STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

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 Expense Tracker and for other Appropriate Relief

BPU Docket No. _____

DIRECT TESTIMONY

OF

JORGE L. CARDENAS
VICE PRESIDENT – GAS DELIVERY

P-4

PUBLIC SERVICE ELECTRIC AND GAS COMPANY

DIRECT TESTIMONY
OF
JORGE L. CARDENAS
VICE PRESIDENT – GAS DELIVERY

My name is Jorge L. Cardenas. I am the Vice President – Gas Delivery, Public Service Electric and Gas Company (PSE&G, Public Service, the Company, Petitioner). In this case, I am serving as the Company's gas operations policy witness. I am responsible for the overall design, engineering, construction and maintenance of PSE&G's gas distribution system.

My testimony discusses the Company's gas delivery business. First, I describe the Company's service territory, gas distribution pipeline system and supporting facilities, and the Gas Delivery department's organizational structure and staffing. I then discuss the Gas Delivery business construction program and the annual operations and maintenance (O&M) expenses associated with gas delivery. Finally, I discuss the Petitioner's Gas Delivery employee safety program, operating performance, and customer service. Schedule JC-1 describes my qualifications as a witness in this proceeding.

Since our last gas base rate case decision in 2006, we have continued to provide safe, adequate, proper and reliable gas service to our customers. Our number one priority as a gas distribution utility is continuing and improving our record of safe

and reliable gas delivery, but we continue to be challenged by (1) an aging infrastructure that requires maintenance and modernization, (2) the need to meet increased regulatory requirements, (3) increased capital expenditures primarily to replace and upgrade old mains and services, (4) the labor intensive nature of our business, and (5) the expectation of our customers for service that can only be enabled by more efficient information management systems. The cost of these necessary expenditures has rendered the Company's current gas distribution base rates inadequate. Given the breadth of our operations across the State, our guardianship of the safety and reliability of the gas distribution infrastructure is essential not only to individual customers, be they homeowners or businesses, but to the health and well-being of New Jersey's economy.

GAS DELIVERY BUSINESS

PSE&G is the largest gas utility in New Jersey. We serve approximately 1.7 million residential, commercial, and industrial gas customers in a service territory that covers approximately 30% of State. Our gas service territory covers approximately 2,350 square miles and 264 New Jersey municipalities, including the State's three largest cities. This is an area of the State in which approximately 62%, or over five million, of the State's residents live.

In order to meet the needs of our customers within this sizeable area, the Company's gas business operates and maintains over 17,600 miles of gas mains of

various sizes from 1 inch to 42 inches; over one million service lines that are over 16,700 miles in length, line valves, pressure regulators, meters, and associated instrumentation and corrosion protection systems. In addition, gas distribution operations encompass 62 metering and regulating stations, three Liquid Propane Air (LPA) peak shaving plants, one Liquid Propane Gas (LPG) storage facility, one Liquefied Natural Gas (LNG) peak shaving facility, and 61 miles of intrastate transmission lines.

Gas Delivery at PSE&G is a department of 1,998 employees (See Schedule JC-2). The employees who physically construct, maintain and operate our distribution system and service our customers' requirements are based in twelve field headquarters throughout the State, strategically located to provide rapid response to emergencies 24 hours a day, seven days a week. These employees have primary responsibility for hands-on distribution and service activities. Personnel based at these locations perform construction, operation, maintenance and repair activities across our entire gas service territory. These services include new and replacement main and service installations, leak detection and repair, system design and maintenance, meter and after-meter safety services, mandated surveys and inspections, and administrative activities associated with this work. The balance of personnel in gas operations is located at the General Office in Newark and at the peak shaving plants. The gas delivery operations associates in the General Office in Newark include staff employed in

the Gas System Operations Center (GSOC), which has direct operating responsibility for the gas system, and associates who provide management and technical support to field operations.

