OTS Statement No. 3SR
Witness: Paul Metro
Date: May 16, 2001

5/23/01

Ohio PA 815

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

Philadelphia Gas Works

Docket No. R-00006042

Surrebuttal Testimony

Of

Paul Metro

Office of Trial Staff

Concerning:

Rate Structure and Tariffs

Q. MR. METRO, DID YOU SUBMIT DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes, I am responsible for OTS Statement No. 3 and OTS Exhibit No. 3.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I will address the rebuttal testimonies of Philadelphia Gas Works (PGW) witness Craig White and OCA witness Ralph E. Miller.

Mr. Craig White

Q. STARTING ON PAGE 11 OF HIS REBUTTAL TESTIMONY (PGW ST. 4.1), MR. WHITE ADDRESSES WHY HE DISAGREES WITH YOUR PROPOSED RATE INCREASES TO THE FOLLOWING CUSTOMER CLASSES - LBS LARGE DIRECT, TRIGEN DIRECT AND NGV DIRECT. DO YOU HAVE ANY COMMENTS REGARDING HIS TESTIMONY?

A. Yes, I do.

Q. MR. METRO, WHAT IS YOUR UNDERSTANDING OF MR. WHITE'S OBJECTIONS TO YOUR PROPOSED INCREASES TO THE THREE ABOVEMENTIONED CUSTOMER CLASSES?

A. Mr. White appears to indicate that since these three rate classes make up only a small portion of PGW's total sales (.0059%), they should not be subject to a rate increase. The only other commonality he mentions is that each of these rate classes consists of interruptible customers.

Q. WHY SHOULD THESE RATE CLASSES WITH *DEMINIMUS* SALES VOLUMES BE SUBJECT TO RATE INCREASES?

A. I stated beginning on page 11 of my direct testimony that PGW has several customer classes in which the revenues do not equal the costs allocated to that customer class. Additionally, there are several rate classes, including GTS Trans, whose revenues are greater than the costs allocated to them.

One of my goals as a rate analyst is to move all customer classes towards cost whenever that is feasible. My proposal moves the four rate classes, which the Company is content to leave at *status quo,* towards cost. The size of a particular rate class or customer should not play a role in the determination of whether that customer should be subject to a rate increase. Nor should the fact that the rate class consists of either firm or interruptible customers.

Q. MR. WHITE OBJECTS TO YOUR RECOMMENDATIONS REGARDING THE APPROPIATE LEVEL OF PGW'S GS

CUSTOMER CHARGES (PGW ST. 4.1, P. 13). *DO YOU HAVE ANY COMMENTS REGARDING HIS REBUTTAL TESTIMONY?*

A. Yes, I do. Mr. White states that PGW is larger than most of the utilities in my comparison group and that the Company operates in an urban environment where customer related costs are very high. He does, however, agree that the proposed 87.5 percent increase (from $8.00 to $15.00) for the residential class customer charge is "sizable."

My first comment concerns Mr. White's reference to an urban environment and high customer-related costs. I have to disagree with this generalization. Common sense dictates that it normally costs more to serve customers in less densely populated service territories. We have seen this most recently in the telecommunications industry in this state. There is a recognition that competitive local exchange companies are not jumping at the chance to compete in the rural service territories due to the fact that it costs more to serve customers that are more widely dispersed than those in urban and suburban environments. So in this sense, my comparison group is fair. In my opinion, this should signal PGW that they should take a very close look at customer-related costs between now and their restructuring filing.

My second point is to reemphasize what Mr. White recognizes. That PGW has proposed a large increase to the customer charge. There is a general

ratemaking rule called gradualism that, in my opinion, has been violated by PGW. Their proposed 87.5 percent increase to the residential customer charge is simply too large. My proposal still increases this charge by 50 percent, and is a good first step toward moving the customer charge to cost.

Third, my proposal still will increase the dollars collected through the customer charge by a significant amount ($25,511,611, See OTS Exhibit No. 3, Schedule 6). This amount does not decrease if PGW gets less than its fully requested rate request.

Q. ON PAGE 14 OF HIS REBUTTAL TESTIMONY, MR. WHITE DISCUSSES YOUR TARIFF LANGUAGE RECOMMENDATIONS. DO YOU HAVE ANY COMMENTS CONCERNING HIS REMARKS?

A. Yes, I do. First, Mr. White states that PGW is willing to work with OTS at the conclusion of this base rate proceeding (PGW St. 4.1, p. 14). OTS is willing to meet with PGW to discuss any unresolved tariff issues at that time.

Second, while I understand the legal grounds discussed by Mr. White, it is my opinion that PGW should begin the process of implementing the tariff changes I have proposed. These changes will be necessary for the

Company's restructuring filing. Making these proposed changes now can only help PGW ease its way into restructuring.

Mr. Ralph E. Miller

Q. MR. MILLER OBJECTS TO YOUR ALLOCATION OF THE CLASS REVENUE INCREASES UNDER THE CIRCUMSTANCE WHERE THE COMMISSION GRANTS PGW LESS THAN ITS FULLY REQUESTED RATE INCREASE. DO YOU HAVE ANY COMMENTS REGARDING HIS OBJECTIONS?

A. Yes, I do. As I stated in my direct testimony, I used what I have characterized as the Company's "cost allocation study" at proposed rates to determine the allocation of the proposed increase to the various customer classes. The Company's study analyzes costs at proposed rates only. Mr. Miller's proposed changes to the Company's study and his analysis are on a present rate only basis. Although I would have preferred to see the Company's study on both a present and proposed rate basis, I still believe it is the best guide on the record in this case. Moving every class towards its cost of service is very important at this juncture. One must also remember that PGW's costs are largely driven by its residential class. Again, as I stated earlier, it is my opinion that the Company should look at its costs very carefully between now and when it files its restructuring filing.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, it does.

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
P.O. BOX 3265, HARRISBURG, PA 17105-3265

IN REPLY PLEASE
REFER TO OUR FILE

May 3, 2001

OTS Revision No. 3

R-00006042 Phila, PA

5/23/01 RJS

Honorable Cynthia W. Fordham
Office of Administrative Law Judge
Pa Public Utility Commission
1302 Philadelphia State Office Building
Broad and Spring Garden Streets
Philadelphia, PA 19130

Pennsylvania Public Utility Commission
v.
Philadelphia Gas Works
Docket No. R-00006042

Dear Administrative Law Judge Fordham:

Enclosed please find revisions to pages 14, 15 and 18, respectively of OTS Statement No. 3. Additionally, please find revisions to Schedules 3 and 4 of OTS Exhibit No. 3.

Please be advised that I have provided the revisions to the parties of record.

Sincerely,

Johnnie E. Simms

Johnnie E. Simms
Senior Prosecutor
Office of Trial Staff

JES:alb

A. OTS has two revenue allowance scenarios. The first scenario describes a revenue allowance comparing the Company's proposed $65 million revenue request versus the OTS recommended level of revenue increase. The second scenario describes a revenue allowance for the Company based upon transferring the social programs and electric costs from the GCR to base rates.

Subject to change or adoption of an adjustment advanced by other parties, the OTS proposed revenue allowance is approximately $44,000,000.

First Scenario

Q. MR. METRO, WHAT IS YOUR REVENUE ALLOCATION AT THE OTS PROPOSED REVENUE INCREASE?

A. My proposed revenue allocation at the $44 million level is shown in Table #3 and in OTS Exhibit No. 3, Schedule 3 Revised. Table #3 incorporates OTS witness, Mr. Kubas' adjustments as described in OTS Statement No. 2. These adjustments relate to changes in customer numbers and changes in sales. The OTS recommended revenue level results in an allocation that resets the volumetric rates back to present rates for all customer classes shown in Table #3 except the Residential class. The residential class would then make up the remaining volumetric increase. The end result of the OTS

revenue requirement and rate design is that the Residential class receives approximately $12.6 million total revenue reduction from the Company's proposed level adjusted. I note that the revenue increases shown in Table #3 for all the non-residential customer classes are increases resulting from customer charge increases. See OTS Exhibit No. 3, Schedule 3, for the complete OTS revenue allocation summary.

Table #3

Customer Class	Present Revenue	Proposed Revenue	Revenue Increase	%
ResGS/PHAGS	$348,565,231	$389,452,893	$40,887,662	11.73
CommGS/MUNGS	$81,868,772	$84,263,177	$2,394,405	2.92
Industrials	$10,813,853	$11,236,253	$422,400	3.91
PHA/PHA	$1,222,145	$1,325,393	$103,248	8.45
MUN/MS	$8,240,897	$8,433,569	$192,672	2.34
Total	$450,710,898	$494,711,285	$40,000,387	29.35

Q. WHAT WAS THE BASIS FOR YOUR REVENUE ALLOCATION AT THE OTS PROPOSED REVENUE LEVEL OF $33 MILLION?

A. As can be seen in Table #1 above, the Residential customer class revenues at proposed rates are substantially less than the costs allocated to this class. The residential customer class is being subsidized by the other customer classes, therefore, the Residential customer class should not receive a volumetric revenue decrease until the other classes obtain the maximum reduction. I would not recommend reducing the customer charge revenue

Q. WHAT IS THE TOTAL BASE RATE REVENUE ALLOWANCE PROPOSED BY OTS IN THE SECOND SCENARIO?

A. The total base rate revenue allowance proposed by OTS in the second scenario is $105.902 million. This is derived by adding the $61.9 million associated with the social and electric cost recovery in the GCR and the $44 million revenue increase proposed by OTS. In addition, OTS proposes to reduce the total GCR costs by $61.9 million. The overall effect on the customers' total bill will be a $44 million increase to base rates.

Q. MR. METRO, HOW SHOULD THE COMPANY RECOVER THE $61.9 MILLION THAT OTS PROPOSES TO BE RECOVERED IN BASE RATES?

A. OTS is proposing that the $61.9 million is a fixed number that is to be included within base rates. I have allocated the $61.9 million based upon customer class sales volumes. OTS Exhibit No. 3, Schedule 4 revised, shows the $105.902 million OTS base rate increase and allocation.

OTS Exhibit No. 3
Schedule 3-REVISED
Witness:PJ Metro

OTS Proposed Revenue Allocation at $44 Million
Revised for OTS Proposed Customer Increase and Usage Increase (Kubas)

Customer Class	Bills	Current Customer Charge	Proposed Customer Charge	Current Customer Revenue	Proposed Customer Revenue	Customer Charge Revenue Increase	%
ResGS/PHAGS	5,735,215	$ 8.0000	$ 12.0000	$ 45,881,720	$ 68,822,580	$ 22,940,860	50.00%
CommGS/MUNGS	299,301	$ 10.0000	$ 18.0000	$ 2,993,006	$ 5,387,411	$ 2,394,405	80.00%
Industrials/GS	14,080	$ 20.0000	$ 50.0000	$ 281,600	$ 704,000	$ 422,400	150.00%
PHA/PHA	5,736	$ -	$ 18.0000	$ -	$ 103,248	$ 103,248	
MUN/MS	10,704	$ -	$ 18.0000	$ -	$ 192,672	$ 192,672	
Total	6,065,036			49,156,326	75,209,911	$ 26,053,585	53.00%

$ 348,565,231

Customer Class	Forcasted Applicable Sales Mcf	Current Volumetric Charge	Proposed Volumetric Charge	Current Volumetric Revenue	Proposed Volumetric Revenue	Volumetric Revenue Increase	Current Total Revenue	Proposed Total Revenue	Total Revenue Increase	%
ResGS/PHAGS	45,770,983	$ 6.6130	$ 7.0051	$ 302,683,511	$ 320,630,313	$ 17,946,802	$ 348,565,231	$ 389,452,893	$ 40,887,662	11.73%
CommGS/MUNGS	11,078,057	$ 7.1200	$ 7.1200	$ 78,875,766	$ 78,875,766	$ -	$ 81,868,772	$ 84,263,177	$ 2,394,405	2.92%
Industrials/GS	1,479,249	$ 7.1200	$ 7.1200	$ 10,532,253	$ 10,532,253	$ -	$ 10,813,853	$ 11,236,253	$ 422,400	3.91%
PHA/PHA	171,505	$ 7.1260	$ 7.1260	$ 1,222,145	$ 1,222,145	$ -	$ 1,222,145	$ 1,325,393	$ 103,248	8.45%
MUN/MS	1,285,030	$ 6.4130	$ 6.4130	$ 8,240,897	$ 8,240,897	$ -	$ 8,240,897	$ 8,433,569	$ 192,672	2.34%
Total	59,784,824			401,554,571	419,501,374	$ 17,946,802	$ 450,710,897	$ 494,711,285	$ 44,000,387	9.8%

	OTS Proposed	Company Proposed	Difference
Increase in Customer Charge	$ 26,053,585	$ 44,520,357	$(18,466,772)
Increase in Volumetric Charge	$ 17,946,802	$ 20,479,769	$ (2,532,967)
Total Revenue Increase	$ 44,000,387	$ 65,000,126	$(20,999,739)

OTS Exhibit No. 3
Schedule 4 REVISED
Witness: PJ Metro

OTS Proposed Revenue Allocation at $105,902 Million
Revised for OTS Proposed Customer Increase and Usage Increase (Kubas)

Customer Class	Bills	Current Customer Charge	Proposed Customer Charge	Current Customer Revenue	Proposed Customer Revenue	Customer Charge Revenue Increase	%
ResGS/PHAGS	5,735,215	$ 8.0000	$ 12.0000	$ 45,881,720	$ 68,822,580	$ 22,940,860	50.00%
CommGS/MUNGS	299,301	$ 10.0000	$ 18.0000	$ 2,993,006	$ 5,387,411	$ 2,394,405	80.00%
Industrials/GS	14,080	$ 20.0000	$ 50.0000	$ 281,600	$ 704,000	$ 422,400	150.00%
PHA/PHA	5,736	$ -	$ 18.0000	$ -	$ 103,248	$ 103,248	
MUN/MS	10,704	$ -	$ 18.0000	$ -	$ 192,672	$ 192,672	
Total	6,065,036			49,156,326	75,209,911	$ 26,053,585	53.00%

Customer Class	Forcasted Applicable Sales Mcf	Current Volumetric Charge	Proposed Volumetric Charge	Current Volumetric Revenue	Proposed Volumetric Revenue	Volumetric Revenue Increase	Current Total Revenue	Proposed Total Revenue	Total Revenue Increase	%
ResGS/PHAGS	45,770,983	$ 6.6130	$ 8.0405	$ 302,683,511	$ 368,022,196	$ 65,338,686	$ 348,565,231	$ 436,844,776	$ 88,279,546	25.33%
CommGS/MUNGS	11,078,057	$ 7.1200	$ 8.1554	$ 78,875,766	$ 90,346,133	$ 11,470,367	$ 81,868,772	$ 95,733,544	$ 13,864,772	16.94%
Industrials/GS	1,479,249	$ 7.1200	$ 8.1554	$ 10,532,253	$ 12,063,887	$ 1,531,634	$ 10,813,853	$ 12,767,887	$ 1,954,034	18.07%
PHA/PHA	171,505	$ 7.1260	$ 8.1614	$ 1,222,145	$ 1,399,723	$ 177,579	$ 1,222,145	$ 1,502,971	$ 280,827	22.98%
MUN/MS	1,285,030	$ 6.4130	$ 7.4484	$ 8,240,897	$ 9,571,435	$ 1,330,537	$ 8,240,897	$ 9,764,107	$ 1,523,209	18.48%
Total	59,784,824			401,554,571	481,403,374	$ 79,848,802	$ 450,710,897	$ 556,613,285	$ 105,902,387	23.5%

	OTS Proposed	Company Proposed	Difference
Increase in Customer Charge	$ 26,053,585	$ 44,520,357	$(18,466,772)
Increase in Volumetric Charge	$ 79,848,802	$ 20,479,769	$ 59,369,033
Total Revenue Increase	$ 105,902,387	$ 65,000,126	$ 40,902,261

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
v.	:	Docket No. R-00006042
Philadelphia Gas Works	:	

CERTIFICATE OF SERVICE

I hereby certify that I am serving the foregoing **Letter** of the Office of Trial Staff, dated May 3, 2001, either personally, by first class mail, electronic mail, or by fax upon the persons listed below:

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Johnnie E. Simms
Senior Prosecutor
Office of Trial Staff

Dated: May 3, 2001
Docket No. R-00006042

OTS Statement No. 4
Witness: David Keim
Date: April 10, 2001

5/23/01 PLL, PD

015

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

Philadelphia Gas Works

Docket No. R-00006042

Direct Testimony

Of

David F. Keim

Office of Trial Staff

Concerning:

Social Programs

Q. WOULD YOU STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is David F. Keim. My business address is P.O. Box 3265, Harrisburg, PA, 17105-3265.

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

A. I am employed by the Pennsylvania Public Utility Commission as a Fixed Utility Financial Analyst in the Office of Trial Staff (OTS).

Q. WHAT IS YOUR EDUCATIONAL, PROFESSIONAL AND EMPLOYMENT EXPERIENCE?

A. A summary of my educational, professional and employment experience is attached as Appendix A.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to recommend several changes to the rate case filing of the Philadelphia Gas Works (PGW). Specifically, I will be recommending changes to the following social programs: Customer Responsibility Program; Conservation Works Program; and, the Senior Citizen Discount program.

Customer Responsibility Program

Q. WHAT IS THE CUSTOMER RESPONSIBILITY PROGRAM?

A. The Customer Responsibility Program (CRP) is a low-income customer assistance program, which is similar to the Customer Assistance Programs (CAP) of other Pennsylvania gas utilities. CAPs are designed as alternatives to traditional collection methods for low income, payment troubled customers. Customers participating in CAP programs agree to make monthly payments based on household family size and gross income. These regular monthly payments, which may be for an amount less than the customer's current bill, are made in exchange for continued utility services.

Q. DO YOU OBJECT TO THE DESIGN OF PGW'S CUSTOMER RESPONSIBILITY PROGRAM?

A. No. The CRP appears to generally agree with most of the requirements for low-income customer assistance programs as contained in the Pennsylvania Public Utility Commission's Order Regarding Revisions to the Customer Assistance Program Policy Statement Made Pursuant 52 Pa. Code Chapter 69 at Docket No. M-00991232 entered April 9, 1999.

Q. DO YOU HAVE AN OBJECTION REGARDING THE CUSTOMER RESPONSIBILITY PROGRAM OF PGW?

A. Yes. My objection concerns the method of recovery of CRP program costs employed by PGW.

Q. HOW DOES PGW RECOVER THE COSTS OF ITS CRP?

A. PGW recovers these costs through its Gas Cost Rate (GCR) mechanism.

Q. WHY IS PGW'S METHOD OF COST RECOVERY IMPROPER?

A. PGW's method is improper since 1) the costs of the CRP are non-gas costs and do not belong in the GCR; and, 2) the use of the GCR mechanism guarantees that PGW that is will recover all of the costs of its CRP. As such, in my opinion, there is no incentive for PGW to either control program costs or manage the size of the program.

Q. WHAT METHOD OF RECOVERY ARE YOU RECOMMENDING?

A. I recommend that the CRP costs be recovered through base rates instead of the GCR mechanism.

Q. WHY IS THE GCR MECHANISM AN INAPPROPRIATE VEHICLE FOR THE RECOVERY OF THE COSTS OF THE CRP?

A. The GCR, by its very definition "gas cost rate" is designed to recover changes in gas costs incurred by a local distribution company (LDC). The GCR should only reflect increases or decreases in gas costs. Because gas

costs constitute approximately 70-80% of the total operation and maintenance costs incurred by the typical LDC and can be extremely volatile, the Commission has had a long-standing policy of giving them special treatment through the GCR. Conversely, the Commission does not give such special treatment to the costs of customer assistance programs.

Q. WHY IS BASE RATE RECOVERY THE APPROPRIATE METHOD FOR RECOVERY OF CRP COSTS?

A. Recovery of CRP costs through base rates will create the incentive for PGW to control program costs and manage the size of the program.

Q. HOW DO OTHER PENNSYLVANIA GAS UTILITIES TREAT CUSTOMER ASSISTANCE PROGRAM COSTS?

A. All Pennsylvania gas utilities with customer assistance programs recover these costs through base rates.

Q. HOW DOES BASE RATE RECOVERY CREATE INCENTIVES TO CONTROL PROGRAM COSTS AND REDUCE THE SIZE?

A. Since the amount of expense allowed would be fixed, PGW's management would be encouraged to control costs and program size, through increased oversight and customer contacts in order to maintain fiscal stability for PGW.

Q. HAVE YOU CALCULATED AN AMOUNT TO BE RECOVERED IN BASE RATES?

A. Yes, I have. The amount of CRP costs to be removed from the GCR mechanism and recovered in base rates is $ 36,852,448 (OTS Exhibit 4, Schedule 1, Page 4 of 6).

Conservation Works Program

Q. WHAT IS THE CONSERVATION WORKS PROGRAM OF PGW?

A. The Conservation Works Program (CWP) is a customer program designed to provide cost-effective energy savings to PGW low-income customers who participate in the Customer Responsibility Program (CRP) and is intended to reduce the overall long-term costs of the CRP. It is similar to Pennsylvania's Low Income Usage Reduction Program (LIURP) and provides energy conservation measures such as thermostats, weather stripping, insulation, etc.

Q. WHAT IS YOUR OBJECTION TO THE CWP?

A. My objection to the CWP is similar to my objection to the Customer Responsibility Program, i.e., the costs are currently being recovered in the GCR mechanism which improperly provides for full-cost recovery. This is

improper since 1) the costs of the CWP are non-gas costs and do not belong in the GCR; and, 2) GCR recovery provides no incentive to control program costs.

Q. HOW SHOULD CWP COSTS BE RECOVERED?

A. These costs should be recovered through an allowance in base rates, similar to the treatment of the costs of the Customer Responsibility Program. Base rate recovery for the costs of the CWP is the proper method since the annual cost is a fixed, budgeted amount, without the volatility of gas costs. These expenses have been stable in recent years, and can easily be projected and are not volatile.

Q. WHAT IS THE AMOUNT OF THE ALLOWANCE OF CWP COSTS THAT SHOULD BE INCLUDED IN BASE RATES?

A. The amount of CWP to be included in base rates is $2,200,000 (OTS Exhibit 4, Schedule 2, Page 2 of 2).

Senior Citizen Discount

Q. WHAT IS PGW'S SENIOR CITIZEN DISCOUNT PROGRAM?

A. PGW's Senior Citizen Discount (SCD) program is a customer assistance program which provides for reduced monthly charges to those customers

who are City residents, 65 years of age or older, and pay for gas service at their residence. Individuals meeting the program requirements pay only 80% of their total monthly bill for gas service and receive a discount of 20%.

Q. WHAT IS THE CURRENT COST OF THE SCD PROGRAM?

A. The cost of the program for the twelve months ended August 2001 is $21,884,717 (OTS Exhibit No. 4, Schedule 1, Page 4 of 6).

Q. WHAT ISSUES WILL YOU BE ADDRESSING WITH RESPECT TO THE SCD PROGRAM?

A. I will be addressing the continued status of the program and the treatment of cost recovery related to the current program.

Q. WHAT ARE YOUR RECOMMENDATIONS CONCERNING THE CURRENT STATUS OF THE SCD PROGRAM?

A. I have three recommendations. First, I recommend that the SCD program be closed to any additional customers as of the date of the Order in this proceeding. Second, I recommend the Commission find that the program should be phased out and that the Philadelphia City Council should pass an ordinance to that effect. Third, all customers currently in the SCD program should be re-certified for eligibility.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION THAT THE SCD PROGRAM BE DISCONTINUED?

A. My basis is 1) the program may not be just and reasonable; and 2) future costs of the SCD program may become so large so as to be completely unmanageable.

Q. WHAT DO YOU MEAN WHEN YOU SAY THE SENIOR CITIZEN DISCOUNT PROGRAM MAY NOT BE JUST AND REASONABLE?

A. The customers who receive the senior citizen discount are not means-tested for income eligibility, it is probable that some customers are receiving the discount even though they have the ability to pay their bills. There is no precedent in Pennsylvania for a program which allows all senior citizens to receive a discounted bill even though some have the ability to pay their bills in full.

Q. DO SENIOR CITIZENS WHO ARE NOT PAYMENT TROUBLED CUSTOMERS RECEIVE DISCOUNTS?

A. Yes. Discussions with PGW have revealed that the majority of those customers receiving the senior citizen discount are above the 150% of the Federal poverty level, which is the threshold for eligibility to the customer responsibility program of PGW.

Q. WHAT DO YOU MEAN WHEN YOU SAY THAT THE FUTURE COSTS OF THE SCD PROGRAM MAY BECOME SO LARGE SO AS TO BE COMPLETELY UNMANAGEABLE?

A. Because of the projected increase in the senior citizen population as a result of the aging of the baby boomer generation nearing retirement age, more and more customers may be eligible for the senior citizen discount. This would result in more and more costs being shifted to other customers of PGW.

Q. WHY MUST PGW RECERTIFY ALL CURRENTLY ELIGIBLE SENIOR CITIZENS?

A. This is necessary since it is very likely that there are some households receiving the discount in which a senior citizen no longer resides. In my opinion, it is necessary for PGW to accomplish this task because this will enable PGW to set a fixed limit on the number of customers in the program. I recommend that PGW perform a one-time verification of all senior citizens receiving the discount to ensure program eligibility.

Q. HAS PGW VERIFIED THAT SENIOR CITIZENS RECEIVING THE DISCOUNT HAVE NOT BEEN VERIFIED FOR CONTINUING PROGRAM ELIGIBILITY?

A. Yes. Although PGW's tariff states that it may periodically require proof of program eligibility from participants, since 1998 PGW has not monitored program participants to ensure that all those receiving the discount are eligible (OTS Exhibit No. 4, Schedule 3).

Q. HOW WILL THOSE SENIOR CITIZENS WHO WILL HAVE DIFFICULTIES PAYING THEIR BILLS BE ASSISTED?

A. Those senior citizens, who at the time of recertification are determined to be at 150% of the Federal poverty level or below, will be rolled into the Customer Responsibility Program. Under the CRP, those enrolled senior citizens will most likely be better off than they would have been under the Senior Discount Program due to the low payment requirements under the CRP.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATIONS REGARDING RECERTIFICATION?

A. 66 Pa. C.S.A. §2212(r)(2) of the Natural Gas Choice and Competition Act states:

> "Individual ratepayers who,...are properly receiving discounted gas rates pursuant to the terms of a program specifically designed to provide assistance to senior citizens contained in the prior tariff shall be entitled to continue to receive such discount under the terms of the prior tariff unless and until the program is modified by ordinance of the governing body of the city..."

It is obvious that a household, which is receiving the senior citizen discount, must have a senior citizen in residence. The only way to ensure that these households are "properly receiving discounted gas rates" is to ensure that a senior citizen lives there.

Q. WHAT IS YOUR RECOMMENDED PHASE OUT PERIOD FOR THE SCD PROGRAM?

A. I am recommending a five-year phase out period.

Q. WHY ARE YOU RECOMMENDING A PHASE OUT PERIOD OF FIVE YEARS?

A. I am recommending a phase out over five years in order to gradually wean customers off of this discount program. By doing this gradually, customers will be able to make adjustments in their individual situations. Under my recommendation, the discount would be reduced by 4% each year, so in the second year of the phase out, the discount would be 16% and in the third year it would be 12%, 8% in the fourth year, and 4% in the final year of the phase out.

Q. WHO HAS THE AUTHORITY TO ORDER A PHASE OUT OF THE SCD?

A. I have been advised by counsel that according to 66 Pa. C.S.A. §2212(r)(2) cited previously, that a phase out of the Senior Citizen Discount program would have to be approved by the City of Philadelphia.

Q. WHAT IS YOUR RECOMMENDATION REGARDING A PHASE OUT APPROVAL BY THE CITY?

A. I recommend that the Commission direct PGW to submit a plan to the City of Philadelphia which phases out the Senior Citizen Discount program over my recommended five-year period.

Q. WHAT IS YOUR OBJECTION REGARDING CURRENT COST RECOVERY OF THE SCD PROGRAM?

A. My objection is that current SCD program costs are being recovered through the GCR mechanism?

Q. WHY ARE YOU OBJECTING TO THE RECOVERY OF THE SENIOR CITIZEN DISCOUNT THROUGH THE GCR MECHANISM?

A. The costs of the Senior Citizen Discount program are non-gas costs and do not belong in the GCR, since cost recovery through the GCR mechanism guarantees PGW will recover all of the costs of the Senior Citizen Discount program. This discourages any incentive to control program costs. The

GCR mechanism improperly provides for full recovery of the shortfall, in this case, resulting from the Senior Citizen Discount program.

Q. WHAT IS THE PROPER METHOD OF RECOVERY FOR SCD PROGRAM COSTS?

A. Recovery of these costs should be in base rates.

Q. WHY ARE YOU RECOMMENDING THAT THE COSTS RELATED TO THE SENIOR CITIZEN DISCOUNT PROGRAM BE RECOVERED IN BASE RATES?

A. Inclusion of these program costs in base rates will encourage management to exercise additional control over the program so as to keep it within the cost constraints built into rates.

Q. WOULD YOU SUMMARIZE YOUR ALL OF YOUR RECOMMENDATIONS REGARDING PGW'S SOCIAL PROGRAMS?

A. My recommendations, if adopted will result in the following costs being shifted from the GCR mechanism to the base rates of PGW: 1) Customer Responsibility Program of $36,852,448; 2) Conservation Works Program of $2,200,000; and 3) Senior Citizen Discount Program of $21,884,717. This result in a total shift of $60,937,165 from the GCR to base rates.

Q. WHAT IS THE EFFECT ON THE GCR AND BASE RATES AS A RESULT OF YOUR ADJUSTMENTS?

A. The effect of my proposals result in an increase in base rates of $60,937,165 and a reduction in the GCR of $1.0175 per Mcf ($60,937,165 / 59,886,185 Mcf).[1] The net impact on the customer's bill will be zero.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

[1] OTS Exhibit No. 4, Schedule 2, Page 2 of 2.

Appendix A

Professional and Educational Experience of

David F. Keim

Professional Certification

Certified Public Accountant

Professional Experience

September 1984 to Present: Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania - Fixed Utility Financial Analyst - Responsible, primarily for the review of rate design and revenue and expenses as part of the evaluation and recommendation process for water, electric, gas and telephone utility rate filings.

June 1979 to September 1984: Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania - Public Utility Auditor - Participated in the coordination of the Management Audit program of the thirty largest utilities within Pennsylvania. Selected national consulting firms for management audits and monitored their progress to ensure an objective report. Performed, as in-charge auditor, financial audits of gas and electric utilities.

Education

Bachelor of Science, Accounting, Pennsylvania State University, 1978

Various AICPA and PICPA sponsored courses for continuing professional education.

Continuing education in utility regulation and accounting.

