP. Rather the final EMP should reflect that the total business case for AMI deployment, beyond the cost of the meters themselves, is the analysis that must be undertaken and should include both the costs and the benefits, including cost savings, of implementing an AMI program. We also advise that any rules established to enable AMI deployment not to be designed as a "one size fits all approach". Instead, we ask that you leave determinations about implementation to each utility. Each utility has unique service territories as well as unique system characteristics, which need to be evaluated on a utility specific basis. Also, each utility is starting from a different stage in AMI development so each program should be appropriately individualized. For example, it will be necessary for each utility to undertake an analysis of the timeframe for the roll-out of an AMI program along with an associated analysis of requirements related to meter deployment, grid enhancements, integration of communication technology onto the grid, and IT infrastructure upgrades. In addition, it is important to consider that with the roll out of AMI comes the collection of more granular customer and system data. Finally, we must emphasize that the privacy of our customer data is sacrosanct, and strongly recommend that any AMI related rules do not require data sharing with third-party entities.

## **II. Establish Policies that Recognize the Need to Support Transmission Infrastructure that will Increase Natural Gas Capacity and Electric System Reliability**

### ***Natural Gas Transmission and Capacity***

New Jersey already has one of the lowest emissions profiles in the region, as in-state coal and oil generation has been replaced with natural gas, and we have continued to benefit from zero-emissions baseload nuclear generation. The abundant natural gas supply available through the Marcellus Shale has helped New Jersey consumers to save hundreds of millions of dollars. However, new interstate pipeline capacity is needed. New Jersey is the tenth-highest natural gas consuming state in the country, and capacity constraints<sup>28</sup> have resulted in price spikes that cost New Jersey consumers and businesses hundreds of millions of dollars during very cold weather. Each pipeline project has its own benefits to customers and the state. For example, the Southern Reliability Link will help to improve reliability by building redundancy in supply points and PennEast will access new locations for supply to help lower cost, diversify supply, and increase reliability. We also feel it necessary here to state that the utilization of natural gas for generation and the increased deployment of renewables are not mutually exclusive. The reliability, dependability, and resilience of natural gas generation will help to accommodate an increasing level of renewable generation, with its inherent output intermittency. In addition, leveraging

---

<sup>27</sup> Draft EMP, pg. 70.

<sup>28</sup> NJUA looks forward to the opportunity to engage in meaningful participation in the BPU's stakeholder proceeding that will explore gas capacity issues in New Jersey to be held pursuant to I/M/O of the Verified Petition of the Retail Energy Suppliers Association to Reopen the Provision of Basic Gas Supply Service Pursuant to the Electric Discount and Energy Competition Act, N.J.S.A.48:3-49 et. seq. and Establish Gas Capacity Procurement Programs, BPU Docket No. GO17121241 (February 27, 2019).

the natural gas infrastructure for the direct and distributed use of lower carbon fuels, such as renewable natural gas, can help us cost-effectively meet the State's goals. With that, the EMP should encourage the objective review of each pipeline project on its own merits. As former President Obama's Administration noted when it outlined his Climate Action Plan, "investments to build and upgrade gas pipelines will not only put more Americans to work, but also reduce emissions and enhance economic productivity."<sup>29</sup>

### ***Electric Transmission***

Investment in the EDCs' existing transmission systems have been and are still necessary, given current demands and aging of infrastructure. Moreover, as noted in the Draft EMP, additional investments in the transmission system will be needed to support the level of electrification and emissions reductions called for in the Draft EMP.

