

Docket R-17XXX

Volume 2

Philadelphia Gas Works
Before The
Pennsylvania Public Utility Commission

**Computation of Annual Purchased Gas Costs
For Twelve Months Ending August 31, 2018**

66 Pa.C.S. § 1307(f)

Information Submitted Pursuant To:

**66 Pa.C.S. §§ 1307(f), 1317, 1318 and
52 Pa. Code § 53.61, et seq.**

February 1, 2017

Philadelphia Gas Works 1307f - 2017 Prefiling

Table of Contents

	<u>Tab</u>
53.64 (c) (1)	#1
53.64 (c) (3)	#2
53.64 (c) (4)	#3
53.64 (c) (5)	#4
53.64 (c) (6)	#5
53.64 (c) (7)	#6
53.64 (c) (8)	#7
53.64 (c) (9)	#8
53.64 (c) (10)	#9
53.64 (c) (11)	#10
53.64 (c) (12)	#11
53.64 (c) (13)	#12
53.64 (c) (14)	#13
53.64 (i) (1)	#14
53.65 (1)	#15
53.65 (2)	#16
53.65 (3)	#17
53.65 (4)	#18
53.65 (5)	#19
1317 (a) (1)	#20
1317 (a) (2)	#21
1317 (a) (3)	#22
1317 (a) (4)	#23
1317 (b) (1)	#24
1317 (b) (2)	#25
1317 (b) (3)	#26
1317 (c) (1)	#27
1317 (c) (2)	#28
1317 (d)	#29
1318 (a) (1)	#30
1318 (a) (2)	#31
1318 (a) (3)	#32
1318 (a) (4)	#33
1318 (b) (1)	#34
1318 (b) (2)	#35
1318 (b) (3)	#36
1318 (c)	#37

Tab 4

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.64(c) Thirty days prior to the filing of a tariff reflecting an increase or decrease in natural gas costs, each Section 1307(f) gas utility seeking recovery of purchased gas costs under that section shall provide notice to the public, under § 53.68 (relating to notice requirements), and shall file the following supporting information with the Commission, with a copy to the Consumer Advocate, Small Business Advocate and to intervenors upon request:

- (5) A listing and updating, if necessary, of projections of gas supply and demand provided to the Commission for any purpose—see § 59.67 (relating to formats). In addition, provide an accounting of the difference between reported gas supply available and gas supply deliverable—including storage—from the utility to its customers under various circumstances and time periods.

Response:

Please see the attached document. PGW's next Annual Resource Planning Report (Forms 1 and 2) is due for submission to the Commission on March 1, 2017 and an updated Annual Resource Planning Report is not available at this time.

ANNUAL RESOURCE PLANNING REPORT

Philadelphia Gas Works

Philadelphia, Pennsylvania

March 2016

Forms 1 & 2

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

**Philadelphia Gas Works
800 West Montgomery Avenue
Philadelphia, Pennsylvania 19122**

**ANNUAL RESOURCE PLANNING REPORT
MARCH 2016**

Forms 1 & 2

**Information Submitted in Compliance with and Pursuant to Title 52
Pennsylvania Code Section 59.81**

PHILADELPHIA GAS WORKS

TABLE OF CONTENTS

<u>EXHIBIT NO.</u>	<u>REGULATION</u>	<u>DESCRIPTION</u>
1	59.81	General
2	59.81	Forms IRP-Gas 1A, and 1B Annual and Peak Day Energy Demand
3	59.81	Forms IRP-Gas 2A, 2B, and 2C Annual and Peak Day Energy Resources, And transmission and storage contracts

Section 59.81: **General**

Pursuant to Section 59.81 (a), each major jurisdictional gas utility must file an annual resource planning report (ARPR) on or before June 1, 1996 and June 1 of each succeeding year, except Form 1A/2A which filing date is March 1. The report must be submitted to:

Secretary
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

One courtesy copy should also be submitted to:

Pennsylvania Public Utility Commission
Conservation, Economics and Energy Planning
P.O. Box 3265
Harrisburg, PA 17105-3265

Also submit one (1) copy to the following:

Office of Consumer Advocate
555 Walnut Street
Forum Place, 5th Floor
Harrisburg, PA 17101-1921

Office of Small Business Advocate
Suite 202, Commerce Building
300 N. Second Street
Harrisburg, PA 17101

Be sure to indicate the name and telephone number of at least one individual at the company who is familiar with the filing and will be available to answer any questions the Commission staff may have. You may also wish to list those individuals who are directly involved in the preparation of the various document components.

Information contained in annual resource planning reports must be utility-specific. The report should follow an outline similar to that which is contained herein, with narrative accompanying the required data. Forms may be modified to accommodate wide columns of numbers and enhance readability, but the general format should be used to maintain consistency.

This information is not generally considered confidential. Utilities are obligated to provide complete information. However, we will treat as confidential those portions of the report designated by the utility as proprietary. If a utility's proprietary claim is challenged, the Commission will direct the utility to file a petition for protective order pursuant to 52 PA Code 5.423.

All questions concerning the reporting requirements for Forms IRP Gas 1A through 9 should be addressed to Pennsylvania Public Utility Commission Bureau of Conservation, Economics and Energy Planning.

Response:

Forms 1A, 1B, 2A, 2b, and 2C along with a general discussion of the methodologies, data sources, and assumptions are being submitted to meet the requirements of the March 1 filing.

All questions concerning the ARPR should be directed to Mr. Kenneth Dybalski, Director, Rates & Gas Planning at 215-684-6317. The following individual is available to answer questions concerning Forms 1 and 2: Ms. Maria Hogan, Manager – Gas Planning at (215) 684-6618.

Section 59.81 **Forms IRP-Gas 1A, and 1B – Annual and Peak Day Demand**

The load growth projections shall reflect the effects of price elasticity, market induced conservation, building and appliance efficiency standards, and the effects of the utility's existing and planned conservation and load management activities.

Response: Please see the attached documentation and forms.

**FORM-IRP-GAS-1A: ANNUAL GAS REQUIREMENTS
REPORTING UTILITY: PHILADELPHIA GAS WORKS
(VOLUMES IN MMcf)**

Index Year Actual Year	Historical Data			Current Year			Three Year Forecast		
	-2 2013-2014	-1 2014-2015	0 2015-2016	1 2016-2017	2 2017-2018	3 2018-2019			
Firm Requirements:									
Retail Residential	39,164	39,026	32,892	37,025	36,913	36,804			
Retail Commercial	8,761	8,917	7,418	8,346	8,318	8,332			
Retail Industrial	502	474	389	445	433	422			
Electric Power Generation	-	-	-	-	-	-			
Exchanges with Other Utilities	-	-	-	-	-	-			
Unaccounted For Gas	1,078	1,641	1,300	1,326	1,322	1,320			
Company Use	395	343	381	365	365	365			
Other - Prior Period Adjustment	-	-	-	-	-	-			
Subtotal Firm	49,900	50,401	42,381	47,507	47,351	47,243			
Interruptible Requirements:									
Retail	1,044	514	206	1,006	1,006	1,006			
Electric Power Generation	-	-	-	-	-	-			
Company's Own Plant	58	57	99	128	128	128			
Unaccounted For Gas	9	1	1	0	0	0			
Subtotal Interruptible	1,110	571	305	1,135	1,135	1,135			
SUBTOTAL FIRM AND INTERRUPTIBLE	51,010	50,973	42,686	48,642	48,485	48,378			
Transportation:									
Firm Residential	51	50	10	-	-	-			
Firm Commercial	3,771	3,922	4,106	4,590	4,786	4,938			
Firm Industrial	386	449	467	518	529	538			
Interruptible Residential	-	-	-	-	-	-			
Interruptible Commercial	7,074	7,284	6,790	8,443	8,995	9,545			
Interruptible Industrial	7,196	7,095	7,136	8,596	9,131	9,664			
Other - Non-Utility Power Producers	10,522	12,036	11,593	11,477	11,477	11,477			
Subtotal Transportation	29,000	30,835	30,103	33,624	34,919	36,163			
TOTAL GAS REQUIREMENTS	80,010	81,808	72,789	82,265	83,405	84,541			
Increase (Decrease)		1,798	(9,019)	9,476	1,140	1,136			
Percent Change (%)		2.25%	-11.27%	13.02%	1.39%	1.36%			

**FORM-IRP-GAS-1B:PEAK DAY REQUIREMENTS
REPORTING UTILITY: PHILADELPHIA GAS WORKS
(VOLUMES IN MMcf)**

Index Year Actual Year	Historical Data		Current Year ⁽¹⁾			Three Year Forecast ⁽¹⁾		
	2013-2014 -2	2014-2015 -1	2015-2016 0	2016-2017 1	2017-2018 2	2018-2019 3		
Firm Requirements:								
Retail Residential	389	405	437	458	457	455		
Retail Commercial	87	93	99	103	103	103		
Retail Industrial	5	5	5	6	5	5		
Electric Power Generation	-	-	-	-	-	-		
Exchanges with Other Utilities	-	-	-	-	-	-		
Unaccounted For Gas	11	17	17	16	16	16		
Company Use	4	4	5	5	5	5		
Other	-	-	-	-	-	-		
Subtotal Firm	496	523	563	588	586	584		
Interruptible Requirements:								
Retail	3.1	4.2	0.9	2.8	2.8	3		
Electric Power Generation	0.0	-	-	-	-	-		
Company's Own Plant	0.3	0.4	0.5	0.6	0.6	1		
Unaccounted For Gas	0.1	0.1	-	0.1	0.1	0.1		
Subtotal Interruptible	3.6	4.7	1.4	3.5	3.5	3.5		
SUBTOTAL FIRM AND INTERRUPTIBLE	499	528	565	591	589	588		
Transportation:								
Firm Residential	0	0	-	-	-	-		
Firm Commercial	30	35	42	50	52	54		
Firm Industrial	2	3	4	5	5	5		
Interruptible Residential	-	-	-	-	-	-		
Interruptible Commercial	51	49	-	-	-	-		
Interruptible Industrial	28	33	-	-	-	-		
Other - Non-Utility Power Producers	29	36	-	-	-	-		
Subtotal Transportation	140	156	47	54	57	59		
TOTAL GAS REQUIREMENTS	640	684	611	646	646	646		
Increase (Decrease)		45	(73)	34	0	1		
Percent Change (%)		7.0%	-10.7%	5.6%	0.1%	0.1%		

⁽¹⁾ Peak Day is forecasted at a 2 degree temperature.

⁽²⁾ Current Year Peak Day is forecasted at a 5 degree temperature.

Section 59.81

Forms IRP-Gas 2A, 2B and 2C - Annual and Peak Day Energy Resources, Transmission and Storage Contracts

The forecast of energy sources shall indicate sources of all presently available and new supplies which the utility estimates will become available, displayed by component parts.

Response:

Please see the attached documentation and forms.

FORM-IRP-GAS-2A: ANNUAL/PEAK SUPPLY
TABLE 1: ANNUAL/PEAK SUPPLY
REPORTING UTILITY: PHILADELPHIA GAS WORKS
(Volumes in MMcf)

Index Year Actual Year	Historical Data				Current Year (2)				Three Year Forecast (1)			
	-2 2013-2014		-1 2014-2015		0 2015-2016		1 2016-2017		2 2017-2018		3 2018-2019	
	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak
Gas Supply for Sales Service												
Spot Purchases	51,199	190	52,701	211	49,968	277	50,471	233	50,324	211	50,085	223
Storage Withdrawals	12,872	122	12,235	171	8,363	159	13,371	214	13,112	227	13,124	214
LNG Withdrawal	3,210	187	2,238	146	1,348	164	2,153	194	2,188	202	2,191	203
LNG Purchases	-	-	-	-	-	-	-	-	-	-	-	-
Exchanges with other LDCs	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Total Gas Supply	67,281	499	67,174	528	53,679	601	65,995	640	65,624	639	65,399	639
Total Transportation Services	29,000	140	30,835	156	30,103	23	33,824	21	34,919	22	36,163	23
TOTAL GAS SUPPLY AND TRANSPORTATION SERVICE	96,281	640	98,010	684	83,782	624	99,819	661	100,544	661	101,562	662
Deductions												
Pipeline: TRANS FUEL	1,750	-	1,323	-	523	8	1,352	9	1,344	9	1,335	9
Storage: INJ, INJ FUEL, WITHDRAW FUEL, TRANS FUEL	12,731	-	12,733	-	8,405	1	13,813	3	13,606	3	13,497	3
LNG: LIQUE, INJ FUEL, TRANS FUEL	1,790	-	2,145	-	2,066	3	2,188	3	2,188	3	2,189	3
Sales to other LDC's	-	-	-	-	-	-	-	-	-	-	-	-
Total Deductions	16,271	-	16,202	-	10,993	13	17,354	15	17,139	15	17,021	15
NET GAS SUPPLY	80,010	640	81,808	684	72,789	611	82,265	646	83,405	646	84,541	646
BTU	1,049	1,056	1,056	1,056	1,05	1,056	1,056	1,056	1,056	1,056	1,056	1,056

(1) Peak Day is forecasted at a 2 degree temperature.

(2) Current Year Peak Day is forecasted at a 5 degree temperature.