Testimony

Before the Pennsylvania Public Utility Commission:

R-842769 - Equitable Gas Company
R-860296 - National Fuel Gas Distribution Corp.
R-860314 - Columbia Gas of Pennsylvania, Inc.
R-850287 - National Fuel Gas Distribution Corp.
R-870665 - UGI Corp. - Gas Division
R-870719 - National Fuel Gas Distribution Corp.
R-870832 - Columbia Gas of Pennsylvania, Inc.
R-880961 - The Peoples Natural Gas Company
R-881089 - Philadelphia Electric Company
R-891218 - National Fuel Gas Distribution Corp.
R-891468 - Columbia Gas of Pennsylvania, Inc.
R-901670 - National Fuel Gas Distribution Corp.
R-901726 - Pennsylvania Gas and Water Company
R-901873 - Columbia Gas of Pennsylvania, Inc.
R-911886 - Columbia Gas of Pennsylvania, Inc.
R-911921 - Columbia Gas of Pennsylvania, Inc.
R-911912 - National Fuel Gas Distribution Corp.
R-910699C002 - Pennsylvania Gas & Water Co. - Gas Division
R-911963 - Roaring Creek Water Company
R-912064 - Bloomsburg Water Company
R-912060 - Shenango Valley Water Company
R-912117 - Fawn Lake Forest Water Company
R-922168 - The York Water Company
R-922314 - Metropolitan Edison Company
R-922428 - Pennsylvania American Water Company
R-922420 - Shenango Valley Water Company
R-922493 - LP Water & Sewer Company
R-00922375 - Colony Water System, Ltd.
R-00932676 - Pennsylvania Gas and Water Company
R-00932667 - Pennsylvania Gas and Water Company
R-00932665 - Roaring Creek Water Company
R-00932862 - UGI Utilities, Inc. - Electric Division
R-00942991 - National Fuel Gas Distribution Corportation
R-00943098 - Borough of Media Water Works
R-00943124 - City of Bethlehem Water Fund
R-00943152 - General Water Works of Pennsylvania, Inc.
R-00943177 - Roaring Creek Water Company

R-00943231 - Pennsylvania-American Water Company
R-00953343 - Philadelphia Suburban Water Company
R-00953300 - Citizen's Utilities Water Company of Pennsylvania
R-00963612 - PG Energy Inc.
R-00973931 - Columbia Gas of Pennsylvania, Inc.
R-00963858 - Equitable Gas Company
R-00974128 - Commonwealth Telephone Company
A-220005 - Township of Falls, Bucks County
R-00974149 - Pennsylvania Power Company
R-00984275 - Manufacturers Water Company
P-00981425 - Pennsylvania Telephone Association
P-00981449 - GTE Chapter 30
R-00994682 - PFG Gas Inc.
R-00994788 - PFG Gas, Inc./North Penn Gas Company
R-00005110 – Columbia Gas of Pennsylvania, Inc.
A-310125 - Application of ATT/TCG
R-00005109 – City of Lancaster Sewer Fund
R-00005296 – PPL Utilities Inc.
R-00005277 – PPL Utilities Inc.
R-00005050 – Emporium Water Company

OTS Exhibit No. 4
Witness: David F. Keim
Date: April 10, 2001

5/23/01
Phil OD
RS

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

Philadelphia Gas Works

Docket No. R-00006042

Exhibits to Accompany
The
Direct Testimony

DOCKETED
JUN 8 2001

Of

David F. Keim

Office of Trial Staff

Concerning:

Social Programs

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RESPONSE TO OFFICE OF TRIAL STAFF DATA REQUEST
REGARDING PGW'S RATE PROCEEDING

Question OTS-RS-21 Refer to Exhibit No. HSG-3, Schedule 1, page 1:

a) Provide the supporting calculations for the $56,700,232 CRP/Senior Discounts – Cost Causation amount under present rates for each customer class.

b) Provide the supporting calculations for the $58,737,165 CRP/Senior Discounts – Cost Causation amount under proposed rates for each customer class.

Response Provided By: Howard S. Gorman, R.J. Rudden Associates

Response:

The $56,700,232 was derived by reducing the proposed rates by the increases in the customer charge and volumetric charge for Senior Citizens; a reduction of $2,036,933 (see Attachment 1).

Regarding the calculation of $58,737,165, please see Attachment 2 for a further breakout of the CRP/Senior Discounts as they apply to the rate classes in Exhibit No. HSG-3, Schedule 1, page 1. Attachment 3 is the detailed calculation of CRP portion, $30,835,532, prior to the proposed rates. Attachment 4 is the methodology to arrive at the additional CRP discount, $6,016,916, based on the proposed rates. The Senior Citizen Discount of $21,884,717 is a derivative of taking 20% the monthly billed consumption of gas priced at the full tariff rates in effect, including the Gas Cost Rate (GCR) adjustment charge, for all program approved Senior Citizens.

Customer Charge						
Proposed Customer Charge			$15.00	$15.00	$25.00	$25.00
Existing Customer Charge			$8.00	$8.00	$10.00	$10.00
Increase			7.00	7.00	15.00	15.00
Number of Seniors- Average		91,014	7058	83742	1	25
Increase in Tariff Revenue- Seniors		7,647,672	592872	7034328	180	4500
Effect of Discount	20.0%	1,529,534	118574.4	1406865.6	36	900
Volumetric Charge						
Proposed Volumetric Charge			$6.9050	$6.9050	$7.6860	$7.6860
Existing Volumetric Charge			$6.6130	$6.6130	$7.1200	$7.1200
Increase			$0.2920	$0.2920	$0.5660	$0.5660
Volume for Seniors		8,682,536	191883	8456833	43	6142
Increase in Tariff Revenue- Seniors		2,536,995	56029.836	2469395.24	24.338	3476.372
Effect of Discount	20.0%	507,399	11205.9672	493879.047	4.8676	695.2744
Change in Senior Discount		2036933.44	129780.367	1900745	40.8676	1595.2744

OTS-RS-21
Attachment 1

OTS Exhibit No. 4
Schedule 1
Page 2 of 6

Philadelphia Gas Works
rvice Study - Test Year Fiscal 2001

			Company Total	Residential Non-Heat RC-1	Residential Heat RC-2	Commercial Non-Heat RC-3	Commercial Heat RC-4	Industrial Non-Heat RC-5	Industrial Heat RC-6	Municipal Non-Heat RC-7	Municipal Heat RC-8	Housing Auth PHA RC-9	Housing Auth GS RC-10
EXISTING TARIFF													
Discounts	Discounts		56,700,232	1,418,148	55,273,113	102	13,640	0	0	0	0	0	(4,772)
Customer Charge													
Proposed Customer Charge				$ 15.00	$ 15.00	$ 25.00	$ 25.00						$ 15.00
Existing Customer Charge				$ 8.00	$ 8.00	$ 10.00	$ 10.00						$ 8.00
Increase				$ 7.00	$ 7.00	$ 15.00	$ 15.00						$ 7.00
Number of Seniors- Average			91,014	7,058	83,742	1	25						188
Increase in Tariff Revenue- Seniors			$ 7,647,672	$ 592,872	$ 7,034,328	$ 180	$ 4,500						$ 15,792
Effect of Discount		20%	$ 1,529,534	$ 118,574	$ 1,406,866	$ 36	$ 900						$ 3,158
Volumetric Charge													
Proposed Volumetric Charge				$ 6.91	$ 6.91	$ 7.69	$ 7.69						$ 6.91
Existing Volumetric Charge				$ 6.61	$ 6.61	$ 7.12	$ 7.12						$ 6.61
Increase				$ 0.29	$ 0.29	$ 0.57	$ 0.57						$ 0.29
Volume for Seniors			8,682,536	191,883	8,456,833	43	6,142						27,635
Increase in Tariff Revenue- Seniors			$ 2,536,995	$ 56,030	$ 2,469,395	$ 24	$ 3,476						$ 8,069
Effect of Discount		20%	$ 507,399	$ 11,206	$ 493,879	$ 5	$ 695						$ 1,614
Change in Senior Discount			$ 2,036,933	$ 129,780	$ 1,900,745	$ 41	$ 1,595						$ 4,772
PROPOSED TARIFF													
Discounts			58,737,165	1,547,928	57,173,858	143	15,236	0	0	0	0	0	0

OTS Exhibit No. 4
Schedule 1
Page 3 of 6

CRP DISCOUNT

	Sep 2000	Oct 2000	Nov 2000	Dec 2000	Jan 2001	Feb 2001	Mar 2001	Apr 2001	May 2001	Jun 2001	Jul 2001	Aug 2001	Total 2000-2001
Non-Heating	(17,095)	10,918	43,307	143,029	247,467	218,562	169,348	96,354	21,351	(7,420)	(10,816)	(3,400)	911,601
Heating	(345,134)	267,867	1,459,792	5,580,785	10,151,236	8,662,651	6,549,713	3,426,292	629,855	(155,630)	(218,035)	(68,545)	35,940,847
Total	(362,229)	278,785	1,503,099	5,723,814	10,398,703	8,881,213	6,719,059	3,522,646	651,206	(163,050)	(228,851)	(71,945)	36,852,448

Senior Citizen Discount

	Sep 2000	Oct 2000	Nov 2000	Dec 2000	Jan 2001	Feb 2001	Mar 2001	Apr 2001	May 2001	Jun 2001	Jul 2001	Aug 2001	Total 2000-2001
Non-Heating													
Residential	26,468	30,237	41,670	68,440	100,712	95,272	81,586	57,908	38,456	35,172	30,204	30,204	636,327
Commercial	7	8	15	18	24	17	12	10	9	9	8	8	143
Heating													
Residential	527,818	730,229	1,377,009	2,617,029	4,052,619	3,721,918	3,111,869	2,035,629	1,124,186	731,839	601,433	601,433	21,233,011
Commercial	296	459	981	1,948	3,054	2,798	2,329	1,493	775	431	336	336	15,236
Total	554,588	760,932	1,419,675	2,687,434	4,156,409	3,820,005	3,195,796	2,095,039	1,163,426	767,451	631,981	631,981	21,884,717

OTS-RS-21-Att 2

OTS Exhibit No. 4
Schedule 1
Page 4 of 6

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Statement of CRP Revenue: Full Tariff vs. Program Rates for Fiscal 2000-01

Scenario: Resume CRP Collection Activity (Break and Suspend) as of January 2001
Scenario: Revised Customer Count and DGD of 4555

Attachment 3

		September	October	November	December	January	February	March	April	May	June	July	August	Total 2000-01
Number of Customers		53,559	54,500	55,000	56,000	56,000	53,000	51,000	49,000	49,000	49,000	49,000	49,000	
Budget+2%	8.9%	4,771	4,855	4,899	4,988	4,988	4,721	4,543	4,365	4,365	4,365	4,365	4,365	85,590
PIIA Allowance	0.9%	477	486	490	499	499	472	454	437	437	437	437	437	5,562
7.35% of Income	61.7%	33,066	33,646	33,956	34,574	34,574	32,722	31,487	30,251	30,251	30,251	30,251	30,251	385,280
$30 Minimum	28.4%	15,232	15,500	15,642	15,926	15,926	15,073	14,504	13,936	13,936	13,936	13,936	13,936	177,483
CRU	0.0%	13	13	13	13	13	12	12	11	11	11	11	11	144
Total - Discounts	90.2%	48,311	49,159	49,611	50,513	50,513	47,807	46,003	44,198	44,198	44,198	44,198	44,198	562,907
Total - Billed	100.0%	53,559	54,500	55,000	56,000	56,000	53,000	51,000	49,000	49,000	49,000	49,000	49,000	624,059
		53,559	108,059	163,059	219,059	275,059	328,059	379,059	428,059	477,059	526,059	575,059	624,059	
Revenue @ CRP Rates														
Budget+2%		$ 277,720	$ 282,610	$ 285,171	$ 290,351	$ 290,351	$ 274,809	$ 264,448	$ 254,087	$ 254,087	$ 254,087	$ 254,087	$ 254,087	$ 3,235,698
PIIA Allowance		$ 67,414	$ 68,686	$ 69,252	$ 70,524	$ 70,524	$ 66,708	$ 64,164	$ 61,761	$ 61,761	$ 61,761	$ 61,761	$ 61,761	$ 786,077
7.35% of Income		$ 1,577,910	$ 1,605,587	$ 1,620,380	$ 1,649,871	$ 1,649,871	$ 1,561,494	$ 1,502,560	$ 1,443,578	$ 1,443,578	$ 1,443,578	$ 1,443,578	$ 1,443,578	$ 18,385,563
$30 Minimum		$ 456,960	$ 465,000	$ 469,260	$ 477,780	$ 477,780	$ 452,190	$ 435,120	$ 418,080	$ 418,080	$ 418,080	$ 418,080	$ 418,080	$ 5,324,490
CRU		$ 822	$ 822	$ 822	$ 822	$ 822	$ 759	$ 759	$ 695	$ 695	$ 695	$ 695	$ 695	$ 9,103
Total - Discounts Classes		$ 2,035,692	$ 2,071,409	$ 2,090,462	$ 2,126,473	$ 2,126,473	$ 2,014,443	$ 1,938,439	$ 1,862,353	$ 1,862,353	$ 1,862,353	$ 1,862,353	$ 1,862,353	$ 23,719,156
Total All Classes		$ 2,380,826	$ 2,422,705	$ 2,444,885	$ 2,489,348	$ 2,489,348	$ 2,355,960	$ 2,267,051	$ 2,178,201	$ 2,178,201	$ 2,178,201	$ 2,178,201	$ 2,178,201	$ 27,741,128
		$ 2,380,826	$ 4,803,531	$ 7,248,416	$ 9,737,764	$ 12,227,112	$ 14,583,072	$ 16,850,123	$ 19,028,324	$ 21,206,525	$ 23,384,726	$ 25,562,927	$ 27,741,128	
														44 45273283
Revenue @ GS Rates		$ 1,482,425	$ 2,253,185	$ 4,743,790	$ 9,654,804	$ 15,230,932	$ 13,141,984	$ 10,488,252	$ 6,416,354	$ 3,324,022	$ 2,032,578	$ 1,594,226	$ 1,594,226	$ 71,956,788
Budget+2%	5.93%	$ 87,885	$ 133,579	$ 281,233	$ 572,380	$ 902,958	$ 779,116	$ 621,791	$ 380,390	$ 197,063	$ 120,500	$ 94,513	$ 94,513	$ 4,265,921
PIIA Allowance	1.25%	$ 18,532	$ 28,168	$ 59,303	$ 120,698	$ 190,408	$ 164,293	$ 131,119	$ 80,213	$ 41,555	$ 25,411	$ 19,930	$ 19,930	$ 899,560
Other														
7.35% of Income	65.26%	$ 967,708	$ 1,470,850	$ 3,096,687	$ 6,302,532	$ 9,942,557	$ 8,578,925	$ 6,846,596	$ 4,188,513	$ 2,169,879	$ 1,326,841	$ 1,040,690	$ 1,040,690	$ 46,972,468
$30 Minimum	27.53%	$ 408,078	$ 620,251	$ 1,305,856	$ 2,657,749	$ 4,192,731	$ 3,617,692	$ 2,887,178	$ 1,766,277	$ 915,026	$ 559,523	$ 438,854	$ 438,854	$ 19,808,073
CRU	0.01%	$ 222	$ 337	$ 710	$ 1,445	$ 2,279	$ 1,967	$ 1,569	$ 960	$ 497	$ 304	$ 239	$ 239	$ 10,768
Total - Discounts Classes	92.8%	$ 1,376,008	$ 2,091,438	$ 4,403,255	$ 8,961,726	$ 14,137,567	$ 12,196,584	$ 9,735,343	$ 5,955,750	$ 3,085,404	$ 1,886,668	$ 1,479,783	$ 1,479,783	$ 66,791,309
Total All Classes	100.0%	$ 1,482,425	$ 2,253,185	$ 4,743,791	$ 9,654,804	$ 15,230,933	$ 13,141,993	$ 10,488,253	$ 6,416,353	$ 3,324,022	$ 2,032,579	$ 1,594,226	$ 1,594,226	$ 71,956,790
		$ 1,482,425	$ 3,735,610	$ 8,479,401	$ 18,134,206	$ 33,365,138	$ 46,507,131	$ 56,995,384	$ 63,411,737	$ 66,735,759	$ 68,768,338	$ 70,362,564	$ 71,956,790	
Potential Discounts/(Premiums) - Gross														
Budget+2%		$ (189,835)	$ (149,031)	$ (3,938)	$ 282,029	$ 612,607	$ 504,307	$ 357,343	$ 126,303	$ (57,024)	$ (133,587)	$ (159,574)	$ (159,574)	$ 1,030,026
PIIA Allowance		$ (48,882)	$ (40,518)	$ (9,949)	$ 50,174	$ 119,884	$ 97,585	$ 66,955	$ 18,452	$ (20,206)	$ (36,350)	$ (41,831)	$ (41,831)	$ 113,483
Other														
7.35% of Income		$ (610,202)	$ (134,737)	$ 1,476,307	$ 4,652,661	$ 8,292,686	$ 7,017,431	$ 5,344,036	$ 2,744,935	$ 726,301	$ (116,737)	$ (402,888)	$ (402,888)	$ 28,586,905
$30 Minimum		$ (48,882)	$ 155,251	$ 836,596	$ 2,179,969	$ 3,714,951	$ 3,165,502	$ 2,452,058	$ 1,348,197	$ 496,948	$ 141,443	$ 20,774	$ 20,774	$ 14,483,583
CRU		$ (600)	$ (485)	$ (112)	$ 823	$ 1,457	$ 1,208	$ 810	$ 265	$ (198)	$ (391)	$ (456)	$ (456)	$ 1,665
Total - Discounts Classes		$ (859,584)	$ 20,029	$ 2,312,793	$ 6,833,253	$ 12,009,094	$ 10,184,141	$ 7,796,904	$ 4,093,397	$ 1,223,051	$ 24,315	$ (382,570)	$ (382,570)	$ 43,072,153
Total All Classes - mo		$ (898,401)	$ (169,520)	$ 2,298,908	$ 7,165,456	$ 12,741,585	$ 10,786,033	$ 8,221,202	$ 4,238,152	$ 1,145,821	$ (145,622)	$ (583,975)	$ (583,975)	$ 44,215,662
- ytd		$ (898,401)	$ (1,067,921)	$ 1,230,985	$ 8,396,441	$ 21,138,026	$ 31,924,059	$ 40,145,261	$ 44,383,413	$ 45,529,234	$ 45,383,612	$ 44,799,637	$ 44,215,662	
Reversal of CRP Discount - CRP Removal *(Broken & Suspended Agreements)*		$ -	$ -	$ -	$ -	$ 630,069	$ 948,997	$ 1,133,299	$ 1,069,306	$ 754,200	$ 435,486	$ 168,272	$ 16,366	$ 5,155,995
Earned Discount - Based on CRP Removal		(659,684)	20,029	2,312,793	6,833,253	11,379,025	9,235,144	6,663,605	3,024,091	468,851	(411,171)	(550,842)	(398,936)	$ 37,916,158
LIHEAP Grants														
2001 Grants		$ (238)	$ (1,900)	$ (1,078,250)	$ (1,482,000)	$ (1,472,500)	$ *(722,000)	$ (180,500)	$ (28,500)	$ (28,500)	$ (238)	$ -	$ -	$ (4,994,626)
2000 Make-up		$ (50,000)	$ (100,000)	$ (150,000)	$ (175,000)	$ (175,000)	$ (175,000)	$ (175,000)	$ 150,000	$ (100,000)	$ (65,000)	$ -	$ -	$ (1,015,000)
Total		$ (50,238)	$ (101,900)	$ (1,228,250)	$ (1,657,000)	$ (1,647,500)	$ (897,000)	$ (355,500)	$ 121,500	$ (128,500)	$ (65,238)	$ -	$ -	$ (6,009,626)
ytd		$ (50,238)	$ (152,138)	$ (1,380,388)	$ (3,037,388)	$ (4,684,888)	$ (5,581,888)	$ (5,937,388)	$ (5,815,888)	$ (5,944,388)	$ (6,009,626)	$ (6,009,626)	$ (6,009,626)	
Excess Usage (Collected)														
Total - Discounts Classes		$ (50,000)	$ (60,000)	$ (70,000)	$ (75,000)	$ (100,000)	$ (150,000)	$ (200,000)	$ (115,000)	$ (101,000)	$ (65,000)	$ (45,000)	$ (40,000)	$ (1,071,000)
CRP Discounts - for GCR Calculation														
Total - Discounts Classes		$ (759,922)	$ (141,871)	$ 1,014,543	$ 5,101,253	$ 9,631,525	$ 8,168,144	$ 6,108,105	$ 3,030,591	$ 239,351	$ (541,409)	$ (595,842)	$ (438,936)	$ 30,835,532
YTD		$ (759,922)	$ (901,793)	$ 112,750	$ 5,214,003	$ 14,845,528	$ 23,033,673	$ 29,141,778	$ 32,172,369	$ 32,411,719	$ 31,870,310	$ 31,274,468	$ 30,835,532	

OTS Exhibit No. 4
Schedule 1
Page 5 of 6

	$65 MILLION INCR	BASE CASE	DIFFERENCE
REVENUE BILLED			
CRP NON-HEAT	2,442,447	2,199,542	242,905
CRP HEAT	79,270,421	73,496,410	5,774,011
	81,712,868	*75,695,952*	*6,016,916*

CRP DISCOUNT WITHOUT $6,019,916 SHORTFALL $30,835,532

NEW CRP DISCOUNT $36,852,448

$36,852,446/$30,835,532=1.195129

	BASE CRP REVENUE	NEW CRP REVENUE	NEW OVER(UNDER) BASE	CURRENT GCR DISCOUNT	NEW GCR DISCOUNT
SEP	1515807	1913500	397693	-759922	-362229
OCT	2355731	2776387	420656	-141871	278785
NOV	4985941	5474497	488556	1014543	1503099
DEC	10172224	10794784	622560	5101253	5723813
JAN	16061400	16828578	767178	9631525	10398703
FEB	13856504	14549572	693068	8188144	8881212
MAR	11054658	11665612	610954	6108105	6719059
APR	6755040	7247095	492055	3030591	3522646
MAY	3489102	3900957	411855	239351	651206
JUN	2125157	2503516	378359	-541409	-163050
JUL	1662194	2029185	366991	-595842	-228851
AUG	1662194	2029185	366991	-438936	-71945
TOTAL	75695952	81712868	6016916	30835532	36852448
	75695952	81712868	6016916		

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

PHILADELPHIA GAS WORKS

INTERIM SETTLEMENT FILING SUPPORTING SCHEDULES

FILED: FEBRUARY 23, 2001

EFFECTIVE: MARCH 1, 2001

Philadelphia Gas Works

Levelized Gas Cost Rate

Fiscal Year 2000-2001

Formula: GCR = ((C-E) / S) - B		1/1/01 1st QTR GCR Filing 2000-2001	4 & 8 Act/Est 2000-2001	4 & 8 Act/Est Over/(Under) 1st Qtr.
where:				
S = Applicable Sales Volume (Mcf)		59,886,185	60,760,276	874,091
Fuel				
Net Natural Gas Expense	$	419,990,904	430,922,923	10,932,019
Plus: Purchased Electric Expense		965,000	965,000	0
Total Applicable Fuel Expense	$	420,955,904	431,887,923	10,932,019
Non-Fuel				
Conservation Programs	$	2,200,000	2,200,000	0
CRP Discounts		39,946,070	45,168,820	5,222,750
Total Applicable Non-Fuel Expenses	$	42,146,070	47,368,820	5,222,750
C = Applicable Raw Material Expense	$	463,101,974	479,256,743	16,154,769
E = Adjustment For: Natural Gas Refunds	$	3,868,973	3,888,544	19,571
Prior Year Reconciliations		(14,050,659)	(14,050,659)	0
Total Adjustment	$	(10,181,687)	(10,162,116)	19,571
C-E = Net Applicable Raw Material Expense	$	473,283,661	489,418,859	16,135,198
B = Base Fuel Charge/Mcf		3.1800	3.1800	0.0000
Projected Unit Cost of Fuel		7.9031	8.0549	0.1519
Recovery Test on: Applicable Sales Volume of (Mcf)		59,886,185	60,760,276	874,091
@GCR in effect	$	6.1985	6.1985	0.0000
@ Base Fuel Rate Effective 9/1/90	$	3.1800	3.1800	0.0000
GCR Charge	$	282,844,837	285,670,229	2,825,392
+ Base Fuel Charge	$	190,438,068	193,217,678	2,779,609
= Total Projected Recovery	$	473,282,904	478,887,907	5,605,002
Compared To				
Net Applicable Raw Material Expense	$	473,283,661	489,418,859	16,135,198
= Net Over/(Under) Recovery	$	(757)	(10,530,952)	(10,530,196)
Degree Days		4,805	4,722	(83)

RESPONSE TO OFFICE OF TRIAL STAFF DATA REQUEST REGARDING PGW'S RATE PROCEEDING

Question OTS-TRF-8: Refer to Section 12.4 of the current tariff.

A) How often does the Company verify the continued existence of the Senior enrolled in the Senior Citizen Discount program?

B) Provide a list of all documents that would satisfy the legal proof of age.

C) Provide a copy of internal documents that show that the Company has performed random or other checks to verify the existence of a Senior enrolled in the Senior Citizen Discount program.

D) Provide the number of employees that are specifically assigned to verify the existence of the Senior.

E) Provide a schedule showing the number of Seniors added and deleted each year for the last five years.

F) Provide a schedule showing how many Seniors were voluntarily removed from the program and how many PGW actually found and removed.

Response Provided By: Cristina Coltro, Manager of Energy Assistance Programs

Response:

A) Until 1998, PGW verified the continued existence of participants in the Senior Citizen Discount once each year. Plans are now in place to resume the verification process to be performed four times each year.

B) Documents used to proof of age include:

- Birth certificate
- Passport
- Drivers License
- Baptismal Certificate
- Census Record
- Any other legal proof of age

C) Documentary evidence of our last verification process is no longer available.

D) All PGW Customer Service representatives who are in contact with the customers in the District Offices, Call Centers, and correspondence area are responsible for assisting customers with the Senior Citizens program application and verification processes.

E and F) PGW does not have available a report showing the showing the number of Seniors added and deleted each year for the last five years nor a schedule of Seniors who were voluntarily removed from the program and how many PGW actually found and removed.

OTS Statement No. 4SR
Witness: David Keim
Date: May 16, 2001

5/23/01

PWb DD

R13

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

Philadelphia Gas Works

Docket No. R-00006042

Surrebuttal Testimony

Of

David F. Keim

Office of Trial Staff

Concerning:

Social Programs

Q. WOULD YOU STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is David F. Keim. My business address is P.O. Box 3265, Harrisburg, PA, 17105-3265.

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

A. I am employed by the Pennsylvania Public Utility Commission as a Fixed Utility Financial Analyst in the Office of Trial Staff (OTS).

Q. HAVE YOU PREVOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. My OTS Statement No. 4 and Exhibit No. 4 were submitted On April 10, 2001.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of Philadelphia Gas Works ("PGW") witness Craig White.

Q. WOULD YOU ADDRESS MR. WHITE'S REBUTTAL TESTIMONY?

A. Yes. Mr. White states at page 10 of his PGW Statement 4.1, that PGW needs the GCR mechanism for dollar for dollar cost recovery and that this is essential if PGW is to maintain its financial health on an ongoing basis. This includes discounts to Customer Responsibility Program (CRP) participants and senior citizens. He maintains that a sliding scale mechanism is necessary in order to ensure cost recovery.

Q. WOULD YOU RESPOND TO MR. WHITE?

A. Mr. White is correct that the only way to guarantee recovery of the CRP and senior discounts is through a sliding scale mechanism. He is incorrect that the only way for PGW to maintain its financial health on an ongoing basis is through a sliding scale mechanism. These programs as they currently exist are nothing more than an open blank check to PGW's management with absolutely no incentives to monitor and control costs. By establishing a fixed recovery in base rates, the Company now has incentive to control costs. The potential negative impact to PGW's financial health only exists if management is unable to meet the challenge. OTS' recommendation in the proceeding is asking no more of PGW's management than that which is already imposed on, and asked of the management of other Pennsylvania LDCs.

Q. DOES MR. WHITE OFFER AN ALTERNATIVE POSITION TO MAINTAINING GCR RECOVERY?

A. Yes. Mr. White is proposing a tracker type mechanism to ensure recovery of under-billing and refund of over-billing to firm customers of PGW. The majority of the historical CRP discount would be moved into base rates with future over and under annual cost recovery remaining in the GCR.

Q. WHAT ABOUT MR. WHITE'S PROPOSED TRACKING MECHANISM?

A. Mr. White's proposal to recover costs above a level in base rates is simply base rate reconciliation in order to guarantee cost recovery. It is no different than dollar for dollar recovery with reconciliation, which is already accomplished by the GCR. This is contrary to ratemaking principles regarding base rate recovery and in my opinion should be rejected. Furthermore, as I previously stated, dollar for dollar recovery does not create incentives to control costs as is the case with fixed recovery in base rates. Finally, it continues to be the position of OTS that the costs of the CRP and the Senior Citizen Discount program are non-gas costs and do not belong in the GCR.

Q. DID THE MANAGEMENT AUDIT ADDRESS THE INCLUSION OF SOCIAL COSTS IN PGW'S GCR?

A. Yes. The report stated that the costs of these programs could be more appropriately considered a City expense rather than an element of the PGW GCR (Page VIII-34, para. 31). This serves to further support the OTS position that these costs do not belong in the GCR.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes it does.

OTS Statement No. 5 + Exh 5
Witness: Kevan Deardorff
Date: April 10, 2001

5/23/01 Phila, PA

RJS

Pennsylvania Public Utility Commission

v.

Philadelphia Gas Works

Docket No. R-00006042

Direct Testimony

Of

Kevan Deardorff

Office of Trial Staff

Concerning:

Debt Service Coverage

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Kevan L. Deardorff. My business address is P.O. Box 3265, Harrisburg, Pa. 17105-3265.

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

A. I am currently employed by the Pennsylvania Public Utility Commission as a Fixed Utility Financial Analyst. I am assigned to the Office of Trial Staff as an expert witness.

Q. WHAT IS YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND?

A. I have prepared this information in Appendix A supplementing my direct testimony.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to address Philadelphia Gas Works' (PGW or Company) debt service coverage requirements and the impact that OTS' recommended revenue increase will have on debt service coverage.

Q. DOES YOUR DIRECT TESTIMONY INCLUDE AN EXHIBIT THAT SUPPORTS YOUR RECOMMENDATION WITH RESPECT TO DEBT SERVICE COVERAGE REQUIREMENTS?

A. Yes. OTS Exhibit No. 5 presents a compilation of PGW's debt service and debt service coverage calculations.

Q. PLEASE DEFINE DEBT SERVICE?

A. Debt service is the annual amount of principal and interest due on an outstanding loan.

Q. WHAT IS MEANT BY DEBT SERVICE COVERAGE?

A. Debt service coverage is a ratio of annual funds available to cover annual debt service divided by the annual debt service requirement (principal and interest).

Q. WHAT IS NORMAL DEBT SERVICE COVERAGE FOR A MUNICIPAL UTILITY?

A. Ms. Barbara Bisgaier, PGW's expert witness concerning debt service, testified at page 5 of PGW-IR St. 2 that most municipal utilities have required coverage between 1.1x and 1.25x annual debt service. The Handbook of Fixed Income Securities published by Dow Jones-Irwin 1987 provides a perspective of the municipal bond investor in terms of what factors a potential investor should examine before investing in municipal bonds. This handbook's recommendation to prospective investors is to

examine the potential of a municipality to pay its operating expenses and cover its annual debt service charges 1.20x.

Q. WHAT IS PGW'S SPECIFIC DEBT SERVICE COVERAGE REQUIREMENT?

A. The Rate Covenant set forth in Article IV, Section 403 of its 1975 and 1998 Bond Ordinances requires PGW to maintain minimum debt service coverage of 1.5 times for the 1975 Ordinance Revenue Bonds and 1998 Ordinance Senior Revenue Bonds and 1.0 times for 1998 Ordinance Subordinate Revenue Bonds.

