STATE OF NEW JERSEY
OFFICE OF ADMINISTRATIVE LAW
BEFORE THE HONORABLE WALTER J. BRASWELL

IN THE MATTER OF THE PETITION OF PUBLIC SERVICE ELECTRIC AND GAS COMPANY FOR APPROVAL OF AN INCREASE IN ELECTRIC AND GAS RATES AND FOR CHANGES IN THE TARIFFS FOR ELECTRIC AND GAS SERVICE, B.P.U.N.J. NO. 14 ELECTRIC AND B.P.U.N.J. NO. 14 GAS PURSUANT TO N.J.S.A. 48:2-21 AND N.J.S.A. 48:2-21.1 AND FOR APPROVAL OF A GAS WEATHER NORMALIZATION CLAUSE; A PENSION TRACKER AND FOR OTHER APPROPRIATE RELIEF	)	**BPU DKT. NO. GR09050422** **OAL DKT. NO. PUCRL 07559-2009N**

DIRECT TESTIMONY OF MICHAEL J. MCFADDEN, A. E. MIDDENTS, AND JOHN N. PETERS RELATING TO GAS SYSTEM RELIABILITY ON BEHALF OF THE NEW JERSEY DEPARTMENT OF THE PUBLIC ADVOCATE DIVISION OF RATE COUNSEL

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I. INTRODUCTION AND BACKGROUND

Q. Please state your name, title, and business address.

A. My name is Michael J. McFadden and I am the president of McFadden Consulting Group, Inc. ("McFadden Consulting"). My business address is 625 S. York Street, Denver, Colorado 80209.

My name is A. E. "Pete" Middents and I am an independent Natural Gas Industry Consultant. I am currently retained as a Senior Consultant by McFadden Consulting. My business address is 3 University Lane, Greenwood Village, Colorado 80121.

My name is John N. Peters and I am an independent Natural Gas Industry Consultant. I am currently retained as a Senior Consultant by McFadden Consulting. My business address is 8629 East Pawnee Drive, Parker, CO 80134.

Q. Please provide a summary of your qualifications and experience.

A. Copies of our resumes are contained in the Appendix.

Q. Was this testimony prepared by you or under your direct supervision?

A. Yes.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your panel's testimony?

A. The New Jersey Department of the Public Advocate, Division of Rate Counsel ("Rate Counsel') retained the McFadden Consulting Group, Inc. ("McFadden Consulting") to review and evaluate Public Service Electric and Gas Company's ("PSE&G" or "the Company") overall management of its gas distribution and transmission infrastructure, as it relates to the Company's requested increase in gas rates.

Rate Counsel also asked McFadden Consulting to review the Company's expenditures associated with the infrastructure acceleration program as approved by the New Jersey Board of Public Utilities ("BPU") in Docket No. EO09010050 as it relates to this rate proceeding.

The two portions of our engagement, i.e., to review the Company's management of the distribution system and to review the impact of the economic stimulus infrastructure program, are inextricably intertwined. For these reasons, McFadden Consulting prepared panel testimony to ensure that the appropriate individual was available to address questions that might be asked during cross-examination.

However, because the infrastructure program is in the initial stages of its two-year life and was established in a separate proceeding, it was decided to present the results of our review of the infrastructure program in a separate set of testimony.

This testimony addresses our review of the overall management of PSE&G's gas distribution and transmission infrastructure, as it relates to the Company's requested increase in gas rates.

Our companion panel testimony addresses issues and concerns related to expenditures for projects included in the Company's Capital Infrastructure Investment Program ("CIIP").

Q. Please explain how the Company's management of its distribution and transmission system impacts the rates as filed in this proceeding.

A. How PSE&G plans, engineers, and constructs its facilities has a tremendous impact on its rates for service. The cost of constructing the facilities is incorporated into its

investment in utility facilities, which then becomes part of its rate base. The Company's allowed earnings are a function of that rate base. Additionally, a significant portion of its expenses relate to operating and maintaining the existing facilities.

In connection with the Company's rate case filing, Rate Counsel wanted an independent evaluation of the Company's management of its gas distribution and transmission infrastructure, particularly:

- engineering & planning processes
- construction programs
- capital expenditure & budget approval process.

Our review of these areas requires a multi-disciplined team of individuals who have experience in each of these areas. For this reason, McFadden Consulting prepared panel testimony to ensure that the appropriate individual was available to address questions that might be asked during cross-examination.

The overall purpose of this testimony is to present the observations, findings, conclusions, and recommendations associated with the Company's management of its gas distribution and transmission system. The remaining portion of our testimony is divided into the following sections:

- Summary of Findings, Conclusions, and Recommendations
- Information Reviewed
- Engineering & Planning Processes
- Construction Practices
- Operations & Maintenance Programs

- PSE&G's Budgeting Process

III. SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Q. Please summarize your findings, conclusions, and recommendations.

A. Based on our review, McFadden Consulting believes that PSE&G gas engineering design and operating processes and procedures appear to be effective and well within acceptable industry standards. The Company operates in a difficult environment where new business expenditures are greatly overshadowed by replacement of aging facilities and obsolete equipment in densely populated areas. Its engineering design philosophy appears to maximize the deliverability of an existing distribution infrastructure. Additionally, we believe the Company's approach for identifying potential system reliability issues is reasonable.

The Gas Delivery organization appears to be fairly organized when dealing with operation and maintenance of their gas delivery system. However, the Company indicated it has not considered outsourcing any of its routine O&M functions. Other gas distribution companies have successfully outsourced these types of functions. We recommend that the BPU require PSE&G Gas Delivery conduct an in-depth analysis of the costs and benefits of outsourcing routine O&M functions on a regular basis.

The Company does not have a formal program to move inside gas meter sets to the outside. We recommend that the Company be required to re-examine this policy. This could begin with a small program that could be done during meter change-outs to evaluate the costs and benefits of such a program.

PSE&G's capital expenditure approval process reflects the fact that is a very large combination gas and electric utility holding company with four principal

subsidiaries or organizations that operate in somewhat disparate businesses, which it currently refers to as Lines of Business or "LOB". Its capital budgeting process is tailored to meld the budgets of the LOBs into a cohesive process that meets the needs of each of the LOBs while simultaneously meeting the overall corporate need for cohesion.

The budgeting process utilizes a "top down" approach. The financial impacts of Gas Delivery's various capital projects are assessed using several computer based tools developed by the financial organization. McFadden Consulting believes that this approach may foster an environment of spending all amounts budgeted within the assigned capital target. McFadden Consulting has not observed any obvious problems in this area, but we recommend that Gas Delivery consider its obligation to both Company stakeholders and ratepayers with regard to the operation of their asset management program.