**FORM-IRP-GAS-2B: NATURAL GAS TRANSPORTATION
REPORTING UTILITY: PHILADELPHIA GAS WORKS
(volumes in MMcf)**

Index Year Actual year	Historical Data				Current Year				Three Year Forecast			
	-2 2013-2014		-1 2014-2015		0 2015-2016		1 2016-2017		2 2017-2018		3 2018-2019	
	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak
<u>City Gate Transportation Contracts:</u>												
Transcontinental Transmission Corp.	3,931	59	3,905	58	3,927	59	3,905	58	3,905	58	3,905	58
Texas Eastern Transmission Corp.	2,202	42	2,188	42	2,200	42	2,188	42	2,188	42	2,188	42
Texas Eastern Transmission Corp.	712	20	707	20	711	20	-	20	-	20	-	20
Transcontinental Transmission Corp.	432	5	429	5	432	5	429	5	429	5	429	5
Total	7,277	126	7,229	125	7,270	125	6,522	125	6,522	125	6,522	125
<u>Upstream Transportation Contracts:</u>												
Transcontinental Transmission Corp.	57,486	157	57,105	156	57,588	157	57,105	156	57,105	156	57,105	156
Texas Eastern Transmission Corp.	26,096	71	25,923	71	26,143	71	25,923	71	25,923	71	25,923	71
Texas Eastern Transmission Corp.	8,289	23	8,234	23	8,304	23	8,234	23	8,234	23	8,234	23
Texas Eastern Transmission Corp.	2,540	17	2,523	17	2,537	17	2,523	17	2,523	17	2,523	17
Texas Eastern Transmission Corp.	2,540	17	2,523	17	2,537	17	2,523	17	2,523	17	2,523	17
Transcontinental Transmission Corp.	169	2	168	2	169	2	168	2	168	2	168	2
Texas Eastern Transmission Corp.	1,740	5	1,728	5	1,743	5	1,728	5	1,728	5	1,728	5
Total	98,858	293	98,203	291	99,020	293	98,203	291	98,203	291	98,203	291
<u>Storage-Related Transportation Contracts:</u>												
Dominion Transmission Inc.	8,945	25	8,886	24	8,961	24	8,886	24	8,886	24	8,886	24
Dominion Transmission Inc.	2,710	7	2,692	7	2,715	7	2,692	7	2,692	7	2,692	7
Total	11,655	32	11,578	32	11,676	32	11,578	32	11,578	32	11,578	32

Conversions at 1056 Btu

**FORM-IRP-GAS-2C: NATURAL GAS STORAGE
REPORTING UTILITY: PHILADELPHIA GAS WORKS
(volumes in MMcf)**

Index Year Actual year	Historical Data				Three Year Forecast							
	-2 2013-2014		-1 2014-2015		0 2015-2016		1 2016-2017		2 2017-2018		3 2018-2019	
	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak
Transcontinental Transmission Corp.	3,931	59	3,905	58	3,927	59	3,905	58	3,905	58	3,905	58
Dominion Transmission Inc.	3,598	32	3,574	32	3,594	32	3,574	32	3,574	32	3,574	32
Transcontinental Transmission Corp.	3,103	33	3,083	32	3,100	32	3,083	32	3,083	32	3,083	32
Texas Eastern Transmission Corp.	2,368	42	3,574	42	2,365	42	2,352	42	2,352	42	2,352	42
Texas Eastern Transmission Corp.	2,202	20	2,188	20	2,200	20	2,188	20	2,188	20	2,188	20
Transcontinental Transmission Corp.	712	84	707	84	711	84	711	84	711	84	711	84
Transcontinental Transmission Corp.	432	5	429	5	432	5	429	5	429	5	429	5
Total	16,346	275	17,459	273	16,330	273	15,530	189	15,530	189	15,530	189

Forecasted Dth to Mcf Conversions at 1056 BTU.

Contract	Expiration Date ⁽¹⁾
Transcontinental Transmission Corp.	3/31/2023
Dominion Transmission Inc.	3/31/2018
Transcontinental Transmission Corp.	10/31/2016
Texas Eastern Transmission Corp.	4/30/2021
Texas Eastern Transmission Corp.	4/30/2021
Transcontinental Transmission Corp. ⁽²⁾	3/31/2016
Transcontinental Transmission Corp.	4/15/2017

⁽¹⁾ For purposes of this report, contracts that are due to expire are assumed renewed for the forecast years.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

**PHILADELPHIA GAS WORKS
800 WEST MONTGOMERY AVENUE
PHILADELPHIA, PENNSYLVANIA**

Annual Resource Planning Summary Report

Filed: March 2016

**Information Submitted in Compliance with and Pursuant to Title 52
Pennsylvania Code Sections 59.81-59.84**

PHILADELPHIA GAS WORKS

2016 Annual Resource Planning Summary Report

TABLE OF CONTENTS

INTRODUCTION

SECTION I -- PGW's Overall Approach to Integrated Resource Planning

SECTION II -- Supply Forecasting Methodology and Assumptions

SECTION III -- Demand Forecasting Methodology and Assumptions

SECTION IV -- Design Day Forecasting Methodology and Assumptions

SECTION V -- PGW Corporate Modeling System

Introduction

By Order entered January 11, 1996, the Pennsylvania Public Utility Commission (PUC) adopted final regulations (52 PA Code §§ 59.81 - 59.84) which set forth revised requirements for filing an Annual Resource Planning Report (the Plan). The Plan submitted represents Philadelphia Gas Works' (PGW or the Company) belief that integrated resource planning (IRP) is a workable approach to utility planning.

This plan summary contains historical data and projections for annual, winter and peak day supply to meet projected customer requirements in a least cost manner, while ensuring adequate and reliable service. It is organized into the following five sections:

- I. PGW's Overall Approach to Integrated Resource Planning
- II. Supply Forecasting Methodology and Assumptions
- III. Demand Forecasting Methodology and Assumptions
- IV. Design Day Forecasting Methodology and Assumptions
- V. PGW Corporate Modeling System

I. PGW's Overall Approach to Integrated Resource Planning

PGW Optimization Standard for Purchasing and Utilizing Gas Supplies

As reasonably anticipated PGW intends on meeting its contractual obligations to supply all of its current firm customers in its service territory on the coldest day, throughout the heating season and throughout the year. Projected customer requirements for design day and design winter conditions form the basis for capacity commitments for pipeline supply, storage, and transportation contracting.

Natural gas supplies are purchased under a portfolio approach with PGW intending to secure the lowest overall price consistent with the corporate goals of reliability and security of supply. In addition, consideration is given to maintaining a diversity of sources and types of supply, coupled with contractual and operational flexibility on both a daily and seasonal basis. Short term purchases from spot market sources are utilized to the maximum degree that they are more economical, available, and transportable.

Natural gas supplies are utilized so as to minimize gas costs subject to reliability constraints. Supply contract obligations are honored and prudent Gas Control operational requirements are assumed. Storage gas is drawn down so as to always maintain an inventory level sufficient for the remaining winter in the event that design temperature conditions should occur in the remaining segment of the winter season. Within the above parameters, priority is given to utilizing the most economical sources of supply first within the context of preserving the capability of meeting seasonal and annual demands rather than the momentary daily requirements. All facilities and sources of supply – flowing, storage and LNG – are available to achieve the intended end, namely, minimizing gas costs subject to reliability constraints.

II. Supply Forecasting Methodology and Assumptions **Basic Assumptions**

The PGW Gas Supply Policy Committee comprised of senior corporate management as well as Gas Planning, Gas Control, Gas Supply, and Regulatory departmental management, approved the aforementioned Optimization Standard for Purchasing and Utilizing Gas Supplies (Section I). All natural gas purchases continue to be made in accordance with this standard. Projected sales, revenues and natural gas expenses in this report result from this agreement, particularly in the areas of inventory valuation, priorities of gas selection and interruptible supply availability.

Incorporated into our projections are additional implementation steps involved with developing a cohesive gas supply/demand strategy for the near term and the longer range. These include developing a cost relationship comparison for current resources and a review of current contract terms and alternatives for continuing, extending, modifying or eliminating contracts.

In order to achieve this while maintaining a balance between economics and security of supply, the company uses a portfolio strategy approach. This approach incorporates a menu driven selection of services which allows the company to choose only those specific services necessary to meet its requirements. This is achieved by taking into consideration transportation capacity rights and then sources of supply are contracted to cover the firm transport rights over differing seasonal obligations.

Operating flexibility is sustained by variations in contract stipulations to permit the system to swing on the most economical gas supplies available while maintaining the ability to supply rapidly fluctuating temperature requirements. Storage facilities are substituted wherever opportunity affords to reduce annual expense for flowing 365 day pipeline service without reducing design day and design winter season delivery capability. Direct control of all storage is paramount to permit PGW to minimize winter costs by injecting lower priced purchases and to cycle storage to balance daily take fluctuations to avoid overrun/balancing charges.

II. Supply Forecasting Methodology and Assumptions **Basic Assumptions (Continued)**

PGW's supply strategy incorporates maintaining full current winter day deliverability with regard to transportation capacity but to convert, where possible, to storage rather than winter flowing contracts to enhance financial and operational flexibility. A variety of longer term supply contracts are necessary to support pipeline transportation capacity because reliance upon best effort spot suppliers to fill wintertime supply requirements to meet firm customers' demands has proven to be an unreliable alternative. As a result longer-term contracts are utilized to support firm transportation capacity. To accomplish this end, the Company purchases winter supply contracts with daily deliverability equal to approximately 47% of the contractual daily transportation entitlements on its two interstate pipelines with direct connections to PGW's service territory. Additionally, these supply contracts match the contractual entitlements of the two pipelines by sourcing supply in a manner consistent with the pipeline's upstream contractual requirements. In this way, PGW not only helps ensure the security of supply by sourcing the gas from geographically diverse supply regions but this diversity also allows PGW to take advantage of the pricing basis differential inherent in these supply locations.

These contracts all contain the ability to fix the price for upcoming months as well as to allow the pricing to default to an agreed upon market index when there is no market advantage in fixing a price before the month begins. PGW uses this fixed price option in conjunction with its Gas Cost Rate (GCR) filing (GCR filing includes pricing based upon the NYMEX) by always attempting to buy under the GCR forecasted prices. Through the matching of the duration supply contracts to a seasonal demand, such as the winter operating season, the firm ratepayers benefit from not paying demand charges year-round.

A second component of PGW's supply portfolio or a volume equal to 30% of pipeline capacity, is purchased gas based on the daily midpoint price published in "Platt's Gas Daily". These contracts allow for daily change in volumetric take. This allows the Company to effectively shut-off higher priced supply replacing such supply with daily cheaper spot priced gases. Under assumed normal winter conditions, PGW utilizes certain storage fields (Eminence and Washington) in a manner similar to third party supply. Specifically, these storage contracts do not contain transportation to the PGW city gate. Therefore, these storages must flow within

II. Supply Forecasting Methodology and Assumptions
Basic Assumptions (Continued)

PGW's contractual upstream capacity rights on TGPL. Delivery from these fields utilizes approximately 17% of the daily TETCO and TGPL capacity rights to the Philadelphia city gates. These storage fields also act as a physical fixed price to counter winter price conditions since the WACOG usually reflects a winter/summer pricing differential. Additionally, PGW purchases 6% of its supply using day purchases as needed. PGW's summer purchasing strategy also incorporates a portfolio approach to the purchase of system supply and storage refill. The GCR filing is again used as a yardstick in purchasing supply for both system supply and storage refill. PGW attempts to always purchase a portion of its supply needs below the projected GCR cost estimate with a portion of the portfolio purchased at default, first-of-the-month pricing. These first of the month pricing option contracts, in most instances, allow PGW to evaluate daily spot prices and provide for a turn-off of first-of-the-month index priced supply in favor of the purchase of more advantageous daily spot purchases.

Operating conditions permitting, the Company enters into the FERC approved capacity release market to offset demand charges it pays for its firm transportation and the incremental off-systems sales market when it is economically advantageous for the firm ratepayer. In both instances, these opportunities are sought only when firm customer needs are satisfied. Additionally, PGW's bundled storages and LNG can be utilized as a substitute for higher price gas supply based on market pricing conditions and the results of PGW's status report. Effectively, the Gas Supply Group is at all times studying the market for any economic advantage it can bring to the firm ratepayer.

III. Demand Forecasting Methodology and Assumptions **Basic Assumptions**

PGW uses a combination of four basic methods to develop demand projections. They are:

- 1) Historical Data -- data showing long-term demand trends, conservation and utilization patterns by the various classes of customers -- Residential, Commercial, Industrial and Interruptible.
- 2) Customer Survey -- Information as gathered by PGW's Marketing Department and used for annual projections by month and year.
- 3) Relative End Use -- Projections via Marketing methods of customer load sizing by appliance type, maximum input, maximum summer and winter full load hour (FLH) calculations which are used to develop yearly and monthly demand requirements.
- 4) Judgment -- Experienced opinion as applied to the evaluation of the combination of all data to develop the basic demand requirements.

Customer Demand

The total system-wide demand is a function of the projected gas demand per customer and the anticipated number of customers in each class. In determining customer demand, consideration is given to projecting current customer usage, augmented by significant gains or losses in each of numerous homogeneous groups for the period being projected. The Gas Planning Department attempts to determine for each customer class, the level of demand relating to experienced temperatures and the component of demand that is apparently not affected by changes in temperature. Within each class the most recent summer and winter usage patterns are established from historical records. Summer data provides an insight into each class of customers' non-temperature sensitive load requirements or baseload which can be expressed in terms of thousands of cubic feet (Mcf) per day, per customer. Similarly, winter data after removal of the daily baseload level provides the temperature sensitive load requirements for each class of customer.

This usage primarily reflects space heating but also includes such other temperature sensitive needs as water heating attributable to colder ground water inlet temperatures and similar process variations. This overall heating requirement can be expressed in terms of the cubic feet of gas

III. Demand Forecasting Methodology and Assumptions **Basic Assumptions (Continued)**

utilized per degree of temperature change on a per customer basis for each separate customer classification.

In addition, consideration must be given to the variation of customer utilization patterns for space heating over the year, recognizing the transitional fall start-up of heaters, the deep winter period needs and the tapering off and shut-down which occurs in the spring. These usage patterns taken in conjunction with anticipated customer counts and appropriate temperature patterns form the basis of determining class and total system demands. Due to the inconsistencies of weather and weather forecasting techniques, no attempt is made to predict the specific daily temperatures of the projection period. Instead PGW has developed a normal monthly temperature pattern by analyzing statistical records of actual temperature patterns over a 30-year period. This pattern reflects 4237 degree-days annually distributed in a stylized pattern preserving the monthly range of colder to warmer daily temperatures experienced in the January to May period and warmer to colder daily temperatures in the September to December period.

The term "degree days" quantifies the number of degrees of temperature below a base level of 65 degrees Fahrenheit and is used as a tool to measure space heating requirements, i.e. on a day experiencing an average temperature of 40 degrees F. there would be 25 degree days. The annual 4,237 degree days which is composed of the PGW normal monthly temperature patterns, form the basis of the calculation of the temperature sensitive component of demand. The application of the above described baseload, space heating factors and customer counts, when applied to a calendar based daily temperature pattern, produce a daily calculation of total customer requirements identified as sendout. It should be noted that there is a difference between sendout volume and sales volume. Sendout represents those volumes metered at the city gate to supply customers' requirements while sales are those volumes registered on customer meters. The variation between sendout and sales, after adjustments, is that portion which is lost and unaccounted for in the PGW distribution system.

III. Demand Forecasting Methodology and Assumptions **Basic Assumptions (Continued)**

Sales and sendout differ on a monthly basis in the degree day distribution pattern. For efficiency, meter reading and billing efforts are distributed uniformly over the available number of working days in a month and the majority of PGW customers are divided into 20 individual groups or cycles containing residential, commercial and industrial accounts within a specific geographic area. When these cycle customers are billed each month they reflect meter reading usage not for the calendar month being billed, but for the number of days and temperature pattern of degree-days experienced during their specific interval between meter readings. For example, assume the month of January contained 900 calendar degree-days. The customers in cycle 10 being billed for the month of January might have had meter readings taken on December 15 and again on January 17. Sales billed and reported in the company records for these customers would reflect the number of days and degree days between these reading dates rather than the 900 degree days of the month. Similarly, cycle 1 customers that might have had meter readings taken on December 1 and January 2 would reflect principally the month of December temperature experience, whereas, cycle 20 customers with meter readings taken possibly December 28 and January 29 would reflect principally the month of January temperature experience.

An average of the 20 cycles (Average Cycle Degree-Days) is used as the temperature pattern upon which to project the volume of sales in the forecast period. Both projections of sales and sendouts represent the full demand for that period from both firm and interruptible customers.