Q. *HAVE YOU REVIEWED THE TESTIMONY OF BARBARA C.* BISGAIER WITH RESPECT TO PGW'S FINANCIAL SITUATION?

A. Yes.

Q. WHAT IS MS. BISGAIER'S POSITION REGARDING PGW'S FINANCIAL SITUATION?

A. Ms Bisgaier's testified at page 6 of her testimony that "without rate relief, it will not achieve its bond ordinance debt service coverage requirements in the fiscal year ending August 31, 2001." Subsequently, she concludes "If the bond rating agencies do not believe PGW can continue to meet its coverage requirements, they will downgrade the long-term credit ratings to

below investment grade and PGW will be unable to access the credit markets."

Q. HAS PGW BEEN ABLE TO MEET ITS DEBT SERVICE COVERAGE OVER THE PAST SEVERAL YEARS?

A. Yes. Schedule No. 1 of OTS Exhibit No. 5 presents the calculated debt service coverage ratios for PGW over the past seven years. PGW was able to meet their debt service requirement of 1.5 for all seven years.

Q. WHAT ARE PGW'S DEBT SERVICE REQUIREMENTS?

A. Schedule No. 2 of OTS Exhibit No. 5 presents the debt service requirements for PGW for the test year ended August 31 2001. The total debt service requirement for the 1975 Ordinance Bonds is $51,611,000. The total debt service requirement for the 1998 Ordinance Bonds is $29,449,000. The total debt service requirement for the 1998 Ordinance Bonds is $1,990,000.

Q. WHAT DEBT SERVICE COVERAGE RESULTS FROM OTS' RECOMMENDED INCREASE IN REVENUE?

A. Schedule No. 3 of OTS Exhibit No. 5 presents the calculation of the debt service coverage ratios for PGW. The funds available to cover debt service were calculated by OTS witness Weakley in Schedule No. 3 of OTS

Exhibit No. 1. The capital lease costs must be added back since the debt service on the 1975 Ordinance bonds must be paid before the lease costs are paid. The funds available to cover the debt service of the 1975 Ordinance Bonds are $145,740,000. The debt service coverage ratio for the 1975 Ordinance Bonds is 2.82x ($145,740,000/$51,611,000). The funds available to cover the debt service of the 1998 Ordinance Bonds is $86,152,000, which is the remainder after the debt service is paid on the 1975 ordinance Bonds and the capital lease payments. The debt service coverage ratio for the 1998 Ordinance Bonds is 2.93x ($86,152,000/$29,449,000). The funds available to cover the debt service of the 1998 Ordinance Subordinate Bonds is $56,703,000, which is the remainder after the debt service is paid on the 1975 Ordinance Bonds, the 1998 Ordinance Bonds and the capital lease payments. The debt service coverage ratio for the 1998 Ordinance Subordinate Bonds is 28.49x ($56,703,000/1,990,000).

Q. DOES THE OTS RECOMMENDATION PROVIDE SUFFICIENT COVERAGE TO PRESERVE PGW'S CREDIT RATING?

A. Yes. These debt service coverage ratios are well in excess of the minimum requirements set forth in the Bond Ordinances, thus provides ample cushion to alleviate any fears of the credit rating agencies that PGW will not meet its debt service.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes.

Kevan L. Deardorff

Educational and Professional Background

I am a graduate of the Pennsylvania State University, where I received a Bachelor of Science Degree in Business Economics and Finance and a Master of Arts Degree in Economics. Before coming to the Pennsylvania PUC in 1983, I worked as a consultant for the United States Environmental Protection Agency between 1980 and 1981, and as a Research Economist for the Pennsylvania Department of Commerce during 1982.

I am currently employed as a Fixed Utility Financial Analyst III. I have completed rate of return analyses in a large number of rate cases and assisted in the analyses of many electric, gas, water and telephone rate cases. I have prepared rate of return and price cap testimony in the following rate cases:

Keystone Water Company	R-822211-12
	R-822215-19
	R-822221
Western Pennsylvania Water Company	R-832381
Philadelphia Suburban Water Company	R-842592
Duquesne Light Company	R-842583
Western Pennsylvania Water Company	R-842621-25
Riverton Consolidated Water Company	R-842675
Keystone Water Company	R-842755-56
	R-842759
Equitable Gas Company	R-842769
Western Pennsylvania Water Company	R-850096-97
West Penn Power Company	R-850220
Dauphin Consolidated Water Supply Co.	R-860350
Western Pennsylvania Water Company	R-860397
Philadelphia Electric Company (Gas Division)	R-870629
National Fuel Gas Distribution Corp.	R-870719
Western Pennsylvania Water Company	R-870825
Philadelphia Suburban Water Company	R-870840
Equitable Gas Company	R-880971
Chartiers Natural Gas Company	R-891283
Columbia Gas of Pennsylvania, Inc.	R-891468
Arrowhead Public Service Corp.	R-891557
Pennsylvania-American Water Co.	R-901652
Citizens Utilities Water Company of Pennsylvania	R-901663
Citizens Utilities Home Water Company	R-901664

National Fuel Gas Distribution	R-901670
York Water Company	R-901813
Columbia Gas of Pennsylvania, Inc.	R-901873
National Fuel Gas Distribution Corp.	R-911912
The Peoples Natural Gas Company	R-00922180
York Water Company	R-00922168
Pennsylvania & Southern Gas Company	R-00922312
North Penn Gas Company	R-00922276
North East Heat and Light Company	R-00922309
Shenango Valley Water Company	R-00922420
Mechanicsburg Water Company	R-00922502
National Fuel Gas Distribution Corp.	R-00932548
Roaring Creek Water Company	R-00932665
Shenango Valley Water Company	R-00932798
The Peoples Natural Gas Company	R-00932866
Blue Mountain Consolidated Water Co.	R-00932873
Allied Gas Company, et. al.	R-00932952
National Fuel Gas Distribution Corp.	R-00942991
Borough of Media Water Works	R-00943098
Newtown Artesian Water Company	R-00943157
Roaring Creek Water Company	R-00943177
Borough of Schuylkill Haven	R-00943156
Pennsylvania Power & Light Company	R-00943271
National Fuel Gas Distribution Corp.	R-00953299
Frontier Companies	P-00951005
PFG Gas, Inc. and North Penn Gas Company	R-00953524
Commonwealth Telephone Company	P-00961024
PECO Energy Company	R-00973877
PECO Energy Company	R-00973953
Pennsylvania Power & Light Company	R-00973954
Ironton Telephone Company	P-00971182
Metropolitan Edison Company	R-00974008
Pennsylvania Electric Company	R-00974009
Pennsylvania Power Company	R-00974149
PG Energy, Inc.	R-00984280
ALLTEL Pennsylvania, Inc.	P-00981423
Pennsylvania Telephone Association Small Group	P-00981425, et al
United Telephone Company of Pennsylvania	P-00981410
City of Lancaster Water Fund	R-00984567
York Water Company	R-00994605
Pittsburgh Thermal, L.P.	R-00994641
PECO Energy Company	A-110550F0147

City of Lancaster Sewer Fund	R-00005109
PG Energy	R-00005119
City of Lancaster Sewer Fund	R-00005109
PFG Gas, Inc. and North Penn Gas Company	R-00005277
Emporium Water Company	R-00005050
T.W. Phillips Gas and Oil Company	R-00005459
Verizon North, Inc.	P-00001854
Metropolitan Edison Company	P-00001860
Pennsylvania Electric Company	P-00001861

OTS Exhibit No. 5
Witness: Kevan Deardorff
Date: April 10, 2001

Philadelphia Gas Works

Docket No. R-00006042

Exhibits to Accompany
the
Direct Testimony

Of

Kevan Deardorff

Office of Trial Staff

Concerning:

Debt Service Coverage

OTS Exhibit No. 5
Schedule No. 1

Historic Debt Service Coverage Ratios for Philadelphia Gas Works
for 1994-2000

		[1]	[2]	[3]	[4]	[5]	[6]	[7]
		1994	1995	1996	1997	1998	1999	2000
[1]	1975 Ordinance Bonds	1.50	1.50	1.67	1.50	1.52	1.53	1.72
[2]	1998 Ordinance Bonds						1.58	1.59
[3]	1998 Ordinance Subordinate Bond							6.48

Sources: OTS-RR-3, OTS-RR-4 and PGW Revised Exhibit A-3

Philadelphia Gas Works
Debt Service Requirements 2000-01
(Dollars in Thousands)

		Interest	Principal Payment	Total Debt Service
	1975 Ordinance Bonds			
[1]	Series 11th C TECA	$ 4,043	$ 3,197	$ 7,240
[2]	Series 12th A & B	920	825	1,745
[3]	Series 13th	102	1,365	1,467
[4]	Series 14th	14,098	7,125	21,223
[5]	Series 15th	5,306	10,725	16,031
[6]	Series 16th	3,265	640	3,905
[7]	Total 1975 Ordinance Bonds	$ 27,734	$ 23,877	$ 51,611
	1998 Ordinance Bonds			
[8]	First Series A	$ 8,332	$ 8,525	$ 16,857
[9]	First Series B	5,190	-	5,190
[10]	Second Series	5,612	1,790	7,402
[11]	Total 1998 Ordinance Bonds	$ 19,134	$ 10,315	$ 29,449
	1998 Ordinance Subordinate Bonds			
[12]	First Series C	$ 925	$ 1,065	$ 1,990
			Total Debt Service	$ 83,050

Sources: Revised Exhibits E and G, PGW Supporting Financial Information, Volume II

Philadelphia Gas Works
Debt Service Coverage
Fiscal Year Ending August 31, 2001

[1]	Funds Available to Cover Debt Service	$ 139,096
[2]	Add-back Lease Costs	7,977
[3]	Funds Available Excluding Lease Costs	147,073
[4]	1975 Ordinance Bonds Debt Service	51,611
[5]	Debt Service Coverage 1975 Bonds	2.85 x
[6]	Net Available after Prior Debt Service	95,462
[7]	PMA and Other Capital Leases	7,977
[8]	Net Available after Prior Capital Leases	87,485
[9]	1998 Ordinance Bonds Debt Service	29,449
[10]	Debt Service Coverage New Bonds	2.97 x
[11]	Net Available after 1998 Debt Service	58,036
[12]	1998 Ordinance Subordinate Bonds Debt Service	1,990
[13]	Debt Service Coverage Subordinate Bonds	29.16 x

Source: OTS Exhibit No. 1, Schedule No. 3

OCA STATEMENT NO. 2

5/23/01
Phila, PA
@/5

BEFORE THE PENNSYLVANIA
PUBLIC UTILITY COMMISSION
DOCKET NO. R-00006042

IN THE MATTER OF THE FILING OF
PHILADELPHIA GAS WORKS
CONCERNING A
BASE RATE INCREASE

DIRECT TESTIMONY OF
RALPH E. MILLER
ON BEHALF OF THE
OFFICE OF CONSUMER ADVOCATE

APRIL, 2001

Prepared Testimony of Ralph E. Miller

Introduction and Summary

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

A. My name is Ralph E. Miller. I am an independent consulting economist. My office is at 5502 Western Avenue, Chevy Chase, Maryland 20815.

Q. PLEASE SUMMARIZE YOUR PROFESSIONAL QUALIFICATIONS.

A. I am an economist specializing in the fields of utility regulation, industrial organization, and public policy towards business. I have more than thirty years of experience in public utility and related energy work, both as a consultant and in government. I am the author of several published reports and papers on public utility economics and energy matters, and I have testified in more than 30 different jurisdictions in a total of more than 250 public utility and other proceedings. I also have several additional years of experience in government and as a university teacher in antitrust, energy demand forecasting and supply analysis, and other areas of economics and energy.

Over the years, I have addressed almost all aspects of gas and electric utility regulation, including rate of return, accounting and revenue requirements, rate design and cost of service, electric fuel and purchased gas cost recovery, industry structure and the role of competition, incentive ratemaking and other types of innovative rate designs, gas and electric supply planning and power plant licensing, productivity and efficiency, and the determination of marginal, incremental, and avoidable costs.

A more detailed statement of my qualifications appears as an appendix to this testimony. A list of proceedings in which I have presented testimony is attached as OCA Exhibit 2-A.

Q. ARE YOU FAMILIAR WITH PHILADELPHIA GAS WORKS?

A. Yes. I testified last year on behalf of the Public Advocate in the proceeding before the Philadelphia Gas Commission to review PGW's proposed Year 2000 Tariff Changes. I also presented testimony before the Philadelphia Gas Commission on rate design issues in PGW's request for an interim base rate increase.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I am a member of the team retained by the Pennsylvania Office of Consumer Advocate to address all of the issues in this proceeding. My responsibilities include the class cost of service study and some rate design issues. I have been asked to address the following specific topics:

-- PGW's proposed increases in the residential customer charge;

-- spread of the total revenue increase among customer classes;

-- the design of rates to recover the total revenue increase of $21.5 million recommended by OCA witness Richard W. LeLash in accord with his recommended changes in the presentation of PGW's rates;

-- PGW's class cost of service study; and

-- PGW's proposed tariff changes.

Q. WHAT CONCLUSIONS HAVE YOU REACHED AS A RESULT OF YOUR ANALYSIS OF THESE TOPICS?

A. I have reached the following conclusions:

(1) There is no proper support for PGW's proposed increase in the residential customer charge to $15.00 per month. I recommend a rate of $11.50 per month.

(2) I do not oppose the way that PGW is proposing to spread its claimed net revenue increase of $65 million among its customer classes. If the allowed net revenue increase is less than $65 million, then the revenue responsibilities for each customer class should be calculated by a proportional reduction in the customer class increases proposed by PGW.

(3) OCA witness Richard LeLash is recommending a total Company net revenue increase of $21.5 million. The appropriate residential class share of this total Company increase is $17.7 million. To achieve this revenue target with a residential customer charge of $11.50 per month, the base rate residential commodity charge must be decreased by 5.71 cents per Mcf, or 0.571 cents per Ccf, to $10.3895 per Mcf including the test year *pro forma* GCR rate of $3.8336.

(4) Several of the allocation procedures in PGW witness Howard Gorman's class cost of service study fail to recognize proper cost causation, and they should be changed. The major items are his use of a customer component in distribution mains investment; his allocation of the entire amount of administrative and general salaries and related office expenses as a labor overhead, and his handling of the credit to reverse overheads initially charged to expense when some of these overheads are capitalized.

(5) PGW's proposal that it be permitted to negotiate non-standard rates for some interruptible customers should be accepted with modifications to protect the firm customers.

(6) The price ceiling based on the Rate GS commercial rate should be removed from the commodity charge provision of the BPS (Boiler and Power Plant Service) rates.

Q. IS YOUR TESTIMONY SUPPORTED BY EXHIBITS?

A. Yes. OCA Exhibits 2-A through 2-C were prepared or selected by me to accompany this testimony. OCA Exhibit 2-A is the list of proceedings in which I have testified, as I have already mentioned. OCA Exhibit 2-B contains the analytical tables I have prepared to accompany this testimony. These tables are identified as Table REM-1 through Table REM-4, and any reference to a "Table REM-X" is a reference to one of these analytical tables in OCA Exhibit 2-B.

OCA Exhibit 2-C is the class cost of service study that I have prepared.

Residential Customer Charges

Q. WHAT ARE PGW'S PRESENT CUSTOMER CHARGES?

A. The rates that I shall refer to as the "present" rates for this proceeding are those identified by Company witness Howard Gorman as PGW's "Existing Tariff" rates, and used by him in his Exhibit HSG-1, Schedules 5 and 5A. Except for the GCR rate, these "present" rates remained in effect from September 2000 until the interim settlement rates were placed in effect as of March 1, 2001. The GCR rate in the "present" rates is $3.8336 per Mcf. It is a *pro forma* rate corresponding to the purchased gas costs included in PGW's claimed test year. All of the test year "present" rates are shown in the first column of Table REM-1 in OCA Exhibit 2-B.

The customer charges in these "present" rates are $8.00 per month for residential customers, $10 for commercial customers, and $20 for industrial customers. All three groups are served under PGW's General Service (GS) rate schedule. The customer charge rates currently being collected by PGW, beginning in March of this year under the interim settlement, are 45.7% higher — $11.66 per month for residential customers, $14.57 for commercial customers, and $29.14 for industrial customers.

Q. WHAT CUSTOMER CHARGE RATES IS PGW PROPOSING?

A. PGW is seeking a residential customer charge of $15.00 per month, with commercial and industrial customer charges of $25.00 and $50.00. The proposed residential customer charge of $15.00 would be an increase of 87.5% above the "present" rate of $8.00 per month, and 29% above the interim settlement rate of $11.66 per month. The proposed commercial and industrial customer charge rates of $25 and $50 are increases of 150% above the "present" rates of $10 and $20, and 72% above the interim settlement rates of $14.57 and $29.14.

Q. HOW DOES PGW ATTEMPT TO JUSTIFY THESE EXTREMELY LARGE INCREASES IN ITS MONTHLY CUSTOMER CHARGES?

A. Company witness Craig White offers three reasons for these large increases. First, he claims that PGW needs higher customer charges so that its non-gas revenues will be much less sensitive to weather. Next, he compares the proposed customer charges to those of other gas utilities in Pennsylvania. Finally, he notes that the proposed customer charges are all much less than the monthly customer costs calculated by PGW witness Howard Gorman. Mr. Gorman does not add any new or additional reasons for an increased customer charge, but he does present his calculation of the customer costs per bill for each customer class, which he derives from his class cost of service study.

Q. DO YOU AGREE WITH PGW'S PROPOSED CUSTOMER CHARGE INCREASES?

A. No, I do not.

Q. WHY DO YOU DISAGREE?

A. None of Mr. White's three reasons provides adequate support for such large increases. It is not proper to make all customers in a rate class pay the same price for gas distribution service, which is the direction PGW is going by shifting as much weight as possible to the customer charges, instead of having rates reflect individual customer usage characteristics as much as possible.

Mr. White's comparison with other Pennsylvania gas utilities provides no support at all for the customer charges sought by PGW, although it does support an increase above the "present" residential customer charge of $8.00 per month. A residential customer charge of $11.00 per month would be near the high end of the range identified by Mr. White, and PGW's proposed $15.00 is out of the ballpark. Even if one recognizes that utilities as a group can only increase their customer charge levels by leap-frogging one another, because they have base rate cases at different times, Mr. White's comparisons with other gas utilities cannot support a residential customer charge higher than $12.00 per month.

Finally, the unit customer costs per bill, which were developed by Mr. Gorman in his class cost of service study, are not a proper basis for Mr. White to use in setting customer charges. The reason is that many of the costs classified by Mr. Gorman as customer costs should not be included in the monthly customer charges. The only cost classifications recognized in Mr. Gorman's cost of service study (and most other cost of service studies) are Demand, Commodity, and Customer. Mr. Gorman classifies a cost as customer-related unless he deems it to be demand-related or commodity-related. But it does not follow that all costs which cannot be related directly to maximum demands or to commodity usage should therefore be recovered in monthly customer charges, yet that is what Mr. Gorman and Mr. White have assumed.

Q. WHAT COSTS ARE APPROPRIATELY RECOVERED BY MEANS OF A CUSTOMER CHARGE?

A. The costs appropriately included in the customer charges are the costs that a utility incurs each month to serve each of its customers. These are costs that increase when one customer is added, and that decrease when one customer is lost. These costs can be called "direct" customer costs.

Q. WHAT COSTS ARE INCLUDED IN THE CATEGORY OF DIRECT CUSTOMER COSTS?

A. The costs that fit into this category are the carrying costs of the Company's investment in services, meters, and house regulators, plus the cost of meter reading and part of the costs of customer records and collection. For privately owned gas utilities, the carrying costs of investment are depreciation, return, and taxes. For PGW, which is municipally owned and not subject to most taxes, the carrying costs are depreciation and the equivalent of return on

investment. In my calculations, I use the total budgeted income at PGW's proposed rates — *i.e.*, revenues less expenses — as the equivalent of return on rate base.

Q. HAVE YOU DETERMINED THE AMOUNT OF THESE DIRECT CUSTOMER COSTS APPROPRIATELY INCLUDED IN THE RESIDENTIAL CUSTOMER CHARGE?

A. Yes, I have calculated the amount of these costs in OCA Exhibit 2-B, Table REM-4. These costs are from my class cost of service study, but the amounts are essentially the same as the corresponding amounts in Mr. Gorman's cost of service study because I have not made any significant changes to the allocation of the components of direct customer costs. This table also reflects the full amount of the Company's claimed revenue requirement, and it would be much smaller if the financial requirements were reduced to the level recommended by OCA witness Richard W. LeLash. With the full amount of the Company's claimed financial requirements included, the direct customer costs for the residential class are $12.17 per customer per month.

Q. WHAT ARE THE MAJOR COST ELEMENTS THAT MR. GORMAN HAS IDENTIFIED AS CUSTOMER COSTS IN HIS CLASS COST OF SERVICE STUDY, WHICH YOU EXCLUDED FROM TABLE REM-4 BECAUSE THEY ARE NOT APPROPRIATE FOR INCLUSION IN RESIDENTIAL CUSTOMER CHARGES?

A. I excluded three large customer cost elements identified by Mr. Gorman: his customer component of distribution mains investment; all types of overheads, specifically administrative and general (A&G) expense and other supervisory costs; and a large amount of Customer Accounts expense, specifically collection costs (part of account 903) and uncollectibles expense (account 904).

Q. WHY DID YOU EXCLUDE MR. GORMAN'S CUSTOMER COMPONENT OF DISTRIBUTION MAINS INVESTMENT FROM THE CATEGORY OF DIRECT CUSTOMER COSTS?

A. Whatever the Commission may decide about the proper allocation of PGW's mains investment costs — an issue that I shall address later in my testimony — there is no justification for recovering any of these mains investment costs in the residential customer charge. In any small geographical area, such as a residential subdivision, mains are installed to serve the entire community, and the investment cost does not depend in any way on the decision of an individual household whether to use gas service. The mains investment cost allocated to the residential class should therefore be recovered from all residential customers in accord with their gas usage and the benefit they derive from using the gas distribution system. This recovery method is appropriate even if the Commission accepts Mr. Gorman's view that the allocation of mains investment among customer classes should be based in part on the number of customers in each class.

Q. WHY DO YOU EXCLUDE OVERHEAD COSTS FROM THE CATEGORY OF DIRECT CUSTOMER COSTS?

A. Overhead costs, specifically administrative and general (A&G) expense and other supervisory costs, are system costs. They are not incurred to provide service to individual customers, and they do not increase or decrease when a few customers are gained or lost. They are therefore inappropriate for recovery in customer charges, even though they are classified in part as customer costs in the class cost of service study because they are allocated to customer classes as overheads to costs that do relate directly to service to individual customers.

Q. WHY DO YOU EXCLUDE SOME CUSTOMER ACCOUNTS EXPENSE FROM THE CATEGORY OF DIRECT CUSTOMER COSTS?

A. Two large Customer Accounts expense items that do not relate to all customers are collection costs (part of account 903) and uncollectibles expense (account 904). I do not agree that uncollectibles are a customer cost at all, because the amount of write-offs depends upon

revenues and not simply the number of bills written off. But even if it turns out that the amount of uncollectibles expense by customer class happens to be approximately proportional to the relative numbers of customer in these classes, there is the further fundamental problem that uncollectibles expense can never be collected from the individual customers that cause the Company to incur this cost. When recovering it from customers that did not cause it to be incurred, the best and fairest way to do so is on the basis of usage. Customers making greater use of the gas system and deriving larger benefits from it should make a larger contribution towards the recovery of costs such as uncollectibles, which they did not cause, but which must be paid to keep the system whole. Collection costs should be viewed similarly, and they too should be recovered from all customers — most of whom are not delinquent — on the basis of usage, at least within each customer class.

The same analysis also applies to other so-called "customer" costs like customer installations expense, the call centers for handling customer inquiries and complaints, sales expense, and even the fixed costs of the BCCS system software and other information technology aspects of customer accounts expense. All of these costs apply to the residential class and other customer classes in the aggregate, but not to each individual customer. As such, these costs are system overheads, and there is no good reason to recover them in customer charges rather than commodity charges merely because the best allocation between customer classes happens to be in accord with the number of customers in each class.

Q. WHY DID YOU INCLUDE IN TABLE REM-4 ONLY ONE-FOURTH OF THE CUSTOMER RECORDS AND COLLECTION EXPENSE IN ACCOUNT 903?

A. Much of the cost of Customer Records and Collection expense is information technology and software expense. It is a system cost, similar in some respects to administrative and general expense. Like A&G expense, it does not change if or when individual customers are added to

or leave the system, and it is not a cost that is incurred for each customer in each month. Thus, it fails to fit the concept of a direct customer cost.

Another part of Customer Records and Collection expenses is the cost of trying to collect from delinquent customers. Most customers are not delinquent, and they are not responsible for causing any of the Company's collection expense, not even in an entire year. I do not dispute that a reasonable amount of collection expense is a proper part of the cost of service, but it is not a cost related to serving each customer each month, so there is no reason to recover it in the monthly customer charge.

The uniform system of accounts does not provide sufficient detail to separate information technology and collection expenses from the other components of customer accounts expense, but each is a major part of the total for this account. The exclusion of three-fourths of this cost still leaves a customer records and collection expense of $1.14 per bill, which is generous compared to other estimates of the cost of billing and receiving revenues.

Class Revenue Responsibilities

Q. WHAT INCREASES IN CLASS REVENUE RESPONSIBILITIES IS PGW PROPOSING?

A. PGW is seeking a net revenue increase of $65 million above the "present" rates in effect in February 2001, immediately prior to the interim settlement rate increase on March 1, 2001. However, as is explained by Company witness Gorman, PGW's full tariff rates must be increased by $66.8 million to obtain the claimed net revenue increase of $65 million, because approximately $2 million of the increase in the full tariff rates will be offset by increases in the amount of the rate discounts offered under existing programs. These programs include the Senior Citizen discount and the Customer Responsibility Program (CRP). For rate design

purposes, my analysis focuses on the tariff requirement rather than the net revenue requirement after discounts.

Table REM-2 in OCA Exhibit 2-B shows the revenue increases above "present" rates proposed by PGW for each customer class. Columns (A) and (B) show revenues at "present" rates and at PGW's proposed rates. The dollar amount of the proposed increase is in column (C), and the percentage increase is in column (D). The proposed increase of 9.1% in PGW's total revenues translates into an increase of 10.0% for PGW's firm customers. None of the base rate increase is applied to the interruptible customers, because their rates are adjusted monthly, based on the prices of alternative fuels.

The non-heating residential customers are the only major class for which PGW proposed a percentage rate increase higher than the 10.0% average for all firm customers. The relatively high percentage increase for this class is due to PGW's proposal that most of its rate increase be obtained from higher customer charges. The municipal accounts billed under the Rate GS commercial rate would also receive a large increase, because they too have relatively low usage per meter. All of the other classes on Rate GS would receive rate increases of at least 8.5% but less than 10%. The Municipal Service – Rate MS would be increased 6.4%, and the Philadelphia Housing Authority would have an increase of only 1.6% for its non-residential accounts billed under Rate PHA. The Housing Authority's residential accounts are subject to the regular residential rates, where they would experience an increase of only 7.6%. This percentage is less than the increases for the residential class as a whole, because PHA's residential accounts have higher usage per customer than the other residential customers.

The revenues at present and proposed rates in Table REM-2 are taken from my proof of revenue calculations in my Tables REM-2a and REM-2b. These tables are derived from the proof of revenue calculations by Company witness Gorman in Schedules 4A and 5A of his

Exhibit HSG-1. Mr. Gorman's data differ from the corresponding information presented by Company witness White in his Exhibit CW-2, and the differences have not been fully explained despite discovery on them. Fortunately, the differences are small. Mr. White's exhibit indicates a revenue increase of almost exactly $65.0 million, whereas Mr. Gorman's increase in net revenue is $64.7 million. I use Mr. Gorman's data because of the additional detail he provides. My Tables REM-2a and REM-2b show exactly the same results as Mr. Gorman's Schedules 4A and 5A, except for a small rounding difference in the Municipal class at present rates.

Q. WHAT CLASS REVENUE RESPONSIBILITIES DO YOU RECOMMEND?

A. I do not disagree with PGW's proposed way of spreading the allowed rate increase among its customer classes.

Q. HOW SHOULD CLASS REVENUE RESPONSIBILITIES BE DETERMINED IF THE COMMISSION ALLOWS A SMALLER REVENUE INCREASE THAN THE $65 MILLION SOUGHT BY PGW?

A. The increases for the individual customer classes should be calculated by proportionately reducing the class revenue increases proposed by the Company. This calculation should be developed from PGW's proposed increases above the "present" rates, ignoring the interim settlement rates. PGW's proposed increases above the "present" rates should be used for this purpose because the interim rates were designed to recover the entire "annual" amount of the interim increase in just six months, mostly outside of the winter period, and their use is a distortion of the rate structure appropriate for a full year.

Q. CAN YOU PROVIDE A MORE DETAILED EXPLANATION OF THIS PROCEDURE FOR SCALING BACK THE INCREASES PROPOSED BY PGW?

A. Yes. The allowed revenue increase should first be converted from a revenue requirement increase to a tariff requirement increase. This conversion can be accomplished by multiplying the revenue requirement increase times a factor of 1.031468. This factor is the ratio of Mr. Gorman's total Company tariff requirement increase of $66,766,872 to his total Company net revenue requirement increase of $64,729,938. The development of this conversion factor is in my Table REM-3.

After the allowed total Company increase in the tariff requirement has been calculated, this increase should be spread to customer classes by scaling back the Company's proposed class revenue increases shown in my Table REM-2, column (C). All of the class revenue increases should be scaled back in the same proportion.

Q. WHAT CLASS REVENUE INCREASES DO YOU RECOMMEND FOR THE TOTAL COMPANY REVENUE INCREASE OF $21.5 MILLION RECOMMENDED BY OCA WITNESS LELASH?

A. The revenue increase targets that I recommend are shown in Column (E) of my Table REM-2. Column (F) shows the class revenue targets that result from adding the target increases to the test year revenues at present rates.

Q. CAN YOU EXPLAIN THE WAY YOU CALCULATED THE TARGET INCREASES?

A. Yes. First I converted Mr. LeLash's recommended net revenue increase of $21.5 million into an increase of $22,176,566 in the full tariff revenue requirement. This conversion is shown on the last two lines of my Table REM-3, using the conversion method I have just explained. I then rounded the target to $22,177,000 and entered it on the "Grand Total" line in column (E) of Table REM-2. This target increase is 0.332156 times the full tariff revenue increase of $66,766,872 proposed by PGW. I have therefore multiplied each of PGW's proposed class tariff revenue increases by this factor of approximately 33% to derive my recommended class

revenue increases. The target increase for the residential class is $17.7 million, or 3.5% above the "present" rate level.

Q. HOW DO THE INTERIM SETTLEMENT RATES FIT INTO THIS PICTURE?

A. The interim settlement rates are irrelevant to a proper determination of class revenue responsibilities, and they are largely irrelevant to the development of a proper rate design.

