

COMMONWEALTH OF PENNSYLVANIA



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June 24, 2010

Rosemary Chiavetta
Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

RE: Pennsylvania Public Utility Commission
v.
Philadelphia Gas Works 1307(f)
Docket No. R-2010-2157062

Secretary Chiavetta:

On May 28, 2010 the parties stipulated to the admission of testimony and exhibits identified in Appendix C of its Joint Petition for Settlement. Accordingly, please find enclosed two (2) copies of the prepared Direct Testimony of the Office of Consumer Advocate in the above-referenced proceeding.

The Administrative Law Judges (ALJs) and the parties of record previously received service of the enclosed testimony. At this time, copies of the transmittal letter only will be served upon the ALJs and parties of record. If you have any questions, please feel free to contact me.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Aron J. Beatty".

Aron J. Beatty
Assistant Consumer Advocate
PA Attorney I.D. # 86625

Enclosures

cc: Hon. Cynthia Fordham (Letter Only)
Hon. Christopher Pell (Letter Only)
Parties of record (Letter Only)

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CERTIFICATE OF SERVICE

Pennsylvania Public Utility Commission :
 :
 v. : Docket No. R-2010-2157062
 :
 Philadelphia Gas Works 1307(f) :
 :

I hereby certify that I have this day served a true copy of the foregoing document, the Office of Consumer Advocate’s Letter, upon parties of record in this proceeding in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant), in the manner and upon the persons listed below:

Dated this 24th day of June 2010.

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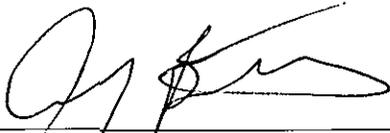
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OCA Statement No. 1

**BEFORE THE PENNSYLVANIA
PUBLIC UTILITY COMMISSION
DOCKET NO. R-2010-2157062**

**IN THE MATTER OF THE FILING OF
PHILADELPHIA GAS WORKS
REGARDING ITS
2010-2011 GAS COST RATE**

**DIRECT TESTIMONY OF
RICHARD W. LELASH
ON BEHALF OF THE
OFFICE OF CONSUMER ADVOCATE**

APRIL, 2010

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PHILADELPHIA GAS WORKS
DOCKET NO. R-2010-2157062
TESTIMONY OF RICHARD W. LELASH

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1 I. STATEMENT OF QUALIFICATIONS

2

3 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE
4 RECORD.

5 A. My name is Richard W. LeLash and my business address is 18 Seventy Acre
6 Road, Redding, Connecticut.

7

8 Q. WHAT IS YOUR CURRENT BUSINESS AFFILIATION?

9 A. I am an independent financial and regulatory consultant working on behalf of
10 several state public utility commissions and consumer advocates.

11

12 Q. PRIOR TO YOUR WORK AS AN INDEPENDENT CONSULTANT, WHAT
13 WAS YOUR BUSINESS AFFILIATION, AND WHAT WAS YOUR
14 REGULATORY EXPERIENCE?

15 A. I was a principal with the Georgetown Consulting Group for twenty years. During
16 my affiliation with Georgetown, and continuing to date, I testified on cost of
17 service, rate of return, and regulatory policy issues in more than 300 regulatory
18 proceedings. These testimonies were presented before the Philadelphia Gas
19 Commission, the Federal Energy Regulatory Commission and in the following
20 jurisdictions: Alabama, Arizona, Colorado, Delaware, District of Columbia,
21 Georgia, Illinois, Kansas, Maine, Maryland, Minnesota, Missouri, New Jersey,

1 New Mexico, New York, Ohio, Oklahoma, Pennsylvania, Rhode Island,
2 U.S. Virgin Islands, and Vermont.

3
4 Q. MR. LELASH, WHAT IS YOUR EDUCATIONAL BACKGROUND?

5 A. I graduated in 1967 from the Wharton School with a BS in Economics and in 1969
6 from the Wharton Graduate School with an MBA.

7
8 Q. DURING THE COURSE OF YOUR REGULATORY WORK, WHAT HAS
9 BEEN YOUR EXPERIENCE WITH GAS POLICY AND PROCUREMENT?

10 A. Since 1980, I have worked extensively on gas policy and procurement issues. In
11 my Appendix there is a listing of the recent cases in which I have sponsored
12 testimony. In addition to these cases, I have reviewed and analyzed many other
13 gas policy filings which were resolved through stipulation. Among other issues,
14 my testimonies have involved gas service unbundling, physical and economic
15 bypass, gas supply incentives, gas plant remediation costs, gas price hedging,
16 demand and capacity planning, gas storage options, gas price forecasting, and least
17 cost gas standards. In addressing these issues, I have analyzed gas regulatory
18 filings involving more than 30 different local distribution companies.

19
20 Q. DO YOU HAVE ANY SPECIFIC EXPERIENCE WITH RESPECT TO THE
21 OPERATIONS OF PGW?

1 A. I have participated and provided testimony on behalf of the Public Advocate in all
2 of PGW's Gas Cost Rate proceedings before the Philadelphia Gas Commission
3 throughout the 1990s and on behalf of the Office of Consumer Advocate in each
4 of its subsequent proceedings before this Commission.

5

6 Q. DO YOU HAVE ANY SPECIFIC EXPERIENCE WITH RESPECT TO
7 NATURAL GAS COST RECOVERY FOR NATURAL GAS DISTRIBUTION
8 COMPANIES IN PENNSYLVANIA?

9 A. Yes, in the past I have worked on and testified on behalf of the Pennsylvania OCA
10 on gas cost recovery concerning seven of the Pennsylvania gas distribution
11 companies in numerous 1307(f) proceedings.

12

1 II. SCOPE AND PURPOSE OF TESTIMONY

2

3 Q. WOULD YOU PLEASE STATE THE SCOPE AND PURPOSE OF YOUR
4 TESTIMONY IN THIS PROCEEDING?

5 A. I was hired by the Office of Consumer Advocate (“OCA”) to review the Gas Cost
6 Rate (“GCR”) filing made by the Philadelphia Gas Works (“PGW” or “Company”)
7 and evaluate its procurement against established regulatory standards. My review
8 focused on the gas costs, gas purchasing practices, and gas management of the
9 Company.

10 The purpose of my testimony is to present findings and recommendations
11 to the Public Utility Commission (“PUC” or “Commission”) concerning issues
12 raised by the filing, PGW’s gas procurement policy and practices, and the
13 reasonableness of its proposed fiscal year 2010-2011 GCR factor.