Methodology Used to Develop Monthly Estimates

A trial domestic factor is developed by classes of customers from sales reported for the summer months in the previous year. This average factor is then utilized in the sendout formula with the customer counts for the months of July, August and September. A comparison between what the formula calculates and the actual experienced for those three months is ascertained and the trial

III. Demand Forecasting Methodology and Assumptions **Basic Assumptions (Continued)**

domestic (baseload) factors are finalized to replicate the total sendout experienced. The finalized domestic factors (DOMs) are then utilized in conjunction with the actual sales and customer counts for the months of December, January and February to determine the average Mcf per degree day for each of the individual months for the remaining temperature sensitive load. The results are weighted by degree-days to give an average value which is utilized as a trial value for the heating factor.

The finalized domestic factor and the trial heating factor developed, as such, are then applied in the sendout calculations together with customer counts for the months of December, January and February (the peak winter heating period) to project an estimated sendout for each of these months. The projected sendout is then compared with the actual sendout experienced. Any variation between the projected and actual is adjusted to force the replication of the actual sendout experience thus resulting in the determination of a finalized heating factor.

To project the number of customers for each individual rate class, each rate class of customers are reviewed and accumulated individually. Current customers are ascertained from the number of billings data available from sales and revenue actually experienced immediately prior to the commencement of a model run. Declines are projected for anticipated losses to electric and other fuels, demolitions and transfers to other rates. Direct transfers from a non-heating to a heating account, as a result of a current customer's conversion to gas heat, moves the domestic load to the new category. Projected additional customers are developed by the Marketing Department where staff dealing with individual classes of customers and having the most direct knowledge of conditions within their expertise, project annual load additions which are translated into customer counts based upon typical customer usage for that individual customer class. The approximate month of turn-on is also developed to permit reflection of the effective portion of the load addition within the fiscal period under study. Interruptible class customers as well as other large special accounts are detailed individually incorporating expected gains and losses as direct contact and experience has indicated.

III. Demand Forecasting Methodology and Assumptions
Basic Assumptions (Continued)

The base revenue projections for both firm and interruptible customer groups are derived as the product of the projected sales volumes and the present tariff rate for each individual customer class within each group. The GCR revenue projections are derived as the product of the GCR factor and the projected sales volumes to the firm GCR customers.

IV. Design Day and Design Hour Forecasting Methodology and Assumptions

Each year a six year estimate of Design Day and Design Hour requirements anticipated under design day and design hour operating conditions is prepared to ensure that adequate resources are under contract and to further ensure that PGW can fulfill its supply obligation for its firm customer requirements on a design day and design hour.

The projected demands for design day are developed utilizing previous winter periods data for all weekdays where the temperature average for the day is 32 degrees Fahrenheit or below. The total sendout for these days as recorded under actual conditions and is reduced to firm sendout by removal of the interruptible load. A computer generated linear regression procedure is utilized to develop a sendout model from actual daily sendouts and degree days, and the process is repeated in a quadratic regression and a cubic regression procedure. From the predicted sendouts in the regression, which are within a reasonable percent of error to the actual sendout, factors are derived to replicate the actual sendouts. The factors derived from this are used to determine the current load requirements for a 0 degrees F day and from this data, the load for a -5 degrees F hour is calculated. PGW's Marketing Department's load projections for present and future years are then applied to these requirements to develop design day and design hour present and future load requirements. This is achieved by the addition of the projected marketing load growth on an annual basis (by day) to the derived base-year design day requirements.

V. PGW Corporate Modeling System

General Description

The corporate modeling system is a tool used by PGW management to project sales, revenues and expenses, as well as to examine key planning strategies and evaluate their effects on company operations. The system provides the ability to determine the results of alternate plans and scenarios, while at the same time allowing for responses to "what if" type situations quantifying revenue and expenses. The system combines the power of the computer with the experience of management to develop both short and long range projections based upon experienced historical data for sales and sendout volumes, raw material expenses and revenues. The corporate model system is composed of five separate parts. Each part operates independently but requires substantial external data inputs as well as data output results from one or more of the other parts in the system.

Gas Demand Model

The gas demand model is used to forecast total requirements for gas based upon current customer usage experience with adjustments for projected gains and losses. Input data includes domestic and space heating usage factors, customer counts by rate classifications, temperature patterns and results in projections of sales and sendout volumes. Detail and summary reports include sales and sendout by rate classification. This data is then used by the Gas Supply Model.

Gas Supply Model

The supply model is used to dispatch the various supply sources in accordance with contract availability limitations. It develops the necessary balance between supply and demand which reflects plant fuel and storage injection requirements as well as customer demands by identifying the availability of interruptible load balancing sales. Detail and summary reports include daily and monthly load requirements, the volumes taken from each source by pipeline contract, storage balances, LNG requirements, etc.

V. PGW Corporate Modeling System (Continued)

This model is also used to determine natural gas and other raw material costs dispatched. The model tracks the various cost components of each contract - the demand, capacity, commodity, injection and withdrawal charges - providing monthly and annual details and summary information including inventory valuations and expenses for supplemental LNG supplies. This data is then used by the Gas Cost Rate Model.

Gas Cost Rate Model

The gas cost rate model is used to develop the GCR. This model in conjunction with the gas supply model ascribes responsibility for the raw material costs to firm rate classes in accordance with PGW's tariff requirements, and compensates for the Interruptible Revenue Credit, interest, gas transportation Supplier Storage Peaking and migration charges and the previous over or under billing of fuel expenses. The GCR is then used by the Revenue Model.

Revenue Model

The revenue model is used to project billed revenue by rate classification in accordance with PGW's rate tariffs. It prepares the net billed revenue, GCR revenues, senior citizen discounts, and cycle billing information all detailed by rate classification. The detail and summary reports provided by this model are directed to the accounting and financial departments for inclusion in various financial reviews.

Summary

The corporate modeling system allows PGW management to effectively address supply/demand balancing, supply facilities planning, projected sales, cost, revenues, and sendout volumes. Results assist in the development of PGW's annual Operating Budget, setting of the GCR and planning of supply resources.

V. PGW Corporate Modeling System (Continued)

The model also provides a Status Report for the evaluation of remaining winter period requirements on both normal and design temperature patterns and the extrapolation of the current year based upon the experience to date and an assumption of temperatures anticipated for the remaining period of the year, this latter acting as a guide for both financial cash flow planning and winter operations.

Tab 5

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

53.64(c)(6) Thirty days prior to the filing, of a tariff reflecting an increase or decrease in natural gas costs, each Section 1307(f) as utility seeking recovery of purchased as costs under that section shall provide notice to the public, under § 53.68 (relating to notice requirements), and shall file the following supporting information with the Commission, with a copy to the Consumer Advocate, Small Business Advocate and to intervenors upon request:

Each Section 1307 (f) utility shall file with the Commission a statement of its current fuel procurement practices, detailed information concerning, the staffing and expertise of its fuel procurement personnel, a discussion of its methodology for obtaining a least cost and reliable source of as supply, including a discussion of any methodologies, assumptions, models or rules of thumb employed in selecting its gas supply, transportation and storage mix, its loss prevention strategy in the event of fraud, nonperformance or interruption of performance, its participation in capacity release and reallocation programs, the impact, if any, upon least cost fuel procurement by constraints imposed by local transportation end users, interruptible service, balancing, storage and dispatching, options, and its strategy for improving its fuel procurement practices in the future and timetable for implementing these changes.

Response:

I. Current Strategy

PGW's current strategy for meeting the system's supply requirements is to use a portfolio approach in both contract structure and pricing. The Company's supply portfolio is split into four distinct categories. First, the Company enters into winter-only supply contracts. These winter-only supply arrangements provide gas supply that fills approximately thirty-seven percent (37%) of PGW's daily firm transportation entitlements on both Spectra Energy Gas Transmission (formerly Duke Energy Gas Transmission) and Williams Gas Pipeline.

Item 53.64(c)(6) continued

The Spectra Energy and Williams pipelines represent the only interstate pipeline facilities with physical connections to the PGW service territory. These supply contracts also recognize pipeline receipt and delivery rights. By sourcing supply in this manner, PGW not only ensures security of supply from the pipelines, but also can take advantage of varying basis differentiated pricing in the market. These contracts all contain the ability to set the price for upcoming months, or to have the pricing default to an agreed upon market index. Second, an additional twenty-seven percent (27 %) is priced at the “gas daily mid-point” for each day of usage. These contracts allow for daily changes in volume. The operational flexibility of these contracts allows the company to increase or decrease gas supply to meet variations in send out requirements. Third the company utilizes one (1) pipeline storage services, as an additional source of supply. This storage service does not contain bundled transportation and therefore the gas is moved to the city gates within PGW's firm interstate pipeline capacity. This service represents eight percent (8 %) of supply at a fixed price. Additionally the company purchases eighteen percent (18%) of its supply using day purchases as needed. The Company will again attempt to release capacity for yearly periods totaling thirty-three thousand dekatherms as it did last year; and if this proves less economic for the ratepayer, the Company will release these capacities for the winter and summer season separately. These capacity releases are with twenty-four hour recall rights in their terms and conditions. They are split between the two interstate pipelines, which service PGW. If the need would arise to recall this capacity PGW would do so and use its unbundled storage to fill the TGPL portion (ten thousand dekatherms) and depend on market based prices to fill the TETCO portion (twenty three thousand dekatherms). The Company also releases firm capacity to its firm choice suppliers on a monthly basis based upon there firm pool size.

Additionally, PGW utilizes bundled storage and LNG to meet operational requirements and to accomplish other cost saving initiatives. Specifically, once design winter sendout requirements are ensured of being met, the company may utilize bundled storage and LNG inventories to displace higher priced supply based on the current market conditions. PGW's also uses a portfolio approach to address system supply and storage refill in the traditional non-peak season. The Gas Supply area uses the GCR filing as a template in an attempt to purchase gas volumes for both system supply and storage refill below the projected cost, when possible. However, some proportion of the supply will always be subject to spot market pricing either daily or monthly due to the constant need to purchase gas to meet sendout variations that are inherent in a residential firm heating load. PGW seeks to recoup demand charges for its firm transportation through the FERC approved capacity release mechanisms.

The Company also enters into the incremental off systems sales market to generate additional revenue when it is economically advantageous to do so. At all times the Company is studying the market for any economic advantage that can be derived in support of the firm ratepayer.

Item 53.64(c) (6) continued

II. Overview of Gas Supply Section

The Gas Supply Section of Gas Management is comprised of four departments: Gas Supply, Gas Transportation, Gas Accounting and Gas Control. The Gas Supply Section is responsible for ensuring that there is an adequate supply of natural gas available at all times to meet the requirements of PGW's approximately 500,000 firm customers. The Gas Supply Section accomplishes this through continuous interaction with various departments within PGW.

The staff of the Gas Supply Section is expected to maintain an in-depth working knowledge of all facets of the natural gas supply markets. The staff members of the four departments are required to maintain a working knowledge of PGW's natural gas contracts and facilities for the purpose of ensuring the safe and efficient operation of the distribution system, in accordance with company procedures, and in compliance with federal, state, and local regulations.

III. Organization and Staffing

Director of Gas Transportation and Gas Control: This person has over a twenty-three year history in the supply area and a seven-year history in gas control. This individual has a BA as well as having a background in natural gas accounting, allocation and confirmation experience under the first stages of FERC Order 636, and its effect on supply portfolio management.

This individual and the staffs of the departments that report to him interact continuously and provides 24/7 coverage in all situations pertaining to the gas supply portfolio and operation of the natural gas facilities. This is done in conjunction with the Gas Supply Committee as well as everyday meetings with the VP of Gas Management and the other direct reports of the VP of Gas Management. The following departments report directly to this individual - Gas Supply, Gas Control, Gas Accounting, and Gas Transportation.

Administrator, Gas Supply this person has over ten years' experience in the gas supply area. This individual has a MBA and BS in addition to having an extensive background in the area of gas purchasing. Reporting to this individual is the gas accountants, gas coordinators and gas buyers.

Manager, Gas Control: This person has over eighteen years in the supply area, is responsible for the day-to-day management of the city distribution grid as well as daily confirmation of each day's gas volumes. He supervises the gas control department on a 24/7 basis. The manager has a BS degree and extensive experience in the Distribution Department's network analysis area as well as post graduate courses in computer science.

Tab 6

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.64(c) Thirty days prior to the filing of a tariff reflecting an increase or decrease in natural gas costs, each Section 1307(f) gas utility seeking recovery of purchased gas costs under that section shall provide notice to the public, under § 53.68 (relating to notice requirements), and shall file the following supporting information with the Commission, with a copy to the Consumer Advocate, Small Business Advocate and to intervenors upon request:

- (7) A list of off-system sales, including transportation, storage, or capacity releases by the utility at less than the weighted average price of gas, or at less than the original contract cost of transportation, storage, or capacity supplied to the utility for its own customers.

Response: The attached schedules list off system sales, capacity release, and asset management for the period of January 1, 2016 to December 31, 2016.

Schedule 1 – reflects all off system sales margins for the period January 1, 2016 to December 31, 2016.

Schedule 2 – would reflect any off system sales transactions, which were done at less than the weighted average cost of gas. The schedule is blank because none of the deals match the criteria.

Schedule 3 – illustrates all capacity release deals.

Schedule 4 - would reflect any individual capacity release transactions, which were done at less than the weighted average cost of capacity.

Schedule 1
Item 53.64(C)(7)

Philadelphia Gas Works
Pennsylvania Public Utilities Commission
52 Pa. Code §53.61, et seq.
For the Twelve Months Ending December 31, 2016

Off-System Sales			
MONTH	Total Revenue	Ratepayer Margin	Total Credit
Jan-16	\$0	\$0	\$0
Feb-16	\$0	\$0	\$0
Mar-16	\$0	\$0	\$0
Apr-16	\$0	\$0	\$0
May-16	\$0	\$0	\$0
Jun-16	\$0	\$0	\$0
Jul-16	\$0	\$0	\$0
Aug-16	\$0	\$0	\$0
Sep-16	\$0	\$0	\$0
Oct-16	\$0	\$0	\$0
Nov-16	\$0	\$0	\$0
Dec-16	\$0	\$0	\$0

Off System Sale Profits Per WACOG Worksheet

PGW had no off system sales, which was not less than the weighted average cost of gas.