The interim settlement was designed to provide a nominal $18 million of additional revenue, but this amount is not a correct indication of its effect from a rate design perspective. On an annualized basis, the interim settlement rates represent a rate increase of $52 million, because these interim rates would provide $52 million of additional revenue if they were in effect for the entire test year. This amount is much larger than the nominal amount of the interim increase because the interim rates were designed to collect $18 million in only six months, from March through August 2001. The timing difference is especially important to the effect of the interim increase in the GCR rate, because the six months from March through August includes only one-fourth of PGW's annual gas sales volume, and the interim increase of $0.4974 in the GCR rate would therefore add $29 million to customer bills on a 12-month basis, not just the net revenue of $7 million specified in the interim settlement for the six months March through August. The very large interim increase in the GCR rate is especially irrelevant from a rate design perspective, because customers have not experienced it for a winter season, when usage is high, and it has relatively little effect on their bills during the summer months when it was collected.

Recommended Rate Design

Q. WHAT RATE DESIGN ISSUES DOES YOUR TESTIMONY ADDRESS?

A. I address two rate design issues. The first is the design of the residential rate to recover the increased residential tariff revenue requirement of $17.7 million that I have recommended as corresponding to Mr. LeLash's recommended total Company net revenue increase of $21.5 million. The second is the specific rate changes needed to accomplish Mr. LeLash's recommended changes in rate presentation.

Residential rate design

Q. HOW DID YOU DESIGN THE RESIDENTIAL RATE?

A. I accepted PGW's existing residential rate structure with a monthly customer charge and a single, flat commodity charge rate. With this rate structure, there is only one degree of freedom in designing the residential rate — once the monthly customer charge rate has been chosen, the commodity charge rate is determined by the requirement that it be precisely sufficient to recover the total tariff revenue requirement from the test year billing determinants.

Q. WHAT RESIDENTIAL CUSTOMER CHARGE DO YOU RECOMMEND?

A. I recommend a residential customer charge of $11.50 per month.

Q. WHAT IS THE BASIS FOR THIS RECOMMENDATION?

A. The residential customer charge now in effect under the interim settlement is $11.66 per month, and this level is consistent with my analysis of the residential customer charge that I presented in the first part of my testimony. More specifically, it is consistent with the direct customer costs in my Table REM-4, and also with the residential customer charges of other Pennsylvania gas utilities, as explained by Company witness White. A higher level would be inappropriate because the increase above the test year "present" rate of $8.00 per month already adds more revenue than the total tariff revenue increase I am recommending for the residential class. I therefore recommend that the residential customer charge rate be established by rounding the

interim rate down to $11.50 per month. A rate of $11.50 per month still yields an increase of more than $20 million in residential customer charge revenues, and it therefore necessitates a residential commodity charge decrease to achieve the residential revenue target of $17.7 million that I am recommending.

Q. WHAT RESIDENTIAL COMMODITY CHARGE RATE DO YOU RECOMMEND?

A. A commodity charge rate of $10.3895 is required to achieve the residential revenue target of $17.7 million. I calculated this rate from the data in Table REM-2c, which is my proof of revenue at OCA's recommended rates. To calculate this rate, I began with the target of $523,374,433 for the residential class. This amount was calculated in Table REM-3, which I have previously explained. I transcribed it to the shaded box in the Total Revenues column of Table REM-2c. From it I subtracted the $66,362,820 of residential customer charge revenues at my recommended rate of $11.50, and I divided the difference by the 43,988,023 Mcf residential usage to yield a rate per Mcf. The quotient of $10.3895 also appears in a shaded box in Table REM-2c.

Q. WHY IS THERE A DIFFERENCE BETWEEN THE TOTAL RESIDENTIAL REVENUES OF $523,376,385 IN YOUR TABLE REM-2c AND THE TARGET OF $523,374,433?

A. This small difference of approximately $2,000 appears because the commodity charge rate of $10.3895 is rounded to the nearest one-hundredth of a cent, instead of being carried out to even more decimal places.

Q. WHAT RESIDENTIAL RATE DESIGN DO YOU RECOMMEND IF THE COMMISSION ALLOWS PGW A TOTAL NET REVENUE INCREASE LARGER THAN THE $21.5 MILLION RECOMMENDED BY OCA WITNESS LeLASH?

A. I recommend keeping the customer charge at $11.50 per month even if the allowed total residential revenue increase exceeds the $17.7 million I am recommending. Even at the

residential class revenue increase of $53.2 million sought by the Company, a customer charge of $11.50 per month would yield a commodity charge of only $11.1978 per Mcf, and an increase to that level would be appropriate from a rate design perspective if such a large class revenue increase is allowed.

Q. YOUR TABLE REM-2c SHOWS RATES FOR ALL OF THE FIRM SERVICE CLASSES. ARE YOU MAKING RATE DESIGN RECOMMENDATIONS FOR THE OTHER CUSTOMER CLASSES, OR JUST THE RESIDENTIAL CLASS?

A. My rate design recommendations are focused on the residential class, but the residential rate design also applies to some of the Housing Authority's customers, as shown on the line identified as "Housing Authority: Rate GS – res." The rates I have shown in Table REM-2c for the other customer classes are merely illustrative. I developed them the same way I developed the residential rate design — by setting the customer charge at a round dollar amount close to the interim settlement rate now being charged, and by calculating the commodity charge rate needed to recover the remainder of the class revenue target. These rates are a reasonable and appropriate way to recover the class revenue targets that I am recommending for the non-residential customer classes, but I take no position on whether they are preferable to some other way of modifying PGW's proposed non-residential rates to fit the class revenue targets I am recommending.

OCA's recommended rate presentation

Q. WHAT IS THE RATE PRESENTATION ISSUE?

A. OCA witness LeLash is recommending that all of PGW's purchased gas costs should be removed from the base rates, and that they should be recovered instead in the GCR rate. He

is also recommending that the recovery of uncollectibles expense should be made entirely through base rates.

Q. HOW DO THESE RECOMMENDATIONS DIFFER FROM PGW'S PRESENT RATES?

A. PGW's present base rates include $3.18 per Mcf of fuel cost recovery. This amount is almost entirely for the recovery of purchased gas costs, but PGW also includes purchased electricity costs in its fuel cost calculations. Mr. LeLash's recommendation is that the purchased gas component of the $3.18 per Mcf should be rolled out of base rates and placed instead in the GCR rate.

The recovery of the test year uncollectibles expense is entirely in the test year base rates, which is where Mr. LeLash recommends it should be. However, the interim settlement provides for an increase in the GCR rate to recover an additional $7 million of uncollectibles expense. Mr. LeLash's recommendation is that this recovery should be removed from the GCR rate when the new rates resulting from the present proceeding are implemented.

Q. DOES YOUR RECOMMENDED RATE DESIGN REFLECT THESE RECOMMENDATIONS?

A. Yes and no. Mr. LeLash's recommendations do not affect the total rate paid by any customer, which is why I characterize his recommendations as relating to rate "presentation" rather than rate design. These rate presentation recommendations have no bearing on the rates in my Table REM-2c, because the commodity charge rate shown there for each customer class is the total commodity charge rate, including the base rate plus the GCR rate. To observe the effect of Mr. LeLash's rate presentation recommendations, it is necessary to return to my Table REM-1, where I show in detail how the total rates are constructed.

Q. PLEASE EXPLAIN THIS EXHIBIT.

A. Lines 5-34 show the test year rates for each of PGW's firm rate schedules, Rates GS (General Service), MS (Municipal Service), and PHA (Philadelphia Housing Authority). Rate GS has three sections in this table because the residential, commercial, and industrial customers on Rate GS pay different rates.

In the residential section of Rate GS, the customer charge appears on line 5. The base rate, which appears in the present tariff (page 83) as 66.13 cents per Ccf, is at line 8. The customer charge and base rate proposed by the Company for the residential class are from First Revised Page No. 83 in the Company's filing for this proceeding, and they appear in the second column of my Table REM-1, again at lines 5 and 8. The "Customer charge" and "Base rate total" lines in the other sections of this table show the corresponding information for the other Rate GS customer classes and the other firm rate schedules.

Q. HOW ARE FUEL COSTS REFLECTED IN TABLE REM-1?

A. Line 1 shows that the present base rates include $3.18 per Mcf for recovery of fuel costs. The excess of PGW's total purchased fuel costs above this base rate amount is recovered in the GCR charge. The GCR charge for the test year is $3.8336 per Mcf, as shown at line 4. It is a *pro forma* amount, based upon the total test year fuel expense.

Lines 2 and 3 show that the $3.18 per Mcf of fuel costs in the base rates includes $0.0162 per Mcf for purchased electricity and $3.1638 for purchased gas. I calculated the $0.0162 per Mcf for purchased electricity from the test year electricity expense of $965,000, which I divided by the total firm service gas sales volume of 58,498,387 Mcf, as shown in Table REM-2a. The $3.1638 for purchased gas is $3.18 less the amount for purchased electricity.

The $3.18 per Mcf of fuel cost in base rates appears in the residential section of Table REM-1 at line 7. The non-fuel component of base rates is calculated by subtracting this fuel

cost from the base rate total on line 8. The GCR rate is at line 9. The total commodity charge rate is the sum of the base rate plus the GCR rate, and it is shown on line 10. The corresponding lines in the other sections of Table REM-1 show the rate detail for the other Rate GS customer classes and the other firm rate schedules.

Q. HOW DID YOU DEVELOP THE DETAILED COMPONENTS OF THE RATES YOU ARE RECOMMENDING?

A. The shaded rates in the column entitled "Existing Presentation" are taken directly from my Table REM-2c, where I developed my proposed rates as I have previously explained. Starting from the commodity charge total of $10.3895 on line 10, I developed the residential base rate total of $6.5559 on line 8 by subtracting the GCR rate of $3.8336. I then developed the non-fuel component of $3.3759 on line 5 by subtracting the base rate fuel component of $3.18 on line 6 from the base rate total. I did similar calculations for the other Rate GS customer classes and the other firm rate schedules.

Q. HOW DID YOU DEVELOP YOUR RECOMMENDED RATE PRESENTATION, WHICH IS SHOWN IN THE LAST COLUMN OF TABLE REM-1?

A. The only change is a shift of $3.1638 per Mcf of purchased gas costs out of the base rate and into the GCR rate. This change reduces the base rate total for each customer class by $3.1638, and it increases the GCR rate by the same amount, to $6.9974. There is no effect on the non-fuel component of the base rate and no effect on the commodity charge total.

Q. HAVE YOU ANY FURTHER COMMENTS ABOUT THE RATE PRESENTATION?

A. Yes. If the rate presentation is changed as Mr. LeLash recommends, then purchased electricity would be treated no differently for rate design purposes than any other purchases, such as office supplies, postage, and consulting services. All would be recovered together in

the base rate, which would be a non-gas rate, but not strictly a non-fuel rate if electricity is considered to be a fuel.

Class Cost of Service Study

Q. HAVE YOU REVIEWED THE CLASS COST OF SERVICE STUDY PRESENTED BY PGW WITNESS HOWARD GORMAN?

A. Yes, I have.

Q. DO YOU AGREE WITH MR. GORMAN'S COST OF SERVICE ANALYSIS AND THE RESULTS OF HIS COST OF SERVICE STUDY?

A. No, I do not. There are three major changes I would make, and several smaller ones. These changes have a significant effect on the results of the study. With them, there is much less difference between the residential revenues and the costs allocated to the residential class than is indicated by Mr. Gorman's study.

Q. WHAT ARE THE THREE MAJOR ITEMS ON WHICH YOU DISAGREE WITH MR. GORMAN'S ALLOCATION?

A. The first and most important is the allocation of PGW's investment in distribution mains. Mr. Gorman classifies 25% of this investment as customer-related, and he allocates it on the basis of the number of customers in each customer class. I do not agree that there should be any customer component of distribution mains investment, and I recommend allocating the entire amount of this investment in accord with the peak and average demand method.

The second major item on which I disagree with Mr. Gorman is his allocation of the entire amount of administrative and general (A&G) salaries (account 920) and office supplies and expenses (account 921) on the basis of labor. Some of these expenses relate much more closely to PGW's plant investment, and they should instead be allocated on that basis.

The third major disagreement relates to Mr. Gorman's allocation of the A&G credit of $12 million of duplicate charges. Mr. Gorman allocates these credits in accord with his allocation of Construction Work In Progress. They should instead be allocated the same way as the costs they are reversing, and those costs are primarily A&G salaries and pensions and benefits.

Q. WHY DO YOU DISAGREE WITH MR. GORMAN'S CLASSIFICATION OF PART OF THE INVESTMENT IN DISTRIBUTION MAINS AS CUSTOMER-RELATED?

A. Mains are constructed to deliver gas, not merely to connect customers to the system, and the entire investment in mains should be allocated on the basis of some measure of the gas they deliver or the loads they serve. Mr. Gorman's defense of his customer component is based on the premise that one reason for installing distribution mains is to attach customers to the distribution. This premise is incorrect because the connection of customers to the distribution system is not a separate product or service provided by PGW, and it has no independent value to PGW's customers.

The absence of any justification for a customer component of mains investment is illuminated further by a comparison of mains and services. The number of services does depend primarily upon the number of customers, because each customer generally has his own service. The diameter of each service pipe depends upon the customer's gas usage, and that is part of the reason why the total cost of services investment is not exactly proportional to the number of customers. For mains, in contrast, there is no evidence that the footage of mains actually depends upon the number of customers. It is <u>not</u> true that each customer has a segment of distribution main specifically dedicated to his own use, in the way that a specific segment of service pipe is dedicated to each customer's use. Instead, all customers share in using all of the footage of distribution mains. The total length is the footage required to reach

from the supply source of gas at the city gate to the most distant customer, and this footage is essentially independent of the number of other customers situated along the way.

Mr. Gorman's position is especially incorrect with regard to PGW, because he has been unable to perform a minimum system or zero intercept analysis to try to identify a customer component. Instead, he relies on his claim that he has performed zero intercept studies for three other utilities. One major problem with this approach is that PGW is very different from other gas utilities. In a study performed for PGW, the contractor (Navigant Consulting), compared PGW's system of mains to the systems of the 25 largest gas distribution utilities in the northeast. Data from that study indicate that PGW has many fewer miles of mains than any of the other 25 gas distribution companies in the study, despite ranking in the middle of the group in the number of services, which the study deems to be an excellent proxy for the number of customers. PGW has only 31 feet of main for each service, and the closest of the other 25 gas distribution companies is Brooklyn Union with 39 feet per service. One of the three utilities for which Mr. Gorman has performed a zero intercept analysis is Niagara Mohawk, but it has 90 feet of main for each service; the other two utilities studied by Mr. Gorman are not in the Navigant report. Because of PGW's unique characteristics, there would be no basis for concluding that a minimum system or zero intercept analysis would be applicable to PGW even if it did apply to other gas distribution companies.

Q. WHY DO YOU DISAGREE WITH MR. GORMAN'S ALLOCATION OF A&G SALARIES AND OFFICE SUPPLIES AND EXPENSES AS LABOR-RELATED?

A. A&G salaries almost invariably include several major departments that cannot reasonably be characterized as related to labor rather than plant or some other causal factor. Among these activities are financial services, which include plant and general accounting and the treasury. Also in this category are corporate information services and legal services. It is incorrect to

allocate all of these costs entirely in relation to labor expense, because the use of labor is not the factor that causes PGW to incur these costs.

Q. WHAT ALTERNATIVES ARE THERE TO MR. GORMAN'S TREATMENT OF ALL OF PGW'S A&G SALARIES AND OFFICE EXPENSES AS LABOR RELATED?

A. The best alternative would have been for Mr. Gorman to make a special study of these A&G costs, to determine how they should have been allocated, instead of making the unreasonable assumption that they are all labor-related. A second alternative is to make a more reasonable assumption about the way A&G salaries and office expenses should be allocated to reflect the nature of PGW's business, instead of making the assumption that these costs are entirely labor-related. One such approach, which I have used, is to allocate one-half of the A&G costs as labor-related and one-half as plant-related. This approach is akin to the "Massachusetts formula" used for allocating common corporate costs in the absence of any cost of service study or equivalent basis for specific causal allocation.

Q. WHY IS IT IMPORTANT TO RECOGNIZE PLANT AS WELL AS LABOR IN THE ALLOCATION OF A&G SALARIES AND OFFICE EXPENSE?

A. Customer accounting and customer service are the labor-intensive aspects of the utility business, because very little plant is used in performing them. Utilities as a whole, however, are extremely capital intensive — indeed, they are among the most capital intensive industries. The allocation of overhead costs like A&G salaries and office expense as related entirely to labor therefore gives undue weight to the customer accounting and customer service aspects of the utility business, and it ignores the fundamental capital intensity of this industry. My allocation of part of these A&G costs on the basis of plant investment recognizes these realities of the way a utility works.

Q. CAN YOU IDENTIFY THE OTHER WAYS IN WHICH YOUR ALLOCATION OF PGW'S COSTS DIFFERS FROM MR. GORMAN'S ALLOCATION?

A. Yes. I used the WINTER-3 factor to allocate all of PGW's investment in storage plant, because the LNG plant is used to support gas sales loads throughout the three peak winter months. However, I allocated the investment in vaporizing equipment on the basis of design day demands.

I also used the peak and average demand allocation factor for distribution compressor station equipment (account 377) and measuring and regulating station equipment (account 378). Measuring and regulating station equipment, which is by far the larger part of the investment in these two accounts, could instead be allocated entirely on average demand or total throughput, because it is clearly needed at all times and for all gas flowing on PGW's distribution system, but I have chosen to allocate the entire system of distribution mains and related equipment the same way, on the basis of peak and average demand.

I allocated general plant investment in proportion to the total of production, storage, and distribution plant, because most general plant is used principally in support of production, storage, and distribution activities. The one exception is office furniture and equipment, which I allocated in proportion to A&G salaries.

I allocated the expense for Distribution Operation Supervision and Engineering half on distribution plant, to recognize the engineering component of this account. Mr. Gorman's allocation entirely on labor recognizes only the supervision component.

I allocated the O&M expense for city gate M&R stations on total throughput, the same as I (and Mr. Gorman) allocated load dispatching and the other distribution M&R station expenses.

Q. HAVE YOU PREPARED A COMPLETE CLASS COST OF SERVICE STUDY EMBODYING THE ALLOCATIONS YOU RECOMMEND?

A. Yes, it accompanies my testimony as OCA Exhibit 4-C.

Tariff Changes Proposed by PGW

Q. WHAT TARIFF CHANGES IS PGW PROPOSING?

A. Company witness Craig White has proposed two tariff changes in his testimony. One is a new Section 2.3 in the Rules and Regulations part the tariff. It would permit PGW to offer individual contracts with non-standard rates to selected interruptible customers. The other change is a modification to the price ceiling provision in the boiler and power plant service (BPS) rate schedules.

Non-standard rates

Q. DO YOU AGREE WITH MR. WHITE THAT PGW SHOULD BE PERMITTED TO OFFER NON-STANDARD RATES IN ACCORD WITH HIS PROPOSED NEW REGULATION IN SECTION 2.3?

A. I agree that PGW should be permitted to offer non-standard rates under negotiated contracts, but I do not agree that it should have quite so much freedom as is provided by the language in proposed Section 2.3.

Q. WHAT CHANGES DO YOU RECOMMEND?

A. I recommend three changes. First, Section 2.3b should state, in its entirety, that "*The negotiated rate(s) shall not be less than 110% of the incremental gas cost for gas sold under the negotiated contract plus an adjustment for all applicable taxes, as determined by the Company.*" This language is the same as the corresponding part of the Commodity

Charge provision in each of PGW's interruptible (BPS and LBS) rate schedules, except that I have substituted a reference to "the negotiated contract" for the rate schedule references to "this rate schedule". The additional language in Mr. White's proposed Section 2.3b, relating to a specific gas source, should be in a separate sub-section. The third of my three recommended changes to proposed Section 2.3 addresses this topic.

Second, there should be a further provision (in a new Section 2.3c) that the negotiated rate shall not be less than the rate that would otherwise be available to the customer, unless the contract also contains a minimum take or a full requirements provision. Also, if the provision qualifying the negotiated contract for a discount rate is a minimum take provision, the minimum take requirement must be at least 80% of the maximum volume for which the discounted rate is offered. This further provision is needed to ensure that PGW obtains a benefit of additional sales volume in exchange for any discounts below the interruptible rates otherwise available to the customer.

The third change that I recommend is a further provision relating to the use of a specific gas source for determining the incremental gas cost for gas sold under the negotiated contract. This further provision would become a new Section 2.3d. It should state that PGW may use a specific gas source purchased for a period of more than one month to determine the incremental gas cost for a negotiated contract, but only if the contract also includes a commitment by the purchaser to take and pay for at least 80% of the gas in that specific purchase. This provision is needed to prevent a purchaser from obtaining a long-term supply commitment from PGW at a specific price, and then walking away if gas prices happen to fall. Absent a multi-month minimum take commitment by the purchaser, the incremental gas cost would continue to be determined monthly, and the contract price in each month would have to be at least 110% of that month's incremental gas cost pursuant to Section 2.3b.

BPS price ceiling

Q. WHAT DO YOU MEAN BY THE "BPS PRICE CEILING"?

A. The Commodity Charge provision in Rate Schedules BPS-S and BPS-L contains a requirement that the commodity charge rate shall not exceed 90% of the General Service (GS) rate for commercial and industrial customers, including the GCR charge. I use the phrase "BPS price ceiling" as a short name for this maximum price limitation.

Q. WHY IS THIS BPS PRICE CEILING A PROBLEM?

A. This price ceiling is a problem because it may in some months be lower than one or more of the price floors in the BPS Commodity Charge provision. The two relevant floors are the requirements that the BPS price be at least 80% of a specified oil parity price, and that it be at least 110% of PGW's incremental gas cost. In months when the price ceiling is below one (or both) of the floors, there is a question whether PGW may offer BPS gas for sale and, if so, at what price.

Q. WHAT TARIFF CHANGE DOES PGW SEEK TO ADDRESS THIS PROBLEM?

A. The answer to this question is not entirely clear. I read Mr. White's testimony at page 14, lines 21-22 as recommending that the BPS price ceiling be removed from the tariff. However, the changed language in the Company's proposed tariff pages 90 and 94 still retains the BPS price ceiling. The proposed tariff wording appears instead to be an attempt to accomplish Mr. White's "alternative" recommendation at page 14, lines 22-24, that the floor at 110% of incremental cost supersedes the ceiling if the two are in conflict.

Q. WHAT IS YOUR RECOMMENDATION?

A. I recommend that the BPS price ceiling at 90% of the GS rate be removed from the tariff.

Q. WHY SHOULD THE BPS PRICE CEILING RELATING TO THE GS RATE BE REMOVED?

A. BPS customers are protected by the oil parity price ceiling in the BPS rate schedule, and more generally by the existence of competition from all the other fuels in the energy marketplace. The GS rate is not a proper standard for interruptible gas prices, because it is not adjusted monthly to reflect changing conditions in the gas market, where prices can be extremely volatile.

Q. WHY SHOULD PGW EVER CHARGE AN INTERRUPTIBLE CUSTOMER A HIGHER RATE THAN IS PAID BY A GS CUSTOMER FOR FIRM GAS SALES SERVICE?

A. PGW's interruptible rates reflect monthly gas market conditions. This short-term focus is appropriate for interruptible rates, because interruptible customers can make short-term decisions about what fuel to burn. The GS rate, in contrast, is levelized in the sense that it is intended to remain stable for 12 months at a time, and even in exceptional circumstances it does not change monthly. It therefore reflects gas market conditions over a period much longer than a single month.

Interruptible rates should generally be less than the firm GS rate, because the firm GS rate is designed to recover some costs that need not be incurred to provide interruptible service. However, gas market prices are highly volatile. In a month when gas prices are extremely high, the interruptible rates should and do reflect this volatility. At such a time, the interruptible rate may exceed the levelized GS rate, even though the interruptible rate would be less than the firm GS when averaged over a suitably longer period of time.

Levelization of the GS rate is appropriate because GS customers are captive customers. GS customers have no alternative to gas service, and they must continue paying PGW's levelized GS rate in the months when it exceeds gas market prices by a wide margin. It is therefore appropriate that GS customers should benefit from the levelized rate in the months when it is much closer to — or even below — gas market prices.

Interruptible customers are in a completely different situation. They have no obligation and no economic need to purchase gas from PGW in months when energy prices are low, unless PGW's gas rates are also low. Because interruptible customers do pay rates based on the levelized GS rate in months when gas market prices are low, they should not be entitled to rates capped by the GS rate in months when gas market prices happen to be high.

Q. DOES THIS CONCLUDE YOUR PREPARED DIRECT TESTIMONY?

A. Yes, it does, except for my qualifications, which follow in Appendix A.

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Appendix A: Qualifications of Ralph E. Miller

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

A. My name is Ralph E. Miller. I am an independent consulting economist. My office is at 5502 Western Avenue, Chevy Chase, Maryland 20815.

Q. WHAT IS YOUR EMPLOYMENT EXPERIENCE?

A. I have been an independent consultant for more than fifteen years. I also have ten years of experience as president or vice president of two different consulting firms specializing in public utility and energy matters. Before that, I spent three years in the federal government, where I was employed in positions at the Federal Power Commission, the Antitrust Division of the U.S. Department of Justice, and the Federal Energy Administration. I was on the faculty of the University of California for three years, where I taught economics courses at both the graduate and undergraduate levels.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I did my undergraduate work at Harvard College, where I received the A.B. degree *summa cum laude* in mathematics in 1961, and I was elected to Phi Beta Kappa. I then went on to graduate work in economics at Harvard, where I received a Master's degree in 1963. I continued my graduate studies there until 1966, and I completed all of the course requirements for the Ph.D. degree, but not a doctoral dissertation.

Q. WHAT IS YOUR EXPERIENCE IN THE AREA OF UTILITY RATE DESIGN?

A. I have been engaged in electric and gas utility rate design work for more than 20 years, and I have devoted much of my time to this field during this period. I am the author of several published reports on utility rate design, and I have been invited to (and did) lead a workshop on class cost of service analysis at the National Regulatory Research Institute (NRRI). My

utility rate design work includes class cost of service studies based on fully distributed embedded costs, marginal cost analysis, determination of customer class revenue responsibilities, and tariff design.

Q. WHAT IS YOUR EXPERIENCE IN THE SPECIFIC AREA OF GAS RATE DESIGN?

A. Since 1981 I have testified on gas rate design in more than 20 proceedings involving gas distribution companies (LDCs). Including collaboratives and roundtables as well as proceedings which were settled prior to hearing, I have worked on more than 30 gas rate design cases involving more than a dozen different LDCs in nine states. In recent years, this work has included a consideration of unbundling and gas transportation, in addition to the more traditional class cost of service studies and class revenue responsibility issues. In Maryland, I have testified on the traditional cost of service and class revenue responsibility issues in several Washington Gas and Baltimore Gas and Electric Company base rate cases, and I have been participating in the gas roundtables for these two and several smaller gas utilities. Michigan and New Jersey are other states in which I have testified on class cost of service, cost allocation, class revenue responsibilities, gas rate design, and gas transportation issues in several base rate cases. In addition, I have extensive experience with gas pipeline rate design and with unbundling and transportation issues at FERC, where I have testified in numerous pipeline rate cases and participated in several of the unbundling proceedings pursuant to FERC Order 636.

Here in Pennsylvania, I presented testimony last year on the cost allocation and rate design issues in the base rate cases of PG Energy, Inc. (Docket No. R-00005119) and of North Penn Gas Company and PFG Gas, Inc. (Docket No. R-00005277). In the preceding year, I submitted testimony on rate design and other issues in four of the gas service restructuring proceedings before the PUC under the Natural Gas Choice and Competition Act. I have also presented testimony within the past two years in several gas cost recovery proceedings under

Section 1307(f), and the appropriate design of rates for the recovery of purchased gas costs was one of the issues I addressed in some of those proceedings.