CONSTRUCTION PROGRAM

The Company has added approximately $605.99 million in construction investment in the gas business from 2006 through year-end 2008. During that period, $169 million was required to provide new mains, services and meters to meet the needs of an expanding population and to support New Jersey's economic growth; an additional $408 million was needed for replacement and upgrade of mains and services to maintain the safety and reliability of the gas system. All of our constructed facilities are designed to deliver natural gas in sufficient volumes on the coldest day at the lowest reasonable cost to our customers, consistent with safety and reliability goals. Peak-shaving plant, metering and regulating, and support facilities projects comprised the remaining $29.10 million in capital additions over the 2006-2008 period. Schedule JC-3 (Gas Business Capital Additions-Actual and Planned), provides the details of these capital expenditures by year from 2006 through 2008, and by major category: (1) Peak Shaving Plants/Meter and Regulating (M&R) Facilities, (2) Replacement and Upgrade of Distribution Facilities, (3) New Business and Load Growth, and (4) Support Facilities. The Company's planned construction expenditures for the test year 2009, as well as

projections for 2010, are also shown on Schedule JC-3. These expenditures, including the Capital Economic Stimulus Infrastructure Investment (CESI) program expenditures described below, total approximately $616.82 million, similar to expenditures for the previous three-year period.

As discussed further in the testimony of Mr. Daly, asset management funding decisions and prioritization process are formalized through the Company's Investment Evaluation System (IES) tool. The Gas Delivery capital expenditure approval process consists of both five-year capital target setting and "next year candidate" project identification. Value scoring of individual next year candidate projects is performed based on scorecard impacts, asset condition, and the risk of not pursuing the project followed by portfolio optimization within the next year's budget constraint using the IES. The proposed capital plan goes through a two-tiered approval process: first, presentation to the Utility Review Board (URB) for approval, and then presentation to the Capital Review Committee (CRC). This approval process is also described in Mr. Kahrer's testimony.

In this period of difficult economic times, the Company will be making substantial infrastructure investments as part of the State of New Jersey's economic stimulus program. In particular, in accordance with a stipulation that has been approved by the Board, we are accelerating replacement and upgrades of our distribution mains and services and peak-shaving plant and M&R equipment. These capital plans are also

included in Schedule JC-3. In addition to making our gas distribution operations safer and even more reliable, the CESI program for Gas Delivery will create jobs, a societal benefit of great importance in this uncertain economy.

The elements of the Gas Delivery business capital additions are discussed in further detail below.

1. Peak Shaving Plants / M&R Facilities

This category includes equipment needed to control and regulate the gas delivery system. Investments in the GSOC in Newark and the M&R facilities for improved system controls and dispatching will continue as communication and control technologies with advanced capabilities and enhanced reliability are constantly evolving. These upgrades are necessary to assure safe and accurate gas control in our system as well as the continued reliability of peaking supplies during extreme cold weather conditions.

The GSOC is in the process of upgrading the Supervisory Control and Data Acquisition (SCADA) system used for the real-time monitoring and control of the gas delivery system. The project is well under way and scheduled to be in service for the 2009 - 2010 winter season. In addition, the GSOC and the M&R group are in the process of replacing the Remote Terminal Units (RTUs) used by SCADA for control

and monitoring. Both of these projects will ensure and enhance the reliability of the monitoring and control of the PSE&G gas delivery system.

To ensure system reliability, the Company has completed a life-cycle replacement of the vaporizer units at our Burlington LNG facility. The new unit was put into service in December 2007. The Burlington LNG Plant has been operational since October 1972. The LNG vaporizers were the original installed units and were of a type no longer commonly used. The new vaporizer is a state-of-the-art model designed to eliminate safety hazards and improve operational performance.

Schedule JC-3 summarizes the expenditures for 2006 - 2008 and reflects the base plan and the CESI program for the years 2009 - 2010.