Schedule 3
Item 53.64(C)(7)

Philadelphia Gas Works
Pennsylvania Public Utilities Commission
52 Pa. Code §53.61, et seq.
For the Twelve Months Ending December 31, 2016

MONTH	Capacity Release			
	Total		Total	
	TGPL Credits		TETCO Credits	Total Credits
Jan-16	\$ 332,126	\$ 499,167	\$ 831,293	
Feb-16	\$ 308,896	\$ 434,214	\$ 743,110	
Mar-16	\$ 398,641	\$ 497,288	\$ 895,929	
Apr-16	\$ 232,520	\$ 584,810	\$ 817,330	
Jun-15	\$ 301,075	\$ 695,667	\$ 996,742	
Jun-16	\$ 336,114	\$ 689,864	\$ 1,025,978	
Jul-16	\$ 371,626	\$ 730,708	\$ 1,102,334	
Aug-16	\$ 375,071	\$ 751,223	\$ 1,126,294	
Sep-16	\$ 316,954	\$ 684,061	\$ 1,001,015	
Oct-16	\$ 258,525	\$ 777,931	\$ 1,036,456	
Nov-16	\$ 204,570	\$ 327,611	\$ 532,181	
Dec-16	\$ 229,974	\$ 365,329	\$ 595,303	
TOTAL	\$ 3,666,092	\$ 7,037,873	\$ 10,703,965	

Philadelphia Gas Works
 Pennsylvania Public Utilities Commission
 52 Pa. Code §53.61, et seq.
 For the Twelve Months Ending December 31, 2016

Schedule 4
 Page 1 of 5
 Item 53.64(C)(7)

M / YR	PIPELINE	PATH	RECALL STATUS	MONTHLY VOLUME DTH	TOTAL MONTHLY CREDIT	CREDIT DTH	TOTAL CREDIT	REPLACEMENT SHIPPER
January-16	TETCO	STX - M-3	N	847,156	\$ 342,992.68	\$ 0.5300	\$ 342,992.68	Shell
	TETCO	ELA - M-3	N	123,566	\$ 52,737.97	\$ 0.4268	\$ 52,737.97	CNE Gas Sup
	TETCO	ELA - M-3	N	2,542	\$ 1,084.93	\$ 0.4268	\$ 1,084.93	South Jersey Res
	TETCO	ELA - M-3	N	100,812	\$ 43,026.56	\$ 0.4268	\$ 43,026.56	UGI
	TETCO	ELA - M-3	N	117,800	\$ 50,403.26	\$ 0.4279	\$ 50,403.26	Direct Energy
	TETCO	ELA - M-3	N	16,027	\$ 6,884.02	\$ 0.4295	\$ 8,884.02	Sprague
	TETCO	ELA - M-3	N	4,774	\$ 2,037.54	\$ 0.4268	\$ 2,038	CIMA
				<u>1,012,677</u>			\$ 499,166.96	
	TRANSCO	3-6	N	155,000	\$ 3,952.50	\$ 0.0255	\$ 3,952.50	Total Gas Power
	TRANSCO	3-6	N	310,000	\$ 139,500.00	\$ 0.4500	\$ 139,500.00	JARON
	TRANSCO	3-6	N	46,500,000	\$ 11,625.00	\$ 0.0003	\$ 15,345.00	Texla
	TRANSCO	3-6	N	2,542	\$ 1,171.18	\$ 0.4607	\$ 1,171.18	South Jersey
	TRANSCO	3-6	N	16,058	\$ 7,397.53	\$ 0.4607	\$ 7,397.53	Sprague
	TRANSCO	3-6	N	123,597	\$ 56,938.63	\$ 0.4607	\$ 56,938.63	CNE
	TRANSCO	3-6	N	100,812	\$ 46,442.07	\$ 0.4607	\$ 46,442.07	UGI Energy
	TRANSCO	3-6	N	117,800	\$ 54,267.98	\$ 0.4807	\$ 54,267.98	Direct Energy
	TRANSCO	3-6	N	155,000	\$ 4,898.00	\$ 0.0318	\$ 4,898.00	South Jersey
	TRANSCO	3-6	N	4,805	\$ 2,213.20	\$ 0.4606	\$ 2,213.20	CIMA
				<u>47,485,614</u>			\$ 332,126.09	
	February-16	TETCO	ELA - M-3	N	108,837	\$ 48,375.45	\$ 0.4261	\$ 48,375.45
TETCO		ELA - M-3	N	111,940	\$ 47,697.64	\$ 0.4261	\$ 47,697.64	CNE
TETCO		ELA - M-3	N	3,335	\$ 1,421.05	\$ 0.4261	\$ 1,421.05	South Jersey
TETCO		ELA - M-3	N	14,993	\$ 9,007.79	\$ 0.6008	\$ 9,007.79	Sprague
TETCO		ELA - M-3	N	5,713	\$ 2,434.31	\$ 0.4261	\$ 2,434.31	CIMA
TETCO		ELA - M-3	N	149,872	\$ 79,432.16	\$ 0.5300	\$ 79,432.16	Shell
TETCO		ELA - M-3	N	392,700	\$ 208,131.00	\$ 0.5300	\$ 208,131.00	Shell
TETCO		ELA - M-3	N	93,206	\$ 39,715.08	\$ 0.4261	\$ 39,715.08	UGI
				<u>880,596</u>			\$ 434,214.48	
TRANSCO		3-6	N	145,000	\$ 4,582.00	\$ 0.0316	\$ 4,582.00	So Jersey Res
TRANSCO		3-6	N	3,335	\$ 1,536.42	\$ 0.4607	\$ 1,536.42	So Jersey Res
TRANSCO		3-6	N	15,022	\$ 6,920.27	\$ 0.4607	\$ 8,920.27	Sprague
TRANSCO		3-6	N	111,940	\$ 51,568.67	\$ 0.4607	\$ 51,568.67	CNE
TRANSCO		3-6	N	93,206	\$ 42,938.27	\$ 0.4607	\$ 42,938.27	UGI
TRANSCO		3-6	N	108,866	\$ 50,152.31	\$ 0.4607	\$ 50,152.31	Direct Energy
TRANSCO		3-6	N	5,742	\$ 2,645.38	\$ 0.4607	\$ 2,645.38	CIMA
TRANSCO		3-6	N	145,000	\$ 3,697.50	\$ 0.0255	\$ 3,697.50	Total Gas Power
TRANSCO		3-6	N	43,500,000	\$ 14,355.00	\$ 0.0003	\$ 14,355.00	Texla
TRANSCO		3-6	N	290,000	\$ 130,500.00	\$ 0.4500	\$ 130,500.00	JARON
				<u>44,418,111</u>			\$ 308,895.82	
March-16	TETCO	ELA - M-3	N	116,436	\$ 49,613.39	\$ 0.4261	\$ 49,613.39	Direct Energy
	TETCO	ELA - M-3	N	123,132	\$ 52,466.55	\$ 0.4261	\$ 52,466.55	CNE
	TETCO	ELA - M-3	N	99,262	\$ 42,295.53	\$ 0.4261	\$ 42,295.53	UGI
	TETCO	STX - M-3	N	3,534	\$ 1,505.84	\$ 0.4261	\$ 1,505.84	South Jersey
	TETCO	STX - M-3	N	160,208	\$ 84,910.24	\$ 0.5300	\$ 84,910.24	Shell
	TETCO	STX - M-3	N	486,948	\$ 258,082.44	\$ 0.5300	\$ 258,082.44	Shell
	TETCO	STX - M-3	N	15,934	\$ 6,789.48	\$ 0.4261	\$ 6,789.48	Sprague
	TETCO	ELA - M-3	N	3,813	\$ 1,625.00	\$ 0.4262	\$ 1,625.00	CIMA
				<u>1,009,267</u>			\$ 497,288.47	
	TRANSCO	3-6	N	155,000	\$ 4,898.00	\$ 0.0316	\$ 4,898.00	South Jersey
	TRANSCO	3-6	N	155,000	\$ 3,952.50	\$ 0.0255	\$ 3,952.50	Total Gas Power
	TRANSCO	3-6	N	310,000	\$ 139,500.00	\$ 0.4500	\$ 139,500.00	JARON
	TRANSCO	3-6	N	3,565	\$ 1,842.38	\$ 0.4607	\$ 1,842.38	South Jersey
	TRANSCO	3-6	N	15,934	\$ 7,340.49	\$ 0.4607	\$ 7,340.49	Sprague
TRANSCO	3-6	N	123,132	\$ 56,724.42	\$ 0.4607	\$ 56,724.42	CNE	
TRANSCO	3-6	N	99,262	\$ 45,727.79	\$ 0.4607	\$ 45,727.79	UGI	
TRANSCO	3-6	N	300,000	\$ 68,100.00	\$ 0.2270	\$ 68,100.00	Free Point	
TRANSCO	3-6	N	116,487	\$ 53,653.87	\$ 0.4607	\$ 53,653.87	Direct Energy	
TRANSCO	3-6	N	46,500,000	\$ 15,345.00	\$ 0.0003	\$ 15,345.00	Texla	
TRANSCO	3-6	N	3,813	\$ 1,756.46	\$ 0.4807	\$ 1,756.46	CIMA	
			<u>47,782,173</u>			\$ 398,640.91		
April-16	TETCO	ELA - M-3	N	112,680	\$ 48,012.94	\$ 0.4261	\$ 48,012.94	Direct Energy
	TETCO	ELA - M-3	N	119,100	\$ 50,748.51	\$ 0.4261	\$ 50,748.51	CNE
	TETCO	STX - M-3	N	15,750	\$ 8,711.09	\$ 0.4281	\$ 8,711.09	Sprague
	TETCO	STX - M-3	N	3,750	\$ 1,597.89	\$ 0.4261	\$ 1,597.89	South Jersey
	TETCO	STX - M-3	N	95,160	\$ 40,547.67	\$ 0.4261	\$ 40,547.67	UGI
	TETCO	STX - M-3	N	210	\$ 89.48	\$ 0.4261	\$ 89.48	WGL
	TETCO	STX - M-3	N	6,420	\$ 2,735.57	\$ 0.4261	\$ 2,735.57	CIMA
	TETCO	STX - M-3	N	155,040	\$ 82,171.20	\$ 0.5300	\$ 82,171.20	Shell
	TETCO	STX - M-3	N	471,240	\$ 249,757.20	\$ 0.5300	\$ 249,757.20	Shell
	TETCO	STX - M-3	N	540,000	\$ 45,198.00	\$ 0.0837	\$ 45,198.00	Infinite
	TETCO	STX - M-3	N	540,000	\$ 57,240.00	\$ 0.1060	\$ 57,240.00	Concord
				<u>2,059,350</u>			\$ 584,809.55	

	PIPELINE	PATH	RECALL STATUS	MONTHLY VOLUME DTH	TOTAL MONTHLY CREDIT	CREDIT DTH	TOTAL CREDIT	REPLACEMENT SHIPPER
	TRANSCO	3-6	N	9,702,480	\$ 13,098.60	\$ 0.0014	\$ 13,098.60	WGL
	TRANSCO	3-6	N	210	\$ 96.60	\$ 0.4600	\$ 96.60	WGL
	TRANSCO	3-6	N	3,780	\$ 1,741.20	\$ 0.4606	\$ 1,741.20	So Jersey
	TRANSCO	3-6	N	300,000	\$ 32,400.00	\$ 0.1080	\$ 32,400.00	Infinite
	TRANSCO	3-6	N	15,780	\$ 7,269.60	\$ 0.4607	\$ 7,269.60	Sprague
	TRANSCO	3-6	N	119,130	\$ 54,881.00	\$ 0.4607	\$ 54,881.00	CNE
	TRANSCO	3-6	N	95,190	\$ 43,851.90	\$ 0.4607	\$ 43,851.90	UGI
	TRANSCO	3-6	N	300,000	\$ 24,300.00	\$ 0.0810	\$ 24,300.00	Colonial
	TRANSCO	3-6	N	112,710	\$ 51,923.40	\$ 0.4607	\$ 51,923.40	Direct Energy
	TRANSCO	3-6	N	6,420	\$ 2,957.70	\$ 0.4607	\$ 2,957.70	CIMA
				<u>10,655,700</u>			<u>\$ 232,520.00</u>	
May-16	TETCO	WLA - M-3	N	217	\$ 92.46	\$ 0.4261	\$ 92.46	WGL
	TETCO	WLA - M-3	N	16,492	\$ 7,028.23	\$ 0.4262	\$ 7,028.23	Sprague
	TETCO	ELA - M-3	N	94,922	\$ 40,446.26	\$ 0.4261	\$ 40,446.26	UGI
	TETCO	STX - M-3	N	4,309	\$ 1,836.78	\$ 0.4263	\$ 1,836.78	South Jersey
	TETCO	STX - M-3	N	116,141	\$ 50,339.89	\$ 0.4261	\$ 50,339.89	Direct Energy
	TETCO	STX - M-3	N	123,938	\$ 52,809.99	\$ 0.4261	\$ 52,809.99	CNE
	TETCO	ELA - M-3	N	93,000	\$ 9,588.30	\$ 0.1031	\$ 9,588.30	Textla
	TETCO	ELA - M-3	N	160,208	\$ 84,910.24	\$ 0.5300	\$ 84,910.24	Shell
	TETCO	ELA - M-3	N	486,948	\$ 258,082.44	\$ 0.5300	\$ 258,082.44	Shell
	TETCO	ELA - M-3	N	4,526	\$ 1,928.53	\$ 0.4261	\$ 1,928.53	CIMA
	TETCO	ELA - M-3	N	558,000	\$ 94,302.02	\$ 0.1690	\$ 94,302.02	Grays Ferry
	TETCO	STX - M-3	N	558,000	\$ 94,302.02	\$ 0.1690	\$ 94,302.02	Grays Ferry
				<u>2,218,701</u>			<u>\$ 695,667.16</u>	
	TRANSCO	3-6	N	10,025,896	\$ 13,535.22	\$ 0.0014	\$ 13,535.22	WGL
	TRANSCO	3-6	N	155,000	\$ 2,712.50	\$ 0.0175	\$ 2,712.50	Textla
	TRANSCO	3-6	N	155,000	\$ 2,728.00	\$ 0.0176	\$ 2,728.00	Textla
	TRANSCO	3-6	N	217	\$ 99.82	\$ 0.4600	\$ 99.82	WGL
	TRANSCO	3-6	N	4,340	\$ 1,999.50	\$ 0.4607	\$ 1,999.50	South Jersey
	TRANSCO	3-6	N	16,523	\$ 7,612.00	\$ 0.4607	\$ 7,612.00	Sprague
	TRANSCO	3-6	N	123,969	\$ 57,110.00	\$ 0.4607	\$ 57,110.00	CNE
	TRANSCO	3-6	N	94,922	\$ 43,728.60	\$ 0.4607	\$ 43,728.60	UGI
	TRANSCO	3-6	N	118,172	\$ 54,439.72	\$ 0.4607	\$ 54,439.72	Direct Energy
	TRANSCO	3-6	N	620,000	\$ 56,420.00	\$ 0.0910	\$ 56,420.00	Macquarie
	TRANSCO	3-6	N	310,000	\$ 25,110.00	\$ 0.0810	\$ 25,110.00	Colonial
	TRANSCO	3-6	N	310,000	\$ 33,480.00	\$ 0.1080	\$ 33,480.00	Infinite
	TRANSCO	3-6	N	4,557	\$ 2,099.32	\$ 0.4607	\$ 2,099.32	CIMA
				#####			\$ 301,074.68	
June-16	TETCO	ELA - M-3	N	210	\$ 89.48	\$ 0.4261	\$ 89.48	WGL
	TETCO	STX - M-3	N	16,050	\$ 6,839.00	\$ 0.4261	\$ 6,839.00	Sprague
	TETCO	STX - M-3	N	90,930	\$ 38,744.90	\$ 0.4261	\$ 38,744.90	UGI
	TETCO	ELA - M-3	N	110,310	\$ 47,005.00	\$ 0.4261	\$ 47,005.00	Direct Energy
	TETCO	ELA - M-3	N	121,890	\$ 51,937.00	\$ 0.4261	\$ 51,937.00	CNE
	TETCO	ELA - M-3	N	90,000	\$ 9,279.00	\$ 0.1031	\$ 9,279.00	Textla
	TETCO	ELA - M-3	N	155,040	\$ 82,171.20	\$ 0.5300	\$ 82,171.20	Shell
	TETCO	ELA - M-3	N	471,240	\$ 249,757.20	\$ 0.5300	\$ 249,757.20	Shell
	TETCO	ELA - M-3	N	6,660	\$ 2,837.61	\$ 0.4261	\$ 2,837.61	CIMA
	TETCO	ELA - M-3	N	540,000	\$ 100,601.88	\$ 0.1863	\$ 100,601.88	Grays Ferry
	TETCO	ELA - M-3	N	540,000	\$ 100,601.88	\$ 0.1863	\$ 100,601.88	Grays Ferry
				<u>2,142,330</u>			<u>\$ 689,864.15</u>	