14

15 Q. IN PERFORMING YOUR REVIEW AND ANALYSIS, WHAT DATA
16 SOURCES DID YOU UTILIZE?

17 A. My review and analysis encompassed the Company’s related filings and its
18 responses to discovery requests. I also utilized information provided in previous
19 GCR proceedings, including those before the Philadelphia Gas Commission,
20 PGW’s prior base rate cases, and general data concerning gas procurement and
21 related gas cost recovery issues.

1

2 Q. WAS THIS TESTIMONY PREPARED BY YOU OR UNDER YOUR DIRECT
3 SUPERVISION?

4 A. Yes, this testimony was prepared by me.

5

1 III. ISSUES OVERVIEW AND FINDINGS

2
3 - PGW's Procurement

4
5 Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S PROCUREMENT IN
6 GENERAL TERMS?

7 A. In the past two years, the Company's GCR rates and its procurement practices
8 have been affected by several major external factors. Several of these factors,
9 such as high natural gas commodity prices, gas price volatility, and demand
10 changes related to price elasticity and conservation, all have had, and will continue
11 to have, an impact on the Company's GCR prices. From an operating perspective,
12 the characteristics of the Company's service territory, its limited capital resources,
13 and the operating status of its LNG facilities all place demands or constraints on
14 PGW's procurement process.

15 Over time, in past GCR proceedings, issues concerning gas price hedging,
16 pipeline capacity, LNG operations, and capacity asset management have been
17 raised and resolution of the associated procurement issues has been limited.

18 While, to some degree, this situation is related to the uncertainties concerning
19 various market driven factors, there is a growing need to resolve rather than defer
20 many of these procurement related issues.

1 Q. WOULD YOU BRIEFLY DISCUSS SOME OF THE EXTERNAL FACTORS
2 SUCH AS GAS PRICE UNCERTAINTY?

3 A. The range of recent natural gas commodity prices can be seen in the Henry Hub
4 rates shown on Schedule 1. Two periods of high prices during the September
5 through December 2005 and April through July 2008 periods had prices that
6 averaged \$11.80 per Dth. This is in contrast to gas prices for 2009 which
7 averaged about \$3.90 per Dth.

8 Such gas price volatility brings into question how gas utilities should
9 manage their commodity gas procurement. During the past five years gas prices
10 ranged from below \$3.00 per Dth up to more than \$13.00 per Dth. Accordingly, it
11 is appropriate for gas utilities to continue to re-evaluate their hedging programs to
12 better address gas price volatility. With the more recent trends in gas costs and
13 evidence of increased speculative trading, gas utilities' hedging programs will
14 need refinement and potentially the adoption of different approaches for setting
15 hedging programs' parameters.

16 In developing any prospective hedging program it is important that utilities
17 such as PGW recognize that gas price risk has two dimensions. The first involves
18 the risk that market prices may move up when gas purchases are unhedged. The
19 second involves the risk that market prices may fall when gas positions are
20 hedged. Accordingly, hedging programs for regulated gas utilities need to address
21 both aspects of price risk.

1 A second external factor involves a greater need to ensure supply
2 reliability. Hurricanes Katrina, Rita, and Ike have shown the vulnerability of Gulf
3 of Mexico supply and infrastructure. As a result, gas utilities have been evaluating
4 non-gulf based supplies and market area rather than production area storage. This
5 in turn has shifted utilities' interest to production from the Rockies, the Rockies
6 Express ("REX") pipeline and associated pipeline expansions and storage projects
7 located in Ohio, Pennsylvania and New York.

8 A third external factor that has a bearing on PGW's gas procurement
9 involves ongoing customer demand. There has been a declining trend in gas
10 volumes associated with housing weatherization and increased efficiency in gas-
11 fired equipment. This trend, along with the impact of price elasticity and
12 conservation initiatives, has slowed gas demand as shown on Schedule 2.
13 Likewise, the current housing market, and the overall economy are further slowing
14 gas demand at least in the short-term. Add uncertainties concerning global
15 warming effects, gas-fired electric generation, and alternative energy sources and
16 the demand uncertainties affecting natural gas usage are apparent.

17 As a result of these types of issues, gas utilities are currently reassessing
18 their procurement activities with the objective of better matching their
19 procurement to the changing gas supply market. For PGW, the areas needing
20 reassessment include the Company's LNG facilities, the matching of its capacity
21 resources to its demand requirements, its overall gas price hedging framework,

1 and its potential use of a third party asset manager for some or all of its off-system
2 and capacity release activities.

3
4 - Summary of Findings and Recommendations

5
6 Q. WOULD YOU PLEASE SUMMARIZE YOUR FINDINGS AND
7 RECOMMENDATIONS CONCERNING THE COMPANY'S GCR FILING?

8 A. Based on my review and analysis, the following are my major findings and
9 recommendations:

10
11 1. The Company continues to maintain gas transportation and storage capacity
12 in excess of its forecasted demand requirements. Based on the Company's
13 most recent demand forecast and available design day capacity resources,
14 ratepayers are being required to pay for about 25% more capacity than is
15 currently required.

16
17 2. The Company has not taken steps to lower its capacity levels to reduce
18 ratepayers' costs. In the past, the potential for reducing either the
19 Company's Equitrans or its WSS storage capacity was identified, but no
20 action has been taken to realize potential annual cost savings of about \$0.5
21 million for each of these storage contracts.

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3. The Company has retained its historical capacity despite the Company's declining customer demand levels, increased DSM programs to reduce customer demand, and the prevailing poor economic conditions. In part, this situation may be remaining stagnant because of the Company's recent authorization to retain 25% of capacity related margins and credits. The higher the level of excess capacity, the larger will be PGW's retained level of related margins and credits. Thus, PGW has a conflict of interest when it comes to making reductions in its capacity levels.

4. In the Company's prior GCR settlement, it agreed to issue an RFP for the asset management of a portion of its storage capacity no later than September 2009 and determine by April 1, 2010 whether an asset management agreement should be executed. To date, the latter of these requirements has not been met.

5. At this time the Company's priority should be the reduction of its levels of transportation and storage capacity. Since such a potential action may preclude entering into an asset management agreement, the Company should not enter into such an agreement at this time. In the alternative, the Company should hire a firm that would be able to assess the anticipated

1 margins and credits that could be obtained with PGW's current capacity
2 portfolio.

3
4 6. In the last GCR settlement the Company also agreed to present an
5 evaluation of its LNG alternatives in its pre-filing in this proceeding. As of
6 now, the Company acknowledges that an assessment of the alternatives has
7 not yet been conducted, but it states additional alternatives are also being
8 considered.