2. Replacement and Upgrade of Facilities

Our construction program to replace and upgrade the Company's aging mains and services is an essential part of maintaining the safety of our distribution system, providing reliable gas service, and upgrading the system's design capability. The programs for replacement of mains and services are based on vigilant monitoring and analysis of break and leak history as well as computer models to evaluate and prioritize specific segments of the system to be replaced to minimize risks from future breakage and gas leaks.

In addition, our cast iron removal program targets specific amounts of elevated pressure main because of the risk factors presented by this type of main if it breaks. Replacement needs for steel mains and services are also evaluated continually through ongoing corrosion testing and monitoring programs. During 2008, the Company replaced approximately 422,000 feet of cast iron and bare steel main. Schedule JC-4 identifies the actual feet of new and replacement mains and services by year for the years 2006-2008 and the projected new and replacement feet for the years 2009-2010.

As indicated, there is a substantial increase in the planned replacement footage of mains and services in 2009-2010. Statistics show that reportable incidents associated with deteriorating assets are much more likely to occur due to a cast iron break than they are with any other type of asset failure. PSE&G has the nation's largest cast iron gas main system as well as a large bare steel main system, and we need to responsibly and prudently replace these aging assets. This ongoing rehabilitation is required to maintain the integrity of a distribution system that is 32% cast iron and unprotected steel. In addition, much of the older mains are located in urban centers or in major thoroughfares, making rehabilitative construction more difficult and expensive than we typically encounter with new mains and services.

The Company manages our replacement program based upon a strategy to minimize risk to the public and to employees. We strive to effectively understand the

condition of the assets and their rates of failure so that we can manage the replacement of the assets at a reasonable level and avoid sudden, widespread failure within any asset class. Using performance standards such as leak per mile rates for the three major classes of pipe included in our replacement programs – i.e. High Pressure Cast Iron; Low Pressure Cast Iron; and Unprotected Steel mains – we plan and manage the program to stay within the upper performance standard of each class of pipe. We have been able to achieve outstanding results as measured by the long-term decline in our system-wide gas leak/mile rate. A comparison to our utility peer panel shows results at or near top quartile performance each year since 2003 even with the high percentage of cast iron and bare steel in our system. These results are summarized in Schedule JC-5.

The Company's replacement of steel services focuses on the use of plastic pipe and tubing to replace approximately 12,000 bare steel services per year. Replacement services fall into four main categories: (1) as a result of leaks; (2) when services are replaced together with main replacement; (3) due to a mandated service replacement program; and, (4) replacement ahead of construction by third parties when there is a conflict between their work or facilities and the gas service. The mandated service replacement program is a requirement of the New Jersey Administrative Code (*N.J.A.C.* 14:7-1.16e), which requires that all of the unprotected services in a definable area be replaced if 20% or more of the unprotected services within that definable area have leaked.

Capital is also expended to rehabilitate cast iron bell joints. We employ several new technologies to seal cast iron joints, and in 2008, we sealed approximately 5,000 cast iron bell joints with advanced encapsulation methods.

In the year 2008, $163.43 million was spent on replacement and upgrade of facilities. The New Jersey Economic Stimulus program will provide for the accelerated replacement of approximately 68 miles of cast iron main, 113 miles of bare steel main, and 19,000 bare steel services. Schedule JC-3 summarizes the expenditures for 2006 - 2008 and reflects the base plan and CESI plan for the years 2009 - 2010. There will be a substantial increase in capital expenditures for the replacement and upgrade of facilities. As indicated on Schedule JC-4, in the 2009-2010 timeframe, we project the installation of 655,000 feet of new main; 960,000 feet of new service; 1.19 million feet of replacement main, and 2.19 million feet of replacement service.

3. **New Business and Load Growth Facilities**

New business and load growth facilities are defined as new mains, services, regulators, and meters required to meet peak hourly gas flows at design conditions for new or incremental loads. Since the beginning of 2006, nearly 55,000 new customers were added to the system. During 2008, $53.31 million was spent on new business and load growth.