The Draft EMP raises questions regarding BPU regulatory authority with respect to electric transmission project approvals. There are means by which state regulatory agencies, including the BPU, currently participate in the review of both baseline and supplemental transmission projects. Baseline projects are identified as part of PJM Interconnection, LLC's (PJM) reliability planning and economic planning analysis. For example, a baseline reliability project may be needed to enable part of the system to meet federally mandated and enforceable reliability standards. Those standards are developed and adopted by the North American Electric Reliability Corporation (NERC) through NERC's Reliability Standards Development program and placed into effect pursuant to Federal Energy Regulatory Commission (FERC) orders or through other applicable authorities.<sup>30</sup> Supplemental projects<sup>31</sup> are Transmission Owner ("TO") initiated projects which are not mandated or directed by PJM but are necessary to address planning functions not transferred to PJM. The baseline projects are reviewed through a Regional Transmission Expansion Planning process, which is open to PJM members, regulatory agencies such as the Board, and any other interested parties. The supplemental projects are discussed in a series of meetings (Assumptions, Needs, and Solutions Meetings) in accordance with Attachment M-3 of the PJM Open Access Transmission Tariff ("OATT"). Stakeholders have the opportunity to participate and comment through each of these meetings. Therefore, NJUA encourages the Board to utilize these opportunities to understand and evaluate the EDCs' proposed baseline and supplemental projects in New Jersey.

As the Board seeks to explore this issue, we emphasize that electric utilities must have the flexibility to undertake both baseline and supplemental projects. As discussed above, baseline projects are important because they are mandated by PJM once they are approved through the RTEP process and supplemental projects are equally as important because these projects are needed to address the integrity of the grid and will also be needed to modernize the grid in order to integrate and realize the full locational net value of DER.

The Draft EMP also expresses concerns that transmission projects are resulting in higher costs for customers. Specifically, the Draft EMP notes that there is "unjustly high Return on Equity ("ROE")"

---

<sup>29</sup>Retrieved at [https://www.northeastgas.org/accelerated\\_infrastructure.php](https://www.northeastgas.org/accelerated_infrastructure.php)

<sup>30</sup> See section 215(e) of the Federal Power Act; also 18 C.F.R. §39.7.

<sup>31</sup> Transmission expansions or enhancements, Supplemental Projects, are FERC jurisdictional pursuant to the Federal Power Act. 16 U.S.C. § 824(a).

and that this is connected to the fact the “FERC does not engage in further prudence review once the formula is set and unlike standard rates, charges passed on to ratepayers through formula rates are not subject to the typical rate case type litigation.” It is important to note that in order for a TO to receive approval for a rate to recover the costs of its transmission investments, there must be a litigated proceeding before the FERC, in which state agencies like the Board can participate. Also, if a state commission or other party believes that a formula rate approved by the FERC has become unjust or unreasonable, that party is able to file a complaint with the FERC under Section 206. Therefore, we disagree with the Draft EMP’s characterization that the ROEs set by the FERC are “unjustly high” as well as the indication that the FERC does not review or have protocols in place to ensure that formula rates are just and reasonable. And because investment in the transmission system is critical to not only maintaining the existing system, but also to advancing the State’s clean energy goals, to utilities believe it is vital that the State act as a partner with the EDCs in supporting continued transmission investment.

### **III. Consider the Critical Role of Utilities in Energy Efficiency**

Holding to the axiom that the cheapest and cleanest unit of energy is energy not used, the utilities have led the way in the development and deployment of energy efficiency programs, both individually and in partnership with the New Jersey Clean Energy Program (NJCEP). Going further, NJUA members were partners in, and supportive of, the development and enactment of the Clean Energy Act which established ambitious new energy reduction targets for utilities. The utilities have been working diligently with the NJCEP and BPU staff on the implementation of the provisions of the Act and to meet associated deadlines.

#### ***Question No. 12 of the Stakeholder Meeting Notice***<sup>32</sup>

We suggest that it is most prudent to first determine the feasibility and impact of meeting the Clean Energy Act targets in the statutorily established timeframe<sup>33</sup> before seeking legislation to require new targets. There are numerous factors to consider in making this determination, including, but not limited to: weather, economic factors, customer growth, increased reliance on electronic devices, deployment of emerging technologies, customers’ behavioral anomalies, and the potential impact of the State’s policy to accelerate distributed energy resources and drive mass electrification in the building and transportation sectors as articulated in the Draft EMP. It is notable that the Clean Energy Act requires the consideration of many of these factors “and any other appropriate factors”<sup>34</sup> in adopting quantitative performance indicators that establish “reasonably achievable” targets for energy usage reductions and peak demand reductions. One important factor that should be considered is the range of costs to achieve higher targets.