9
10 7. If the Company fails to properly evaluate the appropriateness of its capacity
11 resources, evaluate its LNG alternatives, and make the necessary showing
12 in next year's filing, it is recommended that the Commission not renew the
13 Company's sharing of 25% of any capacity related margins or credits after
14 August 31, 2011. If the Company cannot meet acceptable least cost gas
15 standards, then it should not benefit, in the future, from capacity related
16 transactions.

17
18 8. While the Company is currently implementing changes to its hedging
19 program based on the prior GCR settlement, it still should evaluate and
20 potentially implement additional hedging modifications. Such
21 modifications should include the development of formal risk management

1 and hedging policies and practices, the increase in its price hedging to cover
2 50% of its purchase requirements, an evaluation of the use of a dollar cost
3 averaging methodology for either its discretionary or non-discretionary
4 hedging activities, and the adoption of a methodology that would ensure
5 that its hedged positions would cover its monthly gas purchases on a
6 uniform basis.

7
8 9. During the past two years, the Company's previous hedging program was
9 not responsive to changing market conditions. Given the gas price
10 volatility in the market, the Company's hedging did not adequately protect
11 its ratepayers. Accordingly, the Company needs to continue examining its
12 hedging procedures further and adopt one or more potential modifications.

13
14 10. Based on the Company's gas supply management over the past several
15 years, it cannot be said that it has fulfilled all of the requirements of least
16 cost gas procurement. Accordingly, the Commission should require that
17 the changes discussed in this testimony be made to the Company's gas
18 management, and it should consider specific actions if changes are not
19 made on a timely basis.

20

1 IV. GCR AND PROCUREMENT ISSUES

2
3 - Gas Demand and Supply

4
5 Q. AS A GENERAL MATTER, HOW DO GAS UTILITIES DETERMINE THEIR
6 SYSTEM GAS REQUIREMENTS?

7 A. Gas utilities evaluate their annual, winter season, and design day requirements by
8 analyzing their historical experience and by making forecasts of their expected
9 customer growth. The resultant analysis seeks to determine their necessary levels
10 of gas supply to ensure system reliability. For PGW, and for most gas utilities, the
11 critical metric is their design day requirements because they dictate the level of
12 transportation, storage, and peaking supply that must be available to meet the
13 demand on the coldest winter day when requirements are at their highest.

14 As part of the design day analysis, there are four considerations. The first
15 involves the appropriate level of heating degree days (HDDs) that could be
16 experienced. The second part is to forecast firm sendout requirements associated
17 with a design day HDD level. The third is to adjust the sendout requirements for
18 expected customer growth, and the fourth involves an assessment of any potential
19 changes in the level of customer usage over time.

1 Q. WHAT METHODOLOGIES ARE USED BY THE COMPANY TO MAKE ITS
2 DETERMINATION FOR ITS PROSPECTIVE DEMAND REQUIREMENTS?

3 A. Every year PGW develops a Peak Day Analysis that sets forth its forecasting
4 methodology and its determination of future gas requirements. In its most recent
5 Peak Day Analysis, the Company provided an overview of its demand forecasting,
6 with estimates of its design day firm requirements.

7

8 Q. WOULD YOU INITIALLY DISCUSS THE PROCESS OF DETERMINING AN
9 APPROPRIATE HDD LEVEL?

10 A. By looking at the past twenty or thirty years of history, one can reasonably
11 determine what would be the coldest day and the highest HDD for the future. On
12 that basis, one can adopt an HDD level with a one-in-twenty or a one-in-thirty
13 year chance of occurrence.

14 For PGW, the coldest day in the last twenty years occurred on January 19,
15 1993 when the HDD level was 63 and the coldest day in the last 30 years had 65
16 HDD, which occurred on January 17, 1982. Based on this data, the Company's
17 use of a design day criterion of 65 HDD approximates the average of its one-in-
18 thirty coldest day. As such, the Company's determination of its coldest day's
19 demand is compatible with the methodologies employed by other gas utilities.

20

1 Q. ONCE THE DESIGN DAY HDD CRITERION IS DETERMINED, HOW DOES
2 THE COMPANY TRANSLATE THAT INTO ITS FORECASTED DESIGN
3 DAY SENDOUT REQUIREMENT?

4 A. The typical procedure is for the gas utility to develop regression analyses that, in
5 their simplest form, compare the relationship between daily firm sendout and
6 HDD levels. This is done by plotting actual daily data for sendout and HDD over
7 an appropriate time period. Then a statistical formula is derived from the data to
8 quantify the relationship of the two variables.

9

10 Q. IN YOUR OPINION, IS THE METHODOLOGY USED BY THE COMPANY A
11 REASONABLE FORECAST OF DESIGN DAY FIRM DEMAND?

12 A. No issue is taken with the Company's use of a 65 HDD design day, but it should
13 be understood that it is at the high end of the acceptable range. As for the
14 Company's regression model, it forecasts gas requirements of 695,000 Mcf
15 associated with the 65 HDD design requirement. For purposes of demand
16 forecasting at this point in time, the Company's requirement appears acceptable.

17

18 Q. WOULD YOU NOW DISCUSS HOW THE DESIGN DAY SENDOUT
19 FORECAST IS USED TO DETERMINE A GAS UTILITY'S REQUIRED
20 DAILY DELIVERABILITY CAPACITY?

1 A. On Schedule 3, there is data which shows the Company's available capacity and
2 its daily deliverability in comparison to the derived design day demand
3 requirement. As the schedule shows, the Company currently has daily Transco
4 and TETCO deliverability of 446,928 Mcf and LNG daily capacity of between
5 456,000 and 508,000 Mcf delivery depending on whether the Company has added
6 another heater to its LNG vaporization equipment. At a minimum, the Company
7 has a 30.0% design day capacity reserve. This is an unacceptably high level when
8 compared to other gas utilities that maintain about a 5% reserve based on their
9 annual growth in customers.

10
11 Q. WHY WOULD THE COMPANY WANT TO HAVE SUCH A HIGH LEVEL
12 OF EXCESS CAPACITY?

13 A. There are two factors that might justify a portion of such an excess. The first
14 would be if the Company's level of residential customers was growing or if it
15 expected to gain some large firm commercial and industrial load in the foreseeable
16 future. Second, the Company might be able to show that while demand did not
17 warrant such a high capacity level, it was achieving sufficient off-system margins
18 and/or capacity release credits to offset the excess capacity's cost. Unfortunately,
19 the Company's filing did not meaningfully address associated capacity cost issues,
20 nor did it assert any imminent firm demand increase or any specifics on excess
21 capacity costs vs. off-setting capacity credits.

1 - Asset Management Issues

2
3 Q. WOULD YOU PROVIDE SOME BACKGROUND CONCERNING THE
4 COMPANY'S ACTIVITIES AS THEY RELATE TO CAPACITY
5 OPTIMIZATION?

