

1. REPORT DATE: 00/00/00 :
 2. BUREAU: FUS :
 3. SECTION(S): : 4. PUBLIC MEETING DATE:
 5. APPROVED BY: : 00/00/00
 DIRECTOR: :
 SUPERVISOR: :
 6. PERSON IN CHARGE: : 7. DATE FILED: 01/05/01
 8. DOCKET NO: R-00006042 : 9. EFFECTIVE DATE: 03/06/01

PARTY/COMPLAINANT: PUC

RESPONDENT/APPLICANT: PHILADELPHIA GAS WORKS

COMP/APP COUNTY:

UTILITY CODE: 125042

ALLEGATION OR SUBJECT

PHILADELPHIA GAS WORKS FILED SUPPLEMENT NO. 7 TO TARIFF-GAS PA. P.U.C. NO. 1 TO BECOME EFFECTIVE MARCH 6, 2001, WHICH PROPOSES A GENERAL RATE INCREASE OF \$65,000,000.

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JAN 09 2001

Wolf, Block, Schorr and Solis-Cohen LLP

212 Locust Street
Suite 300
Harrisburg, PA 17101

T: 717 237 7160
F: 717 237 7161
www.wolfblock.com

ORIGINAL

DANIEL CLEARFIELD
DIRECT DIAL: (717) 237-7173
E-MAIL: DCLEARFIELD@WOLFBLOCK.COM

January 5, 2001

VIA HAND DELIVERY

James McNulty, Secretary
PA Public Utility Commission
Commonwealth Keystone Bldg., 2nd. Fl.
Harrisburg, PA 17105

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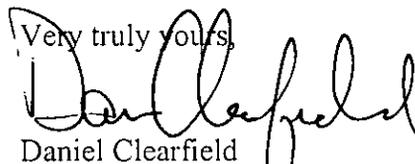
RE: Philadelphia Gas Works' Permanent Base Rate Filing,
Docket No. R-00006042

Dear Secretary McNulty:

On behalf of Philadelphia Gas Works, enclosed for filing is an original and eight copies of its Supplement No. 7 to the its Tariff Gas - Pa. P.U.C. No. 1 which, if implemented, would increase PGW's base rates by \$65 million annually. Also enclosed are the following:

- Testimony and financial data supporting the proposed increase as well as a Cost of Service Study; and
- A Petition for Waiver of Potentially Applicable Notification and Filing Requirements and Establishment of Expedited Hearing Schedule for Base Rate Proceeding.

All parties of record in the interim rate proceeding have been served according to the attached Certificate of Service.

Very truly yours,

Daniel Clearfield

For WOLF, BLOCK, SCHORR and SOLIS-COHEN LLP

DOCUMENT
FOLDER

DC/lww

Enclosure

cc: All Parties of Record (Per Attached Certificate of Service) w/enc.

Robert Rosenthal, Director, FUS, w/enc.

Karen Moury, Esq., Law Bureau, w/enc.

Secretary's Office
PA Public Utility Commission

RE: PGW Base Rate Filing; Docket No. R-00006042

We are filing today, January 5, 2001, the original and one copy of PGW's Base Rate filing. We will serve all parties of record with this filing today and provide the PUC with the additional copies on Monday, January 8, 2001.

Thank you.

Wolf Block Schorr and Solis-Cohen LLP
(717) 23707160

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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**In Re: Petition of Philadelphia Gas Works for
Waiver of Certain Notification and Filing
Requirements and Establishment of
Expedited Hearing Schedule for Base
Rate Proceeding** :

Docket No. R-00006042

SECRETARY'S BUREAU

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**PETITION OF PHILADELPHIA GAS WORKS FOR
WAIVER OF POTENTIALLY APPLICABLE NOTIFICATION AND
FILING REQUIREMENTS AND ESTABLISHMENT OF EXPEDITED
HEARING SCHEDULE FOR BASE RATE PROCEEDING**

Pursuant to 52 Pa. Code §§ 5.41 and 5.43, 66 Pa. C.S. §§ 2212(c), (d) and (e), Chapter 13 and Section 2212(c) of the Public Utility Code (“Code”), Philadelphia Gas Works (“PGW”) hereby submits this Petition requesting that the Commission:

- (1) acknowledge that certain notification provisions in the Commission’s regulations are not presently applicable to the extent that they are deemed to apply to PGW to waive them;
- (2) acknowledge that certain filing requirements in the Commission’s regulations applicable to the filing of a base rate case are not presently applicable to PGW, or to the extent deemed applicable, to waive them; and
- (3) to establish an expedited hearing schedule culminating in a Commission decision no later than on or around June 1, 2001 for the base rate case being filed herewith.

As the Commission is well aware, PGW is in the midst of a full scale “refurbishment” with new management and a new direction, with the goal of returning PGW to good financial

health, increased efficiency and superior customer service. Part of that effort includes PGW's need for a base rate increase — its first since 1992 — as well several rate structure reforms.

In the Commission's Order Establishing Interim Rate Procedures entered on August 17, 2000, the Commission agreed to establish an expedited hearing schedule for consideration of PGW's interim rate request. The PUC accepted PGW's offer to follow up its interim case with a full base rate proceeding and ordered PGW to file a full base rate case on or before January 1, 2001.

In preparing and filing this rate increase PGW has furnished the Commission with the same type of underlying documentation and support that it had, in the past, been required to furnish to the Philadelphia Gas Commission ("PGC") when seeking a base rate increase. Supporting data of this sort is consistent with the Public Utility Code's requirements applicable to PGW. In addition, in view of its present financial situation and its very recent entry into the jurisdictional purview of the Commission, PGW has had no ability to submit a substantially different filing because it has not been able to establish a data base of, or to prepare, all the underlying documentation and information generally required by Commission regulations in the filing of a base rate case.

Accordingly, PGW requests that the Commission either acknowledge that these regulatory requirements do not presently apply to PGW, or alternatively, to employ the authority provided to it by the General Assembly to waive or suspend any inconsistent provisions of the Code or Commission regulations in order to establish, as expeditiously as possible, a reasonable level of base rates for the Company. PGW has and will continue to adhere to all applicable public notice provisions required by PUC regulation.

In addition, PGW requests that the Commission schedule an expedited proceeding to make a determination on such base rates by June 1, 2001. Such a time line is consistent with the time period used by PGW's previous regulator — the PGC — in resolving base rate proceedings of this nature, and is also necessary to avoid a projected financial crisis which may not otherwise be avoidable.

In support of this Petition, PGW states as follows:

I. Background

1. The Petitioner is PGW, with its principal place of business at 800 W. Montgomery Avenue, Philadelphia, PA 19122.
2. PGW is a group of real and personal assets owned by the City of Philadelphia ("City") and used for the acquisition, storage, processing and distribution of natural gas within the City. PGW is a "city natural gas distribution operation" as defined in Section 102 of the Code, 66 Pa. C.S. § 102, and is an instrumentality of the City of Philadelphia pursuant to Section 2212(k) of the Natural Gas Choice and Competition Act ("Gas Choice Act"), 66 Pa. C.S. § 2212(k).
3. In its Opinion and Order Establishing Interim Rate Procedures entered on August 17, 2000, at Docket No. P-00001831, the Commission required PGW to file a full base rate increase on or before January 1, 2001.
4. The Commission has recently extended the time of such filing until January 5, 2001, and PGW is making such filing herewith.
5. Pursuant to Section 2212(d) of the Gas Choice Act, until such time as a new tariff is filed by PGW and approved by the Commission in connection with its restructuring

proceeding, PGW continues and “shall continue to provide natural gas supply and natural gas distribution services to its customers under the prior tariff and the policies or programs existing . . .” on July 1, 2000. PGW’s “Prior Tariff” is defined as PGW’s “tariff, rate schedule and riders incorporated into the tariff” in existence on July 1, 2000. Id.¹ PGW is authorized to request modifications in its “prior” tariff from this Commission prior to such restructuring. 66 Pa. C.S. § 2212(d).

6. Pursuant to Section 2212(e) of the Gas Choice Act, notwithstanding any other provision in the Code, the Commission "shall follow the same ratemaking methodology and requirements that were applicable to [PGW] prior to assumption of jurisdiction by the Commission . . . " in determining PGW’s "revenue requirements and approving overall rates and charges."

7. In addition, pursuant to Section 2212(c) of the Gas Choice Act, the Commission, upon request of PGW, "may suspend or waive the application" to PGW of any provision of the Code other than Section 2212 itself.

8. Pursuant to the above Public Utility Code sections, it is PGW’s view that the PUC is required to follow and comply with PGW’s prior ratemaking methodologies and requirements as well as prior tariff, policies and programs. Accordingly, PGW respectfully requests that the PUC acknowledge that, until PGW’s restructuring case is finalized, PUC regulations and procedures do not apply to PGW with respect to its permanent base rate filing. PGW has

¹ PGW has reformatted its “prior” tariff to change references from the Philadelphia Gas Commission to the Public Utility Commission, where appropriate. Such reformatted tariff was filed with the Commission on July 3, 2000, and is publicly available.

complied with its tariff and prior practice with respect to the information it is submitting to justify its base rate increase request.

9. However, in order to avoid controversy and without waiving its right to assert its legal position in other contexts, if the PUC considers that any of its regulations or other requirements could possibly apply, PGW respectfully requests that all PUC regulations and/or Public Utility Code provisions that are inconsistent with PGW's previous practice, as detailed below, be waived. Specifically, PGW intends to file in the following manner and requests the following waivers:

Waiver of Notice Requirement

10. Notice to PUC. Pursuant to 52 Pa. Code § 53.45(a), a utility is supposed to file with the Commission written notice 30 days prior to filing a new tariff informing the Commission of the anticipated filing of a general rate increase. PGW's prior ratemaking procedures did not contain any pre-notice requirement. In any event, PGW seeks a waiver of this requirement. Because the base rate filing accompanying this Petition was required as part of the interim rate proceeding, notice thereof was already given by PGW in its commitment to make such a filing in response to the Commission's Order entered on August 17, 2000 at Docket No. P-00001831.

11. Notice to Customers. PGW has elected to give notice to customers of its base rate filing pursuant to the alternative method set forth in 52 Pa. Code § 53.45(b)(4), and will comply with those notice requirements. Those notice requirements are similar to the public notice requirements with which PGW previously complied.

12. Waiver of Filing Requirements. In its base rate case filing, PGW is including all the supporting documentation and information it has traditionally been required to file with the PGC in connection with a base rate case. Accordingly, PGW believes that it is complying with all applicable filing requirements. However, if the PUC believes that any other filing requirements apply, PGW requests a waiver of such provisions. PGW has not been able to establish or prepare a data base containing all the documentation and information generally required by the Commission in connection with the filing of a base rate case. PGW requests a waiver from any additional requirements, including, without limitation, the requirements set forth at 52 Pa. Code §§ 53.52 and 53.53. PGW will endeavor to furnish any additional documentation or information reasonably required by the Commission or any party during the base rate proceeding.

13. Accordingly, if the PUC believes that any of its regulations and rules apply they should be waived pursuant to Section 2212(c) of the Gas Choice Act. In granting this request, the Commission would be acting consistently with the Gas Choice Act by recognizing this base rate proceeding "under the prior tariff and the policies or programs existing" on July 1, 2000 under 66 Pa.C.S. § 2212(d) and as following "the same ratemaking methodology and requirements" that were applicable to PGW on that date under 66 Pa.C.S. § 2212(e).

Expedited Rate Hearing

14. PGW also requests that the PUC issue an order establishing that the Company's permanent rate proceeding filed today shall be resolved in five months or on or around June 1, 2001. The reasons supporting this request are as follows:

(a) As indicated above, PGW remains subject to the tariffs, policies and programs, and ratemaking methodologies and requirements in place prior to the implementation of PUC jurisdiction. Under PGW's prior practice, a base rate increase for PGW was completed in five months. See, Base Rate Proceeding PGW St. 1 (Knudsen) Exh. TEK-1.

(b) As indicated by Mr. Knudsen in his testimony submitted with the permanent base rate filing, PGW is facing debt service coverage and cash crisis in FY 2000-01. In summary, PGW's testimony shows that, absent additional rate relief prior to the end of PGW's fiscal year, *it will not satisfy its bond ordinance covenants² and will not be able to cover all of its gas expenditures or the cash working capital requirements necessary to maintain its commercial paper program or enable it to issue new long term debt.*

15. The only way to address PGW's acute financial crisis in the context of this case would be to order that PGW's permanent base rate proceeding will conclude and new rates will be implemented sufficiently in advance of the end of the fiscal year to provide the needed revenues and cash. PGW calculates that to accomplish this, permanent rates would have to go into effect no later than June 1, 2001.

16. In view of its present financial circumstances, PGW needs to collect any rate increase granted by the Commission as soon as possible in order to have sufficient income and cash on hand at the end of its fiscal year to meet its debt service requirements and bond covenants in September-November, 2001 and to be able to purchase gas for the winter heating season of 2001-02.

² The PUC is required to set rates which permit PGW to satisfy the requirements of its bond ordinances. 66 Pa. C.S. § 2212(e).

17. For these reasons, PGW requests the Commission to implement a schedule for the proceedings in this case similar to that previously experienced by PGW while under the PGC's jurisdiction so that the proceedings will be concluded in time for a Commission decision no later than June 1, 2001.

WHEREFORE, PGW respectfully requests the Commission to:

- (a) waive the notification requirement in 52 Pa. Code § 53.45(a);
- (b) waive the requirements of 52 Pa. Code §§ 53.52 and 53.53, as well as any other provisions of the Code or Commission regulations that are inconsistent with the contents of the base rate filing being made by PGW herewith in accordance with its filing requirements before the PGC;
- (c) establish an expedited hearing schedule, culminating in a Commission decision no later than June 1, 2001, to establish permanent base rates for PGW; and
- (d) grant any other relief it determines to be in the public interest.

Respectfully submitted,

Daniel Clearfield
Gerald Gornish
Alan Kohler
Wolf, Block, Schorr and Solis-Cohen LLP
212 Locust Street, Suite 300
Harrisburg, PA 17101
(717) 237-7160

Of Counsel:
Abby L. Pozefsky
Senior Vice President and General Counsel
Philadelphia Gas Works
800 West Montgomery Ave.
Philadelphia, PA 19122

Date: January 5, 2001

VOLUME I

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY
COMMISSION**

PREPARED DIRECT TESTIMONY

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**RE: PHILADELPHIA GAS WORKS
BASE RATE PROCEEDING**

Docket No. R-00006042

JANUARY, 2001

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PGW Statement No. 6 — Jay P. Lukens

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

THOMAS E. KNUDSEN

ON BEHALF OF
PHILADELPHIA GAS WORKS

RE: PHILADELPHIA GAS WORKS
BASE RATE PROCEEDING

DOCKET NO. R-00006042

JANUARY, 2001

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Thomas E. Knudsen. My business address is 800 West
3 Montgomery Avenue, Philadelphia, PA 19122.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by the Philadelphia Gas Works ("PGW" or "the Gas Works"
6 or "the company") as its Interim Chief Financial Officer.

7 **Q. WHAT ARE YOUR JOB RESPONSIBILITIES?**

8 A. My formal responsibilities include the oversight of the following functions:
9 budgeting, treasury, information technology, risk management, customer
10 affairs, regulatory affairs and accounting, among other areas.

11 However, in my capacity as a member of the transitional management
12 team appointed last March, my responsibilities also include the formulation
13 of strategies, policies and procedures that address the needs of the entire
14 organization.

15 **Q. PLEASE SUMARIZE YOUR EDUCATIONAL BACKGROUND AND**
16 **WORK EXPERIENCE.**

17 A. I received a Bachelor of Arts Degree with a major in economics from
18 Northwestern University in 1964 and a Master's Degree in Business
19 Administration from Columbia University in 1968. During the period of
20 1964-66, I served as a supply officer in the United States Navy. From
21 1968-1970, I was Assistant to the Finance Administrator of the City of New
22 York. From 1971-78, I was employed in the Management Services
23 Division of Touche Ross & Co., specializing in government, health care
24 and utility regulatory consulting. From 1978 until February, 2000, I was a

1 founding principal in the Woodside Group, Inc., a utility regulatory
2 consulting firm. In March, 2000, I was appointed to my present position.

3 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY TO THE**
4 **PENNSYLVANIA PUBLIC UTILITY COMMISSION?**

5 A. Yes, I testified on behalf of PGW in its interim rate proceeding (R-
6 00005654). Previous to that, I appeared before the Pennsylvania Public
7 Utility Commission ("the Commission") as an independent consultant and
8 expert witness in various base rate and other proceedings over the course
9 of the last several decades. I have also appeared before numerous other
10 regulatory commissions on regulatory and rate issues, as detailed in
11 Appendix A to my testimony.

12 **Q. PLEASE EXPLAIN THE PURPOSE OF YOUR TESTIMONY.**

13 A. My testimony presents PGW's position on several issues. First, I will
14 explain how this base rate filing fits within a context of an on-going
15 financial crisis at PGW. I present that context and explain the company's
16 revenue requirement presentation that demonstrates a need for a total of
17 \$65 million in annual base rates to take effect late in FY 2001. This
18 presentation is based on a fully forecasted test/budget year but, unlike
19 past practice, will likely not take effect for any substantial portion of the
20 budget period but will be applied to future fiscal years. This circumstance
21 causes a crisis that requires some form of base rate relief well before the
22 end of PGW's current fiscal period, August 31, 2001. I will explain the
23 specifics of this immediate crisis and support the company's position that
24 immediate rate relief is necessary if PGW is going to be able to continue
25 its planned construction and service improvement plans, or more

1 basically, even continue to serve customers at minimally adequate levels.
2 Second, I will again present the basis on which PGW's revenue
3 requirement has always been determined – the Cash Flow Method. Based
4 on the preliminary conclusions of a study we had commissioned, this
5 approach, in addition to being legally required (as I am advised), is
6 actually more economical for ratepayers than if PGW were investor owned
7 and its revenue requirement were determined as an investor owned utility.
8 Finally, I will provide the Commission and the parties with an update on
9 PGW's efforts to improve its service and increase efficiency as well as
10 report on the progress made to fulfill the "Transition to Excellence"
11 program to which we are committed. While progress is being made, these
12 efforts have been slowed by PGW's massive financial crisis that threatens
13 the Company's ability to even maintain its present levels of service
14 through the rest of the fiscal year.

15 **B. Base Rate Filing Overview**

16 **Q. PLEASE PROVIDE AN OVERVIEW OF PGW'S BASE RATE FILING.**

17 **A.** PGW is submitting its base rate increase request for \$65 million
18 substantially on the same basis and with the same type of supporting data
19 as it submitted to justify its \$52 million interim increase, and, before that,
20 its proposed FY 2000-2001 operating and capital budgets to the
21 Philadelphia Gas Commission.

22 The testimony of Mr. Joseph Bogdonavage's, Senior Vice President for
23 Finance, (PGW Statement 2) explains the specific structure of PGW's fully

1 forecasted budget on which the company's going-forward revenue
2 requirement has been calculated. He also explains the specific changes
3 in assumptions between the interim filing and this submission.

4 Mr. Bogdonavage also presents analyses of the current fiscal period
5 financial needs, on an actual and projected actual basis, supporting
6 PGW's position that without immediate rate relief sufficient to allow PGW
7 to sell long term bonds in May 2001, PGW will not survive the year. The
8 results show that, without a bond sale the company cannot meet its
9 fiduciary requirement to comply with certain terms of its \$100 million
10 commercial paper instrument. Were that program to fail, the obligation for
11 the payment of that then-taxable loan would fall to the City's General
12 Fund. However, the City has already committed all that it can in working
13 capital, a total of \$63 million. PGW has no option, now, but to turn to its
14 owner/customers for the funds that it needs to operate.

15 Ms. Barbara Bisgaier, the Company's financial advisor, submits testimony
16 (PGW Statement 3) that updates the Commission on the present standing
17 of PGW with its lenders and the rating agencies and explains what must
18 happen for PGW to avoid a financial "meltdown." She also repeats
19 evidence she presented in the interim case explaining the requirements of
20 PGW's bond indenture.

21 In addition, Mr. Craig White, PGW Senior Vice President for Gas Supply
22 and Marketing, submits testimony (PGW Statement 4) on projected gas
23 sales levels and also presents PGW's proposal to allocate the proposed

1 rate change by increasing the customer charge for each rate class and to
2 make certain other rate structure modifications affecting interruptible
3 customers. He also presents PGW's position with respect to the recovery
4 of non-gas costs in the GCR.

5 Mr. Howard Gorman, R. J. Rudden Associates, presents a fully allocated
6 cost of service study for PGW and shows the results that justify the
7 increases to the customer charge that the company is proposing (PGW
8 Statement 5 and Vol. III of the base rate filing).

9 Finally, Mr. Luken of Lukens Energy Group, Inc. will present an analysis
10 (PGW Statement 6) showing that PGW ratepayers would be required to
11 pay significantly higher rates if PGW were not a municipally owned utility.
12 It is my hope that this testimony will assist the parties in understanding the
13 inherent differences between traditional rate making for privately owned
14 utilities and the Cash Flow Method required for PGW as a municipal utility
15 with unique legal requirements.

16 C. **Background of Base Rate Case Filing and Report on Present**
17 **Financial Status**

18 Q. **PLEASE EXPLAIN THE BACKGROUND FOR PGW'S BASE RATE**
19 **FILING AT THIS TIME.**

20 A. This base rate filing is part of PGW's plan to return to financial stability, a
21 key element of its "Transition to Excellence" program. Management
22 presented this plan to the PUC and the parties shortly after the PUC
23 obtained jurisdiction over the rate making aspects of the Gas Works in the
24 summer of 2000. The planning at that time included obtaining needed

1 interim relief from the Commission in order to assure that we would have
2 sufficient revenues to get us through the winter heating season and to
3 satisfy our financial obligations in the May 2001 through October-
4 November 2001 time period. As I have explained previously, these were
5 obligations that, under our existing rate structure, could only be satisfied
6 by PGW billing and collecting the 65% of its revenues that it books over
7 the four month period from December through March.

8 In return for the PUC's consideration of our request for an interim
9 increase, PGW offered to file a base rate proceeding immediately after the
10 interim case was finished. We believed that the Commission and the
11 interested parties could undertake a more in-depth review of PGW's
12 accounting, financial and other data and determine whether the interim
13 increase had been fully justified. The base rate case also appeared to be
14 the most appropriate place to assess PGW's service issues and to work
15 together to refine PGW's improvement plan. The PUC's August 17, 2000
16 order granting an expedited proceeding to consider its revenue needs
17 required PGW to agree to file a base rate case on or around January 1,
18 2001 and, by this filing, PGW, as permitted, is meeting that commitment.

19 Because of the PUC's decision in the interim rate case, however, this filing
20 has taken on a different importance to the Company and its customers.
21 As the Commission and the parties are aware, the Commission did not
22 accept PGW's revenue requirement claims. Instead it offered to permit
23 PGW to raise its base rates by only \$11 million annually, or just 21% of
24 PGW's interim request of \$52 million. Unfortunately even that offer was

1 contingent upon PGW accepting certain conditions, to which PGW
2 concluded it could not legally agree.¹ The result is that, at the present
3 time, PGW has not been able to put into effect any base rate increase and
4 has appealed the PUC's order to Commonwealth Court.

5 **Q. HOW HAVE THESE FACTS AFFECTED PGW'S PRESENTATION OF**
6 **ITS REVENUE REQUIREMENT NEEDS HERE?**

7 A. PGW was not able to accomplish any of its goals in the interim case.
8 Those goals were; (1) to stabilize the Company by ameliorating the cash
9 and earnings shortfalls that PGW was projecting for Fiscal Year 2001 and
10 (2) in this base rate case, to allow the PUC, the Company and the parties,
11 collectively, to reach consensus on the priorities and steps that PGW
12 needed to implement on a going forward basis to prepare for restructuring
13 and achieve permanent financial stability. PGW has lost a year in its
14 financial recovery efforts. PGW is essentially back where it was last
15 summer-early fall with respect to its financial predicament with one huge
16 difference — things have gotten much worse. With the unprecedented run
17 up in gas costs and without timely and adequate relief in the interim
18 proceeding as requested, we are forced to ask both for further

¹The conditions that PGW could not agree to included an agreement that PGW would agree to install permanent management that would be acceptable to the PUC, in accordance with a PUC-approved process, and that PGW would agree to implement all of the recommendations of the PUC's management audit. The management audit recommendations have not even today been finalized and PGW has not had an opportunity to completely review those that it has been shown. At any rate both of these conditions would require or potentially require PGW to agree to basic changes in its governance and management structure, and in its operating and construction budget that under City of Philadelphia ordinances, require the approval of the Philadelphia Gas Commission or City Council, or both.

1 consideration of the interim needs for FY 2001 and for a larger amount for
2 the permanent needs going forward in FY 2002.

3 **Q. HOW ARE PGW'S PROJECTED FISCAL YEAR RESULTS AFFECTED**
4 **BY THESE DEVELOPMENTS?**

5 A. Mr. Bogdonavage's schedules for base rate relief (part 2 of Vol. II) show
6 the Company's projected results for the fiscal year on a fully forecasted or
7 normalized basis with the requested permanent base rate increase
8 superimposed.

9
10 It is important to note that these fully forecasted results do not include the
11 most recent higher gas costs or the associated provision for uncollectibles.
12 The company has not included the full amount in the fully forecasted
13 presentation opting instead to use a total of \$150 million of additional cost
14 (over original budget). This gas cost level is projected to be more
15 representative of future periods. This level incorporates both the recent
16 \$97 million increase approved in November and an additional \$53 million,
17 rather than the full \$133 million increase that PGW recently submitted.

18 Using this lower level of gas costs reduces the projected bad debt
19 expense as well as the cash working capital needs when compared to the
20 projected actual needs we are anticipating in FY 2001. What the parties
21 have failed to fully appreciate is the impact on PGW's bottom line of any
22 change in gas costs, up or down. Where one can assume a pass through
23 of gas costs for other utilities that have a low bad debt expense of 1-3%,
24 PGW's experience is 8% under normal circumstances and anticipated to
25 be much higher (9%-12%) as bills increase and more people are not able
26 to pay the full charge. This single relationship between gas costs and

1 uncollectible expense creates the major variant in the several filings we
2 have prepared.

3 Moreover, the fully forecasted results only show the company operating
4 with acceptable levels of earnings and liquidity if it were able to collect the
5 full \$65 million for an entire year (and particularly during the winter heating
6 season). Because we are now in January 2001 without adequate rate
7 relief, PGW's actual projected results are considerably worse than its
8 budgeted position. Moreover, PGW's ability to gain timely benefit from a
9 permanent base rate case will be eliminated if this case concludes
10 according to a traditional PUC – general base rate case schedule. Such a
11 schedule would not end until after the fiscal year is over. Accordingly,
12 unless some action is taken in FY 2000-01, PGW is presently projected to
13 experience financial results that will put it in a virtual bankruptcy situation
14 (virtual because as an instrumentality of the City, PGW is not legally able
15 to declare bankruptcy according to our legal advisors).

16 **Q. WHAT MATERIAL CHANGES IN PGW'S FINANCIAL PROJECTIONS**
17 **HAVE OCCURRED SINCE THE END OF THE INTERIM RATE**
18 **PROCEEDING WHICH HAVE CAUSED A DETERIORATION IN PGW'S**
19 **FINANCIAL CONDITION?**

20 A. As noted above, there are two major items. First, and most importantly,
21 wholesale natural gas costs have not only risen as most of us were
22 projecting in the interim case, they have gone up to a much greater extent
23 and threaten to keep rising. On December 29, 2000 PGW filed its first
24 quarterly revision to its GCR factor which took account of increased
25 natural gas price projections available as of late December 2000. The
26 result was a further increase in GCR revenues of \$133 million. This

1 amount, added to the \$97 million previously approved by the PUC, brings
2 the total increases in anticipated gas costs for the fiscal year to \$230
3 million. This is more than twice what PGW was projecting in the interim
4 rate case. Again, these higher gas costs increase PGW's bad debt
5 expense and its cash working capital needs.

6 The permanent base rate projection also assumes PGW's more historical
7 billing/collection relationship that we were expecting at the time of the
8 interim case. The most recent evidence, however, accumulated even
9 before we started to bill the most recent GCR increase, is that customers
10 are already exhibiting a no pay/slow pay pattern that is more pronounced
11 than we have experienced heretofore. If this pattern continues, or is
12 exacerbated once the January 2001 GCR increase is reflected in bills,
13 PGW's earnings shortfall could be substantially greater than Mr.
14 Bogdanovage is projecting. This combination of higher bills and slower
15 pay is having a devastating effect on the company in the short term. If the
16 slow pay customers turn to no pay, we are faced with a potential disaster.

17 These most recent projections for FY2001 mean that, as of this writing,
18 there is a high probability that PGW will not be able to successfully sell a
19 long term bond in the spring of 2001, even if it were able to begin to collect
20 the \$11 million interim award. Most directly, coverage ratio forecasts will
21 be so depressed as to give little comfort to those who buy bonds that
22 PGW can sustain acceptable earnings support over time. Moreover,
23 PGW's projected cash needs will not be covered by available revenue. It
24 must be noted that for PGW to sell bonds there must be an independent

1 engineering report supporting projections of required coverages and
2 adequate financial condition. If the condition of the company is projected
3 to be such that, by the early spring, PGW is not anticipated to make its
4 coverages and the PUC has not acted to support PGW, an objective
5 observer would have to assume that such coverage requirements will not
6 be met either in the short or long term. Which leads us to the second part
7 of PGW's immediate crisis – the cash crisis.

8 **Q. PLEASE EXPLAIN.**

9 A. Without the access to cash from a long term bond, PGW will have no
10 ability to meet its obligation in June 2001 to pay down for at least 5 days
11 its entire outstanding balance of its commercial paper balance of \$97
12 million. If PGW fails that requirement, PGW's commercial paper program
13 will collapse with calamitous results for the Company and its customers.
14 Ms. Bisgaier's testimony here repeats her testimony from the interim case
15 about the extreme negative consequences of PGW not being able to
16 satisfy its commercial paper requirements.

17 There is also another, more immediate effect of the higher gas costs and
18 related uncollectible expense; namely, the lack of cash to pay supplier and
19 pipeline bills throughout the winter and into the spring. Even if the
20 Company had been able to put in place the PUC's proffered \$11 million
21 base rate increase, that level of increase is inadequate to give PGW the
22 cash it has needed to make its gas supplier and debt service payments as
23 they have come due and are coming due this winter. Instead, PGW has
24 had to use, or projects that it will use, virtually all of its available

1 contingency sources to meet its obligations in order to be able to continue
2 to supply gas to customers. These include the following:

- 3 • Using the entire \$45 million line of credit loan offered by the City
4 Administration;
- 5 • Obtaining a "pre-payment" of the remaining annual natural gas bills
6 to the City, the Philadelphia Housing Authority and the Board of
7 Education;
- 8 • Obtaining an advance from PGW's pension plan of the amount that
9 PGW will ultimately have to pay in FY 2000 to pensioners from
10 operating funds;
- 11 • Seeking pipeline and supplier deferral of demand charge
12 obligations;
- 13 • Deferring payment of the City fee;
- 14 • Repeating a forward purchase of earnings on the Debt Service
15 Reserve Fund for a period of 5 to 7 years (similar to what PGW did
16 in 1995 to avoid an immediate rate increase but which was very
17 costly to the Company in the long run); and
- 18 • Selling and repurchasing our gas inventories at usurious rates of
19 interest
- 20 • Seeking pipeline and supplier deferral of commodity charge
21 obligations;

22 By using all but the last three of these sources of cash, PGW projects that
23 it will just squeak through March. But these analyses are based on
24 "normal weather" and assume our present projections for gas costs. Even
25 with the use of all of these contingencies, if gas costs continue to escalate

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1 and/or if the weather continues at "design" conditions (which means that
2 PGW must purchase more gas at current market conditions to be ready to
3 meet much colder than normal weather conditions), PGW could not have
4 enough cash to survive March. And, none of this addresses the looming
5 crises in June to protect the commercial paper program and begin to
6 purchase gas to inject into storage for next winter or at the beginning of
7 the next fiscal year to permit PGW to accumulate cash to make its first
8 debt service payment in January 2002. Present projections leave PGW
9 tens of millions of dollars short of the amount it needs at year end to meet
10 its obligations.

11 In light of all of this, PGW is undertaking an extensive media campaign to
12 exhort its customers to conserve gas, to pay their bills as they come due
13 and to seek low income assistance if the bills get beyond their capability to
14 pay. If it is determined in early January that payment patterns are not
15 meeting PGW's anticipated needs, management will ask the Mayor and
16 City Council for their support for a city-wide, comprehensive appeal for
17 appropriate customer actions as well as to take other steps.

18 **Q. WHAT ARE THE CONSEQUENCES FOR THE COMPANY AND**
19 **CUSTOMERS OF A FAILURE OF PGW TO MEET ITS FINANCIAL**
20 **OBLIGATIONS?**

21 A. The financial consequences of a failure of the commercial paper
22 obligations, a failure to issue additional long-term debt or an inability to
23 pay gas bills will obviously have enormously negative consequences both
24 on a short and long-term basis. There is no question that PGW would
25 have to stop its construction and service improvement program. In

1 addition, even if these service interruptions were avoided, as Ms. Bisgaier
2 details, the increased financial costs imposed on the Company would be
3 substantial and would be felt by every customer. I fail to understand how
4 any customer or customer representative would not want to avoid these
5 contingencies.

6 **Q. IN YOUR OPINION, WHAT CONCLUSIONS MUST THE COMMISSION**
7 **DRAW FROM THESE FACTS?**

8 A. First, as indicated, PGW has presented its financial support for an
9 additional \$65 million base rate increase, on a fully normalized or fully
10 forecasted basis. This means that it has used levels of gas costs and bad
11 debt expense that we believe are representative for the period in which
12 the rates will be in effect. However, any rate adjustment will be of little or
13 no assistance in extricating PGW from its looming financial crisis in this
14 fiscal year.

15 Second, PGW must obtain additional dollars immediately to cover its
16 higher bad debt expense in FY 2000-2001 and to have sufficient liquidity
17 to meet its cash obligations in the spring and at the end of the fiscal year
18 in preparation for substantial disbursements next fall and early winter. An
19 increase in September or October simply will not provide the necessary
20 assistance soon enough.

21 This means that one (or a combination) of several things must happen.
22 Either there must be a revision to the previous determination of PGW's
23 "interim" rate increase request (the case that is on appeal to the
24 Commonwealth Court) by either the PUC or the Court. Or, alternatively,

1 there must be put in place an emergency or temporary increase that would
2 allow us sufficient earnings and cash in this fiscal year to meet our bond
3 ordinance obligations and our cash requirements. Or, finally, this
4 permanent base rate case must be completed quickly enough so that
5 some form of non-commodity based increase, possibly in combination with
6 an interim base rate increase, could be put in place in time to allow PGW
7 to project that it will meet its bond ordinance covenants and its summer/fall
8 2001 cash obligations. The difficulty is persuading the financial markets to
9 stay with the company in the next few months and allow us to raise the
10 requisite capital.

11 **Q. IS THERE A LEVEL OF INTERIM RATE RELIEF THAT MIGHT**
12 **ADDRESS YOUR CONCERNS?**

13 **A.** Mr. Bogdonavage's schedules projecting various potential results for FY
14 2001 show analyses based on no rate relief and \$11 million of annual rate
15 relief. With no rate relief or with only \$11 million of rate relief the company
16 cannot meet its obligations and is essentially bankrupt.

17
18 As Ms. Bisgaier has indicated in her testimony, it is essential that the PUC
19 be perceived as granting a substantial enough amount of money to make
20 a difference and signal its commitment to PGW's workout. I can not
21 stipulate a specific level at this time. It is essential that the parties meet to
22 resolve the interim situation.

23
24 There is one additional consideration in this matter. PGW is presently
25 seeking guidance from bond counsel regarding the obligation to notify

1 investors of our situation. I am advised that when it is clear to
2 management that there is a reasonable possibility of our not being able to
3 satisfy the provisions of our indenture we must issue a "Material Event
4 Notice" so stating. Therefore, we are assembling the information
5 necessary to prepare and file such a notice should the situation further
6 deteriorate. (Cite: SEC Rule 15c2 – 12)

7 **Q. WHAT OTHER LESSONS CAN BE LEARNED FROM PGW'S PRESENT**
8 **FINANCIAL PREDICAMENT?**

9 A. The PUC and the parties need to recognize that PGW simply is not an
10 investor-owned utility with cash and borrowing reserves and investors that
11 can help them through these kinds of crises. Accordingly, PGW's rate
12 allowances must not only be sufficient on a "going forward" or
13 "representative" basis but also must assure that PGW's actual results
14 satisfy the minimum financing requirements imposed by PGW's bond
15 ordinances and its Management Agreement. I will explain below how
16 these two goals might be satisfied. PGW's permanent rate award must be
17 set at levels that will avoid a repeat of this present crisis and allow PGW to
18 begin to work out of the difficulties the company is in.

19 **Q. TURNING SPECIFICALLY TO THE \$65 MILLION BASE RATE**
20 **INCREASE. WHAT ARE THE LONG TERM GOALS OF THE FILING?**

21 A. As indicated above, assuming that PGW somehow gets through this
22 present crisis, a big assumption, PGW's base rate request has the same
23 longer term goals that it was hoping to realize before gas costs started to
24 escalate in July and August 2000 and it determined that it needed
25 immediate rate relief. The longer term portion of PGW's base rate case is

1 designed to gradually allow the company to return to a position of financial
2 well being over the next five years as demonstrated in the five year
3 projections discussed by Mr. Bogdonavage. The objectives are to further
4 ameliorate the company's financial situation by establishing a level of
5 earnings and monthly and end-of-year cash that will:

- 6 1) allow PGW to satisfy its bond ordinance covenants;
- 7 2) have sufficient cash each month to make its projected debt
8 service and gas and other obligation payments;
- 9 3) reduce its level of dependence on short term (commercial
10 paper) borrowing; and, in turn,
- 11 4) reduce the amount of long term debt that the Company
12 needs to issue;
- 13 5) put the Company in the position of not only continuing with
14 its current service improvement plan but to enhance those
15 efforts to respond to the consensus views of the PUC and
16 stakeholders;
- 17 6) put the Company in the position that it will be able to
18 successfully complete its restructuring/unbundling process in
19 2002-2003 with the goal of increasing choice and quality of
20 service for all customers.

21 **Q. MR. KNUDSEN, THE MAJOR VARIABLE IN ALL OF YOUR**
22 **DISCUSSION HAS BEEN THE UNCOLLECTIBLE EXPENSE. THE \$65**
23 **MILLION FIGURE YOU PROPOSE HAS A PROVISION FOR**
24 **UNCOLLECTIBLES ASSOCIATED WITH A \$153 MILLION INCREASE**
25 **IN GAS COSTS. AREN'T YOU LOCKING IN YOUR BASE RATE A**
26 **SUBSTANTIAL PROVISION FOR THESE EXPENSES WHICH IS TOO**
27 **MUCH IN THE EVENT THAT GAS COSTS FALL BELOW THE**
28 **ASSUMED LEVEL?**

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1 A. First, I want to emphasize that we are planning that these rates will be in
2 effect for a period of two years, or until the mandated restructuring
3 proceeding, at which time they can be adjusted. If gas costs were to
4 decline, and with them the level of bad debt expense, the company would
5 use those funds to pay down the short term debt position a year or so
6 earlier than forecasted. This would not only reduce our borrowing costs
7 but also provide PGW with a desperately needed short term borrowing
8 cushion.

9 Q. **YOU HAVE JUST RECENTLY FILED FOR A TOTAL INCREASE IN**
10 **GAS COSTS OF \$230 MILLION. WHAT IF GAS COSTS STAY AT**
11 **THESE LEVELS OR GO UP FURTHER?**

12 A. Unfortunately, in that circumstance we might need to adjust rates if the
13 increase jeopardizes our situation.

14 Q. **HOW MIGHT THAT BE ACCOMPLISHED?**

15 A. Our proposal is that PGW will prepare a forward projection of year end
16 financial conditions by April 15 of each of the next two years, after the
17 winter sales experience is clear. If management determines that, based
18 on its projections, it will not meet its required bond ordinance covenants or
19 end-of-year cash requirements at levels previously agreed to by the PUC,
20 it would propose an adjustment to rates in an accelerated proceeding that
21 would be concluded by June 1. In that case, there would be three months
22 available, prior to the end of the fiscal year, to recover the incremental
23 amount needed. Obviously, this situation applies only if there is
24 substantial volatility in gas prices and/or gas prices stay well in excess of
25 the \$153 million reflected in a \$65 million base rate allowance.

1 I need to emphasize again that none of these goals will be able to be
2 realized if PGW's current financial crisis is not successfully addressed.

3 **C. Ratemaking Methodology and Requirements.**

4 **Q. YOU HAVE MADE REFERENCE IN YOUR TESTIMONY TO THE**
5 **IMPORTANCE OF USING THE "CASH FLOW METHOD" OF RATE**
6 **MAKING. COULD EXPLAIN YOUR POSITION IN MORE DETAIL AND**
7 **WHY THE PUC SHOULD EMPLOY THIS METHOD?**

8 A. The "Cash Flow Method," as I have testified in the interim rate proceeding,
9 has traditionally been used by the PGC when regulating PGW to
10 recognize that it is a municipally owned gas distribution company and that
11 it does not have equity investors who contribute capital to operate the
12 business in the hope of earning attractive returns. I am providing the
13 portion of my testimony in that previous proceeding as an attachment to
14 my testimony here to support my contentions about the Cash Flow Method
15 (Exhibit TEK-1).

16 In addition to being advised by counsel that this method is required by law
17 and therefore the appropriate approach for use by the PUC as well, the
18 Cash Flow Method is also the least costly and most reasonable method of
19 setting rates for a municipal utility. The Cash Flow Method asks
20 ratepayers to supply revenues that essentially do two things: First, the
21 revenues must cover all of the company's expenses so that the remaining
22 amount available to pay debt service is at least 1.5 times the required
23 capital and interest payments for all senior securities. (As noted, this must
24 be the actual projected level of such costs, not some idealized level or the

1 debt service requirements will not be met.) The specifics of PGW's debt
2 service coverage requirement in its bond covenants were also the subject
3 of Ms. Bisgaier's testimony in the interim case and she is incorporating
4 that previous evidence into the testimony that she is presenting here.

5 Second, and just as important, the Cash Flow Method requires that rates
6 be set so that on a month-to-month basis PGW's actual cash receipts will
7 be sufficient to pay its obligations in that month (after accounting for
8 available short and long term borrowing). This is mandated by the PGW
9 Management Agreement Ordinance, a copy of which I am submitting with
10 this testimony (TEK-2). PGW has shown this requirement in monthly cash
11 flow statements that are included in our supporting schedules. As
12 indicated, PGW needs \$35-40 million in positive cash at the end of the
13 fiscal year made up from a combination of cash from operations and
14 recoupment from the Construction Fund of disbursements for capital
15 projects. PGW needs this level of cash to be able to meet its gas
16 purchasing and debt service obligations during the fall and following
17 winter. This is because PGW generates no substantial earnings or cash
18 flow from September to December each year (PGW books approximately
19 65% of all of its revenues under its present rate structure in the winter
20 months of December through March). Not only must PGW have sufficient
21 earnings to make debt services payments but it must also have the
22 necessary liquidity with which to operate.