Q. DOES THIS CONCLUDE YOUR STATEMENT OF QUALIFICATIONS?

A. Yes, it does.

OCA Exhibit 2-A

TESTIMONY OF RALPH E. MILLER (Since 1991)

	Case	Jurisdiction and Docket	Filing Date	Subject
174	Michigan Consolidated Gas Company	Michigan P.S.C. Case No. U-9795	March 1991	Pipeline certificate
175	Elizabethtown Gas Company	New Jersey B.P.U. Docket No. GR9012-1391J	May 1991	Gas rate design
176	Southwest Gas Corporation (three parts)	Nevada P.S.C. Docket Nos. 90-1109 and 90-1110	June 1991 (3)	Purchased gas costs
177	Michigan Gas Utilities	Michigan P.S.C. Case No. U-9456-R	June 1991	Gas cost reconciliation - 1990
178	Consumers Power Company	Michigan P.S.C. Case No. U-9433-R	August 1991	Gas cost reconciliation - 1990
179	Michigan Consolidated Gas Company	Michigan P.S.C. Case No. U-9902	November 1991	Gas supply plan - 1992
180	Michigan Gas Utilities	Michigan P.S.C. Case No. U-9978	December 1991	Gas supply plan - 1992
181	Elizabethtown Water Company (two parts)	New Jersey B.R.C. Docket No. WR9108-1293J	January 1992 February 1992	Water rate design
182	South Jersey Gas Company (three parts)	New Jersey B.R.C. Docket No. GR9107-1243J	February 1992 (2) March 1992	Gas rate design
183	Consumers Power Company	Michigan P.S.C. Case No. U-10030	April 1992	Gas supply plan 1992-93
184	Mountain Fuel Supply Company	Utah P.S.C. Case Nos. 91-057-11 and 91-057-17	May 1992	Gas purchasing practices
185	Michigan Consolidated Gas Company	Michigan P.S.C. Case No. U-9650-R	May 1992	Gas cost reconciliation - 1991

TESTIMONY OF RALPH E. MILLER (Since 1991)

	Case	Jurisdiction and Docket	Filing Date	Subject
186	Michigan Gas Utilities	Michigan P.S.C. Case Nos. U-9734-R and U-10045	June 1992	Gas cost reconciliation - 1991
187	Consumers Power Company	Michigan P.S.C. Case No. U-9733-R	June 1992	Gas cost reconciliation - 1991
188	Consumers Power Company	Michigan P.S.C. Case No. U-10029	August 1992	NML&O gas purchase agreement
189	Delmarva Power & Light Company (two parts)	Maryland P.S.C. Case No. 8521-C	October 1992 November 1992	Alloc. of gas cost to elec. gen.
190	Michigan Consolidated Gas Company	Michigan P.S.C. Case No. U-10105	October 1992	Gas supply plan - 1993
191	Consumers Power Company	Michigan P.S.C. Case No. U-10127	November 1992	Revised settlement of MCV purchase
192	Elizabethtown Water Company	New Jersey B.R.C. Docket No. WR9207-0774J	January 1993	Water rate design
193	Michigan Consolidated Gas Company (two parts)	Michigan P.S.C. Case No. U-10150	January 1993 March 1993	Gas rate design
194	Consumers Power Company.	Michigan P.S.C. Case No. U-10248	April 1993	Gas supply plan 1993-94
195	Elizabethtown Water Company	New Jersey B.R.C. Docket No. WR9301-0007	May 1993	Water rates for CWIP surcharge
196	New Jersey Natural Gas Company	New Jersey B.R.C. Docket No. GR9304-01145	August 1993	Gas rate design

TESTIMONY OF RALPH E. MILLER (Since 1991)

	Case	Jurisdiction and Docket	Filing Date	Subject
197	Algonquin Gas Transmission Co. (three parts)	FERC Docket No. RP93-14-000	August 1993 September 1993 January 1994	Incremental pricing
198	Michigan Consolidated Gas Company	Michigan P.S.C. Case No. U-10385	December 1993	Gas supply plan - 1994
199	Michigan Gas Utilities	Michigan P.S.C. Case No. U-10444	December 1993	Gas supply plan - 1994
200	Conowingo Power Company	Maryland P.S.C. Case No. 8583	February 1994	Power supply planning
201	South Jersey Gas Company	New Jersey B.R.C. Docket No. GR9308-0334	March 1994	Gas purchasing practices
202	Consumers Power Company	Michigan P.S.C. Case No. U-10490	April 1994	Gas supply plan 1994-95
203	South Jersey Gas Company	New Jersey B.R.C. Docket No. GR9401-0002	June 1994	Gas rate design
204	Washington Gas Light Company, Maryland Division	Maryland P.S.C. Case No. 8633	July 1994	Order 636 transition costs
205	Dayton Power and Light Company (filed audit report -- no testimony required)	P.U.C. of Ohio Case No. 94-215-GA-GCR	August 1994	Gas purchasing practices
206	Baltimore Gas and Electric Company (two parts)	Maryland P.S.C. Case No. 8629	September 1994 February 1995	Order 636 transition costs
207	Michigan Consolidated Gas Company	Michigan P.S.C. Case No. U-10640	October 1994	Gas supply plan - 1995

TESTIMONY OF RALPH E. MILLER (Since 1991)

	Case	Jurisdiction and Docket	Filing Date	Subject
208	Columbia Gas of Maryland, Inc.	Maryland P.S.C. Case No. 8634	November 1994	Order 636 transition costs
209	Detroit Edison Company	Michigan P.S.C. Case No. U-10646	November 1994	Special contracts and competition
210	Consumers Power Company	Michigan P.S.C. Case No. U-10750	March 1995	Gas supply plan 1995-96
211	Michigan Consolidated Gas Company	Michigan P.S.C. Case No. U-10385-R	July 1995	Gas cost reconciliation - 1994
212	Michigan Consolidated Gas Company	Michigan P.S.C. Case No. U-10915	October 1995	Gas supply plan - 1996
213	Baltimore Gas and Electric Co. [statement; no testimony]	Maryland P.S.C. Case No. 8709	November 1995	Gas marketing affiliate
214	Baltimore Gas and Electric Co. (two parts)	Maryland P.S.C. Case No. 8700	December 1995 February 1996	Incentive pricing for gas purchases
215	Consumers Power Company	Michigan P.S.C. Case No. U-10925	December 1995	East leg of the Oakland pipeline
216	Delmarva Power & Light Company [live testimony only]	Delaware P.S.C. Docket No. 95-44	January 1996	Gas service restructuring
217	Michigan Gas Utilities	Michigan P.S.C. Case No. U-10982	January 1996	Gas supply plan - 1996
218	Elizabethtown Gas Company [settled; no testimony]	New Jersey B.P.U. Docket No. GR9507-0335	1996	Gas purchasing practices
219	Consumers Power Company [electric]	Michigan P.S.C. Case Nos. U-10685 *et al.*	February 1996	Global settlement; competition

TESTIMONY OF RALPH E. MILLER (Since 1991)

	Case	Jurisdiction and Docket	Filing Date	Subject
220	Consumers Power Company	Michigan P.S.C. Case No. U-11060	April 1996	Gas supply plan 1996-97
221	Michigan Gas Utilities (two parts)	Michigan P.S.C. Case No. U-10960	April 1996 May 1996	Gas rate design
222	South Jersey Gas Company	New Jersey B.P.U. Docket No. GR9601-0032	August 1996	Gas rate design
223	Michigan Consolidated Gas Company	Michigan P.S.C. Case No. U-10640-R	August 1996	Gas cost reconciliation - 1995
224	Michigan Consolidated Gas Company	Michigan P.S.C. Case No. U-11145	October 1996	Gas supply plan - 1997
225	East Ohio Gas Company	P.U.C. of Ohio Case No. 96-219-GA-GCR	November 1996	Gas supply planning
226	Southeastern Michigan Gas Co. and Michigan Gas Company	Michigan P.S.C. Case Nos. U-11215 and U-11265	March 1997	Gas supply plans - 1997
227	Iroquois Gas Transmission System, L.P.	FERC Docket No. RP97-126-000	June 1997	Zone rate design
228	Michigan Gas Utilities	Michigan P.S.C. Case No. U-10982-R	June 1997	Gas cost reconciliation - 1996
229	SEMCO Energy Company	Michigan P.S.C. Case No. U-11220	July 1997	Gas rate design
230	Baltimore Gas and Electric Co.	Maryland P.S.C. Case No. 8500(t)	September 1997	PGA review
231	Consumers Energy Company (two parts)	Michigan P.S.C. Case No. U-11060-R	October 1997 December 1997	Gas cost reconciliation -- 1996-97

TESTIMONY OF RALPH E. MILLER (Since 1991)

	Case	Jurisdiction and Docket	Filing Date	Subject
232	Michigan Consolidated Gas Company	Michigan P.S.C. Case No. U-11455	November 1997	Gas supply plan - 1998
233	Michigan Gas Utilities	Michigan P.S.C. Case No. U-11542	January 1998	Gas supply plan - 1998
234	Elizabethtown Gas Company	New Jersey B.P.U. Docket No. GR9707-0552	March 1998	Gas cost recovery
235	Atlanta Gas Light Company	Georgia P.S.C. Docket No. 8390-U	April 1998	Gas service restructuring
236	Michigan Consolidated Gas Company	Michigan P.S.C. Case No. U-11145-R	June 1998	Gas supply reconciliation – 1997
237	Michigan Gas Utilities	Michigan P.S.C. Case No. U-11192-R	August 1998	Gas supply reconciliation – 1997
238	Consumers Energy Company	Michigan P.S.C. Case No. U-11636	August 1998	Marysville fractionation plant
239	Consumers Energy Company	Michigan P.S.C. Case No. U-11225-R	September 1998	Gas cost reconciliation – 1997-98
240	Baltimore Gas and Electric Co.	Maryland P.S.C. Case No. 8500(u)	September 1998	Gas cost review
241	Michigan Gas Utilities	Michigan P.S.C. Case No. U-11648	November 1998	Affiliate relations
242	Washington Gas Light Company	Maryland P.S.C. Case No. 8509(w)	December 1998	Gas purchasing practices
243	Elizabethtown Gas Company	New Jersey B.P.U. Docket No. GR9808-0533	March 1999	Gas cost recovery

TESTIMONY OF RALPH E. MILLER (Since 1991)

	Case	Jurisdiction and Docket	Filing Date	Subject
244	Columbia Gas of Pennsylvania (two parts)	Pennsylvania P.U.C. Docket No. R-00994612	May 1999 June 1999	Gas cost recovery
245	PECO Energy Company	Pennsylvania P.U.C. Docket No. R-00994683	July 1999	Gas cost recovery
246	PFG Gas, Inc. and North Penn Gas Company	Pennsylvania P.U.C. Docket No. R-00994682	July 1999	Gas cost recovery
247	Michigan Consolidated Gas Company (two parts)	Michigan P.S.C. Case No. U-11455-R	July 1999 August 1999	Gas supply reconciliation – 1998
248	Gas Rate Unbundling (two parts)	New Jersey B.P.U. Docket No. GX9903-0121	July 1999 August 1999	Unbundling – generic
249	South Jersey Gas Company (two parts)	New Jersey B.P.U. Docket No. GO9903-0125	July 1999 August 1999	Unbundling
250	Michigan Gas Utilities	Michigan P.S.C. Case No. U-11542-R	July 1999	Gas supply reconciliation – 1998
251	Columbia Gas of Pennsylvania (two parts)	Pennsylvania P.U.C. Docket No. R-00994781	October 1999 (2)	Restructuring plan
252	PG Energy, Inc. (three parts)	Pennsylvania P.U.C. Docket No. R-00994783	October 1999 (2) November 1999	Gas service restructuring
253	The Potomac Edison Company d/b/a Allegheny Power	Maryland P.S.C. Case No. 8523-M	January 2000	Electric fuel rate
254	Baltimore Gas and Electric Co. (three parts)	Maryland P.S.C. Case No. 8829	January 2000 March 2000 (2)	Gas rate design
255	PECO Energy Company	Pennsylvania P.U.C. Docket No. R-00994787	January 2000	Gas service restructuring

TESTIMONY OF RALPH E. MILLER (Since 1991)

	Case	Jurisdiction and Docket	Filing Date	Subject
256	Washington Gas Light Company	Maryland P.S.C. Case No. 8819	January 2000	Incentive regulation plan
257	PFG Gas, Inc. and North Penn Gas Company (three parts)	Pennsylvania P.U.C. Docket No. R-00994788	February 2000 (2) March 2000	Gas service restructuring
258	Philadelphia Gas Works	Philadelphia Gas Commission Year 2000 Tariff Changes	April 2000	CNG, air conditioning, etc.
259	Columbia Gas of Pennsylvania	Pennsylvania P.U.C. Docket No. R-00005110	May 2000	Gas cost recovery
260	PG Energy, a division of Southern Union Company (two parts)	Pennsylvania P.U.C. Docket No. R-00005119	June 2000 July 2000	Gas rate design
261	PG Energy, a division of Southern Union Company	Pennsylvania P.U.C. Docket No. R-00005279	July 2000	Gas cost recovery
262	PFG Gas, Inc. and North Penn Gas Company	Pennsylvania P.U.C. Docket No. R-00005296	July 2000	Gas cost recovery
263	Philadelphia Gas Works	Philadelphia Gas Commission	August 2000	Gas rates
264	PFG Gas, Inc. and North Penn Gas Company	Pennsylvania P.U.C. Docket No. R-00005277	October 2000	Gas rate design
265	Baltimore Gas and Electric Co.	Maryland P.S.C. Case No. 8860	November 2000	Gas cost recovery procedures
266	Southwest Gas Corporation (two parts)	Arizona C C. Docket No. G-01551A-00-0309	December 2000 February 2001	Gas rate design

TESTIMONY OF RALPH E. MILLER (Since 1991)

	Case	Jurisdiction and Docket	Filing Date	Subject
267	Michigan Consolidated Gas Company	Michigan P.S.C. Case No. U-12762	February 2001	Terminate GCR suspension

OCA Exhibit 2-B

Sent

OCA Exhibit 2-B
Table REM-1

PHILADELPHIA GAS WORKS

Present and Proposed Rates, by Rate Schedule

		Test Year "Present" Rates	Company's Proposed Rates	OCA's Recommended Rates: Existing Presentation	OCA's Recommended Rates: Recommended Presentation
	Rates for recovery of test year fuel costs				
1	Fuel costs in base rates	$3.1800	$3.1800	$3.1800	$0.0162
2	Purchased electricity costs	$0.0162	$0.0162	$0.0162	$0.0162
3	Purchased gas costs in base rates	$3.1638	$3.1638	$3.1638	- 0 -
4	GCR rate — pro forma	$3.8336	$3.8336	$3.8336	$6.9974
	General Service – Rate GS				
	Residential – Rate GS				
5	Customer charge (monthly)	$8.00	$15.00	$11.50	$11.50
	Commodity charges ($ / Mcf)				
	Base rate				
6	Non-fuel component	$3.4330	$3.7250	$3.3759	$3.3759
7	Fuel costs in base rates	$3.1800	$3.1800	$3.1800	$0.0162
8	Base rate total	$6.6130	$6.9050	$6.5559	$3.3921
9	GCR rate — pro forma	$3.8336	$3.8336	$3.8336	$6.9974
10	Commodity charge – total	$10.4466	$10.7386	$10.3895	$10.3895
	Commercial – Rate GS				
11	Customer charge (monthly)	$10.00	$25.00	$15.00	$15.00
	Commodity charges ($ / Mcf)				
	Base rate				
12	Non-fuel component	$3.9400	$4.5060	$4.1275	$4.1275
13	Fuel costs in base rates	$3.1800	$3.1800	$3.1800	$0.0162
14	Base rate total	$7.1200	$7.6860	$7.3075	$4.1437
15	GCR rate — pro forma	$3.8336	$3.8336	$3.8336	$6.9974
16	Commodity charge – total	$10.9536	$11.5196	$11.1411	$11.1411
	Industrial – Rate GS				
17	Customer charge (monthly)	$20.00	$50.00	$30.00	$30.00
	Commodity charges ($ / Mcf)				
	Base rate				
18	Non-fuel component	$3.9400	$4.6370	$4.1712	$4.1712
19	Fuel costs in base rates	$3.1800	$3.1800	$3.1800	$0.0162
20	Base rate total	$7.1200	$7.8170	$7.3512	$4.1874
21	GCR rate — pro forma	$3.8336	$3.8336	$3.8336	$6.9974
22	Commodity charge – total	$10.9536	$11.6506	$11.1848	$11.1848
	Municipal Service – Rate MS				
23	Customer charge (monthly)	- 0 -	$25.00	$15.00	$15.00
	Commodity charges ($ / Mcf)				
	Base rate				
24	Non-fuel component	$3.2330	$3.8870	$3.4494	$3.4494
25	Fuel costs in base rates	$3.1800	$3.1800	$3.1800	$0.0162
26	Base rate total	$6.4130	$7.0670	$6.6294	$3.4656
27	GCR rate — pro forma	$3.8336	$3.8336	$3.8336	$6.9974
28	Commodity charge – total	$10.2466	$10.9006	$10.4630	$10.4630
	Philadelphia Housing Authority – Rate PHA				
29	Customer charge (monthly)	- 0 -	$25.00	$15.00	$15.00
	Commodity charges ($ / Mcf)				
	Base rate				
30	Non-fuel component	$3.9460	$4.0680	$4.0377	$4.0377
31	Fuel costs in base rates	$3.1800	$3.1800	$3.1800	$0.0162
32	Base rate total	$7.1260	$7.2480	$7.2177	$4.0539
33	GCR rate — pro forma	$3.8336	$3.8336	$3.8336	$6.9974
34	Commodity charge – total	$10.9596	$11.0816	$11.0513	$11.0513

PHILADELPHIA GAS WORKS

Customer Class Revenues at Present and Proposed Rates

	Test Year, at Present Rates	Rates Proposed by the Company			OCA's Recommended Class Revenue Targets		OCA's Recommended Rates		
		Revenues	Increase	Percent	Increase	Total	Revenues	Increase	Percent
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(J)
Residential									
Non-Heat	30,647,447	37,031,999	6,384,553	20.83%			33,370,762	2,723,315	8.89%
Heat	475,043,275	521,897,985	46,854,710	9.86%			490,005,623	14,962,349	3.15%
Total	505,690,721	558,929,984	53,239,263	10.53%	17,683,712	523,374,433	523,376,385	17,685,664	3.50%
Commercial									
Non-Heat	21,361,215	23,477,036	2,115,821	9.90%			22,064,288	703,073	3.29%
Heat	95,241,136	103,475,273	8,234,137	8.65%			97,975,948	2,734,812	2.87%
Total	116,602,351	126,952,309	10,349,958	8.88%	3,437,795	120,040,146	120,040,235	3,437,885	2.95%
Industrial									
Non-Heat	6,103,809	6,625,962	522,152	8.55%			6,277,238	173,429	2.84%
Heat	10,380,812	11,311,977	931,164	8.97%			10,690,146	309,333	2.98%
Total	16,484,622	17,937,938	1,453,317	8.82%	482,727	16,967,349	16,967,384	482,762	2.93%
Municipal									
Rate MS	13,167,209	14,011,220	844,011	6.41%	280,343	13,447,552	13,447,450	280,241	2.13%
Rate GS – comm'l	922,086	1,124,762	202,675	21.98%	67,320	989,406	989,558	67,472	7.32%
Total	14,089,295	15,135,982	1,046,686	7.43%	347,663	14,436,958	14,437,008	347,713	2.47%
Housing Authority									
Rate PHA	6,876,568	6,987,017	110,449	1.61%	36,686	6,913,254	6,954,445	77,877	1.13%
Rate GS – res.	7,441,339	8,008,594	567,255	7.62%	188,417	7,629,756	7,588,540	147,201	1.98%
Total	14,317,907	14,995,611	677,703	4.73%	225,103	14,543,010	14,542,985	225,078	1.57%
Total Firm Service	**667,184,896**	**733,951,823**	**66,766,927**	**10.01%**	**22,177,000**	**689,361,896**	**689,363,997**	**22,179,101**	**3.32%**
BPS – total	31,621,638	31,621,638							
LBS – total	28,193,080	28,193,080							
TriGen & Cogen	1,289,387	1,289,387							
Grays Ferry	2,612,540	2,612,540							
GTS	2,665,777	2,665,777							
NGV	16,441	16,441							
Total Interruptible	66,398,863	66,398,863							
Grand Total	**733,583,759**	**800,350,686**	**66,766,927**	**9.10%**	**22,177,000**	**689,361,896**			
OCA's target revenue increase as fraction of Company's proposed increase					0.332165				

OCA Exhibit 2-B
Table REM-2a

PHILADELPHIA GAS WORKS

Proof of Revenues — Present Rates

	No. of Custs.	No. of Bills	Usage (Mcf)	Customer Charge		Commodity Charge		Total Revenues
				Rate	Revenues	Rate	Revenues	
Residential								
Non-Heat	67,980	815,760	2,309,016	$8.00	6,526,080	$10.4466	24,121,367	30,647,447
Heat	412,910	4,954,920	41,679,007	$8.00	39,639,360	$10.4466	435,403,915	475,043,275
Total	480,890	5,770,680	43,988,023		46,165,440		459,525,281	505,690,721
Commercial								
Non-Heat	5,823	69,876	1,886,362	$10.00	698,760	$10.9536	20,662,455	21,361,215
Heat	19,061	228,732	8,486,143	$10.00	2,287,320	$10.9536	92,953,816	95,241,136
Total	24,884	298,608	10,372,505		2,986,080		113,616,271	116,602,351
Industrial								
Non-Heat	388	4,656	548,741	$20.00	93,120	$10.9536	6,010,689	6,103,809
Heat	785	9,420	930,508	$20.00	188,400	$10.9536	10,192,412	10,380,812
Total	1,173	14,076	1,479,249		281,520		16,203,102	16,484,622
Municipal								
Rate MS	12	144	1,285,032	- 0 -	0	$10.2466	13,167,209	13,167,209
Rate GS – comm'l	892	10,704	74,409	$10.00	107,040	$10.9536	815,046	922,086
Total	904	10,848	1,359,441		107,040		13,982,255	14,089,295
Housing Authority								
Rate PHA	113	1,356	627,447	- 0 -	0	$10.9596	6,876,568	6,876,568
Rate GS – res.	4,418	53,016	671,722	$8.00	424,128	$10.4466	7,017,211	7,441,339
Total	4,531	54,372	1,299,169		424,128		13,893,779	14,317,907
Total Firm Service	**512,382**	**6,148,584**	**58,498,387**		**49,964,208**		**617,220,688**	**667,184,896**

PHILADELPHIA GAS WORKS

Proof of Revenues — Company's Proposed Rates

	No. of Custs.	No. of Bills	Usage (Mcf)	Customer Charge Rate	Customer Charge Revenues	Commodity Charge Rate	Commodity Charge Revenues	Total Revenues
Residential								
Non-Heat	67,980	815,760	2,309,016	$15.00	12,236,400	$10.7386	24,795,599	37,031,999
Heat	412,910	4,954,920	41,679,007	$15.00	74,323,800	$10.7386	447,574,185	521,897,985
Total	480,890	5,770,680	43,988,023		86,560,200		472,369,784	558,929,984
Commercial								
Non-Heat	5,823	69,876	1,886,362	$25.00	1,746,900	$11.5196	21,730,136	23,477,036
Heat	19,061	228,732	8,486,143	$25.00	5,718,300	$11.5196	97,756,973	103,475,273
Total	24,884	298,608	10,372,505		7,465,200		119,487,109	126,952,309
Industrial								
Non-Heat	388	4,656	548,741	$50.00	232,800	$11.6506	6,393,162	6,625,962
Heat	785	9,420	930,508	$50.00	471,000	$11.6506	10,840,977	11,311,977
Total	1,173	14,076	1,479,249		703,800		17,234,138	17,937,938
Municipal								
Rate MS	12	144	1,285,032	$25.00	3,600	$10.9006	14,007,620	14,011,220
Rate GS – comm'l	892	10,704	74,409	$25.00	267,600	$11.5196	857,162	1,124,762
Total	904	10,848	1,359,441		271,200		14,864,782	15,135,982
Housing Authority								
Rate PHA	113	1,356	627,447	$25.00	33,900	$11.0816	6,953,117	6,987,017
Rate GS – res.	4,418	53,016	671,722	$15.00	795,240	$10.7386	7,213,354	8,008,594
Total	4,531	54,372	1,299,169		829,140		14,166,471	14,995,611
Total Firm Service	**512,382**	**6,148,584**	**58,498,387**		**95,829,540**		**638,122,283**	**733,951,823**

OCA Exhibit 2-B
Table REM-2c

PHILADELPHIA GAS WORKS

Proof of Revenues — OCA's Recommended Rates

	No. of Custs.	No. of Bills	Usage (Mcf)	Customer Charge Rate	Customer Charge Revenues	Commodity Charge Rate	Commodity Charge Revenues	Total Revenues
Residential								523,374,433
Non-Heat	67,980	815,760	2,309,016	$11.50	9,381,240	$10.3895	23,989,522	33,370,762
Heat	412,910	4,954,920	41,679,007	$11.50	56,981,580	$10.3895	433,024,043	490,005,623
Total	480,890	5,770,680	43,988,023		66,362,820		457,013,565	523,376,385
Commercial								120,040,146
Non-Heat	5,823	69,876	1,886,362	$15.00	1,048,140	$11.1411	21,016,148	22,064,288
Heat	19,061	228,732	8,486,143	$15.00	3,430,980	$11.1411	94,544,968	97,975,948
Total	24,884	298,608	10,372,505		4,479,120		115,561,115	120,040,235
Industrial								16,967,349
Non-Heat	388	4,656	548,741	$30.00	139,680	$11.1848	6,137,558	6,277,238
Heat	785	9,420	930,508	$30.00	282,600	$11.1848	10,407,546	10,690,146
Total	1,173	14,076	1,479,249		422,280		16,545,104	16,967,384
Municipal								14,436,958
Rate MS	12	144	1,285,032	$15.00	2,160	$10.4630	13,445,290	13,447,450
Rate GS – comm'l	892	10,704	74,409	$15.00	160,560	$11.1411	828,998	989,558
Total	904	10,848	1,359,441		162,720		14,274,288	14,437,008
Housing Authority								14,543,010
Rate PHA	113	1,356	627,447	$15.00	20,340	$11.0513	6,934,105	6,954,445
Rate GS – res.	4,418	53,016	671,722	$11.50	609,684	$10.3895	6,978,856	7,588,540
Total	4,531	54,372	1,299,169		630,024		13,912,961	14,542,985
Total Firm Service	**512,382**	**6,148,584**	**58,498,387**		**72,056,964**		**617,307,033**	**689,363,997**

OCA Exhibit 2-B
Table REM-3

PHILADELPHIA GAS WORKS

Relationship of Tariff Requirement Increase to Net Revenue Increase

	Present Rates	Proposed Rates	Increase
Source	Exhibit HSG-1 Schedule 5	Exhibit HSG-1 Schedule 4	
Full tariff revenue requirement	733,583,795	800,350,667	66,766,872
Net revenue	688,794,161	753,524,099	64,729,938
Ratio, full tariff increase to net revenue increase			1.031468
Net revenue increase recommended by OCA witness LeLash			21,500,000
Full tariff revenue increase needed to achieve Mr. LeLash's recommended net revenue increase			22,176,566

OCA Exhibit 2-B
Table REM-4

PHILADELPHIA GAS WORKS

Monthly "Direct Customer Costs" for Residential Customers

Number of bills **5,770,676**

Plant Investment	Gross Plant	Reserve for Dep'n	Net Plant	
Distribution				
380 Services	333,897,544	108,963,186	224,934,358	$57.861
381 Meters	26,220,206	incl. below		$4.544
382 Meter Installations	30,370,376	23,648,288	80,238,870	$5.263
383 House Regulators	1,391,974	incl. below		$0.241
384 House Regulator Inst	4,307,049	3,040,296	8,739,319	$0.746
Total plant investment	396,187,149	135,651,770	313,912,547	$68.655

			Amount	Amount per Bill
Financial Requirements				
Claimed financial requirement of $109.7 million, or 14.9% of net plant investment			46,772,970	$8.105
Depreciation Expense				
Depreciation expense, or 2.66% of gross plant investment			10,538,578	$1.826
O & M Expenses				
Distribution				
878 Meters and House Regulators			3,550,591	$0.615
892 Maint. of Services			1,175,823	$0.204
893 Maint of Meters and House Reg.			1,054,893	$0.183
Subtotal, Distribution			5,781,307	$1.002
Customer Accounts				
Meter reading			580,524	$0.101
Cust. records & collection	26,315,059	25%	6,578,765	$1.140
Subtotal, Cust. Acc'ts			7,159,289	$1.241
Total			70,252,143	$12.174

OCA Exhibit ____ (REM-4)

Table 1: Summary

Table 1: Summary of Revenues and Revenue Requirements by Customer Class

		D	E	F	K	L	M	N	O	P	Q	R	S	T	V
		Total Company			R-N RC-1	Res Heat RC-2	Comm'l - N RC-3	Comm'l Heat RC-4	Ind'l - N RC-5	Ind'l Heat RC-6	Muni – N RC-7	Muni Heat RC-8	PHA - N RC-9	PHA Heat RC-10	Non-Firm RC-11 / 22
10	**Total Plant in Service**	1,245,223,658	T_PLANT		83,390,774	845,814,040	25,857,442	124,791,254	6,060,942	12,919,158	3,147,186	14,776,076	6,723,343	11,573,954	110,169,490
11	Reserve for Depreciation	506,351,888			31,011,864	346,571,067	10,443,188	53,271,612	2,566,006	5,590,841	1,375,078	6,581,257	3,032,892	4,873,119	41,034,965
12															
13	Net Plant in Service	738,871,770			52,378,910	499,242,973	15,414,254	71,519,642	3,494,935	7,328,317	1,772,108	8,194,819	3,690,451	6,700,835	69,134,525
14															
15															
16	FULL TARIFF REVENUES														
17	Revenue at "Present" Rates	733,583,796			30,647,447	475,043,275	21,361,215	95,241,136	6,103,809	10,380,812	2,386,505	11,702,827	6,876,568	7,441,339	66,398,863
18															
19	Forfeited Discounts	13,571,300			566,978	8,788,301	395,182	1,761,961	112,920	192,045	44,150	216,502	127,217	137,665	1,228,379
20															
21	Total Revenues	747,155,096			31,214,425	483,831,576	21,756,397	97,003,097	6,216,729	10,572,857	2,430,655	11,919,329	7,003,785	7,579,004	67,627,242
22															
23	EXPENSES														
24	Total Cost of Gas	417,474,000			13,587,229	260,595,565	10,811,630	51,888,411	3,216,368	5,742,873	1,416,920	7,088,910	3,841,130	4,202,546	55,082,418
25	Op. & Maint. Expense	209,957,921			18,651,781	150,853,061	4,768,915	18,235,769	1,110,201	2,640,474	315,412	1,108,402	460,272	2,985,340	8,828,293
26	Depreciation Exp.	33,126,088			2,512,847	22,229,129	704,697	3,097,857	150,266	308,792	74,676	335,382	148,182	289,841	3,274,418
27	Payroll Taxes	7,815,500	T_LABOR		734,329	5,236,475	238,265	893,597	44,030	90,555	18,600	59,325	23,440	84,121	392,763
28															
29	Total Expenses	668,373,509			35,486,187	438,914,229	16,523,507	74,115,634	4,520,865	8,782,695	1,825,608	8,592,019	4,473,024	7,561,848	67,577,893
30															
31	Financial Requirements	66,250,000			4,696,489	44,763,988	1,382,100	6,412,718	313,369	657,084	158,894	734,778	330,900	600,822	6,198,859
32															
33	Revenue Requirement	734,623,509			40,182,675	483,678,217	17,905,607	80,528,352	4,834,234	9,439,779	1,984,502	9,326,797	4,803,924	8,162,670	73,776,752
34															
35	Full tariff revenue surplus	12,531,587			(8,968,251)	153,359	3,850,791	16,474,745	1,382,496	1,133,078	446,153	2,592,533	2,199,860	(583,666)	(6,149,510
36															
37															

Table 2a Inputs – Plant

			E	F	G	H	
			Total Company				
			Plant in Service	Reserve for Depreciation	Net Plant		
11		**Plant in Service**					
12	301 - 303	***Intangible Plant***	0	0	0	PSTD_PLANT	
13							
14	304 - 338	***Gas Production and Gathering Plant***					
15		Total Production Plant	122,798,644	88,565,040	34,233,604	D: DESIGNDAY	8
16							
17		***Underground Storage Plant***					
18	362	Gas Holders	34,091,977			D: WINTER-3	21
19	363	Purification Equipment	834,380			D: WINTER-3	21
20	364	Liquefaction Equipment	8,634,420			D: WINTER-3	21
21	365	Vaporizing Equipment	11,530,450			D: DESIGNDAY	8
22	366	Compressor Equipment	11,213,835			D: WINTER-3	21
23	367	Meas. and Reg. Eqp't	4,799,191			D: WINTER-3	21
24		Subtotal STOR_P-2	71,104,253			STOR_P-2	
25	360	Land and Land Rights	0			Stor_P-2	
26	361	Structures and Improvements	22,872,482			Stor_P-2	
27	368	Other Storage Equipment	11,662,837			Stor_P-2	
28		Total Storage Plant	105,639,572	60,831,612	44,807,960	STOR_PLANT	
29							
30		***Distribution Plant***					
31	376	Mains	421,085,259	141,504,398	279,580,861	D: Peak & Average	12
32	377	Compressor Station Eqp't	1,293,002	incl. below	1,293,002	D: Peak & Average	12
33	378	Meas. and Reg. Eqp't – general	15,367,942	8,267,780	7,100,162	D: Peak & Average	12
34	379	Meas. and Reg. Eqp't – city gate	0	0	0	D: Peak & Average	12
35	380	Services	370,530,205	120,917,785	249,612,420	C: SERVICES	34
36	381	Meters	42,129,054	incl. below	42,129,054	C: METERS	36
37	382	Meter Installations	41,906,090	32,630,722	9,275,368	C: METERS	36
38	383	House Regulators	1,404,763	incl. below	1,404,763	C: CUST_Res	32
39	384	House Regulator Installation	4,346,622	3,068,230	1,278,392	C: CUST_Res	32
40	385	Industrial Meas. and Reg. St'n Eqp't	330,964	93,470	237,494	C: CUST_Non-Res	30
41		Subtotal DIST_P-2	898,393,901	306,482,385	591,911,516	DIST_P-2	
42	374	Land and Land Rights	100,977	0	100,977	Dist_P-2	
43	375	Structures and Improvements	2,812,225	2,128,530	683,695	Dist_P-2	
44	387	Other Distribution Equipment	4,654,194	1,550,671	3,103,523	Dist_P-2	
45		Total Distribution Plant	905,961,297	310,161,586	595,799,711	DIST_PLANT	
46							
47		Total P-S-T-D Plant	1,134,399,513	459,558,238	674,841,275	PSTD_PLANT	
48							
49		***General Plant***					
50	389	Land	3,755,927			PSTD_PLANT	
51	390	Structures and Improvements	47,011,557			PSTD_PLANT	
52	391	Office Furniture and Equipment	27,252,333			A&G_Salaries	
53	392	Transportation Equipment	15,386,253			PSTD_PLANT	
54	393	Stores Equipment	536,443			PSTD_PLANT	
55	394	Tools, Shop and Garage Equipment	6,106,107			PSTD_PLANT	
56	395	Laboratory Equipment	0			PSTD_PLANT	
57	396	Power Operated Equipment	994,135			PSTD_PLANT	
58	397	Communications Equipment	6,955,332			PSTD_PLANT	
59	398	Misc. Equipment	2,826,058			PSTD_PLANT	
60		Total General Plant	110,824,145	45,793,650	64,030,495	GENL_PLANT	
61							
62		TOTAL PLANT	1,245,223,658	506,351,888	738,871,770	T_PLANT	