6 A. Yes. Since FERC Orders 736 and 737, utilities have been able to utilize any of
7 their excess capacity to make off-system sales and capacity releases. Such
8 transactions reflect the seasonality of demand for gas utilities that have high winter
9 load and lower non-winter demand requirements.

10 As I stated in my prior GCR testimony, for a number of years the Company
11 did not optimize its capacity profile and its high amount of LNG storage.
12 Beginning in the 2005-2006 period the Company dramatically increased its
13 capacity release activities. As shown on Page 2 of Schedule 3, the Company's
14 capacity release credits, which averaged about \$2.2 million during the 2002-2005
15 period, increased dramatically. For the 2006-2009 period, the Company averaged
16 about \$14.8 million of release credits which represented almost a seven fold
17 increase from its 2002-2005 average.

18 With this increasing trend, the Company sought to be able to retain 25% of
19 such credits and off-system sales ("OSS") margins. In the last GCR settlements
20 the parties agreed that PGW would be allowed to retain 25% of all off-system

1 sales margins and capacity release credits beginning on September 1, 2008 and
2 continuing through August 31, 2011.

3
4 Q. IN ADDITION TO THE MARGIN SHARING ISSUE, WERE THERE ANY
5 OTHER CAPACITY RELATED ISSUES THAT WERE RAISED?

6 A. Yes, there was an issue concerning the potential use of a third party asset manager
7 to optimize the sale or release of PGW's excess capacity. The trading platforms
8 and the capacity maintained by asset managers may help PGW in meeting its least
9 cost procurement requirements. In prior GCR proceedings the Company was
10 directed to provide information regarding its evaluations, and action plans
11 concerning whether a third party could better market PGW's portfolio and
12 maximize its potential.

13
14 Q. HOW DOES THE COMPANY'S CURRENT CAPACITY MANAGEMENT
15 COMPARE TO THOSE OF OTHER UTILITIES AND ASSET MANAGERS?

16 A. As a general matter, the Company has been slow to realize the potential of its
17 excess capacity resources. As the data on Page 2 of Schedule 3 shows, the
18 Company was not initially active in the off-system sales market, and it only began
19 to obtain significant capacity release credits beginning in 2005-2006.

20 *Another notable difference between PGW and other utilities and asset*
21 *managers involves its very low level of off-system sales and, more particularly, its*

1 failure to make sales related to its storage resources. In the last GCR proceeding
2 PGW stated that it had not entered into any arbitrage transactions for its storages
3 over the last five years. This is surprising because other utilities and asset
4 managers often obtain 80%-90% of their margins and credits from storage related
5 rather than transportation related transactions.

6
7 Q. BASED ON YOUR REVIEW AND ANALYSIS, WHAT ACTIONS SHOULD
8 THE COMPANY BE TAKING WITH RESPECT TO ITS CAPACITY
9 OPTIMIZATION?

10 A. It may be appropriate for the parties to reconsider the use of a third party asset
11 manager at this time. This is the case for two basic reasons. First, asset managers
12 typically seek between 30% to 50% of any capacity margins or credits that they
13 generate. If PGW, in turn, is to receive 25% of resulting margins net of the asset
14 manager's share, there will be a substantial reduction in any resultant ratepayer
15 benefit. Therefore, effectively, the asset manager would have to obtain at least
16 double the margins and credits currently received in order for there to be any net
17 benefit received by ratepayers.

18 Second, a higher priority should be given to having PGW reduce its overall
19 level of both transportation and storage capacity. Given that potential course of
20 action, it would not be logical to commit to an asset management agreement at this
21 time since its terms could contain restrictions on capacity reductions.

1 As an alternative, it may be useful to explore asset management for just a
2 portion of its storage capacity, and to hire a firm to develop an analysis of what
3 levels of capacity margins and credits should be obtainable given the Company's
4 current capacity configuration. Such an analysis would provide a benchmark for
5 assessing PGW's current capacity and it would provide valuable information when
6 PGW seeks to reduce its overall level of capacity resources.

7
8 Q. BASED ON THE LEVEL OF EXCESS DAILY DELIVERABILITY AND THE
9 CONTINUING TREND OF LOWER FIRM REQUIREMENTS, WHAT
10 ACTIONS SHOULD THE COMMISSION TAKE?

11 A. As an initial matter, absent efforts by the Company to address its capacity surplus,
12 evaluate the appropriateness of its capacity resources, and make the necessary
13 showing in next year's filing, it is recommended that the Commission not renew
14 the Company's sharing of 25% of any capacity related margins or credits after
15 August 31, 2011. If the Company cannot meet acceptable least cost gas standards,
16 then it should not benefit, in the future, from capacity related transactions.

17
18 This recommendation is based on the Company's failure to address the provisions
19 of the Joint Settlement in the 2009-2010 GCR Proceeding (Docket No. R-2009-
20 2088076). Specifically, PGW agreed to continue "to evaluate the appropriateness
21 of its capacity resources, the anticipated overall system demand and any initiatives

1 relative to third party suppliers” and to file the details of its evaluation in its March
2 1, 2010 filing.

3
4 - LNG Operations

5
6 Q. WOULD YOU BEGIN BY GIVING SOME HISTORY CONCERNING THE
7 COMPANY’S LNG FACILITIES AND THE ROLE THEY PLAY IN MEETING
8 CUSTOMER DEMAND REQUIREMENTS?

9 A. At its Richmond and Passyunk facilities, the Company has a combined LNG
10 storage capacity of 4.299 Bcf. The Richmond facility has 4.046 Bcf and it has
11 liquefaction capabilities. The Passyunk facility has .253 Bcf of storage with no
12 liquefaction. These storage volumes have an associated daily sendout of 411,000
13 Mcf at Richmond and 45,000 Mcf at Passyunk.

14 During the past several years, the Company’s LNG operation has had
15 frequent problems. Problems with its liquefaction equipment required the
16 Company to install a new Expander liquefier. Subsequent delays and the inability
17 of the Expander to achieve its rated capacity further hindered liquefaction
18 particularly since the Company determined that its Cascade liquefier was
19 effectively beyond repair. And finally, because of the high replacement cost for a
20 new Cascade system, the Company was left with only its Expander system with its
21 capacity limitations.

1

2 Q. HAVE THESE PROBLEMS AFFECTED THE WAY THE COMPANY
3 OPERATES ITS LNG CAPACITY?

4 A. It appears that they have. For the past few years the Company has not been filling
5 its LNG tanks to capacity and its utilization of its LNG supply has been below
6 30% of capacity during the past four years, as shown by the data contained in
7 Schedule 4.