23 **Q. DOES YOUR BASE RATE INCREASE REQUEST SATISFY THESE**
24 **REQUIREMENTS?**

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1 A. Yes, the granting of the full request would allow us to make our debt
2 service obligations, have sufficient liquidity each month and sufficient cash
3 at the end of the year, again on a normalized or pro forma basis. But,
4 given the timing of the permanent rate proceeding, a granting of our
5 request this fall does not address at all the financial crisis that PGW is
6 projecting during FY 2000-2001.

7 **Q. SOME PARTIES IN THE INTERIM PROCEEDING OBJECTED TO**
8 **PGW'S REQUESTING REVENUES TO SATISFY ITS PROJECTED**
9 **CASH WORKING CAPITAL REQUIREMENTS, CLAIMING THAT CASH**
10 **WORKING CAPITAL SHOULD COME FROM INVESTORS --- NOT**
11 **FROM RATEPAYERS. WERE THEY CORRECT IN THEIR**
12 **CONTENTIONS?**

13 A. No. I believe that what these parties failed to appreciate is that the Cash
14 Flow Method is the least cost method of setting rates for a non-investor
15 owned utility. It asks customer/owners to supply only the amount of cash
16 working capital that the company projects it actually needs to pay its bills –
17 nothing more. It requests no "return" on these amounts for the owners of
18 the company or a return on the entire base rate. The only payment that
19 the "owner" of this municipal utility receives is the \$18 million that is
20 mandated by the PGW Management Agreement and now by the Public
21 Utility Code. Moreover, our cash requirements are driven entirely by
22 PGW's operating expense requirements and revenue sources, all of which
23 can be monitored and reviewed by the parties and the PUC.

24
25 The alternative for the City would be to either sell or arrange for an
26 investor owned utility to provide gas service to the City and have the
27 company's rates determined on a traditional, rate of return/rate base

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1 basis. The result would be that ratepayers would no longer have to
2 provide the cash working capital needed to run the enterprise, only a
3 return on the cash working capital. But, they would also have to provide a
4 return on all investment supplied by investors including a return on equity.
5 In addition, PGW ratepayers would also have to pay income and other
6 taxes that a municipal utility avoids and which would be passed along to
7 ratepayers.

8
9 Based on preliminary results of an analysis that PGW commissioned from
10 Lukens Energy Group, Inc., the annual revenue requirement associated
11 with such an "IOU owned" PGW would be tens of millions of dollars higher
12 than the amount that PGW is claiming here (to say nothing of the one-time
13 tax and other financial consequences of converting PGW to an IOU status
14 if an actual transfer occurred). Accordingly, PGW's present rates,
15 established on a "Cash Flow Method" basis, are certainly reasonable
16 when seen in the context of the other available alternatives.

17
18 Finally, even if there were to develop a consensus that PGW should be
19 subject to the same rate making methodology that IOUs are subject to
20 (and even if such a switch were legal), the Commission can not fairly
21 switch to such a new approach without permitting PGW a transition period.
22 The initial refusal in the interim case of some parties and the PUC to
23 recognize that for the last 100 years or so, PGW's cash flow requirements
24 were supplied by customers and not by "investors" is one of the main
25 contributing factors to PGW's present financial crisis.

1.
2. **D. Progress Report on PGW Service Issues and "Transition to**
3. **Excellence".**

4.
5. **Q. TURNING THEN TO CHANGES WHICH MANAGEMENT HAS**
6. **UNDERTAKEN, CAN YOU ADDRESS WHERE YOU HAD HOPED TO**
7. **BE AFTER NINE MONTHS AS INTERIM MANAGEMENT AND WHAT**
8. **IMPEDIMENTS OR BARRIERS THERE ARE TO FUTURE SUCCESS?**

9. A. Yes. As I indicated initially, Mr. Kishinchand and I were appointed by the
10. Mayor in March 2000. At that time we articulated six goals which we
11. intended to attain in the six months of our management term. These
12. included:

- 13. • *Stabilizing the financial condition of PGW;*
- 14. • *Stabilizing the operating condition of PGW;*
- 15. • *Addressing human resources development;*
- 16. • *Targeting capital spending;*
- 17. *Facilitating the regulatory transition from the Gas Commission to*
18. *the Pa PUC;*
- 19. • *Facilitating the movement to permanent management.*

20.
21. **Q. HOW WOULD YOU SUMMARIZE YOUR ACCOMPLISHMENTS WITH**
22. **REGARD TO FINANCIAL STABILITY?**

23. A. In stabilizing the financial condition of PGW we needed to proceed on
24. several fronts at once. First, one has to understand the condition of PGW
25. when we arrived. To be succinct, the billing system was in total disarray,
26. no financial statements were being generated that could be relied on and
27. the only two documents in which we could place any faith were the
28. monthly bank statements and the gas throughput calculations telling us
29. how much gas we were delivering to customers.

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1
2 The first requirement was to get the billing system to a state that I refer to
3 as "minimally functional." In other words, we needed to bill everyone,
4 including the 40,000 customers who had not received any bill since the
5 conversion of the system in July 1999 and we needed to do so as
6 accurately as possible. A corollary need was to develop a set of financial
7 statements which drew from the billing system that could withstand an
8 independent audit. We needed to demonstrate financial accountability in
9 order to maintain our bond ratings and to be able to sell bonds in 2001.

10
11 We are now generating accurate monthly financial statements and will
12 have an independently audited result shortly. To do this it was necessary
13 to review and reconcile all of the financial transactions for the entire year
14 starting in August and moving back in time to the conversion. To do this
15 also it was necessary to develop a whole set of subsidiary reports that
16 most businesses take for granted and we could not.

17
18 We are also now billing our accounts albeit we still have some problems
19 with accuracy and completeness. As we have peeled away and dealt with
20 major problem areas, we have exposed issues that were smaller but in
21 equal need of correction.

22
23 A critical requirement through all of this effort was to keep our creditors,
24 banks and the rating agencies apprised of our developments and

1 progress. Although we were placed on credit watch in June by Standard
2 and Poors, we have maintained our prior ratings through this entire time.

3
4 Obviously it was essential that we also determine what level of rate relief
5 was needed. That started in June and has proved difficult as the shift of
6 regulatory venue and the unprecedented change in the commodity
7 markets have made specificity difficult.

8
9 Last, we committed to an aggressive level of cost reduction that our
10 monthly statements indicate we are attaining. We have reduced spending
11 in all areas and, with the installation of a fully automated material and
12 accounts payable system, we have a level of control on expenditures that
13 has heretofore not existed. However, the effort is incomplete. It has only
14 been recently with the generation of monthly statements that we are able
15 to compare actual results to budgets and begin to aggressively manage
16 financial performance and target specific reductions in a systematic way.

17
18
19 **Q. OF WHAT DID THE STABILIZING OF THE OPERATIONS OF PGW**
20 **CONSIST?**

21 A. There were principally two components to this effort. The first dealt with
22 control of the billing system, specifically, and information technology
23 issues, in general. The second was targeted at improving customer
24 service both in the call center and in the field. Other efforts included such
25 changes as reorganizing the company and reforming the compensation
26 system.

1 Q. WHAT STEPS HAVE BEEN TAKEN TO CORRENT THE BILLING
2 SYSTEM PROBLEMS?

3 A. The correction of the billing system proved to be a challenge. Having
4 begun from as low a point as one can imagine, the company created the
5 Project Management Office (PMO) for the sole purpose of achieving two
6 initial goals: getting all customers billed and qualifying for an audited
7 financial report. The PMO drew talent from across the company and
8 concentrated the efforts of these personnel for maximum effectiveness.

9
10 The mission of the PMO since it's inception in June 2000 has been to
11 increase the functionality of the Billing, Collections and Customer Service
12 (BCCS) system. This was accomplished by effective project management
13 and adherence to a strict priority of issues. The first several months were
14 spent developing the system metrics and assessing system backlogs in
15 order to identify and prioritize those issues. The following are the original
16 problems identified and the progress to date:

17 **Billing Exceptions** – There were over 55,000 billing exceptions (billing
18 errors) in June 2000. This included the entire backlog from when the
19 system went live in July 1999. The number of exceptions has been
20 reduced to less than 300 per day and these are corrected on an on-going
21 basis. This was accomplished through a CRP cancel and rebilling
22 process and by systematically addressing the exceptions with personnel
23 from the Customer Affairs Department and Call Center.

1 **Cash Posting Errors** -- Over 18,000 accounts had payments that were
2 not posted. The PMO directed the effort to have these posted
3 appropriately. 6000 errors were systematically corrected and the
4 remainder was manually corrected. This resulted in the proper posting of
5 over \$3,000,000.

6 **Budget Billing** – Problems associated with new or renewing budget
7 billing customers or those receiving a zero bill the first month after renewal
8 have been corrected. All budget billing customers had their budgets
9 adjusted on December 1 to reflect the November 22 GCR change and
10 again on January 1 to reflect the GCR quarterly update. The 20,000
11 customers who were removed from the program at the time of conversion
12 were placed back on the budget in the month of December.

13 **PLP Solicitation/PLP creation** -- Solicitation files for this year's Parts
14 and Labor Plan had to be created. Cash remittance problems that led to
15 the incorrect posting of some of last years PLP's were corrected. These
16 changes have eliminated almost all errors that had been associated with
17 last year's plan. To date over 103,000 customers have signed up for the
18 plan resulting in over \$8.9 million of receipts. Additional functionality in the
19 mobile software is enabling the accurate tracking of costs that will assist in
20 the evaluation of the program.

1 **CRP Relief Loan** -- New CRP loans were created as directed by the Gas
2 Commission. This allowed all monies owed by a customer to be billed
3 over a varying multiple of the number of months unbilled.

4 **Estimated and Unbilled Accounts** – The PMO identified and corrected
5 over 70,000 accounts which were estimated in error and which were being
6 billed for zero usage in recent months. This resulted in a manual meter
7 reading effort of the accounts falling into this category which did not have
8 an AMR. The effort resulted in additional billings of \$2.9 million for the
9 month of October. A systematic correction was instituted to estimate the
10 accounts for which we were unable to read the meters. An additional
11 meter reading uploading problem was identified for over 23,000 accounts.
12 The uploading error was identified and corrected, resulting in the these
13 accounts being billed on the actual meter reading as opposed to the
14 estimated bill they had been receiving.

15
16 The PMO will continue to direct its efforts to the completion of the
17 following items in the short term. It will be necessary for the PMO to
18 continue for a minimum of six (6) months to effectively increase the
19 functionality of the system and to begin to evaluate the capability of the
20 system to provide the necessary functionality in a deregulated market.

21 The remaining major projects include:

1 **Payment Arrangements** – There are issues with a number of Payment
2 Arrangements due to inadequate training and system design questions. A
3 large number of errors are being produced during the nightly bill
4 calculation process. This problem results in customers not being billed
5 correctly. A solution has been identified and the design is currently being
6 worked on. Business policies and practices will be reviewed to insure that
7 there are adequate controls in place to monitor this process.

8 **Financial Reports** – Over the last six months the PMO and IT
9 Departments have worked to create key financial and statistical reports
10 that are tailored to PGW's needs. The next step is to more fully develop
11 our understanding of the capacity of the CIS Plus system to provide
12 information for the conduct of our business.

13 **Account Write Off issues** – This process is being reviewed to insure that
14 the original design will meet all business criteria. This process is critical
15 for PGW conducting effective collection activities and ensuring that our
16 financial reporting is accurate.

17 **Modifications of CIS for Service Order Completion** – Management has
18 determined that greater flexibility is required to permit a dispatcher to
19 generate same day orders which is not a feature of the existing software.
20 Solutions to this problem are being investigated.

21 **Complete the Backlog of Bankruptcy Pro Rates** – Until recently,
22 bankruptcy pro rates had not been worked since the system conversion.

1 That is, customers who have filed for bankruptcy have been receiving bills
2 that did not reflect the effects of their bankruptcy arrangements. A
3 program is now being managed to reduce the backlog while keeping
4 current with bankruptcy pro rates received on a daily basis.

5 **Continue to Debug System** - Basic daily maintenance of the system is
6 required. There are system and data related issues still to be resolved.

7 **Work Flow Issues** - We have instituted a system to review lists and
8 tracking reports which when addressed will reduce errors in the system.

9 **BCCS Training** – Comprehensive training will begin this month. This
10 training will be directed enabling personnel to effectively access the
11 system and complete the work flow and exception reports in BCCS. All
12 training since this summer has been general instruction on the use of the
13 system and resolution of specific problems which have arisen in the
14 process of error correction or phone center operations.

15 **Sales Tax Audit** – Every three years there is a sales tax audit. The PMO
16 is developing reports to be utilized by the state and to investigate and
17 confirm the appropriate numbers of customers receiving sales tax
18 exemptions.

19
20 **Q. PLEASE DESCRIBE THE CHANGES TO THE CALL CENTER**
21 **OPERATIONS THAT WERE PART OF THE OPERATIONS**
22 **STABILIZATION PROCESS.**
23

1 A. The substance of Call Center activity is a function of the types of issues it
2 is required handle. Management's directive was to first address the core
3 problems that were driving customers' complaints and inquiries and in so
4 doing attempt to clear the field for the appropriate requests of scheduling
5 service and clarifying legitimate customer concerns. The approach then
6 involved looking first to correct the billing system and then to address
7 issues of field service delivery. If we could do those things first, then fixing
8 the organizational and technical issues at the Center had meaning.

9
10 Prior to October 2000 it was necessary to use call center personnel both
11 to answer 'phones as well as to work extensive overtime in the correction
12 of errors generated by the new computer system. One of the issues
13 confronting the company both past and future is the paucity of personnel
14 capable of operating both the legacy and BCCS systems. Most of the
15 talent to effect the changes we needed was found in Customer Accounting
16 and in the Call Center. Thus, even had we wanted to do more, there were
17 these limitations of too few qualified people.

18
19 A factor complicating our efforts to move more quickly with our
20 improvements was the resignation of the Vice President for Customer
21 Service in July that necessitated a search that took several months. In
22 early October PGW retained the services of professional call center

1 experts to serve as interim management. These individuals brought not
2 only their credentials but also an understanding of how powerful a
3 technology PGW has in its Call Center. In starting to unlock that power
4 we have begun to see gains of 15-20% in productivity of staff and even
5 more marked improvements in call center performance metrics.

6
7 On the following two pages are listings of current and present or proposed
8 changes to Call Center operations which give a sense of the types of
9 improvements effected to date or planned. As important as technical
10 change is the change in the attitude and performance of representatives,
11 who understand the complexity of center operations, in response to
12 people. The approach has been to provide customers more options in
13 their efforts to reach PGW and to hold employees accountable for their
14 activity.

15
16 The task before us is to further increase productivity of staff by improving
17 the information on and accessibility to the computer systems, train more
18 personnel in the new system, and assure that personnel are attentive to
19 their tasks. We know from a recent study that if we can address these
20 three concerns, there is no reason we cannot reach industry standards of
21 performance.

FUTURE ANTICIPATED IMPROVEMENTS

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PRESENT CONDITION

PROPOSED CHANGE

Manual use of ANI to access accounts	Gather information while on hold; CTI- screen pops
Call handling based upon multiple skill sets	Consolidated call handling based on day/hour arrival pattern (one stop shopping)
Semi-manual scheduling of employees	Forecast modeling to determine schedules
Management organization ineffective	Reorganize department to insure employee success (training manager, quality assurance manager, systems administrator etc.)
No visible supervision on floor	Two hours of supervisor coaching/counseling for each employee each week

1
2 **Q. WHAT CHANGES HAVE YOU EFFECTED IN THE HUMAN**
3 **RESOURCES DEPARTMENT?**

4 A. We have proceeded to implement the changes proposed by the Hay study
5 last June. The major initiatives specific to the department have been to
6 properly staff the department and to initiate the development of the Human
7 Resources Information System. It was essential that PGW move beyond
8 the stage of 3x5 cards both in automation and in HR's role as central to
9 the planning of PGW's future.

10
11 The more general recommendations contained in the Hay report have
12 also been addressed. We are in the process of completing a strategic
13 planning process linking performance to compensation, reorganizing the
14 company along more appropriate lines and reforming a compensation
15 system which Mr. Kishinchand and I had found completely unworkable.

16
17 **Q. WHAT ACTIONS DID YOU TAKE RELATIVE TO THE CAPITAL**
18 **BUDGET?**

19 A. This was an easier requirement. We have restricted the capital
20 improvements in the present year to two major projects: the refurbishment
21 of the LNG liquefaction facilities and the replacement of cast iron mains
22 and related services. We have kept to a minimum other types of
23 expenditures.

24
25 **Q. IS THERE ANYTHING YOU CAN SAY ABOUT THE CHANGE IN**
26 **GOVERNANCE, THE TOPIC OF YOUR FIFTH GOAL?**

27 A. The best that can be said is that it has been a challenge. The requirement
28 on management has been to assert the short, intermediate and long term

1 interests of PGW's customers and employees when we appear before the
2 various groups involved with our oversight or regulation.
3

4 **Q. CAN YOU SAY ANYTHING ABOUT PERMANENT MANAGEMENT?**

5 A. It is my understanding that it is the intent of both the Mayor and the Gas
6 Commission to initiate shortly a formal search for permanent management
7 that would result in selection of appropriate leadership by late summer or
8 early fall.

9
10 **Q. MR. KNUDSEN, YOU AND MR. KISHINCHAND HAVE BEEN AT PGW
11 FOR NINE MONTHS AND, JUDGING FROM THE PRIOR RESPONSE,
12 YOU WILL BE HERE FOR SOME TIME MORE. CAN YOU TELL THE
13 PARTIES WHAT YOUR OBJECTIVES ARE FOR THE NEXT SIX TO
14 NINE MONTHS?**

15 A. The objectives for the next six to nine months are: (1) to continue to
16 stabilize the finances of PGW through timely rate relief, the creation and/or
17 reinstitution of all tools needed by the credit and collection department
18 with aggressive implementation of collection policies and tariff provisions;
19 and aggressive cost control efforts; (2) to fully uncover and then move to
20 develop the capabilities of the new computer systems; (3) to implement
21 the work measurement and productivity-related initiatives presently
22 underway; (4) to address Human Resources issues including hiring
23 practices, succession planning, training and HR Information System
24 implementation; (5) to refine programs to enhance customer service and
25 quality assurance; (6) to structure the effort and begin the work required
26 for deregulation and restructuring; and (7) to successfully negotiate the
27 labor agreement to address the future needs of the company.
28

DSH:25415.1

1
2 **Progress Report on the "Transition to Excellence" Program**
3

4 Q. **COULD YOU BRIEFLY DESCRIBE YOUR EFFORTS WITH EACH OF**
5 **THE VARIOUS PROJECTS WHICH YOU UNDERTOOK AS PART OF**
6 **THE "TRANSITION TO EXCELLENCE" EFFORT?**
7

8 A. Yes. There were seven major categories as initially set forth in May.
9

10 Under the "Regulatory" heading the following has been accomplished:
11

12 PUC Audit The work began in June. Management is
13 meeting with the PUC staff and the consulting
14 team shortly to resolve outstanding issues
15 before the report is officially given to us for
16 comment.
17

18 PGC Budget Proceedings The hearings on the Operating Budget were
19 suspended following the July proceedings
20 awaiting completion of several major tasks and
21 reports thereon. The reports have been
22 submitted to the Gas Commission. It is
23 anticipated that hearings will recommence
24 shortly with a decision to follow. The Capital
25 Budget process is awaiting decision by the Gas
26 Commission.
27

28 PUC Base Rate Proc'd'g The interim proceeding is completed pending
29 further action. This filing initiates the
30 proceedings for the permanent rate case.
31

32
33 PUC Gas Cost Proc'd'g Two GCR adjustments have been made to
34 date.
35

36 PUC Cust. Ser. Overs'gh't PGW is working with the PUC staff in
37 conformance with the MOU and facilitating the
38 ability of the PUC to monitor our performance.
39

40 PGC IT Audit The audit was completed in December.
41

42 Under the "Strategy and Planning" heading the following has been
43 accomplished:
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Strategic Plan	The Strategic Plan is in the process of being completed with the goals, objectives and performance measures being required of departments and within departments being extended to staff and tied to compensation.
Organization Plan	Completed in November
Position Evaluation	Completed in November
Comp. Restructuring	Completed in November
Labor Task Force	Counsel and management are proceeding as planned.
Under the "Stabilization" heading the following has been accomplished:	
KPMG Control Study	This effort was postponed awaiting completion of the PUC audit to better focus our concerns.
Project M'g'm't Office	The Project Management Office has met all of the objectives established for it through 2000 and is poised to continue as discussed above.
IT Systems Improv'm'ts	SPL, the BCCS vendor, is working effectively with management to correct the problems associated with the new system implementation.
Financial Controls	All elements of the financial accounting system are in place. Deloitte & Touche will issue an audited report for FY 2000 shortly.
Financial Reports	The key financial reports have been completed and are in production. Several additional reports are complete and ready for production.
Governance	This matter is presently being addressed by the Mayor and City Council
New Management	This matter is presently being addressed by the Mayor and the Philadelphia Gas Commission.

1 Cash Collection

2 The Collection Department has been
3 restructured and required reports and other
4 tools that were discontinued at the time of the
5 system conversion in July 1999 have been
6 replaced. Collections are the principal focus of
7 management for the next four to five months.
8

9 Under the "Call Center" heading the following has been accomplished:

10 Vanguard Study

11 The implementation of the recommendations of
12 Vanguard have been subsumed within a
13 broader effort being undertaken by our interim
14 call center management with extensive
15 industry experience.

16 Interim VP

17 Retained in October

18 New Hires

19 Program changed to a continuous hiring
20 program to exceed 30 positions added to date.
21 *Instead of the call center serving as a career*
22 *terminus for employees, it is now serving as an*
23 *entry port for people coming to PGW.*

24 Staff Reorganization

25 This effort will be complete in February.

26 Training

27 The training modules for BCCS have been
28 written with comprehensive efforts to start this
29 month.

30 Customer Attitude Study Completed in June

31 Under the "Human Resources" heading the following has been
32 accomplished:

33 Hay Study Implement'n

34 On-going but principally completed by
35 November

36 HRIS

37 Specifications complete. Vendor selection this
38 month.

39 Staffing Changes

40 Three positions still to fill
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Under the "Information Technology" heading the following has been accomplished:

Reorganization Completed in November

Under the "Corporate Planning & Process Control" heading the following has been accomplished:

New Department Set Up in November

Staffing Director in place, three positions to fill.

Under the "Marketing Department" heading the following has been accomplished:

Reorganization Completed in November

Under the "Risk Management" heading the following has been accomplished:

Risk Evaluation Completed in June

Reorganization Completed in July

Q. DOES THAT COMPLETE YOUR TESTIMONY?

A. Yes.

EXHIBIT TEK-1

DOCKET NO. R-00006042

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

THOMAS E. KNUDSEN

ON BEHALF OF
PHILADELPHIA GAS WORKS

DOCKET NOS. P-00001831
R-00005654

RE: PETITION OF PHILADELPHIA GAS WORKS
FOR ESTABLISHMENT OF INTERIM RATE
PROCEDURES AND FOR A DECLARATORY ORDER

AUGUST, 2000

create these problems. One crucially important sign of our progress is our work to stabilize the IT systems. This work has resulted in a substantial decline in the number of billing "exceptions" or errors in our computer system as it attempts to send out bills. We expect that by the end of this month we will have billed every customer for the first time in a year. Sending out accurate bills will, after an initial increase in calls, reduce the number of calls coming to our call center so that customers who do call will actually be able to reach a customer service representative within a reasonable time.

As I stated earlier, PGW's problems are complex and more difficult than I had believed before I was appointed by the Mayor on March 17. They cannot be resolved in six months or even a year and they cannot be resolved without assistance from the City and our regulators. The City has already been of enormous help and I expect the help to continue. We are firmly committed to carrying through with our Transition to Excellence plan, but we are here asking this Commission to allow us to put another part of the solution in place.

III. RATEMAKING METHODOLOGY

Q. ARE YOU FAMILIAR WITH THE PROCESS FOLLOWED BY THE PHILADELPHIA GAS COMMISSION WHEN THAT COMMISSION REVIEWS A REQUEST BY PGW FOR A RATE INCREASE?

A. Yes, I am. I testified at the Gas Commission on behalf of the Public Advocate in the last four PGW rate cases – in 1986, 1988, 1990 and 1991. In 1991, there were two cases: an emergency, expedited rate case and a base rate case which followed the full process. I will address the full base rate process first and then the emergency, expedited proceeding in 1991.

Q. **PLEASE EXPLAIN THE PROCESS.**

2 A. Each case commenced with the filing of PGW's request, usually in May or early June.

3 The request was set forth in written testimony, accompanied by exhibits which provided
4 financial data to supplement the written testimony. The filing consisted of our operating
5 and capital budget for the forthcoming (fully forecasted) budget period: September 1st to
6 August 31st of the following calendar year. PGW's filing was followed by a pre-hearing
7 conference after public notice and then formal and informal discovery. Intervenors pre-
8 filed written testimony and all witnesses appeared for cross-examination at a hearing on
9 the record. In every case, the hearings were followed by briefs from the parties. When a
10 hearing examiner conducted the hearings there was a recommended decision with
11 exceptions from the parties prior to the final Commission decision. The recommendation
for the capital budget portion of the proceeding was then forwarded to the City Council.
13 The City Council then established the capital budget as an ordinance.

14 Q. **HOW LONG DID THE ENTIRE PROCESS TAKE?**

15 A. The four full base rate cases took an average of just over 5 months from date of initial
16 filing until the date that the Commission announced its final decision.

17 Q. **YOU MENTIONED THE 1991 EMERGENCY RATE PROCEEDING, HOW WAS
18 THAT DIFFERENT FROM THE OTHER PROCEEDINGS THAT YOU HAVE
19 DESCRIBED?**

20 A. First, it was much shorter. The entire case took approximately one month from filing to
21 final Commission decision. Second, there was no hearing examiner, no recommended
22 decision and no briefs. Discovery was very informal and abbreviated and the Public
23 Advocate did not have the opportunity to submit pre-filed testimony. There was

1 testimony on the record, some cross-examination of PGW witnesses and oral testimony
2 from the Public Advocate witness.

3 **Q. PLEASE EXPLAIN THE SUBSTANTIVE RATE MAKING METHODOLOGY**
4 **EMPLOYED AT THE GAS COMMISSION.**

5
6 A. The rate making standards and methodology are set forth in the Management Agreement,
7 which was adopted by ordinance by City Council (and which is included as Exhibit B to
8 my Interim Rate Affidavit). Section VII of the Management Agreement requires that the
9 rates shall be sufficient to produce revenues which are, in summary, sufficient to pay all
10 operation and maintenance costs and expenses of conducting the Gas Works enterprise, as
11 well as to pay the debt service including depreciation, employee retirement costs, a
12 management fee to PFMC (the managing board of PGW, appointed by the Mayor),
13 expenses of the Gas Commission, all sinking fund charges, general expenses, the \$18
14 million payment to the City plus interest if the payment is delayed, funds to provide 1.5x
15 the annual debt service requirement and a reasonable amount of cash to serve as cash
16 working capital.

17 The Gas Commission's rate making has also required a fully-forecasted test year
18 as the basis for budgets and rate requests. In addition to permitting rates that cover all of
19 these projected expenses and cash needs, the Gas Commission has, in the past, focused on
20 appropriate financial goals for the company in order to keep its costs of borrowing at the
21 most reasonable levels possible. In 1991, the proceeding in which PGW's base rates
22 were last changed, the PGC stated that its goal in setting rates was to permit PGW a level
23 of revenues that would permit it to realize debt service coverage levels in the range of
24 1.7x - 1.9x for the indenture as it existed at that time. In 1998, the indenture coverage
25 calculation methodology changed. Using the method of coverage calculation that was in

place when the PGC established the 1.7x - 1.9x coverage goal, PGW's proposed, interim
base rate increase would give PGW a coverage level of just 1.74 times, at the lower end
of the "target" range that the PGC had established as an appropriate ongoing level of
revenue (see, Appendix D, attached). This below "target" coverage is additional evidence
of the reasonableness of PGW's interim base rate request.

Q. **DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

A. Yes.

EXHIBIT TEK-2

DOCKET NO. R-00006042

AGREEMENT

Between

THE CITY OF PHILADELPHIA

AND

**THE PHILADELPHIA FACILITIES
MANAGEMENT CORPORATION**

**FOR THE MANAGEMENT AND OPERATION
OF THE PHILADELPHIA GAS WORKS**

**PRINTING DATE: January, 1996
Original Agreement Dated December 29, 1972
Includes Amendments Through December 31, 1995**

Original Agreement between the City of Philadelphia and the Philadelphia Facilities Management Corporation was executed on December 29, 1972, for the management and operation of the Philadelphia Gas Works, pursuant to an Ordinance of City Council, approved December 29, 1972 (Bill #455), and to Resolutions of the Board of Directors of the Corporation adopted at a meeting held on December 13, 1972.

Agreement amended, pursuant to an Ordinance of City Council, approved December 14, 1973 (Bill #1021), relating to gas rate discount for Senior Citizens.

Agreement amended, pursuant to an Ordinance of City Council, approved May 30, 1975 (Bill #1870), relating to Gas Works Revenue Bonds.

Agreement amended, pursuant to an Ordinance of City Council, approved November 1, 1976 (Bill #396), relating to Company's management fee.

Agreement amended, pursuant to an Ordinance of City Council, approved June 22, 1978 (Bill #1410), relating to Temporary financing.

Agreement amended, pursuant to an Ordinance of City Council, approved April 10, 1979 (Bill #1874), relating to Company's management fee.

Agreement amended, pursuant to an Ordinance of City Council, approved June 11, 1979 (Bill #1948), relating to Management personnel provided by company; production purchase and delivery of gas; paving requirements; natural gas standards; heating value standards; attendance at meetings; classification of service; definitions and indemnifications.

Agreement amended, pursuant to an Ordinance of City Council, approved September 5, 1980 (Bill #319), relating to Company's management fee.

Agreement amended, pursuant to an Ordinance of City Council, approved September 5, 1980 (Bill #320), relating to Company's management fee.

Agreement amended, pursuant to an Ordinance of City Council, approved September 5, 1980 (Bill #321), relating to Gas Works Temporary Loan Notes.

Agreement amended, pursuant to an Ordinance of City Council, approved June 23, 1981 (Bill #750), relating to Temporary Financing.

Agreement amended, pursuant to an Ordinance of City Council, approved September 22, 1982 (Bill #1315), relating to change in fiscal year basis.

Agreement amended, pursuant to an Ordinance of City Council, approved December 3, 1982 (Bill #1314), relating to Temporary Financing.

Agreement amended, pursuant to an Ordinance of City Council approved April 11, 1990 (Bill #787), relating to compensation.

Agreement amended, pursuant to an Ordinance of City Council approved December 28, 1995 (Bill #1258), relating to Company's management fee.

Marginal notes are not part of the agreement, but are provided for convenience of use.

AGREEMENT made this 29th day of December, 1972, by and between the CITY OF PHILADELPHIA (hereinafter called "City"), and PHILADELPHIA FACILITIES MANAGEMENT CORPORATION, a corporation organized and existing under the laws of the State of Pennsylvania (hereinafter called "Company").

Parties and dates

WITNESSETH:

WHEREAS, the City is the owner of a group of real and personal assets known as the Philadelphia Gas Works ("Gas Works"); and

WHEREAS, the City desires to provide quality gas services to its citizens at reasonable rates; and

WHEREAS, the Company is a non-profit corporation organized for the specific purpose of operating the Philadelphia Gas Works.

NOW, THEREFORE, the parties to this Agreement, intending to be legally bound, agree as follows:

SECTION I

General

1. The City hereby authorizes Company on the terms and conditions herein set forth to manage and operate all the property, real and personal, collectively known as the Gas Works, for the sole and exclusive benefit of City; provided, however, City may retrieve from the Gas Works any property or equipment which City determines to be unnecessary to the efficient and economic operation of the Gas Works.

Authority to manage and operate PGW property

City may retrieve surplus property or equipment

2. City, to the extent that it has or shall have the authority or power so to do, authorizes and empowers Company to maintain, change, alter, replace, repair and operate the Gas Works and appurtenances along and beneath the surfaces of the highways, streets, avenues, lanes, alleys, ways and public places in City, for the supply and distribution of gas, subject to provisions hereinafter set forth. For these purposes Company may enter upon, occupy and open all said highways, streets, avenues, lanes, alleys, ways and public places, and supply and distribute gas through pipes laid therein.

Right to enter highways

3. During the term of this Agreement, Company will maintain the Gas Works for the sole and exclusive benefit of the City, including all additions, extensions, betterments, and improvements made thereto, in good order and efficient operating condition. Upon termination of this Agreement by expiration of the term or by any other means, City, its agents, servants, or employees shall be entitled without further payment to Company to use all processes established at the Gas Works for the manufacture or distribution of gas of any type or kind. To the extent that use of any such process is authorized by a contract with a third party, City may at its option either continue the use of such process in accordance with the terms of such contract or may discontinue use of such process.

Company to maintain Gas Works

City's use of processes upon termination

4. Company shall not assign or subcontract this Agreement or any rights hereunder to any person or corporation, nor delegate any duties hereunder.

Agreement not assignable

5. Company's primary obligation shall be to apply the highest standards of management practice and diligence to the operation of the Gas Works.

Highest management standards

*"Recommendations" in the Ordinance.

6. Company shall provide the following personnel for the operation of the Gas Works:

*Management
personnel provided
by Company*

- (a) a chief executive officer;
- (b) a chief operating officer;
- (c) a chief financial officer; and
- (d) such other personnel as deemed appropriate by Company.

All such personnel shall be subject to the approval of the Gas Commission, which approval shall not be unreasonably withheld. In the event the Gas Commission fails to approve any such personnel they shall be replaced by approved personnel forthwith.

*Personnel subject to
Gas Commission
approval*

7. Company shall file semi-annual reports with the Gas Commission setting forth all salaries, fringe benefits, expenses and costs incurred by Company in carrying out its duties and responsibilities under the terms and conditions of this Agreement.

*Company to file
semi-annual reports*

SECTION II

Production, Purchase and Delivery of Gas

1. The Company shall take all reasonable steps to insure that the capacity of the Gas Works to manufacture, provide and distribute gas is at all times sufficient for the estimated maximum requirements of gas users in the City of Philadelphia.

*Capacity shall
meet requirements*

2. Company may purchase natural gas or other gas from other parties pursuant to contracts and agreements for such purchases which are first submitted to the Gas Commission for its recommendations and approved by City Council; except that in temporary or emergency situations, Company may purchase natural or other gas from other parties and then seek the approval for such purchase or purchases from the Gas Commission and City Council within 30 days after the initiation of such purchase. In the event such temporary purchase shall be disapproved such supply if continuing shall immediately terminate.

Approval of purchase of gas

Company shall have the right to contract with others for the distribution and/or transmission of such gas to the Gas Works or its facilities which are ancillary, attendant or related in any manner to purchase of gas after such contracts are first submitted to the Gas Commission for its recommendations and approved by City council.

Approval of natural gas delivery facilities

3. Company, to the extent permitted by the lawfully constituted authorities, may enlarge or extend the facilities for the distribution of gas to an agreed-upon customer meter location as may be necessary to meet the demand for gas. In any situation where such enlargement or extension of the Gas Works' facilities will place an unreasonable financial burden upon the then existing customers, in view of the anticipated revenues to be expected from such enlargement or extension Company shall make reasonable charges for the same as defined from time to time in Company regulations which are approved by the Gas Commission.

Charges to customers for extensions

4. The intention of this Agreement is that all changes, additions, extensions, betterments, improvements, alterations and replacements in the Gas Works and in the mains, pipes and appurtenances thereof, and in the property needed to meet the demands for gas as herein provided, shall be made in such a way and manner as shall maintain the Gas Works in good order and condition with the best and most economical processes in use that are customary in the best regulated gas works, to the extent permitted by funds available for said purposes.

Company shall maintain Gas Works in good order

5. All openings, excavations and repaving shall be made subject to such general rules, regulations, specifications, ordinances and such Acts of Assembly as may apply, as from time to time shall be in force concerning the opening, excavation and repaving of streets and the protection of travel along the same, and the trenches shall be refilled and repaved with the same material and character of paving as before they were opened, unless otherwise ordered by the Streets Commissioner. Refilling and making opening safe for traffic shall be completed by Company within five (5) days after the pipe, services, or mains have been laid, and said repaving shall be completed, weather permitting, within sixty (60) days thereafter.

Paving requirements

6. All ordinances, rules and regulations of City regulating the safety of the piping and fixtures of houses or buildings shall be binding upon Company.

Safety regulations

SECTION III

Standards of Gas

1. *General*

Company may supply straight natural gas in accordance with the standards provided for in the General Terms and Conditions of the supplier Company's Tariffs on file with the Federal Energy Regulatory Commission and incorporated by reference in the Agreements for the purchase of natural gas, to which the Company, City and Supplier companies are parties. Also for supplemental purposes, the Company may, as necessary, supply other gases interchangeable and compatible with natural gas.

Natural gas standards

Interchangeable supplemental gases

2. *Testing--Facilities and Inspection*

Adequate facilities for testing the heating value and purity of the gas shall be provided at the Gas Works' expense and equipped with calorimeters for continuously determining the heating value of the gas, apparatus for determining presence of sulphureted hydrogen in the gas, apparatus for determining total sulphur content, apparatus for determining total ammonia content, apparatus for determining specific gravity of the gas and such other apparatus customary and necessary for such purposes, or which will be found to improve the rapidity and accuracy of such testing.

Plant testing facilities

The location of testing facilities shall be selected by Company, and approved by Gas Commission.

Location of testing facilities

The design and accuracy of all testing apparatus when desired by City, Gas Commission or Company shall be certified by the United States Bureau of Standards.

Certification of test equipment

Standards and tests specified herein may be changed and altered from time to time as recommended by Company and approved by Gas Commission.

Change in standards and tests

City and Gas Commission shall have the right at all times by its proper officers, during the term of this Agreement, to test the quality and pressure of gas. Full facilities for these purposes shall be afforded by Company. All such tests shall be made in the presence of a representative of Company. Accurate written records of such test shall be maintained by Company.

City and Gas Commission have right to inspect

3. *Heating Value--Requirements And Determination*

The monthly average total heating value of the gas, when determined as provided below, shall not be less than 950 British Thermal Units per cubic foot, measured at a temperature of 60° Fahrenheit and a pressure of 30 inches of mercury.

Heating value standards

The daily average total heating value shall not differ from the monthly average total heating value to such extent as to interfere with the satisfactory functioning of consumer appliances.

The total heating value of the gas shall be continuously recorded daily unless prevented by circumstances beyond the Company's control.

Daily recording

The monthly average total heating value of the gas shall be the average of the daily averages of the total heating value for that month.

Average monthly value

The daily average total heating value shall be the average of 24-hourly readings.

Average daily value

4. *Purity--Requirements and Determination*

Sulphureted Hydrogen--The gas shall contain not more than a trace of sulphureted hydrogen. The gas shall be considered to contain not more than a trace of sulphurated hydrogen if a strip of white filter paper moistened with a solution containing five per cent by weight of lead acetate is not distinctly darker than a second paper freshly moistened in the same solution after the first paper has been exposed to the gas for one and one-half minutes in an apparatus of approved form through which the gas is flowing at the rate of approximately 5 cubic feet per hour, the gas not impinging directly from a jet upon the test paper.

Sulphureted hydrogen

Total sulphur--The gas shall contain in each 100 cubic feet not more than 30 grains of total sulphur.

Sulphur

Ammonia--The gas shall contain in each 100 cubic feet not more than 5 grains of ammonia.

Ammonia

5. *Pressure Regulations*

Company shall maintain pressures throughout the City within limits compatible with the satisfactory utilization of gas and as more fully defined in the Rules and Regulations* of the Company's Tariff and as approved from time to time by the Gas Commission.

Gas pressure requirements

Company shall take pressure readings continuously in representative locations throughout the City, which readings shall be available to representatives of City and the Gas Commission upon request for a period of one year prior to the date of such request, or in compliance with the rules issued from time to time by the Gas Commission.

Pressure readings

Gas Commission may order Company by written notice to adjust pressures to acceptable limits for satisfactory utilization of gas, and due diligence shall be employed by Company to adjust pressures at such points to within such acceptable limits. If compliance with the order of the Gas Commission shall require the installation of new apparatus or mains, Company shall be allowed six (6) months, after the necessary financing has been secured to obtain permits for opening of streets and for the laying of the mains and the installation of the necessary apparatus.

Adjustments of pressures

Delay in compliance

SECTION IV

Accounting Methods; Operating Budget and Forecast; Capital Budget and Forecast; Temporary Financing and Financial Statements

1. *Accounting Methods*

(a) *In General*

The accounts and reporting shall be on the accrual methods in which the accounting for depreciation shall be as described in subsection 1(b) herein.

Accounting to be on accrual method

The Gas Works revenues and expenses shall be operated and accounted for an extended period basis from July 1, 1981 to August 31, 1981, and on a fiscal year basis commencing September 1, 1982 and terminating August 31, 1983 and from September 1 to August 31 from year to year thereafter. Accounting shall be employed to show separately the operating accounts and the capital accounts. Operating and capital accounts shall follow generally the classifications specified by the Public Utility Commission of Pennsylvania, expanded or altered, as required by the Director of Finance to portray the special charges and special accounting prescribed in this agreement.

*Fiscal year
September 1 to
August 31*

*Accounting to follow:
PUC*

(b) Depreciation

There shall be established and maintained a reserve for depreciation reasonably estimated to be adequate to care for the retirement (due to exhaustion, wear and tear and obsolescence) of property at original cost. The amount necessary to be credited to the reserve each year for such purposes shall be charged to operations.

*Depreciation on
original cost*

(c) Employee Retirement Costs

There shall be provided for and charged to operations annually retirement cost for retired employees and employees still in service on the following basis:

For retired employees, the amount necessary to meet current payments to them under their retirement schedules.

Retired employees

An additional amount, as determined by the Director of Finance, shall be placed in a retirement fund to be held and invested by the Sinking Fund Commission. Such additional amount shall be determined by the Director of Finance after taking into consideration the current payrolls, the retirement schedules then in effect applicable to various classes of employees and the extent to which it appears desirable and reasonable to build up such fund in current and future years.

Pension fund

To this end, the Director of Finance at appropriate times shall obtain competent actuarial advice and shall have available at all times a report made within the immediately preceding five (5) years by a competent actuary based upon an actuarial investigation of the pertinent factors with the costs to be paid by the Gas Works. Payment out of such funds shall be subject to the approval of the Director of Finance as to amounts and when and how payable.

Any proposed change in the retirement plan, schedule or system recommended by Company first shall be transmitted to the Director of Finance for his approval and then transmitted to City Council for its approval, for which purpose there shall be made available to the City Council an appropriate actuarial report prepared under the direction of the Director of Finance.