We make every effort to make sure that we are designing our new facilities correctly, and not over- or under- sizing our new mains. Gas mains are sized to handle peak hourly gas flow during design conditions so that our customers will receive an uninterrupted supply of natural gas, even during the coldest days of the year. Gas services are also sized to provide peak hourly supplies for each customer. The design of services is also dependent on the distance the service must traverse from the gas main in or near the street to the house connection.

The physical facility requirements of new customer loads coming onto the system are determined with the aid of a computer simulation model, SynerGEE, which is an interactive model of existing and proposed distribution mains and customer peak hour demand. This network modeling tool is also used to analyze and determine which segments of the distribution system need reinforcement for pressure reasons due to peak hour demand requirements. Schedule JC-4 summarizes the footage of new main installed by year for 2006-2008 and planned for 2009-2010.

4. Support Facilities and Projects

Capital expenditures for support facilities and projects were $5.07 million for the year 2008 and are expected to be $1.41 million in the test year, as shown on Schedule JC-3. Included in this category are the costs of information systems, radios, communication equipment, building improvements, expenditures for

office equipment/furniture and various tools and equipment. Information technology and automation of systems that support the business process have moved the Company from paper intensive back office records to integrated work management, and the investment in these backbone business support systems has been essential for the continued safe and reliable operation of our distribution system and emergency response infrastructure. One recent investment that enhances safety and efficiency in such areas as markouts and response to gas emergencies is our Geographical Information System (GIS) which provides facility records in an electronic format accessible by field employees on a mobile field device.

OPERATION AND MAINTENANCE

PSE&G conducts extensive gas O&M activities, including finding and repairing gas leaks on mains, services and customer premises; responding to emergency leak situations; responding to gas pressure problems; maintaining, monitoring and controlling gas pressures on the system; and, maintaining customer accounts, billing, metering, and appliance safety for all customers. Most of our field operation activities are mandated by the U.S. Department of Transportation, including some recent additions to our operations activities, such as inspection of outside meter sets for atmospheric corrosion and the new pipeline integrity requirements for maintaining our gas transmission lines. Other activities, such as research and

development participation, training and continuing education, accounting, employee benefit management, information technology, standards development, and participation in industry operations forums are in direct support of safe and effective gas distribution system operation.

A key component of system integrity is damage prevention, and our damage prevention process continues to produce excellent results. PSE&G continues to reduce the number of overall damages to our facilities even while experiencing an increase in the number of requests for locates by third party excavators. Our overall damage rate (damages per 1,000 locate requests) continues to decline.

Nevertheless, facility damage still occurs and there is room for constant improvement. The Company has developed a process that identifies specific high risk excavation activities and appropriate action items.

The Company expended $85 million in the year 2008 in gas operating expenses, excluding fuel costs, depreciation, amortization and taxes, as detailed in Schedule JC-6. In all aspects of O&M, we strive for excellence in safety, for both our customers and our employees, and prudent and efficient cost controls and productivity. We continually measure our level of effectiveness in these areas through reporting, benchmarking and process improvements. As a result of our continuous efforts to improve efficiency, our distribution cost per customer is in the top quartile – that is, in the lowest cost group – of our benchmarking peer panel. See Schedule JC-7

CONTROLLING COSTS

The Company's expenditures that I have addressed in my testimony and schedules reflect the impact of proven cost saving construction methods, such as plastic pipe insertion and joint trenching, as well as the introduction of new technology into our operations. For example, where appropriate, the insertion of polyethylene (PE) pipe into an existing main rather than opening a trench to replace a main results in lower costs because there is less pavement disturbance and restoration required. By reducing the need to excavate, plastic pipe insertion can sometimes result in labor savings of about 50% for larger diameter piping. Another work practice that minimizes construction costs are joint trenching efforts where multiple utility facilities are installed in the same trench, resulting in savings of as much as 70% in new residential developments where this technique can be used.