Philadelphia Gas Works
 Pennsylvania Public Utilities Commission
 52 Pa. Code §53.61, et seq.
 For the Twelve Months Ending December 31, 2016

Schedule 4
 Page 3 of 5
 Item 53.64(C)(7)

	PIPELINE	PATH	RECALL STATUS	MONTHLY VOLUME DTH	TOTAL MONTHLY CREDIT	CREDIT DTH	TOTAL CREDIT	REPLACEMENT SHIPPER
	TRANSCO	3-6	N	150,000	\$ 2,625.00	\$ 0.0175	\$ 2,625.00	Texla
	TRANSCO	3-6	N	150,000	\$ 2,640.00	\$ 0.0176	\$ 2,640.00	Texla
	TRANSCO	3-6	N	210	\$ 96.60	\$ 0.4600	\$ 96.60	WGL
	TRANSCO	3-6	N	9,702,480	\$ 13,096.60	\$ 0.0014	\$ 13,096.60	WGL
	TRANSCO	3-6	N	4,320	\$ 1,990.20	\$ 0.4607	\$ 1,990.20	South Jersey
	TRANSCO	3-6	N	16,060	\$ 7,407.90	\$ 0.4607	\$ 7,407.90	Sprague
	TRANSCO	3-6	N	121,690	\$ 56,152.50	\$ 0.4607	\$ 56,152.50	CNE
	TRANSCO	3-6	N	90,980	\$ 41,903.40	\$ 0.4607	\$ 41,903.40	UGI
	TRANSCO	3-6	N	100,310	\$ 50,617.60	\$ 0.5066	\$ 50,617.60	Direct Energy
	TRANSCO	3-6	N	600,000	\$ 54,600.00	\$ 0.0910	\$ 54,600.00	Macquarie
	TRANSCO	3-6	N	300,000	\$ 24,300.00	\$ 0.0810	\$ 24,300.00	Colonial
	TRANSCO	3-6	N	300,000	\$ 32,400.00	\$ 0.1060	\$ 32,400.00	Infinite
	TRANSCO	3-6	N	300,000	\$ 25,500.00	\$ 0.0650	\$ 25,500.00	BP
	TRANSCO	3-6	N	6,690	\$ 3,061.90	\$ 0.4607	\$ 3,061.90	CIMA
	TRANSCO	3-6	N	300,000	\$ 19,500.00	\$ 0.0650	\$ 19,500.00	Talen
				<u>12,142,940</u>			<u>\$ 336,113.70</u>	
July-16	TETCO	ELA - M-3	N	961	\$ 409.56	\$ 0.4262	\$ 409.56	WGL
	TETCO	STX - M-3	N	16,633	\$ 7,172.54	\$ 0.4261	\$ 7,172.54	Sprague
	TETCO	ELA - M-3	N	95,511	\$ 40,697.00	\$ 0.4261	\$ 40,697.00	UGI
	TETCO	WLA - M-3	N	4,557	\$ 1,942.00	\$ 0.4262	\$ 1,942.00	South Jersey
	TETCO	WLA - M-3	N	113,677	\$ 46,437.60	\$ 0.4261	\$ 46,437.60	Direct Energy
	TETCO	WLA - M-3	N	126,635	\$ 53,960.00	\$ 0.4261	\$ 53,960.00	CNE
	TETCO	WLA - M-3	N	93,000	\$ 9,566.30	\$ 0.1031	\$ 9,566.30	Texla
	TETCO	WLA - M-3	N	160,208	\$ 84,910.00	\$ 0.5300	\$ 84,910.00	Shell
	TETCO	WLA - M-3	N	466,946	\$ 256,062.00	\$ 0.5300	\$ 256,062.00	Shell
	TETCO	ELA - M-3	N	7,254	\$ 3,090.00	\$ 0.4260	\$ 3,090.00	CIMA
	TETCO	STX - M-3	N	556,000	\$ 111,209.40	\$ 0.1993	\$ 111,209.40	Grays Ferry
	TETCO	STX - M-3	N	556,000	\$ 111,209.40	\$ 0.1993	\$ 111,209.40	Grays Ferry
				<u>2,221,584</u>			<u>\$ 730,708.00</u>	
	TRANSCO	3-6	N	10,025,896	\$ 13,535.22	\$ 0.0014	\$ 13,535.22	WGL
	TRANSCO	3-6	N	155,000	\$ 2,712.50	\$ 0.0175	\$ 2,712.50	Texla
	TRANSCO	3-6	N	155,000	\$ 2,726.00	\$ 0.0176	\$ 2,726.00	Texla
	TRANSCO	3-6	N	992	\$ 456.00	\$ 0.4597	\$ 456.00	WGL
	TRANSCO	3-6	N	4,557	\$ 2,099.32	\$ 0.4607	\$ 2,099.32	South Jersey
	TRANSCO	3-6	N	16,864	\$ 7,768.91	\$ 0.4607	\$ 7,768.91	Sprague
	TRANSCO	3-6	N	126,635	\$ 56,336.26	\$ 0.4607	\$ 56,336.26	CNE
	TRANSCO	3-6	N	95,542	\$ 44,014.00	\$ 0.4607	\$ 44,014.00	UGI
	TRANSCO	3-6	N	113,706	\$ 52,382.67	\$ 0.4607	\$ 52,382.67	Direct Energy
	TRANSCO	3-6	N	620,000	\$ 56,420.00	\$ 0.0910	\$ 56,420.00	Macquarie
	TRANSCO	3-6	N	310,000	\$ 25,110.00	\$ 0.0810	\$ 25,110.00	Colonial
	TRANSCO	3-6	N	310,000	\$ 33,460.00	\$ 0.1060	\$ 33,460.00	Infinite
	TRANSCO	3-6	N	155,000	\$ 10,075.00	\$ 0.0650	\$ 10,075.00	BP
	TRANSCO	3-6	N	310,000	\$ 10,075.00	\$ 0.0325	\$ 26,350.00	BP
	TRANSCO	3-6	N	7,265	\$ 3,356.00	\$ 0.4607	\$ 3,356.00	CIMA
	TRANSCO	3-6	N	310,000	\$ 20,150.00	\$ 0.0650	\$ 20,150.00	Talen
	TRANSCO	3-6	N	230,000	\$ 12,650.00	\$ 0.0550	\$ 12,650.00	Talen
				<u>##### ###</u>			<u>\$ 371,626.10</u>	
August-16	TETCO	STX - M-3	N	961	\$ 412.70	\$ 0.4294	\$ 412.70	WGL
	TETCO	STX - M-3	N	2,294	\$ 7,231.45	\$ 3.1523	\$ 7,231.45	Sprague
	TETCO	ELA - M-3	N	94,209	\$ 40,472.18	\$ 0.4296	\$ 40,472.18	UGI
	TETCO	STX - M-3	N	4,557	\$ 1,957.69	\$ 0.4296	\$ 1,957.69	South Jersey
	TETCO	STX - M-3	N	111,600	\$ 47,943.36	\$ 0.4296	\$ 47,943.36	Direct Energy
	TETCO	ELA - M-3	N	126,123	\$ 55,042.62	\$ 0.4296	\$ 55,042.62	CNE
	TETCO	WLA - M-3	N	93,000	\$ 9,566.30	\$ 0.1031	\$ 9,566.30	Texla
	TETCO	WLA - M-3	N	160,206	\$ 84,910.20	\$ 0.5300	\$ 84,910.20	Shell
	TETCO	ELA - M-3	N	466,946	\$ 256,062.00	\$ 0.5300	\$ 256,062.00	Shell
	TETCO	WLA - M-3	N	7,161	\$ 3,076.36	\$ 0.4296	\$ 3,076.36	CIMA
	TETCO	STX - M-3	N	556,000	\$ 121,253.30	\$ 0.2173	\$ 121,253.30	Grays Ferry
	TETCO	STX - M-3	N	556,000	\$ 121,253.30	\$ 0.2173	\$ 121,253.30	Grays Ferry
				<u>2,205,061</u>			<u>\$ 751,223.46</u>	

Philadelphia Gas Works
 Pennsylvania Public Utilities Commission
 52 Pa. Code §53.61, et seq.
 Philadelphia Gas Works

PIPELINE	PATH	RECALL STATUS	VOLUME DTH	MONTHLY CREDIT	CREDIT DTH	TOTAL CREDIT	REPLACEMENT SHIPPER	
TRANSCO	3-6	N	155,000	\$ 2,712.50	\$ 0.0175	\$ 2,712.50	Texla	
TRANSCO	3-6	N	10,025,896	\$ 13,535.22	\$ 0.0014	\$ 13,535.22	WGL	
TRANSCO	3-6	N	155,000	\$ 2,728.00	\$ 0.0176	\$ 2,728.00	Texla	
TRANSCO	3-6	N	992	\$ 456.94	\$ 0.4606	\$ 456.94	WGL	
TRANSCO	3-6	N	4,557	\$ 2,099.32	\$ 0.4607	\$ 2,099.32	South Jersey	
TRANSCO	3-6	N	16,833	\$ 7,754.65	\$ 0.4607	\$ 7,754.65	Sprague	
TRANSCO	3-6	N	128,123	\$ 59,024.00	\$ 0.4607	\$ 59,024.00	CNE	
TRANSCO	3-6	N	94,240	\$ 43,414.57	\$ 0.4607	\$ 43,414.57	UGI	
TRANSCO	3-6	N	111,600	\$ 51,411.95	\$ 0.4607	\$ 51,411.95	Direct Energy	
TRANSCO	3-6	N	820,000	\$ 56,420.00	\$ 0.0910	\$ 56,420.00	Macquarie	
TRANSCO	3-6	N	310,000	\$ 25,110.00	\$ 0.0810	\$ 25,110.00	Colonial	
TRANSCO	3-6	N	310,000	\$ 33,480.00	\$ 0.1080	\$ 33,480.00	Infinite	
TRANSCO	3-6	N	155,000	\$ 10,075.00	\$ 0.0650	\$ 10,075.00	BP	
TRANSCO	3-6	N	310,000	\$ 28,350.00	\$ 0.0850	\$ 26,350.00	BP	
TRANSCO	3-6	N	7,181	\$ 3,299.02	\$ 0.4607	\$ 3,299.02	CIMA	
TRANSCO	3-6	N	310,000	\$ 20,150.00	\$ 0.0650	\$ 20,150.00	Talen	
TRANSCO	3-6	N	310,000	\$ 17,050.00	\$ 0.0550	\$ 17,050.00	Talen	
			13,024,402			\$ 375,071.17		
September-16	TETCO	ELA - M-3	N	870	\$ 373.75	\$ 0.4296	\$ 373.75	WGL
	TETCO	ELA - M-3	N	11,220	\$ 4,820.86	\$ 0.4297	\$ 4,820.86	Sprague
	TETCO	ELA - M-3	N	68,640	\$ 29,487.75	\$ 0.4296	\$ 29,487.75	UGI
	TETCO	STX - M-3	N	3,180	\$ 1,366.10	\$ 0.4296	\$ 1,366.10	South Jersey
	TETCO	ELA - M-3	N	83,190	\$ 35,738.43	\$ 0.4296	\$ 35,738.43	Direct Energy
	TETCO	STX - M-3	N	82,770	\$ 35,557.99	\$ 0.4296	\$ 35,557.99	CNE
	TETCO	STX - M-3	N	90,000	\$ 9,279.00	\$ 0.1031	\$ 9,279.00	Texla
	TETCO	STX - M-3	N	155,000	\$ 82,171.20	\$ 0.5301	\$ 82,171.20	Shell
	TETCO	STX - M-3	N	471,240	\$ 249,757.20	\$ 0.5300	\$ 249,757.20	Shell
	TETCO	STX - M-3	N	1,920	\$ 824.84	\$ 0.4296	\$ 824.84	CIMA
	TETCO	STX - M-3	N	540,000	\$ 117,341.97	\$ 0.2173	\$ 117,341.97	Grays Ferry
	TETCO	STX - M-3	N	540,000	\$ 117,341.97	\$ 0.2173	\$ 117,341.97	Grays Ferry
			2,048,030			\$ 664,061.06		
TRANSCO	3-6	N	9,702,480	\$ 13,098.60	\$ 0.0014	\$ 13,098.60	WGL	
TRANSCO	3-6	N	150,000	\$ 2,640.00	\$ 0.0176	\$ 2,640.00	Texla	
TRANSCO	3-6	N	150,000	\$ 2,625.00	\$ 0.0175	\$ 2,625.00	Texla	
TRANSCO	3-6	N	870	\$ 400.80	\$ 0.4607	\$ 400.80	WGL	
TRANSCO	3-6	N	3,180	\$ 1,464.90	\$ 0.4607	\$ 1,464.90	South Jersey	
TRANSCO	3-6	N	11,220	\$ 5,169.00	\$ 0.4607	\$ 5,169.00	Sprague	
TRANSCO	3-6	N	82,770	\$ 38,130.60	\$ 0.4607	\$ 38,130.60	CNE	
TRANSCO	3-6	N	68,640	\$ 31,620.90	\$ 0.4607	\$ 31,620.90	UGI	
TRANSCO	3-6	N	83,220	\$ 38,337.00	\$ 0.4607	\$ 38,337.00	Direct Energy	
TRANSCO	3-6	N	600,000	\$ 54,600.00	\$ 0.0910	\$ 54,600.00	Macquarie	
TRANSCO	3-6	N	300,000	\$ 24,300.00	\$ 0.0810	\$ 24,300.00	Colonial	
TRANSCO	3-6	N	300,000	\$ 32,400.00	\$ 0.1080	\$ 32,400.00	Infinite	
TRANSCO	3-6	N	150,000	\$ 9,750.00	\$ 0.0650	\$ 9,750.00	BP	
TRANSCO	3-6	N	300,000	\$ 25,500.00	\$ 0.0850	\$ 25,500.00	BP	
TRANSCO	3-6	N	1,920	\$ 884.00	\$ 0.4604	\$ 884.00	CIMA	
TRANSCO	3-6	N	300,000	\$ 16,533.00	\$ 0.0551	\$ 16,533.00	Calpine	
TRANSCO	3-6	N	300,000	\$ 19,500.00	\$ 0.0650	\$ 19,500.00	Talen	
			12,504,300			\$ 316,953.80		