---

<sup>32</sup> Question #12 of the BPU’s Notice Regarding the Draft EMP is stated as follows: “New Jersey is currently targeting annual energy efficiency gains of 2% in the electricity sector and 0.75% in the gas sector. Do you recommend that New Jersey be more aggressive in approaching its energy efficiency goals? Why or why not, how much annually is feasible, and how long of a ramp up period is needed?”

<sup>33</sup> See subsection a. of section 3 of the Clean Energy Act (N.J.S.A.48:87.9) providing, in pertinent part, that energy reduction goals are met “within five years of implementation” of the utilities’ respective energy efficiency programs.

<sup>34</sup> Id.

While the Draft EMP references the Market Potential Study finding that the state could theoretically realize a 21 percent reduction in electricity demand by 2029<sup>35</sup>, we propose that the BPU also consider that the targets established in the Clean Energy Act were developed among many stakeholders and with significant deliberation that included numerous legislative hearings. We respectfully ask the BPU to consider that the utilities had extremely limited opportunities for input into its development and that stakeholder response to the draft Study was limited in part due to the challenging time frames to which the BPU and its stakeholders were subject. Furthermore, as the Board appropriately noted in its Order dated May 28, 2019: “The Board acknowledges that there is still a lot of work ahead and that there are many details not fully contemplated in the law or addressed in the EE study which require further analysis and recommendations.” The Board adopted the Market Potential Study as preliminary and directed a stakeholder process to support its further determinations. As such, it is most prudent to first determine the feasibility and impact of meeting the Clean Energy Act targets in the statutorily established timeframe<sup>36</sup> before seeking legislation to require new targets. Therefore, NJUA encourages greater collaboration to better inform the goal-setting process to ensure that the energy efficiency goals established are attainable at a reasonable cost to NJ consumers.

***Question No. 13 of the Stakeholder Meeting Notice***<sup>37</sup>

The NJUA has been consistent in asserting that the utilities are uniquely positioned to support Governor Murphy’s Administration in implementing energy efficiency initiatives, in addition to being statutorily required to do so.<sup>38</sup> Given recent proposals<sup>39</sup>, we ask that you consider that the principle of due process requires that the utilities cannot face a mandated responsibility to deliver energy savings as set forth in the law and then effectively be excluded from operating in the market segments where the most cost-effective opportunities exist. We note that our energy members have significant experience running energy efficiency programs and recognize the magnitude of the effort required to develop and offer energy efficiency programs for their customers at reasonable cost.

Speaking further to the strength of utility-run programs, the utilities can leverage their ongoing relationship and frequent communication with customers. Routine utility interactions, such as inquiries regarding a high bill or new customer connections can be leveraged into opportunities to participate in utility energy efficiency programs. Leading programs across the country are focused on personalization of customer communications to identify the best opportunities for customers to save energy and for improving the targeting of customer participation through propensity modeling.

The utilities recognize that there needs to be a comprehensive and diversified portfolio of programs to ensure that all customer classes can participate and realize energy savings to meet the very ambitious Clean Energy targets. It is important that special attention is given to programs and features to support

---

<sup>35</sup> Draft EMP, pg.59.

<sup>36</sup> See subsection a. of section 3 of the Clean Energy Act (N.J.S.A.48:87.9) providing, in pertinent part, that annual energy reduction goals must be met “within five years of implementation” of the utilities’ respective energy efficiency programs.

<sup>37</sup> Question #12 of the BPU’s Notice Regarding the Draft EMP is stated as follows: “What are the strengths and weaknesses of the utility-run energy efficiency programs, third party supplier-run energy efficiency programs, and state-run programs that NJBPU should consider?”

<sup>38</sup> See P.L.2018, c.17.

<sup>39</sup> See BPU Staff proposals regarding CRA funding and NJCEP Budgets and Program Plans for FY 2020 (proposed May 2019) and proposed Program Plans for FY 2019-22 (proposed May 2018) and FY20.

participation by low- and moderate-income residential customers. It is also important to develop distinct approaches for the residential market segments that include renters and seniors. For commercial and industrial customers, there is an opportunity to expand efforts by industry segment, leverage insights from national efforts (e.g. Consortium for Energy Efficiency and U.S. Department of Energy Better Buildings Network) to learn from others and share best practices in program administration. Each NJUA energy member has experience with providing programs and can leverage their knowledge to target or maximize participation across customer segments through both program design and implementation.