IV. INFORMATION REVIEWED

Q. Please describe the material or data sources analyzed in conducting the McFadden Consulting's review and evaluation of the Company's management of its gas distribution and transmission infrastructure.

A. McFadden Consulting reviewed PSE&G's Petition in this case, including the testimony and exhibits filed by PSE&G in support of said petition. McFadden Consulting conducted a detailed review of the direct testimonies and exhibits submitted by the Company's witnesses, with particular emphasis on the testimony of:

- Ralph A. LaRossa, President and Chief Operating Officer
- Jorge L. Cardenas, Vice President - Gas Delivery

- Mark G. Kahrer, Vice President – Finance.

Based on our review of these documents, and our experience and expertise in gas distribution company system planning, engineering, construction, and operations, McFadden Consulting initially prepared 108 data requests seeking additional information and clarification on how PSE&G manages its physical facilities as well as additional information that pertained to the CIIP. Subsequently, we filed 23 additional data requests.

We also reviewed the Company's responses to the numerous data requests submitted by other consultants retained by Rate Counsel and the Board Staff.

On October 22 and 23, 2009, we conducted an on-site visit of PSE&G, during which time we reviewed documents and interviewed key personnel responsible for managing the Company's Gas Delivery facilities. In addition to PSE&G and the McFadden Consulting team, representatives from Rate Counsel, BPU, and Cozen O'Connor on behalf of the Electric Generation Customers attended.

McFadden Consulting was also retained by Rate Counsel to assist it in reviewing PSE&G's petition for Approval of a Capital Economic Stimulus Infrastructure Investment Program and An Associated Cost Recovery Mechanism Pursuant to N.J.S.A. 48:2-21 and 48:21.1 filed with the Board of Public Utilities ("BPU") in Docket. No. EO09010050. In that docket, McFadden Consulting reviewed the Company's filing dated January 21, 2009, as well as the Company's supplemental filing dated February 4, 2009.

Subsequent to our review of the Company's CIIP, we prepared 65 data requests and conducted a detailed review of the Company's responses to said data

requests. Additionally, we reviewed the Company's responses to the numerous data requests submitted by other consultants retained by Rate Counsel and the Board Staff. We reviewed the Stipulation agreed to by the parties in that proceeding, which was subsequently approved by the BPU on April 28, 2009. We also reviewed PSE&G's first two infrastructure Quarterly Reports filed with the BPU.

The review of this information and material, and the interviews we conducted, provide the basis for our findings.

V. ENGINEERING & PLANNING PROCESSES

Q. Please describe your observations on how the Company's planning and engineering design process identifies potential system reinforcements.

A. We reviewed PSE&G's planning and engineering design methodology for determining when future system improvements and reinforcements are to be included in the capital budget. PSE&G runs periodic system flow studies utilizing their SynerGee Stoner® ("Stoner") software program to analyze projected peak day low pressure areas within the distribution system. These low pressure areas are sometimes referred to as tail-ends within the distribution system. If the Stoner flow study identifies an area where tail-end pressures are critically low, a reinforcement project is proposed in the budgeting process to raise pressure in these areas to prevent outages.

For example, on a 60 pounds per square inch gauge ("psig") designed distribution system with 60 psig being delivered at the meter/regulator station, the Company's Gas Distribution Standards Manual states that tail-end pressures below 3 psig shall be flagged for a future reinforcement. This engineering design philosophy maximizes the deliverability of an existing distribution infrastructure. Therefore, we

believe the Company's approach for identifying potential system reliability issues is reasonable and does not create unnecessary capital expenditures.

Q. What weather criteria does the Company use when modeling its system for peak day operation?

A. As with most natural gas companies, PSE&G uses a design day point of reference for peak day system modeling. A design day is the average of the highest and the lowest temperatures for that particular day. For PSE&G's service territory, they use a design day temperature of 5ºF with an assumed wind velocity of 15 mph. Both of these readings are taken at the Newark Liberty International Airport. The Company states that the maximum peak hour usually occurs between 7:00 AM and 9:00 AM with the airport temperature at 0ºF.

Q. Are these peak day design criteria appropriate?

A. During the last 20 years, records show that there was one day (January 19, 1994) where the average temperature was 2ºF and five days where the temperature averaged between 5ºF and 10ºF. The 5ºF design day temperature seems to be appropriate.

Q. Please explain how the Company determines the pipe size for a proposed reinforcement.

A. When it has been determined that a low pressure area is in need of reinforcement that requires the addition of pipe, PSE&G again uses the Stoner software package to look at projected load growth for the area. They have the ability to project how the system loads, flows and pressures will look more than five years into the future. They can insert different pipe diameters into the reinforcement model, seeing how that pipe size impacts system tail-end pressures. Using this process, the Company has the

opportunity to ultimately pick a pipe size that is neither undersized nor oversized for the near future.

PSE&G provided an example of a 2008 project, the Route 526-Upper Freehold Reinforcement, where they determined that 8-inch was the correct size for this 24,000 foot gas main reinforcement in this 60 psig distribution. Without reinforcement, the low pressure area in Millstone Township would drop below 1 psig on a 5ºF design day. The Stoner model showed that the 8-inch was the correct size to increase pressures in the critical areas. The eight year forecast for the 5ºF design day indicated that the 8-inch reinforcement would provide the Millstone tail-end with a minimum pressure of 6.2 psig in the year 2016.

Another capital construction project example, the Newark Bay Crossing, was reviewed. This was a project to relocate a 12-inch transmission line under Newark Bay between Elizabeth and Bayonne because of the Port Authority of New York & New Jersey's ("Port Authority") need to deepen the channel for larger ships. The existing 12-inch pipe was near capacity. It was more of a cost benefit or business decision to increase the pipe size to 16-inch, since the directional drilling cost difference between 12-inch and 16-inch was less than 5%.

Q. Does this engineering design methodology still maintain and protect the integrity of PSE&G's gas delivery system?

A. Yes. The Company is still able to maintain the reliability of their distribution system. PSE&G has indicated that in recent years, there have been no system outages due to low tail-end pressures created by inaccurate system design and delivery assumptions. The Company does admit that water in the mains and services of their Utilization

Pressure Systems running at a pressure of approximately 6 inches water column has caused some outages.