October-16	PIPELINE	PATH	RECALL STATUS	VOLUME DTH	MONTHLY CREDIT	CREDIT DTH	TOTAL CREDIT	REPLACEMENT SHIPPER
	TETCO	ELA - M-3	N	899	\$ 543.30	\$ 0.6043	\$ 543.30	WGL
	TETCO	ELA - M-3	N	11,594	\$ 4,982.89	\$ 0.4298	\$ 4,982.89	Sprague
	TETCO	STX - M-3	N	70,928	\$ 30,471.00	\$ 0.4296	\$ 30,471.00	UGI
	TETCO	STX - M-3	N	85,963	\$ 36,930.00	\$ 0.4296	\$ 36,930.00	Direct Energy
	TETCO	WLA - M-3	N	85,963	\$ 36,930.00	\$ 0.4296	\$ 36,930.00	CNE
	TETCO	WLA - M-3	N	93,000	\$ 9,588.30	\$ 0.1031	\$ 9,588.30	Texta
	TETCO	WLA - M-3	N	160,208	\$ 84,910.00	\$ 0.5300	\$ 84,910.00	Shell
	TETCO	WLA - M-3	N	486,948	\$ 258,082.40	\$ 0.5300	\$ 258,082.40	Shell
	TETCO	WLA - M-3	N	1,116,000	\$ 103,788.00	\$ 0.0930	\$ 103,788.00	Texta
	TETCO	WLA - M-3	N	5,456	\$ 2,345.00	\$ 0.4298	\$ 2,345.00	CIMA
	TETCO	WLA - M-3	N	558,000	\$ 104,880.00	\$ 0.1876	\$ 104,880.00	Grays Ferry
	TETCO	WLA - M-3	N	558,000	\$ 104,880.00	\$ 0.1876	\$ 104,880.00	Grays Ferry
				<u>3,232,959</u>			<u>\$ 777,930.89</u>	
	TRANSCO	3-6	N	155,000	\$ 2,712.50	\$ 0.0175	\$ 2,712.50	Texta
	TRANSCO	3-6	N	155,000	\$ 2,728.00	\$ 0.0176	\$ 2,728.00	Texta
	TRANSCO	3-6	N	899	\$ 414.16	\$ 0.4607	\$ 414.16	WGL
	TRANSCO	3-6	N	3,289	\$ 1,513.73	\$ 0.4602	\$ 1,513.73	South Jersey
	TRANSCO	3-6	N	11,594	\$ 5,341.30	\$ 0.4607	\$ 5,341.30	Sprague
	TRANSCO	3-6	N	85,529	\$ 39,401.62	\$ 0.4607	\$ 39,401.62	CNE
	TRANSCO	3-6	N	70,928	\$ 32,875.00	\$ 0.4607	\$ 32,875.00	UGI
	TRANSCO	3-6	N	85,994	\$ 39,815.83	\$ 0.4607	\$ 39,815.83	Direct Energy
	TRANSCO	3-6	N	620,000	\$ 56,420.00	\$ 0.0910	\$ 56,420.00	Macquarie
	TRANSCO	3-6	N	310,000	\$ 18,600.00	\$ 0.0600	\$ 18,600.00	DTE
	TRANSCO	3-6	N	155,000	\$ 10,075.00	\$ 0.0650	\$ 10,075.00	BP
	TRANSCO	3-6	N	310,000	\$ 28,350.00	\$ 0.0850	\$ 28,350.00	BP
	TRANSCO	3-6	N	5,487	\$ 2,527.74	\$ 0.4607	\$ 2,527.74	CIMA
	TRANSCO	3-6	N	310,000	\$ 20,150.00	\$ 0.0650	\$ 20,150.00	Talen
				<u>2,278,720</u>			<u>\$ 258,524.88</u>	
November-16	TETCO	ELA - M-3	N	870	\$ 373.75	\$ 0.4296	\$ 373.75	WGL
	TETCO	ELA - M-3	N	11,220	\$ 4,820.12	\$ 0.4296	\$ 4,820.12	Sprague
	TETCO	STX - M-3	N	68,640	\$ 29,487.75	\$ 0.4296	\$ 29,487.75	UGI
	TETCO	ELA - M-3	N	3,180	\$ 1,366.00	\$ 0.4296	\$ 1,366.00	South Jersey
	TETCO	ELA - M-3	N	83,190	\$ 35,739.00	\$ 0.4298	\$ 35,739.00	Direct Energy
	TETCO	ELA - M-3	N	82,770	\$ 35,559.00	\$ 0.4296	\$ 35,559.00	CNE
	TETCO	ELA - M-3	N	155,040	\$ 62,018.00	\$ 0.4000	\$ 62,018.00	Coned Energy
	TETCO	ELA - M-3	N	471,240	\$ 155,980.44	\$ 0.3310	\$ 155,980.44	UGI
	TETCO	ELA - M-3	N	5,280	\$ 2,288.90	\$ 0.4297	\$ 2,288.90	CIMA
				<u>876,150</u>			<u>\$ 327,610.96</u>	
	TRANSCO	3-6	N	870	\$ 400.80	\$ 0.4607	\$ 400.80	WGL
	TRANSCO	3-6	N	11,220	\$ 5,169.00	\$ 0.4607	\$ 5,169.00	Sprague
	TRANSCO	3-6	N	68,640	\$ 31,620.90	\$ 0.4607	\$ 31,620.90	UGI
	TRANSCO	3-6	N	3,180	\$ 1,464.90	\$ 0.4607	\$ 1,464.90	South Jersey
	TRANSCO	3-6	N	83,220	\$ 38,337.90	\$ 0.4607	\$ 38,337.90	Direct Energy
	TRANSCO	3-6	N	82,770	\$ 38,130.60	\$ 0.4607	\$ 38,130.60	CNE
	TRANSCO	3-6	N	5,310	\$ 2,446.20	\$ 0.4607	\$ 2,446.20	CIMA
	TRANSCO	3-6	N	300,000	\$ 87,000.00	\$ 0.2900	\$ 87,000.00	Consolidated
				<u>555,210</u>			<u>\$ 204,570.30</u>	
December-16	TETCO	ELA - M-3	N	1,178	\$ 509.00	\$ 0.4321	\$ 509.00	WGL
	TETCO	ELA - M-3	N	11,594	\$ 4,999.00	\$ 0.4312	\$ 4,999.00	Sprague
	TETCO	ELA - M-3	N	76,136	\$ 32,824.00	\$ 0.4311	\$ 32,824.00	UGI
	TETCO	ELA - M-3	N	3,720	\$ 1,604.00	\$ 0.4312	\$ 1,604.00	South Jersey
	TETCO	ELA - M-3	N	99,541	\$ 42,911.00	\$ 0.4311	\$ 42,911.00	Direct Energy
	TETCO	ELA - M-3	N	103,540	\$ 44,637.00	\$ 0.4311	\$ 44,637.00	CNE
	TETCO	ELA - M-3	N	160,208	\$ 64,083.20	\$ 0.4000	\$ 64,083.20	Coned energy
	TETCO	ELA - M-3	N	486,948	\$ 181,179.79	\$ 0.3310	\$ 161,179.79	UGI
	TETCO	ELA - M-3	N	8,308	\$ 3,582.00	\$ 0.4312	\$ 3,582.00	CIMA
				<u>951,173</u>			<u>\$ 356,328.99</u>	
	TRANSCO	3-6	N	1,178	\$ 542.80	\$ 0.4808	\$ 542.80	WGL
	TRANSCO	3-6	N	11,594	\$ 5,341.30	\$ 0.4607	\$ 5,341.30	Sprague
	TRANSCO	3-6	N	76,136	\$ 35,074.33	\$ 0.4607	\$ 35,074.33	UGI
	TRANSCO	3-6	N	3,751	\$ 1,727.90	\$ 0.4607	\$ 1,727.90	South Jersey
	TRANSCO	3-6	N	99,541	\$ 45,856.44	\$ 0.4807	\$ 45,856.44	Direct Energy
	TRANSCO	3-6	N	103,540	\$ 47,689.70	\$ 0.4606	\$ 47,689.70	CNE
	TRANSCO	3-6	N	8,339	\$ 3,841.50	\$ 0.4807	\$ 3,841.50	CIMA
	TRANSCO	3-6	N	310,000	\$ 89,900.00	\$ 0.2900	\$ 89,900.00	Consolidated
				<u>814,079</u>			<u>\$ 229,973.97</u>	

Tab 7

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.64(c) Thirty days prior to the filing of a tariff reflecting an increase or decrease in natural gas costs, each Section 1307(f) gas utility seeking recovery of purchased gas costs under that section shall provide notice to the public, under § 53.68 (relating to notice requirements), and shall file the following supporting information with the Commission, with a copy to the Consumer Advocate, Small Business Advocate and to intervenors upon request:

- (8) A list of agreements to transport gas by the utility through its system, for other utilities, pipelines or jurisdictional customers including the quantity and price of the transportation.

Response:

Please see the attached list of gas transportation agreements for PGW's jurisdictional customers. PGW has no transportation agreements with other utilities or pipeline customers.