Retirement plan changes

No employee of Company shall be entitled to be paid a retirement or separation allowance unless and until he can establish his direct and immediate and exclusive connection as such employee with the Gas Works whether under the present operator or former operator.

Employee eligibility for pensions

All such retirement and separation allowances which are paid during the continuance of this agreement and the terms of which, as so approved, require their continued payment after its termination, shall be thereafter paid by City, or City shall cause the same to be paid by any person succeeding to the operation of the Gas Works.

Obligation of City to continue to pay pensions

2. Budgets

(a) Operating Budget and Forecast

There shall be prepared annually an operating budget for the ensuing year and an operating forecast for four (4) years comprising the ensuing year and the three (3) years next following.

Operating budget

Such budget and forecast shall be prepared by Company with the aid of the Director of Finance; shall be consistent with the accounting methods prescribed in Section IV (1); and in general shall be in form and extent satisfactory to the Director of Finance and Gas Commission. The operating budget and forecast shall be subject to the approval of the Gas Commission.

*Approval of
operating budget by
Gas Commission*

(b) Capital Budget and Forecast

There shall be prepared annually a proposed capital budget for the ensuing year and a forecast for six (6) years comprising the ensuing year and the five (5) years next following. Such budget and forecast shall be prepared by Company; shall be consistent with the accounting methods prescribed in Section IV (1); and in general be in form and extent satisfactory to the Director of Finance and the Gas Commission.

Capital budget

The proposed budget and forecast first shall be transmitted to the Director of Finance and the Gas Commission for their recommendations thereon. The Director of Finance and Gas Commission shall transmit such budget and forecast together with their recommendations thereon to City Council for its approval. The submission of the proposed budget and forecast to the Director of Finance and Gas Commission by Company shall be made in sufficient time for their review and for the Director of Finance and Gas Commission in turn to submit the said budget and forecast together with their recommendations thereon to City Council no later than the middle of the fourth month preceding the beginning of the Gas Works' fiscal year, so that City Council may act on it at least thirty (30) days prior to the next ensuing fiscal year.

*Approval of capital
budget by City
Council*

The capital budget and forecast shall include a showing of the nature of the proposed capital additions and replacements, the amounts needed therefor and how the funds required are to be supplied as between--

*Nature of capital
items*

(i) funds generated within the business through charges to customers or otherwise; and

(ii) funds to be obtained through capital loans.

Capital loans

At any time during the fiscal year, or before the budget accounts are closed for the year, the division between (i) and (ii) above may, if conditions so warrant, be changed or the total thereof increased upon recommendation of the Director of Finance and the Gas Commission and upon approval by City Council.

Approval of changes

In the event that capital loans are required in any year under (ii) above, plans therefor shall be submitted to the Director of Finance for approval of the amount of loan and the method of effecting it, and then transmitted to City Council for its approval.

Approval of capital loans

(c) Expenditures Pursuant to Budgets

All expenditure and commitments therefor shall be made pursuant to such approved budgets and subject to rules and regulations, if any, promulgated by the Gas Commission in connection therewith.

Gas Commission rules regulate expenditures

3. Temporary Financing

Short-term loans not exceeding twenty million dollars in amount or twelve months in duration may be negotiated in anticipation of revenues, except that short-term loans exceeding twenty million dollars but not exceeding forty-five million dollars in amount may be negotiated in anticipation of revenues for Fiscal Year 1982 of the Gas Works and may be outstanding during the period July 1, 1981 through June 30, 1982. If such loans are required, plans therefor shall be submitted to the Gas Commission and the Director of Finance for approval of amount of loan. The amount of any such loan shall also be subject to the approval by resolution or by ordinance of City Council.

Approval of short term loans

The Gas Works may also receive temporary advances from the City in anticipation of revenues which are anticipated to be received by the Gas Works provided that such advances do not exceed twenty million dollars in amount or twenty-four months in duration; provided further, however, that during the period June 30, 1981 through June 30, 1983, such advances may exceed twenty million dollars but shall not exceed forty-five million dollars in amount. The amount of each such advance shall be subject to the prior approval of the Director of Finance and the Gas Commission and to the approval by resolution or by ordinance of City Council.

In addition to the foregoing authorized borrowings, loans not exceeding one hundred million dollars in aggregate principal amount at any time outstanding may be incurred for financing accounts receivable and the purchase of inventory for the Gas Works, as authorized by applicable law. If such loans are required, plans therefor shall be submitted to the Gas Commission and the Director of Finance for approval of the aggregate principal amount of such loans which may be outstanding at any single time. Such aggregate principal amount shall also be subject to approval by resolution or by ordinance of City Council.

4. *Financial Statements*

Company shall within a reasonable time after the close of the Gas Works' fiscal year furnish to the Mayor, the Gas Commission, the City Controller, the City Solicitor, the Director of Finance and City Council a financial statement of such year in form and extent satisfactory to the Director of Finance and Gas Commission. Such financial statement shall be audited by a certified public accountant in accordance with generally accepted accounting principles.

Furnishing of financial statements by Company

CPA to audit financial statement

All books, records and accounts of the Gas Works shall be kept separate and apart from all other books, records and accounts of Company. The City Controller and the Director of Finance and Gas Commission may examine or cause to be examined the books, records and accounts of Gas Works for the purpose of auditing and reporting upon

Books, records and accounts of PGW to be kept separate

such financial statement to the Mayor, the Gas Commission, the City Council, the City Solicitor and the Director of Finance; and the Director of Finance, Gas Commission and the City Controller shall at all times hereafter, for such purpose or for the purpose of ascertaining any facts in relation to the operation of the Gas Works and the performance of the obligations of Company, have full and free access at all reasonable hours to the related books, records and accounts of Gas Works.

*City controller.
Director of Finance
and Gas Commission
may audit books*

Company shall furnish the Mayor, the Gas Commission, the City Controller, the City Solicitor, the Director of Finance and City Council with copies of regular interim financial or operating reports, prepared for periods within the fiscal year, which any such parties may reasonably request.

*Furnishings of
regular interim
reports by company*

SECTION V

Insurance; Eminent Domain

1. Insurance

Company shall insure against loss the buildings, machinery, and equipment and other property of the Gas Works and other risks to the Gas Works, all of which shall be insured to the extent that such property and risks of gas companies are usually insured except that the Gas Commission may provide otherwise in its discretion.

*Adequate insurance
to be provided*

2. Eminent Domain

In the event that Company shall be lawfully required to remove or reconstruct any portion of the Gas Works, or to acquire additional land or property therefor, in consequence of the taking of any of the land or property of the said Gas Works by the United States, the State of Pennsylvania or the City of Philadelphia, in the exercise of the right of eminent domain, or for any other reason whatsoever, the cost and expense thereof shall be accorded appropriate accounting treatment.

*Exercise of right of
eminent domain*

SECTION VI

Gas Commission

1. The Gas Commission as it is presently constituted shall be retained.

Retained

2. The Gas Commission shall consist of the City Controller, two members appointed by City Council and two members appointed by the Mayor.

Membership

3. The members of the Gas Commission appointed by the Mayor shall be designated for four year terms to hold office until their successors are appointed and qualified. The City Controller shall hold office during his incumbency and until his successor has been elected and qualified. The members of the Gas Commission appointed by City Council shall be designated for four year terms, to hold office until their successors are appointed and qualified. The terms of all members of the Gas Commission shall terminate if this agreement is terminated by either party prior to the expiration of their respective terms.

Terms of office

4. Members of the Gas Commission shall receive compensation as fixed by City Council from time to time.

Compensation

5. The Gas Commission shall have the power and authority to obtain such professional services and to employ experts, consultants and such other personnel as in its judgment shall be deemed necessary, their compensation and expenses to be considered an operating expense of the Gas Works.

Power to hire experts

6. A statement of the expenses of the Gas Commission shall be filed annually by the Gas Commission with the City Controller and copies thereof transmitted to the Mayor, the City Solicitor, the Director of Finance and City Council.

Statement of expenses to be filed annually

7. Company shall keep the Gas Commission fully informed of its plans for operation, improvement, extension and betterment of the Gas Works.

Company to keep Gas Commission fully informed

8. The Gas Commission shall hold regular meetings and shall conduct all Commission business thereat. The City Solicitor and the Director of Finance or their designates or deputies shall and the Chief Executive Officer of the Gas Works or his designates may attend all such meetings of the Gas Commission.

Regular meetings

9. The Gas Commission shall have the responsibility for the overseeing of the operation of the Gas Works by the Company. All power not specifically granted to the Company shall reside in the Gas Commission.

Responsibility, powers, and duties

SECTION VII

Gas Rates

1. The Gas Commission shall fix and regulate rates and charges for supplying gas to customers, other than the City and the Board of Education, without further authorization of City Council, which (together with revenues for gas supplied to the City and to the Board of Education and other revenues of the Gas Works qualifying as "project revenues" as such term is defined in Section 2 of The First Class City Revenue Bond Act) will, in each fiscal year produce revenues, at a minimum:

Gas commission shall fix rates

"Project Revenues"

First Class City Revenue Bond Act

(a) Sufficient to pay all of the operation and maintenance costs and expenses of conducting the Gas Works enterprise and to pay the interest and amortization becoming due in such fiscal year on debt incurred for the Gas Works, including, but not limited to:

*Rates to include
Operating and
maintenance costs
Interest and
amortization on
debt*

(i) Charges for depreciation as prescribed in Section IV 1. (b);

Depreciation

(ii) Charges for employees' retirement costs as prescribed in Section IV 1. (c);

Retirement costs

(iii) A management fee to Company equal to the actual cost to Company of managing the Gas Works but not to exceed the sum of:

Management Fee

(A) The amount needed to pay or provide for the payment of base salaries for the Chief Executive Officer, chief Operating Officer and Chief financial Officer and to pay the other expenses of the Company, not to exceed the following amounts for the specified fiscal years:

Salaries

FY1996	\$700,000
FY1997	\$725,000
FY1998	\$750,000
FY1999	\$775,000
FY2000	\$800,000

FY2001 and thereafter The prior fiscal year's maximum amount adjusted to reflect the percentage change in the Consumer Price Index for All Urban Consumer (CPI-U) All Items Index, Philadelphia, Pennsylvania, United States Department of Labor, Bureau of Labor Statistics, as most recently published and available to the Director of Finance on March 1 of each such fiscal year; and

(B) Incentive compensation, if any, awarded to Company management at the discretion of Company's Board of Directors, in total amount not to exceed \$150,000 per annum and in an amount per employee not to exceed \$75,000 per annum. Incentive compensation shall be payable only pursuant to performance standards established, and performance measured against such standards, by the Board of Directors of the Company. The performance standards shall include standards which the Board of Directors determines, from time to time, to be important for the improved operations of the Gas Works such as the achievement of the Gas Works' financial plan, customer service, billing and collection efficiencies and development of new revenues (other than from general rate increases).

*Incentive
compensation*

The Gas Works shall reimburse Company against vouchers on the first day of each calendar month for monies expended for the operation of the Gas Works in the previous calendar month.

(iv) Expenses of the Gas Commission; and

*Gas Commission
expenses*

(v) All sinking fund charges payable in respect of principal and interest on all obligations of the City issued for or with respect to the Gas Works and, with respect to Gas Works Revenue Bonds issued pursuant to The First Class City Revenue Bond Act, such additional amount as may be required to comply with any rate covenant and sinking fund reserve requirement approved by ordinance of City Council in connection with the authorization or issuance of Gas Works Revenue Bonds.

*Sinking fund
charges in
connection with Gas
Works Revenue
Bonds*

(b) Sufficient also (together with the excess on a cumulative basis of internally generated funds available for the purposes set forth below in this subparagraph (b) of prior years beginning after June 30, 1974, to the extent that such excess shall not have been applied to such purposes and shall be available for the payment of general expenses of such fiscal year and, subject and subordinate to the payment or provision for payment of all operation and maintenance costs and all sinking fund and sinking fund reserve

General expenses

requirements as set forth in subparagraph (a) of this subsection 1., together with the excess funds provided by revenues of such fiscal year not required for such purposes):

(i) To make base payments to the City in the aggregate annual *principal* amount of \$18,000,000 payable in the amount of \$4,500,000 on each February 1, March 1, April 1 and May 1, provided that the Gas Works may defer this payment to any time between said due date and June 30 of each year in which event it shall be assessed interest on the principal amount of prevailing rates, to be determined by the Director of Finance and the Gas Works, from the said due date of the date of payment or such different amounts at such different times, not greater in annual aggregate principal amount, as City Council shall prescribe;

Payments to City

(ii) To provide appropriations, to the extent not otherwise provided, for prepayment of debt and for capital additions which have been determined by the Gas Commission to be reasonable and which have been approved by City Council; and

Debt reduction and capital additions

(iii) To provide cash, or equivalent, for working capital in such reasonable amounts as may be determined by Company to be necessary and as shall be approved by the Gas Commission.

Working capital

(c) Anything to the contrary herein contained notwithstanding, Company may continue to budget and report revenues and expenses in the form and by the methods heretofore used and the Gas Works shall continue to pay out of its revenues all of the expenses set forth in this subsection 1, and all other expenses necessary and proper to the operation of the Gas Works, excepting only the Company's own personnel and administrative costs which are payable out of the management fee.

Non-cash expenses included in estimates of revenue requirements

For the purposes of clauses (a) and (b) of this subsection 1., to the extent that operating expenses do not represent an actual outflow of funds (e.g., depreciation) such amount may be included in ascertaining whether revenues are sufficient to meet other costs, expenses and requirements of said clauses (a) and (b). Company shall at all times to the extent of its authority observe and comply with all terms, covenants and provisions of all ordinances enacted by City Council relating to the Gas Works including without limitation, ordinances enacted pursuant to The First Class City Revenue Bond Act authorizing Gas Works Revenue Bonds.

Company to comply with terms of City Council ordinances

2. Upon any change in the rates for gas, the Gas Commission, at least thirty (30) days prior to the effective date thereof, shall notify City Council and give public notice by advertisement once in one or more daily newspapers having a circulation of at least 10,000 published in the City of Philadelphia, of the rates for gas to be charged.

Public notice of rate change

3. Company shall furnish to the City and the Board of Education, delivered in their various public buildings along the lines of its mains, such amounts of gas as may be required by the City or the said Board. Rates for gas for such public purposes shall be established from time to time by the Gas Commission upon the recommendations of Company and subject to approval by City Council.

Gas Rates for municipal purposes

4. In connection with any gas rate study or matter related thereto, Company shall furnish the Gas Commission such data as may reasonably be required therefor.

Company to furnish rate data to Gas Commission

5. In the determination of rate schedules for gas, the Gas Commission shall establish and apply non-discriminatory rates based on suitable and reasonable classification of the services provided, taking into consideration the preparation of such schedules, the nature and purpose of the use, the quantity* used, the time of year when used, the available supply of gas and other competing fuels, the maximum demand, and such other factors, including state, and federal laws, regulations or guide lines,

Non-discriminatory rates

Classification of service

* "quality" in the Ordinance

as may be appropriate to the economics of the purchase, manufacture, distribution and sale of gas and consistent with the intent and purpose of this ordinance and/or Agreement. Such rates may provide for sufficient revenue to stabilize them over a reasonable number of years.

6. If conditions warrant, the Company shall pay to the City, but only from any excess described in clause (b) of subsection 1. of this Section VII, such amounts, in addition to those set forth in clause (b) (i) of subsection 1. of this Section VII, as may be determined and agreed upon by the Gas Commission and City Council.

Additional city payments

7. The Gas Commission is authorized to establish rates for gas users authorizing a reduction in gas rates, in the amount of 20% of charges for non-heating and heating purposes to his residence, for any individual 65 years of age or older, residing in the City of Philadelphia, who directly makes payment to the operator of the Gas Works for gas services at his residence. In order to qualify for any rate reduction a person must first apply to the Philadelphia Gas Works for a rate reduction at least thirty days before the next scheduled meter reading. The reduction shall then take effect at the start of the succeeding billing period.

Senior Citizen rate

8. Notwithstanding any provisions to the contrary contained herein, no payments will be made to the City under subparagraph (b) of Paragraph 1 or under Paragraph 6 of this Section VII until the \$20,000,000 Gas Works Temporary Loan Note, Series of 1980, of the City has been paid in full with interest.

Temporary Loan Notes

SECTION VIII

Purchases and Sales of Non-Gas Items

1. Except in the purchase of unique articles or articles which for any other reason cannot be obtained in the open market, competitive bids shall be secured, pursuant to

procurement standards adopted and promulgated by the Gas Commission, before any purchase, by contract or otherwise, is made or before any contract is awarded for material and supplies, construction, alterations, repairs or maintenance or for rendering any services to Company other than professional services or for the purchase of any other item, thing or service, and the purchase shall be made from or the contract shall be awarded to the lowest responsible bidder.

Purchases to be made by competitive bids

Gas Commission to set purchasing standards

2. All residuals and by-products from operations, unserviceable property or equipment shall be sold to the highest responsible bidder pursuant to standards adopted and promulgated by the Gas Commission in a manner similar to that required for awards of contracts for the purchase of goods and services.

Residuals to be sold to highest responsible bidder

3. All acquisitions, sales and leases of real estate proposed by or for the Gas Works by Company shall be submitted to the Gas Commission for its action and approval, and shall be submitted to City Council for its approval by ordinance.

Real estate transactions to be approved by Gas Commission and City Council

SECTION IX

Legal Services

The Law Department of the City of Philadelphia shall be the legal advisor for the Gas Commission and the Gas Works. It shall supervise, direct, and control all of the law work of the Gas Commission and the Gas Works including, but not limited to, litigation or other legal representation, investigation, and drafting of documents including contracts, bonds and all other legal instruments for the Gas Commission and the Gas Works.

Law Department legal advisor for Gas Commission and PGW

Duties of Law Department

The City Solicitor shall determine whether legal services for the Gas Works shall be performed by other counsel, and in such event he shall designate such counsel and the compensation therefor in his sole discretion.

City Solicitor shall designate other counsel

All legal services rendered, by the Law Department and by other special legal counsel, to the Gas Commission and to the Gas Works shall be billed to the Gas Works and shall be payable out of gas revenues.

PGW shall pay for legal services

SECTION X

Company's Obligations During Disputes

No disputes between City and Company concerning any of the terms or provisions of this Agreement shall release Company from its obligations to manufacture, provide and supply gas in accordance with the terms and provisions hereof during the existence of this Agreement.

Disputes between City and Company

SECTION XI

Definitions

The following terms are defined for purposes of this Agreement as set forth below:

1. *Director of Finance* - The Director of Finance of the City of Philadelphia.
2. *City Solicitor* - The City Solicitor of the City of Philadelphia.
3. *City Controller* - The City Controller of the City of Philadelphia.
4. *Mayor* - The Mayor of the City of Philadelphia.

5. *City Council* - The City Council of the City of Philadelphia.

6. *Streets Commissioner* - The Commissioner of the Department of Streets of the City of Philadelphia.

7. *Gas Works* - All of the property, both personal and real, including mains and pipes, which together constitute the plant and equipment of the Philadelphia Gas Works.

8. *Non-Gas Items* - Non-gas items include but are not limited to every tangible or intangible article, item or thing except natural gas and substitute natural gas.

SECTION XII

Term

The term of this Agreement shall be for a period of two (2) years commencing January 1, 1973. Said term shall be subject to cancellation by City at any time, or upon the expiration of said two (2) years, upon ninety (90) days notice. No such cancellation shall be effective unless and until such cancellation shall have been approved by resolution or ordinance of City Council. In the absence of such notice, the term shall be extended for further two (2) year periods upon the terms and conditions herein.

Two year term

Termination by City

SECTION XIII

Other Agreements

1. Unless approved by the Gas Commission, no contract or agreement with a third party, including without limitation any union contract covering Gas Works personnel, entered into by Company or at its direction on behalf of the Gas Works during the term of this Agreement shall provide by its terms that it shall terminate or expire in the event that this Agreement between City and Company shall terminate or expire.

Contracts shall not terminate with this

2. The City agrees and hereby does, indemnify and hold harmless the Directors, the officers and the employees of Company, individually and collectively, while acting within the scope of their employment, against and from any and all personal liability, actions, causes of action, and any and all claims made against them whatever in their capacities as Directors, Officers or employees of Company with regard to this Agreement.

*Indemnification of
Board by City*

SECTION XIV

Counterparts

This Agreement may be executed in counterparts, all of which taken together shall constitute one document.

SECTION XV

Effectiveness

This Agreement shall not be effective or binding upon the parties unless it has been approved by an effective ordinance of City Council and has been ratified by the Board of Directors of Company.

IN WITNESS-WHEREOF, the parties hereto have duly executed this Agreement, the corporate seal of the City of Philadelphia has been duly affixed by the Mayor of said City, and the corporate seal of the Philadelphia Facilities Management Corporation has been duly affixed by an authorized officer thereof, the day and year first above written.

CITY OF PHILADELPHIA

Attest:(s) Pace Reich
Deputy to the City Solicitor

By: (s) Frank L. Rizzo
Mayor

By: (s) William A. Costello
Commissioner of Public Property

PHILADELPHIA FACILITIES MANAGEMENT CORPORATION

Attest: (s) Stephen S. Gardner
Secretary

By: (s) F. Eugene Dixon, Jr.
President

Approved for the City of Philadelphia
as to correctness and form:

(s) Martin Weinberg
City Solicitor

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

BARBARA BISGAIER

ON BEHALF OF
PHILADELPHIA GAS WORKS

Docket No. R-00006042

PHILADELPHIA GAS WORKS
BASE RATE PROCEEDING

January, 2001

1 **Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.**

2 A. Barbara C. Bisgaier, Managing Director, Public Financial Management, Inc., 2
3 Logan Square, Suite 1600, Philadelphia, Pennsylvania 19103-2770, (215) 567-
4 6100. I am a Financial Advisor to state and local governments and authorities.

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A. I am employed by Public Financial Management, Inc. I am a shareholder in the
7 firm.

8 **Q. SUMMARIZE YOUR PROFESSIONAL QUALIFICATIONS.**

9 A. I have been employed by Public Financial Management, Inc. for more than 18
10 years. For approximately 16 of those years, I have had the title of managing
11 director and have managed the firm's municipal utility practice. During my career
12 at Public Financial Management, Inc., I have served as a Financial Advisor to a
13 broad range of state and local governments and authorities. In particular, my
14 experience has been concentrated in the area of publicly-owned utility systems.
15 In addition to the Philadelphia Gas Works, my utility clients have included the
16 Water Department of the City of Philadelphia, the Pittsburgh Water and Sewer
17 Authority, the Harrisburg Water and Sewer Authority, the New Jersey Water
18 Supply Authority, the North Jersey District Water Commissioners, the Passaic
19 Valley Sewerage Commissioners, the Middlesex County (NJ) Utilities Authority,
20 the Ocean County (NJ) Utilities Authority, the Atlantic County (NJ) Utilities
21 Authority, the Southeast Morris County Water Authority and the Atlantic City
22 Sewerage Authority. In addition, I have served, since 1992, as the Financial

1 Advisor to the City of Philadelphia. In that capacity, I have served as the City's
2 advisor for all debt issued by the City and by its authorities and enterprises (the
3 Water Department, the Division of Aviation, the Philadelphia Municipal Authority
4 and PGW). This has included serving as the advisor for two bond issues that
5 were each in excess of one billion dollars. Most recently, I served as the
6 Financial Advisor for the largest issue of municipal bonds to come to market in
7 2000: \$1.8 billion of Turnpike Revenue Bonds for the New Jersey Turnpike
8 Authority. Over the course of my career, I have served as the advisor for the
9 issuance of long-term debt having a par value in excess of \$15 billion.

10 In the course of these various engagements, my responsibilities include general
11 financial planning and the management of the debt issuance process. With
12 regard to the financial planning aspect of my work, I assist clients with their
13 development of capital financing strategies, debt policies, budgets and rate
14 setting issues. With regard to the debt issuance process, I frequently serve as
15 the liaison between my clients and the bond rating agencies, the municipal bond
16 insurers and other credit-providing agencies. I also advise my clients throughout
17 the debt issuance process as to the costs and benefits of various alternative
18 approaches to business and financial issues under consideration. I am also
19 frequently responsible for working with my clients to prepare disclosure
20 documents, offering circulars and presentations to the bond rating agencies and
21 credit enhancers.

22 **Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

1 A. I have an A.B. degree from Mount Holyoke College and a Master of City and
2 Regional Planning degree from Rutgers University.

3 **Q. WHAT IS YOUR EMPLOYMENT EXPERIENCE?**

4 A. Prior to my employment by Public Financial Management, Inc., I was employed
5 by Strouse, Greenberg & Co. from 1980-1982 as a financial analyst. From 1974-
6 1980, I was employed by the City of Philadelphia, concluding my employment
7 with the title of Deputy Director of the Office of Housing and Community
8 Development.

9 **Q. EXPLAIN THE BASIS OF YOUR EXPERIENCE WITH AND KNOWLEDGE OF**
10 **PGW.**

11
12 A. Public Financial Management, Inc. was engaged in 1992 by the City of
13 Philadelphia to serve as its Financial Advisor. That engagement included,
14 broadly, responsibility for the preparation of the Five-Year Financial Plans
15 mandated by the Pennsylvania Intergovernmental Cooperation Authority, general
16 financial planning for the City and traditional financial advisory work for the City
17 and its enterprises in connection with the issuance of long-term and short-term
18 debt. At the commencement of this engagement, the City's below-investment-
19 grade bond rating and general fiscal distress essentially barred it and its
20 enterprises from the public debt markets. In 1993, with the beginning of a return
21 to fiscal stability, the City began its return to the capital markets. I began serving
22 specifically as the Financial Advisor to PGW with the issuance of its 14th Series
23 Bonds. I have subsequently worked on each of PGW's bond transactions. I
24 have assisted PGW in the implementation of certain asset management

1 transactions, most notably the competitive acquisition of a Forward Rate
2 Agreement for its debt service reserve fund and the implementation of a "knock-
3 in" swap with Morgan Guaranty Trust Company. I have also assisted PGW with
4 the issuance of its commercial paper; that assistance has included the annual
5 preparation of the offering/disclosure document, procurement of the various
6 letters of credit that have provided program liquidity and management of the
7 process of obtaining and maintaining a credit rating for PGW's commercial paper
8 program. I also managed the competitive implementation of PGW's equipment
9 leasing program. In the course of each of these specific engagements, I have
10 made various presentations on PGW's behalf to the Philadelphia City Council,
11 the Philadelphia Gas Commission and the Philadelphia Facilities Management
12 Corporation. I have had extensive contact with each of the three municipal bond
13 rating agencies on behalf of PGW, both with regard to specific bond transactions
14 and to the general credit of PGW. I have had similar contacts with the four
15 principal municipal bond insurers on PGW's behalf and have been responsible
16 for the procurement of letters of credit for the commercial paper program. This
17 work has permitted me to become familiar with the financial structure, condition
18 and issues of PGW, and to have obtained a substantial institutional knowledge of
19 PGW.

20 **Q. HAVE YOU EVER TESTIFIED BEFORE ANY REGULATORY AGENCIES?**

21 A. Yes, I have testified before the Philadelphia Gas Commission and I submitted
22 testimony to the Public Utility Commission in PGW's interim rate proceeding.

1 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

2 A. The purpose of my testimony is: 1) to provide my expert opinion regarding the
3 impact on PGW if the Company fails to meet the coverage requirements in its
4 bond ordinances or if it fails to maintain its short term, commercial paper
5 program; 2) the effect on the Company of the downgrading to non-investment
6 grade of PGW's bonds; and 3) the effect on the Company if the PUC fails
7 effectively to permit PGW to recover its costs and to maintain the requirements of
8 its bond indentures. I am also incorporating into this submission my previous
9 testimony in PGW's interim rate proceeding in which I explained the bond
10 coverage requirements.

11 Q. YOU HAVE PREVIOUSLY TESTIFIED THAT PGW IS FINANCIALLY
12 VULNERABLE IF IT FAILS TO MEET THE DEBT SERVICE COVERAGE
13 REQUIREMENTS SPECIFIED IN ITS BOND ORDINANCE AND/OR IT IS
14 UNABLE TO RENEW ITS COMMERCIAL PAPER PROGRAM. HAS
15 ANYTHING CHANGED WITH REGARD TO EITHER OF THESE TWO
16 REQUIREMENTS?

17
18 A. It remains essential to the financial viability of PGW that it continue to have
19 access to both the long-term and short-term credit markets, the former to satisfy
20 capital requirements and the latter for liquidity purposes. I would like to address
21 each of these points separately.

22 *Access to the long-term capital market.* PGW must have the ability to access the
23 long-term capital market to satisfy its capital funding requirements. Maintenance
24 of plant and the continuation of the cast iron pipe replacement program are
25 obviously essential to PGW's future. The only available source of funding for this
26 effort is through the public sale of bonds. **PGW's ability to sell its bonds will**

1 **be eliminated if it loses its investment-grade long-term bond rating.** PGW
2 will lose its investment grade rating if it does not meet its debt service coverage
3 requirements. The rating agencies have long stressed the fact that PGW's debt
4 service coverage requirements are the most significant factor for the continued
5 maintenance of an investment grade rating in view of the financial stress PGW
6 faces.

7 PGW is now projecting that without rate relief, it will not achieve its bond
8 ordinance debt service coverage requirements in the fiscal year ending August
9 31, 2001. I explained PGW's bond ordinance requirements in my testimony in
10 PGW's interim rate proceeding, a copy of which I am attaching here. (Exhibit
11 BB-1). I am also attaching the relevant bond ordinance covenant itself. (Exhibit
12 BB-2). Once this result becomes reasonably certain, PGW will be required to
13 report its projected default in meeting those bond ordinance requirements to the
14 investment community. If the bond rating agencies do not believe PGW can
15 continue to meet its coverage requirements, they will downgrade the long-term
16 credit ratings to below investment grade and PGW will be unable to access the
17 credit markets. Moody's Investors Service currently has PGW on "negative
18 outlook", a warning that it expects to downgrade PGW unless there is a change
19 in basic financial outlook. Standard & Poor's Corporation, similarly, has PGW on
20 "credit watch with negative implications". The risk of a downgrade is, therefore,
21 quite real.

1 PGW's investment-grade bond rating would also be threatened by a
2 demonstration that its new regulators are unwilling to provide the rate relief
3 necessary both to meet debt service coverage requirements and to produce
4 **adequate cash for operations**. The \$11 million of base rate relief granted in
5 PGW's interim rate case is demonstrably inadequate --- in the face of the
6 additional \$20 million of bad debt expense that will result from the additional
7 increase to the Gas Cost Rate --- both to satisfy its bond ordinance requirements
8 and to provide sufficient cash to meet its cash needs during the rest of the year.
9 It is essential that PGW receive additional rate relief as soon as possible in order
10 to prevent not only the further deterioration of its already fragile cash condition
11 but also a further deterioration in the public perception of PGW and an almost
12 certain downgrading of its bond ratings.

13 *Access to the short-term credit markets.* PGW has for the past 20 years relied
14 upon its commercial paper program to provide liquidity to deal with the fact that
15 revenues are realized irregularly throughout the year. During the past several
16 years, however, the PGW commercial paper program has changed from one that
17 provides liquidity to one that has essentially become a permanent part of PGW's
18 capital structure. Were the commercial paper program to be eliminated, PGW
19 would, in my opinion, face fiscal collapse. However, it is clear that merely
20 providing sufficient cash to allow PGW to renew its commercial paper is not
21 sufficient to solve PGW's problems. Renewing the commercial paper is
22 essential. Providing additional revenue to PGW to give it the resources to

1 address the fundamental problems that produced the current crisis is also
2 essential.

3 PGW will be able to sustain the commercial paper program at its current level
4 only if it is successful in having Morgan Guaranty Trust Company ("Morgan")
5 renew the letter of credit that supports the program. The letter of credit will
6 expire in June 2001. Pursuant to the terms of the letter of credit, PGW requested
7 a letter of credit extension in June 2000. To date, Morgan has been unwilling to
8 grant that extension and has delayed taking formal action. Morgan had indicated
9 to PGW that it would await the outcome of the interim rate case and the actions
10 of the PUC with regard to the GCR before it acts on the PGW extension request.
11 Further, one of the three participants in the letter of credit, PNC Bancorp, has
12 already informed Morgan and PGW that it will not renew its participation in the
13 letter of credit. Morgan must, therefore, either increase its own level of
14 participation in the letter of credit (an action that it is unwilling to take) or find a
15 substitute for PNC. This will be extremely difficult, at best, but will be more
16 difficult to the extent that PGW cannot demonstrate its ability to meet its debt
17 service coverage requirements and sustain itself, from a cash perspective, as a
18 viable concern.

19 One critical factor in Morgan's decision as to its willingness to renew the letter of
20 credit will be PGW's ability to demonstrate that, in accordance with the terms of
21 the letter of credit, it will have cash on hand sufficient to demonstrate to Morgan
22 that it could pay off the full amount of the letter of credit. During calendar year

1 2001, the only way in which PGW can satisfy this requirement is that it have the
2 proceeds of its projected bond issue in May, 2001. Even if PGW's financial
3 position improves to the point that it appears that it will just meet its bond
4 ordinance requirements and have sufficient end of year cash to meet obligations
5 the ability of PGW to complete the May bond issue will depend upon Morgan's
6 willingness to extend the letter of credit because prospective bond buyers will be
7 unwilling to purchase bonds if the imminent collapse of the commercial paper
8 program is disclosed to them.

9 Morgan has also indicated to PGW that one of the critical elements of its analysis
10 of PGW's creditworthiness will be the rapidity with which the PUC grants rate
11 relief via the GCR in the event of escalating gas costs. To the extent that the
12 PUC permits immediate GCR relief, particularly during the winter heating season
13 when delays are costly, Morgan will be encouraged to continue its support of the
14 commercial paper program.

15 The collapse of the commercial paper program, in addition to keeping PGW from
16 the long-term bond market, will also create an extraordinary financial crisis for
17 PGW. At the final maturity of the commercial paper program in June 2001, the
18 Morgan letter of credit will have to be drawn upon. The drawing will convert, after
19 30 days to a \$97,000,000 taxable loan from Morgan that must be repaid rapidly.
20 PGW will be unable to repay this loan. This obligation will presumably fall upon
21 the City, as owner, to repay. I am not sure how the City could possibly
22 accommodate such a huge liability.

1 **Q. WHAT IS THE CURRENT ATTITUDE OF MORGAN TOWARD PGW?**

2 A. After PGW's request for the letter of credit extension, Morgan informed PGW that
3 it would await the outcome of the interim rate case to make a decision. Because
4 PGW has indicated that the \$11 million base rate increase is inadequate and, at
5 any rate, has not accepted it for other reasons, Morgan continues to defer its
6 decision on the letter of credit extension. Morgan has also expressed concern
7 about PGW's ability to receive approval for timely interim GCR increases given
8 the recent rapid increase in gas costs nationally. The issue of contemporaneous
9 recovery of gas cost increases is a key consideration in their deliberation of this
10 matter.

11 **Q. WHAT IS THE CURRENT ATTITUDE OF THE RATING AGENCIES TOWARD**
12 **PGW?**

13 A. PGW officials have spoken to each of the three rating agencies on almost a
14 weekly basis since September in an effort to keep them informed of ongoing
15 developments. In particular, the rating agencies have expressed concern as to
16 the ability of PGW to remain financially viable absent significant and immediate
17 base rate relief. They have also expressed concern as to the ability of PGW to
18 obtain timely interim increases to the GCR in the face of rapidly escalating gas
19 prices.
20

21 **Q. WOULDN'T THE COMMERCIAL PAPER ISSUE BE RESOLVED IF THE CITY**
22 **PROVIDED THE FUNDS NEEDED TO RENEW THE COMMERCIAL PAPER**
23 **PROGRAM?**

24 A. Aside from the fact that it is highly unlikely that the City can or will make
25 additional cash payments to PGW, Morgan would be unwilling to renew its letter
26

1 of credit based upon a one time City payment to PGW. Morgan is seeking
2 systemic improvement at PGW that can sustain the credit exposure it has to
3 PGW. Both Morgan and the bond rating agencies need to be convinced that
4 PGW will generate sufficient revenue by its rates to demonstrate that it is a
5 "going concern," that is that PGW will, in the normal course of business, be
6 capable of meeting the requirements of its bond covenants and be capable of
7 funding a capital program that will insure the safety of the system and its ability to
8 continue to provide service to its customers into the future. Only adequate rate
9 relief can satisfy the "going concern" requirement. City grants and/or loans may
10 help PGW in a short-term crisis, but do not address the essential "going concern"
11 issue. If anything, such reliance on City assistance demonstrates that PGW is
12 not, on its own, a "going concern."

13 **Q. MS. BISGAIER, YOU TESTIFIED IN PGW'S INTERIM RATE PROCEEDING**
14 **THAT A FAILURE BY THE PUC TO ALLOW ADEQUATE RATE RELIEF**
15 **WOULD RESULT IN A DOWNGRADING OF PGW'S BONDS. HAS THAT**
16 **OCCURRED?**

17
18 **A.** No, not yet. I attribute that to our communication with the agencies and the
19 information we have provided to them. We have informed them that PGW's
20 future failure to meet its bond ordinance requirements or its being short of the
21 cash needed to meet its commercial paper requirements and other obligations
22 are not as yet certain outcomes. We have also explained that PGW still has the
23 opportunity to avoid these results if it finds a way to obtain higher rates in the
24 next few months that will permit it to meet its debt service and cash

1 requirements. The more time that passes without base rate relief the more
2 unlikely it is that PGW will avoid these negative results.

3 **Q. DOES THAT COMPLETE YOUR TESTIMONY?**

4 A. Yes, it does.

EXHIBIT BB-1

DOCKET NO. R-00006042

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

BARBARA BISGAIER

ON BEHALF OF
PHILADELPHIA GAS WORKS

DOCKET NOS. P-00001831
R-00005654

RE: PETITION OF PHILADELPHIA GAS WORKS
FOR ESTABLISHMENT OF INTERIM RATE
PROCEDURES AND FOR A DECLARATORY ORDER

AUGUST 2000

1 Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

2 A. Barbara C. Bisgaier, Managing Director, Public Financial Management, Inc., 2 Logan
3 Square, Suite 1600, Philadelphia, Pennsylvania 19103-2770, (215) 567-6100. I am a
4 *Financial Advisor to state and local governments and authorities.*

5 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

6 A. I am employed by Public Financial Management, Inc. I am a shareholder in the firm.

7 Q. SUMMARIZE YOUR PROFESSIONAL QUALIFICATIONS.

8 A. I have been employed by Public Financial Management, Inc. for more than 18 years. For
9 approximately 16 of those years, I have had the title of managing director and have
10 managed the firm's municipal utility practice. During my career at Public Financial
11 Management, Inc., I have served as a Financial Advisor to a broad range of state and local
12 governments and authorities. In particular, my experience has been concentrated in the
13 area of publicly-owned utility systems. In addition to the Philadelphia Gas Works, my
14 utility clients have included the Water Department of the City of Philadelphia, the
15 Pittsburgh Water and Sewer Authority, the Harrisburg Water and Sewer Authority, the
16 New Jersey Water Supply Authority, the North Jersey District Water Commissioners, the
17 Passaic Valley Sewerage Commissioners, the Middlesex County (NJ) Utilities Authority,
18 the Ocean County (NJ) Utilities Authority, the Atlantic County (NJ) Utilities Authority,
19 the Southeast Morris County Water Authority and the Atlantic City Sewerage Authority.
20 In addition, I have served, since 1992, as the Financial Advisor to the City of
21 Philadelphia. In that capacity, I have served as the City's advisor for all debt issued by
22 the City and by its authorities and enterprises (the Water Department, the Division of
23 Aviation, the Philadelphia Municipal Authority and PGW). This has included serving as

1 the advisor for two bond issues that were each in excess of one billion dollars. Most
2 recently, I served as the Financial Advisor for the largest issue of municipal bonds to
3 come to market in 2000: \$1.8 billion of Turnpike Revenue Bonds for the New Jersey
4 Turnpike Authority. Over the course of my career, I have served as the advisor for the
5 issuance of long-term debt having a par value in excess of \$15 billion.

6 *In the course of these various engagements, my responsibilities include general*
7 *financial planning and the management of the debt issuance process. With regard to the*
8 *financial planning aspect of my work, I assist clients with their development of capital*
9 *financing strategies, debt policies, budgets and rate setting issues. With regard to the debt*
10 *issuance process, I frequently serve as the liaison between my clients and the bond rating*
11 *agencies, the municipal bond insurers and other credit-providing agencies, I also advise*
12 *my clients throughout the debt issuance process as to the costs and benefits of various*
13 *alternative approaches to business and financial issues under consideration. I am also*
14 *frequently responsible for working with my clients to prepare disclosure documents,*
15 *offering circulars and presentations to the bond rating agencies and credit enhancers.*

16 **Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

17 A. I have an A.B. degree from Mount Holyoke College and a Master of City and Regional
18 Planning degree from Rutgers University.

19 **Q. WHAT IS YOUR EMPLOYMENT EXPERIENCE?**

20 A. Prior to my employment by Public Financial Management, Inc., I was employed by
21 Strouse, Greenberg & Co. from 1980-1982 as a financial analyst. From 1974-1980, I was
22 employed by the City of Philadelphia, concluding my employment with the title of

1 Deputy Director of the Office of Housing and Community Development.

2 Q. EXPLAIN THE BASIS OF YOUR EXPERIENCE WITH AND KNOWLEDGE OF
3 PGW.

4 A. Public Financial Management, Inc. was engaged in 1992 by the City of Philadelphia to
5 serve as its Financial Advisor. That engagement included, broadly, responsibility for the
6 preparation of the Five-Year Financial Plans mandated by the Pennsylvania
7 Intergovernmental Cooperation Authority, general financial planning for the City and
8 traditional financial advisory work for the City and its enterprises in connection with the
9 issuance of long-term and short-term debt. At the commencement of this engagement,
10 the City's below-investment-grade bond rating and general fiscal distress essentially
11 barred it and its enterprises from the public debt markets. In 1993, with the beginning of
12 a return to fiscal stability, the City began its return to the capital markets. I began serving
13 specifically as the Financial Advisor to PGW with the issuance of its 14th Series Bonds. I
14 have subsequently worked on each of PGW's bond transactions. I have assisted PGW in
15 the implementation of certain asset management transactions, most notably the
16 competitive acquisition of a Forward Rate Agreement for its debt service reserve fund
17 and the implementation of a "knock-in" swap with Morgan Guaranty Trust Company. I
18 have also assisted PGW with the issuance of its commercial paper; that assistance has
19 included the annual preparation of the offering disclosure document, procurement of the
20 various letters of credit that have provided program liquidity and management of the
21 process of obtaining and maintaining a credit rating for PGW's commercial paper
22 program. I also managed the competitive implementation of PGW's equipment leasing

1 program. In the course of each of these specific engagements, I have made various
2 presentations on PGW's behalf to the Philadelphia City Council, the Philadelphia Gas
3 Commission and the Philadelphia Facilities Management Corporation. I have had
4 extensive contact with each of the three municipal bond rating agencies on behalf of
5 PGW, both with regard to specific bond transactions and to the general credit of PGW. I
6 have had similar contacts with the four principal municipal bond insurers on PGW's
7 behalf and have been responsible for the procurement of letters of credit for the
8 commercial paper program. This work has permitted me to become familiar with the
9 financial structure, condition and issues of PGW, and to have obtained a substantial
10 institutional knowledge of PGW.