The Company has actively sought technological innovations that result in cost reduction while improving quality, safety and reliability. We continue to actively collaborate with the Gas Technology Institute and NYSEARCH Northeast Gas Association with respect to the design, development, evaluation, and implementation of new technologies. We have received several R&D-related awards for our work in trenchless service renewal systems, large diameter coil pipe, guided piercing tools, and advances in leak detection equipment. We are proud to be industry leaders in deploying new technologies.

GAS DELIVERY OPERATIONS AND PERFORMANCE

1. Employee and Customer Safety

The safety of our employees is a primary concern and we have been making steady, positive progress in reducing the amount of injuries and accidents experienced by our employees. In addition, safety in PSE&G business practices, the safety of our customers, and a continuous effort to make safety improvements to our distribution system, are a focus of all who work in our gas business. Employee involvement, particularly the participation of our union representatives, has been key to the development of our safety practices and procedures.

Gas Delivery has instituted several initiatives in order to further enhance a successful safety program, several of which are also employed by the Electric Distribution business. These include: Sharepoint, an intranet website that includes a safety section for the benefit of our associates; a one-on-one driver training program that has helped reduce collisions involving our fleet of 1,800 vehicles by over 60%; a First Aid and CPR training program administered by an outside vendor, Less Stress; an Injury Prevention Program through which associates voluntarily consult with physical therapists and develop individualized plans to reduce muscular-skeletal injuries both on and off the job; a Bundled Safety Training program for all Appliance Service Technicians in the Gas Delivery department; and the continuation, in

accordance with federal and state regulation, of operator qualification training for Gas Delivery personnel.

We employ the same safety-first mindset with our customers as we do with our employees. In 2008, our gas service technicians responded to over 93,000 emergency leak calls, with a 99.95% response rate within 60 minutes. All identified leaks and hazards were made safe for our customers. Additionally, in 2008, our technicians handled over 237,000 heating related calls in both a timely and expeditious manner. We continue to offer safety checks of gas appliances for proper installation and ventilation, and have actively promoted customer awareness of the dangers and causes of carbon monoxide poisoning through bill inserts. We conducted 6,936 leak calls for suspected carbon monoxide emissions on customer premises in 2008. On 48% of those calls, our associates found measurable levels of carbon monoxide present. In each instance, PSE&G Gas Delivery associates made the premises safe.

Finally, several small projects were initiated as a result of PSE&G's Transmission Pipeline Integrity Plan in compliance with the Gas Transmission Pipeline Integrity Management requirements (49 CFR Part 192, Subpart O), including extensive pipeline assessments which resulted in the upgrade of several valves and some of the cathodic protection systems that were found to be no longer as effective as originally designed. No major defects or safety deficiencies were found as a result of the assessments to date, which have covered 72.5% of the transmission pipeline mileage that

is covered by the program. The pipelines with the highest risk were assessed first, and the remainder of the transmission pipelines in the Pipeline Integrity Plan will be addressed over the next four years.

2. Gas Delivery Benchmarking and Process Improvement

The Company's gas business participates in the American Gas Association (AGA) Best Practices Benchmarking Project, an annual industry-wide study that focuses on key operating processes and identification of innovative and cost efficient practices among gas distribution companies. PSE&G has been selected by the AGA as a Best Practice company for nine out of fifteen years, and was most recently recognized for best practices in the areas of Employee Safety - Emergency Response. The information and data that is obtained from this AGA project is incorporated into process improvement efforts.

PSE&G is also the leader in coordinating a national panel of utility companies that annually produces a Utility Peer Panel Study. The results of this study are used to set targeted levels of performance on Gas Delivery's Balanced Scorecard. Active participation in the development of this Study enables our organization to share in meaningful performance data collected on a national basis. This ongoing collaborative effort seeks to continually refine the quality and breadth of information made available to member companies on an annual basis. Gas Delivery leadership

utilizes this information to define performance gaps and formulate strategic objectives as part of our annual strategic planning process.