**PHILADELPHIA GAS WORKS
JANUARY 2016 - DECEMBER 2016**

53.64(c) 8-9

MTR_NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL_CCF	Max Daily Qnty (Dth)
1457534	103372.05	81970.4	44557.61	30760.85	8492.64	0	12.53	0	0	17344.07	48558.03	93127.08	428195.26	267
2026784	9620.07	8146.96	6004.57	5306.84	2893.85	620.43	569.97	540.87	595.2	2880.94	5487.85	9220.04	51887.59	420
2024683	31039.31	29578.85	19107.07	12846.57	7142.25	1895.68	1703.99	1611.23	1901.06	10125.87	15796.22	26823.27	159571.37	360
2188212	17913.82	14828.43	7532.07	5933.51	590.61	0	0	0	10.36	3121.37	9279.11	15862.93	75072.21	706
1611639	13485.74	11203.6	2621.51	1596.44	0	44.42	0	0	0	1028.64	3734.47	11736.6	45451.42	1465
1519033	24987.85	21309.16	17947.78	12307.23	2676.42	0	0	0	31.1	4918.88	11452.19	21612.92	117243.53	994
1582086	0	0	0	0	0	0	0	0	0	0	0	0	0	450
1546132	85089.77	97585.07	98009.2	77932.22	97830.44	77436.54	95572.11	64022.14	92145.73	66453.71	88825.93	97381.94	1038284.80	500
1582085	2304010.81	2621060.63	2246575.08	2213287.03	2509437.07	2186695.89	2330979.1	2320904.7	2205390.56	1906992.69	2313661.47	2533209.7	27692204.77	2400
2064973	191120.57	167328.58	142305.36	127987.29	117267.88	104248.16	114868.72	116186.76	111242	118135.82	140142.41	183285.06	1634118.61	400
1724230	9016.75	7712.52	2958.41	1819.83	440.71	3.1	5.21	4.16	5.19	635.15	3857.38	9571.43	36029.84	280
1571006	12585.01	9632.55	3896.43	2693.21	885.01	0	0	0	0	870.1	4892.24	12116.57	47571.12	348
1571005	17630.16	13882.16	6339.09	3725.84	1183.58	0	0	0	0	1410.13	7328.03	16747.59	68246.58	1032
2027533	18026.47	13121.47	6730.09	5771.06	2296.51	18.23	0	0	0	2614.6	6169.65	12447.66	67195.74	58
1987805	12626.15	10576.16	5020.81	3357.27	1629.47	301.11	252.34	253.1	247.75	1666.82	5423.54	10553.43	51907.95	340
1724005	0	0	0	0	0	0	0	0	0	0	0	0	0	452
2027459	0	0	0	0	0	0	0	0	0	0	0	0	0	417
2035554	4747.97	4045.31	2859.53	2263.59	1266.19	621.07	568.59	526.21	589.76	1560.16	2937.15	4747.02	26732.55	240
2123225	31234.21	23185.97	18969.58	0	0	0	0	0	0	0	15639.05	23935.42	112964.23	81
1553337	26466.58	24896.1	15828.49	11252.39	3462.87	0	0	0	0	7544.67	13410.66	22957.84	125819.60	720
2064975	18574.35	19253.79	19496.14	17782.26	18962.15	18323.28	15378.6	16487.16	16585.37	17044.32	18366.61	20169.95	216423.98	200
2211338	69428.59	63973.31	64149.78	55876	54153.03	49162.25	53575.64	50780.37	43230.03	59398.96	62618.17	71711.74	698057.87	200
2027375	23161.06	21277.9	14369.83	10950.33	7443.57	3887.03	3221.5	3083.01	3567.78	7434.96	13717.77	21495.87	133610.61	180
1806081	43674.77	47874.09	50709.41	46438.29	47794.47	44536.84	43903	46503.05	49024.89	56482.68	55706.22	57379.53	590027.24	700
2035210	3033.69	2450.8	1483.46	840.6	0	0	0	0	1.03	547.34	1515.48	2328.04	12200.44	403
2035366	4001.1	3056.61	1720.81	1083.29	0	0	0	0	0	560.17	1553.44	2792.86	14768.28	311
1989426	31691.7	27426.73	17109.92	13262.78	5989.55	2354.88	2107.46	2097.91	2287.28	7725.86	15650.06	26749.79	154453.92	383
2024644	9953.56	8886.49	5082.54	3797.34	1749.67	1133.16	859.75	998.34	1342.87	2529.79	6365.39	9641.07	52339.97	340
2123519	66883.83	64857.47	60788.23	51892.22	45131.68	27123.17	23460.66	24004.62	25479.37	40831.3	55352.42	75092.98	560897.95	475
1723873	4293.8	3615.01	2107.45	1192.36	127.58	0	0	0	0	501.55	1762.09	4225.32	17825.16	958
2188210	25551.26	20074.88	14901.1	12409.14	7944.4	3054.02	3214.08	0	3939.63	4251.95	6517.55	0	101858.01	407
2064976	24859.12	23769.79	9714.17	5230.03	0	0	0	0	0	1841.96	14864.62	23742.44	104022.13	172
1989652	20769.64	15848.12	0	9624.15	8387.85	7349.25	5838.1	3927.26	3595.78	3795.38	13477.46	0	92612.99	226
2035356	3003.48	2320.28	1369.41	798.28	49.47	0	0	0	0	377.85	215.47	2345.75	10479.99	31
2024712	19575.33	14009.88	4566.92	2303.41	428.92	0	0	0	0	1606.07	4968.43	16304.87	63763.83	120
2188215	31014.38	23438.55	6299.98	3586.78	0	0	0	0	0	876.68	6633.1	23881.85	95731.32	1833
1553331	65867.87	53325.21	25384.62	16959.73	4529.1	1186.88	1103.2	1346.59	1055.97	7771.04	22889.35	53413.47	254833.03	300
2070242	2951.39	2603.1	1332.87	993.77	370.49	0	0	0	0	511.21	1294.94	2900.77	12958.54	302
2070260	3671.88	2927.64	1764.44	1339.32	506.95	0	0	0	0	461.67	1591.01	3307.35	15570.26	958
2070271	3729.35	3304.48	2108.6	1438.35	463.89	0	0	0	0	643.76	2656.94	3966.43	18311.80	419
2070249	4924.46	4216.43	3266.56	2751.52	1345.14	0	0	0	0	853.34	1837.42	3768.31	22963.18	336
1906628	12775.13	8798.06	2148.32	1757.2	197.67	0	0	0	0	154.98	5382.6	10649.07	41863.03	90
2025139	14592.7	12189.18	8426.47	3700.18	0	0	0	0	2.07	1322.95	8906.63	14493.07	63633.25	408
1987495	11983.1	12302.84	12208.93	10879.92	11635.05	10905.71	6377.51	13100.9	10865.68	10600.33	13147.65	10034.4	134042.02	216
1884506	12435.79	8862.78	3800.31	869.52	0	0	0	0	0	303.72	2129.36	9421.03	37822.51	266
1756663	77840.29	60984.36	29468.53	15226.13	1837.49	0	0	0	0	4336.07	26663.01	61540.78	277896.66	223
1658879	12153.04	10678.51	7033.11	5469	3042.21	1215.15	991.3	906.66	771.41	2114.15	5078.33	10727.78	60180.65	360
2026819	0	0	0	0	17615.93	12884.4	12761	4538.18	16451.78	18321.07	19888.92	21375.69	123836.97	425
1724853	43518.17	40009.29	12843.1	5140.87	1015.57	0	0	0	0	3019.64	11010.84	35830.11	152387.59	144
2024307	14547.5	11962.99	7124.56	4583.05	684.35	0	0	0	0	1217.68	4951.07	12862.08	57933.28	360
2188226	85662.35	69388.1	39658.97	27979.12	8583.59	7977.46	7443.03	7039.41	0	25718.04	52390.4	79937.96	411778.43	825
2188226	85662.35	69388.1	39658.97	27979.12	8583.59	7977.46	7443.03	7039.41	0	25718.04	52390.4	79937.96	411778.43	600
1921578	7957.88	7341.73	3594.65	4111.94	1845.74	1655.39	2024.04	1969.27	2324.61	2631.18	6276.42	6868.96	48601.81	81
2027635	4917.36	4544.86	3635.23	3316.87	4639.12	4805.8	4956.81	4674.56	4444.47	3883.6	3041.92	4451.67	51312.27	500
2157700	60377.8	56817.99	50542.28	47982.25	41602.11	37291.95	34020.28	31999.11	33869.47	42567.88	48231.56	64516.23	549818.91	2847
2012886	4540.51	3803.32	2130.69	1549.53	659.76	0	0	0	0	726.69	2130.72	3769.75	19310.97	75
1594769	0	0	0	0	0	0	65217.24	32536.6	0	0	0	0	97753.84	92
2090400	199684.33	177533.39	157017.65	136139.24	141191.06	129666.12	64316.8	89748.37	112427.07	115853.9	140226.7	208602.99	1672407.62	419
1621317	403270.85	354145.84	287145.37	240548.22	236803.23	197118.42	277659.97	298244.48	413189.09	197860.48	300872	347306.35	3554164.30	92
1987777	9878	8705.45	8764.34	7688.1	7554.72	7799.25	6583.27	6614.19	6636.56	7345.35	7982.62	8574.35	94106.20	43
1987797	12730.76	12135.7	10015.95	8261.64	7981.91	8073.97	7261.26	8358.14	8207.35	8708.03	9709.86	16543.45	117988.02	303
1884577	27704.98	23635.37	11312.34	9842.24	3719.56	0	0	0	0	3341.96	10973.77	21574.69	112104.91	624
2157694	14524.15	12353.18	7985.35	5009.03	1414.47	0	0	0	0	1309.62	5518.68	13097.71	61212.19	325
2027531	19491.04	14868.05	8264.36	7093.11	1659.67	0	0	0	5.18	1922.64	5388.48	14150.54	72843.07	3128
1685273	28475.61	22467.13	13785.13	10861.96	5897.68	2016.82	1718.64	1660.72	1813.94	5530.37	14082.87	25067.07	133377.94	782
2115837	26508.88	21690.59	17786.99	14165.21	11824.06	7412.97	6598.62	7659.64	9363.97	14990.49	20902.25	24712.71	183616.38	782
1906625	10168.58	9666.2	10243.55	7551.15	7341.89	6564.37	6065.57	6664.05	6562.37	6450.93	8779.65	9966.44	96024.75	30
1724008	41723.31	35455.47	30123.77	25512.34	21169.11	17638.37	16920.48	14777.19	13252.95	20904.67	27462.96	34762.29	299702.91	522
2027477	4000.39	3861.56	3565.58	3596.26	3404.75	2281.55	1752.42	2806.57	2003.57	3519.21	3576.33	2569.49	36937.68	162
2036147	8485.96	6853.29	3078.65	1900.07	1030.38	0	0	0	91.29	790.59	2489.4	4911.92	29631.55	312
2024704	12157.97	9753.64	3206.59	2520.97	1024.96	0	9.37	0	2.07	1788.18	4067.55	10715.94	45247.24	313
2157692	76887.51	67407.04	34239.98	2730										

**PHILADELPHIA GAS WORKS
JANUARY 2016 - DECEMBER 2016**

53.64(c) 8-9

MTR_NBR													TOTAL_CCF	Max Daily Qty (Dth)
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
2115543	5605.83	4601.09	2411.12	1596.52	421.21	0	0	0	0	804.12	2716.36	4888.85	23045.10	64
2157683	42578.51	40228.55	41931.07	38115.23	37524.39	32687.83	30813.77	33394.18	33352.35	34041.44	35229.71	43931.97	443829.00	550
2026758	15968.74	12162.34	7707.2	5109.03	2301.82	395.02	0	0	0	2211.61	5914.98	12515.53	64286.27	250
1806092	34112.78	40293.04	39854.35	35181.6	41272.81	41455.26	42001.95	35818.35	38069.45	30254.95	32960.09	34451.24	44525.87	384
2094623	0	174623.85	90405.78	89855.83	84392.32	86853.97	83862.67	73837.93	79726.53	73542.23	77874.02	77080.16	992055.29	1046
1987500	55214.87	38407.04	21944.29	11789.22	0	0	0	0	0	6568.29	12915.81	49357.79	196197.31	479
2027401	10249.52	8203.76	6715.51	7176.75	6476.96	6323.02	3388.06	6319.05	6552.34	5872.83	6886.72	8375.38	82539.90	305
2027402	12226.33	9699.01	7992.26	8652.65	7803.18	7752.43	3954.01	7747.98	8042.53	7050.39	8271.72	10021.82	99214.31	707
1658880	0	0	20019.29	17293.24	17136.7	15777.18	13927.44	16538.68	16323.46	18005.81	18325.98	19591.61	172939.39	272
2157688	13024.64	25753.4	22776.53	19464.29	18905.91	13491.38	21551.75	15366.2	15609.23	2411.82	0	0	168355.15	750
2157696	54318.11	48896.56	31558.37	22712.23	14565.94	7988.19	8588.7	9464.01	9045.43	17263	20778.92	16604.82	261786.28	450
1724001	19954.89	18194.79	11062.09	5680.15	738.87	0	0	0	0	1002.87	8698.65	13315.11	78647.42	173
1658881	27365.98	22508.1	14683.21	10947.02	2408.23	0	0	0	0	0	0	0	77912.54	403
1989625	5324.97	4882.75	1486.39	1006.1	0	0	0	0	0	11.49	88.76	1041.13	13841.59	454
2035891	8277.49	8347.98	11131.27	9363.46	3798.22	2338.4	1749.84	2052.47	2024.14	4028.04	6704.35	7983.77	67799.43	591
2036188	26918.38	20677.8	14337.35	13551.01	10197.29	11406.12	12673.64	12742.44	12658.53	13632.67	12722.62	24872.64	186544.09	1300
1921579	5089.16	3127.59	1854.76	1587.25	1595.44	1487.62	1124.22	1057.29	1763.89	2666.95	2715.88	3610.74	27680.79	843
1909351	7551.02	6341.37	3809.27	2294.07	775.1	0	0	0	0	1610.59	3445.51	6621.36	32448.29	504
2198755	14372.88	12124.95	7192.48	4696.66	1359.98	0	0	0	153.08	3578.38	10555.44	16234.49	70268.34	400
2024690	57058.92	48879.92	38501.61	36356.9	27665.88	9190.91	6663.14	5607.39	13214.68	9063.54	18146.62	32376.5	300726.01	300
2198741	0	0	0	0	0	0	0	73258.32	55512.16	73032.16	70349.6	71620.97	343773.21	503
2024715	32795.86	23141.96	10137.32	4173.82	0	0	0	0	0	2011.87	11593.26	24821.03	108675.12	300
2035967	5198.25	5243.46	6266.81	5986.3	6579.68	6173.34	6445.93	6621.58	6606.91	7083.7	6821.31	7290.72	76317.99	685
2024851	19185.38	17531.75	12081.52	8713.86	2495.68	0	0	0	17.62	3647.98	8245.61	16120.49	88039.89	244
2025158	22943.55	15922.29	4447.39	2307.52	0	0	775.93	1.1	1.09	0	7924.08	9652.69	63975.64	626
2171231	70244.01	59553.67	47851.08	41417.87	37936.84	30749.12	29221.77	33145.43	29908.25	41200.4	52081.24	71547.44	544857.12	860
1724011	13093.96	9343.46	2246.37	1139.63	31.48	0	0	0	134.84	1141.08	2418.47	10305.83	39855.12	907
2023840	5931.9	5440.01	4086.94	3048.02	1747.69	891.15	823.29	807.66	853.67	1955.97	3759.58	6023.73	35369.61	934
1658873	5276.77	0	0	0	0	0	0	0	0	1108.75	4270.19	11610.66	22266.37	1400
2036167	16859.75	14269.92	9113.3	5560.09	1632.67	0	1.04	0	0	3622.68	9368.22	15513.53	75941.20	4372
1806077	73406.81	65989.73	57748.41	26735.96	3133.36	2596.92	2296.25	1564.01	2083.51	28949.27	49996.71	67145.52	381646.46	277
2025150	8374.78	6594.71	3887.58	2727.26	436.81	0	0	0	0	1883.44	5798.72	7608.26	37311.56	178
2123510	9420.81	5305.64	3754.66	2123.86	398.02	14.52	0	0	0	1209.39	4315.19	7999.54	34541.63	90
2116171	44947.22	35397.62	25061.56	18195.99	10142.36	0	0	0	0	9865.19	22274.07	34612.96	200496.97	1252
2116174	81028.97	64082.32	47006.39	33718.25	19232.85	0	0	0	0	18767.8	41567.02	62122.02	367525.62	1252
2157697	61665.77	55892.07	51768.81	31222.13	28166.55	10367.12	9715.6	9161.63	9816.58	34074.89	39233.74	52626.64	393711.53	550
1989428	76556.26	62855.04	48274.38	40013.94	29700.28	18803.58	11036.76	11692.27	12740.24	33204.62	42047.97	60430.78	447356.12	302
2035975	11680.6	11875.39	10896.25	9963.42	10016.86	8430.48	6872.2	7215.11	6976.25	8868.52	9478.92	11886.09	114160.09	554
1826616	7007.15	6065.52	4120.88	3243.53	1881.76	0	0	0	0	2085.92	3695.14	6738.29	34838.19	703
2123526	21935.77	15818.86	7583.87	3479.62	0	0	0	0	0	721.19	6733.31	21597.39	77870.01	305
2027599	4678.44	4559.94	3439.83	2972.54	2314.01	1747.48	1705.63	1788.87	1911.68	2564.97	3056.89	4717.79	35458.07	123
1723898	49622.81	35473.55	15577.6	7845.84	0	0	0	0	0	6802.82	20312.43	42546.29	178181.34	424
2171221	29451.16	24752.89	22963.97	21856.12	20048.91	19349.21	17777.29	17744.29	18490.03	21407.86	23706.34	26807.73	264355.80	400
2132738	67086.76	55637.81	48663.65	47776.59	79765.47	66301.98	77054.78	86100.42	87132.42	101119.13	112072.58	131306.92	960018.51	424
2123509	27225.67	19488.1	5503.71	2280.55	1.1	1.1	1.1	1.1	1.09	186.17	4062.27	16296.77	75047.63	430
2188219	57887.34	49746.72	38227.86	36530.67	22441.07	17430.85	16739.22	16082.36	16236.64	25816.72	42540.94	53883.54	393563.93	324
1987785	6721.57	6280.05	5224.76	3218.67	1146.1	970.08	879.52	844.12	952.35	2300.55	5285.7	6200.86	40024.33	120
1884513	8815.86	7599.55	5750.39	4620.05	4470.18	3973.4	4611.64	4548.38	3436.92	4175.27	6627.01	9062.67	67689.32	241
1884573	30465.35	22731.16	10238.11	6068.67	1373.46	0	0	0	0	2516.13	8753.8	23996.48	106143.16	698
1611640	12026.84	8226.42	2314.75	1401.35	0	0	0	0	0	0	1544.83	8490.11	34004.30	240
2116154	11442.87	11352.51	8412.05	7030.96	9049.38	9772.94	4744.91	8639.76	6114.15	7251.73	6873.6	9138.48	99823.34	141
1921703	30204.29	25034.32	17329.68	13164.26	3420.38	0	0	0	0	6352.95	20226.62	38798.11	154530.61	400
2123295	6187.04	5567.11	5587.89	3330.97	4215.78	2079.86	3279.63	4894.75	4776.02	4352.84	6452.95	6580.77	57305.61	430
2171230	39471.45	30631.15	12446.21	5441.87	0	0	0	0	0	1888.67	11465.63	33540.13	134885.11	340
1724240	11040.17	10327.23	2653.57	2103.28	0	0	0	0	0	1209.07	4249.27	10264.85	41847.44	703
1514012	15546.85	12177.08	4249.59	2425.65	1345.47	0	0	0	0	1412.32	4480.7	10398.95	52036.61	264
2188213	9111.03	6775.53	3167.84	2141.53	326.91	0	0	0	0	1088.28	2770.66	5740.06	31121.84	418
2023947	9095.98	8116.52	5992.3	5273.97	4169.77	3256.92	3366.34	4203.14	3954.8	4063.34	6924.58	9032.12	67449.78	418
2133386	1856.61	1551.95	778.29	524.44	26.39	0	0	0	0	166.85	821.23	1249.81	6975.57	495
1987808	21.29	73.2	62.35	249.78	0	0	2291.22	8890.55	10637.07	2340.33	0	0	24565.79	370
1724003	10291.08	25846.65	18474.73	11795.26	7588.68	3542.11	3704.95	2491.47	4157.56	9325.95	14514.12	25968.92	135701.48	305
2171219	107978.92	90175.87	59035.05	45088.85	27546.79	14334.81	7727.75	104.1	104.6	27418.82	57204.77	88934.36	525654.69	449
1621318	28244.73	20474	6163.13	4178.15	0	0	10.4	0	0	2612.02	8036.45	26585.65	96304.53	550
1909301	1088834.83	1047529.15	1036097.84	669688.59	965296.56	649741.53	879086.306	1038992.6	985510.427	827273.835	855213.012	1007089.9	11050354.59	0
2027485	41323.2	33519.55	21883.61	13727.94	4511.04	3535.66	3207.34	1626.44	3043.72	11511.41	23350.64	37941.55	199182.10	1461
2023712	3723.2	3047.99	1310.95	1244.21	25.33	0	0	0	0	314.6	722.14	1973.6	12362.02	1461
2025166	5745.71	4011.56	877.84	530.81	0	0	0	0	6.24	279.17	1259.08	4167.8	16878.21	192
1987812	15230.76	11294.95	5818.69	3815.08	1070.13	0	0	0	0	2114.89	5498.8	11750.49	56593.79	1046
2115067	6542.98	5973.42	5095.91	3614.8	0	0	0	0	0	1749.6	3604.24	4627.73	31208.68	316
1826506	6219.23	6394.46	4825.7	4403.32	3940.84	4583.98	3983.12	3555.44	2718.71	4247.9	4275.25	6833.51	55981.46	302
2116016	3452.94	2922.33	1483.99	1089.31	411.54	0								