11 **Q. HAVE YOU EVER TESTIFIED BEFORE ANY REGULATORY AGENCIES?**

A. Yes, I have testified before the Philadelphia Gas Commission.

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

14 A. The purpose of my testimony is to provide my expert opinion regarding the impact on
15 PGW of a failure by the Public Utility Commission to grant the establishment of the
16 interim rates requested by PGW in its petition dated August 8, 2000 as it relates to access
17 to the capital markets generally, the cost of funds and the commercial paper program and
18 the impact on PGW of a failure by the Public Utility Commission to grant an increase in
19 the Gas Cost Recovery charge requested by PGW in its petition dated August 2, 2000.

20 **SUMMARY OF FINDINGS**

21 **Q. COULD YOU SUMMARIZE YOUR FINDINGS.**

22 A. I would like to divide my findings into several separate related sections in order to

1 address the impact of certain outcomes for PGW.

2 **a. Failure to meet its bond covenants** – If PGW is not granted increases in both its
3 GCR and base rates, there is a substantial probability that PGW will be in default
4 of one or more of its bond covenants. In its various bond resolutions, PGW has
5 essentially committed to its bondholders to set rates that are sufficient to pay for
6 the cost of operating and maintaining PGW and to pay principal and interest on its
7 outstanding debt (as well as provide for a minimum of 1.5x debt service coverage
8 on all long-term debt). Failure of PGW to generate revenues to pay all of its
9 expenses or to meet the 1.5x debt service coverage test, even if debt service
10 payments are timely made, will result in a technical default under those bond
11 resolutions. In my opinion, and in the present circumstances, this technical
12 default (and the implications of such an eventuality) will immediately result in the
13 down-grading to below investment-grade of PGW's long-term credit rating by
14 each of the three municipal credit rating agencies. It has long been understood
15 that PGW has maintained its investment grade rating substantially as a result of its
16 unusually high debt service coverage requirement (most municipal utilities have
17 required coverage between 1.1x and 1.25x annual debt service). **Absent**
18 **achievement of the debt service coverage requirement, the rating agencies**
19 **will have no alternative but to reduce PGW's rating to junk bond status.**
20 **That status will prevent PGW from accessing the public credit markets.**
21 Further, PGW will be unable to obtain insurance on its bonds. Furthermore, PGW
22 will be unable to obtain capital to maintain and/or upgrade its capital facilities.

1 This was precisely the situation that the City of Philadelphia found itself in 1991.
2 In fact, the final financial crisis that led to the Commonwealth's passage of the
3 Pennsylvania Intergovernmental Cooperation Act was the attempt by and failure
4 of the City to sell its temporary loan notes in 1991, after the City's general credit
5 was reduced to junk bond status. In fact, extreme fiscal distress is often heralded
6 by a cash flow crisis.

7 The implications of PGW's loss of investment-grade status are dire in that
8 PGW will be denied access to the capital markets.¹ This inability to replenish
9 PGW's capital account through the sale of bonds will initially and immediately
10 contribute to the stress on PGW's cash position in that it is currently PGW's
11 intention to reimburse itself for previous capital expenditures in the amount of
12 \$21.5 million from the proceeds of bonds to be issued in the spring of 2001. It is
13 my understanding that PGW believes that the availability of this \$21.5 million of
14 capital is essential to the maintenance of its program of upgrading crucial capital
15 facilities, such as mains. This reimbursement has been anticipated in the cash
16 flow projections prepared by PGW and will not be available in the event that
17 bonds cannot be sold.

- 18 **b. Collapse of the commercial paper program** – In my opinion, the most
19 immediate and devastating impact of a failure of PGW to meet its rate covenant
20 would be the absolute collapse of the commercial paper program. PGW has, for

¹ PGW is currently two rating steps above junk bond status. There is no requirement that a downgrade occur one step at a time.

1 many years, depended upon its commercial paper program to provide a stable
2 source of monthly operating cash in the face of the peaks and valleys of cash
3 receipts over the course of each year. For the past several years, PGW has
4 maintained an outstanding balance of commercial paper at the \$100,000,000 level
5 for much of every year. The commercial paper has become, in effect, a permanent
6 part of PGW's capital structure rather than a mechanism used to smooth over cash
7 flow irregularities. **In either of these two modes, the ability of PGW to issue
8 its commercial paper is an absolute necessity for the maintenance of the basic
9 operation and financial integrity of PGW. It is almost impossible to imagine
10 PGW as a going concern without access to its commercial paper program.**

11 Tax-exempt commercial paper (except in the instance of very highly rated
12 governments) is always secured by a letter of credit provided by a highly rated
13 commercial bank. The PGW commercial paper is currently secured by a letter of
14 credit provided by the Morgan Guaranty Trust Company. That letter of credit
15 matures in June 2001. Pursuant to the terms of that letter of credit, PGW, in June
16 2000, requested a one-year extension of the Morgan letter of credit (to June 2002).
17 Assuming that Morgan grants that extension (by no means a sure thing), the
18 commercial paper program will survive until June 2002. If Morgan does not grant
19 the extension, PGW will be faced with the immediate need to find a letter of credit
20 bank to replace Morgan in 2001. In my opinion, that will be difficult to do. It
21 will be difficult, in part, because the letter of credit market is currently contracting
22 and there is a substantially reduced number of banks that remain active in the

1 municipal market. In particular, the troubled financial condition of PGW, absent
2 the requested interim rate increase, will virtually eliminate the possibility of
3 getting a replacement letter of credit. Even assuming that Morgan grants the
4 requested one year extension (and does so because PGW will have met its rate
5 covenant as of August 31, 2000), it is a virtual certainty that neither Morgan nor
6 any other bank would issue a letter of credit in June 2001 if no rate relief has been
7 granted and PGW has been down-graded to below investment-grade. Given the
8 reserve requirements that the Controller of the Currency places on a commercial
9 bank, providing a letter of credit to a below investment-grade entity, no bank
10 would be willing to provide such a facility. While there may be a year of grace
11 until June 2002 if Morgan does grant the extension, a failure to meet the rate or
12 coverage covenant on August 31, 2001 will guarantee that no extension or
13 replacement would be available in June 2002. In my opinion, this would be
14 catastrophic for PGW.

15 The cash flow projections for fiscal year 2000-2001 prepared by PGW rely
16 upon the fact that \$97 million of commercial paper will be outstanding for
17 virtually the entire year. Other analyses, for example, the Public Advocate's cas'
18 flow projection presented to the Philadelphia Gas Commission (which assumes
19 no increase to the base rate but rather a commitment by the City to forego the \$18
20 million annual payment and a loan to PGW of \$20 million) assumes that the full
21 amount of \$97 million of commercial paper is already fully outstanding at the
22 start of the year. This is an unrealistic projection because there will be no

1 commercial paper available after June 2001 if PGW loses its investment grade
2 rating and, as a direct result of that loss, the letter of credit that supports the
3 commercial paper program.

4 The potential loss of the Morgan Guaranty letter of credit is a very real
5 threat. The current letter of credit agreement permits PGW to request a one-year
6 extension of the letter of credit one year prior to the final maturity date of that
7 letter of credit. Therefore, in May 2000, PGW requested that Morgan Guaranty
8 extend the term of the letter of credit for one year past the scheduled maturity date
9 of June 2001. In response to my recent (the second week of August, 2000)
10 request to Morgan Guaranty as to the status of that extension application, I was
11 advised by a senior official at Morgan that the banks that participate in the letter
12 of credit with them were unwilling to continue to do so after the current expiration
13 date in June 2001.² Morgan Guaranty must, therefore, seek other bank
14 participants as they are unwilling to underwrite the full \$100 million of the letter
15 of credit themselves. They further advised me that, in their opinion, the search for
16 new participants should be delayed until November or December 2000 in
17 anticipation that the GCR and base rate increases will have been granted and thus
18 make it possible to find new participants. **Absent the unlikely commitment of**
19 **new participants, Morgan Guaranty, on its own, may or may not elect to**

2 PNC Bank had previously informed me that, based upon the unanimous vote of its
credit committee, it was withdrawing its participation in the Morgan Guaranty letter
of credit.

1 extend the letter of credit but in no event will that extension be for an amount
2 in excess of \$50 million. This will be the first result of a failure to receive GCR
3 and base rate relief.

4 c. **Substantially increased cost of funds** - Even if and when PGW were to return to
5 investment-grade status at a point in time in the future, the credit markets would
6 continue for some time to extract an interest rate premium on PGW bonds. In my
7 opinion (which is substantially based upon the experience of the City of
8 Philadelphia when it finally returned to investment-grade status and had access to
9 the public credit markets), the markets will demand interest rates higher than
10 those paid on comparable bonds for at least five years following the return to
11 investment-grade status. This premium may begin in the range of 50 basis points
12 and decline over time. That additional cost would be borne by PGW's rate payers
13 for years to come. Additionally, PGW would be forced to pay a premium when it
14 attempted to obtain municipal bond insurance to improve the marketability of its
15 bonds. That additional premium could be as much as 100 basis points. For
16 example on a \$75 million bond issue, this would translate into an added cost of
17 \$7,500,000 in increased insurance premiums alone. This conclusion is again based
18 upon the experience of the City of Philadelphia that was required to pay a bond
19 insurance premium of 125 basis points when it first returned to investment-grade
20 status and now routinely pays insurance premiums of 25 basis points.

21 The investment-grade bond rating would be lost because the rating
22 agencies would view the City's contributions as a one-time fix rather than a

1 systemic improvement to PGW's financial condition. The rating agencies are
2 well aware of the fact that the City is not in a position to maintain this level of
3 financial commitment to PGW without severely stressing its own financial well-
4 being and, in fact, will be prevented from doing so by the Pennsylvania
5 Intergovernmental Cooperation Authority, the body that oversees the City's
6 financial affairs. In addition, the rating agencies would view such a City bailout
7 as PGW using up of the only "life preserver" available to PGW in the event that
8 its financial projections understate its case or income results (e.g., PGW
9 experiences a considerably warmer than normal winter).

10 In my opinion, the rating agency analysis and conclusion in this instance
11 will not only focus upon the fact that the bond covenants had been met, but also
12 upon whether the Public Utility Commission clearly demonstrates a willingness to
13 meet its legal obligation to grant rates sufficient to permit PGW to meet its bond
14 covenants. It is important to PGW and its customers that the correct signal be
15 sent to PGW's creditors.

16 **II. SPECIFIC ANALYSES OF PGW BOND COVENANTS**

17 **Q. ARE YOU FAMILIAR WITH THE RATE COVENANT THAT IS CONTAINED**
18 **IN PGW'S BOND ORDINANCES?**

19 A. Yes.

20 **Q. HOW HAVE YOU BECOME FAMILIAR WITH THEM?**

21 A. In the course of my work with PGW during the past eight years, I have read and worked
22 with their bond documents on many occasions.

1 **Q. EXPLAIN THESE COVENANTS AS YOU UNDERSTAND THEM.**

2 A. The major elements of the rate covenants require PGW to set rates and charges at a level
3 that generates revenue that is sufficient to:

- 4 1) pay the costs of operating and maintaining PGW (the "rate covenant");
- 5 2) pay the interest and principal, when due, of outstanding PGW revenue bonds;
- 6 3) after operating expenses have been met, provide at least 1.5x coverage of the debt
7 service on outstanding PGW revenue bonds (its "coverage" covenant); and
- 8 4) pay principal and interest on subordinated bonds, including interest on the
9 commercial paper (Nos. 2 and 4 are its debt service covenants).

10 **Q. EXPLAIN WHAT PGW MUST DO TO AVOID A DEFAULT.**

11 A. To avoid a technical default of its "rate covenant," it needs to have collected sufficient
12 revenue in that year to cover all of its operating expenses including all of its debt service
13 obligations, but not including its payment obligation to the City. In addition, PGW must
14 satisfy its covenants associated with its "debt service" and "coverage." A monetary
15 default would occur if PGW failed to pay timely principal and/or interest on its revenue
16 bonds. A technical default would occur if PGW paid principal and interest timely, but
17 did not produce sufficient revenue from rates to cover all of its net operating expenses
18 (which does not include its City payment) and provide the mandated 1.5x debt service
19 coverage from revenues available after the payment of operating and maintenance
20 expenses.

21 **Q. HAVE YOU REVIEWED MR. KNUDSEN'S TESTIMONY?**

22 A. Yes.

1 Q. **BASED UPON MR. KNUDSEN'S FINANCIAL PRESENTATION AND**
2 **ASSUMING IT TO BE ACCURATE, WHAT WOULD BE THE EFFECT ON**
3 **PGW'S ABILITY TO MEET ITS BOND COVENANTS IF PGW DOES NOT**
4 **RECEIVE ADDITIONAL RATE RELIEF?**

5 A. Without rate relief, PGW would be in technical default of its "rate" covenant at the end of
6 August, 2001 because it would end the year with a negative income level of over \$100
7 million, over and above its commercial paper borrowing. (PGW St. 1.0, App. B). Even if
8 PGW obtained a GCR increase but no base rate relief, it would, at the end of the year,
9 still be over almost \$17 million short of covering its expenses in 2000-01, even with its
10 ability to borrow from its commercial paper line of credit.

11 Q. **WITHOUT RATE RELIEF WILL PGW BE ABLE TO MEET ITS COVERAGE**
12 **COVENANTS?**

13 A. Mr. Knudsen's financial presentation indicates that PGW will barely make its coverage
14 covenant at the end of fiscal year 1999-2000. Without any rate relief PGW clearly would
15 not be able to meet its coverage covenants at the end of August 2001. It would also fail
16 its coverage test (for its 1998 revenue bonds) even if it obtained an immediate GCR
17 increase. Even with interim rate relief, PGW's ability to make coverages will not be
18 without risk. This is because Mr. Knudsen's presentation makes several crucial
19 assumptions. Most importantly, he assumes that weather will be normal (i.e., 4,600
20 degree days³). Any deviation from that — whether warmer or colder — will result in, at
21 a minimum, cash flow difficulties and, **if warmer, a huge loss of income as well.**

22 Q. **WHAT WOULD BE THE EFFECT IF PGW RECEIVED RATE RELIEF IN**

PGW's proposed budget forecasts a marginal reduction in revenues of \$4 million to reflect a warmer heating season.

1 **LATE 2001 RATHER THAN IN NOVEMBER 2000?**

2 A. If PGW obtained permanent rate relief in the late 3rd or 4th Quarter 2001, a technical
3 default would have occurred or have been projected. This would result in the bond rating
4 degradation and other negative consequences I have described. In any event, it would
5 likely delay PGW's ability to sell the long-term debt it is counting on in June, 2001, with
6 very negative consequences on its cash flow.

7 **Q. WHAT WOULD BE THE OVERALL CONSEQUENCES TO PGW AND ITS**
8 **CUSTOMERS IF PGW FOUND ITSELF IN TECHNICAL DEFAULT OF ITS**
9 **COVENANTS?**

10 A. As noted above, PGW's bonds would be down-graded to junk bond status. Access to the
11 capital markets would be eliminated. Even upon an ultimate return to investment-grade
12 status, interest rate premiums would be significant and would add to the cost to carry
13 PGW's debt for years to come. Most immediately, there would, in my opinion, be a
14 staggering cash crisis that would threaten the ongoing operation of PGW as a result of an
15 inability to retain the cash life line of the commercial paper program.

16 **Q. ARE YOU FAMILIAR WITH THE INVESTMENT COMMUNITY AND THE**
17 **RATING AGENCIES THAT FOLLOW ISSUERS LIKE PGW?**

18 A. Yes. Working with the investment community and the rating agencies is an essential
19 element of my job as a financial advisor. I work with these institutions on virtually a
20 daily basis.

21 **Q. IN YOUR OPINION, HOW WOULD INVESTORS AND THE RATING**
22 **AGENCIES RESPOND IF PGW WERE UNABLE TO SECURE SUFFICIENT**
23 **RATE RELIEF IN A TIMELY FASHION?**

24 A. In the secondary market, investors will either experience a loss in the value of the PGW

1 bonds they already own (whether or not that loss is immediately realized) and potential
2 investors will only buy PGW bonds if their yield is sufficiently high to overcome the risk
3 of non-payment and lack of liquidity (i.e., the ability to resell the bonds to someone else
4 in the future). As I have noted above, I believe that PGW will not itself pay an immediate
5 interest rate penalty since I have concluded PGW will not be in a position to issue new
6 bonds after the decline to junk bond status that I believe will follow a failure to secure
7 sufficient and timely rate relief. Standard & Poor's Corporation, for example, has
8 recently placed PGW's credit on their Credit Watch with Negative implications. Their
9 report on PGW, dated July 21, 2000, explicitly states that "rate relief is needed by this
10 fall" and "to preserve its ratings, PGW will need to obtain rate relief" A copy of
11 that report is attached hereto (Appendix A). Both Moody's and Fitch IBCA are closely
12 monitoring the rate increase situation and there is no doubt that each would reduce
13 PGW's rating absent the requested rate relief.

14 **Q. WOULD THERE BE AN EFFECT ON THE BOND RATING OR INVESTMENT**
15 **VIEW REGARDING OTHER TAX-EXEMPT INVESTMENTS IN THE**
16 **COMMONWEALTH AS THE RESULT OF A TECHNICAL DEFAULT BY**
17 **PGW?**

18 A. The secondary impact of a PGW technical default would be felt first by the City of
19 Philadelphia. The City has spent the past nine years re-establishing its financial
20 condition. A technical default by one of its related entities would not reflect well upon
21 the City. For example, the City believes that it is a candidate for a rating increase from
22 BBB to BBB+ at Standard & Poor's. This rating increase would result in a reduced cost
23 of capital to the City. A technical default of PGW might well imperil that increase. From

1 the point of view of the Commonwealth, I do not believe there would be a direct or
2 *immediate cost, but I do believe, just as the technical default of the Pennsylvania Housing*
3 Finance Authority in the mid-1970's raised questions for the Commonwealth, the failure
4 of the PUC to act to grant necessary rate relief might well raise questions for other state
5 financing entities.

6 **Q. HOW WOULD THE INVESTMENT COMMUNITY/RATING AGENCIES**
7 **RESPOND IF PGW HAD TO GET A SHORT-TERM LOAN FROM THE CITY**
8 **TO AVOID A TECHNICAL DEFAULT?**

9 A. A loan from the City to PGW would certainly help PGW's cash flow situation but a loan
10 (as opposed to an outright, unconditional grant) would not be "Project Revenues" under
11 the terms of the rate covenant and, therefore, could not be counted toward meeting the
12 rating covenant requirements. A loan from the City would not help PGW, avoid a
technical default.

14 **Q. DESCRIBE YOUR UNDERSTANDING OF PGW'S FINANCIAL OBLIGATIONS**
15 **TO THE CITY.**

16 A. I understand that PGW has a contractual obligation to make an annual payment of \$18
17 million to the City and that that payment is permitted (but not required) under PGW's
18 bond ordinance.

19 **Q. IF PGW WERE ABLE TO AVOID ITS OBLIGATION TO MAKE THE**
20 **PAYMENT TO THE CITY, HOW WOULD THIS AFFECT ITS ABILITY TO**
21 **MAINTAIN ITS BOND COVENANTS?**

22 A. I do not believe that a failure to pay the City would result in a violation of PGW's rate
23 covenant because it is a contractual obligation rather than part of the rate covenant. By
24 the same token, however, relief from making the City payment does not translate directly

1 into the availability of additional revenues for the purpose of calculating compliance with
2 the rate covenant. PGW would have to pay the \$18 million to the City and have the City
3 grant it back to PGW as "Project Revenues" for the \$18 million to accrue to PGW's
4 benefit.

5 **Q. WHAT WOULD THE IMPACT ON PGW BE IF IT WERE ABLE TO MEET ITS**
6 **BOND COVENANTS DURING FISCAL YEAR 2000-2001 AS A RESULT OF**
7 **SOME COMBINATION OF THE CITY'S FORGIVENESS OF THE \$18**
8 **MILLION ANNUAL PAYMENT AND A CITY LOAN IN THE AMOUNT OF**
9 **APPROXIMATELY \$20 MILLION?**

10 A. In my opinion, PGW's ability to satisfy technically its bond covenants (e.g., the payment
11 of operating and maintenance expenses and the satisfaction of the debt service coverage
12 test) as a result of one time payments from the City necessitated by the unwillingness or
13 inability for some reason of the Public Utility Commission to grant rate relief would
14 result in virtually the same set of outcomes described above. Specifically, PGW would
15 be viewed very negatively by the rating agencies. One of their greatest concerns in rating
16 utility bonds is the potential responsiveness of a regulatory body to provide rate relief to
17 enable bond covenants to be satisfied. The failure of the Public Utility Commission to
18 grant such requested relief would be a substantial negative in their assessment of PGW's
19 creditworthiness.

20 **Q. ARE THERE OTHER CONSEQUENCES IF PGW DOES NOT MEET ITS**
21 **FINANCIAL OBLIGATION TO THE CITY?**

22 A. The financial consequences of PGW's failure to pay the City would, in the first instance,
23 be felt by the City. In its Ninth Five-Year Plan (Fiscal Years 2001-2005), the City has
24 anticipated a total of \$90 million of revenues from PGW. The loss of some or all of this

1 revenue would be a significant financial hardship for the City. PGW would also suffer
2 certain negative consequences of a failure to make the required payments. While this
3 would not precipitate a technical bond default, it would eliminate the comfort that the
4 rating agencies, bond holders and credit enhancers have always felt in knowing that the
5 need to make the City payment (after debt service had been fully paid) was a "cushion"
6 against a monetary default. Failure to make the payment even once would signal the
7 City's willingness to forgive the payment and hence remove the assurance of the cushion
8 that had been provided.

9 **Q. IN YOUR OPINION, FROM THE STANDPOINT OF PGW'S STATUS WITH**
10 **MUNICIPAL BOND INVESTORS, THE CAPITAL MARKETS GENERALLY**
11 **AND THE RATING AGENCIES SPECIFICALLY, WHAT WOULD BE THE**
12 **BEST COURSE TO FOLLOW?**

13 A. Without a doubt or hesitation, the best course for PGW is to obtain both the full amount
14 of interim rate relief and the increase to the GCR that are the subject of the pending
15 petition. This rate relief will permit stabilized operations to be sustained while a longer-
16 term rate strategy and permanent rate structure for PGW is developed and approved.

17 **Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?**

18 A. Yes it does.

APPENDIX A

Ratings Services
 55 Water Street 38th Floor
 New York, NY 10041-0003
 Tel 212 478-2064
 Reference No.:

Curtis Moulton
 Managing Director
 Infrastructure Finance Ratings

Standard & Poor's

A Division of The McGraw-Hill Companies



July 20, 2000

Mr. Kumar Kishinchand, P.E.
 President & Chief Executive Officer
 Philadelphia Gas Works
 800 W. Montgomery Avenue
 Philadelphia, PA 19122

Re: *\$355,825,000 Philadelphia Gas Works, Revenue Bonds*
\$103,550,000 Philadelphia Gas Works, Revenue Bonds, 1998 General Ordinance,
Series B (SPUR)
\$160,660,000 Philadelphia Gas Works, Revenue Bonds, 1998 General Ordinance,
Series A (SPUR)
\$112,245,000 Philadelphia Gas Works, Revenue Bonds, Second Series (SPUR)
\$61,960,000 Philadelphia Gas Works, Revenue Bonds, Sixteenth Series (SPUR)

Dear Mr. Kishinchand:

As part of Standard & Poor's ongoing secondary market surveillance, we have reviewed the latest financial report and other relevant data on the above debt. After such review, we have placed the rating of 'BBB' on CreditWatch with negative implications due to PGW's very weak cash flows arising from a convergence of budgeting that did not reflect the trend toward warmer winters; historic ongoing problems with high revenue receivables; and the faulty implementation of a new billing system.

Please continue to send updated information including annual audit reports and budgets, and if applicable, updated operating and construction progress data, addressed to:

Standard & Poor's Ratings Services
Public Finance Secondary Market Surveillance
55 Water Street, Muni Drop Box No. 1, 38-2-2
New York, NY 10041-0003

If you have any questions please feel free to contact Jodi Hecht at (212) 438-2019.

Thank you for continuing your relationship with Standard & Poor's Ratings Services.

Very truly yours,

Curtis Moulton

cc: Barbara C. Bisgajer, Public Financial Management

**STANDARD
& POOR'S**



INFRASTRUCTURE FINANCE

Credit Profile

Outstanding Ratings

\$794.2 mil rev bnds,
varies series **BBB**
\$20.0 mil rev bnds,
subordinate, 1998 gen ordinance,
series C **BBB-**

Revised: CreditWatch

Negative

Analysts:

Jodi Hecht, New York
(212) 435-2019

Elizabeth Fitzgerald Smith, Chicago
(312) 669-2172

PHILADELPHIA GAS WORKS, PENNSYLVANIA

Rationale

The rating action reflects PGW's very weak cash flows arising from a convergence of budgeting that did not reflect the trend toward warmer winters; historic ongoing problems with high revenue receivables; and the faulty implementation of a new billing system. Rate relief is needed by this fall. The tariffs that PGW has filed before the state Public Utilities Commission are projected to generate an additional \$52 million and increase base rates and monthly charges by 10%. The proposed tariff will increase rates to above-average in a service area with below-average income levels.

Rate applications to the PUC are typically resolved over a nine-month period, but it is not clear that PGW's application, which was filed in July 2000, will be approved before the 2000 winter heating season that is a critical component of the utility's cash flow.

Other credit weaknesses include the following:

--Potentially above average gas rates if PGW's five year plan is not fully implemented, especially in a market that will be open to retail choice beginning in fiscal 2004;

--Aggressive future projections which assume normal weather conditions that have not been realized in recent years and productivity cost savings, ranging from 5% to 10% of expenditures;

--Deferred capital spending limited by declining excess cash flow; and

--Uncertainty regarding the long term management structure and operating strategy.

These are offset by sound legal provisions, which require, on an accrual basis, 1.50 times (x) coverage on the senior bonds, in spite of the lowered revenue requirement from the creation of a subordinate lien.

The bonds are secured by the net revenues of the gas system. Under provisions of the Natural Gas Choice and Competition Act, which was signed into law in June 1999 by Gov. Tom Ridge, after July 1, 2000 the rate relief and customer service functions for PGW were to be regulated by the PUC. Previously, these powers belonged to the Philadelphia Gas Commission (PGC). The PGC maintains the authority to approve operating and capital budgets, while the city of Philadelphia remains the owner of the system.

PGW filed a rate increase in July 2000, which they would like to take effect before the 2000 winter heating season. However, the PUC's approval process takes nine months to complete. PGW requested that the PUC allow this rate filing to be reviewed by PGW, which has a shorter process, and would enable the new rates to be effective by October 2000. Without the rate increase in place, the ending cash position for fiscal 2001 is projected to be negative \$16.9 million (approximately 4% of operating expenditures).

The 1998 indenture created senior and subordinate liens. The senior lien rate

PHILADELPHIA GAS WORKS, PENNSYLVANIA

covenant remains at 1.50 times (x) annual debt service, while the subordinate lien and refunded 1975 bond rate covenant require only 1x coverage of annual debt service. While 1.5x coverage is sound for a triple-B-rated gas system, debt service coverage of all obligations after the \$18 million annual transfer to the city was less than 1 times (x) in fiscals 1998 and 1999. The payment is made throughout the year. However, the city had been willing to defer the payment until year end, providing some latitude to address unanticipated year-end financial needs.

Minimal coverage has been a historic problem. PGW implemented non-recurring actions in fiscals 1995, 1998, and 1999 to meet its rate covenant. Steps were not needed in fiscal 2000, because the calculation of the rate covenant was liberalized under the provisions of the 1998 indenture. Another warmer-than-budgeted winter in 2000 led to reduced gas sales, and revenues were 15% lower than budget. Debt service coverage in fiscal 1999 of all revenue bonds was 1.11 times (x), with estimated fiscal 2000 results generating 1.31x DSC. However, when coverage of all fixed payments—including lease payments—is calculated, fiscal 1999 DSC was a minimal 1.01x, and fiscal 2000 DSC is 1.20x. Financial projections, while somewhat aggressive, assume a normal number of degree days, which has not occurred in the past three years; approval of the rate increase; discontinuation of the senior citizen discount program; and productivity and cost savings that are expected to be implemented under a new labor contract beginning in late fiscal 2001.

Over the past three years, including estimates for fiscal 2000, operating expenses have exceeded operating revenues, reducing reserves and cash balances. In fiscal 2000, no excess revenues were generated to contribute to ongoing and long-term capital needs. The revised five-year fiscal 2002-2006 capital program totals \$266.4 million—a \$91 million decline from the previous program. While current management believes this program is better targeted to address immediate needs, it is unclear that the ongoing investment has been adequately made in the system. Funding

for this program includes a \$75 million bond issue next fiscal year (28% of the program) with the balance (72%) funded from internally generated funds. Funding for the capital program is largely dependent on PGW's ability to implement the five-year operating plan, as projected.

Outlook

To preserve its ratings, PGW will need to obtain rate relief and implement the projected productivity savings ranging between 5% to 10% annually. Cost reductions are critical to PGW's ability to fund future capital needs and maintain competitive commodity charges to retain customers following the introduction of customer choice in fiscal 2004.

EXHIBIT BB-2

DOCKET NO. R-00006042

City of Philadelphia

Bill No. 980232

Certified Copy

(cc) a statement that, in the opinion of the Engineer, the Gas Works are in good operating condition or that adequate steps are being taken to make them so.

(b) It will, at a minimum, impose, charge and collect in each Fiscal Year such gas rates and charges as shall, together with all other Gas Works Revenues to be received in such Fiscal Year, equal not less than the greater of:

A. The sum of:

(i) all Net Operating Expenses payable during such Fiscal Year;

(ii) all principal of and interest on bonds issued and outstanding under the 1975 Ordinance payable during such Fiscal Year and amounts required to be paid into the sinking fund reserve under the 1975 Ordinance during such Fiscal Year;

(iii) 150% of the amount required to pay Sinking Fund deposits required during such Fiscal Year in respect of all Outstanding Senior Bonds and 100% of the amounts payable in respect of the Prior Obligations during such Fiscal Year;

(iv) the amount required to pay Sinking Fund deposits required during such Fiscal Year in respect of all Outstanding Subordinate Bonds and other obligations of the Gas Works on a parity with Subordinate Bonds payable during such Fiscal Year;

(v) the amount, if any, required to be paid into the Sinking Fund Reserve during such Fiscal Year;

(vi) the Rebate Amount required to be paid to

City of Philadelphia

Bill No. 980232

Certified Copy

United States during such Fiscal Year; and

(vii) the amounts required to be paid to the issuers of Credit Facilities and the providers of Qualified Swaps and Exchange Agreements during such Fiscal Year; or

B. The sum of:

(i) all Net Operating Expenses payable during such Fiscal Year;

(ii) all principal of and interest on bonds issued and outstanding under the 1975 Ordinance payable during such Fiscal Year and amounts required to be paid into the sinking fund reserve under the 1975 Ordinance during such Fiscal Year;

(iii) all Sinking Fund deposits required during such Fiscal Year in respect of all Outstanding Bonds and all amounts payable in respect of obligations of the Gas Works which are on a parity with any of the Bonds and in respect of general obligation bonds issued for improvements to the Gas Works and all amounts, if any, required during such Fiscal Year to be paid into the Sinking Fund Reserve;

(iv) the Rebate Amount required to be paid to the United States during such Fiscal Year; and

(v) the amounts required to be paid to the issuers of Credit Facilities and the providers of Qualified Swaps and Exchange Agreements during such Fiscal Year.

For purposes of estimating Sinking Fund deposits with respect to Interim Debt and Variable Rate Bonds, the City shall be entitled to assume that (1) Interim Debt will be amortized

City of Philadelp

Bill No. 980232

over a period of up to the maximum term but not in excess of the useful life of the assets on an approximately level debt service basis and bear interest at the average interest rate on bonds of a similar maturity and credit rating (without any credit enhancement) as the Bonds Outstanding under this Ordinance and (2) Variable Rate Bonds will bear interest at a rate equal to the average interest rate on such Variable Rate Bonds during the period of twenty-four (24) consecutive calendar months immediately preceding the date of calculation or during such shorter period that such Variable Rate Bonds have been Outstanding.

The Gas Commission is hereby authorized and directed, without further authorization, to impose and charge and to collect, or cause to be collected, rents, rates and charges which shall be sufficient in each Fiscal Year to comply with the foregoing Rate Covenant.

Notwithstanding the requirements of this Section 4.03(b) and the pledge under Section 4.02, the City may, at such time as there are no bonds outstanding under the 1975 Ordinance, pursuant to a Supplemental Ordinance, securitize and sell that portion of the Gas Works rents, rates and charges which relate to assets which are designated as non-performing by the Gas Commission and as to which the Gas Commission has designated specific rents, rates or charges; provided that prior to any such securitization and sale the City delivers to the Fiscal Agent (1) an Engineer's report including a statement that, for the three year period following such securitization and sale, the Gas Works rents, rates and charges (excluding those securitized and sold) are currently and will be sufficient to comply with the Rate Covenant set forth in Section 4.03(b) applied as if the percentage in subsection A(iii) were 175% rather than 150% and (2) an opinion of Bond Counsel that such securitization and sale will not adversely affect the exclusion

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

JOSEPH R. BOGDONAVAGE

ON BEHALF OF
PHILADELPHIA GAS WORKS

PHILADELPHIA GAS WORKS
BASE RATE PROCEEDING

DOCKET NO. R-00006042

JANUARY, 2001

1 **Q. PLEASE STATE YOUR NAME AND POSITION WITH THE COMPANY.**

2 A. My name is Joseph R. Bogdonavage. My position is Senior Vice President,
3 Finance.

4 **Q. HOW LONG HAVE YOU HELD THIS POSITION?**

5 A. I was promoted to this position in December 2000.

6 **Q. PLEASE SUMMARIZE YOUR WORK EXPERIENCE.**

7 A. I have been employed with PGW since 1973, during which time I have held
8 various positions in the Finance area. I most recently held the position of Director
9 – Budget & Financial Forecasting. My principal responsibilities included the
10 preparation of the financial areas for the operating and capital budgets, review of
11 operating budgets prepared by the individual departments, and the coordination,
12 analysis, issuance and overall control of the complete annual Operating Budget
13 filing.

14 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND.**

15 A. I received a Bachelor's Degree in Accounting from Temple University in 1972.

16 **Q. HAVE YOU EVER TESTIFIED BEFORE ANY REGULATORY AGENCIES?**

17 A. Yes, I have testified before the Philadelphia Gas Commission ("PGC") on
18 numerous occasions. I have most recently presented written direct testimony and
19 testified before the Philadelphia Gas Commission on matters associated with
20 PGW's 2000-01 Operating Budget proceedings in 2000.

21 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THESE PROCEEDINGS?**

22 A. The purpose of my testimony is to: 1) provide the documentation and supporting
23 methodology for the schedules and exhibits that are included in the filing, provide

1 detailed information regarding certain income and expense items and, where
2 necessary, explain the reasons for variations between the fiscal periods; 2)
3 describe the changes that have been incorporated into the revised filing including
4 the proposed \$65.0 million base rate increase that is the subject of the base rate
5 increase request; 3) comment upon PGW's current financial condition for Fiscal
6 Year 2000-01, in light of known actual information and changes to PGW's Gas
7 Cost Rate and the Interim Base Rate order; 4) comment on PGW's Five Year
8 Forecast that is also included in this filing which shows the impact that the
9 proposed \$65.0 million base rate increase has on PGW's longer term financial
10 condition.

11 **Q. MR. BOGDONAVAGE, ARE YOU SPONSORING THE FINANCIAL DATA**
12 **SUPPORTING PGW'S CLAIM FOR A \$65 MILLION BASE RATE INCREASE?**

13
14 A. Yes. Those schedules are displayed in Part 2 of Volume II of the Company's
15 filing and reflect PGW's "fully forecasted" fiscal year 2000-01 projection. Just as
16 PGW's filing in the interim rate proceeding, this presentation utilizes as a starting
17 point PGW's proposed 2000-01 fiscal year budget that was initially prepared and
18 submitted in the summer of 2000.

19 **Q. MR. BOGDONAVAGE COULD YOU PLEASE EXPLAIN THE MAJOR**
20 **CHANGES THAT ARE REFLECTED IN THE MOST RECENT UPDATE OF**
21 **PGW'S FULLY FORECASTED FISCAL YEAR 2000-01 OPERATING**
22 **BUDGET?**

23
24 A. The most significant factor that affected the financial projections was the
25 unprecedented rise in natural gas prices and their impact on PGW's Gas Cost
26 Rate, Revenues, Accounts Receivable, Bad debt expense and working capital
27 requirements for natural gas storage inventories. PGW's natural gas utilized

1 expense increased by \$100.0 million compared to the original filing. This added
2 cost had a dire impact on PGW's accounts receivable and bad debt projections.
3 The original estimate of accounts receivable of \$138.0 million with a bad debt
4 expense of \$46.0 million is now anticipated to be \$186.6 million and \$65.3
5 million, respectively. The additional bad debt expense is one of the main
6 components contributing to the rise in the proposed base rate increase from
7 \$52.0 million to \$65.0 million. In addition, PGW has now reduced its degree day
8 forecast for normal weather to 4,555 a 1% decline from the previously utilized
9 level of 4,600. This change was the result of using a 30 year historical average
10 for degree days. The use of the lower level of degree days resulted in
11 approximately \$1.6 million less in marginal "normalized" revenues and was the
12 impetus for removing PGW's original \$4.0 million weather adjustment from the
13 current filing. Also, PGW does not anticipate being able to make the necessary
14 changes in the current Senior Citizen Discount program to effectuate a revenue
15 source that will impact the 2000-01 Fiscal Year.

16 PGW has also included additional expenses in the revised 2000-01 Fiscal Year
17 Operating Budget reflecting more recent cost estimates on projected savings and
18 expenditures. PGW increased its Health Insurance costs by \$1.0 million due to a
19 more realistic estimate of the premium savings that can be achieved by changes
20 to active and retired plan participants during the current period. Additional
21 expenditures are expected as a result of amortizing non-recurring costs related to
22 billing system improvements during the recently completed 1999-00 fiscal period
23 totaling \$.6 million. Legal costs are expected to rise by \$.5 million associated

1 with the protracted proceedings before at the Public Utility Commission and the
2 courts regarding PGW's gas cost rate filings and interim and permanent base
3 rate cases. Expenditures associated with on-going environmental remediation at
4 PGW facilities resulted in the inclusion of \$.5 million in PGW's revised Operating
5 Budget Filing.

6 The revised filing includes the utilization of actual information for the 1999-00
7 Fiscal period; although no final audited statements are available as of this date,
8 PGW does not anticipate any material change to the actual information
9 presented in the supporting documents. PGW in the recently completed fiscal
10 year met its bond indenture requirements and achieved 1.72x coverage on its
11 1975 Ordinance debt service and 1.59x coverage on its 1998 Ordinance debt
12 service. On a more significant note, PGW's outstanding commercial paper
13 balance was at a level of \$97.0 million, with a cash balance of only \$8.4 million at
14 August 31, 2000. This leaves PGW with little flexibility in attempting to fund
15 working capital requirements, as they become necessary.

16 The above mentioned items are the significant changes that have been reflected
17 in the January 5, 2001 filing.

18 **Q. MR. BOGDONAVAGE WERE THE PA. PUBLIC UTILITY COMMISSION TO**
19 **GRANT PGW THE \$65.0 MILLION BASE RATE INCREASE WOULD THERE**
20 **BE ENOUGH OF A SUBSTANTIVE IMPROVEMENT IN THE FUNDAMENTAL**
21 **FINANCIAL OUTLOOK TO ALLOW PGW ACCESS TO FINANCIAL**
22 **MARKETS?**

23
24 **A.** If the rate increase was in effect for the full period of the 2000-01 fiscal period,
25 and PGW was permitted to adjust its Gas Cost Rate on a timely basis, I would
26 expect that PGW would have access to the financial marketplace at reasonable

1 rates to sell long term bonds and renew its short term commercial paper
2 program. Ms. Barbara Bisgaier, PGW's financial advisor has presented
3 additional testimony regarding PGW's current and projected financial condition
4 including possible rating downgrades and the inability to access financial markets
5 if PGW is not granted timely and adequate rate relief. However, PGW is
6 currently facing a severe cash flow problem as a result of delayed
7 implementation of changes to its Gas Cost Rate charge, the inadequate rate
8 relief granted in the interim proceeding and higher unrecovered bad debt
9 expenses and cash needs owing to higher gas costs. PGW has used its limited
10 sources of funding to pay for the escalating cost of natural gas over the last
11 several months, whether to procure natural gas storage inventories or for flowing
12 gas requirements. As a result of this situation, PGW finds itself in a tenuous
13 position of having to borrow \$45.0 million from the City of Philadelphia to alleviate
14 the cash shortfall. PGW needs to enter the financial market in late spring of 2001
15 to sell a long term revenue bond to fund its on-going capital programs and, at the
16 same time, get a renewal of its short term Commercial Paper program. To assure
17 access to these financial markets PGW must demonstrate sufficient revenues
18 and cash receipts to the financial community. The proposed \$65.0 million base
19 rate increase along with the ability to change the gas cost rate on a timely basis
20 should be sufficient to allow PGW access to the funding sources it so desperately
21 needs. With sufficient revenues as a result of the rate increase on an annualized
22 basis, PGW will be able to start to change the fundamental financial outlook by
23 reducing its reliance on the short term commercial paper program as a

1 permanent part of its recent financial structure. This will allow PGW to utilize its
2 short term debt to truly fund working capital requirements, as they become
3 necessary due to the seasonal nature of its revenues and customer receipts.

4 **Q. HAVE YOU ALSO SUBMITTED FIRST QUARTER UPDATED ACTUAL AND**
5 **ACTUAL PROJECTED SCENARIOS FOR THE 2000-01 FISCAL YEAR?**

6
7 A. Yes. They are included as Part One of Volume II. PGW has provided supporting
8 documentation that includes two different scenarios involving the 2000-01 Fiscal
9 Year. Each of these cases involves the use of the latest information for gas
10 sales and natural gas prices and deteriorating customer payment patterns as a
11 result of the escalating bills reflecting the higher cost of gas and the colder
12 weather.

13 The first scenario incorporates no base rate increase during the 2000-01 fiscal
14 period, but assumes higher sales as a result of the colder weather experienced
15 through the period. This results in added marginal revenues of \$4.0 million.
16 However, with no substantive rate relief, PGW most likely will have no ability to
17 enter the long term credit market and will thus be unable to fully fund its capital
18 construction program. It also will most likely be unable to renew its short term
19 commercial paper program. More importantly due to insufficient cash flow, the
20 repayment of the outstanding \$97.0 million will not be made, and it will result in
21 PGW having to draw upon the letter of credit which will convert to a taxable loan
22 and have an expedited repayment term. Under the scenario (which is where
23 PGW is at presently), PGW has no way of repaying this obligation in full at the
24 time it is due. Even if there were some way of repaying this obligation without
25 the renewal of this program, PGW would be unable to meet its other obligations

1 including natural gas and debt service payments. The \$45.0 million City loan
2 would be fully drawn and PGW would end the year with a large, \$34.1 million,
3 negative cash balance and fail to meet its statutory bond indenture requirements.
4 As a way of trying to alleviate the cash flow problem PGW would have to
5 severely curtail its capital construction programs. PGW will have no way of
6 funding its continuing working capital needs to purchase natural gas storage
7 inventories and would cease being an on-going enterprise.