VI. CONSTRUCTION PRACTICES

Q. Please describe your assessment of the Company's construction practices?

A. PSE&G's construction practices were reviewed and analyzed. A large portion of the Company's capital construction budget deals with their aging infrastructure, such as the replacement of cast iron mains and bare/unprotected coated steel services, and the encapsulation of cast iron bell joints.

Leak history is the main justification for these replacement projects. In addition, many of the service replacements are mandated by the BPU's 20% rule, that states:

> …an operator shall replace all bare and coated cathodically unprotected steel service lines within a definable area when records indicate that 20 percent or more of the bare and coated cathodically unprotected steel services within a definable area have exhibited leaks.[1]

Q. Please describe the Company's formal cast iron replacement program

A. PSE&G has a program to replace cast iron pipe based on operating pressure and size. The major components of program are:

- All 8-inch cast iron mains operating above utilization pressure are being replaced.
- All 12-inch cast iron operating in the 60 psig design systems are scheduled for replacement.

[1] / NJAC 14:7-1.20(d)

- All 10-inch and 12-inch cast iron mains which have experienced any breaks are on a priority list for replacement.
- Utilization pressure cast iron mains which have two or more breaks in the same segment are placed on a priority list.
- All 3-inch utilization pressure cast iron mains are being replaced.
- All cast iron services are being replaced.
- All large diameter cast iron mains, 16-inch and larger, are being replaced only if there is a conflict with outside construction activities.

There are a few exceptions to the above replacement program categories. PSE&G believes that under certain conditions, cast iron mains are a viable option. Although it is not installing any new cast iron mains, the Company has no program to replace all existing cast iron mains in its system.

Q. Are these types of replacement and repair projects necessary?

A. Generally speaking, these types of replacement and repair projects are an important aspect of providing safe and reliable service. Correcting leaks in a company's gas delivery system reduces the chance of a fire or explosion. Additionally, these types of projects can reduce lost and unaccountable ("L&U") gas, which reduces the Company's operating expenses and its rates to customers. Therefore, we believe these types of projects are necessary, although timing of the replacement or repairs can be an issue.

Q. Does the Gas Delivery budget typically include any specific projects in the annual capital construction budget?

A. Yes. PSE&G will typically have one or two specific projects. The East Rutherford Meter/Regulator Station was included in the 2009 budget. This was an Infrastructure Stimulus project. Projects such as the Route 526-Upper Freehold Reinforcement and the Newark Bay Crossing were included in previous years' budgets. The Route 526-Upper Freehold Reinforcement (24 feet of 8-inch pipe) was completed in 2008 at a cost of $1.52 million. It was installed to increase system pressures in the Millstone Township area. The 16-inch Newark Bay Crossing was mandated by the Port Authority. The total capital expenditure of that project was $6.2 million after cost sharing.

Q. What percentage of construction work is performed by outside contractors?

A. A large percentage of construction is performed by PSE&G crews. According to responses to data requests, approximately 20% of construction has been completed by outside contractors over the last five years, primarily larger steel main projects. The Company claims this contractor percentage will increase significantly with the added infrastructure work to be done in the next 24 months.

Q. What is the impact on capital construction costs using Company crews versus outside contractors?

A. This is a difficult question to address without an in-depth comparison between the Company and contractor equipment and labor costs, along with related overheads. At the on-site meeting in October 2009, the Company said that overheads for Company construction projects ranged in the neighborhood of 30%, while contractor overheads were closer to 10% for contractor work. The Company has not recently conducted a cost benefit study comparing the two alternatives.

The Company indicates that it maintains highly trained construction crews. It also monitors construction costs by benchmark with other gas utilities. Additionally, all outside contract work is awarded through a competitive bidding process.

VII. OPERATIONS & MAINTENANCE PROGRAMS

Q. From an engineering perspective, what is your assessment of the Company's overall operations and maintenance ("O&M") programs?

A. The data responses were reviewed in detail. The on-site meeting was also useful in discussing O&M issues and reviewing documents. Generally speaking, PSE&G seems to be fairly organized when dealing with operation and maintenance of their gas delivery system. The Gas Delivery Engineering Committee was established as an oversight and decision making group on ongoing O&M type issues. All Divisions and operational personnel are represented.

Q. Has the Company considered outsourcing any routine O&M functions such as markouts, meter reading, appliance service checks, vehicle/equipment maintenance, or contractor inspection?

A. In the Company's discovery responses, it indicates that it has not considered outsourcing any of its routine O&M functions. It views these functions as core competencies, which are critical to maintaining high levels of safety, system security, and reliability.

Q. In your view, is PSE&G compliant with Department of Transportation ("DOT") codes and regulations?

A. Yes. After reviewing the Company's Gas Distribution Standards Manual and the Gas Design Manual and examining the annual reports required by DOT, it appears that the Company is compliant with DOT Pipeline Safety Regulations, Parts 191 &192.

Q. Does the Company have a formal program to move inside gas meter sets to the outside?

A. The Company does not have a formal program to move inside gas meter sets to the outside, although the Gas Distribution Standards Manual states that the outside location is preferred for new meter sets.

Q. Please summarize your observations and findings regarding PSE&G's engineering design, construction and operations of their gas delivery system.

A. Overall, Gas Delivery's engineering design and operating processes and procedures appear to be effective and well within acceptable industry standards. It operates in a difficult environment where new business expenditures are greatly overshadowed by replacement of aging facilities and obsolete equipment in densely populated areas.

New technologies and cost savings programs such as Remote Methane Leak Detection ("RMLD"), Excess Flow Valve ("EFV") installation without trenching, Geographic Information System ("GIS"), and joint utility trenching have been put in place.

Q. Please summarize your conclusions and recommendations regarding the engineering design, construction and operations of the Company's gas delivery system.

A. McFadden Consulting recommends that the BPU require that PSE&G Gas Delivery conduct an in-depth analysis of the costs and benefits of using Company construction

crews versus outside contractor crews. Such analysis should consider both tangible and intangible factors.

Additionally, outsourcing routine O&M functions should be examined on a regular basis. We recognize that union issues may be a concern when considering meter reading, markouts, and leak detection. However, other GDCs have successfully negotiated outsourcing these types of functions. It may provide an opportunity to reduce O&M costs.

It is recommended that the Company be required to re-examine its policy of not having a program to remove inside meter sets to an outside location. This could begin with a small program that could be done during meter change-outs to evaluate the costs and benefits of such a program.