8

9 Q. WHAT IS IMPLIED OPERATIONALLY BASED ON THE DATA FOR THE
10 PAST FOUR YEARS?

11 A. There are several operational factors that can affect the Company's average
12 storage levels. First, milder than average winters could lower overall LNG usage.
13 Second, the Company may not have been aggressively utilizing its LNG supply.
14 And third, the Company may have been conserving its storage balances because of
15 limitations in its liquefaction equipment. Ideally, the Company should be able to
16 use or sell a substantial percentage of its LNG storage during the winter season
17 and be able to fully replenish it during the non-winter months.

18

19 Q. TURNING TO THE COMPANY'S EVALUATION OF ITS LNG EQUIPMENT,
20 DO YOU HAVE ANY COMMENTS?

1 A. In the settlement from the prior GCR proceeding, the Company was to present an
2 evaluation of its LNG alternatives in this docket. In response, the Company
3 provided copies of a new liquefier cost study and a cascade LNG plant revamp
4 study. However, it also stated in its response OSBA Set 1-3 that, “An assessment
5 of the alternatives has not yet been conducted” and “Additional alternatives are
6 also being considered.”

7 The first of the studies involved a cost estimate to install a new LNG
8 liquefier in parallel to the existing cascade system. This study contained options
9 for two differently sized alternatives and involved costs between \$20 and \$35
10 million with about a two year time frame for equipment delivery and installation.
11 The second study involved the refurbishment of the existing cascade system with
12 various equipment options for costs between \$40 and \$50 million. The second
13 study did not have a specified time frame for its proposed work plans.

14 While these two studies present certain options, there are other alternatives
15 that were not included within the scope of either study. For example, the
16 *Company was asked whether there was an evaluation of a tail gas recompression*
17 *option to increase the existing expander’s liquefaction capacity. In this regard, the*
18 *Company responded that studies were conducted in 2003 on the feasibility of tail*
19 *gas recompression and the option remains a consideration (Company Response*
20 *OCA Set I-10).*

21

1 Q. BASED ON YOUR REVIEW OF THE INFORMATION PROVIDED BY THE
2 COMPANY, DOES THE INFORMATION ADEQUATELY ADDRESS THE
3 REQUIREMENTS OF LAST YEAR'S SETTLEMENT AGREEMENT?

4 A. In my opinion, the Company's information does not adequately provide either an
5 evaluation or an action plan for its LNG operation. Absent from the information is
6 any discussion of what options appear most viable or any meaningful discussion of
7 the future use of its LNG facilities and specifically how and when they will be
8 fully operational.

9 It also appears that an alliance with another entity could possibly serve to
10 maximize LNG value. For LNG facilities, the storage component is most critical
11 and the most expensive to replicate. Accordingly, another entity may be able to
12 provide necessary capital on terms such that PGW and ratepayer value will be
13 increased.

14 In the end analysis, PGW's LNG operation has created such problems in
15 the past that a comprehensive plan specifying alternative options is long overdue.
16 Accordingly, it is again recommended that such a plan be required from PGW by a
17 date certain.

18

19 - Gas Price Hedging

20

1 Q. WOULD YOU BEGIN BY PUTTING THE COMPANY'S HEDGING INTO
2 CONTEXT WITH THE RECENT COMMODITY GAS PRICE TRENDS?

3 A. Yes. By referring to the data on Schedule 1, it can be seen that gas prices have
4 remained below \$7.00 per Dth since September 2008. However, all of the
5 Company's hedge positions between July 2008 and March 2009 had average costs
6 in excess of \$10.00 per Dth. To a large degree, this disconnect between hedged
7 gas prices and index prices for an extended period was the result of unexpected
8 gas price movements. While there typically are price increases leading into and
9 during the winter months, prices tend to moderate during the spring and summer
10 periods. In 2008, however, this was not the case. Gas prices increased throughout
11 the spring and summer and then declined steadily from August 2008 through
12 September 2009.

13
14 Q. DOES THE NATURE OF PRICE VOLATILITY DURING THE PAST YEAR
15 SUGGEST ANY CONSIDERATIONS ABOUT THE COMPANY'S
16 PROSPECTIVE PRICE HEDGING?

17 A. Yes. The price volatility during the past 24 months and the results of the
18 Company's gas price hedging positions suggest the need for continued review and
19 enhancement of the Company's hedging parameters. For example, in discovery
20 the Company was asked to provide a copy of all risk management and hedging
21 policies and practices currently in effect for PGW. The discovery request also

1 stated that the Company's response should set forth the parameters of the
2 Company's current hedging plus corporate resolutions or guidelines for hedging
3 authorization, counter party credit requirements, required authorizations and
4 hedging supervision (Response OCA-Set I-1).

5 In response, the Company indicated that it does no financial hedging, it
6 uses fixed price purchases in outlying months under the direction of its Gas
7 Supply Committee and based on its yearly GCR settlement agreements, and it
8 attempts to purchase gas volumes at prices that mitigate volatility for ratepayers.
9 Unfortunately, this policy does not constitute viable risk management and hedging
10 policies and practices, nor does it address the other hedging related matters that
11 were referenced.

12 The Company's prospective gas price hedging policies and practices are
13 governed by Appendix B, Schedule 1 of the prior year's settlement. However,
14 there is no definition of what physical hedging constitutes. Similarly, in my
15 opinion, the discretionary and non-discretionary hedging should each cover about
16 25% of total purchases. For the data on Appendix B, Schedule 2 for the delivery
17 months of September 2010 through August 2011, it does not appear that the
18 discretionary hedges follow even the Schedule 1 requirements. Using the
19 forecasted purchases for those months shows that discretionary hedges only equal
20 15.4% of the purchased volumes. This percentage calculation is shown on my
21 Schedule 5. This schedule also shows that the month by month discretionary

1 hedges reflected on the schedule vary materially. In December 2010 only 9.2% of
2 purchases are hedged, while in August 2011 24.0% of purchases are hedged.

3 Q. BASED ON HAVING NON-DISCRETIONARY HEDGING OF 25% OF
4 MONTHLY PURCHASES, WHAT VOLUMES WOULD BE HEDGED
5 MONTHLY?

6 A. The last two columns on Schedule 5 show the associated hedged volumes. These
7 amounts were rounded in order to have just three levels of hedge positions. These
8 could be adjusted further to take into account the number of days in each month to
9 simplify the associated hedge transactions.

10
11 Q. ARE THERE ANY OTHER HEDGING RELATED ISSUES THAT SHOULD
12 BE CONSIDERED?