Gas Delivery has a Balanced Scorecard measurement process in place, which allows all Gas Delivery personnel to strive for one set of common goals. The Balanced Scorecard is used to review organizational performance and to gauge how we are doing in providing safe, adequate, proper, reliable and low cost gas services in a manner that is consistent with the Company's vision: Being a recognized leader for people providing safe, reliable and green energy. Reviews of the Balanced Scorecard results are held monthly at all levels, and charts are posted at all our facilities to display to all gas associates the latest results on all performance measures. To hold the organization accountable for achieving scorecard targets, every associate in Gas Delivery has performance-based incentive pay tied to meeting the scorecard targets. With an organization-wide focus on common targets, every associate is focused on the same goals. This process aligns and strengthens our focus to achieve our performance targets at every level.

Scorecard metrics evolve continually based upon the business needs of Gas Delivery and changes in our operating environment. A thorough analysis of our scorecard structure is performed annually as part of the Gas Delivery strategic planning process. During this annual review, scorecard measures are refined for the upcoming year and corresponding five-year targets are developed. Utilizing our Balanced

Scorecard ensures that all drivers of the business are monitored and managed without sacrificing another area.

Process improvement opportunities are identified through either performance gaps or standardized processes or procedures. Over the past several years, PSE&G has been able to improve, from a process and consistency perspective, several initiatives that are critical to our operational success. Examples include:

- Leak Management and Leak Survey Procedures
- Gas Out Procedures
- District Duty Responsibilities
- Contractor Inspection and Oversight

Annually, we conduct emergency drill scenarios, focused on emergency preparation and response to simulated system outages and incidents.

Process improvement also plays a large role in the activities of our Gas Delivery Engineering Committee. This committee is comprised of associates from Technical Support, Asset Management and Field Operations. The primary responsibility of the committee is a thorough and consistent review of processes, procedures, material, and equipment associated with regulated functions and activities aligned with new and replacement construction, operations and maintenance activities. The committee maintains general oversight of our Gas Distribution Standards; material and equipment approvals; and various operational initiatives that are driven by regulatory initiatives.

3. Gas Delivery Customer Service

PSE&G's gas service technicians are the first responders to gas leaks and other related emergencies, both outside and inside customers' premises. They provide a variety of safety-related services associated with our customers' gas appliances and piping systems in a responsive and thorough manner, and also provide active support for all aspects of on-site gas metering for our 1.7 million gas customers. In 2008, our service. In addition, the work that they perform related to competitive service offerings provides a valuable service to our customers and also brings in additional revenue to the Company which helps offset overall customer rates. The full talents, training and dedication of this group of technicians were highlighted in the aftermath of major storms in recent years that left widespread areas with severe flooding that required expeditious service restoration along with thorough piping and appliance repair services for our customers.

CONCLUSION

Safety is our number one priority in the Gas Delivery business: the safety of our employees leads to the safety and reliability of our distribution infrastructure, which in turn ensures the safety of our customers. It is imperative that our gas operations are conducted properly, efficiently and in such a manner as will provide safe, adequate, proper and reliable service to our customers. We have made numerous

improvements in the technology and infrastructure of our gas business since our last gas base rate case decision in order to provide the service levels that our customers have come to expect. Our gas delivery business is a vital component of the State's economic infrastructure and our request supports the need to continue to provide a gas delivery system and organization that assures our customers of continued safe, reliable, and responsive service.

I believe that the facts presented by the Company demonstrate that this base rate case is necessary and justified, and the rate relief requested should be granted by the Board of Public Utilities. This is essential in order for PSE&G to continue to ensure the safety of our employees, the reliability of our distribution system, and ultimately to provide safe, adequate, proper and reliable service to our customers. The requested rate increase will insure a financially healthy gas business that is responsive to growth and can therefore support and benefit New Jersey's economy.

This concludes my testimony at this time.