Printed 10-Apr-01, 13:53

Table 2b Inputs – O&M Expense

			Total Company			
			Total Expense	Labor		
		Operation and Maintenance Expense				
710 - 742		***Manufactured Gas Production***	1,490,391	1,021,519	D: DESIGNDAY	8
		Storage Expenses	9,897,228	5,050,390	D: WINTER-3	21
		Distribution Expenses				
	870	Operation Supervision and Engrg.	1,861,753	1,831,753		
		Plant related	930,877	915,877	Dist_Plant	
		Op. labor related	930,877	915,877	D-O-Labor	
	871	Load Dispatching	1,135,000	772,000	E: THRUPUT	15
	874	Mains and Services	2,017,958	147,958	Main_Serv	
	875	Meas. and Reg. Stn. Exp – Gen'l	1,027,183	624,183	E: THRUPUT	15
	876	Meas. and Reg. Stn. Exp – Ind'l	0	0		
	877	Meas. and Reg. Stn. Exp – City G.	138,226	115,226	E: THRUPUT	15
	878	Meters and House Regulators	4,786,618	4,063,468	Mtr_House-R	
	879	Customer Inst. Exp. – gas business	12,174,782	11,609,884	C: METERS	36
	880	Other Distribution Exp.	7,399,985	1,766,755	Dist_Plant	
	881	Dist'n Rents	0	0		
	885	Maint. Supervision and Engrg.	223,884	210,884	D_Maint_Labor	
	886	Maint. of Structures and Improv.	0	0		
	887	Maint of Mains	5,435,876	3,404,876	MAINS	
	889	Maint. of M & R Stn. Exp – Gen'l	1,380,821	862,821	M&R – Gen'l	
	890	Maint. of M & R Stn. Exp – Ind'l	0	0	M&R – Ind'l	
	891	Maint. of M & R Stn. Exp – City G.	561,866	339,866	M&R – City G	
	892	Maint of Services	1,304,826	978,826	Services	
	893	Maint of Meters and House Reg.	1,422,121	1,098,721	Mtr_House-R	
	894	Other Distribution Maint.	0	0	Dist_Plant	
		Total Distribution Expense	40,870,899	27,827,221		
		Total P-S-T-D Expense	52,258,518	33,899,130	PSTD_EXP	
		Customer Accounts Expenses				
	901a	Supervision – cust. svc.	298,803	281,114	C: CUSTOMERS	26
	901b	Supervision – collection	191,064	179,753	C: CUST-Collect	48
	902a	Meter Reading – direct	580,524	403,989	C: METER-direct	38
	902b	Meter Reading – allocated	1,635,879	1,138,414	C: METER-Read	40
	903	Customer Records and Collection	27,848,133	15,703,133	C: COLLECTION	44
	904	Uncollectible Accounts	65,297,000	0	C: WRITEOFF-$	46
	905	Misc. Customer Accounts	0	0		
		Total Customer Accounts Exp.	95,851,403	17,706,403		
		Customer Service and Info. Expenses				
	906	Cust Svc. and Info. Exp.	0	0		
	908a	Customer Assistance – direct	6,144,978	1,412,095	C: DIR_908	42
	908b	Customer Assistance – allocated	2,554,022	586,905	C: CUSTOMERS	26
	909	Inform, Instruct. Advertising	0	0		
		Total Cust Svc. and Info. Exp.	8,699,000	1,999,000		
		Sales Expenses				
		Total Sales Expense	0	0		
		Total Customer Accounts & Services	104,550,403	19,705,403		

182		*Administrative & General Expenses*					
183	920	A & G Salaries	6,894,000		—	6,789,600	
184		Plant related		3,447,000	3,394,800		PSTD_PLANT
185		Labor related		3,447,000	3,394,800		LABOR_1
186	921	Office Supplies and Exper	4,857,000		—		
187		Plant related		2,428,500	0		PSTD_PLANT
188		Labor related		2,428,500	0		LABOR_1
189	922	Admin. Exp. Transferred (credit)		—	—		
190		Construction OH		(5,334,000)			T_LABOR
191		A & G OH		(6,815,000)			T_A&G
192	923	Outside Services Employed		4,366,000	0		T_A&G
193	926	Employee Pensions and Benefits		30,545,000	200,000		T_LABOR
194	924	Property Insurance		1,250,000	86,000		PSTD_PLANT
195	925a	Inj. & Damages – Workers Comp.		1,816,000	225,154		LABOR_1
196	925b	Injuries & Damages – Other		1,628,000	201,846		PSTD_PLANT
197	932	Maintenance of General Plant		129,000	66,486		GENL_PLANT
198	927	Franchise Requirements		1,362,000			PSTD_PLANT
199	928	Regulatory Commission Expense		2,525,000	476,000		T_PLANT
200	930	Misc. General Expenses		9,698,000	0		PSTD_PLANT
201	931	Rents		228,000			T_PLANT
202		Total Admin. & General Exp.		53,149,000	8,045,086		
203							
204		TOTAL O&M EXPENSE		209,957,921	61,649,619		

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A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R
	Table 3a: Plant in Service					ALLOCATION OF TOTAL COSTS										
				Total Company		R-N RC-1	Res Heat RC-2	Comm'l - N RC-3	Comm'l Heat RC-4	Ind'l - N RC-5	Ind'l Heat RC-6	Muni – N RC-7	Muni Heat RC-8	PHA - N RC-9	PHA Heat RC-10	Non-Firm RC-11 / 22
11		**Plant in Service**														
12	301-3	***Intangible Plant***		0	PSTD_PLANT	0	0	0	0	0	0	0	0	0	0	0
13																
14	304-38	**Gas Production and Gathering *Plant***														
15		Total Production Plant		122,798,644	D: DESIGNDAY	3,385,606	92,627,984	2,070,707	16,317,718	755,807	1,902,323	477,461	2,550,249	1,213,581	1,497,209	0
16																
17		***Underground Storage Plant***														
18	362	Gas Holders		34,091,977	D: WINTER-3	834,064	22,319,186	668,175	4,154,616	219,692	476,479	118,758	619,143	312,301	362,200	4,007,362
19	363	Purification Equipment		834,380	D: WINTER-3	20,413	546,248	16,353	101,682	5,377	11,662	2,907	15,153	7,643	8,865	98,078
20	364	Liquefaction Equipment		8,634,420	D: WINTER-3	211,242	5,652,744	169,227	1,052,233	55,641	120,677	30,078	156,809	79,096	91,734	1,014,938
21	365	Vaporizing Equipment		11,530,450	D: DESIGNDAY	317,899	8,697,509	194,434	1,532,188	70,968	178,623	44,832	239,461	113,952	140,564	0
22	366	Compressor Equipment		11,213,835	D: WINTER-3	274,348	7,341,424	219,782	1,366,573	72,263	156,728	39,063	203,854	102,725	119,138	1,318,137
23	367	Meas. and Reg. Eqp't		4,799,191	D: WINTER-3	117,413	3,141,913	94,060	584,853	30,926	67,075	16,718	87,158	43,963	50,988	564,124
24		Subtotal: STOR_P-2		71,104,253	STOR_P-2	1,775,380	47,699,026	1,362,031	8,792,146	454,868	1,011,243	252,354	1,321,378	659,681	773,508	7,002,639
25	360	Land and Land Rights		0	Stor_P-2	0	0	0	0	0	0	0	0	0	0	0
26	361	Structures and Improvements		22,872,482	Stor_P-2	571,096	15,343,598	438,132	2,828,216	146,320	325,292	81,176	425,055	212,203	248,819	2,252,576
27	368	Other Storage Equipment		11,662,837	Stor_P-2	291,206	7,823,807	223,406	1,442,127	74,609	165,869	41,392	216,738	108,204	126,874	1,148,604
28		Total Storage Plant		105,639,572	STOR_PLANT	2,637,681	70,866,431	2,023,569	13,062,489	675,797	1,502,403	374,923	1,963,172	980,087	1,149,201	10,403,820
29																
30		***Distribution Plant***														
31	376	Mains		421,085,259	D: Peak & Avera	11,095,008	249,123,259	7,986,534	46,782,964	2,561,121	5,305,049	1,319,641	6,816,023	3,470,012	4,021,774	82,603,874
32	377	Compressor Station Eqp't		1,293,002	D: Peak & Avera	34,069	764,968	24,524	143,654	7,864	16,290	4,052	20,930	10,655	12,349	253,647
33	378	Meas. and Reg. Eqp't – general		15,367,942	D: Peak & Avera	404,924	9,092,011	291,477	1,707,393	93,471	193,613	48,182	248,758	126,642	146,779	3,014,714
34	379	Meas. and Reg. Eqp't – city gate		0	D: Peak & Avera	0	0	0	0	0	0	0	0	0	0	0
35	380	Services		370,530,205	C: SERVICES	47,200,581	286,696,963	6,064,825	19,851,761	1,023,779	2,072,185	366,608	1,456,511	298,162	3,067,794	2,431,036
36	381	Meters		42,129,054	C: METERS	4,316,074	26,215,890	2,343,435	7,670,677	192,700	390,036	141,858	274,151	56,121	280,522	247,792
37	382	Meter Installations		41,906,090	C: METERS	4,293,231	26,077,145	2,331,032	7,630,080	191,680	387,972	140,907	272,700	55,824	279,036	246,480
38	383	House Regulators		1,404,763	C: CUST_Res	196,773	1,195,201	0	0	0	0	0	0	0	12,789	0
39	384	House Regulator Installation		4,346,622	C: CUST_Res	608,855	3,698,194	0	0	0	0	0	0	0	39,572	0
40	385	Industrial Meas. and Reg. Sta Eqp't		330,964	C: CUST_Non-R	0	0	69,871	228,705	4,656	9,423	4,224	6,623	1,358	0	6,107
41		Subtotal: DIST_PLANT2		898,393,901	DIST_P-2	68,149,514	602,863,632	19,111,697	84,015,233	4,075,271	8,374,568	2,025,249	9,095,694	4,018,773	7,860,619	88,803,650
42	374	Land and Land Rights		100,977	Dist_P-2	7,660	67,760	2,148	9,443	458	941	228	1,022	452	884	9,981
43	375	Structures and Improvements		2,812,225	Dist_P-2	213,327	1,887,132	59,825	262,991	12,757	26,215	6,340	28,472	12,580	24,606	277,980
44	387	Other Distribution Equipment		4,654,194	Dist_P-2	353,053	3,123,178	99,010	435,247	21,112	43,385	10,492	47,121	20,820	40,722	460,054
45		Total Distribution Plant		905,961,297	DIST_PLANT	68,723,555	607,941,703	19,272,680	84,722,914	4,109,598	8,445,109	2,042,308	9,172,310	4,052,624	7,926,831	89,551,685
46																
47		Total P-S-T-D Plant		1,134,399,513	PSTD_PLANT	74,746,842	771,436,118	23,366,955	114,103,121	5,541,202	11,849,834	2,894,693	13,685,730	6,246,293	10,573,241	99,955,485
48																
49		***General Plant***														
50	389	Land		3,755,927	PSTD_PLANT	247,482	2,554,178	77,367	377,768	18,347	39,234	9,584	45,313	20,681	35,007	330,946
51	390	Structures and Improvements		47,011,557	PSTD_PLANT	3,097,644	31,969,701	968,369	4,726,638	229,637	491,078	119,961	567,161	258,858	438,174	4,142,335
52	391	Office Furniture and Equipment		27,252,333	A&G_Salaries	2,206,055	18,386,157	705,989	2,942,493	144,084	301,388	67,033	263,379	113,405	275,126	1,847,225
53	392	Transportation Equipment		15,386,253	PSTD_PLANT	1,013,817	10,463,255	316,934	1,547,620	75,157	160,723	39,262	185,824	84,721	143,409	1,355,731
54	393	Stores Equipment		536,443	PSTD_PLANT	35,347	364,802	11,050	53,958	2,620	5,604	1,369	6,472	2,954	5,000	47,268
55	394	Tools, Shop and Garage Equipment		6,106,107	PSTD_PLANT	402,338	4,152,392	125,777	614,180	29,827	63,784	15,581	73,866	33,622	56,912	538,028
56	395	Laboratory Equipment		0	PSTD_PLANT	0	0	0	0	0	0	0	0	0	0	0
57	396	Power Operated Equipment		994,135	PSTD_PLANT	65,505	676,051	20,478	99,995	4,856	10,385	2,537	11,994	5,474	9,266	87,596
58	397	Communications Equipment		6,955,332	PSTD_PLANT	458,295	4,729,898	143,270	699,599	33,975	72,655	17,748	83,911	38,298	64,828	612,856
59	398	Misc. Equipment		2,826,058	PSTD_PLANT	186,212	1,921,830	58,213	284,258	13,804	29,521	7,211	34,094	15,561	26,340	249,013
60		Total General Plant		110,824,145		8,643,933	74,377,922	2,490,487	10,686,133	519,740	1,089,324	252,493	1,090,346	477,050	1,000,713	10,214,005
61																
62		TOTAL PLANT IN SERVICE		1,245,223,658	T_PLANT	83,390,774	845,814,040	25,857,442	124,791,254	6,060,942	12,919,158	3,147,186	14,776,076	6,723,343	11,573,954	110,169,490
63																
64		MAINS_SERVICES		791,615,464		58,295,588	535,820,223	14,051,359	66,634,725	3,584,900	7,377,234	1,686,249	8,272,533	3,768,175	7,089,569	85,034,910
65		Meters – total		84,035,144		8,609,305	52,293,034	4,674,467	15,300,757	384,380	778,008	282,563	546,851	111,946	559,560	494,272
66		Meter_House		89,786,529	Meter_House	9,414,933	57,186,430	4,674,467	15,300,757	384,380	778,008	282,563	546,851	111,946	611,822	494,272

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	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R
68																
69	Table 3b:	Depreciation								ALLOCATION OF TOTAL COSTS						
70				Total		R-N	Res Heat	Comm'l - N	Comm'l Heat	Ind'l - N	Ind'l Heat	Muni – N	Muni Heat	PHA - N	PHA Heat	Non-Firm
71				Company		RC-1	RC-2	RC-3	RC-4	RC-5	RC-6	RC-7	RC-8	RC-9	RC-10	RC-11 / 22
72																
73		**Reserve for Depreciation**														
74		***Intangible Plant***		0												
75																
76		***Gas Production and Gathering Pla***		88,565,040		2,441,772	66,805,307	1,493,438	11,768,692	545,104	1,371,998	344,355	1,839,295	875,261	1,079,819	0
77																
78		***Underground Storage Plant***		60,831,612		1,518,885	40,807,807	1,165,254	7,521,918	389,152	865,145	215,896	1,130,475	564,375	861,757	5,990,947
79																
80		***Distribution Plant***														
81	376	Mains		141,504,398		3,728,443	83,717,100	2,883,850	15,721,270	860,657	1,782,745	443,461	2,290,503	1,166,087	1,351,505	27,758,776
82	377	Compressor Station Eqp't		incl. below												
83	378	Meas. and Reg. Eqp't – general		8,267,780		217,844	4,891,400	156,811	918,558	50,286	104,162	25,910	133,829	68,132	78,965	1,621,882
84	379	Meas. and Reg. Eqp't – city gate		0												
85	380	Services		120,917,785		15,403,305	93,559,881	1,979,178	6,478,368	334,097	676,231	119,638	475,314	97,302	1,001,135	793,337
86	381	Meters		incl. below												
87	382	Meter Installations		32,630,722		3,342,980	20,305,308	1,815,089	5,941,261	149,254	302,099	109,719	212,341	43,468	217,276	191,925
88	383	House Regulators		incl. below												
89	384	House Regulator Installation		3,068,230		429,784	2,610,512	0	0	0	0	0	0	0	27,934	0
90	385	Industrial Meas. and Reg. Sta Eqp't		93,470		0	0	19,733	64,590	1,315	2,661	1,193	1,871	383	0	1,725
91		Subtotal		306,482,385		23,122,356	205,084,201	8,654,661	29,124,048	1,395,609	2,867,899	699,921	3,113,858	1,375,372	2,676,816	30,367,646
92	374	Land and Land Rights		0												
93	375	Structures and Improvements		2,128,530		161,464	1,428,342	45,281	199,054	9,655	19,842	4,798	21,550	9,522	18,624	210,399
94	387	Other Distribution Equipment		1,550,671		117,629	1,040,572	32,988	145,014	7,034	14,455	3,496	15,700	6,937	13,568	153,279
95		Total Distribution Plant		310,161,586		23,401,450	207,553,114	8,732,929	29,468,116	1,412,299	2,902,195	708,215	3,151,107	1,391,830	2,709,007	30,731,324
96																
97		***General Plant***		46,793,650		3,549,757	31,404,839	1,051,567	4,512,886	219,451	451,504	106,611	460,380	201,427	422,535	4,312,693
98																
99		TOTAL RESERVE FOR DEPN		506,361,888		31,011,864	346,571,067	10,443,188	53,271,812	2,566,008	5,590,841	1,375,078	6,581,257	3,032,892	4,873,119	41,034,965
100																
101																
102		**Depreciation Expense**														
103		Original cost depreciation		33,970,088	PSTD_PLANT	2,238,327	23,100,991	699,734	3,416,868	165,934	354,848	86,683	409,825	187,048	316,620	2,993,211
104		Cost of removal		2,500,000	PSTD_PLANT	164,728	1,700,098	51,496	251,461	12,212	26,115	6,379	30,161	13,766	23,301	220,283
105		Depreciation transferred		(3,344,000)	PSTD_PLANT	(220,340)	(2,274,051)	(68,834)	(336,369)	(16,334)	(34,931)	(8,533)	(40,343)	(18,413)	(31,168)	(294,650)
106		TOTAL DEPRECIATION EXP		33,126,088		2,182,715	22,527,038	682,396	3,331,960	161,812	346,032	84,529	399,643	182,401	308,753	2,918,844
107																

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Table 3c: O&M Expense

		Total Company		ALLOCATION OF TOTAL COSTS										
				R-N RC-1	Res Heat RC-2	Comm'l - N RC-3	Comm'l Heat RC-4	Ind'l - N RC-5	Ind'l Heat RC-6	Muni – N RC-7	Muni Heat RC-8	PHA - N RC-9	PHA Heat RC-10	Non-Firm RC-11 / 22
	Operation and Maintenance Expense													
	Manufactured Gas Production	1,490,391	D. DESIGNDAY	41,091	1,124,214	25,132	198,046	9,173	23,088	5,795	30,952	14,729	18,171	0
	Storage Expenses	9,897,228	D WINTER-3	242,137	6,479,474	193,977	1,206,125	83,779	138,326	34,476	179,743	90,664	105,150	1,163,376
	Distribution Expenses													
870	Operation Supervision and Engrg.													
	Plant related	930,877	Dist_Plant	70,614	624,661	19,803	87,053	4,223	8,677	2,098	9,425	4,164	8,145	92,014
	Op. labor related	930,877	D-O-Labor	87,846	577,842	45,417	152,955	4,345	8,849	2,938	6,837	1,976	6,531	35,540
871	Load Dispatching	1,135,000	E: THRUPUT	31,520	568,961	25,751	115,844	7,491	12,702	3,124	15,434	8,565	9,170	336,437
874	Mains and Services	2,017,958	Main_Serv	148,605	1,365,894	35,819	169,863	9,138	18,806	4,299	21,088	9,606	18,072	216,768
875	Meas. and Reg. Stn. Exp – Gen'l	1,027,183	E: THRUPUT	28,526	514,914	23,305	104,840	6,779	11,496	2,827	13,967	7,752	8,299	304,476
876	Meas. and Reg. Stn. Exp – Ind'l	0												
877	Meas. and Reg. Stn. Exp – City G.	138,226	E: THRUPUT	3,839	69,291	3,136	14,108	912	1,547	380	1,880	1,043	1,117	40,973
878	Meters and House Regulators	4,786,618	Mtr_House-R	501,920	3,048,671	249,201	815,700	20,492	41,476	15,064	29,153	5,968	32,622	26,350
879	Customer Inst. Exp. – gas business	12,174,782	C: METERS	1,247,293	7,576,072	677,224	2,216,732	55,688	112,716	40,937	79,226	16,218	81,066	71,609
880	Other Distribution Exp.	7,399,985	Dist_Plant	561,341	4,985,730	157,421	692,025	33,568	68,981	16,682	74,920	33,102	64,747	731,467
881	Dist'n Rents	0												
885	Maint. Supervision and Engrg.	223,884	D_Maint_Labor	12,100	140,092	5,379	25,170	1,187	2,446	632	2,851	1,344	1,996	30,688
886	Maint. of Structures and Improv.	0												
887	Maint of Mains	5,435,876	MAINS	143,228	3,215,983	103,100	603,931	33,062	68,484	17,036	87,989	44,795	51,918	1,066,350
889	Maint. of M & R Stn. Exp – Gen'l	1,380,821	M&R – Gen'l	36,383	816,924	26,189	153,410	8,398	17,396	4,327	22,351	11,379	13,188	270,874
890	Maint. of M & R Stn. Exp – Ind'l	0	M&R – Ind'l											
891	Maint. of M & R Stn. Exp – City G.	561,866	M&R – City G	14,804	332,412	10,657	62,424	3,417	7,079	1,761	9,095	4,630	5,366	110,221
892	Maint of Services	1,304,826	Services	166,217	1,009,606	21,357	69,908	3,605	7,297	1,291	5,129	1,050	10,803	8,561
893	Maint of Meters and House Reg.	1,422,121	Mtr_House-R	149,122	905,771	74,038	242,347	6,088	12,323	4,475	8,662	1,773	9,692	7,829
894	Other Distribution Maint.	0	Dist_Plant											
	Total Distribution Expense	40,870,599		3,203,358	25,732,824	1,477,797	5,526,312	198,394	400,075	117,872	388,007	153,366	322,734	3,350,160
	Total P.S.-1 O. Expense	52,258,518		3,486,586	33,336,511	1,696,907	6,930,483	271,346	561,490	158,143	598,702	258,759	446,055	4,513,536

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154	***Customer Accounts Expenses***													
155	901a Supervision – cust. svc.	288,803	C: CUSTOMERS	39,604	240,555	3,392	11,105	226	458	205	322	66	2,574	297
156	901b Supervision – collection	191,084	C: CUST-Collect	38,559	143,955	2,365	5,759	70	151	0	0	0	205	0
157	902a Meter Reading – direct	580,524	C: METER-direc	82,064	498,460	0	0	0	0	0	0	0	0	0
158	902b Meter Reading – allocated	1,635,879	C: METER-Reac	0	0	302,484	890,109	20,155	40,764	18,285	28,674	5,870	229,510	0
159	903 Customer Records and Collection	27,848,133	C: COLLECTION	4,260,005	22,055,054	279,769	899,877	16,861	38,103	13,008	20,399	4,176	247,025	13,856
160	904 Uncollectible Accounts	65,297,000	C: WRITEOFF-$	5,566,077	53,281,549	963,204	3,446,727	54,111	477,554	0	0	0	1,507,778	0
161	905 Misc. Customer Accounts	0												
162	Total Customer Accounts Exp.	95,851,403		9,986,309	76,219,573	1,551,214	5,353,577	91,424	557,059	31,498	49,394	10,112	1,987,092	14,153
163														
164	***Customer Service and Info. Expenses***													
165	906 Cust Svc. and Info. Exp.	0												
166	908a Customer Assistance – direct	6,144,978	C DIR_908	231,125	3,603,854	64,822	212,178	466,875	949,029	0	0	0	0	615,095
167	908b Customer Assistance	2,554,022	C: CUSTOMERS	336,516	2,056,149	28,997	94,916	1,932	3,911	1,753	2,749	563	22,002	2,535
168	909 Inform, Instruct. Advertising	0												
169	Total Cust Svc. and Info. Exp.	8,699,000		569,641	5,660,003	93,819	307,094	470,807	952,940	1,753	2,749	563	22,002	617,630
170														
171	***Sales Expenses***													
178	Total Sales Expense	0												
179														
180	Total Customer Accounts & Services	104,550,403		10,555,950	81,879,576	1,645,033	5,660,671	562,231	1,509,999	33,251	52,143	10,674	2,009,093	631,782
181														
182	***Administrative & General Expenses***													
183	920 A & G Salaries													
184	Plant related	3,447,000	PSTD_PLANT	227,127	2,344,095	71,003	346,715	16,838	36,007	8,796	41,586	18,980	32,128	303,726
185	Labor related	3,447,000	LABOR_1	330,937	2,307,036	107,590	397,845	19,611	40,235	8,161	25,041	9,708	37,470	163,565
186	921 Office Supplies and Expenses													
187	Plant related	2,428,500	PSTD_PLANT	160,017	1,651,475	50,024	244,270	11,862	25,368	6,197	29,298	13,372	22,635	213,983
188	Labor related	2,428,500	LABOR_1	233,154	1,625,366	75,800	280,151	13,817	28,346	5,750	17,642	6,840	26,399	115,236
189	922 Admin. Exp. Transferred (credit)	—												
190	Construction OH	(5,334,000)	T_LABOR	(501,172)	(3,573,841)	(162,614)	(609,871)	(30,050)	(61,803)	(12,694)	(40,489)	(15,998)	(57,412)	(268,057)
191	A & G OH	(6,815,000)	T_A&G	(551,669)	(4,597,832)	(176,547)	(735,830)	(36,031)	(75,368)	(16,763)	(65,863)	(28,359)	(68,801)	(461,936)
192	923 Outside Services Employed	4,366,000	T_A&G	353,424	2,945,581	113,104	471,406	23,083	48,284	10,739	42,195	18,168	44,077	295,937
193	926 Employee Pensions and Benefits	30,545,000	T_LABOR	2,869,948	20,465,500	931,203	3,492,407	172,080	353,914	72,693	231,857	91,810	328,786	1,535,020
194	924 Property Insurance	1,250,000	PSTD_PLANT	82,364	850,049	25,748	125,731	6,108	13,057	3,190	15,080	6,883	11,651	110,141
195	925a Inj. & Damages – Workers Comp.	1,816,000	LABOR_1	174,349	1,215,427	56,682	209,493	10,332	21,197	4,300	13,193	5,115	19,741	86,172
196	925b Injuries & Damages – Other	1,628,000	PSTD_PLANT	107,271	1,107,104	33,534	163,752	7,952	17,006	4,154	19,641	8,964	15,174	143,448
197	932 Maintenance of General Plant	129,000	GENL_PLANT	10,062	86,576	2,899	12,441	605	1,245	294	1,269	555	1,165	11,889
198	927 Franchise Requirements	1,362,000	PSTD_PLANT	89,744	926,213	28,055	136,996	6,653	14,227	3,475	16,432	7,500	12,695	120,010
199	928 Regulatory Commission Expense	2,525,000	T_PLANT	169,095	1,715,098	52,432	253,045	12,290	26,197	6,382	29,962	13,633	23,469	223,396
200	930 Misc. General Expenses	9,698,000	PSTD_PLANT	639,012	6,595,020	199,764	975,469	47,372	101,304	24,747	117,000	53,400	90,391	854,521
201	931 Rents	228,000	T_PLANT	15,289	154,868	4,734	22,849	1,110	2,365	576	2,705	1,231	2,119	20,172
202	Total Admin. & General Exp.	53,149,000		4,609,246	35,636,973	1,426,975	5,644,818	276,824	568,986	124,019	457,557	190,839	530,191	3,682,975
203														
204	TOTAL O&M EXPENSE	209,057,921		18,651,781	150,853,061	4,768,915	18,235,769	1,110,201	2,640,474	315,412	1,108,402	460,272	2,985,340	8,828,293
205														
206	A&G_Salaries	8,894,000		558,064	4,651,131	178,593	744,360	36,448	76,242	16,957	66,627	28,688	69,598	467,291

OCA Exhibit 2-C

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R
212	Table 3d: O&M Labor			Total		ALLOCATION OF TOTAL LABOR COSTS										
213				Company		RN	RH	GSN	GSH	INT	HV-F	HV-I	A / C	GL	AF	T5
214																
215		**Operation and Maintenance Exp. – Labor**														
218		***Manufactured Gas Production***		1,021,519	D. DESIGNDAY	28,164	770,540	17,225	135,741	6,287	15,825	3,972	21,215	10,095	12,455	0
219																
220		***Storage Expenses***		5,050,390	D. WINTER-3	123,558	3,306,387	98,983	615,485	32,545	70,586	17,593	91,720	46,264	53,656	593,651
221																
222		***Distribution Expenses***														
223	870	Operation Supervision and Engrg.		1,831,753	0											
224		Plant related		915,877	Dist_Plant	69,476	614,595	19,484	85,650	4,155	8,538	2,085	9,273	4,097	8,014	90,532
225		Op. labor related		915,877	D-O-Labor	86,431	568,531	44,685	150,490	4,275	8,510	2,891	6,727	1,944	6,425	34,967
226	871	Load Dispatching		772,000	E: THRUPUT	21,439	386,994	17,515	78,795	5,095	8,640	2,125	10,498	5,826	6,237	228,837
227	874	Mains and Services		147,958	Main_Serv	10,896	100,148	2,626	12,454	670	1,379	315	1,546	704	1,325	15,894
228	875	Meas. and Reg. Stn. Exp – Gen'l		624,183	E: THRUPUT	17,334	312,895	14,161	63,708	4,120	6,986	1,718	8,488	4,710	5,043	185,021
229	876	Meas. and Reg. Stn. Exp – Ind'l		0	0											
230	877	Meas. and Reg. Stn. Exp – City G.		115,226	E: THRUPUT	3,200	57,761	2,614	11,761	760	1,290	317	1,567	870	931	34,155
231	878	Meters and House Regulators		4,063,468	Mtr_House-R	426,092	2,588,086	211,552	692,466	17,396	35,210	12,788	24,749	5,066	27,694	22,369
232	879	Customer Inst. Exp. – gas business		11,609,884	C: METERS	1,189,419	7,224,550	645,802	2,113,878	53,104	107,486	39,038	75,550	15,486	77,306	68,286
233	880	Other Distribution Exp.		1,766,755	Dist_Plant	134,021	1,185,574	37,585	165,222	8,014	16,469	3,983	17,887	7,903	15,458	174,639
234	881	Dist'n Rents		0	0											
235	885	Maint. Supervision and Engrg.		210,884	D_Maint_Labor	11,397	131,957	5,087	23,709	1,118	2,304	595	2,685	1,266	1,880	28,906
236	886	Maint. of Structures and Improv.		0	0											
237	887	Maint of Mains		3,404,876	MAINS	89,714	2,014,399	64,579	378,285	20,709	42,896	10,671	55,114	28,058	32,520	667,931
238	889	Maint. of M & R Stn. Exp – Gen'l		862,821	M&R – Gen'l	22,734	510,464	16,365	95,880	5,248	10,870	2,704	13,966	7,110	8,241	169,259
239	890	Maint. of M & R Stn. Exp – Ind'l		0	M&R – Ind'l											
240	891	Maint. of M & R Stn. Exp – City G.		339,866	M&R – City G	8,955	201,072	6,446	37,759	2,067	4,282	1,065	5,501	2,801	3,246	66,671
241	892	Maint of Services		978,826	Services	124,689	757,365	16,021	52,442	2,705	5,474	968	3,848	788	8,104	6,422
242	893	Maint of Meters and House Reg.		1,098,721	Mtr_House-R	115,211	699,792	57,202	187,236	4,704	9,521	3,458	6,892	1,370	7,488	6,046
243	894	Other Distribution Maint.		0	Dist_Plant											
244		Total Distribution Expense		27,827,221		2,331,008	17,354,182	1,161,703	4,149,715	134,140	269,853	84,700	244,091	87,979	209,912	1,799,937
245																
246		Total P.S.T.D. Expense		33,899,130		2,482,730	21,431,089	1,277,912	4,900,922	172,972	356,264	106,265	357,025	144,339	276,023	2,393,588
247																