The utilities recognize the importance of meeting the expectations of customers and properly supporting trade allies and are in a unique position to engage both directly. Customers who have unsatisfactory experiences during a transition period may develop a negative association with energy efficiency investments that could reduce their interest in participating in future programs or lead them to share their bad experience with other customers. Either of those customer outcomes would make it more challenging to meet long term goals. Similarly, the utilities want to ensure that contractors and other trades allies understand and can plan for shifts in or expansion of program administration that will impact their business, including the potential for improvements that encourage them to play a greater role in the clean energy economy. For example, if utility programs can improve the timeliness of incentive payments it would provide a significant benefit to contractor working capital. Accordingly, the utilities encourage thoughtful consideration of the time frame and approach for the transition of any program that includes the opportunity for ongoing stakeholder input. We additionally suggest that the BPU not significantly redesign or expand the State's energy efficiency programs until there is greater clarity for utilities regarding their role in program administration as well as territory specific targets and clarity regarding how utility efforts will be judged under the quantitative performance indicators that will be established pursuant to the Clean Energy Act.

It is also worth noting that our multi-state companies will be able to reference their experience in other states to inform opportunity to build efficiencies here in New Jersey. This is not intended to suggest cross-subsidization between states. It is simply noting the significant potential for multi-state utilities to achieve administrative and financial efficiencies across programs and asking the Board to keep an open mind about those opportunities.

Finally, NJUA's member companies are committed to helping Governor Murphy ensure that low- and moderate-income customers may also participate in and benefit from energy efficiency initiatives. In fact, the utilities have helped more than 112,000 low-income customers through the Comfort Partners Program ("Comfort Partners")<sup>40</sup>. Comfort Partners is an energy saving and energy education program for qualified low-income customers, for no charge to those customers, that the utilities have collaboratively administered for more than 17 years. Through this program, the utilities partner with their customers who are most in need to help them save energy and money and make their homes healthier and more energy efficient. Certified Building Performance Institute contractors install energy saving measures in their homes at no cost to the customer and customers are coached on how to conserve energy. Several utilities also offer energy efficiency programs targeted to help low to moderate income customers.

---

<sup>40</sup> Rockland Electric has its own energy saving and energy education program for its low-income customers and does not participate in Comfort Partners

Taking all of this into consideration, we strongly recommend that the final EMP, along with New Jersey's efforts to implement the Clean Energy Act, should include recognition of the opportunity to leverage the strengths of the utility-run programs.

#### **IV. Establish Policies that Encourage Utility Involvement in AFV Deployment**

NJUA supports policies that advance the use of alternative fueled vehicles such as compressed natural gas (CNG) and electric vehicles (EV). Recent data shows that transportation emissions account for approximately 27% of total U.S. carbon emissions and that proportion is likely to grow.<sup>41</sup> And, as is cited in the Draft EMP, the largest source, by far, of New Jersey's CO<sub>2</sub> emissions is the transportation sector.<sup>42</sup> CNG vehicles and EVs have the potential to reduce emissions significantly from the transportation sector. NJUA energy members have been proactively engaged in developing alternative fuel technology and building infrastructure that supports the use of CNG vehicles and EVs for their fleets and employees. Some companies have made refueling service available to the public and are seeking to expand that effort.