VIII. PSE&G'S BUDGETING PROCESS

Q. Please briefly describe PSE&G's Gas Capital Budgeting process.

A. PSE&G is a very large combination gas and electric utility holding company with four principle subsidiaries or organizations that operate in somewhat disparate businesses. PSE&G has previously referred to the different organizations as Business Units. The Company's current lexicon refers to the different businesses as Lines of Business ("LOB"). As such, its capital budgeting process is tailored to meld the budgets of the different LOBs into a cohesive process that meets the needs of each of the LOBs while simultaneously meeting the overall corporate need for cohesion.

The Gas Delivery organization's capital budget only comprises approximately 35% of the total gas and electric distribution budget and is a much smaller percentage of the total PSE&G corporate capital budget. As such, the Gas Delivery budgeting

process tends to be quite different from that found in the stand alone gas distribution companies with whom we are familiar.

Annually PSE&G prepares a 5 year capital expenditure plan. However, the last four years, or the out years, are single value highest level proposed capital expenditure budgets. Consequently, the Company's 5 year capital expenditure plan is, in reality, a one year capital budget and a four year financial expenditure forecast.

The amount of detail contained in the Gas Delivery capital budget, as it goes through the Company's approval process, is very small. The line items in the Gas Delivery capital budget consist of six blanket categories and any specific appropriation projects (specific projects that exceed $1 million).

Capital expenditures for routine construction projects, such as meter sets, line extensions, and other similar non-discretionary projects, are pooled (called "blankets") because such expenditures are dependent on circumstances not directly controlled by the Company. For example, meter sets are dependent on contractors building structures in the Company's service territory. The Company can only estimate the anticipated expenditures based on historical trends, because it does not know with certainty how many new structures will be constructed in the coming year.

The six blanket categories are:

- New business
- RF (Replace facilities)
- ER (Environmental/Regulatory)
- SR (System reinforcement)
- SF (Support facilities)

- Meters

In each of the last 5 years, over 95% of the dollars in PSE&G's Gas Delivery capital budget are earmarked for blanket type budget items.

Q. Please briefly describe PSE&G's gas capital budgeting and approval process.

A. The Gas Asset Management organization, a department within Gas Delivery, has responsibility for developing the annual Gas Delivery Capital Budget. Each year the Company's capital budgeting process begins with the assignment of "capital targets" or "annual capital amounts" for each major organization. The capital targets are, in general, derived from the prior budget's 5 year projection and are confirmed by the Utility Planning organization for the individual organization's annual capital amount.

Once Gas Asset Management receives the assigned Gas Delivery annual capital target, it populates a portfolio of proposed blanket and specific projects for evaluation against balanced scorecard impacts, asset conditions, and risk utilizing the Investment Evaluation System ("IES"). The "optimizer" function of the IES program is then applied against the portfolio of proposed projects and a portfolio of projects meeting the assigned target is identified.

Conceptual Investment Requests ("IRs"), which are consistent with the IES output, are then prepared by Gas Asset Management. The IRs include investment descriptions, historical and requested spending, work units, details of the work, and balanced scorecard areas of impact. The IRs and associated materials are then reviewed and approved by the Vice President - Gas Delivery prior to submission to the Company's formal capital budget review and approval process.

Q. Please describe PSE&G's capital review and approval process.

A. Basically, the Company has a three tier formal capital budget review and approval process:

- the PSE&G Utility Review Board
- the PSEG Capital Review Committee
- the PSEG Board of Directors

The PSE&G Utility Review Board ("URB") was developed in 2003 to provide a more formal structure to PSE&G's utility LOBs internal review of its proposed capital budget before it is submitted to the parent company's Capital Review Committee ("CRC"). The URB consists of the President of PSE&G and those who report to him. Once the URB approves the various departmental budgets, which includes Gas Delivery's Capital Budget, all of the Utility projects are consolidated into a single presentation to the CRC. It is interesting to note that during the past five years, every Gas Delivery project submitted to the URB was approved. In the response to data request RCR-GR-69, the Company indicates that projects are well vetted prior to submittal to the URB.

The CRC consists of the CFO of PSEG, the presidents of the subsidiary companies, and the PSEG Executive Vice President of Planning and Strategy. The budget requests submitted to the CRC are the input to the Public Service Enterprise Group (five year) Outlook. The CRC reviews the five year Outlook, along with individual project requests, at an annual CRC Project Review meeting held prior to the completion of the Public Service Enterprise Group Five-Year Business Plan. The

Public Service Enterprise Group Five-Year Business Plan is then presented to the Board of Directors for approval at the December Board meeting.

Q. Please summarize your conclusions and recommendations pertaining to the Company's Budgeting Process.

A. Due to the immensity and structure of the Public Service Enterprise Group's capital budgeting process, it is very important that thorough analysis of the Gas Delivery proposed capital projects be completed within that department's organization on an ongoing basis.

The Company utilizes three economic evaluation tools, the IES, the Project Economic Evaluation Model ("PEEM"), and IRs. These three tools, as defined by the Company, are described below:

- IES is used to evaluate all capital proposed investments, both blankets and specifics. It assembles key demographic information on each investment, quantifies value, risk and costs of those investments as well as their anticipated Balanced Scorecard impacts, and develops summary view at both the individual investment and the aggregate portfolio levels.
- PEEM is used to evaluate all capital specific proposed investments. It is primarily a financial analyzer, used to calculate comparative financial metrics for proposed investments and their alternatives. These metrics include primarily Internal Rate of Return, Levelized Annual Revenue Requirements and Discounted Payback Period.
- IRs contain most of the pertinent information that management needs to make an investment decision at a summarized level. The majority of the

information included in the IR comes from IES and PEEM, including project description and history, capital and O&M spending cash flows, assumptions about executing the project, balanced scorecard impacts, discussion of alternative, and financial returns.

McFadden Consulting identified some concerns with the capital budgeting process. PSE&G's budgeting process is very much a "top down" process, as evidenced by the fact that each year the process begins with the assignment of capital targets or annual capital amounts for each LOB. A top down process could foster an environment of budgeting and spending all amounts within the assigned capital target.

This concern is exacerbated by the type of economic evaluation tools that are utilized in the budgeting process and the fact that the vast majority of Gas Delivery's Capital Budget is comprised of blanket type projects. For blanket type projects, the primary benefit of the evaluation tools appears to be the optimization or relative ranking of projects. This, in turn, may foster a mindset of budgeting and spending everything that survives the IES optimizer identification function.

Because more than 95% of Gas Delivery's Capital Budget is comprised of blanket type projects, there is a concern that Company personnel may spend all dollars available for "repair and replace" type projects in the name of providing safe and reliable service. However, a gas distribution company also has an obligation to its customers to provide economic service. Blanket expenditures do not typically entail individual cost/benefit analyses. Without any cost/benefit analysis, it is uncertain if the blanket project provides any financial benefits that accrue to the customer. This is where balanced prudent asset management comes into play.