13 A. Gas utilities, while utilizing a prescribed framework, have been seeking a way to
14 add some flexibility to their hedging without making hedge positions speculative.
15 At the current time, for example, Chesapeake Utilities is seeking to allow
16 modification of its pre-determined hedges if prices rise or fall during the course of
17 the year. Essentially, Chesapeake would lower monthly hedge amounts if prices
18 rose to specified levels above its forecasted weighted average cost of gas
19 (“WACOG”) and increase them if prices fall below specified levels in its
20 forecasted WACOG. Such refinement to a hedging program would help lessen the
21 impact of significant gas price changes.

1 In the alternative, the same type of adjustment methodology could be
2 achieved by using a dollar cost averaging approach to hedging. Instead of
3 defining hedge targets in terms of gas volumes, the hedge positions would be
4 determined based on a monthly dollar amount of gas purchases. This hedging
5 would utilize the same annual gas volumes and, based upon PGW's gas price
6 forecast, would determine a dollar amount to be spent on hedge positions.
7 Effectively, such a dollar cost averaging methodology would automatically
8 increase the volumes hedged when prices fall below the forecast and decrease the
9 volumes when prices were above the forecast.

10 Such a dollar cost averaging framework has been adopted by the gas
11 utilities of PECO Energy and Public Service Electric and Gas during the past year
12 in order to address the gas price fluctuations that have recently been experienced.
13 Prior to implementing its adoption of dollar cost averaging, Public Service
14 compared dollar cost averaging results to its actual hedging results since 2005. In
15 all cases the utility's price hedging would have benefitted from the use of dollar
16 cost averaging. Dollar cost averaging will automatically adjust for price changes
17 with a methodology that would not require ongoing modifications and would
18 better tailor hedge positions to price changes.

19

1 Q. WOULD YOU EXPLAIN WHY A TRANSITION TO UNIFORM HEDGING
2 PERCENTAGES THROUGHOUT THE YEAR IS BETTER THAN THE
3 FRAMEWORK USED BY THE COMPANY?

4 A. Yes. The purpose of hedging is to limit price risk on the gas purchases made by a
5 utility. As the data shows, PGW's forecasted gas purchases in the winter months
6 are not higher than the average purchases over the past two years. This fact,
7 coupled with the fact that the highest recent gas prices were for the August to
8 December 2005 and March to July 2008 periods, show that recently the winter
9 months have not had higher price risk than the non-winter months.

10
11 Q. BASED ON YOUR REVIEW, ARE THERE ANY PROGRAM REFINEMENTS
12 THAT SHOULD BE CONSIDERED BY THE COMMISSION?

13 A. Yes. The Company should consider hedging about 50% of its net gas purchase
14 requirements. Additionally, storage transactions should not be considered to
15 constitute a portion of a hedge position. Inventory purchases themselves should
16 be hedged, since they are subject to the same price risks as non-storage purchases.
17 Second, the hedging targets should be a relatively uniform percentage for all
18 months of the year. Price levels have shown that summer prices can vary as much
19 as winter prices, and therefore there is no longer justification for having seasonally
20 differentiated hedging targets.

1 As stated, since the level of gas prices is exogenous, hedging should cover
2 50% of gas purchases. With such a target, regardless of price movements,
3 ratepayers will benefit. If prices go up, ratepayers will benefit from the hedged
4 volumes, and if prices go down they will benefit from the 50% of requirements
5 that are purchased at index prices.

6
7 - Assessment of PGW Procurement

8
9 Q. BASED ON YOUR REVIEW OF PGW'S GAS PROCUREMENT, IS THE
10 COMPANY FULFILLING THE CRITERIA WHICH ARE GENERALLY
11 APPLICABLE FOR GAS PROCUREMENT AND RECOVERY?

12 A. The Company is not affiliated with any pipeline or gas supply operation, nor does
13 it have any contracts for local production. Accordingly, the Company is not able,
14 in the traditional sense, to withhold from the market any gas supplies which should
15 be part of a least cost gas procurement program. In the one context where PGW
16 does have discretion concerning supply utilization, that being its use of LNG
17 storage, the Company has not been able to fully utilize its total storage capacity.

18 At this time it cannot be said that the Company has fulfilled all of the
19 requirements of least cost gas procurement. The Company has not pursued a
20 permanent fix for its LNG facilities and is therefore potentially foregoing credits
21 that would lower ratepayers' cost of gas. This issue has been pending for several

1 years and the Company has yet to remedy its deficiencies. With respect to the
2 evaluation of having a third party asset manager optimize all or a portion of its
3 excess capacity, the Company has continued to promise an evaluation of such an
4 option. However, no actions have been taken to date. And finally, though the
5 Company continues to reference its past and future losses of customers and lower
6 customer usage, it has not seemingly evaluated reductions to its interstate
7 transportation and storage resources. These are three failings that should not be
8 overlooked by the Commission. In the Company's last GCR proceeding the
9 Company agreed to provide information regarding its evaluations and, if
10 applicable, action plans on the issues discussed above. As was evident from its
11 filing, the Company has still made little if any progress in developing either
12 evaluations or necessary action plans for the three identified issue areas.

13
14 Q. MR. LELASH, DOES THIS CONCLUDE YOUR TESTIMONY IN THIS
15 MATTER?

16 A. Yes, it does.

17 125408

18

V . SUPPORTING SCHEDULES

Philadelphia Gas Works
Henry Hub - Dollars per Dth

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010F</u>
January	\$ 6.18	\$ 8.73	\$ 6.40	\$ 7.97	\$ 5.23	\$ 5.81
February	6.11	7.54	8.04	8.49	4.50	5.30
March	6.94	6.89	7.11	9.36	3.94	4.30
April	7.16	7.07	7.58	10.15	3.50	3.87
May	6.46	6.21	7.64	11.25	3.80	3.93
June	7.19	6.26	7.34	12.67	3.78	4.01
July	7.60	6.12	6.22	11.19	3.38	4.10
August	9.47	7.17	6.27	8.26	3.12	4.17
September	12.41	4.86	5.99	7.69	2.93	4.21
October	13.59	5.75	6.72	6.72	3.95	4.31
November	10.28	7.38	7.01	6.59	3.55	4.68
December	12.90	6.74	7.11	5.76	5.36	5.10
Average	\$ 8.86	\$ 6.73	\$ 6.95	\$ 8.84	\$ 3.92	\$ 4.48

SOURCE: PIRA North American Gas Forecast Monthly, March 26, 2010, page 15.