8 The second case assumes that the \$11.0 million interim base rate increase is in
9 effect. It is highly unlikely that this level of rate relief would be enough to allow
10 PGW to enter the financial credit markets both short and long term. As a result
11 PGW again would be unable to repay the outstanding level of \$97.0 million of
12 commercial paper. PGW again has no way of repaying this obligation in full at the
13 time it is due. PGW would again be unable to meet its other obligations. Although
14 on paper it would barely achieve the mandatory bond indenture requirements, it
15 would end the year again with a \$25.8 million negative cash balance and the
16 \$45.0 million City loan would be fully drawn. PGW would again try to conserve
17 cash by curtailing its capital construction programs or by not being able to make
18 necessary gas purchases. PGW as in the previous scenario would for all
19 purposes cease to be a viable on-going enterprise.

20 **Q. HAVE YOU PREPARED A FIVE YEAR FORECAST OF PGW'S FINANCIAL**
21 **RESULTS?**

22
23 A. Yes. This is a filing requirement of the PGC and we are presenting it to the PUC
24 as well. This analysis is Part 3 of Volume II.

1 Q. REGARDING THE FIVE YEAR FORECAST PRESENTED IN THE FILING
2 COULD YOU EXPLAIN SOME OF THE MAJOR ASSUMPTIONS THAT WERE
3 THE BASIS FOR THE FINANCIAL PROJECTIONS.
4

5 A. The major assumptions for the five year forecast are as follows: A \$65.0 million
6 permanent rate increase was assumed effective during the 2000-01 Fiscal period
7 continuing in place until the 2003-04 Fiscal Year when a \$20.0 million reduction
8 is proposed and remains at that level for the remainder of the period. Due to the
9 current situation were no interim rate increase is in place an update of the five
10 year forecast is contemplated that addresses the final outcome of rates in the
11 current period and the impact on the financial projections contained in the five
12 year forecast.

13 Natural gas prices were assumed to remain at the levels included in the 2000-01
14 fully forecasted test year (\$153 million higher than original budget) and not the
15 higher prices that are currently being experienced. These prices are assumed to
16 increase in FY 2003 and then decline substantially during the remaining period of
17 the forecast.

18 Current margins on customers were assumed to be maintained during the period
19 of deregulation. There is anticipated to be a substantial shift from firm and
20 interruptible load to transportation service after deregulation has occurred.

21 Marginal revenue loss is projected starting in FY 2001-02 and continuing
22 throughout the forecast due to reduced customer utilization resulting in more
23 energy efficient appliances.

1 Bad debt expense is expected to stabilize as customer billings decline over time
2 reflecting the lower natural gas prices anticipated combined with improved
3 collection efforts.

4 Cost savings are projected to rise from the \$13.0 million included in FY 2001, to
5 \$18.0 million in FY 2002, and rise to \$24.0 million annually throughout the
6 remaining forecast period.

7 Personnel levels are forecasted to continue to decline from an average level of
8 1,822 in FY 2001 to 1,650 in FY 2006, while wage increases of 2% annually were
9 included in the labor expenses effective in FY 2001-02.

10 A bond sale was assumed in FY 2001 with no plans for a future sale during the
11 forecast period. However, as a result of the delay in the base rate increase in FY
12 2001 at least one additional bond sale will be required to satisfy capital
13 construction requirements during the forecast period.

14 A declining level of outstanding commercial paper is anticipated during the
15 forecast period allowing PGW to utilize short term paper for working capital
16 requirements and not as a permanent part of the financial structure at PGW.
17 Cash balances were projected to range between \$11.0 million to \$17.0 million
18 during the five year period.

19 The forecast period due to the fully forecasted nature of the filing did not include
20 the \$45.0 million City loan as part of the financial projections. As was previously
21 mentioned when an update is prepared the latest available information will be
22 utilized when revising the five year forecast.

1 Q. **COULD YOU EXPLAIN THE BASIS FOR CALCULATING PGW'S BAD DEBT**
2 **AND UNCOLLECTIBLE RESERVE REQUIREMENT FOR FISCAL YEAR 2000-**
3 **01?**

4
5 A. PGW's calculates its reserve for bad debt requirements based on an automated
6 collectibility study that is usually performed several times during the year and at
7 fiscal year end. The study identifies each customer account with an amount due,
8 calculates payments on the account during the period, and compares the amount
9 paid with the amount due. The lower amount is considered the likely collectible
10 amount. The collectible amounts are totaled and subtracted from the total
11 receivable balance. The difference is the expected uncollectible balance. This
12 uncollectible balance is compared to the reserve balance in the general ledger
13 and adjustments are made as appropriate.

14 PGW has many customers who do not pay their amounts owed. An inordinate
15 amount of low income customers, less than efficient collection activities, and a
16 mandated collection moratorium have historically caused bad debt problems.
17 Problems with the new billing system have worsened these problems.

18 PGW's FYE 2000 bad debt reserve of \$102 million is \$35 million (52%) higher
19 than in FYE 1999 and over \$32 million (38%) higher than the historical 10 year
20 average of \$70 million. Bad debt expense in FY 2000 was \$54 million, a \$15
21 million (38%) increase over FY 1999 and a \$17 million (46%) increase over the
22 historical 10 year average of \$37 million.

23 This dramatic run up in bad debt expense is expected to repeat again in FY 2001
24 and later years. Steep increases in gas costs will result in higher bills to
25 customers who, in many households, already struggle to pay their gas bills. With

1 unprecedented billings, PGW expects unprecedented bad debt and reserve
2 requirements. Recent years statistics or historical averages may not be good
3 indicators for the actual bad debt expense in FY 2001 and later years.

4 Attached is the collectibility study used to calculate PGW's FY 2000 bad debt
5 reserve requirement. The "Grand Total" of \$203 million in the report agrees with
6 the total accounts receivable balance in the Billing and Customer Collection
7 System (BCCS). The receivable balances reported in the general ledger (\$141
8 million) as of August 31, 2000 are less than in BCCS because the CRP
9 customers' "frozen arrears" of approximately \$62 million are not included in the
10 general ledger totals.

11 **Q. DOES THIS COMPLETE YOUR TESTIMONY?**

12 **A. Yes it does.**

EXHIBIT JRB-1

DOCKET NO. R-00006042

PHILADELPHIA GAS WORKS
BAD DEBT EXPENSE & ACCOUNTS RECEIVABLE

(Dollars in Thousands)

<u>Fiscal Year</u> <u>Ended</u>	<u>Gas</u> <u>Revenues</u>	<u>Bad Debt</u> <u>Expense</u>	<u>Customer</u> <u>Accts. Rec.</u>	<u>Uncollect</u> <u>Reserve</u>	<u>Bad Debt</u> <u>%/ Revenue</u>	<u>Bad Debt</u> <u>%/ Accts. Rec</u>
6/30/78	\$238,024	\$5,169	\$39,891	(\$6,023)	2.17%	12.96%
6/30/79	248,027	5,251	45,721	(5,743)	2.12%	11.48%
6/30/80	326,750	5,539	47,200	(5,785)	1.70%	11.74%
6/30/81	419,712	15,977	91,931	(16,216)	3.81%	17.38%
6/30/82	488,510	27,131	104,005	(32,243)	5.55%	26.09%
8/31/83	494,757	26,990	77,718	(25,009)	5.46%	34.73%
8/31/84	525,028	25,441	71,781	(26,071)	4.85%	35.44%

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

CRAIG WHITE

ON BEHALF OF
PHILADELPHIA GAS WORKS

Docket No. R-00006042

RE: PHILADELPHIA GAS WORKS
BASE RATE PROCEEDING

JANUARY, 2001

1 Q. PLEASE STATE YOUR NAME AND POSITION WITH THE COMPANY.

2
3 A. My name is Craig White. My position is Senior Vice President, Marketing and
4 Supply Services.

5 Q. HOW LONG HAVE YOU HELD THIS POSITION?

6
7 A. I was promoted to this position in November 1999.

8 Q. PLEASE SUMMARIZE YOUR WORK EXPERIENCE.

9
10 A. I have been associated with PGW since 1980, during which time I have held the
11 following positions: Accounting Specialist, Office of VP, Finance; Demand
12 Analyst, Energy Planning & Forecasting; Planning Analyst, Corporate Planning &
13 Analysis; Federal Regulatory Specialist and Administrator, Federal Regulatory
14 Affairs, Gas Acquisitions & Federal Regulatory Affairs; Manager, Energy
15 Planning & Federal Regulatory Affairs; Vice President, Marketing/Economic and
16 New Business Development, and Senior Vice President, Marketing and Supply
17 Services.

18 Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND.

19
20 A. I received a Bachelor's Degree in Business from Kutztown University in 1978 and
21 a Master's Degree (MBA) in Finance/Management from Drexel University in
22 1986.

23 Q. HAVE YOU EVER PROVIDED TESTIMONY TO THIS COMMISSION BEFORE?

1 A. Yes. I have provided direct written testimony concerning PGW's Proposed 2000-
2 2001 Gas Cost Rate. I also submitted testimony on the allocation of the rate
3 increase in PGW's interim rate proceeding.

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

5 A. The purpose of my testimony is to: 1) describe the 30-year average degree day
6 analysis used to establish projected sales for the budgeted test year; 2) describe
7 the process used to develop fully forecasted test year or budgeted sales; 3)
8 support PGW's request for an increase in the General Service ("GS Rate")
9 Customer Charge for firm service Residential, Commercial and Industrial
10 customers as well as for firm service Municipal Service ("MS Rate") and firm
11 service Philadelphia Housing Authority ("PHA Rate") customers in order to bring
12 these rates more in line with their cost to serve and identify the volumetric rate
13 increase component of PGW's proposed \$65 million base rate increase; 4)
14 comment upon PGW's present method of recovering certain non-gas costs; 5)
15 propose a tariff modification to allow large industrial and commercial customers
16 to enter into non-standard rate arrangements with PGW; and 6) revise the tariff to
17 clarify the parameters for establishing the rates for customers.

18 **I. TOTAL DEGREE DAYS**

19 **Q. WHAT ASSUMPTIONS DID YOU MAKE IN PROJECTING SALES FOR PGW'S**
20 **FISCAL YEAR?**

21 A. PGW is proposing to utilize the most recent thirty year average heating season
22 degree days actually experienced in PGW's service territory. As shown in Exhibit
23

1 CW-1, that level is 4,555 degree days or 45 degree days less than the level
2 adopted by the PUC as a "normal level" for PGW in the interim rate proceeding.

3 **Q. WHY SHOULD THE NORMAL LEVEL OF BUDGETED OR "NORMALIZED"**
4 **DEGREE-DAYS BE REDUCED FROM 4,600 TO 4,555?**

5
6 A. The 4,555 degree day year is based on a simple average of Philadelphia
7 temperatures over the last 30 fiscal years from 1970-71 through 1999-2000, for
8 the months of September through May. (While there are a small number of
9 degree days recorded during the summer, they do not produce any heating load.)
10 Utilizing the 30-year methodology incorporates the recent three-year warming
11 trend in the context of a long-range average. (It should be noted that a 20-year
12 methodology would produce only 4,509 degree days.) The 45-degree day
13 difference in comparison to the 4,600 degree day average amounts to a change
14 of just less than 1%.

15 **II. TEST YEAR SALES**

16 **Q. WHAT ARE THE UNDERLYING ASSUMPTIONS FOR TEST YEAR SALES?**

17
18 A. In addition to assuming that gas usage will be based on the revised normal 4,555
19 Degree-Day temperature pattern, PGW made revised gas cost assumptions as it
20 did in the first quarterly GCR update which was filed on December 29, 2000.
21 However, the gas costs in this filing were based upon data available at the time
22 the Company prepared the underlying base information which differ from the data
23 available for the first quarterly GCR filing. The gas costs assumed in this

1 forecast are \$55.6 million higher than those reflected in PGW's \$97 million GCR
2 increase, which was approved by the PUC in November.

3 PGW also made a series of additional assumptions which are consistent with its
4 proposed operating budget that forms the basis for its \$65 million permanent
5 base rate increase request. These include the following:

- 6 1. LBS/BPS tariff sales are assumed to continue year-round, drawn from
7 seasonal supply and storage supplies.
- 8 2. Customer demand incorporates the Marketing Department's latest estimate of
9 additional load to be gained in FY 2000.
- 10 3. Unaccounted-for gas (calculated on a gross, send-out versus sales basis) will
11 be at a level of 3.6% calculated on firm gas only.
- 12 4. Customer Responsibility Program (CRP) anticipated total customer statistics
13 are assumed to decline from 52,000 to 49,000 through Fiscal Year 2000-
14 2001. The total CRP discount is \$36.9 million.

15 **III. ALLOCATION OF BASE RATE INCREASE**

16 **Q. WHAT RATE INCREASE IS PGW PROPOSING?**

17
18 A. An increase of \$65 million. Exhibit CW-2 shows the present revenue stream
19 from the existing customer charge and volumetric components of PGW's base
20 rates for all firm customers. Additionally, this exhibit shows the proposed
21 revenue stream from the proposed increases in the customer charge and the
22 volumetric component of PGW's base rate for all firm customers.

23 **Q. WHAT IS THE BASIS FOR THE CHANGES TO THE CUSTOMER CHARGE**
24 **FOR GS RESIDENTIAL, COMMERCIAL AND INDUSTRIAL CUSTOMERS AS**

1 **WELL AS MUNICIPAL (MS) AND THE PHILADELPHIA HOUSING**
2 **AUTHORITY. (PHA)?**

3 A. The devastating effects of the last three winters with 10% to 15% warmer than
4 normal weather has adversely affected the Company's ability to collect sufficient
5 revenues to meet operating, maintenance and debt service requirements. To
6 help mitigate the impact of warmer-than-normal temperatures in the future, PGW
7 is proposing the recovery of a greater portion of its fixed costs in a fixed monthly
8 Customer Charge. The increase in the customer charge will generate
9 approximately \$44.5 million of the requested total increase of \$65 million. The
10 remaining \$20.5 million is proposed to be recovered through an increase in the
11 volumetric portion of the base rates.

12 **Q. HOW DO PGW'S PROPOSED CUSTOMER CHARGES COMPARE TO THOSE**
13 **CHARGED BY SURROUNDING UTILITIES?**

14 A. A comparison was made of other Pennsylvania utilities based on similar
15 expected usage patterns by rate class. The following table summarizes our
16 findings in this regard:
17

**Comparison of Monthly Customer Charges
(Pennsylvania Gas Utilities)**

Company	Residential	Commercial/ Industrial
PECO Energy	\$7.20	\$14.40 - \$72.01
Columbia Gas of Pennsylvania	\$10.81	\$14.53 - \$22.60
Equitable Gas Company	\$11.65	\$17.00 - \$75.00
People's Natural Gas	\$10.21	\$10.21 - \$34.20
National Fuel Gas Distribution Co.	\$11.09	\$15.42-\$121.01
North Penn Gas Co./PFG Gas Inc.	\$8.08	\$14.96 - \$23.75
T.W. Phillips Gas & Oil Co.	\$8.46	\$33.25 - \$33.25
Average	\$9.64	\$17.11 - \$54.56
PGW Current	\$ 8.00	\$10.00 - \$20.00
PGW Proposed	\$15.00	\$25.00 - \$50.00

1 **Q. HOW DOES PGW'S PROPOSED CUSTOMER CHARGE COMPARE TO**
 2 **THOSE OF COMPANIES OF SIMILAR SIZE AND WHICH SERVE SIMILAR**
 3 **POPULATIONS?**

4
 5 **A.** In my view the most appropriate comparison is to the customer charges for
 6 Pittsburgh area utilities which serve urban areas as we do. That comparison is
 7 shown below:

**Comparison of Monthly Customer Charges
(Pittsburgh Area Gas Utilities)**

Company	Residential	Commercial/ Industrial
Columbia Gas of Pennsylvania	\$10.81	\$14.53 - \$22.60
Equitable Gas Company	\$11.65	\$17.00 - \$75.00
People's Natural Gas	\$10.21	\$10.21 - \$34.20
Average	\$10.89	\$13.91 - \$43.93
PGW Current	\$ 8.00	\$10.00 - \$20.00
PGW Proposed	\$15.00	\$25.00 - \$50.00

1 Q. HOW DO YOUR RECOMMENDED CUSTOMER CHARGES COMPARE TO
2 THE FIXED DISTRIBUTION-RELATED COSTS IDENTIFIED IN THE COST-OF-
3 SERVICE STUDY PREPARED BY R. J. RUDDEN, ASSOCIATES ON BEHALF
4 OF PGW?

5 A. The R. J. Rudden Cost-of-Service Study indicates that the fixed, distribution
6 related costs that would appropriately be recovered in a monthly customer
7 charge are higher in all sectors than either PGW's current or proposed customer
8 charges (see table).

	Res. – GS	Com. – GS	Ind. – GS	Mun. - GS	Mun. – MS	PHA – GS	PHA - PHA
Rudden Study	\$39.94	\$106.41	\$280.85	\$122.94	\$122.94	\$62.76	\$279.43
PGW Current	\$ 8.00	\$10.00	\$20.00	\$ 10.00	\$ 0.00	\$ 8.00	\$ 0.00
PGW Proposal	\$15.00	\$25.00	\$50.00	\$25.00	\$ 25.00	\$15.00	\$25.00

9 Q. WHAT CONCLUSIONS CAN YOU DRAW FROM THESE DATA?
10

11 A. PGW's current customer charge lags significantly compared to the cost of
12 providing non-volumetric service and also lags behind the level of customer
13 charge imposed by most comparable gas companies. In addition, an increase in
14 the charge is essential to mitigate PGW's current substantial reliance upon cold
15 winter weather to generate sufficient annual revenues since PGW's load is
16 heavily weighted toward weather-sensitive customers (residential and small
17 commercial). Its sensitivity to weather variations is greater than most other gas
18 companies. Accordingly, an increase in the customer charge as PGW has
19 proposed is warranted.

1 **IV. NON-FUEL RATE COMPONENTS**

2 **Q. CAN YOU SUMMARIZE THE CURRENT BILL COMPONENTS FOR FIRM**
3 **CUSTOMERS FOR THE RECOVERY OF NON-GAS COSTS?**

4
5 A. A PGW firm rate customer's bill contains two volumetric charges plus a monthly
6 customer charge. The customer charge simply recognizes the need to collect a
7 certain amount of the fixed costs of the distribution system on a fixed basis in
8 order to make rates better track costs as well as to reduce the level of risk, which
9 I previously described, associated with recovering all costs on a volumetric basis.
10 The two volumetric charges consist of 1) a base rate charge and 2) a Gas Cost
11 Rate (GCR) which, under PGW's existing tariff, includes certain non-fuel costs.
12 The base rate charge, for all PGW firm Rate Schedules, includes a base fuel
13 component of \$3.18 per Mcf and a non-fuel component.
14 The Company's GCR includes Natural Gas Expenses & Purchased Electric as
15 well as non-fuel costs associated with the Company's Customer Responsibility
16 Program (CRP) and Conservation Works Program (CWP). Additionally, since
17 the Senior Citizen Discount is applied to a customer's total bill, a significant
18 portion of the total Senior Citizen Discount is also applied to the GCR
19 mechanism.

20 **Q. PLEASE DESCRIBE THE CRP COSTS YOU REFERRED TO ABOVE.**

21
22 A. The CRP program is defined in detail in PGW's tariff Section 4.50. In summary,
23 the customers pay the Company for a portion of the natural gas bill which is

1 reflective of the customer's income level. Additionally, the company collects
2 LIHEAP grant money for which the customer is eligible. The sum of these two
3 items represent the entire amount that the Company receives in payment for the
4 customer's gas bill. The total customer bill minus these two components is
5 referred to as the CRP discount. As indicated above, the CRP discount is
6 currently collected through the GCR.

7 **Q. PLEASE DESCRIBE THE CWP COSTS YOU REFERRED TO ABOVE.**

8
9 A. The CWP program is designed to help low income customers reduce their
10 energy costs by investing in conservation efforts to reduce their consumption and
11 ultimately to limit future uncollectible amounts. The costs of the conservation
12 efforts are collected through the GCR. Historically, CWP funds available to
13 customers total approximately \$2.2 million annually.

14 **Q. WHY DOES PGW RECOVER THE COSTS OF THESE SOCIAL PROGRAMS**
15 **THROUGH ITS GCR?**

16
17 A. Traditionally, PGW has collected these costs through the GCR because it
18 assured dollar-for-dollar recovery of these non-gas costs — no more and no less.
19 It also assured that these costs were collected in the year in which they were
20 incurred with little build up or over/under collection. This methodology was
21 accepted and approved by PGW's previous regulatory authority, the Philadelphia
22 Gas Commission (PGC).

23 **Q. WHAT IS PGW'S POSITION ON THE CONTINUATION OF THIS RECOVERY**
24 **MECHANISM?**
25

1 A. As these programs are all part of PGW's current tariff and approved or directed
2 by the PGC and/or the City of Philadelphia, PGW believes that any revision of
3 these programs should occur in PGW's restructuring proceeding. So long as
4 these programs continue, it is crucial to PGW's financial stability that the
5 Company continue to have the ability to recover all of these costs on a dollar-for-
6 dollar basis. The inclusion of these items in its GCR assures such a dollar-for-
7 dollar tracking recovery.

8 **V. NON-STANDARD RATE ARRANGEMENTS**

9 **Q. WHAT NON-STANDARD RATE ARRANGEMENTS ARE YOU PROPOSING**
10 **FOR YOUR INTERRUPTIBLE INDUSTRIAL AND COMMERCIAL**
11 **CUSTOMERS?**

12
13 A. PGW proposes to modify its tariff so as to be able to enter into individual
14 contracts with interruptible customers at a negotiated price for an agreed upon
15 period of time. Such flexibility will allow the Company to offer individual,
16 alternative pricing solutions to customers when they are faced with competitive
17 fuel offerings, or to attract them back to natural gas when they are currently using
18 an alternative fuel.

19 **Q. PLEASE GIVE AN EXAMPLE OF SUCH A POTENTIAL OFFERING.**

20
21 A. One solution to regain customers lost to alternative fuels may be to offer a fixed
22 discount from the published comparable tariff rate for a set period of time with
23 minimum usage requirements.

1 **Q. HOW ARE YOU GOING TO INSURE THAT THE DISCOUNT DOES NOT FALL**
2 **BELOW THE COST OF NATURAL GAS?**

3
4 A. Terms will be included in all non-standard rate offerings to insure that PGW
5 revenue will equal or exceed 110 percent of the cost of natural gas. Specifically,
6 revenues will exceed 110 percent of the weighted average cost of gas, or in the
7 alternative, if PGW enters into an arrangement providing for direct-stream gas
8 supply, PGW will require revenue equal to or in excess of 110 percent of the cost
9 of natural gas. Each arrangement will be evaluated in response to a
10 competitive scenario. Many factors will be taken into account and contracts will
11 be structured to insure positive returns based on the above criteria and sound
12 business practices.

13 **Q. ARE YOU SUGGESTING THAT THOSE CUSTOMERS WILL BE PERMITTED**
14 **TO NEGOTIATE THE PRICE THAT THEY WILL PAY FOR THEIR GAS?**

15
16 A. Yes, but only to the extent that the customer's circumstances satisfy the
17 requirements described above.

18 **Q. HOW WOULD THESE TYPES OF ARRANGEMENTS HELP THE OVERALL**
19 **FINANCIAL POSITION OF THE COMPANY?**

20
21 A. As proposed, PGW will not be obligated to enter into a non-standard rate
22 arrangement; it will be left to PGW's sole discretion. The only time PGW will
23 consider a non-standard deal is when flexibility in terms, prices or conditions will
24 result in an overall financial benefit to the company and remaining customers by
25 increasing expected margin. For example, when new or existing customers are
26 deciding on what systems and technologies to install, energy alternatives are an
27 important consideration. The proposed tariff language will enable PGW more

1 effectively to compete with electric, steam and oil competitors who currently offer
2 creative and flexible solutions. The contracts will be written to insure maximum
3 margin and confidentiality.

4 **Q. WILL THE COMPANY'S FIRM CUSTOMERS RECEIVE ANY BENEFIT BY**
5 **ALLOWING THE COMPANY TO OFFER THIS TYPE OF SERVICE TO**
6 **INTERRUPTIBLE CUSTOMERS?**

7
8 A. Yes, any additional margin associated with these deals will flow back to support
9 the firm ratepayers, thereby reducing the level of costs borne by the firm
10 ratepayers.

11 **Q. DOES THIS PROPOSED PRICING ENHANCEMENT CHANGE THE NATURE**
12 **OF THE INTERRUPTIBLE SERVICE?**

13
14 A. The proposed pricing enhancement will not change the nature of the interruptible
15 service. All of the characteristics of providing interruptible service, as identified in
16 the tariff, will remain intact.

17 **Q. HOW WILL THESE CUSTOMERS BE IMPACTED DURING PERIODS OF**
18 **INTERRUPTION?**

19
20 A. These interruptible customers will be treated in the same manner as all other
21 interruptible customers.

22 **Q. PLEASE IDENTIFY ANY CHANGES REQUIRED TO YOUR EXISTING TARIFF**
23 **TO EFFECTUATE THESE CHANGES.**

24
25 A. PGW's proposed tariff submitted with this file contains the proposed tariff
26 changes necessary to provide this enhanced level of service. These changes
27 can be found in proposed Section 2.3.

28

1 **V. BOILER PLANT SERVICE (BPS) RATE TARIFF MODIFICATION**

2 **Q. ARE YOU PROPOSING ANY ADDITIONAL CHANGES TO YOUR TARIFF?**

3
4 A. Yes. PGW is proposing to clarify the rate schedules for BPS-S and BPS-L which
5 could currently be interpreted to limit the maximum price that PGW can charge its
6 BPS customers to 90% of the General Service (GS) rate for Commercial customers
7 even if that rate is below PGW's cost of gas.

8 **Q. WHY ARE YOU PROPOSING A CLARIFICATION?**

9
10 A. There are two conflicting parameters in the tariff which could prevent the company
11 from being able to set any rate at all. Specifically, one parameter dictates that the
12 company must charge at least 110% of the cost of the gas used to serve that class,
13 while the second parameter mandates that the rate be set at a level not greater
14 than the 90% GS Commercial threshold. Currently, the Company interprets the
15 90% GS Commercial provision to not apply when it would produce a price below the
16 Company's incremental cost of gas. Otherwise, PGW would have to impose an
17 "economic interruption" under its tariff to prevent the selling of gas to BPS
18 customers at below cost rates.

19 While we believe that the Company's interpretation is reasonable, PGW believes
20 that it would be best to revise the tariff language to remove any potential confusion
21 or conflict. PGW suggests that the tariff be revised to include only the 110% of
22 incremental gas costs provision. In the alternative, the tariff should clearly indicate
23 that the parameter that mandates that the company be required to charge no less
24 than 110% of its commodity cost will supercede the 90% GS Commercial rate

1 threshold requirement when using that 90% parameter would require us to interrupt
2 the customer.

3 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

4

5 A. Yes.

EXHIBIT CW-1

DOCKET NO. R-00006042

Annual Degree Day History

YEAR	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	TOTAL	+/- NOR	%NOR	HTG SEA
1943-44	54	304	598	927	882	855	783	450	48	14	0	0	4,915	315	6.8%	4901
1944-45	34	267	544	958	1,169	815	397	261	164	51	0	6	4,666	66	1.4%	4609
1945-46	31	249	604	1,022	915	830	438	376	107	43	0	1	4,516	(84)	-1.8%	4472
1946-47	17	136	417	801	781	987	810	368	172	20	0	0	4,509	(91)	-2.0%	4489
1947-48	101	95	619	914	1,168	913	640	388	145	9	0	0	4,992	392	8.5%	4983
1948-49	24	272	375	796	753	681	639	337	111	2	0	0	3,990	(610)	-13.3%	3988
1949-50	45	124	539	754	663	859	803	473	160	10	0	0	4,430	(170)	-3.7%	4420
1950-51	91	179	529	936	859	785	681	339	104	24	0	0	4,527	(73)	-1.6%	4503
1951-52	29	198	656	781	834	771	734	297	120	11	0	0	4,431	(169)	-3.7%	4420
1952-53	15	312	510	803	801	707	614	364	89	21	0	0	4,236	(364)	-7.9%	4215
1953-54	27	155	482	736	990	636	694	304	161	8	0	0	4,193	(407)	-8.8%	4185
1954-55	27	219	572	872	994	792	646	291	54	25	0	0	4,492	(108)	-2.3%	4467
1955-56	18	180	581	1,022	972	757	779	451	171	9	5	2	4,947	347	7.5%	4931
1956-57	86	188	520	655	1,035	721	659	332	119	14	0	0	4,329	(271)	-5.9%	4315
1957-58	44	271	466	720	983	976	751	303	135	22	0	0	4,671	71	1.5%	4649
1958-59	31	272	490	1,034	966	823	694	296	77	17	0	0	4,700	100	2.2%	4683
1959-60	34	217	547	774	877	794	935	262	96	0	0	0	4,536	(64)	-1.4%	4536
1960-61	12	228	444	1,013	1,096	757	678	451	159	5	0	0	4,843	243	5.3%	4838
1961-62	19	178	483	880	964	898	692	361	114	10	0	5	4,604	4	0.1%	4589
1962-63	82	228	622	1,023	1,064	1,021	638	353	160	8	0	0	5,199	599	13.0%	5191
1963-64	96	120	421	1,041	882	913	650	443	92	19	2	3	4,682	82	1.8%	4581
1964-65	62	323	457	830	1,077	844	754	410	54	15	0	4	4,830	230	5.0%	4811
1965-66	29	252	521	741	1,055	831	639	439	153	11	0	0	4,671	71	1.5%	4660
1966-67	58	250	449	839	793	923	734	406	282	4	0	2	4,740	140	3.0%	4734
1967-68	46	239	643	806	1,098	975	605	293	155	4	0	0	4,864	264	5.7%	4860
1968-69	3	215	531	932	1,009	860	744	257	62	0	0	0	4,613	13	0.3%	4613
1969-70	28	229	546	938	1,178	833	791	374	98	4	0	0	5,019	419	9.1%	5015
1970-71	31	175	475	864	1,097	776	741	383	137	0	0	0	4,679	79	1.7%	4679
1971-72	18	86	576	682	884	918	747	426	91	32	0	0	4,460	(140)	-3.0%	4428
1972-73	25	350	605	745	902	852	528	333	163	1	0	0	4,504	(96)	-2.1%	4503
1973-74	17	147	457	759	827	842	634	281	130	21	0	0	4,115	(485)	-10.5%	4094
1974-75	55	315	523	752	837	785	739	493	84	4	0	0	4,587	(13)	-0.3%	4583
1975-76	50	180	369	870	1,104	677	585	301	115	14	0	1	4,266	(334)	-7.3%	4251
1976-77	35	367	713	1,030	1,298	833	517	303	77	31	0	0	5,202	602	13.1%	5171
1977-78	22	304	507	923	1,129	1,053	771	392	171	8	7	0	5,287	687	14.9%	5272
1978-79	51	263	492	809	1,014	1,136	552	398	76	19	7	0	4,817	217	4.7%	4791
1979-80	27	328	435	800	986	991	752	309	64	20	8	8	4,728	128	2.8%	4692
1980-81	12	297	628	973	1,154	702	719	265	97	5	0	0	4,852	252	5.5%	4847
1981-82	38	320	542	896	1,189	837	685	389	49	23	0	0	4,968	368	8.0%	4945
1982-83	23	242	463	682	912	811	631	337	112	2	0	0	4,215	(385)	-8.4%	4213
1983-84	42	241	503	965	1,112	741	858	382	128	0	1	2	4,975	375	8.2%	4972
1984-85	68	100	546	876	1,143	839	644	319	93	20	0	0	4,448	(152)	-3.3%	4428
1985-86	40	186	430	953	972	914	807	352	82	9	0	13	4,558	(42)	-0.9%	4536
1986-87	23	222	575	787	988	860	582	344	117	0	0	0	4,498	(102)	-2.2%	4498
1987-88	19	336	485	767	1,089	855	603	413	109	32	0	0	4,708	108	2.3%	4676
1988-89	28	378	474	868	829	888	684	344	146	1	0	0	4,580	(20)	-0.4%	4579
1989-90	47	210	565	1,187	727	650	578	352	115	5	1	1	4,438	(162)	-3.5%	4431
1990-91	51	159	452	705	908	674	598	308	45	12	0	0	3,912	(688)	-15.0%	3900
1991-92	60	228	504	769	883	787	732	408	171	14	1	3	4,560	(40)	-0.9%	4542
1992-93	64	332	537	816	836	946	786	355	59	12	0	1	4,744	144	3.1%	4731
1993-94	73	281	522	868	1,210	932	721	232	159	2	0	2	5,002	402	8.7%	4998
1994-95	23	242	412	718	835	919	583	353	115	6	0	0	4,206	(394)	-8.6%	4200
1995-96	48	227	685	1,013	1,055	859	783	355	192	6	0	0	5,223	623	13.5%	5217
1996-97	42	258	680	766	1,000	678	661	383	154	40	0	0	4,662	62	1.3%	4622
1997-98	45	274	625	825	727	607	588	241	64	7	1	0	4,004	(596)	-13.0%	3996
1998-99	7	188	441	657	884	700	654	297	58	6	0	0	3,892	(708)	-15.4%	3886
1999-00	25	235	403	725	974	738	456	329	75	19	1	1	3,981	(619)	-13.5%	3960
2000-01													0	(4,600)	(1)	0
HISTORY AVG	40	235	521	849	971	830	673	352	116	13	1	1	4,521			4,505
HISTORY HIGH MO.	101	378	713	1,187	1,296	1,136	935	493	282	51	8	13				
HISTORY LOW MO.	3	86	369	655	663	607	397	232	45	0	0	0				
MEAN																
PGW DESIGN	38	226	617	994	1,160	987	808	334	116	0	0	0	5,280			
40 year average	39	243	519	847	993	840	666	354	114	11	1	1	4,628	28	0.6%	4,615
30 year average	37	249	521	828	983	825	657	346	108	12	1	1	4,569	(31)	-0.7%	4,555
20 year average	39	248	524	831	971	794	658	338	107	11	0	1	4,521	(79)	-1.7%	4,509

EXHIBIT CW-2

DOCKET NO. R-00006042

**65 MILLION RATE INCREASE
4555 DEGREE DAYS**

Rate	Forecasted Applicable Sales 9/1/00 thru 8/31/01 (mcf)	Current Customer Charge Revenue	Current Volumetric Revenue	Total Current Revenue	Proposed Customer Charge Revenue	Proposed Volumetric Revenue	Total Proposed Revenue	Revenue Contribution Increase
ResGS/PHAGS	43,380,423	\$ 44,807,577	\$ 286,874,737	\$ 331,682,314	\$ 84,014,208	\$ 299,546,159	\$ 383,560,367	15.64%
ComGS/MUNGS	10,445,678	\$ 2,986,886	\$ 74,373,227	\$ 77,360,113	\$ 7,467,215	\$ 80,289,659	\$ 87,756,874	13.44%
Industrial/GS	1,479,249	\$ 281,600	\$ 10,532,253	\$ 10,813,853	\$ 704,000	\$ 11,563,289	\$ 12,267,289	13.44%
PHA/PHA	171,505	\$ -	\$ 1,222,145	\$ 1,222,145	\$ 143,400	\$ 1,243,000	\$ 1,386,400	13.44%
MUN/MS	1,285,030	\$ -	\$ 8,240,897	\$ 8,240,897	\$ 267,600	\$ 9,080,922	\$ 9,348,522	13.44%
Total Applicable Sales	56,761,885	\$ 48,076,063	\$ 381,243,260	\$ 429,319,323	\$ 92,596,423	\$ 401,723,029	\$ 494,319,452	

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY
COMMISSION

DIRECT TESTIMONY OF

HOWARD S. GORMAN

ON BEHALF OF
PHILADELPHIA GAS WORKS

Docket No. R-00006042

RE: PHILADELPHIA GAS WORKS
BASE RATE PROCEEDING

JANUARY, 2001

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Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is Howard Gorman. I am a Managing Consultant with R. J. Rudden Associates, Inc. ("Rudden"). I also serve as Rudden's Chief Financial Officer. My business address is 898 Veterans Highway, Hauppauge, NY 11788.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. My educational background and professional experience are outlined in my curriculum vitae that is attached as Attachment A. A description of the experience and expertise of R. J. Rudden Associates, Inc. is attached as Attachment B.

Q. PLEASE BRIEFLY DESCRIBE THE SCOPE OF YOUR ENGAGEMENT WITH PGW AND THE PURPOSE OF YOUR TESTIMONY.

A. Rudden was retained by Philadelphia Gas Works ("PGW" or "Company") to perform an unbundled, fully allocated cost of service study (generally, a "COSS" and this particular COSS, the "PGW COSS"), which was completed in December, 2000. One of the purposes of a COSS is to assign the total costs incurred by the utility to each Customer Class, and to compare the costs assigned to each Customer Class to the revenue produced by the rates proposed by the utility. The costs assigned, in the PGW COSS, to each Customer Class, have been compared to the revenue produced by the rates in the Company's proposed Gas Rate Tariff ("Tariff"), as presented in its Base Rate Case filing of January, 2001 ("Filing"). The PGW COSS was performed using widely accepted practices. The costs and other information used in the PGW COSS and in developing the Tariff were for

1 PGW's Fiscal Year 2001 Budget. All years discussed in this testimony refer to
2 PGW's Fiscal Years, September 1 through August 31; Fiscal Year 2001 ends
3 August 31, 2001.

4 My testimony first describes the methodology used to perform the PGW COSS,
5 which was based on the Fiscal Year 2001 Budget ("Test Year"). Then, the costs
6 assigned to each Customer Class are compared to the revenue produced by the
7 Tariff rates proposed by PGW.

8 **Q. PLEASE STATE PGW'S TOTAL REVENUE REQUIREMENT AND**
9 **TARIFF REQUIREMENT FOR THE TEST YEAR.**

10
11 A. *Based on the Test Year Budget, PGW's total Revenue Requirement is \$754*

12 million and its Tariff Requirement is \$800 million. Please note that in this
13 testimony, most amounts are rounded to the nearest million dollars. Also, "sales"
14 refers to volumes and "revenues" refers to dollars.

15 **Q. PLEASE EXPLAIN THE DIFFERENCE BETWEEN THE REVENUE**
16 **REQUIREMENT AND THE TARIFF REQUIREMENT.**

17
18 A. As I use the term in my testimony, the "Revenue Requirement" is PGW's total
19 cost of providing service, which is \$754 million under the Test Year Budget. By
20 the term "Tariff Requirement," I mean the total amount PGW would collect
21 under the proposed Tariff **before discounts and other revenue adjustments**. The
22 Tariff Requirement is \$800 million. However, PGW will not collect this amount
23 because the Test Year Budget shows discounts of \$58 million for the Customer
24 Responsibility Program ("CRP") and Senior Citizens programs. In addition, the
25 Test Year Budget shows finance charge revenue, other operating and non-
26 operating revenue, and adjustments, the net effect of which is \$12 million in

1 additional revenue. Therefore, if PGW sets its Tariff rates at \$800 million, has
2 discounts of \$58 million, and has other revenue and adjustments of \$12 million, it
3 will realize its Revenue Requirement of \$754 million.

4 **Q. DOES PGW EXPECT TO REALIZE THE TOTAL TARIFF**
5 **REQUIREMENT?**

6
7 A. No, PGW only expects to realize the Revenue Requirement, because discounts
8 and other adjustments will be applied to the Tariff Requirement. The term
9 “realize” is used because the Budget is based on accrual accounting, and the term
10 “collect” might imply an amount actually collected in cash.

11 **Q. PLEASE IDENTIFY THE EXHIBITS' THAT ARE INCLUDED WITH**
12 **YOUR TESTIMONY.**

13
14 A. *Exhibit HSG - 1* summarizes the results of the PGW COSS.

- 15 • Schedule 1 – Revenue Requirement and Tariff Requirement by Customer
16 Class for the Test Year.
- 17 • Schedule 2 – Unitized Tariff Requirement.
- 18 • Schedule 3 – Over (Under) Collection by Customer Class – Proposed Tariff.
- 19 • Schedule 4 – Test Year Projected Surplus (Deficit) by Customer Class -
20 Proposed Tariff.
- 21 • Schedule 5 – Test Year Projected Surplus (Deficit) by Customer Class –
22 Present Tariff.

23 *Exhibit HSG – 2* provides the following information from the PGW COSS:

- 24 • Schedule 1 – Test Year Budget data by account.
- 25 • Schedule 2 – Details of external allocation factors used in the PGW COSS.

- 1 • Schedule 3 – Names of allocators used in the PGW COSS.

2 *Exhibit HSG – 3* provides the following information:

- 3 • Schedule 1 – Comparison of Proposed Tariff and Existing Tariff

4 *Exhibit HSG – 4* presents additional information provided by PGW:

- 5 • Schedule 1 – Cash flow projections for Fiscal Years 2001 - 2006.
6 • Schedule 2 – Debt coverage projections for Fiscal Years 2001 - 2005.

7 *Exhibit HSG – 5* presents information about external allocators and special studies
8 developed for the PGW COSS:

9 *Exhibit HSG – 6* is a printout of the PGW Cost of Service study.

10 **Q. PLEASE SUMMARIZE THE RESULTS OF YOUR WORK AS THEY**
11 **APPLY TO THE CHANGES TO THE TARIFF PROPOSED BY PGW IN**
12 **THIS FILING.**

13
14 **A.** I have reached the following conclusions based on my work:

- 15 1. The proposed Tariff rates result in the under and over-recoveries of **cost-**
16 **causation** based Tariff Requirements as shown in Exhibit HSG-1, Schedule 3,
17 line 12 (dollars) and line 14 (percentages). After **re-assigning** Customer
18 Responsibility Program (“CRP”) and Senior discounts and Conservation Works
19 Program (“CWP”) (together “Social Costs”) on a volumetric basis, the proposed
20 Tariff rates result in the under and over-recoveries of Tariff Requirements as
21 shown on line 19 (dollars) and line 21 (percentages).
22 2. The monthly Customer Charges being proposed by PGW are significantly lower
23 than the customer related costs on a per customer-month basis in the Test Year
24 Budget, as shown on Exhibit HSG – 1, Schedule 2, line 40.

¹ These exhibits are located in the Cost Service Study which is Volume III of this filing.

1 3. Based on the costs and physical quantities in the Test Year Budget, and using the
2 revenues that would be collected under the proposed Tariff, the Projected Surplus
3 for PGW is as shown on Exhibit HSG-1, Schedule 4, line 34. The Projected
4 Surplus (Deficit) for each Customer Class is shown on a **cost-causation** basis on
5 line 34 and the Projected Surplus (Deficit) for each Customer Class after re-
6 **assigning** Social Costs is shown on line 45.