McFadden Consulting has not observed any obvious problems in this area, but it is our recommendation that Gas Delivery consider its obligations to Company stakeholders and ratepayers with regard to the operation of their asset management program. In industries that are capital intensive, it is especially important to optimize physical assets. It is important that Gas Delivery develop a mindset throughout their organization whereby all projects, including individual blanket projects, are evaluated from economical as well as safety and reliability criteria.

Q. Does that conclude your testimony?

A. Yes. However, we reserve the right to supplement our testimony based on the Company's responses to any outstanding discovery requests.

APPENDIX

MICHAEL J. MCFADDEN

AREAS OF QUALIFICATION

Rates, regulatory affairs, strategic planning, gas and electric utility operations, corporate finance, financial analysis, asset valuation, fuel supply planning and procurement, accounting, and budgeting.

EMPLOYMENT HISTORY

- President, McFadden Consulting Group, Inc., 1995-present
- Chairman, Colorado Low-Income Energy Assistance Commission, appointed as member by Governor Owens 2005-2008. Commissioner 2002-2008.
- Board of Directors, Chairman Audit Committee & Treasurer, Energy Outreach Colorado, formerly the Colorado Energy Assistance Foundation, 2003-present
- University of Phoenix, Colorado Division, Faculty Member, 1982-2005, Finance Area Chair, 1992-1993, Accounting Area Chair, 2000-2004
- Board of Advisors, Full Power Corporation, Los Angeles, CA, 1998-2000
- Senior Advisor, Hagler Bailly Consulting, Inc., Boulder, CO, 1995-2000
- Metropolitan State College, Denver, CO, Adjunct Faculty Member, 1989-1995
- Principal, Hagler Bailly Consulting, Inc., Boulder, CO, 1993-1995
- Vice President, Treasurer, Secretary and Member of the Board of Directors, WestGas Gathering, Inc., WestGas InterState, Inc., WestGas TransColorado, Inc., 1989-1993
- Manager, Financial Services and Administration, Assistant Treasurer and Assistant Secretary, Western Gas Supply Company, 1989-1993
- Staff Assistant to Senior Vice President, Finance and Chief Financial Officer, Public Service Company of Colorado, 1986-1989
- Regis University, Adjunct Faculty Member, 1981-1982
- Director, Rate Regulatory Services Department, Public Service Company of Colorado, 1974-1986

EDUCATION

- University of Denver, MBA, Business Administration, 1973
- Regis University, BS, Business Administration, 1972

PROFESSIONAL EXPERIENCE

Michael J. McFadden is a rate, regulatory affairs, finance, strategic planning, and utility operations expert with 35 years experience in the electric utility and natural gas industries. He has appeared as an expert witness and provided testimony in numerous hearing before the Federal Energy Regulatory Commission (FERC), regulatory Commissions in Arkansas, Colorado, Georgia, Indiana, Kansas, New Jersey, Ohio, Texas, Wyoming, Utah, and British Columbia, and the United States District Court. He has also filed testimony in Montana and

Ontario. Mr. McFadden headed a combination gas, electric, and steam heat utility company's rate regulatory services department where he was responsible for various submittals to regulatory agencies that had jurisdiction over the company's rates, facilities, and services. In addition, he previously served as chief financial officer for a natural transmission, gas gathering, and processing company where he was responsible for rate and regulatory affairs, financial and managerial accounting, financial policy and planning, business opportunity and financial analysis, strategic planning, and information and computer administration. He has dealt with such issues as Order 636 restructuring strategies, customer choice programs, development of gas transportation tariffs, practices and procedures, development and implementation of gas purchasing strategies, development of avoided costs, mains extensions policies, and producer take or pay issues. On the electric side of the business, he has participated in numerous rate cases and regulatory proceedings and has been involved in such issues as the utilization of purchased power, economic dispatching of generating stations, coal inventory measurement and management, generating station performance measures, incentive cost recovery mechanisms for a nuclear generating plant, generating plant maintenance schedules and management, unit coal train economics and management, and the development and administration of electric cost adjustment mechanisms. Mr. McFadden was also on the advisory board of Full Power Corporation, an electric marketing company serving the California markets. He previously served as the accounting area chair and the finance area chair for the University of Phoenix, Colorado Division. He is a past Chair and commissioner of the Colorado Commission on Low-Income Energy Assistance. Mr. McFadden is currently a member of the Board of Directors, Chairman of the Audit Committee, and Treasurer for Energy Outreach Colorado, a non-profit organization helping low-income energy users. He has a BS in business administration from Regis University and an MBA from the University of Denver.

SPECIAL TRAINING

- Cornell University, Johnson Graduate School of Management. Merger and Acquisitions Forum. 1989.
- Irving Trust Company, New York City. Financial Seminar. 1985. Security analysis, types of securities, method of offering securities, project financing, capital structure and financial policy and others.
- University of Idaho, Moscow, Idaho. Executive Development. 1982. Financing through capital markets, strategic planning and management, managing human resources, financial management and others.

PRESENTATIONS AND TESTIMONY

"The Difference between Pipelines and Gas Distributors: What You Need to Know." New Mexico State University Center for Public Utilities. Basic Utilities Course. October 2008.

Testimony in New Jersey Natural Gas Company's rate case proceeding on the management of its gas distribution and transportation infrastructure on behalf of the New Jersey Division of the Rate Counsel. Newark, New Jersey. June 2008.

Testimony and cross-examination cost impact of Tri-State Transmission and Generation Association, Inc. proposed 115 KV transmission line before the Public Utilities Commission of Colorado. April 2008.

Testimony and cross examination on Columbia Gas of Ohio's gas supply planning and procurement practices before the Ohio Public Utilities Commission. January 2007.

Testimony on cost allocation and rate design issues before the Texas Railroad Commission in Atmos Energy Corporation's request to increase rates for its Mid-Tex division in Texas on behalf of the City of Dallas, Texas. Austin, Texas. November 2006.

Testimony in Public Service Electric and Gas Company's rate case proceeding on the management of its gas distribution and transportation infrastructure on behalf of the New Jersey Division of the Ratepayer Advocate. Newark, New Jersey. July 2006.

Testimony on electric and gas department revenue requirement, cost allocation, and rate design analyses on behalf of Cheyenne Light, Fuel and Power Company before the Wyoming Public Service Commission. Cheyenne, Wyoming. October 2005.