Philadelphia Gas Works
Annual Gas Volumes
(000's Mcf)

	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Other</u>	<u>Total</u>
2000	40,988	12,238	1,299	12,686	67,211
2001	46,228	12,931	1,521	7,319	67,999
2002	35,591	10,369	1,098	8,413	55,471
2003	47,656	13,317	1,337	9,666	71,976
2004	42,433	12,166	1,119	6,985	62,703
2005	41,467	11,919	1,050	6,294	60,730
2006	34,083	10,697	904	5,687	51,371
2007	36,184	10,757	847	6,593	54,581
2008	35,197	9,733	658	3,993	49,581
2009	37,670	9,726	630	3,324	51,350
Average 2000-2004	42,579	12,204	1,275	9,014	65,072
Average 2005-2009	36,920	10,566	818	5,178	53,483
Percent Change	(13.3)%	(13.4)%	(35.8)%	(42.6)%	(17.8)%

SOURCES: Company's Annual Resource Planning Reports, 2000-2010.

Philadelphia Gas Works
Design Day Capacity
(Mmcf)

	<u>2009</u>	<u>2010</u>
Transco	219.7	219.7
Texas Eastern	<u>227.3</u>	<u>227.3</u>
Total Pipeline	447.0	447.0
LNG	<u>456.0</u>	<u>508.0</u>
Total Supply	904.0	955.0
Firm Demand	695.0	695.0
Supply Reserve	209.0	260.0
Reserve Percentage	30.0%	37.4%

SOURCE: Company Responses OCA-I-13, OAC-I-22, and LeLash Schedule 5 from Docket No. R-2008-2021348.

Philadelphia Gas Works
Capacity Credits and Margins
(\$000's)

	<u>Capacity Release</u>	<u>Off-System</u>	<u>Total</u>
2002-2003	\$ 2,710	\$1,237	\$ 3,947
2003-2004	1,592	0	1,592
2004-2005	2,235	460	2,695
2005-2006	8,898	69	8,967
2006-2007	14,399	39	14,438
2007-2008	14,255	460	14,715
2008-2009	15,718	9	15,727
Average 2002-2005	2,179	566	2,745
Average 2006-2009	14,791	169	14,960
Percentage Change	579%	(70)%	445%

SOURCES: Company Responses OSBA-Set 1-6a and 7.

Philadelphia Gas Works
LNG Storage Volumes
(000's Mcf)

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
January	2,476	3,853	1,343	2,096	2,153
February	2,191	3,771	986	1,933	2,097
March	1,311	3,572	875	2,047	2,334
April	1,198	3,507	1,053	2,001	2,587
May	1,122	3,445	1,554	1,939	2,731
June	1,725	3,386	1,939	1,883	2,787
July	2,185	3,319	2,344	2,172	2,773
August	2,753	3,260	2,666	2,442	2,606
September	3,310	3,260	3,151	2,799	2,588
October	3,793	3,647	3,630	3,347	2,883
November	4,216	3,629	3,738	3,507	3,260
December	4,145	2,950	3,775	3,243	3,233
Capacity	4,299	4,299	4,299	4,299	4,299
Max Fill %	98.1%	84.8%	87.8%	81.6%	75.8%
Usage	2,783	644	2,772	1,441	1,173
Usage %	64.7%	15.0%	64.5%	33.5%	27.3%

SOURCES: Company responses from prior PGW GCR Dockets.

Philadelphia Gas Works
LNG Storage Volumes
(000's Mcf)

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
January	3,115	3,702	3,390	3,266
February	2,978	2,920	3,367	2,992
March	2,852	2,619	3,493	2,802
April	2,912	2,703	3,683	2,747
May	3,081	2,904	3,810	2,679
June	3,118	2,999	3,751	2,618
July	3,055	2,936	3,686	2,563
August	2,996	2,874	3,630	2,502
September	3,175	2,904	3,564	-
October	3,689	3,051	3,747	-
November	3,971	3,380	3,917	-
December	3,913	3,544	3,704	-
Capacity	4,299	4,299	4,299	4,299
Max Fill %	92.4%	82.4%	91.1%	76.0%
Usage	408	1,352	51	-
Usage %	9.5%	31.4%	1.1%	-

SOURCES: Company responses from prior GCR dockets and the Company's Response to OCA Set 1-7.

Philadelphia Gas Works
Hedging - 000's Dth

<u>Month</u>	<u>Purchases</u>	<u>Non Discretionary Hedges</u>	<u>% Hedged</u>	<u>Proposed</u>	<u>% Hedged</u>
September, 2010	3,525	840	23.8	900	25.5
October	5,233	840	16.1	1,300	24.8
November	6,022	840	13.9	1,300	21.6
December	7,698	840	9.2	1,900	24.7
January, 2011	7,987	840	10.5	1,900	23.8
February	7,150	840	11.7	1,900	26.6
March	7,041	840	11.9	1,900	27.0
April	5,377	840	15.6	1,300	24.2
May	4,766	840	17.6	1,300	27.3
June	3,569	840	23.5	900	25.2
July	3,511	840	23.9	900	25.6
August	<u>3,499</u>	<u>840</u>	24.0	900	25.7
Totals/Averages	65,378	10,080	15.4%	16,400	24.7%

SOURCES: Company Response OCA Set I-11.