QUALIFICATIONS
OF
JORGE L. CARDENAS
VICE PRESIDENT – GAS DELIVERY

I received a Bachelors Degree in Engineering from Stevens Institute of Technology in 1977. I received a Masters Degree in Business Administration from Rutgers University in 1995. I also participated in the Penn State Executive Development Program in 1992 and the Leadership New Jersey Program in 2000.

I was employed by PSE&G in June 1977. After a training program, I worked as an Engineer in the Palisades Electric Transmission and Distribution Division, where I provided engineering and managerial support for all phases of planning, design, construction and maintenance of the electric distribution system.

In 1981, I was promoted to the position of lead engineer in the Electric Standards and Performance department and assigned responsibility for the design and specification of outside plant switchgear for Electric Distribution. In 1984 I was promoted to the position of supervising engineer in the Metropolitan Electric Division and given the responsibility for the New Business department covering Essex and Passaic counties in the PSE&G franchised territory.

In 1986, I was promoted to the position of Line Engineer in the Elizabeth Electric Division with responsibility for overhead and underground

distribution, and transmission operations, construction and maintenance of facilities in central New Jersey.

In 1987, I was promoted to Product Service Manager – Corporate Services and was given the responsibility to re-engineer and downsize the Nuclear Operations at the Hope Creek and Salem nuclear stations, the corporate Engineering and Construction Departments, the Corporate Real Estate Department, and the Customer Services and Marketing Departments of the Company.

I was promoted to Planning and Customer Operations Manager at Palisades Electric Division in 1990 with responsibility for the overall electric distribution planning, operations, and customer interactions in Bergen and Hudson Counties in northern New Jersey. In 1992 I became the Manager of Regulatory and Customer Operations for the Electric Transmission and Distribution department of PSE&G. In this position I had responsibility for new business policy, regulatory liaison with the BPU, environmental services, customer satisfaction, new products and services, and EMF issues management.

In 1995, I was promoted to the position of Division Manager – Metropolitan Electric Division, where I had overall responsibility for the electric transmission and distribution system operation, construction, and maintenance for Essex and Passaic counties serving over 500,000 industrial, commercial, and distribution customers.

In 1997, I was named Division Manager Northern Gas Division. I was given the responsibility for the gas distribution operation, maintenance, and construction for Hudson, Bergen, Essex, and Passaic counties in northern New Jersey serving 700,000 gas customers.

In 2006, I was promoted to Vice President – Gas Delivery. My responsibilities included the overall design, engineering, construction and maintenance of PSE&G's gas distribution system serving more than 1.7 million gas customers. The position also includes oversight of the Appliance Service Business, which provides utility (i.e., leak response, meter connection, appliance diagnostics) and competitive, revenue generating (i.e., parts replacement, water heater replacement, HVAC installations) services.

I am a member of the Leadership Council of the American Gas Association. I am currently a member of the AGA Safety Committee. I am a member of the Board of Directors of Operations Technology Development, a NFP company focused on research and development to reduce cost, enhance safety, and increase efficiency in the gas industry. I am also currently a member of the Board of Directors of the Northeast Gas Association. In addition, I am the current Chairman of the Board of Trustees of the New Jersey State Safety Council, and I serve on the Board of the N.J. Chapter of the March of Dimes.