Testimony on decoupling, revenue forecasting and rate design issues before the Georgia Public Service Commission in Atmos Energy Corporation's request to increase rates in Georgia. Atlanta, Georgia. October 2005.

Testimony on revenue forecasting, cost of service, and rate design issues before the Georgia Public Service Commission in Atlanta Gas Light Company's rate application. Atlanta, Georgia. March 2005.

Presentation to the Tennessee Valley Public Power Association, which is comprised of 158 municipal and cooperative distribution system served by the Tennessee Valley Authority on TVA's Cost of Service Methodologies. Franklin, Tennessee. November 2004.

Presentation to the Tennessee Valley Authority Board of Directors on TVA's Cost of Service Methodologies. Knoxville, Tennessee. August, 2004.

Testimony before the Arkansas Public Service Commission on Arkansas Oklahoma Gas Corporation's gas supply planning and procurement activities. Little Rock, Arkansas. May 2004.

Testimony on cost of service and rate design issues before the Georgia Public Service Commission in Atlanta Gas Light Company's earnings review proceeding. Atlanta, Georgia. April 2002.

Testimony before the Public Utilities Commission of Colorado in KN Wattenberg Transmission LLC application for a CPCN to operate facilities it constructed to serve two industrial customers within the city limits of Fort Morgan, Colorado. June 2001.

Testimony on behalf of the Colorado Office of Consumer Counsel before the Public Utilities Commission of Colorado in its investigation into price stabilization mechanisms of regulated gas utilities. June 2001.

Testimony before the Public Utilities Commission of Colorado in Totem Gas Storage Company, LLC's Application for a Certificate of Public Convenience and Necessity to Construct and Operate a Gas Storage Using Competitive Market-Based Rates. Denver, Colorado. June 2000.

Testimony before the Utah Public Service Commission in Questar Gas Company's Application for an Increase in Rates and Charges in Docket No. 99-057-20. Salt Lake City, Utah. June 2000.

Testimony before the Kansas Corporation Commission on Kansas Gas Service Company's Application for Approval to Restructure Gas Supply Contracts. Topeka, Kansas. March 2000.

Presentation to City Council on Proposed Electric and Gas Department Rate Changes. City of Fort Morgan, Colorado City Council Meeting. Fort Morgan, Colorado. January 2000.

Testimony on Questar Gas Company's Application to Recover Costs Associated with Constructing a CO_2 Extraction Plant. Salt Lake City, Utah. June 1999.

Presentation to City Council on Proposed Electric and Gas Department Rate Changes. City of Fort Morgan, Colorado City Council Meeting. Fort Morgan, Colorado. October 1998.

"Potholes on the Road to Unbundling" presented to the 57th Annual Western Conference of Public Service Commissioners. Sunriver, Oregon. June 1998.

Testimony on Incorporating Riders in Performance-Based Rate Mechanisms for Atlanta Gas Light Company. Atlanta, Georgia. March 1998.

Testimony on the Management and Financial Review of Atlanta Gas Light Company's Manufactured Gas Plant Site Environmental Clean-Up Efforts. Atlanta, Georgia. March 1998.

Keynote address on Electric Utility Restructuring at the University of Kansas' 21st Annual Economic Outlook Conference. Lawrence, Kansas. October 1997.

"An Analysis of the Impact of Retail Wheeling on the State of Kansas" presented to the Kansas Legislative Task Force on Retail Wheeling. Topeka, Kansas. August 1997.

A presentation to the Rocky Mountain Natural Gas Strategy Conference and Marketing Fair on restructuring of natural gas and electric utility industries. Denver, Colorado. August 1997.

Testimony on the Public Utilities Commission of Colorado's proposed rules on gas cost adjustments. Denver, Colorado. February 1997.

"Restructuring of the Natural Gas Industry" presented to the Governor's Energy Assistance Reform Task Force. Denver, Colorado. February 1997.

"The Feasibility of Allowing Nondiscriminatory Access to Retail Natural Gas Distribution Services in Colorado" presented to the Colorado Legislative Council. Denver, Colorado. December 1996.

Presentation to Rocky Mountain Natural Gas Association on the issues associated with providing transportation service to residential and small commercial customers. Denver, Colorado. October 1996.

Testimony and cross-examination on the Public Utilities Commission of Colorado's proposed rules on cost allocation between regulated and non-regulated affiliates. Denver, Colorado. July 1996.

"Planning in a Competitive Environment." Power Engineering Society, Institute of Electrical and Electronic Engineers Summer Conference. Denver, Colorado. July 1996.

Presentation to City Council on Proposed Electric Department Rate Changes. City of Fort Morgan, Colorado City Council Meeting. Fort Morgan, Colorado. May 1996.

Testimony and cross examination on East Ohio Gas Company gas planning and procurement practices before the Ohio Public Utilities Commission. December 1995.

"Economic Impact of Fuel Switching at Selected Denver Area Power Plants," presented on behalf of Colorado Oil and Gas Association before the Colorado Air Quality Council and the Regional Air Quality Council. Denver, Colorado. November 1995.

Presentation to City Council on Proposed Gas Department Rate Changes. City of Fort Morgan, Colorado City Council Meeting. Fort Morgan, Colorado. November 1995.

Testimony and cross examination on BC Gas Utility, Ltd. extension policy before the British Columbia Utilities Commission. Vancouver, BC. June 1995.

Testimony and cross examination on BC Gas Utility, Ltd. avoided costs before the British Columbia Utilities Commission. Vancouver, BC. June 1995.

"Development of Long Run Avoided Costs for a Gas Distributor." Gas Research Institute Avoided Cost Conference. Milwaukee, Wisconsin. June 1994.

PROFESSIONAL AFFILIATIONS

- Board of Directors, Chairman of Audit Committee & Treasurer, Energy Outreach Colorado
- Commissioner, Colorado Commission on Low Income Energy Assistance
- Rocky Mountain Natural Gas Association
- Colorado Association of Commerce and Industry, 50 For Colorado
- American Gas Association, former member
- Interstate Natural Gas Association of America, former member of Rate and Policy Committee
- Regis University Alumni Association
- Former Member, Regis University Business and Industry Group
- University of Denver Alumni Association
- Listed in *Who's Who in America, Who's Who in Executives and Professionals, The National Registry of Who's Who, and Who's Who International*

A. E. MIDDENTS

AREAS OF QUALIFICATION

Gas operations, gas industry restructuring, supply planning and procurement, regulatory matters, engineering, marketing, transportation, business development, and strategic planning.