7 4. Based on the costs and physical quantities in the Test Year Budget, and using the
8 revenues that would be collected under the existing Tariff, the Projected Surplus
9 (Deficit) for PGW and for each Customer Class is as shown on Exhibit HSG-1,
10 Schedule 5.

11 **SECTION 1 – PGW COST OF SERVICE STUDY**

12 **Q. PLEASE BRIEFLY DESCRIBE THE PURPOSE IN PERFORMING A**
13 **COST OF SERVICE STUDY.**

14
15 A. An unbundled fully allocated COSS analyzes all the functional components of the
16 utility's total cost of service and assigns plant investments and operating expenses,
17 including gas supply costs, to determine the costs incurred by the utility in
18 providing products and services to each Customer Class. The COSS determines
19 the Revenue Requirement for each Customer Class. The Revenue Requirement
20 for a Customer Class is that portion of the total costs incurred by PGW in
21 providing service, that can be attributed to that Customer Class on a cost-causality
22 basis. An important aspect of a COSS is that all of the utility's costs of providing
23 service must be analyzed and allocated among the Customer Classes, so that the

1 utility can establish rates that ensure, subject to assumptions such as sales
2 volumes and customer counts, that it recovers all of its costs.

3 **Q. PLEASE EXPLAIN THE TERM "UNBUNDLED" WITH RESPECT TO**
4 **THE COSTS OF PROVIDING NATURAL GAS SERVICE.**

5
6 A. Unbundling is the separation of the costs of gas supply and gas purchasing
7 requirements and the delivery of gas service into its various product and service
8 components. In the simplest sense, it means separating the gas merchant function
9 costs and the gas distribution delivery function costs. The merchant service
10 typically includes acquisition, management and delivery of gas supply to the
11 distribution system at the City Gate including production; production and market
12 area storage management; upstream pipeline capacity and transportation
13 arrangements; procurement of gas commodity; and gas contract management.
14 The delivery service includes transmission and/or distribution pipelines services
15 down stream of the city gates; gas dispatch and management services; metering,
16 billing and accounting services; marketing and advertising services related to
17 service connections and safety; and customer information and call center
18 activities.

19 **Q. PLEASE SUMMARIZE THE COST OF SERVICE APPROACH THAT**
20 **YOU FOLLOWED IN PERFORMING THE PGW COSS.**

21
22 A. The most critical task in performing a COSS is establishing relationships between
23 customer requirements, load profiles and usage characteristics on the one hand,
24 and the costs incurred to serve those requirements on the other hand.

25 PGW's gas distribution system is designed to meet three primary objectives:

- 26 1. to extend distribution services to all customers;

- 1 2. to meet the aggregate peak design day capacity requirements of all
2 customers entitled to service on the peak design day, and
3 .3. to deliver volumes of natural gas to those customers either on a
4 sales or transportation service basis.

5 It is important that the allocation methods used within the COSS recognize these
6 *cost causative* characteristics of the company's plant investments and operating
7 expenses. The COSS should objectively reflect cost causation factors attributable
8 to the utility's customers, their gas usage requirements, and system operations, and
9 to the extent possible, should not be influenced by desired end-results, customer
10 equity, or other rate design considerations.

11 The COSS was performed using R.J. Rudden Associates' proprietary, EXCEL
12 based spreadsheet computer model ("Model"). The study uses a basic three-step
13 process of cost analysis: 1) *functionalization* of rate base, purchased gas supply
14 costs and expenses among the following functions -- production, storage,
15 distribution and onsite (or customer, representing services at or downstream from
16 customers' meters); 2) *classification* of functionalized costs into demand,
17 commodity and customer cost categories; and 3) *allocation* of functionalized,
18 classified costs among the Customer Classes. The Model provides unbundled,
19 functionalized and classified cost information by service class, develops
20 unbundled Revenue Requirements by functional classification and in total for
21 each service class, and calculates unit costs by function for customer, commodity
22 and demand categories.

1 **Q. WHAT IS THE SOURCE OF THE DATA UTILIZED IN THE PGW**
2 **COSS?**

3
4 A. All data for the PGW COSS and the proposed revenue increase were provided by
5 PGW. Costs and other data were for the Test Year (the Budget for the Fiscal Year
6 ending August 31, 2001). These data included forecasted test year total system
7 costs of service, forecasted sales and transportation volumes, forecasted customer
8 information and forecasted revenues. In addition, other operating and plant
9 information was supplied by PGW for the purpose of cost classification and the
10 development of direct cost assignments and allocation factors that are required to
11 perform the cost allocation study. The budget was prepared by PGW on the
12 assumption of normal weather.

13 Exhibit HSG - 2, Schedule 1 shows the account specific data for the Test Year.

14 Exhibit HSG - 2, Schedule 2 shows the main external allocators that were
15 developed based on data provided by PGW.

16 **Q. WHY DID YOU USE BUDGETED DATA FOR THE TEST YEAR IN THE**
17 **PGW COSS?**

18
19 A. The purpose of using budgeted data is to avoid any effect of weather in the COSS
20 results and the ensuing rate design. The PGW budget assumes that weather will
21 be normal, and that weather related revenues and costs will be consistent with
22 average weather assumptions. If PGW were to base its cost of service on actual
23 historical data, we would have to normalize the data to remove the effects of
24 weather. It is more reliable to use budget data based on a weather-normal year,
25 than to normalize historical data.

26 **Q. PLEASE DESCRIBE THE FUNCTIONALIZATION STEP OF A COSS.**

1 A. In the **functionalization** step, costs are separated by the utility's basic service
2 characteristics, i.e., production, storage, distribution and on-site. For the most
3 part, this procedure is straight-forward and follows costs as recorded in the
4 Uniform System of Accounts. However, certain common costs (e.g.,
5 administrative and general expenses) can not be directly related to the primary
6 functions. These costs are analyzed and assigned among the primary functions
7 using a meaningful basis of assignment, so that every item of the utility's total
8 cost of service is assigned among the primary functions.

9 **Q. PLEASE DESCRIBE THE CLASSIFICATION STEP OF A COSS.**

10 A. In the **classification** step, the previously functionalized costs are separated
11 according to the system design or operating characteristics which cause those
12 costs to be incurred. In this step, each cost is determined to be incurred to serve
13 **customers**, to supply the natural gas **commodity** or to meet various capacity
14 **demands** including coincident and non-coincident peaks.
15 **Customer** related costs are the costs incurred to attach a customer to the
16 distribution system, to meter gas usage and to maintain the customer's account.
17 Customer costs are a function of the number of customers served and continue to
18 be incurred whether or not the particular customer uses any gas. They include
19 capital costs associated with distribution mains, services and meters, and
20 operating costs such as customer service, field service, billing and accounting
21 expenses.

1 **Commodity** related costs are those costs that vary with the natural gas throughput
2 sold to, or transported for, customers. These costs include the cost of the
3 commodity, lost and unaccounted for gas, as well as related procurement and
4 supply management costs.

5 **Demand, or capacity,** related costs are associated with plant that is designed,
6 installed and operated to meet maximum hourly or daily gas flow requirements,
7 such as distribution mains. Contracts for gas supply, transportation (from supply
8 source to City Gate) and storage also have a capacity related component, related
9 to meeting peak design day demand and the duration of demand during the peak
10 season. For PGW the peak season is the three months from December through
11 February. Demand-related costs associated with serving the *system design day* are
12 allocated among the Customer Classes based upon contribution to the *system*
13 *design day* requirements. Demand-related costs associated with managing supply
14 throughout the *peak season* are allocated among the Customer Classes based upon
15 contribution to the *peak season* requirements.

16 **Q. DO ALL EXPENSES FIT NEATLY INTO ONE OF THESE THREE**
17 **CLASSIFICATIONS?**

18 **A.** Most costs do fit neatly into one of the three classifications, but it may be
19 necessary to assign some costs among two or three classifications based upon
20 special external studies or based upon how related costs have been classified
21 through the use of internal classification allocation factors. For example, Account
22 807, Natural Gas Operating Expenses, was classified as both commodity and
23

1 demand related based upon relationships found in the classification of PGW's cost
2 of purchased gas and its on-system gas production and storage facilities.

3 **Q. PLEASE DESCRIBE THE ALLOCATION STEP OF A COSS.**

4 A. In the **allocation** step, the functionalized, classified costs are allocated among the
5 Customer Classes, based on relationships as determined by the analyst. To
6 determine these relationships, the analyst must analyze the Company's gas system
7 design and operations, its accounting records and its system and customer load
8 data (e.g., annual and peak period gas consumption levels). From the results of
9 those analyses, direct assignments of costs, as well as cost allocation
10 methodologies, can be chosen for each of the utility's plant and expense elements.

11 **Q. PLEASE EXPLAIN WHAT YOU MEAN BY THE TERM "DIRECT**
12 **ASSIGNMENT."**

13
14 A. The term "direct assignment" means identifying plant investments or costs
15 incurred exclusively to serve a specific customer or group of customers. Direct
16 assignments best reflect the cost causation of serving individual customers or
17 groups of customers. Therefore, in performing a COSS, the analyst seeks
18 whenever possible to directly assign costs, and to reduce the use of generalized
19 cost allocation methods. Where necessary data are available, special studies can
20 directly assign plant and expenses to particular customers or groups of customers.

21 **Q. IS IT REALISTIC TO ASSUME THAT A LARGE PORTION OF THE**
22 **PLANT AND EXPENSES OF A UTILITY CAN BE DIRECTLY**
23 **ASSIGNED?**

24
25 A. No, it is not. The nature of utility operations is characterized by common or joint
26 use facilities. In addition, direct assignments require detailed analyses of maps,

1 work orders, property records and customer accounting records, which may be
2 unavailable or may require a great deal of time to obtain and use. Therefore, to
3 the extent that a utility's plant and expense cannot be directly assigned to customer
4 groups, common allocation methods must be derived to assign the remaining costs
5 to the customer classes. The analyses discussed above facilitate the derivation of
6 reasonable allocation bases for cost assignment purposes.

7 **Q. PLEASE EXPLAIN HOW ALLOCATION BASES ARE DERIVED.**

8 A. There are two types of allocation bases, or allocators. *External allocators* are
9 based on special studies derived from data in the utility's accounting and other
10 records. For example, gas sales, the volume of gas consumed by each Customer
11 Class, is an external allocator that is used to allocate some of the gas commodity
12 costs. Other examples of external allocators are number of customers, estimated
13 design day sales and historical bad debt experience. Exhibit HSG - 2, Schedule 2
14 shows the main external allocators that were developed based on data provided by
15 PGW.

16 *Internal allocators* are based on some combination of external allocators,
17 previously directly assigned costs and other internal allocators. For example, the
18 allocators for property insurance costs are based on plant investment amounts
19 assigned to components of the rate base; it is necessary to compute the rate base
20 before property insurance costs can be assigned. Both external and internal
21 allocators are used in each of the functionalization, classification and allocation
22 steps.

1 Q. ARE THERE CERTAIN GUIDING PRINCIPLES THAT SHOULD BE
2 FOLLOWED WHEN PERFORMING A FULLY ALLOCATED COSS?
3

4 A. Yes, there are. The essential element in the selection and development of a COSS
5 allocation methodology is the establishment of relationships between customer
6 requirements, load profiles and usage characteristics on the one hand and the costs
7 incurred by the Company in serving those requirements on the other hand. The
8 primary objectives in selecting a cost allocation methodology are:

- 9 1. recognition of **cost causality** as opposed to **value of service**;
- 10 2. **stability** of results over time;
- 11 3. logical **consistency** and **completeness**; and
- 12 4. **ease of implementation**.

13 Q. HOW DOES THE RUDDEN COMPUTERIZED MODEL OPERATE?

14 A. The Model is a tool that speeds up computations and eases documentation. The
15 results of the COSS are completely determined by the inputs to the Model, which
16 are listed below:

- 17 • *Rate base*; each account in the utility's rate base is input to the Model.
- 18 • *Cost of service*; each account in the utility's cost of service (e.g.,
19 purchased gas costs, O&M expenses, metering, billing and customer
20 accounting expenses, customer sales and information expenses, taxes,
21 administrative and general expenses, interest expense, contribution to
22 the City) is input to the Model.
- 23 • *External allocators*; the data derived as a result of special studies.

- 1 • *Internal allocation formulas*; these formulas specify which previously
- 2 allocated cost or costs are to be the basis for each internal allocator.
- 3 • *Direct assignment dollars*.
- 4 • *Allocator names*; the name of the external or internal allocator on
- 5 which each cost will be functionalized, classified and allocated.

6 Exhibit HSG - 2, Schedule 3 lists the names of all the allocators assigned in
7 performing the PGW COSS.

8 Once these data are input, the Model computes the results of the COSS and
9 presents them in the specified report formats. Due to the large number of accounts
10 and allocators in a typical COSS, and to the use of internal allocators which
11 require iterative computations, use of a computerized model greatly reduces the
12 time and cost to complete a COSS.

13 **Q. WHAT IS THE RATE BASE AND HOW DOES IT AFFECT THE PGW**
14 **COSS?**

15
16 A. The rate base is the cost, net of accumulated depreciation, of PGW's investment
17 in plant and other assets used to serve customers. In a typical investor-owned
18 utility, the size of the rate base is important because the utility is allowed to earn a
19 return on its investment in rate base. This is not the case for PGW, because
20 PGW's rates allow it to collect the dollar amount needed to meet its financial
21 obligations, including maintaining debt service coverage as required by certain
22 financing documents and bond ordinance covenants. Therefore, PGW's Revenue
23 Requirement is not directly affected by the size of the rate base. However the rate
24 base is an important allocator, because many costs are functionalized, classified or

1 allocated among Customer Classes in the same ratio as the rate base or a portion
2 of the rate base.

3 For example, interest expense on long-term debt is functionalized, classified and
4 allocated among Customer Classes using the rate base, because interest expense is
5 incurred to finance the purchase of the assets in the rate base.

6 **Q. WHAT ARE THE MAJOR COMPONENTS OF PGW'S RATE BASE?**

7 A. For purposes of discussing how I functionalized, classified and allocated PGW's
8 rate base in the PGW COSS, I will refer to the following groupings of rate base
9 items. After presenting the list, I will describe how I treated each of these major
10 rate base categories:

- 11 • Production plant.
- 12 • Storage plant.
- 13 • Distribution plant.
- 14 • General plant.
- 15 • Depreciation reserve.
- 16 • Construction in Process and Unclassified.
- 17 • Leased Equipment.
- 18 • Working capital.

19 **Q. WHAT IS THE TOTAL RATE BASE?**

20 A. The total rate base is \$1,027 million, net of accumulated depreciation, for the
21 Test Year.

22

1 Q. WHAT ARE THE PRINCIPAL ALLOCATORS FOR EACH
2 COMPONENT OF THE RATE BASE?
3

4 A. The principal allocators for each component of the rate base are:

5 *Production plant*, net of depreciation, is 3.3% of the rate base. This item, PGW's
6 investment in natural gas production assets, is used to meet demand during the
7 peak season, and the investment cost has been classified to demand, and allocated
8 among Customer Classes based on forecasted design day sales.

9 *Storage plant*, net of depreciation, is 4.4% of the rate base. This item, PGW's
10 investment in liquefied natural gas ("LNG") facilities, is maintained in order to
11 meet demand during the peak season, and especially during the design day of the
12 system. Therefore, the investment cost has been classified to demand, and
13 allocated among Customer Classes based on the forecasted design day sales.

14 *Distribution plant*, net of depreciation, is 58.0% of the rate base, and includes:

15 • Mains, 27.2% of the rate base has been classified as a combination of
16 demand and customer. This reflects the dual purpose of mains: (1) to
17 attach a customer and enable the customer to receive a minimal level
18 of service, and (2) to provide adequate capacity for the maximum
19 demand level by the customer. The former purpose is customer related,
20 while the latter is demand related.

21 Ideally, to determine the customer component of the investment in
22 mains, we would perform a zero-intercept study. A zero intercept study
23 estimates the investment that would be required, if instead of the
24 existing mains, minimum-diameter pipes were installed. The estimated

1 cost of the minimum-diameter system is the customer component of
2 mains, and the balance of the total investment in mains is the demand
3 component, because the costs above the minimum are deemed to be
4 incurred to serve peak design day demands.

5 The data to do a Zero Intercept study were not available. However,
6 Rudden's experience shows that the customer component of mains
7 typically ranges from 25% to 50% of the total investment. In addition,
8 zero-intercept studies for three Northeast gas utilities (Niagara
9 Mohawk, PG Energy and Southern Connecticut Gas) showed customer
10 components from 30% to 33%. For PGW, an estimate of 25% was
11 used to take into account the density of the PGW system. Therefore,
12 25% of the investment in mains was classified as customer-related and
13 allocated among Customer Classes based on customer counts.

14 The remaining 75% of the investment in mains was classified as
15 demand-related, and was allocated among Customer Classes based on
16 the design-day sendout subject to maximum distribution system
17 constraints but not to supply constraints.

- 18 • Services, 24.3% of the rate base, has been classified to customer
19 related costs, and allocated among Customer Classes based on the
20 estimated total replacement cost for each Customer Class. Total
21 replacement cost for a Customer Class was estimated by multiplying

1 x) replacement cost of a service line with typical diameter for the
2 Customer Class by y) number of customers in the Customer Class.

- 3 • Meters and Meter Installation, 5.0% of the rate base, have been re-
4 functionalized to onsite, classified to customer related costs, and
5 allocated among Customer Classes based on the estimated total
6 replacement cost for each Customer Class. Total replacement cost for
7 a Customer Class was estimated by multiplying x) replacement cost of
8 a meter with typical size for the Customer Class by y) number of
9 customers in the Customer Class.

- 10 • Other Distribution plant, 1.5% of the rate base, includes a) House
11 Regulators and House Regulator Installation, which were classified as
12 customer-related and assigned among the residential Customer Classes
13 based on customer counts; b) Industrial Measuring Equipment, which
14 was classified as customer-related and assigned among the non-
15 residential Customer Classes based on customer counts; and c) Other
16 Equipment, which was classified and allocated among Customer
17 Classes based on the averages for Distribution plant.

18 *General plant*, net of depreciation, is 6.2% of the rate base, and includes facilities
19 and equipment used in performing more than one function. These items were
20 allocated among Customer Classes primarily based on direct labor content of each
21 functionalized, classified cost element. Labor was used due to the nature of the

1 items – e.g., transportation equipment, communications equipment, tools and
2 office-related.

3 *Depreciation reserve*, \$520 million, was provided by PGW broken down to rate
4 base category (production plant, storage plant, etc.); each item has been
5 functionalized, classified and allocated among Customer Classes in the same ratio
6 as the average for the rate base category.

7 *Construction Work in Process* (“CWIP”) and *Unclassified*, net of depreciation,
8 totaled 17.6% of the rate base, and includes projects that have not been
9 completely placed in service. Based on a special study, each project was
10 functionalized to the function to which the completed project will be assigned.

11 The projects were then classified, and allocated among Customer Classes, in the
12 same ratios as related in-service rate base categories or rate base accounts. For
13 example, distribution projects in CWIP and Unclassified were classified and
14 allocated in the same ratio as total Distribution plant in service, a major rate base
15 category; meters in CWIP and Unclassified were classified and allocated in the
16 same ratio as Meters, a single rate base account.

17 *Leased equipment*, net of depreciation, is 0.9% of the rate base, and includes items
18 in various categories; the total has been functionalized, classified and allocated
19 among Customer Classes in the same ratio as total plant in service.

20 *Working capital* is 9.6% of the rate base, and represents PGW’s need for cash to
21 keep the business running until revenues are collected to pay costs. Each item of
22 working capital was functionalized, classified and allocated among Customer
23 Classes in the same ratio as the activity which caused the item to be incurred. For

1 example, components of working capital related to revenue (e.g., accounts
2 receivable) were functionalized, classified and allocated in the same ratio as
3 Revenue Requirements; components of working capital related to gas costs (e.g.,
4 gas inventory, less related accounts payable) were functionalized, classified and
5 allocated in the same ratio as gas costs; items related to operating costs (e.g.,
6 materials and supplies inventories, less related accounts payable) were
7 functionalized, classified and allocated in the same ratio as operating costs
8 (excluding gas costs).

9 **Q. WHAT ARE THE MAJOR CATEGORIES OF COSTS IN PGW'S COST**
10 **OF SERVICE?**

11
12 A. For purposes of discussing how I functionalized, classified and allocated PGW's
13 costs, I will refer to the following groupings of rate base items. After presenting
14 the list, I will describe how I treated each of these major cost categories:

- 15 • Production costs, which includes gas commodity costs.
- 16 • Storage costs.
- 17 • Distribution costs.
- 18 • Customer accounts, customer service and sales costs.
- 19 • Administrative and general expenses.
- 20 • Depreciation expense.
- 21 • Tax expense; for PGW this is primarily payroll tax and excludes income tax.
- 22 • Financial requirements.
- 23 • Other revenues and expenses.
- 24 • Discounts and adjustments.

1 **Q. IN DETERMINING HOW YOU WOULD TREAT THESE EXPENSES IN**
2 **THE COSS, WERE THERE ANY OTHER IMPORTANT CATEGORY OF**
3 **COSTS THAT YOU CONSIDERED?**
4

5 A. Yes, Labor costs affect most of the cost categories because many costs are
6 assigned based on the direct labor content of other costs. For example, Account
7 870, Operations Supervision and Engineering, is allocated among Customer
8 Classes based on the direct labor content of distribution and onsite costs. To
9 enable these allocations to be performed, the direct labor content of each cost
10 account was obtained, and special allocators were developed so that costs could
11 be assigned based on only the direct labor content of accounts.

12 **Q. HOW DID YOU CHOOSE THE ALLOCATION FACTORS FOR**
13 **PRODUCTION AND STORAGE RELATED COSTS?**
14

15 A. PGW meets its customers' annual, seasonal and peak day demands for gas by
16 buying gas throughout the year. It has entered into supply, transportation and
17 storage contracts that permit PGW to acquire, transport, store, and inject or
18 withdraw various volumes of natural gas for various periods to manage gas
19 pressures within its system to provide reliable service. PGW also maintains
20 liquefied natural gas ("LNG") facilities to meet demand of firm customers during
21 the peak season. In months when gas purchases exceed send-out, the excess is
22 stored as natural gas or liquefied and stored as LNG. In months when sendout
23 requirements exceed maximum current supply availability, such as during peak
24 season, PGW meets the demand with a combination of current supply,
25 withdrawals from storage and LNG vaporization.

1 PGW manages its storage and seasonal gas supplies throughout the year, and
2 especially the peak season, to ensure that sufficient commodity will be available
3 to meet demand from non-interruptible customers each day of the year including
4 any design day. This means, for example, that PGW may meet demand on a
5 given day from a combination of resources, rather than from current flowing gas
6 supply only, so as not to constrain future daily draws of current supply.

7 Therefore, in choosing allocators for production and storage costs, we considered
8 that PGW purchases commodity throughout the year, and maintains and manages
9 a variety of resources, to meet design day demand and demand throughout the
10 peak season.

11 **Q. WHAT WERE THE PRINCIPAL ALLOCATION FACTORS USED FOR**
12 **PURCHASED GAS SUPPLY AND PRODUCTION COSTS?**

13
14 A. Purchased gas supply costs and production costs aggregated \$396 million.

15 Purchased gas commodity costs, totaling \$355 million (net of credits for off
16 system sales), were allocated among Customer Classes based on annual volumes
17 of natural gas sales. This is appropriate because PGW buys natural gas
18 throughout the year. While the cost varies throughout the year, the higher costs
19 during peak season costs caused annual costs to increase by only 6.0%.

20 Of the total purchased gas commodity cost stated above, \$24 million represents an
21 increase in the cost of gas in storage from the beginning of the year to the end.

22 This increase is due to rising gas costs, partially offset by slightly lower volumes.

23 Because this expenditure is not a cost incurred to serve customers in the Test

24 Year, the cost of commodity purchased in the PGW COSS was reduced by this

1 amount; and the reduction was allocated among Customer Classes in the same
2 ratios as the sum of all other purchasing and production costs.

3 Firm transportation contract costs, totaling \$45 million (net of refunds and
4 capacity release credits), were allocated among Customer Classes based on design
5 day sales, because the contract costs are billed to PGW based upon maximum
6 daily demand quantities that are determined using forecasted design day
7 requirements. These costs are incurred in order to ensure service to firm service
8 customers entitled to receive gas on a non-interruptible basis at the time of PGW's
9 anticipated peak demand.

10 Producer demand charges, totaling \$5 million, are incurred to ensure the supply of
11 commodity during the peak season. These costs were allocated among Customer
12 Classes based on design day sales.

13 Storage costs, totaling \$12 million, include charges for capacity (the total volume
14 of gas in storage at any time) and demand (the maximum volume that can be
15 injected or withdrawn on any day). These costs are incurred to ensure the supply
16 of commodity during the peak season, and were re-functionalized to storage, and
17 allocated among Customer Classes based on peak season sales; except that the
18 storage contracts used for daily balancing throughout the year were allocated
19 among Customer Classes based on annual sales and transportation volumes.

20 Storage injection and withdrawal fees, totaling \$1 million, were allocated among
21 Customer Classes based on peak season sales.

1 Natural gas operating costs, aggregating \$1 million, were functionalized,
2 classified and allocated among Customer Classes in the same ratios as the sum of
3 all other purchasing and production costs.

4 Costs to operate PGW's LNG Production facilities, aggregating \$1 million, were
5 allocated among Customer Classes based on design day sales.

6 **Q. HOW DID YOU CHOOSE THE ALLOCATION FACTORS USED FOR**
7 **STORAGE COSTS?**

8
9 A. Storage costs aggregated \$10 million. These are the costs of operating PGW's
10 LNG facilities. PGW maintains these facilities to meet demand during the peak
11 season. Therefore, these costs were functionalized to storage, classified as
12 demand and allocated among Customer Classes based on design day sales.

13 **Q. WHAT IS INCLUDED IN PGW'S DISTRIBUTION COSTS?**

14 A. Distribution costs are the costs of operating and maintaining PGW's City Gate
15 station, mains, services and meters, i.e., the gas delivery system. All costs were
16 analyzed to determine whether they were incurred in order to manage gas supply,
17 maintain equipment or for supervision.

18 **Q. WHAT WERE THE PRINCIPAL ALLOCATION FACTORS USED FOR**
19 **DISTRIBUTION COSTS?**

20
21 A. Distribution costs aggregated \$41 million, of which \$23 million was re-
22 functionalized to onsite and \$18 million functionalized to distribution.

23 Costs relating to managing gas supply, totaling \$2 million, were allocated among
24 Customer Classes based on annual sales. Costs related to the City Gate station and
25 measuring and regulating equipment, totaling \$2 million, were allocated Customer
26 Classes based on design day sales.

1 Costs of maintaining mains and services, totaling \$9 million, were classified and
2 allocated among Customer Classes based on the respective investments in mains
3 and services. Supervision and engineering costs, totaling \$2 million, were
4 allocated among Customer Classes in the same ratios as distribution labor.

5 The costs directly re-functionalized to onsite, totaling \$18 million, were for
6 maintenance of meters and related equipment, and for work performed on
7 customer's premises. These costs were classified to customer and were allocated
8 among Customer Classes primarily based on the investment in meters.

9 The remaining distribution costs, totaling \$8 million, were functionalized in the
10 same ratio as all other distribution costs (i.e., to both distribution and onsite) and
11 classified as customer related costs. The distribution function costs were allocated
12 among Customer Classes based on the investment in distribution plant. The
13 onsite function costs were allocated based on the investment in meters.

14 **Q. WHAT WERE THE PRINCIPAL ALLOCATION FACTORS USED FOR**
15 **CUSTOMER ACCOUNTS, CUSTOMER SERVICE AND SALES COSTS?**
16

17 **A.** Customer accounts, customer service and sales costs aggregated \$104 million.

18 These costs were functionalized to onsite and classified to customer.

19 Uncollectible accounts expense is revenue that is not collected from customers
20 due to bad debts. The Test Year budget amount, \$65 million, was allocated
21 among Customer Classes in the same ratio as actual uncollectible accounts
22 experience for the prior fiscal year. Both the Test Year and the actual experience
23 amounts are net of recoveries of amounts previously written off. This expense is a
24 substantial increase over prior years, due to higher gas costs and to past problems

1 with the new billing and collection system. To test the allocation of this expense,
2 the incidence among Customer Classes using the above allocator was compared to
3 the incidence of actual write-offs among Customer Classes for Fiscal Year 1998,
4 and was found to be reasonably similar.

5 Customer records and collection expense, \$28 million, includes telephone service,
6 district offices, bill preparation, collection labor and support, collection
7 processing and other activities. The cost of each activity was allocated among
8 Customer Classes based on special studies which were performed to analyze the
9 cost causation of each activity. The external allocators used or developed in these
10 special studies were number of customers, number of non-large customers and
11 number of delinquent accounts.

12 Customer assistance expenses aggregated \$9 million. This amount includes \$6
13 million for marketing to particular Customer Classes, which was directly assigned
14 to those Customer Classes. The balance includes the cost of providing general
15 informational services to customers and related costs, and was allocated among
16 Customer Classes based on numbers of customers.

17 Meter reading expenses, \$2 million, were allocated among Customer Classes
18 based on special studies. First, for nearly all residential customers, meters are read
19 automatically through drive-by meter reading; this cost, \$1 million, was allocated
20 among the residential Customer Classes based on number of customers. Then, the
21 balance of meter reading costs, \$1 million, was allocated among all other firm-
22 service Customer Classes based on the number of customers. Interruptible
23 customers are telemetered, which has essentially no recurring costs; the higher

1 capital costs of telemetering are reflected in the allocation of meter investment in
2 the rate base.

3 Supervision for customer accounts, customer service and sales costs aggregated
4 less than \$1 million. Supervision for customer service was allocated among
5 Customer Classes based on the number of customers; the same manner as
6 Customer Service costs. Supervision for collections was allocated among
7 Customer Classes using a special study performed using Fiscal Year 1998 data,
8 which computed the number of open collection accounts weighted by time the
9 account is in collections.

10 **Q. WHAT WERE THE PRINCIPAL ALLOCATION FACTORS USED FOR**
11 **ADMINISTRATIVE AND GENERAL EXPENSES?**

12
13 A. Administrative and general expenses aggregated \$53 million, reflecting \$65
14 million in costs incurred less \$12 million capitalized costs.

15 Costs incurred included \$48 million for employee pensions and benefits; workers
16 compensation insurance and claims; office supplies and expenses; and
17 administrative and general salaries. These costs are directly related to labor costs
18 and therefore were functionalized, classified and allocated among Customer
19 Classes in the same ratios as direct labor content.

20 An additional \$10 million of costs incurred, reflecting miscellaneous general
21 expenses, were functionalized, classified and allocated among Customer Classes
22 in the same ratios as direct labor content for all accounts.

1 Property insurance costs incurred and related claims, \$3 million, were
2 functionalized, classified and allocated among Customer Classes in the same ratio
3 as the rate base.

4 The balance of costs incurred, \$4 million, reflects regulatory expenses, and was
5 functionalized, classified and allocated among Customer Classes in the same
6 ratios as the rate base.

7 Costs capitalized to CWIP, which reduce Revenue Requirements, were
8 functionalized, classified and allocated among Customer Classes in the same
9 ratios as the balances in CWIP.

10 **Q. WERE THERE ANY NOTEWORTHY ITEMS IN ADMINISTRATIVE**
11 **AND GENERAL EXPENSES?**

12
13 A. Yes. The expenses stated above reflect cost savings and productivity
14 improvements totaling \$10 million that PGW hopes to achieve, and savings of
15 \$2.5 million due to unspecified personnel reductions and retirements.

16 **Q. WHAT WERE THE PRINCIPAL ALLOCATION FACTORS USED FOR**
17 **DEPRECIATION EXPENSE?**

18
19 A. Depreciation expense was \$33 million, reflecting \$34 million in depreciation
20 expense and \$2 million for costs of removal, less \$3 million capitalized.
21 Depreciation expense and costs of removal were functionalized, classified and
22 allocated among Customer Classes in the same ratios as the rate base and
23 components of the rate base. Depreciation expense capitalized to CWIP was
24 functionalized, classified and allocated among Customer Classes in the same
25 ratios as the balances in CWIP. For the purposes of the PGW COSS, Test Year
26 depreciation expense was increased by \$0.5 million to reflect depreciation of a

1 directly assigned asset over the term of the contract with the customer for whom
2 the asset was installed.

3 **Q. WHAT WERE THE PRINCIPAL ALLOCATION FACTORS USED FOR**
4 **TAX EXPENSE?**

5
6 A. Tax expense, which aggregated \$8 million, reflects primarily payroll taxes and
7 was functionalized, classified and allocated among Customer Classes primarily
8 based on direct labor content for all accounts.

9 **Q. WHAT ARE THE COMPONENTS OF PGW'S FINANCIAL**
10 **REQUIREMENTS?**

11
12 A. Financial requirements aggregated \$109 million. The components were interest
13 expense, appropriation for the City of Philadelphia and budgeted surplus.

14 **Q. DO THESE FINANCIAL REQUIREMENTS DIFFER FROM A TYPICAL**
15 **INVESTOR-OWNED UTILITY?**

16
17 A. Yes, they do. In a typical investor-owned utility, an important component of the
18 Revenue Requirement is the return that the utility is allowed to earn on its
19 investment in the rate base. The return is usually stated as a percent, and is
20 designed to include interest on debt capital plus return on equity capital. However
21 PGW includes in Revenue Requirements the dollar amount of its financial
22 requirements, rather than an amount based on returns to investors of debt and
23 equity capital.

24 **Q. ARE THERE OTHER SIGNIFICANT DIFFERENCES FROM A TYPICAL**
25 **INVESTOR-OWNED UTILITY?**

26
27 A. Yes. A typical investor-owned utility will be subject to taxation. This may
28 include income tax, gross receipts tax or others. In order for the utility to recover
29 the net amount of cash it needs, any amounts that it collects must be adjusted to

1 provide for the payment of taxes. For example, if a utility is subject to a gross
2 receipts tax of 2%, then in order to collect and keep \$1,000 with which to pay
3 expenses, it must collect \$1,020.41; it will remit taxes of \$20.41, or 2% of
4 \$1,020.41, and be left with \$1,000.

5 PGW is not subject to an income tax or gross receipts tax and does not have to
6 take them into consideration when computing its Revenue Requirements.

7 **Q. WHAT WERE THE PRINCIPAL ALLOCATION FACTORS USED FOR**
8 **INTEREST EXPENSE?**

9
10 A. Interest expense, \$57 million, represents interest payments on PGW's bonds and
11 leases plus amortization of debt issue costs, less capitalized interest expense.

12 Interest expense was incurred to finance PGW's investment in rate base assets.

13 Therefore, interest expense was functionalized, classified and allocated among

14 Customer Classes in the same ratios as the rate base and components of the rate

15 base.

16 **Q. WHAT WERE THE PRINCIPAL ALLOCATION FACTORS USED FOR**
17 **THE PAYMENT TO THE CITY OF PHILADELPHIA?**

18
19 A. The "Agreement between the City of Philadelphia and the Philadelphia Facilities
20 Management Corporation for the Management and Operation of the Philadelphia

21 Gas Works", Section 7.1 (b) (i), requires that PGW's rates be set at a level to

22 produce revenues sufficient to pay the City \$18 million annually. PGW informed

23 Rudden that this payment has been adjudicated to have the legal status of a return

24 to an equity holder. Therefore, this item was functionalized, classified and

25 allocated among Customer Classes in the same ratios as the rate base and

26 components of the rate base.

1 Q. **WHAT IS THE AMOUNT OF THE BUDGETED SURPLUS?**

2 A. The PGW COSS shows a surplus of \$34 million. The PGW COSS includes three
3 adjustments to the PGW budget. The net effect was an increase to the budget
4 surplus of \$30,000, reflecting one item which reduced the surplus by \$589,000
5 and two which together increased the surplus \$619,000.

6 Q. **HOW DID PGW MANAGEMENT DETERMINE THE AMOUNT OF THE
7 REQUIRED BUDGETED SURPLUS?**

8
9 A. The budget surplus is based on **accrual accounting**. However, PGW
10 management is managing the Company to meet its **cash needs**. PGW
11 management set the proposed revenues so as to provide sufficient cash to do all of
12 the following: a) pay PGW's cash operating expenses and other items described
13 above; b) fund increases in working capital which are primarily attributable to
14 higher gas costs; c) meet day-to-day cash needs without exceeding present
15 borrowing arrangements; d) maintain commercial paper borrowings at \$97 million
16 throughout the year; e) meet debt service coverage requirements in all years; f)
17 generate a small cash surplus to provide a margin for variances in Fiscal 2001;
18 and g) generate cash to repay the outstanding commercial paper balances by the
19 end of Fiscal 2006.

20 Q. **DID PGW PREPARE CASH FLOW PROJECTIONS?**

21 A. Yes, PGW prepared cash flow projections for Fiscal Years 2001 – 2006, which
22 are included as Exhibit HSG-4, Schedule 1. The projections show that the rates
23 proposed in the Tariff produce the results described above in the Test Year. The
24 projections also show that the rates produce the results described above in each of

1 Fiscal Years 2001 – 2006, and also sufficient additional cash to repay in full the
2 commercial paper by the end of Fiscal 2006.

3 **Q. DID PGW PREPARE DEBT SERVICE COVERAGE PROJECTIONS?**

4 A. Yes, PGW prepared debt service coverage projections for Fiscal Years 2001 –
5 2006, which are included as Exhibit HSG-4, Schedule 2. The projections show
6 that PGW will exceed its debt service coverage requirement in each year of Fiscal
7 Year 2001 – 2006.

8 **Q. DID PGW MANAGEMENT EXPLAIN WHY IT IS NECESSARY TO SET
9 RATES SO AS TO EXCEED, ON A PROJECTED BASIS, ITS DEBT
10 SERVICE COVERAGE REQUIREMENT?**

11 A. Yes. PGW management believes that the only way to restore PGW's financial
12 condition is to satisfy all the objectives (items a through g) listed above in
13 meeting its cash needs. PGW believes that achieving such a plan will permit it to
14 borrow, on reasonable terms, the long-term debt needed for capital investment,
15 which is critical to providing and improving service, or even the short term debt
16 needed for daily operations. The debt service coverage requirement is not the
17 most restrictive objective, and if rates were set only to meet the debt service
18 coverage requirement, PGW would not meet some of the other objectives, and, in
19 the view of PGW management, PGW would not be able to borrow either long-
20 term debt or short-term debt.
21

22 **Q. WHAT WERE THE PRINCIPAL ALLOCATION FACTORS USED FOR
23 THE BUDGETED SURPLUS?**

24 A. In choosing allocation factors, the objective is to allocate the amount among the
25 Customer Classes based on cost-causality, and developing appropriate allocation
26

1 factors. As discussed above, typically a surplus represents a return on equity, and
2 is allocated based on rate base.

3 However PGW's budgeted surplus is necessary to rebuild PGW's financial
4 condition. PGW's financial condition has deteriorated because actual revenues did
5 not meet revenue requirements in Fiscal Years 1998, 1999 and 2000. The Gas
6 Cost Rate Clause ensures that PGW recovers its **gas costs** in full. Therefore the
7 budgeted surplus is needed due to under-recovery of **non-gas operating costs** in
8 prior years.

9 Another way of looking at the budgeted surplus is that cash is needed to repay
10 commercial paper which was issued to fund non-gas operating costs; accordingly
11 the budgeted surplus should be allocated based on non-gas operating costs.

12 Therefore, the budgeted surplus was functionalized, classified and allocated
13 among Customer Classes, using special allocators, based on non-gas operating
14 costs. Gas commodity costs were excluded because PGW recovers changes in its
15 actual gas commodity costs through the GCR

16 **Q. MIGHT OTHER ALLOCATION FACTORS BE CONSIDERED FOR THE**
17 **BUDGETED SURPLUS?**

18
19 **A.** Yes, but after careful consideration, we determined that there were no allocation
20 factors that were more appropriate at this time than the non-gas operating costs
21 that we used. As long as the excess cash is used to reduce commercial paper
22 balances, it is appropriate to use the special allocators which reflect non-gas
23 operating costs.

1 The question of cost causality should be revisited once PGW's financial condition
2 improves. This improvement might be indicated if a portion of the cash generated
3 were used to fund capital programs instead of repaying commercial paper.

4 However, the use of cash to fund capital programs would not by itself determine
5 causality. If PGW's capital structure were not able at that time to support new
6 long-term debt at reasonable rates, then the surplus would continue to be caused
7 by the need to rebuild financial condition.

8 **Q. ARE THERE ANY REMAINING ITEMS IN DISCUSSING PGW'S**
9 **REVENUE REQUIREMENT?**

10
11 A. No. The above items total \$754 million, which is PGW's Revenue Requirement.

12 PGW will set its Tariff rates at a level to collect this amount, after considering
13 Other revenue and expenses, and Discounts.

14 **Q. WHAT ARE THE COMPONENTS OF OTHER REVENUES AND**
15 **EXPENSES AND WHAT WERE THE PRINCIPAL ALLOCATION**
16 **FACTORS USED?**

17
18 A. Other revenues and expenses, on a net basis, were \$12 million net revenue; this
19 amount was applied to reduce the total Revenue Requirement. This item
20 comprises:
21 Revenue, net of expenses, from *sales of energy-related appliance services* was \$5
22 million. This reduction in Revenue Requirements was functionalized to onsite,
23 classified to customer related costs and allocated among Customer Classes by
24 direct assignment to the classes responsible for this activity. As a result, most of
25 the reduction was allocated to the residential Customer Classes.

1 *Interest and related income* aggregated a \$6 million reduction in Revenue
2 Requirements. This was functionalized, classified and allocated among Customer
3 Classes in the same ratios as the rate base and components of the rate base. These
4 are primarily earnings on cash balances maintained in connection with bonds and
5 leases, and are thus related to the rate base. A small amount due to capitalized
6 interest was functionalized, classified and allocated among Customer Classes in
7 the same ratios CWIP.

8 Revenue from *Finance Charges* was \$15 million. This reduction in Revenue
9 Requirements was functionalized and classified based on Revenue Requirements,
10 and allocated among Customer Classes based on a special study of overdue
11 amounts performed based on data for Fiscal Year 1998.

12 *GCR Adjustments* due to customers at the start of the Test Year, \$14 million, was
13 functionalized to production, classified to demand and allocated among based on
14 the volumes subject to the GCR under the Tariff. Because customers will receive
15 credits aggregating this amount, this item increased the Revenue Requirement.

16 This item will vary as needed from year to year by operation of the GCR; that is,
17 including it in the Test Year Revenue Requirement does not mean that it is
18 permanently included in the rates.

19 **Q. WHAT DISCOUNTS ARE INCLUDED IN THE PGW COSS, AND WHY**
20 **ARE THEY INCLUDED IN THE TARIFF REQUIREMENT?**

21
22 A. PGW has two discount programs, the CRP and the Senior Citizens discounts.