EXHIBIT P-4
SCHEDULE JC-2

PSE&G Gas Distribution Staffing Levels

	April 2009 Actual				June 2006 Actual			
	Mast	**BU**	**Temp**	**Actual**	**Mast**	**BU**	**Temp**	**Actual**
Gas Operations								
Gas Operations Distribution								
Southern Division	71	660	4	**735**	73	659	18	**750**
Central Division	44	429	3	**476**	42	422	7	**471**
Northern Division	60	585	-	**645**	65	570	9	**644**
Total Gas Operations Distribution	**175**	**1,674**	**7**	**1,856**	**180**	**1,651**	**34**	**1,865**
VP Gas Operations								
VP Gas Delivery & Staff	6	-	-	**6**	8	-	40	**48**
Total VP Gas Operations	**6**	**-**	**-**	**6**	**8**		**40**	**48**
Total Gas Operations	**181**	**1,674**	**7**	**1,862**	**188**	**1,651**	**74**	**1,913**
Gas Support Groups								
Asset Management	42	-	-	**42**	37	-	16	**53**
Tech Support	15	-	-	**15**	19	-	-	**19**
Appliance Service Support	12	-	-	**12**	8	-	-	**8**
M&R	23	16	-	**39**	22	16	-	**38**
GSOC	28	-	-	**28**	29	-	-	**29**
Total Gas Support	**120**	**16**	**-**	**136**	**115**	**16**	**16**	**147**
Total Gas Delivery	**301**	**1,690**	**7**	**1,998**	**303**	**1,667**	**90**	**2,060**

EXHIBIT P-4
SCHEDULE JC-3

PUBLIC SERVICE ELECTRIC & GAS COMPANY

GAS BUSINESS CAPITAL ADDITIONS - ACTUAL AND PLANNED

(Millions)

	Actual 2006	Actual 2007	Actual 2008	Base Plan 2009	Stimulus 2009	Plan Total 2009	Base Plan 2010	Stimulus 2010	Plan Total 2010
Peak Shaving Plant/M&R	**2.95**	**5.67**	**2.81**	5.99	3.60	**9.59**	4.40	13.00	**17.40**
Replacement/Upgrades	**120.94**	**123.49**	**163.43**	107.55	82.83	**190.38**	114.27	160.45	**274.72**
New Business	**64.87**	**50.85**	**53.31**	55.83	-	**55.83**	65.13	-	**65.13**
Support Facilities	**7.71**	**4.89**	**5.07**	1.16	0.25	**1.41**	2.11	0.25	**2.36**
TOTAL	**196.47**	**184.90**	**224.62**	170.53	86.68	**257.21**	185.91	173.70	**359.61**

EXHIBIT P-4
SCHEDULE JC-4

PUBLIC SERVICE ELECTRIC & GAS COMPANY

MAIN AND SERVICE FOOTAGE 2006 - 2010

	New Footage (000s)		Replaced Footage (000s)	
	Actual		Actual	
YEAR	Main	Service	Main	Service
2006	610	811	329	563
2007	397	603	312	586
2008	409	560	422	677
	Planned		Planned	
	Main	Service	Main	Service
2009	325	480	479	900
2010	330	480	709	1293

EXHIBIT P-4
SCHEDULE JC-5

PUBLIC SERVICE ELECTRIC & GAS COMPANY

GAS SYSTEM LEAKAGE RATE

YEAR	LEAKS/MILE	PEER PANEL TOP QUARTILE
2003	0.261	0.260
2004	0.250	0.230
2005	0.237	0.240
2006	0.230	0.230
2007	0.230	0.227
2008	0.222	Not yet available

EXHIBIT P-4
SCHEDULE JC-6

PUBLIC SERVICE ELECTRIC & GAS COMPANY

GAS OPERATIONS & MAINTENANCE EXPENSES
EXCLUDING FUEL COSTS, DEPRECIATION, AMORTIZATION AND TAXES
($000)

	2008	2009
Gas Production, net Fuel	$1,197	$1,026
Gas Supply, net Fuel	$3,734	$3,271
Gas Storage Operations	$82	$47
Gas Storage Maintenance	$265	$329
Distribution Operations	$55,092	$48,275
Distribution Maintenance	$24,645	$27,579
Total O&M	$85,015	$80,527

EXHIBIT P-4
SCHEDULE JC-7

PUBLIC SERVICE ELECTRIC & GAS COMPANY

DISTRIBUTION COST/CUSTOMER

YEAR	PSE&G	PEER PANEL TOP QUARTILE	
2003	52.16	62.47	
2004	72.82	62.77	
2005	66.10	65.81	
2006	60.47	62.70	
2007	55.31	57.65	
2008	67.25	71.34	*

* preliminary