NJUA strongly believes that utility ownership and operation of charging infrastructure must be recognized as a viable option in state policy, as it offers a significant and valuable opportunity for widespread charging deployment. As noted by Deloitte in its article "Powering the future of mobility":

Some state utility commissions have hesitated to allow electric companies to recover these costs, seeing charging stations as a benefit to some but not all utility customers. In addition, some regulators believe that allowing cost recovery and a rate of return would provide an unfair competitive advantage for electric utilities over other infrastructure providers. But the expansion of EVs and the potential benefits to all electricity customers in terms of reliability, affordability, and environmental gains from widespread adoption diminishes these arguments and highlights the crucial role of utilities.<sup>43</sup>

The article also notes that the California Public Utilities Commission precluded the state's investor-owned utilities from investing in EV charging infrastructure in 2011, but in 2014, reversed its decision.<sup>44</sup> EV adoption in California has markedly increased since utility EV charging initiatives were launched.<sup>45</sup> New Jersey should learn from their experience in this regard. In addition, the Alliance to Save Energy's 50x50 Commission recently issued recommendations including a call for utility regulators to support utility involvement in the development of charging and refueling stations<sup>46</sup>. Electric utilities are

---

<sup>41</sup> U.S. Environmental Protection Agency. *U.S. Greenhouse Gas Inventory Report: 1990-2013*

<sup>42</sup> New Jersey Department of Environmental Protection (2015). *Statewide Greenhouse Gas (GHG) Emissions Inventory, 2015 Report*. Retrieved at <https://www.nj.gov/dep/aces/oce-ghgei.html>

<sup>43</sup> Smith, S., Sanborn, S., Slaughter, A. (October 16, 2017). Retrieved at <https://www2.deloitte.com/insights/us/en/focus/future-of-mobility/power-utilities-future-of-electric-vehicles.html#endnote-38>

<sup>44</sup> Ibid.

<sup>45</sup> <https://theicct.org/sites/default/files/publications/CA-cityEV-Briefing-20180507.pdf>

<sup>46</sup> Alliance to Save Energy (September 26, 2018). *50x50 Reinventing U.S. Mobility*. Retrieved at [https://www.ase.org/sites/ase.org/files/ase-50x50-full\\_policyreport-final.pdf](https://www.ase.org/sites/ase.org/files/ase-50x50-full_policyreport-final.pdf)

uniquely positioned to effectively and efficiently deploy and maintain EV infrastructure. Widespread availability of charging and fast-charging stations will diminish consumer “range anxiety” and increase EV adoption rates.

We also advise that policies or rules concerning EV infrastructure should *not* include provisions to require “network choice” and that the State view any proposal containing that language with a particularly critical eye. Network choice would allow the end user of charging infrastructure to choose the type of software used to transmit data throughout a charging network. At first glance, this appears as a competition-driven, consumer-friendly proposal, but it is not. Choosing a network is important but the utilities should have the flexibility to choose the appropriate software, as necessary, and not have the “choice” imposed on them by third-party vendors. Network choice defeats the purpose of having network software in the first place and it could undermine the potential innovative uses of the EV charging network, including the ability to lower peak demand and thus lower per unit electricity costs for all consumers; and the ability of EVs to discharge back into the grid in a way that helps drive down costs.

In summary, NJUA encourages the Murphy Administration to include the New Jersey’s energy utilities in efforts to further integrate new EV charging technologies into the marketplace and to reflect that policy in the final EMP.

#### **V. Establish Policies to Assist LMI Customers**

NJUA members recognize the need to provide assistance to customers who are experiencing financial challenges and support policies to continue that effort. NJUA member companies conduct extensive outreach so that customers in need of assistance are aware of the suite of programs available to help. Companies inform customers about programs like the Low-Income Home Energy Assistance Program (LIHEAP), New Jersey’s Lifeline Credit Program and the Universal Service Fund Program, as well as programs available to help customers facing temporary financial hardships, such as NJSHARES and Payment Assistance for Gas and Electric (PAGE) grants. Many companies have been conducting outreach events across their service territories over the past few weeks to help customers apply for assistance for this coming winter season. The utilities also work closely with non-profit and community organizations to help fill in other gaps. Our members provide significant financial assistance and volunteer hours to hundreds of organizations across the state that help to provide a safety net to our customers most in need of assistance.

#### **Conclusion**

In conclusion, the NJUA appreciates the willingness of the Governor, the Board of Public Utilities, and participating State departments to consider our comments as the State finalizes the Energy Master Plan.

Respectfully,



Thomas R. Churchelow, Esq.  
New Jersey Utilities Association