23 Discounts under the two programs aggregated \$58 million. These are not costs
24 incurred by PGW. However, these items must be accounted for when designing

1 the Tariff, so that the tariff rates will provide sufficient revenue after reflecting the
2 items. As discussed above, the "Tariff Requirement" is the amount that would be
3 collected under the Tariff before allowing for these items. The Tariff
4 Requirement minus these discounts, and the other revenue and expense items
5 discussed above, will provide the Revenue Requirement to PGW.

6 **Q. WHAT ARE THE ALLOCATORS FOR THESE DISCOUNTS?**

7 These discounts are functionalized and classified based on Revenue
8 Requirements, and allocated among Customer Classes based on the Customer
9 Class from which they arise. However, PGW policy is to recover the discounts
10 from Customer Classes through its GCR, which is assigned among non-
11 interruptible Customer Classes based on annual sales volumes. Therefore, the
12 results of the PGW COSS are presented on two bases; first, on a cost-causation
13 basis, and then, on the basis of re-assigning responsibility for the discounts among
14 non-interruptible Customer Classes based on annual sales volumes. It should be
15 noted that the results will be the same whether the discounts are recovered
16 through the GCR itself, or through another clause which assigns responsibility
17 among non-interruptible Customer Classes based on annual sales volumes.

18 **Q. ARE THERE ANY OTHER ITEMS THAT PGW TREATS SIMILARLY**
19 **TO THESE DISCOUNTS FOR RATE-MAKING PURPOSES?**

20
21 A. Yes. PGW policy is to recover the costs of its Conservation Works Program
22 ("CWP") from non-interruptible Customer Classes based on annual sales
23 volumes.

1 Q. **WHAT IS THE MECHANISM THAT PGW USES TO ASSIGN AND**
2 **RECOVER THE CRP AND SENIOR DISCOUNTS AND CWP COSTS TO**
3 **THOSE CUSTOMERS?**

4
5 A. The costs of the CRP discount, Senior discount and CWP are “Social Costs”.

6 PGW presently includes the amount of Social Costs to be recovered in the GCR
7 adjustment. However, even if another **mechanism** is used, the results of the PGW
8 COSS would not change on a projected basis as long as PGW’s **policy** is to
9 recover the Social Costs from non-interruptible customers. On an actual basis,
10 using the GCR mechanism to recover Social Costs means that PGW does not gain
11 or lose if actual costs of these programs are different from budget. If a different
12 mechanism were used to recover the Social Costs, this would not necessarily be
13 true.

14 Q. **ARE THERE ANY OTHER COMPONENTS TO THE PGW COSS THAT**
15 **WARRANT DISCUSSION?**

16
17 A. No, the above testimony addresses all significant components of the PGW COSS.

18 **SECTION 2 – RESULTS OF THE PGW COSS**

19 Q. **PLEASE DESCRIBE THE INFORMATION ON EXHIBIT HSG – 1,**
20 **SCHEDULE 1.**

21
22 A. Exhibit HSG – 1, Schedule 1, shows the Revenue Requirement and the Tariff
23 Requirement for PGW, in total and for each Customer Class; line 18 is on a **cost-**
24 **causation** basis and line 22 is after **re-assigning** Social Costs.

25 Q. **PLEASE DESCRIBE THE INFORMATION ON EXHIBIT HSG – 1,**
26 **SCHEDULE 2.**

27
28 A. Exhibit HSG – 1, Schedule 2 shows the classified, unitized Revenue
29 Requirements by Customer Class. “Classified” means that each cost element is

1 classified as one of Customer, Commodity or Demand. "Unitized" means that the
2 classified costs are expressed in terms of a meaningful unit of measurement. For
3 example, commodity related costs are typically expressed in dollars per thousand
4 cubic feet ("mcf") of gas used. Customer related costs are typically expressed in
5 dollars per customer-month. Demand related costs are expressed in dollars per
6 mcf of peak daily demand.

7 **Q. PLEASE EXPLAIN THE CUSTOMER RELATED COSTS IN THE PGW**
8 **COSS.**

9
10 A. As previously described, customer related costs are the costs incurred to attach a
11 customer to the distribution system, to meter gas usage and to maintain the
12 customer's account. The total of all customer costs for PGW is a function of the
13 number of customers served. Customer costs continue to be incurred whether or
14 not a particular customer uses any gas. They include capital costs associated with
15 distribution mains, services and meters, and operating costs such as customer
16 service and accounting expenses. Total customer costs by Customer Class for the
17 Test Year are shown on Exhibit HSG – 1, Schedule 1, line 12. These costs are
18 shown on a unit basis, on Exhibit HSG – 1, Schedule 2, line 36. The unit is a
19 customer-month; that is, these are the amounts that PGW should collect from each
20 customer each month to recover fully its customer related costs.

21 **Q. DID YOU COMPARE THE MONTHLY CUSTOMER CHARGES BEING**
22 **PROPOSED BY PGW TO THE CUSTOMER RELATED COSTS IN THE**
23 **PGW COSS?**

24
25 A. Yes. For every Customer Class, the monthly Customer Charges being proposed
26 by PGW are lower than the customer related costs on a per customer-month basis

1 in the PGW COSS for Test Year Budget 2001. The customer related costs for
2 PGW are shown on Exhibit HSG – 1, Schedule 2, line 36; the proposed monthly
3 Customer Charges are shown on line 38; the differences are shown on line 40.

4 **Q. PLEASE DESCRIBE THE INFORMATION ON EXHIBIT HSG – 1,**
5 **SCHEDULE 3.**

6
7 A. Exhibit HSG – 1, Schedule 3 compares the revenue that PGW would realize under
8 the proposed Tariff, to the Tariff Requirements. The under and over-recoveries
9 compared to **cost-causation** based Tariff Requirements are shown on line 12
10 (dollars) and line 14 (percentages). The under and over-recoveries after **re-**
11 **assigning** Social Costs on a volumetric basis are shown on line 19 (dollars) and
12 line 21 (percentages).

13 **Q. PLEASE DESCRIBE THE INFORMATION ON EXHIBIT HSG – 1,**
14 **SCHEDULE 4.**

15
16 A. Exhibit HSG – 1, Schedule 4 shows Projected Surplus (Deficit) for PGW and for
17 each Customer Class, based on the costs and physical quantities in the Test Year
18 Budget, and using the revenues that would be collected under the proposed Tariff.
19 The Projected Surplus for each Customer Class is shown on a **cost-causation**
20 basis on line 34 and after **re-assigning** Social Costs on line 45. Line 37 shows the
21 Surplus Responsibility for each Customer Class (the amount of Budgeted Surplus
22 allocated to each Customer Class in the PGW COSS; this item was allocated
23 using a special allocator which reflected non-gas operating costs).
24 Exhibit HSG – 1, Schedule 4, line 38 compares Projected Surplus on a **cost-**
25 **causation** basis to Surplus Responsibility; the resulting under and over amount
26 for each Customer Class is the same as Exhibit HSG – 1, Schedule 3, line 12.

1 Exhibit HSG – 1, Schedule 4, line 49 compares Projected Surplus on a re-
2 **assignment** basis to Surplus Responsibility; the resulting under and over amount
3 for each Customer Class is the same as Exhibit HSG – 1, Schedule 3, line 19.

4 Exhibit HSG – 1, Schedule 4A shows the computation of the \$800 million under
5 the proposed Tariff before discounts, with the result on line 28.

6 **Q. PLEASE DESCRIBE THE INFORMATION ON EXHIBIT HSG – 1,**
7 **SCHEDULE 5.**

8
9 A. Exhibit HSG – 1, Schedule 5 shows Projected Surplus (Deficit) for PGW and for
10 each Customer Class, based on the costs and physical quantities in the Test Year
11 Budget, and using the revenues that would be collected under the proposed Tariff.
12 This assumes that PGW will recover higher gas costs through the GCR, and
13 therefore the GCR volumetric charge remains the same as in the Proposed Tariff.
14 Exhibit HSG – 1, Schedule 5A shows the computation of the revenue under the
15 existing Tariff before discounts, with the result on line 28.

16 **Q. PLEASE DESCRIBE THE INFORMATION ON EXHIBIT HSG – 2.**

17 A. Exhibit HSG – 2, Schedules 1, 2 and 3, present information provided by PGW for
18 use in the PGW COSS. Each schedule has been discussed in this testimony.

19 **Q. PLEASE DESCRIBE THE INFORMATION ON EXHIBIT HSG – 3.**

20 A. Exhibit HSG – 3, Schedule 1 compares the revenue that PGW would realize under
21 the proposed Tariff to the revenue under the existing Tariff. Line 30 shows that
22 the new rates would increase PGW's revenue by approximately \$65 million,
23 assuming the customer counts and volumes in the Test Year Budget. The percent
24 increase for each Customer Class is shown on line 32, and the percent increase in

1 the average monthly customer bill is shown on line 46. It should be noted that the
2 amounts on this schedule have the same gas costs and assume that PGW will
3 collect those gas costs under either the proposed Tariff or the existing Tariff. In
4 addition, some costs such as Uncollectible Accounts Expense could be lower if
5 revenue were lower, but no adjustment was made to attempt to reflect this.

6 **Q. PLEASE DESCRIBE THE INFORMATION ON EXHIBIT HSG – 4.**

7 A. Exhibit HSG – 2, Schedules 1 and 2 present information provided by PGW for
8 use in the PGW COSS. Each schedule has been discussed in this testimony.

9 **Q. PLEASE DESCRIBE THE INFORMATION ON EXHIBIT HSG – 5.**

10 A. Exhibit HSG – 5, Schedules 1 through 22, present the development of each of the
11 main external allocators.

12 **Q. PLEASE DESCRIBE THE INFORMATION ON EXHIBIT HSG – 6.**

13 A. Exhibit HSG – 6 is a printout of the PGW Cost of Service study.

14 **Q. DOES THIS CONCLUDE YOUR TESTIMONY TODAY?**

A. Yes.

Testimony of Howard S. Gorman
On behalf of Philadelphia Gas Works

HOWARD S. GORMAN
MANAGING CONSULTANT
R.J. Rudden Associates, Inc.
898 VETERANS MEMORIAL HIGHWAY
Hauppauge, New York 11788
(631) 348-4090

SUMMARY

Howard S. Gorman has more than 12 years of diversified experience in the energy industry, and a total of 20 years experience covering all areas of finance. He specializes in energy project financing and analysis; energy asset valuations, acquisitions and divestitures; mergers and related management and organizational matters; economic and financial planning; computer modeling and information systems; and accounting and costing including electric and gas costing. He also has extensive experience in budgeting and reporting; procurement and contract negotiation; interest and currency derivatives; and all areas of financial management including treasury, insurance, benefits and taxes. He has worked with independent power plants, combined heat and power facilities and other cogeneration facilities, district heating and cooling systems, and regulated and unregulated entities; other industries include leisure goods and software.

PROFESSIONAL EMPLOYMENT

1997 - Present	R.J. Rudden Associates, Inc. Managing Consultant, Chief Financial Officer
1995 - 1997	Independent Consultant
1987 - 1995	Trigen Energy Corporation 1987-1993 Corporate Controller; Trigen was formed in 1987 1993-1995 Treasurer; Trigen had IPO with NYSE listing in 1994
1982 - 1987	Coleco Industries, Inc. Director, Treasury
1976 - 1979	Touche Ross & Co. Staff Accountant

PROFESSIONAL EXPERIENCE

Energy Project Financing and Analysis

Mr. Gorman has successfully completed numerous energy asset financing transactions as a principal and has also supported the financing of many other energy assets.

He has negotiated and completed transactions including construction and term loans, tax-exempt bonds, taxable bonds, subordinated debt, asset-backed (receivables and inventory) revolving credit facilities and other instruments. The borrowers have included corporations, joint ventures, special purpose entities and partnerships. He has worked successfully with lenders and borrowers to source and structure transactions, and has been instrumental in the negotiation of the loan documents and in the design of power sale contracts and supply procurement contracts to be financable. Among these financings are a \$28 million construction and term loan for the joint venture which constructed the district heating and cooling system for McCormick Place Exposition Center, Chicago; a \$62.5 million corporate acquisition and expansion facility secured by a portfolio of energy assets; a \$40 million tax-exempt financing for the Trenton cogeneration and district energy system; a \$39 million IPO for Trigen Energy Corporation (NYSE- TGN); and over \$150 million in connection with acquisitions.

These projects have included independent power plants, combined heat and power facilities, other cogeneration facilities including plants which were Qualifying Facilities under PURPA, district heating and cooling systems, and regulated and unregulated entities.

Mr. Gorman has performed analysis of several energy projects in connection with due diligence for financing, including contract review, financial modeling, supply analysis, forward price projections, and economic valuation with cash flow forecasting, and the identification, assessment and mitigation of financial and operating risks for the project and its investors.

The clients and entities with which he has worked include Trigen Energy Corporation; The Toronto-Dominion Bank; Societe Generale; Peoples Gas Corporation; Calpine; Bank of Montreal; and Donaldson, Lufkin and Jenrette.

Energy Asset Valuations, Acquisitions and Divestitures

Mr. Gorman has participated both as principal and consultant in the valuation of energy assets, and also in the subsequent acquisition or divestiture. He has performed financial and strategic valuations of power plants, business units, public corporations, private corporations, partnerships and other entities.

These valuations included development and review of assumptions, analysis of data, modeling and forecasting, sensitivity testing under various constraints, and forming and supporting an opinion as to valuation.

These valuations were used to support strategic decisions as to which assets to acquire or divest, and what price to pay or accept, as well as the development of post-acquisition strategic alternatives for the acquiror. In the case of acquisitions, the valuations were often used to support the financing for the assets. Among these activities are valuations of power plants, combined heat and power plants, and energy companies for the purpose of acquisition; valuation and assessment of alternatives for the waste-to-energy assets and other energy assets of a diversified company on behalf of an interested acquiror; valuation of the common stock of a publicly traded multi-jurisdiction utility for the purpose of investment; assessment of strategic fit and valuation for a utility seeking to diversify into energy-related services; and assistance with valuation and preparation for negotiation for a private entity seeking a buyer for energy assets.

The clients and entities with which he has worked include Trigen Energy Corporation; Ameren Corporation; Blavin and Co.; and several confidential assignments.

Mergers and Related Management and Organizational Matters

In connection with his work in asset valuations and acquisitions, Mr. Gorman has extensive experience integrating newly acquired assets into a company. He has successfully completed the financial integration of several acquisitions, including development of accounting, reporting and control systems, consolidation of functions and procurement. In addition, he has advised clients on the operating implications of transactions under consideration, as well as the financial, regulatory and strategic implications. Mr. Gorman has performed these services on behalf of the Midwest ISO, Mappcor, Star Gas MLP, Trigen Energy Corporation, Calpine and several confidential assignments.

Computer Modeling and Decision Support

Mr. Gorman is a highly accomplished modeler with expertise in spreadsheet and database applications, as well as the use of programming tools. He has developed analytical tools to perform valuations, projections and simulations. These models have been applied to financial analysis, cost allocations, rate design and pricing, forecasting revenue requirements, numerous tax and accounting matters, supply modeling and optimizations. Several of these models have contained interactive modules for automated scenario testing and sensitivity analysis.

Mr. Gorman has performed analyses and created applications in Excel, Lotus, Access and VB/VBA. Among these assignments, he specified, designed and programmed the upgraded R.J. Rudden Electric Cost of Service Model and the upgraded R.J. Rudden Gas Cost of Service Model; and internal projects for R.J. Rudden Associates, Inc.

Clients for which Mr. Gorman performed these services include Baltimore Gas & Electric, Philadelphia Gas Works, Niagara Mohawk Power Corporation, Enmax-City of Calgary, Connecticut Natural Gas, Southern Connecticut Gas Corporation, Bank of Montreal, Blavin & Co. and several confidential assignments.

Accounting and Costing Including Electric and Gas Costing

Mr. Gorman has extensive experience in financial accounting as well as cost accounting. As controller of Trigen Energy Corporation, he founded and built the finance and accounting function; developed reports, procedures and management tools; and managed subsidiary controllers across North America.

In addition, he has performed electric and gas costing assignments for clients, including developing the unbundled, fully allocated cost of service for an electric company undergoing deregulation pursuant to FERC Order 888; developing revenue requirements and identifying customer class cross-subsidizations for a gas LDC; designing a rate structure, allocating costs and assisting with a FERC rate filing for an electric regional transmission organization; budgeting and costing for an electric regional transmission organization.

These assignments included development of test year data under the regulatory basis, review and documentation of operations, establishment of cost causality, selection of allocation bases, development of allocators, and implementation of billing determinants for rate design.

The companies for which he has performed these assignments include Baltimore Gas & Electric, Philadelphia Gas Works, PJM Interconnection, LLC, MAPPOR and Trigen Energy Corporation.

Financial Management and Related Areas

Mr. Gorman has developed, sourced and procured competitive contracts for loans as well as for energy, both as principal and on behalf of clients. This included an RFP for competitive supply of electricity for the State of New Jersey and its agencies.

He has bought and sold derivatives in the course of business transactions for the purposes of managing interest rate risk and currency risk. This included interest rate forwards and options in connection with financings; and currency swaps and forwards in connection with intercompany transfers and international procurement.

He managed the corporate insurance portfolios and the benefit plans for Trigen Energy Corporation and for Coleco Industries.

EDUCATION

New York University, B.S., Accounting, 1976

Harvard Business School, MBA, 1981

Exhibit B

Testimony of Howard S. Gorman
On behalf of Philadelphia Gas Works

R. J. RUDDEN ASSOCIATES, INC.

R.J. Rudden Associates, Inc. (Rudden) provides economic, management and financial consulting services to utilities and their customers throughout North America and internationally. Founded in 1981, we have approximately 70 consultants. Our headquarters office is in Hauppauge, New York with regional offices in Washington, D.C. and San Francisco, California. Rudden's major practice areas include utility pricing; regulatory policy analysis; strategic and market planning; market research, demand forecasting and marketing; merger and acquisition assistance; generation and transmission planning; energy project management, financing and analysis; fuels analysis and acquisition; and litigation support and testimony. Our clients include electric and gas utilities subject to FERC and state regulation, energy producers and consumers, other industrial and commercial organizations, financial institutions and the U.S. and Canadian government.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

JAY P. LUKENS, PhD.

ON BEHALF OF
PHILADELPHIA GAS WORKS

Docket No. R-00006042

PHILADELPHIA GAS WORKS
BASE RATE PROCEEDING

JANUARY, 2001

1 **Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.**

2
3 A. My name is Jay P. Lukens. I am President of the Lukens Energy Group, Inc.
4 ("LEG"). My business address is 2100 West Loop South, Suite 1300, Houston,
5 Texas 77027. My telephone number is (713) 961-1100 and my E-mail address is
6 jlukens@lukensgroup.com.

7 **Q. PLEASE DESCRIBE THE BUSINESS ACTIVITIES OF LEG.**

8 A. LEG offers economic analysis, business counsel and litigation support services
9 to buyers and sellers of natural gas, electricity and related products and services.
10 LEG's senior consultants have management experience and market expertise in
11 all phases of the natural gas value chain. LEG also employs technical experts in
12 the fields of finance, economics, econometrics, decision science and applied
13 mathematics.

14 **Q. PLEASE DESCRIBE YOUR BACKGROUND AND QUALIFICATIONS.**

15 A. I hold B.A. and Ph.D. degrees in economics and have an extensive background
16 in energy economics. My curriculum vitae is attached as an Appendix. I have
17 provided business advice and expert testimony on a wide variety of issues
18 involving natural gas pipelines, local gas distribution companies, energy
19 marketing companies and electric utilities. I have also provided expert opinions
20 in civil litigation and at the Federal Energy Regulatory Commission ("FERC")
21 involving issues of market power and antitrust economics. Prior to becoming a
22 consultant I worked for Transcontinental Gas Pipe Line Corporation ("Transco").
23 At the time of my departure from Transco in 1995 I held the position of Senior
24 Vice President of Planning and Rates. I was responsible for Transco's strategic
25 planning, rates and Federal regulatory affairs from 1987 to 1995.

1 I have provided consulting services to many of the leading natural gas and
2 electric power firms in North America on issues of business strategy, business
3 valuation and regulatory policy. I have published articles on pricing pipeline
4 capacity and I am a regular speaker at industry functions on topics related to the
5 natural gas and electric power industries.

6 **Q. WHAT IS THE PRIMARY PURPOSE OF YOUR TESTIMONY IN THIS**
7 **PROCEEDING?**

8 A. I have been asked by Philadelphia Gas Works (PGW) to review the Cost of
9 Service Study filed in this case and develop an estimate of the additional
10 revenues that would be required if PGW were an investor-owned utility (IOU).
11 Specifically, I will consider the revenue impacts of an increase in PGW's equity
12 mix and the capitalization of PGW with taxable debt and equity. In addition, I will
13 estimate the income tax and several additional taxes other than income that
14 PGW would be liable for if it was an IOU, and I will reduce the cost of service to
15 reflect elimination of the City Payment.

16 **Q. WHEN DO YOU ANTICIPATE FILING THE RESULTS OF YOUR STUDY?**

17 A. I have just received the completed Cost of Service Study and anticipate
18 completing and filing the results of my study, along with additional testimony, by
19 January 16, 2001.

JAY P. LUKENS

Lukens Energy Group, Inc.
2100 West Loop South #1300
Houston, Texas 77027

PROFESSIONAL EXPERIENCE

Lukens Energy Group, Inc., Houston, TX
President, January 1999 – present

Founder of economics/management consulting firm offering economic analysis, business counsel, and litigation support services to buyers and sellers of natural gas, electricity and related products and services. Areas of expertise include economics of deregulation, market power analysis, and energy project evaluation. Provides expert testimony in conjunction with civil litigation and regulatory proceedings.

The Economics Resource Group, Inc., Houston, TX
Managing Director, August 1996 – December 1998

Principal of the firm and head of the Houston office. Lead consultant on variety of assignments regarding business and regulatory strategy for electric utilities, natural gas pipelines and distributors, and energy marketing firms.

Energy Market Economics, Inc., Houston, TX
President, November 1995 - August 1996

Founder of consulting firm offering services to energy firms in the areas of business strategy, project evaluation and development, expert witness, and regulatory support.

Transcontinental Gas Pipe Line Corporation, Houston, TX
Senior Vice President, 1989 - 1995

Principal commercial officer with accountability for operating income performance and direct responsibility for business strategy, rates, and federal regulatory affairs. Served as company's principal negotiator in rate cases, transition cost recovery proceedings, and settlements of major civil lawsuits. Directed Transco's implementation of FERC Order No. 636. Represented Transco as a policy witness in FERC proceedings. Had P&L responsibility for Transco's gas marketing business during 1991-92. Initiated and directed two major projects to align internal business processes with new competitive environment.

Vice President, Market Development and Planning, 1986 - 1989

Directed Transco's rates, planning, and business development activities. Served as Transco's principal negotiator in FERC's Northeast Open Season proceeding. Developed, marketed, and obtained regulatory approval for projects to expand Transco's capacity by over 10 percent (over 500 MMCFD) with associated capital investment of almost \$300 million. Negotiated contracts with other pipelines to market gas storage and Canadian gas supply projects on Transco's system. Managed Transco's interests in several joint ventures with other interstate pipelines. Evaluated proposals for Transco to acquire or divest pipeline properties and gas production assets.

Director, Strategic Planning, 1985 - 1986

Developed annual budgets, long-range plans, and special studies to support business development activities. Developed market analysis of Transco system that guided market development efforts over the next five years.

*AT&T Communications, Basking Ridge, NJ
Staff Manager, 1981 - 1985*

Worked in an internal consulting group known as the Analytical Support Center. Led interdisciplinary teams in analyses of a wide range of strategic and operational issues. Principal work related to the impacts of deregulation and divestiture on AT&T's service structure and pricing strategy. Developed competitor analysis methods and systems. Managed market research and economic modeling to evaluate new network services.

*Resources Research Corporation, Bryan, TX
Economist, 1978 - 1981*

Analyzed data and provided general research support for consulting projects. Principally responsible for econometric studies of markets for medical and dental services.

EDUCATION

Texas A&M University, College Station, TX
Ph.D., Economics, 1981

Eckerd College, St. Petersburg, FL
B.A., Economics, 1977

REPRESENTATIVE BUSINESS STRATEGY CONSULTING EXPERIENCE

Integrated Gas/Electric Company

Assisted in the evaluation and eventual acquisition of a major integrated natural gas company. Developed financial evaluation models for natural gas pipeline and local distribution companies. Developed probabilistic methods to value future growth opportunities. (Ongoing)

Integrated Gas/Electric Company

Assisted a large integrated natural gas and electric power company develop a comprehensive strategy for its regulated businesses. Developed viewpoint of future market structure to align management team around strategic alternatives. Analyzed earnings potential of regulated businesses relative to long term growth plans of corporation. Recommended strategies that consisted of business unit divestiture, asset acquisition, pipeline project development and wholesale trading and marketing. (Ongoing)

Major Gas Utility

Retained to assess the risk of a proposal to eliminate cost-based rates for utility gas sales service. Project involves assessment of the cost and risk inherent in overall gas supply and pipeline capacity contract portfolio. Developing forecast of pipeline capacity prices in Northeast region through 2005. (1999)

Major Electric Utility

Assisting a major electric utility in developing a natural gas strategy. Project to date has focused on evaluation of potential acquisition of natural gas assets. Assessed regional growth in gas consumption and pipeline capacity driven by growth in gas-fired electric generation. Developed screens for potential acquisition candidates based on financial, operational, and regulatory criteria. Developed financial valuation models for a number of gas assets. Developed preliminary market power analysis to identify potential antitrust issues associated with certain acquisitions. (ongoing)

Atmos Energy Corporation

Assisting in the development of a comprehensive, long-term regulatory strategy for the five operating companies and twelve states in which Atmos operates. Strategic issues being considered include rate case timing, the timing and extent of sales service unbundling, and approaches to incentive regulation. Engagement also encompasses re-engineering of the long-range planning process. (ongoing)

Major Energy Marketing Company

Provide analytical support for development of retail energy marketing strategy in state of Georgia. (1998)

Major Oil Company

Provided analysis of potential market for LNG imports. (1998)

Interstate Natural Gas Association of America

Provided analysis to INGAA staff on the potential for regulation by FERC pursuant to the Outer Continental Shelf Land's Act to supplant cost of service regulation pursuant to the Natural Gas Act for offshore pipelines in the Gulf of Mexico. (1997)

North Atlantic Pipeline Partners, L.P.

Provided analytical support to the sponsors of this offshore Canada pipeline project on a broad range of subjects. Prepared a market analysis report estimating potential demand for pipeline capacity in the Northeast that was filed with FERC and NEB certificate applications. Developed cost allocation and rate design methods, and provided necessary exhibits in FERC and NEB certificate applications. Developed economic models used in project evaluation and risk analysis. (1997-1998)

CNG Transmission Corporation

Prepared analysis of pipeline transportation markets in support of proposal to FERC for market-based rates for interruptible and short-term firm transportation services. (1998)

Major Interstate Pipeline

Conducted a strategic evaluation of production area gas transportation and liquids assets designed to position pipeline to respond to increased gas supplies coming

from deep water development in the Gulf of Mexico off the continental shelf.
(1997)

Interstate Natural Gas Association of America

Worked with INGAA staff to develop comments on FERC's Proposed Rulemaking on removing price caps for secondary market transactions (*Docket No. RM96-14*).
(1996)

Major Gas Gathering Company

Provided advice on regulatory strategy for gathering company seeking refunctionalization of transmission assets owned by major interstate pipeline.
(1996)

Interstate Natural Gas Association of America

Wrote a paper comparing electronic transportation information systems in the natural gas and electricity industries. INGAA filed the paper with its comments in *Docket No. RM95-9*. (1995)

TESTIMONY

Texas Gas Transmission Corporation

United States of America before the Federal Energy Regulatory Commission, Texas Gas Transmission Corporation, Docket No. RP00-260-000. Testimony supporting proposal for

seasonal and term differentiated rates for short term transportation services. Also addressed analysis of the supply and demand balance and the business risk in the market for pipeline capacity in which Texas Gas participates, April 21st, 2000.

ATCO Gas Company

Before the Alberta Energy and Utilities Board, Nova Gas Transmission Ltd., on behalf of ATCO Gas Company. Testimony for alternative rate design for Nova Gas Transmission Ltd. Written evidence submitted on August 10, 1999.

El Paso Natural Gas Company

United States of America before the Federal Energy Regulatory Commission, El Paso Natural Gas Company, Docket No. RP97-287-010. Expert Report filed to rebut claims by CPUC regarding effect on California gas market of contract between Dynegy Corp. and El Paso Natural Gas, May 6, 1999.

El Paso Natural Gas Company

United States of America before the Federal Energy Regulatory Commission, Docket No. RM98-10, Regulation of Short-Term Natural Gas Transportation Services, Docket No. RM98-12, Regulation of Interstate Natural Gas Transportation Services. Expert Report (with Adam Jaffe) regarding economic impact of FERC's proposed rule, April 12th, 1999.

Transcontinental Gas Pipeline Company

United States of America before the Federal Energy Regulatory Commission, Transcontinental Gas Pipeline Company, Docket No. CP98-74-001. Prepared Answering Testimony on behalf of Transco analyzing competitive effects of refusal to construct interconnect, January 5, 1999.

Northern Natural Gas Company and Dynegy Energy Resources, Limited Partnership, *Bearpaw Gathering Systems, Inc., et al., vs. Northern Natural Gas Company and Dynegy Energy Resources, Limited Partnership, f/k/a NGC Energy Resources, Limited Partnership, vs. Ocean Energy, Inc., in the United States District Court for the District of Harris County, Texas, Cause No. 97-47540. Expert testimony in natural gas contract dispute, December 22, 1998.*

Shell Oil Company, Shell Western E&P, Inc., and Mobil Producing Texas and New Mexico, Inc.

CO2 Claims Coalition, et al., vs. Shell Oil Company, et al., in the United States District Court for the District of Colorado, CIV. No. 96-Z-2451. Expert Report analyzing the economic implications of the Plaintiffs' and their Experts' claims concerning price fixing and anti-competitive behavior in establishing the tariffs charged by Cortez Pipeline Company to move CO₂ from the McElmo Dome Unit in southwestern Colorado to Denver City in the Permian Basin, November 2, 1998. Supplemental Expert Report filed April 30, 1999.

El Paso Natural Gas Company

United States of America before the Federal Energy Regulatory Commission, El Paso Natural Gas Company, Docket No. RP97-287-010. Expert Report (with Adam Jaffe) filed with the Initial Comments of El Paso in the technical conference in this docket analyzing the policy issues raised by the contracts between El Paso and Natural Gas Clearinghouse, February 26, 1998. Expert Report filed with the Reply Comments of

El Paso in the technical conference in this docket analyzing the competitive impacts of the contracts between El Paso and Natural Gas Clearinghouse, April 14, 1998.

Texas New Mexico Power Company

State of Texas, State Office of Administrative Hearings, Application for Approval of the TNMP Transition Plan and Statement of Intent to Decrease Rates, and Municipal Rate Appeals, SOAH Docket No. 473-97-1561. Prepared Rebuttal Testimony in Support of Restated Stipulation. Policy testimony on terms of competition and conditions of entry in electric restructuring case, March 2, 1998.

AEC Oil & Gas, a Division of Alberta Energy Company, Ltd., Canadian Forest Oil Ltd., and ProGas Limited

In Arbitration, Alberta Northeast Gas Limited vs. AEC Oil & Gas, a Division of Alberta Energy Company, Ltd., Canadian Forest Oil Ltd., and ProGas Limited. Testimony regarding proper interpretation of long-term gas sales contract. Prepared Direct Testimony, January 26, 1998. Reply Testimony, February 11, 1998.

CNG Transmission Corporation

United States of America before the Federal Energy Regulatory Commission, CNG Transmission Corporation, Docket No. RP97-406-000. Prepared Direct Testimony. Expert testimony on market power in secondary market for pipeline capacity, July 1, 1997.

Leidy Line Roll-in Group

United States of America before the Federal Energy Regulatory Commission, Transcontinental Gas Pipe Line, Docket No. RP95-197 & RP 97-71 (Consolidated). Prepared Answering Testimony, March 25, 1997. Cross-Answering Testimony filed May 12, 1997.

Amoco Production Company

In the Matter of Doris Feerer, et al. vs. Amoco Production Company, et al., Civ. No. 95-0012-JC/WWD in United States District Court for the District of New Mexico. Expert report regarding vertical integration and transfer pricing in a royalty dispute, May 5, 1997.

Oklahoma Gas and Electric Co.

Prepared Rebuttal Testimony before the Corporation Commission of the State of Oklahoma, Cause No. PUD 960000116, on behalf of Oklahoma Gas and Electric Company. Recommended the proper allocation of costs for the Enogex pipeline system between Oklahoma Gas and Electric and third party transportation services, November 6, 1996.

Nashville Gas Company

Prepared Direct Testimony before the Tennessee Public Service Commission, Docket No. 96-00805, on behalf of Nashville Gas Company, A Division of Piedmont Natural Gas Company. Proposed a performance incentive program for Nashville's gas procurement and capacity costs, April 22, 1996.

Leidy Line Roll-in Group

United States of America before the Federal Energy Regulatory Commission, Docket No. RP95-197-000 (Phase II). Expert testimony supporting rolled-in rate treatment for Transco's existing incrementally priced expansion projects. Other Answering and Rebuttal Testimony filed as case progressed, January 24, 1996.

Transcontinental Gas Pipe Line Corporation (Transco)

United States of America before the Federal Energy Regulatory Commission, Docket No. RP95-197-000, Prepared Direct Testimony on behalf of Transco. General policy issues in rate case, March 15, 1995.

United States of America before the Federal Energy Regulatory Commission, Docket No. RP93-100, Prepared Direct Testimony on behalf of Transco, supporting the terms and conditions of Transco's contract settlement with Dakota Gasification. Other Supplemental, Answering, and Rebuttal Testimony filed as case progressed, December 19, 1994.

United States of America before the Federal Energy Regulatory Commission, Docket No. RM94-4, Public Conference on Natural Gas Gathering Issues, testimony and response to questions before the Commission members and their staff, February 24, 1994.

United States of America before the Federal Energy Regulatory Commission, Docket No. RP92-137, Prepared Direct Testimony on Behalf of Transco, addressing general policy issues in rate case; primary issue in litigated phase of the case was the design of rates for production area services. Supplemental, Answering, and Rebuttal testimony filed as case progressed, March 17, 1992.

United States of America before the Federal Energy Regulatory Commission, Docket No. RP92-108, Prepared Direct Testimony on Behalf of Transco, supporting general policy issues in rate case, March 10, 1992.

United States of America before the Federal Energy Regulatory Commission, Docket No. CP92-378, Prepared Direct Testimony on Behalf of Transco, addressing the design of an incentive rate mechanism for gas pipelines, February 28, 1992.

United States of America before the Federal Energy Regulatory Commission, Docket No. RM90-1, Public Conference on Pipeline Construction Rulemaking, testimony and

response to questions before the Commission members and their staff, January 28, 1992.

United States of America before the Federal Energy Regulatory Commission, Docket No. RP90-8, Prepared Direct Testimony on Behalf of Transco, supporting proposal for new transportation rate design consistent with unbundled service structure, October 24, 1989.

United States of America before the Federal Energy Regulatory Commission, Docket No. RP87-7, Prepared Direct Testimony on Behalf of Transco, addressing the reserved issues of rate design and the terms and conditions of transportation service; supported proposal for a price deregulated secondary market in pipeline capacity rights, June 21, 1989.

United States of America before the Federal Energy Regulatory Commission, Docket No. TA-3-89, Prepared Answering Testimony on Behalf of Transco in remedies phase of FERC enforcement action, February 13, 1989.

PUBLICATIONS AND RESEARCH

"Pricing and Integrated Energy Transmission Grid: Are FERC's Natural Gas and Electric Power Transmission Pricing Policies on a collision course?" *The Electricity Journal*, March 2000.

"The Pipeline's View: FERC's Proposed Rule Misses the Mark," with Adam Jaffe, *Public Utilities Fortnightly*, July 1, 1999.

"Benefits of Retail Electricity Competition in Low Cost States," with Greg Hopper and Frank Felder, *Electricity Journal*, August/September 1998.

"Should a Marketer Manage Your Supply Assets?" with Greg Hopper, *Hart's Energy Markets*, February 1998.

"Wither the Contract for Pipeline Capacity," *Natural Gas Focus*, January 1996.

"Comparison of Transportation Information Systems in the Gas and Electric Industries," EME Working Paper, December 1995.

SELECTED PRESENTATIONS

"Future Pipeline Contract Trends and Emerging Market Centers," presented at the Southern Gas Association—Gas Supply Marketing Forum VII, October 1998.

"Pricing Pipeline Capacity," presented to the Public Service Electric and Gas Company Annual Supplier Meeting, September 1998.

"LDC Unbundling: Theory and Practice," presented at annual meeting of the Municipal Gas Association of Georgia, April 1997.

"LDC Unbundling: Where's the Beef?" presented at Southern Gas Association Marketing Executive Forum, October 1996.

"Five Lessons Learned in Unbundling Natural Gas Pipelines," presented at Center for Business Intelligence Conference, November 1995.

"Evolving Energy Markets: Open Access, Wheeling, and Restructuring," presented at annual meeting of the American Bar Association, August 1994.

"Transco's Operations Under Order No. 636," presented to the Terzic Task Force on Competition, January 1993.

"Straight Fixed Variable Rate Design, Market Centers, and Mitigation," presented at annual meeting of the Institute of Public Utilities, December 1992.

"Service Unbundling: A Primer," presented at the Institute of Gas Technology's conference on Gas Supply for Electric Power, March 1992.