EMPLOYMENT HISTORY

- Senior Consultant, McFadden Consulting Group, Inc., Denver, CO, 1996-present
- Independent Natural Gas Industry Consultant, Greenwood Village, CO, 1996-present
- Vice President, Technical Services, Northern Pipeline Construction Company, 1995-1996
- Independent Consultant, 1993-1995
- Senior Vice President, Public Service Company of Colorado, 1988-1993
- Vice President Gas Operations, Public Service Company of Colorado, 1986-1988
- Manager, Engineer and Construction, Western Gas Supply Company, 1983-1986
- Engineering Manager, Western Gas Supply Company, 1981-1983
- Assistant to the President, Fuelco, 1981-1983
- Assistant to the Vice President Gas Operations, Public Service Company of Colorado, 1980-1981
- Gas Distribution Operations Manager, Public Service Company of Colorado, 1976-1980
- Superintendent of Gas Utilization, Public Service Company of Colorado, 1976
- Superintendent, Division Gas Distribution, Public Service Company of Colorado, 1972-1976
- Superintendent, Planning and Analysis, Public Service Company of Colorado, 1970-1972
- Supervisor, System Planning, Public Service Company of Colorado, 1966-1970
- Various positions, Public Service Company of Colorado, 1960-1966

EDUCATION

- Iowa State University, BS, Industrial Engineering
- University of Colorado, Business Courses
- University of Colorado, Executive Education Program for the Gas Industry
- University of Michigan, Public Utility Executive Program

PROFESSIONAL EXPERIENCE

A. E. "Pete" Middents has 42 years of broad experience in all segments of the natural gas industry. This includes the entire spectrum of technical and economic issues associated with the utilization of natural gas, including engineering and construction, gas supply, gas contracts, transmission and distribution, storage, compression, processing, economic feasibility, regulatory issues, long-range planning, and operations issues.

Mr. Middents was previously employed by Northern Pipeline Construction Company as Vice President, Technical Services. NPL is headquartered in Phoenix, Arizona and was acquired by Southwest Gas Corporation, headquartered in Las Vegas, Nevada in 1996. He was responsible

for the overall management of Northern's Technical Services Division as well as marketing and new product development.
Mr. Middents was an independent consultant specializing in the natural gas industry from 1993 to 1995. His consulting assignments have primarily been in the areas of new business development, gas industry restructuring, economic feasibility and evaluation, overall planning and engineering design (pipeline processing and distribution), and natural gas marketing. Recent clients include:

- Utah Committee of Consumer Services
- Questar Pipeline Corporation, Salt Lake City, UT
- New Jersey Rate Counsel
- Arkansas Public Service Commission
- Northern Pipeline Construction Company, Phoenix, AZ
- K & M Engineering and Consulting Corp., Washington, D.C.
- Premier Enterprises, Inc., Englewood, CO
- U.S. Agency for International Development (U.S. State Department), Washington, D.C. and Montevideo, Uruguay
- Benjamin Schlesinger and Associates, Bethesda, Maryland
- Minister of Industry, Energy and Minerals, Government of Uruguay, Montevideo, Uruguay

In 1993 he exercised an early retirement option from Public Service Company of Colorado. As Senior Vice President of Gas Operations for Public Service Company (a combination gas and electric utility serving the majority of the state of Colorado), Mr. Middents had full executive responsibility for the Company's natural gas operations. He was also President and a Director of Western Gas Supply Company (WestGas, a gas gathering, processing, and transmission subsidiary company), President and a Director of Fuel Resources Development Company (Fuelco, a gas and oil exploration and production subsidiary company), Chairman and a Director of Natural Fuels Corporation (a full service natural gas vehicle subsidiary company), and Vice President and a Director of Cheyenne Light, Fuel and Power Company (a combination gas and electric utility serving a portion of Wyoming). Mr. Middents also served as chairman and director of the following companies: WestGas Interstate Gas Company, WestGas Gathering, Inc. and WestGas TransColorado, Inc.

Mr. Middents joined the Public Service Company in 1960 as a gas engineer. He held numerous management positions with WestGas and Public Service Company prior to his election as Vice President in 1986. He was promoted to Senior Vice President in 1988.

PROFESSIONAL AFFILIATIONS

- Past Chairman of the Board, Midwest Gas Association
- American Gas Association
- Board of Directors, Interstate Natural Gas Association of America
- Industrial Technical Advisory Committee, Gas Research Institute
- Board of Directors, Natural Gas Vehicle Coalition

- Past President and Director, Rocky Mountain Gas Association

PRESENTATIONS AND TESTIMONY

Mr. Middents has appeared as an expert witness and provided testimony in hearings before the Federal Energy Regulatory Commission (FERC), the United States District Court in Iowa, South Dakota, and Washington, and state regulatory Commissions in Colorado and Utah. During the past ten years, these included:

- Testimony in New Jersey Natural Gas Company's rate case proceeding on the management of its gas distribution and transportation infrastructure on behalf of the New Jersey Division of the Rate Counsel. Newark, New Jersey. June 2008.
- Filed testimony and testified before the State of New Jersey Board of Public Utilities in 2006, regarding Public Service Electric and Gas Company's application for Approval of an Increase in Gas Rates, Depreciation Rates for Gas Property, and for Changes in the Tariff for Gas Service. (State of New Jersey Board of Public Utilities; BPU Docket No. GR05100845).
- Filed an expert report and made depositions in the civil case of Northwester Public Service, a Division of Northwestern Corporation -vs- Union Carbide Corporation in 2002 (United States District Court District of South Dakota, Southern Division; Civil No. 99-4182).
- Filed testimony before the Public Utilities Commission of Utah in 1999, regarding Questar Gas Company's application to recover costs associated with constructing a CO2 extraction plant (Public Service Commission of Utah; Docket No. 98-057-12).
- Filed an expert report and made depositions in the civil case of MidAmerica Energy Company-vs- Union Carbide Corporation in 1998 (United States District Court District for Black Hawk County, Iowa; Case No. LACV076851).
- Filed an expert report and testimony in the civil case of March Point Cogeneration Company –vs- Puget Sound Power & Light Company in 1997 (United States District Court District, State of Washington; specific case number unknown).

Prior to 1997, Mr. Middents' expert witness and testimony experience included the following (specific dates and case numbers are not available):

- Numerous testimonies on gas transmission tariff issues on behalf of Public Service Company before the Public Utilities Commission of Colorado from 1986 thru 1993.
- Numerous testimonies on gas department tariff issues on behalf of Western Gas Supply Company before the Public Utilities Commission of Colorado from 1986 thru 1993.
- Numerous intervening testimonies before the Federal Energy Regulatory Commission regarding gas transmission tariff issues filed by Colorado Interstate Gas Company from 1985 thru 1993.