	Customer Accounts Expenses												
901a	Supervision – cust. svc.	281,114	C: CUSTOMER:	37,259	228,315	3,192	10,447	213	430	193	303	82	2,422	279
901b	Supervision – collection	179,753	C: CUST-Collect	36,278	135,433	2,225	5,418	66	142	0	0	0	193	0
902a	Meter Reading – direct	403,989	C: METER-direc	57,109	346,880	0	0	0	0	0	0	0	0	0
902b	Meter Reading – allocated	1,138,414	C: METER-Reac	0	0	210,500	689,020	14,028	28,389	12,724	19,954	4,085	159,717	0
903	Customer Records and Collection	15,703,133	C: COLLECTION	2,402,151	12,436,505	157,757	507,427	9,508	21,486	7,335	11,503	2,355	139,294	7,813
904	Uncollectible Accounts	0	C: WRITEOFF-$	0	0	0	0	0	0	0	0	0	0	0
905	Misc. Customer Accounts	0	0											
	Total Customer Accounts Exp	17,706,403		2,532,786	13,145,132	373,674	1,212,312	23,812	50,447	20,252	31,759	6,502	301,625	8,092
	Customer Service and Info. Expenses												
906	Cust Svc. and Info. Exp.	0	0											
908a	Customer Assistance – direct	1,412,095	C: DIR_908	53,112	828,153	14,896	48,758	107,746	218,084	0	0	0	0	141,347
908b	Customer Assistance	586,905	C: CUSTOMER:	77,790	472,496	6,663	21,811	444	899	403	632	129	5,056	582
909	Inform, Instruct. Advertising	0	0											
	Total Cust Svc and Info Exp	1,999,000		130,901	1,300,649	21,559	70,569	108,190	218,982	403	632	129	5,056	141,929
	Sales Expenses												
	Total Sales Expense	0											
	Total Customer Accounts & Services	19,705,403		2,663,697	14,445,781	395,233	1,282,882	132,002	269,429	20,655	32,391	6,631	306,680	150,021
	Administrative & General Expenses												
920	A & G Salaries	—											
	Plant related	3,394,800	PSTD_PLANT	223,687	2,308,597	69,928	341,465	16,583	35,462	8,663	40,956	18,693	31,641	299,126
	Labor related	3,394,800	LABOR_1	325,926	2,272,099	105,961	391,623	19,314	39,625	8,038	24,662	9,561	35,903	161,088
921	Office Supplies and Expenses	—												
	Plant related	0	PSTD_PLANT	0	0	0	0	0	0	0	0	0	0	0
	Labor related	0	LABOR_1	0	0	0	0	0	0	0	0	0	0	0
922	Admin. Exp. Transferred (credit)	—												
	Construction OH	0	T_LABOR	0	0	0	0	0	0	0	0	0	0	0
	A & G OH	0	T_A&G	0	0	0	0	0	0	0	0	0	0	0
923	Outside Services Employed	0	T_A&G	0	0	0	0	0	0	0	0	0	0	0
926	Employee Pensions and Benefits	200,000	T_LABOR	18,782	134,002	6,097	22,867	1,127	2,317	478	1,518	600	2,153	10,051
924	Property Insurance	86,000	PSTD_PLANT	5,867	58,483	1,771	8,650	420	898	219	1,038	474	802	7,578
925a	Inj. & Damages – Workers Comp.	225,154	LABOR_1	21,618	150,693	7,028	25,974	1,281	2,628	533	1,836	634	2,448	10,684
925b	Injuries & Damages – Other	201,848	PSTD_PLANT	13,300	137,263	4,158	20,303	986	2,108	515	2,435	1,111	1,881	17,785
932	Maintenance of General Plant	66,486	GENL_PLANT	5,186	44,621	1,494	6,412	312	642	151	654	286	800	6,128
927	Franchise Requirements	0	PSTD_PLANT	0	0	0	0	0	0	0	0	0	0	0
928	Regulatory Commission Expense	476,000	T_PLANT	31,877	323,321	9,884	47,703	2,317	4,938	1,203	5,848	2,570	4,424	42,113
930	Misc. General Expenses	0	PSTD_PLANT	0	0	0	0	0	0	0	0	0	0	0
931	Rents	0	T_PLANT	0	0	0	0	0	0	0	0	0	0	0
	Total Admin & General Exp	8,045,886		682,871	5,395,854	208,814	838,885	41,051	84,466	18,700	71,379	30,112	78,743	594,211
	TOTAL O&M LABOR	61,649,619		5,829,298	41,272,724	1,881,959	7,022,688	346,026	710,159	145,620	480,795	181,082	661,446	3,137,821
	D-O-Labor	19,099,474		1,802,401	11,856,007	931,855	3,138,283	89,159	177,459	60,284	140,284	40,546	133,994	729,200
	D_Maint_Labor	6,685,110		361,303	4,183,092	160,613	751,583	35,432	73,043	18,866	85,121	40,127	59,599	916,331
	LABOR_1 (all exc. A&G)	53,604,533		5,146,427	35,876,871	1,673,145	6,183,803	304,974	625,693	128,920	389,416	150,970	582,704	2,543,610
	T_A&G	6,789,600		549,613	4,580,696	175,889	733,088	35,897	75,087	16,701	85,618	28,254	68,544	460,214
	T_LABOR (excl. P & B)	61,449,619		5,773,686	41,171,949	1,873,370	7,025,932	346,187	711,995	146,242	466,445	184,299	661,403	3,088,112

Table 4: External Allocation Factors

			F	G	H	I	J	K	L	M	N	O	P	Q	S
			Total Company		R-N RC-1	Res Heat RC-2	Comm'l - N RC-3	Comm'l Heat RC-4	Ind'l - N RC-5	Ind'l Heat RC-6	Muni – N RC-7	Muni Heat RC-8	PHA - PHA RC-9	PHA - GS RC-10	Non-Firm RC-11 / 22
7	DESIGNDAY	Design day sales	767,200		21,152	578,705	12,937	101,947	4,722	11,885	2,983	15,933	7,582	9,354	0
8			1.000000		0.027570	0.754308	0.016863	0.132882	0.006155	0.015491	0.003888	0.020768	0.009883	0.012192	0.000000
9	PEAKDEMAND	Peak day	[redacted]		21,152	578,705	12,937	101,947	4,722	11,885	2,983	15,933	7,582	9,354	[redacted]
10			1.000000		0.024926	0.681957	0.015245	0.120136	0.005564	0.014006	0.003515	0.018778	0.008935	0.011023	0.095917
11			0												
12	P & A Demand	Peak & avg. demand 50 / 50 weighting	1.000000		0.026349	0.591622	0.018987	0.111101	0.006082	0.012599	0.003134	0.016187	0.008241	0.009551	0.196169
14	THRUPUT	Throughput @ sendout	[redacted]		2,395,245	43,235,484	1,956,807	8,803,053	569,233	965,257	237,408	1,172,801	650,879	698,807	[redacted]
15			1.000000		0.027771	0.501287	0.022688	0.102068	0.006600	0.011192	0.002753	0.013598	0.007547	0.008079	0.296421
16	COM-1	Annual sales @ meters	[redacted]		2,309,018	41,679,007	1,886,362	8,486,143	548,741	930,508	228,861	1,130,580	627,447	671,722	[redacted]
17			1.000000		0.033533	0.605297	0.027395	0.123243	0.007969	0.013514	0.003324	0.016419	0.009112	0.009755	0.150439
18	COM-1_X-INT	Annual firm sales	58,498,387		2,309,018	41,679,007	1,886,362	8,486,143	548,741	930,508	228,861	1,130,580	627,447	671,722	0
19			1.000000		0.039471	0.712481	0.032246	0.145066	0.009380	0.015907	0.003912	0.019327	0.010726	0.011483	0.000000
20	WINTER-3	Sales in three peak months	[redacted]		812,450	21,740,792	850,859	4,046,951	213,999	464,131	115,680	603,098	304,208	352,814	[redacted]
21			1.000000		0.024465	0.654676	0.019599	0.121865	0.006444	0.013976	0.003483	0.018161	0.009161	0.010624	0.117546
22	Through_X-GTS	Throughput – ex. GTS	[redacted]		2,395,245	43,235,484	1,956,807	8,803,053	569,233	965,257	237,408	1,172,801	650,879	698,807	[redacted]
23			1.000000		0.033533	0.605297	0.027395	0.123243	0.007969	0.013514	0.003324	0.016419	0.009112	0.009755	0.150439
24															
25	CUSTOMERS	Number of customers	512,891		67,980	412,910	5,823	19,061	388	785	352	552	113	4,418	509
26			1.000000		0.132542	0.805063	0.011354	0.037163	0.000756	0.001531	0.000686	0.001076	0.000220	0.008615	0.000992
27	BILL-CUST	Number of bills	[redacted]		815,757	4,954,919	69,878	228,729	4,656	9,424	4,224	6,624	1,356	53,020	[redacted]
28			1.000000		0.132542	0.805063	0.011354	0.037163	0.000756	0.001531	0.000686	0.001076	0.000220	0.008615	0.000992
29	CUST_Non-Res	Customers – Non-Res	27,583		0	0	5,823	19,061	388	785	352	552	113	0	509
30			1.000000		0.000000	0.000000	0.211112	0.691026	0.014067	0.028471	0.012761	0.020012	0.004097	0.000000	0.018453
31	CUST_Res	Customers – Residential	485,308		67,980	412,910								4,418	
32			1.000000		0.140075	0.850820	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.009104	0.000000
33	SERVICES	Services – est. repl. cost	[redacted]		134,056,067	814,258,356	17,224,927	58,381,699	2,907,672	5,885,288	1,041,216	4,136,688	846,822	8,712,953	[redacted]
34			1.000000		0.127387	0.773748	0.016368	0.053577	0.002763	0.005592	0.000989	0.003931	0.000805	0.008279	0.006561
35	METERS	Meters – est. repl. cost	[redacted]		14,479,691	87,949,836	7,861,824	25,733,811	646,476	1,308,504	475,233	919,729	188,278	941,105	[redacted]
36			1.000000		0.102449	0.622276	0.055625	0.182076	0.004574	0.009258	0.003362	0.006507	0.001332	0.006659	0.005882
37	METER-direct	Direct to a/c 902	580,524		82,064	498,460									
38			1.000000		0.141382	0.858638	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39	METER-Read	Cust. ex. Res. Non-firm	31,493				5,823	19,061	388	785	352	552	113	4,418	
40			1.000000		0.000000	0.000000	0.184906	0.605246	0.012320	0.024937	0.011177	0.017528	0.003588	0.140298	0.000000
41	DIR_908		[redacted]		231,125	3,603,854	84,822	212,178	468,875	949,029	0	0	0	0	[redacted]
42			1.000000		0.037812	0.586471	0.010549	0.034529	0.076302	0.154440	0.000000	0.000000	0.000000	0.000000	0.100097
43	COLLECTION	Special study	[redacted]		4,260,005	22,055,054	279,789	899,877	16,861	38,103	13,008	20,399	4,176	247,025	[redacted]
44			1.000000		0.152973	0.791976	0.010046	0.032314	0.000605	0.001368	0.000467	0.000733	0.000150	0.008870	0.000498
45	WRITEOFF-$	Special study	33,632,301		2,866,900	27,443,544	496,114	1,775,294	27,871	245,972	0	0	0	776,606	
46			1.000000		0.085242	0.815988	0.014751	0.052785	0.000829	0.007314	0.000000	0.000000	0.000000	0.023091	0.000000
47	CUST_Collect	Special study	1,116,747		225,374	841,398	13,824	33,662	412	881	0	0	0	1,196	
48			1.000000		0.201813	0.753437	0.012379	0.030143	0.000369	0.000789	0.000000	0.000000	0.000000	0.001071	0.000000

OCA STATEMENT NO. 2-S

5/23/01

RS Phila, PA

BEFORE THE PENNSYLVANIA
PUBLIC UTILITY COMMISSION
DOCKET NO. R-00006042

IN THE MATTER OF THE FILING OF
PHILADELPHIA GAS WORKS
CONCERNING A
BASE RATE INCREASE

SURREBUTTAL TESTIMONY OF
RALPH E. MILLER
ON BEHALF OF THE
OFFICE OF CONSUMER ADVOCATE

MAY 2001

Prepared Surrebuttal Testimony of Ralph E. Miller

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

A. My name is Ralph E. Miller. I am an independent consulting economist. My office is at 5502 Western Avenue, Chevy Chase, Maryland 20815.

Q. ARE YOU THE SAME RALPH E. MILLER WHO SUBMITTED OTHER TESTIMONY IN THIS PROCEEDING?

A. Yes, I am. My prepared initial testimony is OCA Statement No. 2, and my prepared rebuttal testimony is OCA Statement No. 2-R.

Q. WHAT IS THE PURPOSE OF THIS SURREBUTTAL TESTIMONY?

A. I am responding to the rebuttal testimony of PGW witness Howard S. Gorman and OSBA witness Brian Kalcic. My response to Mr. Gorman concerns his rebuttal testimony relating to the allocation of administrative and general (A&G) costs. My response to Mr. Kalcic relates to class revenue responsibilities.

PGW Witness Gorman

Q. WHAT ARE PGW'S ADMINISTRATIVE AND GENERAL COSTS?

A. PGW's budgeted total A&G outlays are $65 million, but only $53 million is charged to test year A&G expense, as I shall explain. The largest single component of A&G outlays is $30 million for employee pensions and benefits.

Q. WHY DOES PGW CHARGE ONLY $53 MILLION OF A&G OUTLAYS TO OPERATING EXPENSE, IF IT HAS BUDGETED A TOTAL OF $65 MILLION OF A&G OUTLAYS FOR THE TEST YEAR?

A. The reason is that annual operating expenses are the costs of providing gas service in the current year. But PGW's business activities do not relate only to gas service provided in the current year because PGW also engages in the construction of new plant, and the costs of creating new plant investment relate to gas service that will be provided in future years. In accord with standard accounting practices, PGW recognizes the future orientation of new plant investment by charging its plant construction costs to its capital account, rather than to its current operating expenses, and these capital outlays are not included in the test year revenue requirement. PGW's total budgeted A&G outlays of $65 million include $12 million of budgeted A&G costs that PGW expects to allocate to construction, leaving only $53 million to be charged to operating expense. The $12 million of A&G costs that PGW allocates to construction appear in account 929, which is a credit for "Duplicate Charges." The allocation of this credit is one of the issues addressed in Mr. Gorman's rebuttal.

Q. WHAT IS THE ISSUE ABOUT THE ALLOCATION OF THESE A&G CREDITS FOR DUPLICATE CHARGES?

A. In his class cost of service study, which he presented in his initial direct testimony, Mr. Gorman allocated this $12 million of Duplicate Charge credits as though it relates to PGW's construction work in progress (CWIP). In my direct testimony, I stated that these Duplicate Charge credits should instead be allocated the same way as the costs they are reversing, and that those costs are primarily A&G costs, including employee benefits. On rebuttal, Mr. Gorman states that his allocation method is based on the assumption that the costs being reversed by these Duplicate Charges "are similar to the costs for which the construction is being performed", and he claims that this assumption is a reasonable one.

Q. WHAT IS YOUR RESPONSE?

A. Mr. Gorman's rebuttal indicates incomplete comprehension of what the credit for Duplicate Charges represents, or how it was developed. An explanation of these Duplicate Charges shows clearly that my approach is the correct one.

Q. CAN YOU EXPLAIN HOW THE DUPLICATE CHARGES WERE DEVELOPED AND WHAT THEY REPRESENT?

A. Yes, but it is simplest to provide this explanation first for the $5.333 million of Duplicate Charges that constitute employee benefits charged to construction. This $5.333 million is almost half of the total Duplicate Charges of $12 million.

PGW's response to question 24 in OCA's second set of discovery requests (OCA II-24) presents the development of this $5.333 million of Duplicate Charges. It shows that PGW's total budgeted payroll for the test year is $99 million, of which $88 million is the directly chargeable labor base. Of this $88 million, $16 million is labor cost that is charged directly to construction. The total amount of labor cost charged directly to operating expense is $61 million, as shown in the last line of the "Labor $" column on page 6 of Mr. Gorman's cost of service study, Exhibit HSG-6, and repeated in the "Total Company" column on line 298 of my cost of service study, OCA Exhibit 2-C, Table 3d. This $61 million of operating expense labor cost does not include any of the $16 million of labor cost charged to construction.

OCA II-24 also shows $29 million of employee benefits budgeted for the test year. This amount corresponds to the $30,545,000 of total employee pensions and benefits in account 926, which Mr. Gorman and I both use our class cost of service studies. This $30,545,000 relates to all of PGW's test year labor, including the $16 million of labor costs charged directly to construction. The credit for $5,333,000 of Duplicate Charges in account 929.100 is the amount of employee pensions and benefits that PGW allocates to the $16 million of labor cost charged to construction. The amount of employee pensions and

benefits chargeable to current operating expense is the total pension and benefits expense of $30,545,000 less the credit of $5,333,000, or $25,212,000. This net amount is the pensions and benefits expense applicable to the $61 million of labor cost charged to PGW's test year operating expense. This net amount is the pension and benefits expense that should be allocated across PGW's labor costs charged to operating expense.

Q. HOW DOES YOUR COST OF SERVICE STUDY ACHIEVE A PROPER ALLOCATION OF THE NET AMOUNT OF EMPLOYEE BENEFITS CHARGEABLE TO OPERATING EXPENSES?

A. I allocate the total pension and benefits expense of $30,545,000 on line 193 in my cost of service study, OCA Exhibit 2-C, Table 3c, and I allocate the Duplicate Charge credit of $5,333,000 at line 190. I allocate both entries in proportion to the total amount of labor cost charged directly to PGW's operating expense, as indicated by the factor T_LABOR. The result of these two separate allocations is mathematically identical to allocating the net amount of $25,211,000, which is the amount of pension and benefits expense chargeable to operating expenses, according to the factor T_LABOR.

Q. HOW DOES MR. GORMAN'S REBUTTAL INDICATE A MISUNDERSTANDING OF THE DUPLICATE CHARGES AT ISSUE HERE?

A. Mr. Gorman claims that he "did not have the detailed data to determine which costs were reversed" by these credits for Duplicate Charges. However, one does not need detailed data to determine that the costs being reversed are employee benefit costs and other A&G expenses which are charged initially to operating expense, but which are properly charged instead to PGW's plant accounts because they are construction overheads, as I have explained in some detail. The CWIP allocation factor that Mr. Gorman used to allocate these credits in his own cost of service study could not possibly have any relationship to his allocation of the

costs being reversed, because he did not use the CWIP factor in developing the allocation of any of the amounts charged to employee benefits or other A&G costs.

Q. HAVE YOU ANY FURTHER COMMENTS ABOUT MR. GORMAN'S REBUTTAL ON THIS ISSUE?

A. Yes. The essence of Mr. Gorman's claim is that he did not know which costs are being reversed by the credit for Duplicate Charges, and he made an assumption that seemed to him to be reasonable in relation to that lack of information. However, my direct testimony states explicitly that the costs being reversed "are primarily A&G salaries and pensions and benefits." (OCA Statement No. 2, page 22.) I used this additional information to guide the allocation of the credits for the Duplicate Charges. Nowhere in his rebuttal to my allocation of these credits does Mr. Gorman challenge the correctness of the additional information that I presented, nor does he dispute my claim that this additional information is the proper guide to the allocation of these credits. Instead he asserts that an unsupported assumption he made because he lacked this information is superior to the analysis that I made using the additional information which I presented.

Q. MR. GORMAN ALSO DISPUTES YOUR ALLOCATION OF A&G SALARIES AND OFFICE EXPENSES IN PART ON THE BASIS OF PLANT RATHER THAN LABOR, WHICH IS THE WAY HE ALLOCATES ALL A&G SALARIES AND OFFICE EXPENSE. DO YOU HAVE A RESPONSE?

A. Yes. Mr. Gorman claims that his allocation reflects PGW's business because direct labor costs reflect PGW's business. He then states that my use of plant investment to allocate some A&G costs is valid only if there are "A&G costs incurred to manage assets without having direct labor involved;" and he adds that "this is not the case for PGW." Putting aside for the moment the question whether my method is valid only if PGW incurs some A&G costs to manage

assets without direct labor being involved, the fact is that PGW does incur some A&G costs to manage assets without direct labor being involved. Specifically, PGW's plant and general accounting costs and its treasury activity costs are costs incurred to manage (or finance) PGW's assets, and these plant accounting and treasury costs are all included in A&G expense. None of these plant accounting and treasury costs has any direct labor component because the direct costs of performing these activities are charged to A&G salaries in account 920, not to any of the O&M accounts 700-919, and the direct labor in accounts 700-919 is the way Mr. Gorman allocates all of PGW's A&G salaries and office expense. Plant accounting costs might arguably be related to construction outlays and to depreciation expense, but the direct labor component of construction outlays is not included in O&M expense, and depreciation does not have a labor cost component. By allocating all A&G salaries in proportion only to the direct labor costs in O&M accounts 700-919, Mr. Gorman has chosen an allocation factor which excludes all of the things to which plant accounting and treasury costs might reasonably be related.

Q. MR. GORMAN MENTIONS THAT FERC GENERALLY ACCEPTS AN ALLOCATION OF A&G EXPENSE BASED ON DIRECT LABOR COSTS. HAVE YOU A RESPONSE?

A. Yes. FERC's use of direct labor to allocate A&G salaries is not relevant to PGW because the situation of interstate pipelines is very different from that of gas distribution companies, including PGW. As I explained in my direct testimony, the major problem in using the labor allocator is that it overemphasizes the customer accounts function, which is more than one-third of the direct labor allocator, and it gives too little weight to the distribution and storage functions that use much more plant than labor. This distortion is a problem because customer accounts costs are allocated almost entirely to the residential class, whereas distribution and storage costs are

not. This distortion does not arise with interstate pipelines because their customer accounts expense is a much smaller of their other direct labor costs. Further, even if the use of direct labor does cause some overweighting of customer accounts, it is much less of a problem for interstate pipelines because their customer accounts expense is allocated in much the same way as their other costs. The decreased importance of the customer accounts function and the similarity of its allocation to the pipelines' other costs are both due to the absence of a separate class of numerous small customers, which is characteristic only of the gas distribution business but not of interstate pipelines.

OSBA Witness Kalcic

Q. AT PAGE 4 OF HIS REBUTTAL, MR. KALCIC STATES THAT OSBA REQUESTED SOME INFORMATION ABOUT YOUR COST OF SERVICE STUDY, BUT THAT IT WAS NOT AVAILABLE WHEN HE PREPARED HIS REBUTTAL. HAVE YOU A COMMENT ON THIS MATTER?

A. Yes. Mr. Kalcic's factual statements are correct as far as they go, but they omit some important information. My response was provided on Tuesday, May 8, which I understand to be timely under the procedural rules for this proceeding because OSBA's interrogatory was filed on April 24, but May 8 also happens to be the date when rebuttal testimony was due to be filed. There was no improper delay on my part, as Mr. Kalcic's rebuttal appears to suggest.

Q. DOES THIS DISCOVERY ISSUE SHED ANY FURTHER LIGHT ON THE SUBSTANTIVE QUESTIONS BETWEEN YOU AND MR. KALCIC?

A. Yes. Mr. Kalcic claims he could not make a proper comparison between my cost of service study and PGW's because PGW's study is presented only at the Company's proposed revenue requirement, whereas mine is at present rates. I am somewhat sympathetic with Mr. Kalcic

and his problem in this regard, as I agree generally with OTS witness Paul J. Metro that PGW's study does not contain all of the elements of a traditional cost of service study. But if Mr. Kalcic could not determine how PGW would allocate its own costs at present rates, so as to compare the Company's allocations to mine, then this lack of information indicates that it would be a mistake to rely on the Company's cost of service study to support a major realignment of class revenue responsibilities in the present proceeding. In view of the problems that several parties -- including Mr. Kalcic -- have had in applying PGW's cost of service study to an analysis of the class revenue requirements issue, it is appropriate to move cautiously in area at this time. That is one reason why it is appropriate to make the relatively modest shift in class revenue responsibilities proposed by the Company, as opposed to the much larger changes recommended by Mr. Kalcic and the still more radical proposal of Mr. Richard A. Baudino on behalf of the industrial and commercial customer group. Perhaps in a future proceeding, after the special issues related to PGW's situation as a municipal utility have been addressed, the cost of service study will appear in a form that can be used as a more reliable guide.

Q. DOES THIS CONCLUDE YOUR PREPARED SURREBUTTAL TESTIMONY?

A. Yes, it does.

00063733

OCA STATEMENT NO. 2-R

5/23/01

RJS Phila PA

BEFORE THE PENNSYLVANIA
PUBLIC UTILITY COMMISSION
DOCKET NO. R-00006042

IN THE MATTER OF THE FILING OF
PHILADELPHIA GAS WORKS
CONCERNING A
BASE RATE INCREASE

REBUTTAL TESTIMONY OF
RALPH E. MILLER
ON BEHALF OF THE
OFFICE OF CONSUMER ADVOCATE

MAY 2001

Prepared Rebuttal Testimony of Ralph E. Miller

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

A. My name is Ralph E. Miller. I am an independent consulting economist. My office is at 5502 Western Avenue, Chevy Chase, Maryland 20815.

Q. ARE YOU THE SAME RALPH E. MILLER WHO SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes, I am. My prepared initial testimony is OCA Statement No. 2.

Q. WHAT IS THE PURPOSE OF THIS REBUTTAL TESTIMONY?

A. I am responding to the direct testimony of OTS witness Paul J. Metro, OSBA witness Brian Kalcic, and Philadelphia Industrial and Commercial Gas Users Group (PICGUG) witness Richard A. Baudino. My response to all three of these witnesses relates only to the issue of class revenue responsibilities.

Q. HOW DO THE POSITIONS OF MESSRS. METRO, KALCIC, AND BAUDINO DIFFER FROM YOUR POSITION ON THIS ISSUE?

A. I accepted PGW's proposed class revenue increases as an appropriate way to achieve the total company increase of $65 million claimed by PGW. If the Commission allows a total company revenue increase less than $65 million, I recommended that all of the class revenue increases proposed by PGW be decreased in the same proportion.

Mr. Metro claims that he also accepts the class revenue increases proposed by PGW as an appropriate way to achieve the Company's claimed total revenue increase of $65 million, at least for the firm gas sales rate schedules. He then recommends a reallocation of revenue responsibilities among the interruptible sales and transportation customer classes. I take no position on this reallocation.

The difference between Mr. Metro's position and mine is that he recommends a different method for determining the class revenue increases if the Commission allows a total company revenue increase less than the $65 million claimed by PGW. The OTS revenue allowance of $44 million in his revised testimony is two-thirds of the $65 million sought by PGW. However, Mr. Metro is recommending that the revenue increases for PGW's non-residential customers be reduced to only one-fourth of the amount proposed by the Company, whereas the residential increase would remain more than three-fourths of the amount sought by the Company.

Messrs. Kalcic and Baudino both recommend that the residential class should bear more of the $65 million increase claimed by PGW than the $51 million proposed by the Company. Mr. Kalcic would increase the residential share to $61 million, and Mr. Baudino would make the residential class responsible for the entire $65 million.

Q. WHY DO YOU DISAGREE WITH MESSRS. METRO, KALCIC, AND BAUDINO ON THE ISSUE OF CLASS REVENUE RESPONSIBILITIES?

A. All three of these witnesses base their class revenue responsibility recommendations on the PGW class cost of service study presented by Company witness Howard Gorman. They claim that PGW's own class cost of service study fails to support the Company's proposed class revenue responsibilities, and they develop alternative class revenue responsibility recommendations purportedly based on the Company's class cost of service study.

I disagree with these alternative class revenue responsibility recommendations because I disagree with the Company's class cost of service study, on which they are based. I demonstrated in my own direct testimony that Mr. Gorman's allocation of several major items in his class cost of service study fails to recognize proper cost causation, and these allocations should be changed. When they are changed, as in OCA Exhibit 2-C accompanying my direct

testimony, it turns out that the cost responsibility of the residential class is much less than the amounts indicated by the Company's cost of service study. If these changes are recognized, as they should be, then there is no longer a sound basis for the extreme disparities in class revenue increases recommended by Mr. Metro, Mr. Kalcic, and Mr. Baudino.

Q. HAVE YOU ANY FURTHER COMMENTS IN RESPONSE TO MESSRS. KALCIC AND BAUDINO?

A. Yes. Each of them alleges that the residential customers are being subsidized by PGW's non-residential customers. Each of them also claims that the amount of this alleged subsidy is the difference between class revenues and the costs allocated to that class in the class cost of service study. I disagree with these views.

The concept of subsidies has a specific meaning in economics, and it is not indicated by the difference between revenues and fully allocated total costs. If the correct concept of subsidies is used, as I shall explain, then PGW's residential class is not being subsidized by non-residential customers, and this conclusion remains correct regardless of what the Commission decides about the disputed cost allocation issues in this proceeding. Even if the Commission accepts the Company's class cost of service study as the proper allocation of PGW's total costs, there is no subsidy of the residential class, because the difference between residential revenues and the costs allocated to the residential class in this study is not a subsidy.

Q. WHAT IS A SUBSIDY?

A. A subsidy occurs if a product is being provided to a customer or a class of customers at a price less than the marginal or incremental cost of serving those customers. Class cost of service studies fail to measure or indicate the presence or absence of subsidies because they are based on total costs, not on marginal or incremental costs, and a gas utility's marginal or incremental costs are much less than its total costs.

Q. WHY DOES THE SUBSIDY CONCEPT FOCUS ON MARGINAL OR INCREMENTAL COSTS, NOT ON TOTAL COSTS?

A. There are two reasons. First, if the prices paid by residential customers exceed the marginal or incremental costs of serving them, then residential customers are making a positive contribution towards the recovery of the utility's fixed (*i.e.*, non-marginal) costs. Because of this positive contribution, the non-residential customers are better off than if the residential class simply disappeared, which would leave the non-residential customers with the full responsibility for paying all of the utility's fixed costs.

Q. WHAT IS THE SECOND REASON WHY THE SUBSIDY CONCEPT FOCUSES ON MARGINAL OR INCREMENTAL COSTS?

A. The second reason is that prices based on marginal costs have a special relationship to the recovery of total costs. This special relationship exists in industries with so-called "constant returns to scale", which occur if the production of all products can be doubled by doubling all of the inputs. Where there are constant returns to scale, if each product is sold at a price equal to its marginal cost, then the total revenue is exactly equal to total cost, neither more nor less. However, if an industry is subject to increasing returns to scale -- as is the gas distribution industry -- then prices equal to marginal costs will not be high enough to recover the industry's total costs. In short, because PGW's gas distribution business is subject to economies of large scale, PGW can recover its total costs only by charging some (or all) customers prices higher than the marginal or incremental cost of serving them.