OTHER PROFESSIONAL ACTIVITIES

International Association for Energy Economics (IAEE), 1996 – 1998

Board of Directors, INGAA Foundation, 1989 - 1995, 1997 - 1998

Member, Rate Committee, INGAA, 1986 - 1995

Member, Policy Analysis Committee, INGAA, 1986 - 1995

HONORS AND AWARDS

Recipient of the Alfred Chalk Award to the Outstanding Graduate Student, Department of Economics, Texas A&M University, 1981

Thomas Presidential Scholar, Eckerd College, 1973 – 1977

VOLUME II

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY
COMMISSION**

**SUPPORTING FINANCIAL
INFORMATION**

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SECRETARY'S BUREAU

**RE: PHILADELPHIA GAS WORKS
BASE RATE PROCEEDING**

DOCKETED

Docket No. R-00006042

JAN 09 2001

JANUARY, 2001

**DOCUMENT
FOLDER**

VOLUME II

PART ONE

PHILADELPHIA GAS WORKS
STATEMENT OF INCOME
(Dollars in Thousands)

	ACTUAL 1999-2000	1st Qtr GCR BUDGET 2000-01	\$11M BUDGET 2000-01
OPERATING REVENUES			
Non-Heating	\$87,830	\$140,274	\$140,274
Gas Transport Service	3,313	3,417	3,417
Heating	434,544	613,341	613,341
Proposed Base Rate Increase	-	-	11,000
Net Marginal Revenue / Increased Sales	-	4,000	4,000
Unbilled Adjustment	7,299	4,844	5,344
Total Gas Revenues	532,986	765,876	777,376
Appliance Repair & Bill Paid Turn-Ons	11,978	13,233	13,233
Other Operating Revenues	10,911	15,502	15,722
Total Other Operating Revenues	22,889	28,735	28,955
Total Operating Revenues	\$555,875	\$794,611	\$806,331
OPERATING EXPENSES			
Natural Gas	\$266,350	\$478,368	\$478,368
Other Raw Material	4	10	10
Sub-Total Fuel	266,354	478,378	478,378
CONTRIBUTION MARGINS	\$289,521	\$316,233	\$327,953
Gas Processing	14,032	13,935	13,935
Field Services	33,704	33,061	33,061
Distribution	14,246	13,601	13,601
Collection	12,609	13,740	13,740
Customer Service	11,753	13,287	13,287
Customer Accounting	3,669	4,181	4,181
Bad Debt Expense	54,642	74,100	74,637
Marketing & Point-of-Sale Expenses	3,041	6,713	6,713
Administrative & General	37,676	45,407	45,407
Health Insurance	24,241	28,290	28,290
Capitalized Fringe Benefits	(4,654)	(5,333)	(5,333)
Capitalized Administrative Charges	(4,857)	(6,815)	(6,815)
Regulatory Asset Amortization	1,984	3,750	3,750
Amortization of Restructuring Costs	965	965	965
Year 2000 & Deregulation Amortization	882	888	888
Pensions	1,096	1,376	1,376
Taxes	6,512	6,548	6,548
Personnel Reductions/Retirements	-	(2,500)	(2,500)
Cost Savings/Productivity Improvements	-	(10,000)	(10,000)
Sub-Total Other Oper. & Maintenance	211,541	233,194	233,731
Depreciation	32,614	33,381	33,381
Cost of Removal	2,519	2,500	2,500
To Clearing Accounts	(4,328)	(3,344)	(3,344)
30,805	32,537	32,537	
TOTAL OPERATING EXPENSES	\$508,700	\$744,109	\$744,646
OPERATING INCOME	47,175	50,502	61,685
Other Income	9,417	6,106	6,106
INCOME BEFORE INTEREST	\$56,592	\$56,608	\$67,791
INTEREST			
Long-Term Debt	\$49,256	\$47,871	\$47,871
Other	5,810	6,102	6,102
AFUDC	(374)	(346)	(346)
Loss From Extinguishment of Debt	4,311	4,162	4,162
Total Interest	59,003	57,789	57,789
NET INCOME	(2,411)	(1,181)	10,002
City Payment	18,000	18,000	18,000
Net Earnings	(\$20,411)	(\$19,181)	(\$7,996)

**FIRST QUARTER GCR
4555 DEGREE DAYS; \$75M BOND SALE**

**01/05/01
PART ONE
Schedule 2**

**PHILADELPHIA GAS WORKS
CASHFLOW STATEMENT
(Dollars in Thousands)**

	<u>ACTUAL</u> <u>1999-2000</u>	<u>1st Qtr GCR</u> <u>BUDGET</u> <u>2000-01</u>	<u>\$11M</u> <u>BUDGET</u> <u>2000-01</u>
SOURCES			
Net Income	(\$2,411)	(\$1,181)	\$10,002
Depreciation & Amortization	40,985	42,827	42,827
Earnings on Restricted Funds	563	451	451
Impact of Refunded Debt Service	548	-	-
Increased/(Decreased) Other Liabilities	14,800	3,682	3,682
Available From Operations	<u>54,485</u>	<u>45,779</u>	<u>56,962</u>
Funds Required for Capital	69,264	34,000	34,000
Capital Leasing	2,228	6,000	6,000
City Loan	-	45,000	45,000
Temporary Financing	22,000	-	-
TOTAL SOURCES	<u><u>\$147,977</u></u>	<u><u>\$130,779</u></u>	<u><u>\$141,962</u></u>
USES			
Net Construction Expenditures	\$48,139	\$62,293	\$62,293
Funded Debt Reduction:			
Revenue Bonds	33,595	34,192	34,192
PMA Lease/Subordinate Debt	1,020	1,065	1,065
Capital Lease	6,538	6,901	6,901
Notes Payable - CNG Acquisition	219	59	59
Temporary Financing Repayment	-	-	-
City Loan Repayment	-	-	-
Distribution of Earnings	18,000	18,000	18,000
Additions To (Reductions of)			
Non-Cash Working Capital	<u>48,128</u>	<u>52,153</u>	<u>53,651</u>
Cash Needs	155,639	174,663	176,161
Cash Surplus (Shortfall)	(7,662)	(43,884)	(34,199)
TOTAL USES	<u><u>\$147,977</u></u>	<u><u>\$130,779</u></u>	<u><u>\$141,962</u></u>
Cash - Beginning of Period	\$16,087	\$8,425	\$8,425
Cash - Surplus (Shortfall)	(7,662)	(43,884)	(34,199)
ENDING CASH	<u>\$8,425</u>	<u>(\$35,459)</u>	<u>(\$25,774)</u>
Additional Funds For Capital	-	-	-
ADJUSTED ENDING CASH	<u><u>\$8,425</u></u>	<u><u>(\$35,459)</u></u>	<u><u>(\$25,774)</u></u>
Outstanding Commercial Paper	\$97,000	\$97,000	\$97,000

PHILADELPHIA GAS WORKS
DEBT SERVICE COVERAGE
(Dollars in Thousands)

	ACTUAL 1999-2000	1st Qtr GCR BUDGET 2000-01	\$11M BUDGET 2000-01
FUNDS PROVIDED			
Total Gas Revenues	\$532,986	\$765,876	\$777,376
Other Operating Revenues	22,889	28,735	28,955
Total Operating Revenues	555,875	794,611	806,331
Other Income Less Restricted Funds	9,980	6,557	6,557
AFUDC (Interest)	374	346	346
TOTAL FUNDS PROVIDED	\$566,229	\$801,514	\$813,234
FUNDS APPLIED			
Fuel Costs	266,354	478,378	478,378
Other Operating Costs	242,345	265,731	266,268
Total Operating Expenses	508,699	744,109	744,646
PMA Lease Cost	-	-	-
\$20.1M Capital Lease Cost	3,991	3,980	3,980
\$23M Capital Lease Cost	3,997	3,997	3,997
Less: Non-Cash Expenses	44,343	37,295	37,295
TOTAL FUNDS APPLIED	\$472,344	\$714,791	\$715,328
Funds Available to Cover Debt Service	\$93,885	\$86,723	\$97,906
Add-back Lease Costs	7,988	7,977	7,977
Funds Available Excluding Lease Costs	\$101,873	\$94,700	\$105,883
1975 Ordinance Bonds Debt Service	\$59,345	\$51,611	\$51,611
Debt Service Coverage 1975 Bonds	1.72	1.83	2.05
Net Available after Prior Debt Service	\$42,528	\$43,089	\$54,272
PMA & Other Capital Leases	7,988	7,977	7,977
Net Available after Prior Capital Leases	\$34,540	\$35,112	\$46,295
1998 Ordinance Bonds Debt Service	\$21,659	\$29,449	\$29,449
Debt Service Coverage New Bonds	1.59	1.19	1.57
Net Available after New Debt Service	\$12,881	\$5,663	\$16,846
1998 Ordinance Subordinate Bond Debt Ser	\$1,987	\$1,990	\$1,990
Debt Service Coverage Subordinate Bond	6.48	2.85	8.47

Normal weather 4600 degree days
 Rate increase -\$0MM Interim
 Productivity/savings \$10.0 million
 Beginning Cash Balance \$8.7 million
 GCR \$230MM Billed / Nat. Gas Costs \$230MM
 City Loan \$45.0MM Utilized

BUDGET OF CASH RECEIPTS AND DISBURSEMENTS
 FISCAL YEAR ENDING AUGUST 31, 2001
 (Millions of Dollars)

	ACTUAL	ACTUAL	ACTUAL	ESTIMATE	BUDGET	BUDGET	TOTAL						
12/28/00	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	
OPENING BALANCE - CASH INCLUDES 97.0 TXCP RECEIPTS	\$8.7	\$21.8	\$15.2	\$3.0	\$5.2	\$0.3	\$0.1	\$0.2	\$0.4	\$0.3	\$28.5	(\$15.0)	\$8.7
Gas	29.4	31.1	32.5	42.0	67.3	86.4	90.4	88.0	75.8	58.4	49.2	45.7	695.2
Other	0.6	1.1	4.2	1.0	1.3	1.4	1.4	1.6	1.6	1.6	1.5	3.9	21.2
Drawn from Capital Funds - Principal \$34.8	26.9	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.9
Drawn from Capital Funds - Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drawn from Lease Funds - Principal \$10.3	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	6.0
Drawn from Lease Funds - Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advance (Repayment) of Capital Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Personnel Withdrawal	0.0	4.4	2.2	8.8	0.0	0.0	6.6	0.0	0.0	5.5	0.0	0.0	27.5
City Loan	0.0	0.0	0.0	7.9	45.0	10.0	0.0	0.0	0.0	40.0	0.0	0.0	102.9
Rate Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL RECEIPTS	56.9	43.6	38.9	63.2	113.6	96.8	96.4	89.6	79.9	105.5	50.7	49.6	886.7
TOTAL	65.6	65.4	54.1	66.2	118.8	97.2	98.5	89.8	80.3	105.7	79.2	34.6	895.4
DISBURSEMENTS													
Labor	10.3	11.2	12.4	13.2	10.8	10.7	11.2	10.1	11.3	11.0	10.6	11.3	134.1
Natural Gas	23.6	25.3	32.0	31.8	56.3	71.2	58.1	59.4	44.3	37.0	36.0	35.8	510.8
Debt Service	0.0	3.7	0.0	0.1	25.9	2.7	0.0	4.0	1.7	1.4	37.9	13.3	90.7
TXCP Interest	0.4	0.5	0.0	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	4.3
Repayment of City Loan	0.0	0.0	0.0	7.9	11.0	1.5	18.5	6.0	13.0	0.0	0.0	0.0	57.9
City Fee	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	18.2	0.0	0.0	21.0
Other Disbursements	9.5	9.5	6.7	7.6	11.3	10.6	10.1	9.5	9.4	9.3	9.3	9.2	112.0
TOTAL DISBURSEMENTS	43.8	50.2	51.1	61.0	118.5	97.1	98.3	89.4	80.0	77.2	94.2	70.0	930.8
MONTHLY CASH FLOW	13.1	(6.6)	(12.2)	2.2	(4.9)	(0.2)	0.2	0.2	(0.1)	28.2	(43.5)	(20.4)	(44.1)
CUMULATIVE CASH FLOW	13.1	6.5	(5.7)	(3.5)	(8.4)	(8.6)	(8.5)	(8.3)	(8.4)	19.8	(23.7)	(44.1)	
OPENING TXCP	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
TXCP ISSUED DURING MONTH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TXCP ISSUED PAID DOWN DURING MONTH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENDING TXCP	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
OPENING BALANCE - CASH	8.7	21.8	15.2	3.0	5.2	0.3	0.1	0.2	0.4	0.3	28.5	(15.0)	8.7
MONTHLY CASH FLOW	13.1	(6.6)	(12.2)	2.2	(4.9)	(0.2)	0.2	0.2	(0.1)	28.2	(43.5)	(20.4)	(44.1)
NET TXCP ACTIVITY MONTHLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENDING BALANCE - CASH	21.8	15.2	3.0	5.2	0.3	0.1	0.2	0.4	0.3	28.5	(15.0)	(35.4)	(35.4)
CASH POSITION NET OF TXCP	(75.2)	(81.8)	(94.0)	(91.8)	(96.7)	(96.9)	(96.8)	(96.6)	(96.7)	(68.5)	(112.0)	(132.4)	(132.4)

** June, 2001 TXCP Repayment of \$97.0 million required, available cash balance 6/1/01 \$45.8 million, shortfall of \$51.2 million needed to be funded by rates, deferred expenses higher cash receipts or other financial transactions.

Normal weather 4600 degree days
 Rate Increase -\$11MM Interim 201 Volumetric
 Productivity/loss savings \$10.0 million
 Beginning Cash Balance \$8.7 million
 GCR \$230MM Billed / Nat. Gas Costs \$230MM
 City Loan \$45.0MM Utilized

BUDGET OF CASH RECEIPTS AND DISBURSEMENTS
 FISCAL YEAR ENDING AUGUST 31, 2001
 (Millions of Dollars)

	ACTUAL	ACTUAL	ACTUAL	BUDGET	BUDGET	TOTAL							
12/28/00	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	
OPENING BALANCE - CASH INCLUDES 97.0 TXCP RECEIPTS	38.7	321.8	315.2	33.0	35.2	30.3	30.1	30.4	30.3	31.2	336.8	(36.6)	38.7
Gas	29.4	31.1	32.5	42.0	67.3	85.4	90.4	88.0	75.8	58.4	49.2	45.7	695.2
Other	0.6	1.1	4.2	1.0	1.3	1.4	1.4	1.6	1.6	1.6	1.5	3.9	21.2
Drawn from Capital Funds - Principal \$34.8	26.9	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.9
Drawn from Capital Funds - Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drawn from Lease Funds - Principal \$10.3	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	6.0
Drawn from Lease Funds - Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advances (Repayment) of Capital Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pension Withdrawal	0.0	4.4	2.2	8.8	0.0	0.0	6.6	0.0	0.0	5.5	0.0	0.0	27.5
City Loan	0.0	0.0	0.0	7.9	45.0	10.0	0.0	0.0	0.0	45.0	0.0	0.0	107.9
Rate Increase	0.0	0.0	0.0	0.0	0.0	0.5	2.2	1.8	1.5	1.3	1.1	1.1	9.5
TOTAL RECEIPTS	56.9	43.6	38.9	63.2	113.6	97.3	100.6	91.4	81.4	111.8	51.8	50.7	901.2
TOTAL	65.6	65.4	54.1	66.2	118.3	97.7	100.7	91.7	81.8	113.1	87.6	44.1	909.9
DISBURSEMENTS													
Labor	10.3	11.2	12.4	13.2	10.8	10.7	11.2	10.1	11.3	11.0	10.6	11.3	134.1
Natural Gas	23.6	25.3	32.0	31.8	56.3	71.2	58.1	59.4	44.3	37.0	36.0	35.8	510.8
Debt Service	0.0	3.7	0.0	0.1	25.9	2.7	0.0	4.0	1.7	1.4	37.9	13.3	90.7
TXCP Interest	0.4	0.5	0.0	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	4.3
Repayment of City Loan	0.0	0.0	0.0	7.9	11.0	2.0	20.5	8.0	13.5	0.0	0.0	0.0	62.9
City Fee	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	18.2	0.0	0.0	21.0
Other Disbursements	9.5	9.5	6.7	7.6	11.3	10.6	10.1	9.5	9.4	9.3	9.3	9.2	112.0
TOTAL DISBURSEMENTS	43.8	50.2	51.1	61.0	116.5	97.6	100.3	91.4	80.5	77.2	94.2	70.0	935.8
MONTHLY CASH FLOW	13.1	(6.6)	(12.2)	2.2	(4.9)	(0.2)	0.3	(0.1)	0.9	34.6	(42.4)	(19.3)	(34.5)
CUMULATIVE CASH FLOW	13.1	6.5	(5.7)	(3.5)	(8.4)	(8.6)	(8.3)	(8.4)	(7.5)	27.1	(15.3)	(34.5)	
OPENING TXCP	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
TXCP ISSUED DURING MONTH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TXCP ISSUED PAID DOWN DURING MONTH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENDING TXCP	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
OPENING BALANCE - CASH	8.7	21.8	15.2	3.0	5.2	0.3	0.1	0.4	0.3	1.2	35.8	(6.6)	8.7
MONTHLY CASH FLOW	13.1	(6.6)	(12.2)	2.2	(4.9)	(0.2)	0.3	(0.1)	0.9	34.6	(42.4)	(19.3)	(34.5)
NET TXCP ACTIVITY MONTHLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENDING BALANCE - CASH	21.8	16.2	3.0	5.2	0.3	0.1	0.4	0.3	1.2	35.8	(6.6)	(25.8)	(25.8)
CASH POSITION NET OF TXCP	(75.2)	(81.8)	(94.0)	(91.8)	(96.7)	(96.9)	(98.6)	(95.7)	(95.8)	(61.2)	(100.6)	(122.8)	(122.8)

** June, 2001 TXCP Repayment of \$97.0 million required, available cash balance 6/1/01 \$51.7 million, a shortfall of \$45.3 million needed to be funded by rates, deferred expenses, higher cash receipts or other financial transactions.

PHILADELPHIA GAS WORKS - FIRST QUARTER GCR; 4555 DEGREE DAYS; \$75M BOND SALE
 DETAIL OF NON-CASH WORKING CAPITAL
 (DOLLARS IN THOUSANDS)

01/05/01
 PART ONE
 Schedule 6

	Actual		Change	Budget No Rates		Budget \$11M	
	August 1999	August 2000		August 2001	Change	August 2001	Change
ADDITIONS TO:							
Materials & Supplies:							
LNG-Commodity	7,473	12,717	5,244	16,100	3,383	16,100	3,383
LNG-Processing	1,136	1,334	198	1,160	(174)	1,160	(174)
Pipeline Storage	35,120	43,789	8,669	77,097	33,308	77,097	33,308
Other Materials & Supplies	10,121	9,859	(262)	9,800	(59)	9,800	(59)
Total Materials & Supplies	53,850	67,699	13,849	104,157	36,458	104,157	36,458
Accounts Receivable:							
GAS	96,957	140,230	43,273	211,714	71,484	213,249	73,019
M & J	81	850	769	0	(850)	0	(850)
Other	3,414	2,887	(527)	871	(2,016)	871	(2,016)
Accrued Gas	7,001	14,300	7,299	19,144	4,844	19,644	5,344
Uncollectible Reserve	(67,070)	(102,000)	(34,930)	(138,597)	(36,597)	(139,134)	(37,134)
Net Accounts Receivable	40,383	56,267	15,884	93,132	36,865	94,630	38,363
Other Current Assets	722	1,911	1,189	1,623	(288)	1,623	(288)
Deferred Debits	21,049	23,693	2,644	8,284	(15,409)	8,284	(15,409)
TOTAL ADDITIONS	116,004	149,570	33,566	207,196	57,626	208,694	59,124
REDUCTIONS OF:							
Accounts Payable:							
Natural Gas	18,972	23,364	4,392	35,111	11,747	35,111	11,747
General	19,658	12,726	(6,932)	12,700	(26)	12,700	(26)
Total Accounts Payable	38,630	36,090	(2,540)	47,811	11,721	47,811	11,721
Customer Deposits	1,035	1,109	74	1,155	46	1,155	46
Accrued Wages and Taxes	3,066	3,930	864	2,140	(1,790)	2,140	(1,790)
Accrued Interest	8,407	8,187	(220)	8,616	429	8,616	429
Other Current Liabilities	1,965	7,888	5,923	3,608	(4,280)	3,608	(4,280)
Deferred Credits	21,671	3,008	(18,663)	2,355	(653)	2,355	(653)
TOTAL REDUCTIONS	74,774	60,212	(14,562)	65,685	5,473	65,685	5,473
TOTAL CHANGES	41,230	89,358	48,128	141,511	52,153	143,009	53,651

FIRST QUARTER GCR
4555 DEGREE DAYS; \$75M BOND SALE

01/05/01
PART ONE
Schedule 7

<u>Accounts Receivable</u>	Actual	No Rates Budget	\$11M RI Budget
Beginning Receivable Balance	<u>1999-00</u> 97,038	<u>2000-01</u> 141,080	<u>2000-01</u> 141,080
Current Billed Revenues			
Proposed Base Rate	495,546	771,080	771,080
Net Marginal Revenue/increased Sales			11,000
Other Revenues		4,000	4,000
Total Billed Revenues	17,567	25,912	26,280
	<u>513,113</u>	<u>800,992</u>	<u>812,360</u>
Collections Current AR	87.62%	86.50%	86.50%
Collections Outstanding AR	(449,606)	(692,858)	(702,691)
Writeoffs			
Total Credit / Reductions	(19,465)	(37,500)	(37,500)
	<u>(469,071)</u>	<u>(730,358)</u>	<u>(740,191)</u>
Ending Receivable Balance			
	<u>141,080</u>	<u>211,714</u>	<u>213,249</u>
<u>Bad Debt Expense</u>			
Current Year Net Receivable			
Reserve Factor	141,080	211,714	213,249
Total Bad Debt Expense	38.73%	35.00%	35.00%
	<u>54,642</u>	<u>74,100</u>	<u>74,637</u>
<u>Estimated Write Off</u>			
Gas Accounts			
	19,465	37,500	37,500
<u>Total Reserve Balance</u>			
Beginning Reserve Balance			
Write - Off	66,520	101,697	101,697
Appropriation to Reserve	(19,465)	(37,500)	(37,500)
Ending Reserve Balance	54,642	74,100	74,637
OAR Reserve	101,697	138,297	138,834
M & J Reserve	253	250	250
Total Reserve Balance	50	50	50
	<u>102,000</u>	<u>138,597</u>	<u>139,134</u>

PHILADELPHIA GAS WORKS
COLLECTIBILITY STUDY: AUGUST, 2000 BALANCES

01/05/01
 Part One
 Schedule 8

Classification	Balance Per Study (1)		Reserve	
	Receivable	Collectible	%	\$
Defaulted Non-budget Agreement				
1 Commercial	\$0	\$0		
2 Residential	<u>0</u>	<u>0</u>		
1 Total	0	0	#DIV/0!	\$0
Active Non-budget Agreement				
3 Commercial	2,063,244	1,540,965		
4 Residential	<u>10,668,335</u>	<u>7,592,458</u>		
2 Total	12,731,579	9,133,423	28.26%	3,598,156
Off - Curb & Dig				
3 5 Commercial	1,112,948	0	100.00%	1,112,948
4 6 Residential	<u>18,130,654</u>	<u>1,146,343</u>	93.68%	<u>16,984,311</u>
Total	19,243,602	1,146,343	94.04%	18,097,259
Finals				
5 7 Commercial	1,601,591	326,878	79.59%	1,274,713
6 8 Residential	<u>17,247,897</u>	<u>2,799,617</u>	83.77%	<u>14,448,280</u>
Total	18,849,488	3,126,495	83.41%	15,722,993
Non-budget Non-Agreement				
7 9 Commercial	17,087,927	10,602,024	37.96%	6,485,903
8 10 Residential	<u>50,712,335</u>	<u>20,095,837</u>	60.37%	<u>30,616,498</u>
Total	67,800,262	30,697,861	54.72%	37,102,401
Defaulted Budget Agreement				
9 11 Total	5,415	4,097	24.34%	1,318
Active Budget Agreement				
10 13 Total	0	0	N/A	0
EMPP				
11 15 Total	6,027,279	<u>5,559,178</u>	7.77%	<u>468,101</u>
Sub-total before CRP & Specials	124,657,625	49,667,397	60.16%	74,990,228
CRP Agreements				
12 CRP Program	14,534,749	1,822,383	87.46%	12,712,366
13 <u>CRP Arrearage</u>	<u>32,337,231</u>	<u>18,532,138</u>	42.69%	<u>13,805,093</u>
CRP for Collections	46,871,980	20,354,521		26,517,459
CRP Regulatory Asset	<u>31,079,000</u>	<u>0</u>		<u>N/A</u>
16 Total CRP	<u>77,950,980</u>	<u>20,354,521</u>		<u>26,517,459</u>
Sub-total before Specials	\$202,608,605	\$70,021,918	65.44%	\$101,507,687
Special Accounts				
14 Total	0		0.00% (1)	
Grand Total	<u>\$202,608,605</u>	<u>\$70,021,918</u>		<u>\$101,507,687</u>

PHILADELPHIA GAS WORKS
ACCOUNTS RECEIVABLE, RESERVE FOR BAD DEBT, WRITE-OFF
EXPENSES, DELINQUENT CUSTOMERS AND REVENUE STATISTICS
(Dollars in Thousands)

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>10_Yr. Avg.</u>
Billed Gas Revenues During the Year *	\$443,124	\$492,742	\$526,723	\$554,212	\$477,601	\$539,119	\$548,455	\$497,985	\$482,700	\$525,687	\$508,834.80
Accounts Receivable at August 31, **	93,361	116,688	132,574	171,730	140,002	143,303	132,660	110,790	116,094	156,080	131,318
Reserve for Bad Debt	48,027	53,051	54,665	73,772	79,195	83,214	77,100	64,724	67,070	102,000	70,272
Net Accounts Receivable at August 31,	45,334	63,637	78,009	97,958	60,807	60,089	55,460	46,066	49,024	54,080	61,046
Reserve for Bad Debt as a Percentage of Accounts Receivable	51.4%	45.5%	41.2%	43.0%	56.6%	58.1%	58.2%	58.4%	57.8%	65.4%	53.5%
Net Write-Offs during the Year	23,361	22,474	\$28,355	\$23,927	\$37,518	\$33,975	\$39,149	\$45,973	\$38,806	\$37,807	\$32,935
Receivable as a Percentage of Billed Gas Revenues	21.1%	23.7%	25.2%	31.0%	29.3%	26.6%	24.2%	22.2%	24.1%	29.7%	25.8%
Delinquent Customers (Annual Average)	134,368	138,721	145,092	143,613	112,712	119,806	120,901	117,394	N/A	N/A	N/A
Delinquent Customers at August 31,	120,161	125,385	145,298	121,317	114,179	115,618	118,925	107,750	N/A	N/A	N/A
Bad Debt	\$30,315	\$27,520	\$29,866	\$43,401	\$43,276	\$38,340	\$33,474	\$34,130	\$39,000	\$54,000	\$37,332
Bad Debt % of Sales	6.84%	5.59%	5.67%	7.83%	9.06%	7.11%	6.10%	6.85%	8.08%	10.27%	7.34%
Bad Debt % of A/R	32.47%	23.58%	22.53%	25.27%	30.91%	26.75%	25.25%	30.81%	33.59%	34.60%	28.58%

VOLUME II

PART TWO

**PHILADELPHIA GAS WORKS
STATEMENT OF INCOME
(Dollars in Thousands)**

Line No.	Actual <u>1999-2000</u>	Revised Budget <u>2000-01</u>	2000-01 Budget Over/(Under) 1999-00 Actual <u>Amount</u>	<u>%</u>	
OPERATING REVENUES					
1	\$87,830	\$130,699	\$42,869	49	
2	3,313	3,656	343	10	
3	434,544	591,260	156,716	36	
4	7,299	1,844	(5,455)		
5	Total Gas Revenues	532,986	727,459	194,473	36
6	Marketing Point-of Sale Revenues	-	-	-	
7	Appliance Repair & Other Service Revenues	11,978	13,233	1,255	10
8	Other Operating Revenues	10,911	14,793	3,882	36
9	Total Other Revenues	22,889	28,026	5,137	22
10	Total Operating Revenues	\$555,875	\$755,485	\$199,610	36
OPERATING EXPENSES					
11	Natural Gas	\$266,350	\$394,576	\$128,226	48
12	Other Raw Material	4	10	6.00	
13	Sub-Total Fuel	266,354	394,586	128,232	48
14	Contribution Margins	\$289,521	\$360,899	\$71,378	25
15	Labor & Fringe Benefits	\$112,813	\$114,407	\$1,594	1
16	Bad Debt Expense	54,642	65,297	10,655	19
17	Other Expenses & Depreciation	74,891	77,257	2,366	3
18	Sub-Total Other O&M & Depreciation	242,346	256,961	14,615	6
19	Total Operating Expenses	\$508,700	\$651,547	\$142,847	28
20	Operating Income	\$47,175	\$103,938	\$56,763	
21	Other Income	9,417	6,106	(3,311)	(35)
22	Income Before Interest	\$56,592	\$110,044	\$53,452	
INTEREST					
23	Long Term Debt	\$49,256	\$47,871	(\$1,385)	(3)
24	Other Interest	5,810	6,102	292	5
25	AFUDC	(374)	(346)	28	(7)
26	Loss from Extinguishment of Debt	4,311	4,162	(149)	(3)
27	Total Interest Expense	\$59,003	\$57,789	(\$1,214)	(2)
28	Net Income Before City Payment	(2,411)	52,255	54,666	
29	City Payment	18,000	18,000	-	
30	Net Earnings/(Loss) from Operations	(\$20,411)	\$34,255	\$54,666	

PHILADELPHIA GAS WORKS
STATEMENT OF INCOME
(Dollars in Thousands)

	Actual 1999-2000	Revised Budget 2000-01	2000-01 Budget Over/(Under) 1999-00 Actual	
			Amount	%
OPERATING REVENUES				
Non-Heating	\$87,830	\$130,699	\$42,869	49
Gas Transport Service	3,314	3,656	342	10
Heating	434,544	591,260	156,716	36
Proposed Base Rate Increase	-	-	0	
Marginal Revenue Loss - Weather	-	-	0	
Change in Senior Citizen Discount	-	-	0	
Unbilled Adjustment	7,299	1,844	(5,455)	
Total Gas Revenues	532,987	727,459	194,472	36
Appliance Repair & Bill Paid Turn-Ons	11,978	13,233	1,255	10
Other Operating Revenues	10,911	14,793	3,882	36
Total Other Operating Revenues	22,889	28,026	5,137	22
Total Operating Revenues	\$555,876	\$755,485	\$199,609	36
OPERATING EXPENSES				
Natural Gas	\$266,350	\$394,576	\$128,226	48
Other Raw Material	4	10	6.00	
Sub-Total Fuel	266,354	394,586	128,232	48
CONTRIBUTION MARGINS	\$289,522	\$360,899	\$71,377	25
Gas Processing	14,032	13,968	(64)	
Field Services	33,704	33,061	(643)	(2)
Distribution	14,246	13,601	(645)	(5)
Collection	12,609	13,740	1,131	9
Customer Service	11,753	13,287	1,534*	13
Customer Accounting	3,669	4,181	512	14
Bad Debt Expense	54,642	65,297	10,655	19
Marketing	3,041	6,713	3,672	121
Administrative & General	37,676	45,407	7,731	21
Health Insurance	24,241	26,290	2,049	8
Capitalized Fringe Benefits	(4,654)	(5,333)	(679)	15
Capitalized Administrative Charges	(4,857)	(6,815)	(1,958)	40
Regulatory Asset Amortization	1,984	3,750	1,766.00	
Amortization of Restructuring Costs	965	965	-	
Year 2000 & Deregulation Amortization	882	888	6.00	1
Pensions	1,096	1,376	280	26
Taxes	6,512	6,548	36	1
Personnel Reductions/Retirements	-	(2,500)	(2,500)	
Cost Savings/Productivity Improvements	-	(10,000)	(10,000)	
Sub-Total Other Oper. & Maintenance	211,541	224,424	12,883	6
Depreciation	32,614	33,381	767	2
Cost of Removal	2,519	2,500	(19.00)	
To Clearing Accounts	(4,328)	(3,344)	984	(23)
	30,805	32,537	1,732	6
TOTAL OPERATING EXPENSES	\$508,700	\$651,547	\$142,847	28
OPERATING INCOME	47,176	103,938	56,762	
Other Income	9,417	6,106	(3,311)	(35)
INCOME BEFORE INTEREST	\$56,593	\$110,044	\$53,451	
INTEREST				
Long-Term Debt	\$49,256	\$47,871	(\$1,385)	(3)
Other	5,810	6,102	292	5
AFUDC	(374)	(346)	28	(7)
Loss From Extinguishment of Debt	4,311	4,162	(149)	(3)
Total Interest	59,003	57,789	(1,214)	(2)
NET INCOME	(2,410)	52,255	54,665	
City Payment	18,000	18,000	-	
Net Earnings/(Loss) From Operations	(\$20,410)	\$34,255	\$54,665	

**PHILADELPHIA GAS WORKS
CASHFLOW STATEMENT
(Dollars in Thousands)**

Line No.	<u>SOURCES</u>	Actual 1999-2000	Revised Budget 2000-01	2000-01 Budget Over/(Under) 1999-00 Actual Amount
1.	Net Income	(\$2,411)	\$52,255	\$54,666
2.	Depreciation & Amortization	40,985	42,827	1,842
3.	Earnings on Restricted Funds	563	451	(112)
4.	Increased/(Decreased) Long Term Debt	548	-	(548)
5.	Increased/(Decreased) Other Liabilities	14,800	3,682	(11,118)
6.	Available From Operations	<u>54,485</u>	<u>99,215</u>	<u>44,730</u>
7.	Funds Required for Capital	69,264	34,000	(35,264)
8.	Capital Leasing	2,228	6,000	3,772
9.	Temporary Financing	22,000	-	(22,000)
10.	TOTAL SOURCES	<u><u>\$147,977</u></u>	<u><u>\$139,215</u></u>	<u><u>(\$8,762)</u></u>
 <u>USES</u>				
11.	Net Construction Expenditures	\$48,139	\$62,293	\$14,154
Funded Debt Reduction:				
12.	Revenue Bonds	33,595	34,192	597
13.	PMA Lease/Subordinate Debt	1,020	1,065	45
14.	Capital Lease	6,538	6,901	363
15.	Notes Payable - CNG Acquisition	219	59	(160)
16.	Distribution of Earnings	18,000	18,000	-
Additions to (Reductions of)				
17.	Non-Cash Working Capital	48,128	14,891	(33,237)
18.	Cash Needs	155,639	137,401	(18,238)
19.	Cash Surplus (Shortfall)	(7,662)	1,814	9,476
20.	TOTAL USES	<u><u>\$147,977</u></u>	<u><u>\$139,215</u></u>	<u><u>(\$8,762)</u></u>
21.	Cash - Beginning of Period	\$16,087	\$8,425	(\$7,662)
22.	Cash - Surplus (Shortfall)	(7,662)	1,814	9,476
23.	Ending Cash	<u><u>\$8,425</u></u>	<u><u>\$10,239</u></u>	<u><u>\$1,814</u></u>
24.	Internally Generated Funds	-	\$22,293	\$22,293
25.	Outstanding Commercial Paper	\$97,000	\$97,000	-

**PHILADELPHIA GAS WORKS
DEBT SERVICE COVERAGE
(Dollars in Thousands)**

Line No.	Actual <u>1999-2000</u>	Revised Budget <u>2000-01</u>	2000-01 Budget Over/(Under) 1999-00 Actual <u>Amount</u>
<u>FUNDS PROVIDED</u>			
1.	\$532,986	\$727,459	\$194,473
2.	22,889	28,026	5,137
3.	555,875	755,485	199,610
4.	9,980	6,557	(3,423)
5.	374	346	(28)
6.	\$566,229	\$762,388	\$196,159
<u>FUNDS APPLIED</u>			
7.	\$266,354	\$394,586	\$128,232
8.	242,345	256,961	14,616
9.	508,699	651,547	142,848
10.	7,988	7,977	(11)
11.	44,343	37,272	(7,071)
12.	\$472,344	\$622,252	\$149,908
13.	\$93,885	\$140,136	\$46,251
14.	7,988	7,977	(11)
15.	101,873	148,113	46,240
16.	\$59,345	\$51,611	(\$7,734)
17.	1.72	2.87	1.15
18.	\$42,528	\$96,502	\$53,974
19.	7,988	7,977	(11)
20.	34,540	88,525	53,985
21.	\$21,659	\$29,449	\$7,790
22.	1.59	3.01	1.41
23.	\$12,881	\$59,076	\$46,195
24.	1,987	1,990	3
25.	6.48	29.69	23.20

PHILADELPHIA GAS WORKS
OPERATING REVENUES
(Dollars in Thousands)

Line No.	<u>Actual 1999-2000</u>	<u>Revised Budget 2000-01</u>
1. Non-Heating	\$87,830	\$130,699
2. Gas Transportation Service	3,313	3,656
3. Heating	434,544	591,260
4. Unbilled Gas Adjustment	<u>7,299</u>	<u>1,844</u>
5. Sub-Total Gas Revenues	532,986	727,459
6. Appliance Repair & Other Service Revenues	11,978	13,233
7. Other Operating Revenues	<u>10,911</u>	<u>14,793</u>
8. Sub-Total Other Revenues	22,889	28,026
9. Total Operating Revenues	<u><u>\$555,875</u></u>	<u><u>\$755,485</u></u>

PGW
RECONCILIATION OF BILLED REVENUES
(Dollars in Thousands)

1999-2000 ACTUAL	<u>Billed Revenues</u>	<u>1998-99 Over recovery</u>	<u>1999-2000 Under recovery</u>	<u>Total Revenues</u>
Firm Non-Heating	\$43,690	1,434	700	\$45,824
Interruptible	<u>42,006</u>			<u>42,006</u>
Total Non Heating	85,696	1,434	700	87,830
Gas Transportation Service	3,313			3,313
Heating	<u>406,536</u>	<u>14,660</u>	<u>13,348</u>	<u>434,544</u>
Total Revenues	<u>\$495,545</u>	<u>\$16,094</u>	<u>\$14,048</u>	<u>\$525,687</u>
2000-01 BUDGET	<u>Billed Revenues</u>	<u>1999-2000 Under recovery</u>		<u>Total Revenues</u>
Firm Non-Heating	\$68,656	(\$700)	.	\$67,956
Interruptible	<u>62,743</u>			<u>62,743</u>
Total Non Heating	131,399	(700)		130,699
Gas Transportation Service	3,656			3,656
Heating	<u>604,608</u>	<u>(13,348)</u>		<u>591,260</u>
Total Revenues	<u>\$739,663</u>	<u>(\$14,048)</u>	<u>\$0</u>	<u>\$725,615</u>

**PHILADELPHIA GAS WORKS
GAS REVENUES
(Dollars in Thousands)**

GAS REVENUES	Actual 1999-2000	Revised Budget 2000-01	2000-01 Budget Over/(Under) 1999-2000 Actual	
			Amount	%
<u>NON HEATING</u>				
Residential	21,437	36,229	14,792	69
CRP Shortfall	(399)	(489)	(90)	23
Commercial	16,424	23,328	6,904	42
Industrial	4,111	6,590	2,479	60
Municipal	1,978	2,592	614	31
Housing Authority	139	406	267	192
Total Firm Non-Heating	43,690	68,656	24,966	57
BPS - Small	1,737	2,238	501	29
BPS - Large	19,662	28,078	8,416	43
BPS - A/C		1,305	1,305	
LBS-L Direct	798	1,825	1,027	129
LBS-L Indirect	4,944	6,894	1,950	39
LBS-S Indirect	7,358	10,324	2,966	40
LBS-XL Direct	1,334	3,563	2,229	167
LBS-XL Indirect	4,578	5,587	1,009	22
Co-Generation - Direct (Trigen)		352	352	
Co-Generation - Indirect	848	927	79	9
Grays Ferry		868	868	
GTS - Sales	694	766	72	10
NGV	53	16	(37)	(70)
Total Interruptibles	42,006	62,743	20,737	49
Total Non Heating	85,696	131,399	45,703	53
<u>HEATING</u>				
Residential	333,608	499,688	166,080	50
CRP Shortfall	(18,381)	(36,363)	(17,982)	98
Commercial	69,435	103,130	33,695	49
Industrial	7,140	11,281	4,141	58
Municipal	7,459	12,503	5,044	68
Housing Authority	7,275	14,369	7,094	98
Total Heating	406,536	604,608	198,072	49
Net Billed Revenues	492,232	736,007	243,775	50
GTS Revenues	3,313	3,656	343	10
Total Billed Revenues	495,545	739,663	244,118	49
GCR Factor per MCF	1.0982	3.8336	2.7354	

PHILADELPHIA GAS WORKS
GAS SALES
(MCF's)

GAS SALES	Actual 1999-2000	Revised Budget 2000-01	2000-01 Budget Over/(Under) 1999-2000 Actual	
			Amount	%
<u>NON HEATING</u>				
Residential	1,940	2,309	369	19
Commercial	1,920	1,886	(34)	(2)
Industrial	456	549	93	20
Municipal	261	229	(32)	(12)
Housing Authority	17	36	19	
Total Firm Non-Heating	4,594	5,009	415	9
BPS - Small	177	302	125	71
BPS - Large	3,768	4,121	353	9
BPS - A/C		239	239	
LBS - L Direct	177	335	158	89
LBS - L Indirect	1,114	1,290	176	16
LBS - S Indirect	1,648	1,807	159	10
LBS - XL Direct	312	669	357	
LBS - XL Indirect	1,063	1,066	3	
Co-Generation - Direct (Trigen)	-	70	70	
Co-Generation - Indirect	208	168	(40)	(19)
Grays Ferry	-	175	175	
GTS - Sales	134	114	(20)	(15)
NGV Indirect	3	3	-	
Total Interruptibles	8,604	10,359	1,755	20
Total Non Heating	13,198	15,368	2,170	16
<u>HEATING</u>				
Residential	39,048	41,679	2,631	7
Commercial	8,191	8,486	295	4
Industrial	844	930	86	10
Municipal	978	1,131	153	16
Housing Authority	871	1,263	392	45
Total Heating	49,932	53,489	3,557	7
Net Billed Sales	63,130	68,857	5,727	9
GTS Volumes	14,092	14,817	725	5
Total Billed Sales	77,222	83,674	6,452	8

PHILADELPHIA GAS WORKS NATURAL GAS EXPENSE

(Dollars in Thousands)

Line No.		Actual <u>1999-2000</u>	Revised Budget <u>2000-01</u>
	Billed Natural Gas		
	<u>Demand Charges:</u>		
1.	Texas Eastern	\$32,369	\$34,920
2.	Transcontinental	29,189	27,207
3.	Other	7,453	3,966
4.	Total Demand	<u>69,011</u>	<u>66,093</u>
	<u>Commodity Charges:</u>		
5.	Texas Eastern	2,708	30,110
6.	Transcontinental	46,930	88,771
7.	Other	161,643	236,987
8.	Total Commodity	<u>211,281</u>	<u>355,868</u>
9.	Total Billed Natural Gas	<u>280,292</u>	<u>421,961</u>
	Storage Activity		
10.	(To) Inventory	(65,324)	(97,369)
11.	From Inventory	51,405	73,852
12.	Net Storage	<u>(13,919)</u>	<u>(23,517)</u>
13.	Natural Gas Refunds	<u>(23)</u>	<u>(3,868)</u>
14.	Total Natural Gas Expense	<u><u>\$266,350</u></u>	<u><u>\$394,576</u></u>

PHILADELPHIA GAS WORKS
NATURAL GAS EXPENSE
1999-2000 ACTUAL
(Dollars in Thousands)

Line No.		<u>Billed</u>	<u>(To) Inventory</u>	<u>From Inventory</u>	<u>Refunds</u>	<u>Seasonal Adjustment</u>	<u>Total</u>
1.	September	\$19,035	(\$8,211)	\$222	\$ -	(\$3,598)	\$7,448
2.	October	19,097	(4,430)	338		(2,012)	12,993
3.	November	23,959	(2,821)	1,640	(21)	1,218	23,975
4.	December	24,885	(460)	9,637		4,895	38,957
5.	January	24,792	(959)	18,947		6,677	49,457
6.	February	25,932	(217)	10,213		5,243	41,171
7.	March	18,919	(1,126)	6,746		2,941	27,480
8.	April	25,195	(5,593)	2,035		(1,133)	20,504
9.	May	21,805	(9,357)	250	(2)	(3,046)	9,650
10.	June	26,945	(11,080)	183		(3,763)	12,285
11.	July	26,364	(11,218)	328		(3,704)	11,770
12.	August	<u>23,364</u>	<u>(9,852)</u>	<u>866</u>		<u>(3,718)</u>	<u>10,660</u>
13.	Total	<u>\$280,292</u>	<u>(\$65,324)</u>	<u>\$51,405</u>	<u>(\$23)</u>	<u>\$0</u>	<u>\$266,350</u>

**PHILADELPHIA GAS WORKS
NATURAL GAS EXPENSE
2000-01 BUDGET**
(Dollars in Thousands)

Line No.		<u>Billed</u>	<u>(To) Inventory</u>	<u>From Inventory</u>	<u>Refunds</u>	<u>Seasonal Adjustment</u>	<u>Total</u>
1.	September	\$30,827	(\$14,890)	\$292	\$ -	(\$3,593)	\$12,636
2.	October	32,271	(4,596)	324	(3,845)	(2,021)	22,133
3.	November	27,189	(254)	8,222	(23)	2,321	37,455
4.	December	44,585	-	14,430	-	4,023	63,038
5.	January	50,172	-	17,897	-	5,903	73,972
6.	February	32,508	-	22,255	-	4,184	58,947
7.	March	39,259	-	7,726	-	2,453	49,438
8.	April	37,473	(10,252)	1,187	-	(717)	27,691
9.	May	35,180	(17,070)	378	-	(2,587)	15,901
10.	June	31,011	(17,097)	371	-	(3,364)	10,921
11.	July	30,906	(16,727)	385	-	(3,305)	11,259
12.	August	<u>30,580</u>	<u>(16,483)</u>	<u>385</u>	<u>-</u>	<u>(3,297)</u>	<u>11,185</u>
13.	Total	<u>\$421,961</u>	<u>(\$97,369)</u>	<u>\$73,852</u>	<u>(\$3,868)</u>	<u>\$0</u>	<u>\$394,576</u>

PHILADELPHIA GAS WORKS DETAIL OF DIRECT LABOR EXPENSES

(Dollars in Thousands)

Line No.	Actual 1999-2000		Budget 2000-01		
	<u>Average Personnel</u>	<u>Payroll</u>	<u>Average Personnel</u>	<u>Payroll</u>	
1.	Administration	53	\$3,760	60	\$4,925
2.	Finance	49	2,421	51	2,509
3.	Customer Activities	299	16,259	318	16,791
4.	Marketing & Planning	56	3,192	67	3,837
5.	Operations	1,099	58,895	1,072	58,538
6.	Systems & Services	281	14,339	304	15,874
7.	Retirements	-	-	(50)	(2,500)
8.	Philadelphia Gas Commission		463		476
9.	Total Personnel & Payroll	1,837	\$99,329	1,822	\$100,450
10.	Allocated to Capital & Appliances		(20,095)		(22,399)
11.	Net Operating Labor	1,837	\$79,234	1,822	\$78,051

PHILADELPHIA GAS WORKS
DETAIL OF OTHER EXPENSES
(Dollars in Thousands)

LINE NO.	<u>OTHER EXPENSES</u>	<u>Actual 1999-2000</u>	<u>Revised Budget 2000-01</u>
1.	Appropriation for Reserves and Other Losses	\$3,415	\$2,102
2.	Advertising	383	1,333
3.	General Material	4,833	5,359
4.	Insurance	2,143	1,379
5.	Contracted Maintenance	3,052	4,851
6.	Utilities	3,631	3,503
7.	Rentals	1,411	2,448
8.	Purchased Services	17,982	22,129
9.	Postage	2,142	2,822
10.	Promotion	94	1,645
11.	Non-Utility Revenues	(64)	(72)
12.	Labor Related Fringe Benefits and A&G Charged to Capital	(9,512)	(12,149)
13.	Depreciation	35,133	35,881
14.	Less: Cleared to Capital	(1,259)	(699)
15.	Miscellaneous	<u>11,507</u>	<u>6,725</u>
16.	Total Other Expenses	<u>\$74,891</u>	<u>\$77,257</u>