JOHN N. PETERS

AREAS OF QUALIFICATION

Gas operations, supply planning and procurement, engineering design, construction management, bid proposal & contract preparation, permit & ROW acquisition, material specification & procurement, training, and operations support.

EDUCATION

- University of Colorado, BS, Mechanical Engineering
- University of Colorado, Business Courses
- University of Colorado, Executive Education Program for the Gas Industry
- University of Idaho, Public Utilities Executive Course

PROFESSIONAL EXPERIENCE

John N. Peters has 45 years experience in the natural gas utility industry. He has extensive experience in the engineering, design, construction, and operation of gathering, transmission, and distribution systems, including compressor stations and processing plants. Mr. Peters was division manager of gas operations for a natural gas gathering and transmission company, responsible for 180 employees and an annual O&M budget of $15 million and capital budgets up to $50 million. In addition, Mr. Peters developed a Natural Gas Vehicle (NGV) program and took it through a very critical and successful research, testing, development, and implementation phase, resulting in the conversion of more than 600 fleet vehicles to natural gas and the genesis of a fueling station infrastructure throughout Colorado. In recent years, Mr. Peters has been working as a consultant to the natural gas industry and has been involved in various projects in Arizona, Alaska, Nevada, Maryland, and Wyoming.

EMPLOYMENT HISTORY

Consultant to the Natural Gas Industry 9/94 to present

Independent consultant providing technical support on various projects in Alaska, Arizona, Maryland, Nevada, and Wyoming. Responsibilities include feasibility studies, engineering design, bid proposal & contract preparation, permit & ROW acquisition, material specification & procurement, construction management, training and operations support.

Manager, Operations Division - WestGas/Public Service Company of Colorado
3/83 to 9/94

Responsible for the operations and maintenance of natural gas gathering, transmission, processing, and storage facilities including gas plants, CO_2 processing plants, meter stations, and more than 2100 miles of pipelines. Also responsible for an operations support staff involved with hazardous material coordination, operations training, and the gas

dispatching function performed at the Gas Load Control Center. Key accomplishments included:

- Served as member of the WestGas senior management team helping develop business plans, marketing plans, supply strategies, and financial forecasts
- Responsible for the operations of six geographic divisions within Colorado with a work force of approximately 180 employees
- Responsible for a $12 - $15 million annual O&M expense and capital budget
- Initiated cost management programs that more than doubled productivity in less than 9 years, saving $8-10 million
- Developed a Products and Services Program that generated revenues approaching $3 million
- Involved in labor union grievance hearings, arbitrations, and negotiations
- Developed an extremely proactive safety team whose programs resulted in significant reduction in the number of accidents
- Responsible for the corporate natural gas vehicle program during a very critical and successful research, development, and implementation phase -- involved with live TV news conferences with the mayor and governor

Administrative Assistance to the President - WestGas 12/81 to 3/83

This was a temporary assignment designed to enhance executive management skills. Provided research and support as follows:

- Participated in the design and implementation of new employee evaluation and compensation system
- Assisted with FERC rate hearings in Washington, D.C.
- Assisted attorneys with franchise disputes, law suit investigations, and settlements
- Provided support to the gas exploration subsidiary
- Filled in for gas managers during lengthy vacations and illnesses

Engineering Manager - Western Slope Gas Co. 1/78 to 12/81

Responsible for the budgeting, engineering, and construction of all WSG pipelines, plants, and treating facilities. Key accomplishments included:

- Structured a new engineering group to streamline and standardize engineering and design
- Set up policies and procedures to be responsive to changes in gas codes and regulations
- Managed and oversaw the design and installation of a major underground gas storage facility
- Testified as an expert witness in court and at PUC hearings

Operations Superintendent - Western Slope Gas Company 1/73 to 1/78

Responsible for the operation and maintenance of gathering and transmission facilities in the Durango division. Oversaw the operation of facilities on the Southern Ute Indian Reservation.

Senior Engineer - Western Slope Gas Company 12/70 to 1/73

Responsible for O&M engineering and troubleshooting on Western division facilities, equipment, controls, and telemetering. Also constructed meter stations, plant modifications, well connects, and several hundred miles of pipeline.

Distribution Engineer - Public Service Company of Colorado 6/69 to 12/70

Responsible for the design of distribution facilities in the Denver metro area. Constructed 20 miles of 20 & 24-inch intermediate pressure pipeline. Was on call to respond to gas emergencies, explosions, and outages.

Engineer - Public Service Company of Colorado 5/68 to 6/69

As Engineer-in-Training, worked in eight different gas departments within Public Service Company. Designed a low cost, one-piece, house meter bracket that is still in use today. Also worked with plastic pipe and plastic/steel transition fittings. Designed a mobile unit for flame ionization gas leak detection.

Senior Technician - Public Service Company of Colorado 2/65 to 5/68

Responsible for setting up a gas analysis lab in the Gas Utilization and Standards Department. Conducted gas quality tests using instruments such as the gas chromatograph, supercompressibility apparatus and the specific gravity balance. Also given special projects such as designing an impact tester for plastic pipe. Tested natural gas appliances and gas regulators/meters for performance at high altitude.

Technician - Public Service Company of Colorado 3/62 to 2/65

Responsible for the industrial gas customers in the Denver metro area, installing automatic chart changers, testing meters, and conducting gas quality tests.

PRESENTATIONS AND TESTIMONY

In the last five years, Mr. Peters has testified before various courts and county planning commissions, as follows:

- June 2009 – Testimony in New Jersey Natural Gas Company's rate case proceeding on the management of its gas distribution and transportation infrastructure on behalf of the New Jersey Division of the Rate Counsel. Newark, New Jersey.
- September 2007 – Ted Koutsoubos v. Kinder Morgan before the Pitkin County (Colorado) Planning Commission regarding the final route selection and easement of the Snowmass pipeline across landowner's property.
- April 2007 – Six Landowners v. Williams Overland Pass Pipeline - Immediate Possession Hearing before Yuma County.
- May 2006 – Protect Marshall Group v. Xcel Energy (Public Service Co. of Colorado) before Boulder County Planning Commission regarding the proposed site of the Foothills Compressor Station.

- March 2006 – Ted Koutsoubos v. Kinder Morgan - Immediate Possession Hearing before the Pitkin County (Colorado) regarding Snowmass pipeline across landowner's property.