This necessary divergence between prices and marginal costs does not constitute a subsidy. Class cost of service studies, which are procedures for allocating a utility's total costs, are one of the tools used to determine how far above marginal costs the rates for each customer class should be set. However, even if there are differences between the rates

actually set and the results of a particular class cost of service study, these differences are not subsidies unless the rates for some customers are less than the marginal or incremental costs of serving those customers. Neither Mr. Kalcic nor Mr. Baudino has addressed the marginal costs of serving the residential class, so they cannot properly make claims about subsidies. My own review indicates that PGW's marginal costs are much less than the total costs allocated to the residential class, and less also than the rates paid by residential customers.

Q. HAVE YOU ANY FURTHER COMMENTS ON THIS TOPIC?

A. Yes. One of the reasons for the rate case disputes about class cost of service studies is that there are clear principles for determining the marginal or incremental costs of each product or service in a multi-product enterprise, such as a utility, but there are no clear principles for associating costs other than marginal or incremental costs with specific products or services. For a utility, prices equal only to marginal costs would be too low because the utility and its customers benefit from economies of large scale, and rates must be set high enough to recover the utility's total costs. One of the major issues in utility ratemaking is therefore the determination of how much each customer class should contribute towards the recovery of the utility's fixed costs in excess of its marginal costs. Class cost of service studies are an attempt to address that issue, but they are not a complete solution because the conceptual underpinning of cost allocation does not extend beyond marginal costs.

Q. DOES THIS CONCLUDE YOUR PREPARED REBUTTAL TESTIMONY?

A. Yes, it does.

00063568

OSBA Statement No. 1

5/23/01
RPS
Phila, PA

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	Docket No. R-00006042
	:	
PHILADELPHIA GAS WORKS	:	

Direct Testimony
BRIAN KALCIC

On Behalf of the
Office of Small Business Advocate

Date Served: April 10, 2001

Date Submitted for the Record: _____

Direct Testimony of Brian Kalcic

Q. Please state your name and business address.

A. Brian Kalcic, 225 S. Meramec Avenue, St. Louis, Missouri 63105.

Q. What is your occupation?

A. I am an economist and consultant in the field of public utility regulation, and principal of Excel Consulting. My qualifications are described in the Appendix to this testimony.

Q. On whose behalf are you testifying in this case?

A. I am testifying on behalf of the Office of Small Business Advocate ("OSBA") which is representing the small business customers served by Philadelphia Gas Works ("PGW" or "Company").

Q. What is the subject of your testimony?

A. I have been asked by the OSBA to evaluate the propriety of the Company's proposed revenue distribution and commercial class rate design, and to recommend changes to PGW's proposed rate structure, where appropriate.

I note at the outset that certain of my recommendations and/or schedules reflect PGW's full rate request in this proceeding. Any such reference is intended for comparison purposes only and should not be

construed as a recommendation by the OSBA that the Commission grant the Company's request in whole or in part.

Q. Please summarize your major findings and recommendations.

A. Based upon my analysis of the Company's base rate filing, I find that:

- PGW's proposed class revenue distribution would fail to provide for adequate movement of each class towards its respective cost of service, and should therefore be rejected by the Commission;

- the OSBA's recommended class revenue distribution provides for reasonable movement towards cost without causing undue customer impacts, and should be adopted by the Commission;

- PGW's proposed Commercial class customer charge increase is excessive; and

- the Commission should order PGW to implement a smaller increase to the Commercial class customer charge, consistent with the OSBA's recommended rate design.

The specific details associated with my recommended rate structure are discussed below.

Class Revenue Distribution

Q. Mr. Kalcic, what type of cost-of-service evidence does PGW provide in support of its revenue distribution and rate design proposals?

A. Mr. Howard S. Gorman of R. J. Rudden Associates, Inc. prepared a fully allocated cost-of-service study ("COSS") reflecting PGW's requested (tariff requirement) revenues of approximately $800.4 million. As explained by Mr. Gorman, the COSS determines the cost-based revenue requirement for each customer class, i.e., that portion of PGW's overall requested revenue requirement that is attributable to each class on a cost-causality basis.

In addition to the above analysis, Mr. Gorman also calculated adjusted class revenue requirements that reflect the re-assignment among classes of approximately $58.7 million of Customer Responsibility Program ("CRP") and Senior Citizens ("Senior") discounts. This reassignment was conducted on a volumetric basis in order to reflect the method with which PGW currently recovers such discounts. Importantly, PGW does not claim that a volumetric recovery of CRP and Senior discounts is cost based.

Q. What does Mr. Gorman conclude with respect to PGW's proposed revenue distribution?

A. Based on the results of the Company's COSS, Mr. Gorman concludes that PGW's proposed tariff rates would result in both under- and over-recoveries of cost-based class tariff requirements. In addition, even after re-assigning CRP and Senior discounts as described above, under- and over-recoveries (i.e., class subsidies) would remain. (See PGW - St. 5.0, page 5, lines 14-21.)

Q. Have you summarized the class cost-of-service results arising from the Company's cost analyses?

A. Yes. Schedule BK-1 of OSBA Exhibit No. 1 utilizes PGW's COSS results to calculate: 1) the cost-based rate increases required of each customer class (Schedule BK-1, page 1 of 2), and 2) the adjusted "cost-based" increases required of each customer class under the assumption that the re-assignment of CRP and Senior discounts on a volumetric basis is appropriate (Schedule BK-1, page 2 of 2).

Q. What do the results in Schedule BK-1 indicate?

A. Page 1 of Schedule BK-1 shows that the Residential class would require a base rate increase of 26.65% in order to fully recover its cost of service. All other rate classes would require base rate decreases.

Page 2 of Schedule BK-2 indicates that even allowing for the non-cost based re-assignment of CRP and Senior discounts that is inherent in PGW's current method of discount recovery, the Residential class would still require a "cost-based" increase of 22.34%. With the exception of the Housing Authority class, all remaining rate classes would again require base rate decreases in this proceeding in order to move to cost of service.

Q. Is it important that PGW begin to reduce the significant class subsidies inherent on its system in this proceeding?

A. Very much so. It is my understanding that PGW must file its restructuring case no later than July 1, 2002. In that proceeding, PGW will be required to unbundle its rates to prepare for the advent of customer choice. Ideally, such customer choice should be made available to all PGW customers via cost-based transportation rates.

However, if PGW is to offer cost-based transportation rates to all customer classes, it must first revise its bundled sales service rates to reflect cost-of-service levels. (If PGW's unbundled sales service rates for non-residential customers were to remain above cost, the Company would be exposed to significant revenue erosion as non-residential customers moved to transportation service at rates inherently below their corresponding sales delivery charge levels.) Clearly, PGW's current bundled rates are not cost based, and therefore would not produce cost-based transportation rates if unbundled at this time. In recognition of that fact, the Commission should reject any rate structure proposals in this proceeding that do not provide for a meaningful reduction of PGW's existing subsidies.

Q. Mr. Kalcic, how does PGW propose to recover its requested base revenue increase of $65.0 million from ratepayers?

A. Schedule BK-2 summarizes the Company's proposed class revenue distribution. Under PGW's proposal, individual class increases would range from 0.0% for all interruptible classes to 15.8% for the Residential class.

Q. How did PGW arrive at the proposed revenue distribution shown in Schedule BK-2?

A. As discussed in its response to OTS-RS-9, PGW targeted a combined Residential / Housing Authority class with an increase of 15.64% -- exactly 0.5% above its requested average base rate increase of 15.1% to firm customers. All remaining firm customer classes were then assigned an across-the-board residual increase of 13.44%.[1]

Q. Does the Company claim that its proposed revenue distribution is cost based?

A. Yes. As explained in OTS-RS-9, it is PGW's position that the 15.64% Residential increase "...moves us in the direction of eliminating the under contribution of costs by Residential customers, as identified in Exhibit HSG-1, Schedule 3 of the COS study."

Q. Given the full cost-of-service increases calculated in Schedule BK-1, do you agree that PGW's proposed revenue distribution provides for an adequate movement towards cost-based rates in this proceeding?

A. No. Page 1 of Schedule BK-1 shows that the Residential class requires an increase of 26.65% on a full cost-of-service basis. Schedule BK-2

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[1] Schedule BK-2 reports the Company's proposed increases on an individual class basis rather than the combined basis shown in PGW's Exhibit CW-2.

shows that the Company is proposing a (stand-alone) Residential increase of only 15.8% or 1.04 times the system average increase of 15.1%. This is totally inadequate.

As PGW recognizes, any movement toward cost-based rates in this proceeding will require that the Residential class receive an increase greater than the system average. To hold the Residential increase in this case to just 1.04 times the system average would likely: 1) unreasonably postpone the implementation of cost-based transportation rates on PGW's system, and/or 2) necessitate that the Residential class absorb what might otherwise be considered an unacceptably high increase at a later date.

Q. What is your recommendation with respect to the apportionment of the Company's requested base rate increase in this proceeding?

A. I recommend that PGW's requested increase be distributed as shown in Schedule BK-3.

Q. Please discuss how you derived the OSBA's recommended class revenue distribution.

A. In recognition of the large subsidy currently provided to PGW's residential customers, I first targeted the Residential class with an increase of 18.9% or 1.25 times the system average increase of 15.1%. This multiple (1.25) of the required system average increase was chosen to balance customer impact or gradualism considerations against the need to secure reasonable movement toward class cost of service in this

proceeding. I then adjusted downward the Company's proposed across-the-board increase to the firm non-residential classes. Specifically, each non-residential class received an adjustment in proportion to the level of its respective over-recovery shown in Exhibit HSG-1, Schedule 3, line 19.[2]

Q. Have you calculated the class subsidies that would result from implementing your recommended revenue distribution?

A. Yes. Schedule BK-4 shows the class subsidies that would result under both the PGW (column 1) and OSBA (column 2) class revenue distributions. Note that the subsidies shown in Schedule BK-4 are conservative in that the results are based on the case where all CRP and Senior discounts have been reassigned on a volumetric (non-cost) basis.

As shown in Schedule BK-4, the OSBA's recommended revenue distribution would produce a reduction in class subsidies, and therefore a greater movement toward class cost of service, when compared to PGW's proposal.

Commercial Class Rate Design

2. The only exception being that no non-residential class should receive an overall base rate decrease.

Q. Mr. Kalcic, have you designed a set of rates to implement your recommended increase of $2.96 million to PGW's Commercial class?

A. Yes. Schedule BK-5 presents the OSBA's recommended Commercial class rate design and proof of revenue. As shown in lines 4 and 7 of Schedule BK-5, I recommend a Commercial class customer charge of $17.50 per month, and a commodity charge of $7.1897 per Mcf.

Q. Apart from a lower overall Commercial class revenue target, how does your recommended rate design differ from that of the Company?

A. The major differences relate to the level of the Commercial customer charge. PGW is proposing a Commercial customer charge of $25.00 per month. My recommended rate design incorporates a Commercial customer charge of $17.50 per month.

Q. What is the basis for setting the Commercial customer charge at $17.50 per month in Schedule BK-5?

A. PGW is proposing an increase in the Commercial customer charge of $15.00 or 150% in order to move the rate closer to the Company's customer charge cost benchmark of $106.41.[3] However, such an outcome would give rise to a disproportionate rate impact among smaller commercial customers.

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[3] The $106.41 cost benchmark includes all costs assigned to commercial customers on a customer-related basis, including the customer-related portion of distribution mains.

In order to mitigate the rate impact on smaller commercial customers, I incorporated half of the Company's requested customer charge increase, or $7.50, in my recommended rate design. However, even at a level of $17.50 per month, my recommended customer charge would continue to reflect a substantial increase (75%), particularly when compared to the overall recommended Commercial class increase of 3.9% shown in Schedule BK-3.

Q. How is the OSBA's recommended Commercial commodity charge of $7.1897 per Mcf determined in Schedule BK-5?

A. The commodity charge is determined as the residual necessary to recover the class revenue target, given a customer charge of $17.50 per month. As the current Commercial commodity charge is $7.1200 per Mcf, the OSBA's recommended increase is approximately 1.0%.

Q. Would smaller commercial customers continue to receive a greater than (class) average increase under the OSBA's recommended rate design?

A. Yes. This conclusion follows from the fact that the OSBA's recommended customer charge increase (75%) far exceeds its recommended commodity charge adjustment (1%).

Q. Mr. Kalcic, what is your recommendation in the event that the Commission awards PGW less than its requested amount of base rate relief?

A. In that event, I would recommend that the class increases shown in column 2 of Schedule BK-3 be reduced proportionately. In addition, I would recommend that any lower Commercial class revenue target be obtained by reducing only the OSBA's recommended commodity charge, i.e., the $17.50 customer charge should remain unchanged.

Q. Does this conclude your direct testimony?

A. Yes.

APPENDIX

Qualifications of Brian Kalcic

Mr. Kalcic graduated from Illinois Benedictine College with a Bachelor of Arts degree in Economics in December, 1974. In May, 1977 he received a Master of Arts degree in Economics from Washington University, St. Louis. In addition, he has completed all course requirements at Washington University for a Ph.D. in Economics.

From 1977 to 1982, Mr. Kalcic taught courses in economics at both Washington University and Webster University. The courses that he taught included Microeconomic and Macroeconomic Theory, Labor Economics and Public Finance.

During 1980 and 1981, Mr. Kalcic was a consultant to the Equal Employment Opportunity Commission, St. Louis District Office. His responsibilities included data collection and organization, statistical analysis and trial testimony.

From 1982 to 1996, Mr. Kalcic joined the firm of Cook, Eisdorfer & Associates, Inc.. During that time, he participated in the analysis of electric, gas and water utility rate case filings. His primary responsibilities included cost-of-service and economic analysis, model building, and statistical analysis.

In March 1996, Mr. Kalcic founded Excel Consulting, a consulting practice which offers business and regulatory services.

Mr. Kalcic has previously testified before the state regulatory commissions of Delaware, Kentucky, Maine, Massachusetts, Minnesota, Missouri, New Jersey, New York, Ohio, Oregon, Pennsylvania, Texas, and the Bonneville Power Administration.

PHILADELPHIA GAS WORKS
Comparison of Present Base Revenues
with Class Cost-of-Service Indications
Basis: CRP / Senior Discounts @ Cost Causation

Line	Description	Present		Claimed Cost of Service		Cost-Based Increase [C3/C1]
		Base Revenue	%	Base Revenue	%	
		(1)	(2)	(3)	(4)	(5)
1	Residential	$337,058,237	66.18%	$426,894,577	74.10%	26.65%
2	Commercial	$76,838,316	15.09%	$65,533,389	11.38%	-14.71%
3	Industrial	$10,813,773	2.12%	$8,875,264	1.54%	-17.93%
4	Municipal	$8,877,779	1.74%	$6,354,363	1.10%	-28.42%
5	Housing Authority	$9,337,413	1.83%	$8,237,813	1.43%	-11.78%
6	Interruptible / Trans.	$66,398,862	13.04%	$60,195,846	10.45%	-9.34%
7	Total Billed Rev.	$509,324,380	100.00%	$576,091,252	100.00%	13.11%
	Source:	OSBA-I-3		Exh. HSG-1 Sch. 1, line 18 less GCR $		

PHILADELPHIA GAS WORKS
Comparison of Present Revenues
with Class Cost-of-Service Indications
Basis: CRP / Senior Discounts Reassigned via GCR

Line	Description	Present		Adjusted Cost of Service		"Cost-Based" *
		Base Revenue	%	Base Revenue	%	Increase [C3/C1]
		(1)	(2)	(3)	(4)	(5)
1	Residential	$337,058,237	66.18%	$412,340,363	71.58%	22.34%
2	Commercial	$76,838,316	15.09%	$75,932,854	13.18%	-1.18%
3	Industrial	$10,813,773	2.12%	$10,360,551	1.80%	-4.19%
4	Municipal	$8,877,779	1.74%	$7,719,353	1.34%	-13.05%
5	Housing Authority	$9,337,413	1.83%	$9,542,285	1.66%	2.19%
6	Interruptible / Trans.	$66,398,862	13.04%	$60,195,846	10.45%	-9.34%
7	Total Billed Rev.	$509,324,380	100.00%	$576,091,252	100.00%	13.11%

Source: OSBA-I-3

Exh. HSG-1
Sch. 1, line 22
less GCR $

* Note: Assumes that a volumetric recovery of CRP / Senior discounts reflects cost-causation.

PHILADELPHIA GAS WORKS

Company Proposed Distribution of its
Requested Increase in Total Base Revenue
Basis: Applicable Base Revenues
(Test Year Fiscal 2001)

Line	Classification	Present Applicable Base Revenue	Proposed Increase Amount	Proposed Increase Percent	Ratio* x 100
		1	2	3	4
1	Residential	$323,876,120	$51,212,954	15.8%	104
2	Commercial	$76,828,881	$10,352,456	13.5%	89
3	Industrial	$10,813,853	$1,453,436	13.4%	89
4	Municipal	$8,772,129	$1,151,929	13.1%	87
5	Housing Authority	$9,028,347	$829,353	9.2%	61
6	Subtotal Firm	$429,319,330	$65,000,128	15.1%	100
7	Interruptible / Trans.	$66,398,862	$0	0.0%	
8	TOTAL	$495,718,192	$65,000,128	13.1%	
	Source:	Exh. CW-2 and OCA-VI-1	Exh. CW-2 and OCA-VI-1		

* Note: Ratio of class to system average increase of 15.1%, times 100.

PHILADELPHIA GAS WORKS

OSBA Recommended Distribution of PGW's
Requested Increase in Total Base Revenue
Basis: Applicable Base Revenues
(Test Year Fiscal 2001)

Line	Classification	Present Applicable Base Revenue	OSBA Recommended Increase Amount	Percent	Ratio x 100
		1	2	3	4
1	Residential	$323,876,120	$61,319,397	18.9%	125
2	Commercial	$76,828,881	$2,961,534	3.9%	25
3	Industrial	$10,813,853	$200,726	1.9%	12
4	Municipal	$8,772,129	$0	0.0%	0
5	Housing Authority	$9,028,347	$518,471	5.7%	38
6	Subtotal Firm	$429,319,330	$65,000,128	15.1%	100
7	Interruptible / Trans.	$66,398,862	$0	0.0%	
8	TOTAL	$495,718,192	$65,000,128	13.1%	

Source: Exh. CW-2
and OCA-VI-1

* Note: Ratio of class to system average increase of 15.1%, times 100.

PHILADELPHIA GAS WORKS

PGW Proposed versus OSBA Adjusted
Class Revenue Subsidies *
Basis: CRP / Senior Discounts Reassigned via GCR

Line	Description	PGW Proposed Subsidy	OSBA Adjusted Subsidy
		1	2
1	Residential	($22,042,864)	($11,936,421)
2	Commercial	$11,255,420	$3,864,498
3	Industrial	$1,906,539	$653,829
4	Municipal	$2,205,056	$1,053,127
5	Housing Authority	$472,832	$161,950
6	Subtotal Firm	($6,203,017)	($6,203,017)
7	Interruptible / Trans.	$6,203,017	$6,203,017
8	TOTAL	$0	$0
	Source:	Exh. HSG-1, Sch. 3, line 19	Col. 1 + (OSBA-PGW) class increases

* Note: A positive number indicates that a class is providing a subsidy; a negative number indicates that a class is receiving a subsidy.

PHILADELPHIA GAS WORKS

OSBA Recommended Commercial Class
Tariff Charges and Proof of Revenue

Line	Description	Class Revenue Target	Billing Determinants	
			Bills	Mcf
		1	2	3
	Commercial			
1	Non-Heating		69,876	1,886,354
2	Heating		228,669	8,484,915
3	Total	$79,790,415	298,545	10,371,269
	Customer			
4	Charge ($ / Mo.)		$17.50	
5	Revenue	$5,224,538	$5,224,538	
	Volumetric			
6	Revenue	$74,565,878		$74,565,878
7	Charge ($ / Mcf) *			$7.1897
	Source - Line 3:	Sch. BK-3, line 2	OCA-VI-1	OCA-VI-1

* Note: Commodity charge excludes the GCR of $3.8336 per Mcf.

OSBA Statement No. 2

5/23/01 Phila, PA
RQS

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	Docket No. R-00006042
PHILADELPHIA GAS WORKS	:	

Rebuttal Testimony
BRIAN KALCIC

On Behalf of the
Office of Small Business Advocate

Date Served: May 8, 2001

Date Submitted for the Record: _____

Rebuttal Testimony of Brian Kalcic

Q. Please state your name and business address.

A. Brian Kalcic, 225 S. Meramec Avenue, St. Louis, Missouri 63105.

Q. Have you previously submitted testimony in this proceeding?

A. Yes.

Q. What is the subject of your rebuttal testimony?

A. My rebuttal testimony examines certain rate structure proposals appearing in the direct testimony of OCA witness Ralph E. Miller.

OCA Witness Miller

Q. What class revenue distribution does Mr. Miller recommend be adopted in this proceeding?

A. Mr. Miller accepts the relative class increases contained in PGW's proposed class revenue distribution, and proceeds to apply those relative increases to the OCA's recommended net increase of $21.5 million to develop his proposed class revenue targets.

Q. Does Mr. Miller accept the results of PGW's cost-of-service analysis?

A. No. Mr. Miller has prepared an alternative cost analysis that incorporates several changes to the Company's methodology, including the use of the peak and average ("P&A") demand methodology to allocate the costs associated with distribution mains.

Q. Does Mr. Miller explicitly reference the results of the OCA's cost-of-service study to support his recommended class revenue distribution?

A. No. In fact, Mr. Miller does not offer any specific arguments regarding why he believes the Company's relative class increases are appropriate.

Q. What does the OCA's cost-of-service study show?

A. Based on the cost results summarized in OCA Exhibit ___ (REM-4), Mr. Miller concludes that the Residential class is closer to cost of service than under PGW's study.

Q. Do you have any comments in this area?

A. Yes. Mr. Miller presents the results of the OCA's cost analysis at present rates only. Unfortunately, the OCA's cost study at present rates is difficult to compare with PGW's study since Exhibit HSG-1 is presented at the Company's proposed revenue requirement level. As a result, it is not clear exactly how much closer the Residential class is to cost of service in Mr. Miller's analysis. More importantly, there is no evidence that the OCA's cost methodology improves the results of the

Residential class sufficiently to justify the minimal residential increase recommended by the OCA (and Company).

Q. Please explain.

A. Schedule BK-1, page 1 of 2 shows that, under the Company's cost study, the Residential class could be assigned 100% of the Company's requested $65.0 million increase in this proceeding and remain below cost of service. In effect, the breach that exists between the existing level of residential revenues and cost of service which the OCA's cost methodology must close is enormous. Given that fact, it is not surprising that OCA Exhibit ___ (REM-4) shows that the Residential class remains considerably below cost of service.

At this point, one may conclude that the only class revenue distribution which the OCA's cost analysis would appear to rule out is one that would move the Residential class to full cost of service under the Company's study. Mr. Miller has not established that his recommended residential increase produces a meaningful degree of movement toward cost of service. Nor has Mr. Miller presented any evidence to indicate that the OSBA's (higher) recommended increase to the Residential class would be inappropriate (i.e., move the Residential class above the OCA's cost-of-service benchmark).

As a result, I recommend that the Commission reject the OCA's revenue distribution proposal.

Q. Mr. Kalcic, have you requested further information from the OCA regarding its cost-of-service results?

A. Yes. The OSBA requested that the OCA provide its cost-of-service results at the Company's proposed revenue requirement level in order to quantify the impact of Mr. Miller's recommended changes in methodology on class revenue requirements. However, the OCA's response was not available at the time this rebuttal testimony was prepared. Consequently, the OSBA reserves the right to address the results of the OCA's cost-of-service study in greater detail via surrebuttal testimony.

Q. Does this conclude your rebuttal testimony?

A. Yes.

OSBA Statement No. 3

5/23/01
OPS
Phila, PA

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	Docket No. R-00006042
PHILADELPHIA GAS WORKS	:	

Surrebuttal Testimony
BRIAN KALCIC

On Behalf of the
Office of Small Business Advocate

Date Served: May 15, 2001

Date Submitted for the Record: _____

Surrebuttal Testimony of Brian Kalcic

Q. Please state your name and business address.

A. Brian Kalcic, 225 S. Meramec Avenue, St. Louis, Missouri 63105.

Q. Have you previously submitted direct and rebuttal testimony in this proceeding?

A. Yes.

Q. What is the subject of your surrebuttal testimony?

A. My surrebuttal testimony responds to certain class revenue distribution arguments contained in the rebuttal testimony of OCA witness Ralph E. Miller.

OCA Witness Miller

Q. Does Mr. Miller disagree with the OSBA's recommended class revenue distribution in this proceeding?

A. Yes.

Q. On what basis does Mr. Miller reject your position?

A. Mr. Miller argues, in part, that the OSBA's recommended revenue distribution relies upon an inappropriate cost-of-service methodology --

namely, PGW's which, in Mr. Miller's opinion, fails to properly recognize cost causation. Mr. Miller goes on to state that when costs are properly recognized, as in the OCA's cost methodology, the underlying cost responsibility of the residential class is much less than that depicted in Mr. Gorman's study. In particular, Mr. Miller concludes that if his recommended changes to the Company's cost-of-service methodology were to be adopted, there would no longer be "a sound basis for the extreme disparities in class revenue increases recommended by Mr. Metro, Mr. Kalcic, and Mr. Baudino". (See OCA Statement No. 2-R, pages 2-3.)

Q. Mr. Kalcic, have you reviewed the results of the OCA's recommended cost-of-service methodology at the Company's proposed revenue requirement level?

A. Yes. Mr. Miller provided this information in response to the OSBA's Interrogatory No. 1 to the OCA.

Q. Have you summarized the results contained in the above OCA interrogatory response?

A. Yes. To facilitate a comparison with PGW's cost study, I have summarized the results of the OCA's cost analysis in Schedule BK-1S, pages 1 and 2.

Note that the formats of Schedule BK-1 and Schedule BK-1S are

identical. Page 1 of Schedule BK-1 shows the cost-based increases required of each customer class under the Company's cost methodology, while page 1 of Schedule BK-1S reports the corresponding results under the OCA's cost methodology. Likewise, page 2 of each schedule compares results across the two methodologies in the case where CRP and Senior discounts are re-assigned to customer classes on a volumetric basis.

Q. What does the OCA's cost study show with respect to class revenue requirement levels?

A. Upon comparing page 1 of Schedule BK-1 with page 1 of Schedule BK-1S, it is clear that the OCA's cost methodology has the greatest impact on PGW's interruptible classes. In place of the interruptible decrease of 9.34% shown in page 1 of Schedule BK-1, the class would require an increase of 12.14% per the OCA's study. However, since it is not possible to generate additional revenue from PGW's interruptible classes at this time, this theoretical cost reassignment contained in the OCA's study cannot be utilized to provide any real rate relief to PGW's firm rate classes, including the Residential class.

Among PGW's firm rate classes, the OCA's cost methodology has the greatest percentage impact on the Commercial class, which would see its required cost-based decrease rise from 14.71% in PGW's cost study to 20.89% in the OCA's study. Next, we find that the

required Residential increase of 26.65% in Schedule BK-1 is reduced to 23.77% in Schedule BK-1S. However, the cost-of-service results for PGW's remaining firm classes (i.e., Industrial, Municipal and Housing Authority) are virtually unchanged across the two cost studies.

On net, Schedule BK-1S, page 1 of 2 does not reveal any improvement in the relative standing of the Residential class among PGW's firm rate classes. For instance, the Residential class is still the only firm class shown to require an increase, that increase is in excess of 23.5%, and all other firm rate classes are shown to require double-digit decreases. Therefore, Schedule BK-1S, page 1 of 2 does not provide any evidence in support of Mr. Miller's conclusion that the "extreme" disparity in residential versus non-residential increases recommended by the OSBA is unfounded.

Q. Do the above conclusions hold if one compares the class revenue requirement results across the two methodologies in the case where CRP and Senior discounts are re-assigned to customer classes on a volumetric basis?

A. Yes. If one compares page 2 of Schedule BK-1 with page 2 of Schedule BK-1S, one finds that, as before, the commercial class receives the greatest percentage reduction in allocated revenue responsibility. Indeed, all of the relative changes in class revenue responsibility discussed above are "mirrored" in the scenario where

CRP and Senior discounts are re-assigned on a volumetric basis.

With the possible exception of the Housing Authority class, the Residential class remains the only firm class that is shown to require an increase in this proceeding. Moreover, this conclusion holds independent of: a) the choice of cost-of-service methodology and b) the manner in which CRP and Senior discounts are assigned to rate classes. Such unambiguous results clearly invalidate Mr. Miller's conclusions with respect to alleged impropriety of the OSBA's recommended class revenue distribution.

Q. Does this conclude your surrebuttal testimony?

A. Yes.

PHILADELPHIA GAS WORKS
Comparison of Present Base Revenues
with **OCA** Class Cost-of-Service Indications
Basis: CRP / Senior Discounts @ Cost Causation

Line	Description	Present		Claimed Cost of Service		Cost-Based Increase [C3/C1]
		Base Revenue	%	Base Revenue	%	
		(1)	(2)	(3)	(4)	(5)
1	Residential	$337,058,237	66.18%	$417,163,766	72.41%	23.77%
2	Commercial	$76,838,316	15.09%	$60,784,140	10.55%	-20.89%
3	Industrial	$10,813,773	2.12%	$8,944,782	1.55%	-17.28%
4	Municipal	$8,877,779	1.74%	$6,447,059	1.12%	-27.38%
5	Housing Authority	$9,337,413	1.83%	$8,290,290	1.44%	-11.21%
6	Interruptible / Trans.	$66,398,862	13.04%	$74,461,216	12.93%	12.14%
7	Total Billed Rev.	$509,324,380	100.00%	$576,091,253	100.00%	13.11%

Source: OSBA-I-3

OSBA-OCA-1 ln. 32 plus
Exh. HSG-1, Sch. 1, ln.18 minus ln. 22
less GCR $

PHILADELPHIA GAS WORKS
Comparison of Present Base Revenues
with **OCA** Class Cost-of-Service Indications
Basis: CRP / Senior Discounts Reassigned via GCR

Line	Description	Present Base Revenue	Present %	Adjusted Cost of Service Base Revenue	Adjusted Cost of Service %	"Cost-Based" * Increase [C3/C1]
		(1)	(2)	(3)	(4)	(5)
1	Residential	$337,058,237	66.18%	$402,609,552	69.89%	19.45%
2	Commercial	$76,838,316	15.09%	$71,183,605	12.36%	-7.36%
3	Industrial	$10,813,773	2.12%	$10,430,069	1.81%	-3.55%
4	Municipal	$8,877,779	1.74%	$7,812,049	1.36%	-12.00%
5	Housing Authority	$9,337,413	1.83%	$9,594,762	1.67%	2.76%
6	Interruptible / Trans.	$66,398,862	13.04%	$74,461,216	12.93%	12.14%
7	Total Billed Rev.	$509,324,380	100.00%	$576,091,253	100.00%	13.11%

Source: OSBA-I-3

OCA Response to
OSBA-1, line 32
less GCR $

* Note: Assumes that a volumetric recovery of CRP / Senior discounts reflects cost-causation.