VI. APPENDIX: PRIOR R.W. LELASH TESTIMONIES

R. W. LELASH'S REGULATORY TESTIMONIES
(2004 to Present)

268. Delaware, Delmarva Power & Light Company (Docket No. 03-378F) Evaluation of Gas Procurement and Price Hedging Testimony for the Delaware Public Service Commission (February, 2004).
269. Pennsylvania, Philadelphia Gas Works (Docket Nos. R-00049157 and P-00042090) Purchased Gas Cost Testimony for the Pennsylvania Office of Consumer Advocate (May, 2004)
270. Pennsylvania, Philadelphia Gas Works (Docket Nos. R-00049157 and P-00042090) Purchased Gas Cost Rebuttal Testimony for the Pennsylvania Office of Consumer Advocate (May, 2004)
271. Delaware, Chesapeake Utilities Corporation (Docket No. 02-287F) Gas Supply Plan Review for Chesapeake Utilities and the Delaware Public Service Commission (July, 2004).
272. Georgia, Atmos Energy Corporation (Docket No. 18509-U) Procurement and Capacity Plan Testimony for the Georgia Public Service Commission (August, 2004).
273. Georgia, Atlanta Gas Light Company (Docket Nos. 18437-U and 8516-U) Procurement and Capacity Plan Testimony for the Georgia Public Service Commission (August, 2004).
274. New Jersey, NUI Utilities and AGL Resources (Docket No. GM04070721) Terms and Conditions of Merger Testimony for the New Jersey Ratepayer Advocate (September, 2004).
275. Georgia, Atlanta Gas Light Company (Docket No. 18638-U) Business Risk Testimony for the Georgia Public Service Commission (February, 2005).
276. Pennsylvania, Philadelphia Gas Works (Docket No. R-00050264) Purchase Gas Cost Testimony for the Pennsylvania Office of Consumer Advocate (April, 2005).
277. Federal Energy Regulatory Commission, Exelon and Public Service Enterprise Group (Docket No. EC05-43-000) Market Power Testimony by Affidavits for the New Jersey Division of the Ratepayer Advocate (April and May, 2005).
278. Pennsylvania, PECO Energy Company (Docket No. R-00050537) Gas Procurement and Policy Testimony for the Pennsylvania Office of Consumer Advocate (July, 2005).
279. Georgia, Atmos Energy Corporation (Docket No. 20528-U) Gas Supply Plan Testimony for the Georgia Public Service Commission (August, 2005).
280. New Jersey, Public Service Electric & Gas/Exelon (Docket No. EM05020106) Gas Related Merger Testimony for the New Jersey Ratepayer Advocate (November, 2005).
281. New Jersey, Public Service Electric & Gas/Exelon (Docket No. EM05020106) Gas Related Merger Surrebuttal Testimony for the New Jersey Ratepayer Advocate (December, 2005).
282. New Jersey, Pivotal Utilities Holdings (Docket No. GR05040371) Pipeline Replacement Cost Recovery Testimony for the New Jersey Ratepayer Advocate (February, 2006).
283. New Jersey, Public Service Electric & Gas Company (Docket No. GR05050470) Gas Supply Requirements Testimony for the New Jersey Ratepayer Advocate (May, 2006).

284. New Jersey, Public Service Electric & Gas Company (Docket No. GR05100845) Base Rate Regulatory Policy Testimony for the New Jersey Ratepayer Advocate (June, 2006).
285. Vermont, Vermont Gas Systems (Docket No. 7109/7160) Report on Gas Price Hedging for Vermont Gas Systems (December, 2006).
286. Delaware, Chesapeake Utilities Corporation (Docket No. 06-287F) Report on Gas Price Hedging for Chesapeake Utilities Corporation (March 2007).
287. Delaware, Chesapeake Utilities Corporation (Docket No. 06-287F) Gas Procurement and Policy Testimony for the Delaware Public Service Commission (March, 2007).
288. Pennsylvania, Philadelphia Gas Works (Docket No. R-00061931) Base Rate Regulatory Policy Testimony for the Pennsylvania Office of Consumer Advocate (April, 2007).
289. Pennsylvania, Philadelphia Gas Works (Docket No. R-00072110) Gas Cost Rate Testimony for the Pennsylvania Office of Consumer Advocate (April 2007)
290. Pennsylvania, Philadelphia Gas Works (Docket No. R-00061931) Base Rate Rebuttal Testimony for the Pennsylvania Office of Consumer Advocate (May 2007).
291. Pennsylvania, Philadelphia Gas Works (Docket No. R-0001931) Base Rate Surrebuttal Testimony for the Pennsylvania Office of Consumer Advocate (May 2007).
292. Pennsylvania, PECO Energy Company (Docket No. R-00072331) Gas Procurement and Policy Testimony for the Pennsylvania Office of Consumer Advocate (July, 2007).
293. Georgia, Atlanta Gas Light Company (Docket No. 18437-U) Capacity Supply Plan Testimony for the Georgia Public Service Commission (August, 2007)
294. Delaware, Chesapeake Utilities Corporation (Docket No. 07-186) Gas Policy Testimony for the Delaware Public Service Commission (December, 2007).
295. Delaware, Chesapeake Utilities Corporation (Docket No. 07-246F) Gas Procurement and Policy Testimony for the Delaware Public Service Commission (April, 2008).
296. Pennsylvania, Philadelphia Gas Works (Docket No. R-2008-2021348) Gas Cost Rate Testimony for the Pennsylvania Office of Consumer Advocate (April, 2008).
297. New Jersey, New Jersey Natural Gas Company (Docket No. GR07110889) Base Rate Policy Testimony for the Division of Rate Counsel (April, 2008).
298. Georgia, Atmos Energy Corporation (Docket No. 27168) Gas Supply Plan Testimony for the Georgia Public Service Commission (August, 2008).
299. Pennsylvania, Philadelphia Gas Works (Docket No. R-2008-2073938) Emergency Rate Relief Testimony for the Pennsylvania Office of Consumer Advocate (December, 2008).
300. Delaware, Delmarva Power & Light Company (Docket No. 08-266F) Gas Procurement and Policy Testimony for the Delaware Public Service Commission (February, 2009).

301. Delaware, Chesapeake Utilities Corporation (Docket No. 08-269F) Gas Procurement and Policy Testimony for the Delaware Public Service Commission (March, 2009).
302. Pennsylvania, Philadelphia Gas Works (Docket No. R-2009-2088076) Gas Procurement and Policy Testimony for the Pennsylvania Office of Consumer Advocate (April, 2009).
303. Pennsylvania, PECO Energy Company (Docket No. R-2009-2108705) Gas Procurement and Policy Testimony for the Pennsylvania Office of Consumer Advocate (July, 2009).
304. Delaware, Chesapeake Utilities Corporation (Docket No. 08-269F, Phase II) Gas Policy Testimony for the Delaware Public Service Commission (August, 2009).
305. Georgia, Atmos Energy Corporation (Docket No. 29554) Gas Supply Plan Testimony for the Georgia Public Service Commission (August, 2009).
306. New Jersey, Pivotal Utilities Holdings (Docket No. GR09030195) Base Rate Policy Regulatory Testimony for the Division of Rate Counsel (August, 2009).
307. New Jersey, Public Service Electric & Gas Company (Docket No. GR09050422) Base Rate Regulatory Policy Testimony for the Division of Rate Counsel (November, 2009).
308. New Jersey, Gas and Electric Utilities (Docket No. EX00020091) Rate Recovery of Deferred USF Expenditures for the Division of Rate Counsel (January, 2010).
309. Delaware, Chesapeake Utilities Corporation (Docket No. 09-398F) Gas Procurement and Policy Testimony for the Delaware Public Service Commission (January, 2010).
310. Delaware, Delmarva Power and Light Company (Docket No. 09-385F) Gas Procurement and Policy Testimony for the Delaware Public Service Commission (February, 2010).
311. Pennsylvania, Philadelphia Gas Works (Docket No. R-2009-2139884) Base Rate Policy Testimony for the Pennsylvania Office of Consumer Advocate (March, 2010).