**PHILADELPHIA GAS WORKS
JANUARY 2016 - DECEMBER 2016**

53.64(c) 8-9

MTR_NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL_CCF	Max Daily Qty (Dth)
1884510	26875.89	23108.94	15120.63	10521.32	7051.44	5456.41	4191.97	4086.83	4443.66	8245.53	12813.32	22466.76	144382.70	34
1826674	15803.38	14486.72	13280.4	9974.26	10450.56	10326.67	9362.3	9384.22	8182.01	8754.43	10126.52	12779.01	132910.48	114
2023831	3232.02	3314.82	3222.84	2986.13	2961.29	2540.88	2367.69	2227.23	2241.57	2753.37	2954.67	3374.34	34176.85	89
2025178	16984.1	14712.74	9520.62	5716.29	3583.33	1652.54	3231.26	5842.85	5524.06	8288.26	11082.57	15350.26	101488.88	149
1582087	20814.41	16089.29	9700.25	3988.82	10.87	0	0	0	0	1392.96	7067.39	18978.48	78042.47	676
1685278	44546	34434.19	18521.91	12560.42	4814.31	2607.04	2351.22	2493.29	2203.23	8638.94	16679.84	35009.03	184859.42	133
1658878	48322.32	34292.27	0	0	0	0	0	0	0	0	0	0	82614.59	1222
2198744	0	0	0	0	0	0	0	0	0	98704.4	80501.99	92546.42	271752.81	644
2198748	191601.89	209915.1	183083.02	135921.51	174805.39	159818.34	138793.17	158670.73	404975.58	103429.03	105141.59	121456.05	2087611.40	644
2115595	6635.91	7752.91	3310.57	2.35	1859.78	6644.75	10148.27	10287.07	6904.21	426.47	1.18	17882.96	71856.43	301
1406184	10227.58	8053.73	2863.07	1661.4	0	0	0	0	0	909.97	3731.06	8857.59	36304.40	144
1724851	78136.48	72378.44	63708.89	61026.64	51983.9	37189.24	34857.64	27623.99	39288.39	42142.63	56471.86	75478.9	640287.00	1461
1724852	92309.58	85002.58	75823.48	72919.38	61918.21	44564.57	41222.8	32523.28	46688.35	50404.66	67617.96	89510.69	760505.54	228
2023960	18847.65	17349.83	17887.49	18576.48	17479.92	17384.79	16764.99	17304.34	11714.5	9939.76	14218.01	12743.42	190211.18	1151
1722879	14249.19	13087.82	9510.13	7453.08	2951.55	1802.42	1181.48	1156.46	1676.72	3735.72	9296.1	14299.26	80399.93	302
1884404	2298.76	2168.4	1648.59	1310.36	350.07	38.36	235.75	231.25	242.71	872.57	1641.72	2196.09	13234.63	1500
2188099	2280.29	2144.63	1499.54	1269.05	388.7	318.77	297.27	284.38	280.2	837.57	1720.75	2301.6	13622.75	89
2188130	2212.18	2099.09	1999.79	1612.43	507.94	376.97	347.31	375.06	431.25	1267.3	1932.29	2281.4	15443.01	89
2211303	2699.46	2321.08	2012.53	1243.53	568.85	422.65	330.65	318.77	337.52	1178.66	1935.59	2934.87	16304.16	130
2123504	34183.12	23204.94	11432.46	6953.01	1474.87	0	1.38	1.38	1.39	5273.27	19673.44	30259.8	132459.06	276
2024604	5864.79	5637.43	6249.33	6388.87	8202.05	8349.44	7301.91	8625.41	8737.44	8167.91	5334.29	4662.57	83521.44	110
1906623	9354.18	7806.25	5566.54	4953.04	2100.85	848.68	916.14	869.12	940.89	5839.15	6360.3	8356.12	53911.26	89
1546144	5828.62	5274.98	2478.35	983.19	147.88	0	0	0	0	355.71	1500.63	4548.45	21117.81	285
2115841	52905.45	54980.02	49219.18	43237.45	37451.88	40884.42	40909.02	38055.19	38938.07	45272.77	48628.74	45785.81	536288.00	183
2115844	64321.55	61033.3	60319.86	53631.94	48635.48	51818.86	52215.2	49928.5	49725.95	56391.76	59858.15	57530.39	670480.94	240
2123527	16633.44	13332.85	7490.61	5228.21	1601.87	0	0	0	0	229.83	1310.22	9884.56	55711.59	831
1553331	65867.87	53325.21	25384.62	16959.73	4529.1	1186.88	1103.2	1346.59	1055.97	7771.04	22889.35	53413.47	254833.03	225
1723998	65908.58	57551.39	45587.56	40076.58	32750.53	18729.1	13430.25	12976.8	15348.21	25862.16	43889.13	56389.71	428500.00	907
2027560	6251.23	6324.67	4120.62	4079.49	2752.04	1729.6	1492.69	1620.71	1910.25	2868.48	4227.57	7547.17	44924.52	432
2024645	13300.4	12617.37	0	0	0	0	0	24557.37	985.48	3886.3	9838.24	14729.21	79914.37	313
2025149	7506.86	7165.62	4658.94	9624.63	10005.99	10194.11	2421.99	2288.01	7044	11573.13	6206.43	5757.65	84447.36	13.7
2116156	15874.34	13596.3	7654.5	6469.65	3487.01	2294.89	2222.69	2428.44	2816.63	7392.17	14151.11	21666.79	100054.52	76
2132737	63030.42	51094.13	31749.22	27205.28	17692.19	13538.2	12833.46	12817.09	19384.26	24290.27	36590.21	51200.26	381424.99	800
2036151	10280.5	8966.83	8966.83	4537.04	1869.18	0	0	0	0	2197.27	5406.79	9131.95	49049.09	202
2064880	3083.31	2597.81	2582.79	2549.66	2782.9	3288.05	2787.22	2941.56	2448.82	1741.37	1775.07	1992.79	30571.35	115
2023958	24500.06	22112.72	13014.48	7408.67	282.09	0	0	0	0	1401.48	4188.45	8972.24	81880.19	397
2024684	8447.79	7126.47	2596.89	1508.7	552.41	0	0	0	3.11	1183.61	3572.96	7325.9	32317.84	281
2116148	11602.71	9983.51	6574.71	4655.51	2262.62	903.59	897.26	927.54	948.07	1964.55	5466.75	10608.82	56795.64	500
2064974	29585.93	0	22283.91	8396.38	5257.46	0	0	0	0	2052.36	7816.14	24384.68	99776.86	456
2171222	19676.63	17001.18	5701.62	2840.75	832.51	0	0	0	0	1457.75	3114.62	8780.62	59405.68	300
1420497	128280.6	120774.87	100235.89	105177.57	98970.11	90398.71	77670.34	87777.89	73603.4	84279.29	70494.6	82851.14	1120514.41	2847
2012880	8089.63	7121.38	5161.72	4499.89	2966.96	1154.99	1014.16	1032.79	1108.83	2685.58	4587.1	7873.6	47296.63	396
1724854	95275.86	89330.5	85204.13	80316.95	58433.3	37398.53	35692.83	38566.32	38141.89	52396.55	71055.92	74225.99	756038.77	240
2188214	29198.02	21867.86	15773.95	13319.78	10230.26	1938.43	992.88	1946.26	2955.3	10068.88	14727.99	23841.24	146858.85	272
2171232	43925.64	43881.63	19672.45	8259.55	3041.5	0	0	0	0	4299.13	18244.78	34155.21	175479.89	400
2116159	27229.89	20232.54	8726.41	3602.38	2719.69	0	0	0	0	3740.11	2499.83	3003.64	71764.49	170
2116158	49438.81	41664.26	21324.05	7597.05	6326.34	0	0	0	10.36	6975.88	26498.54	49417.01	209252.30	2169
2133065	9131.57	7023.15	3960.32	1985.81	362.22	0	0	0	0	1129.47	3290.88	6155.72	33039.14	269
2116152	10835.36	8089.02	2672.93	1494.47	464.58	0	0	0	0	973.75	2971.57	8843.02	36344.70	245
2157693	9385.82	6880.85	2704.85	1557.1	200.46	0	0	0	10.37	335.49	2075.16	6509.48	29659.58	300
2123523	8454.91	6701.08	4354.83	2967.42	757.85	0	0	0	0	931.36	3190.47	8281.89	35639.81	375
2027510	7952.1	7922.52	6933.66	6409.06	6821.14	7067.51	7284.11	7643.01	8119.33	8907.62	8691.25	7515.57	91266.88	215
1954681	60915.24	48602.03	37720.97	35800.33	28322.17	30747.73	24105.16	23035.27	20844.09	25828.43	37836.28	55406	429163.70	127
2027454	8754.99	6980.19	5131.67	2312.99	0	0	0	0	0	832.94	5138.76	7217.92	36369.46	127
2035408	2964.88	2422.85	1156.26	633.12	0	0	0	0	0	250.85	1309.95	2748.93	11486.84	127
1685269	24518.65	25848.51	28703.55	23776.43	26278.85	25260.51	21244.42	23919.61	21921.01	24191.34	25141.64	28876.41	299680.93	216
2116004	6867.83	5182.8	2865.26	1667.22	0	0	0	0	0	1445.44	2066.25	4591.96	24686.76	103
2123495	15089.81	12836.4	9549.08	7614.46	6091.28	2219.21	2218.3	2228.63	3285.28	6067.92	8197.97	11916.02	87314.36	120
1987815	70247.26	61570.03	46015.46	38280.55	27737.32	5429.22	1674.31	6281.08	13398.22	32082.92	50648.53	68988.33	422353.23	131
1724010	22152.57	25061.57	25430.75	21469.14	23278.44	21752.8	21867.17	21587.71	22872.58	23338.1	21225.99	23517.47	273554.29	76
1826561	9568.22	7783.58	5221.21	4051.06	2138.86	891.09	830.55	796.15	853.37	2300.24	5766.56	9206.85	49407.74	132
2035839	6275.75	5559.48	3632	2848.62	2378.75	1612.95	1730.53	1617.19	1954.54	1858.73	3326.51	5574.9	38369.95	112
1756664	29869.52	24860.57	14573.1	9450.47	2307.25	0	0	0	0	3221.73	16172.67	30091.15	130546.46	346
1921700	43908.97	42437.56	20459.44	9643.54	2787.71	11.09	55.63	1291.06	0	6733.94	18436.2	40604.84	186367.78	549
2025107	9938.57	8465.44	3384.1	1640.04	0	0	0	0	0	0	2558.44	8446.38	34432.97	576
2116161	196831.4	185740.76	134149.91	69235.63	0	0	0	208.49	0	2729.55	106554.34	192971.28	888421.36	518
2157680	63438.51	56218.82	49497.42	44554.67	41294.66	36999.67	36050.75	35728.91	37121.4	50703.36	50774.95	61846.07	584229.19	267
2036180	46405.45	44685.93	42966.22	34896.33	31527.5	26226.91	24106.55	22107	21779.82	24995.56	30072.32	39474.1	389243.69	1362
1884579	8250.58	7197.75	5025.01	2173.75	0	10.4	0	0	0	2102.44	4532.82	6495.23	35787.98	174
1685272	51483.26	46277.27	26878.69	21091.87	8455.05</									

**PHILADELPHIA GAS WORKS
JANUARY 2016 - DECEMBER 2016**

53.64(c) 8-9

MTR_NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL_CCF	Max Daily Qty (Dth)
2064920	0	0	0	0	0	2501.86	2603.63	3213.41	3472.07	4353.57	7081.73	19184.63	42410.90	375
2123514	25338.85	21280.14	7939.36	2859.29	1102.6	979.18	663.92	165.66	71.1	451.13	6416.73	11652.94	78920.90	291
2012845	0	0	0	0	5543.4	4824.03	4479.52	4225.58	4568.37	6183.69	6792.86	7222.08	43839.53	400
2123515	27845.98	23286.96	9230.23	5542.53	345.78	0	11.84	11.84	35.41	2462.38	9040.63	21672.5	99486.08	211
2123516	30164.72	26252.26	13712.17	11690.09	7362.45	2867.04	2598.42	2522.22	2719.95	5305.42	11871.16	21182	138247.90	260
1685280	56650.51	44953.08	44963.52	52866.37	71994.42	54560.77	50658.43	52209.82	36425.18	53171.66	46134.87	59251.11	623839.74	625
2026766	17715.2	14373.49	7341.53	0	0	5103.11	0	0	0	1932.77	9098.15	14281.9	69846.15	272
2027581	17133.47	13748.21	7315.75	4858.86	635.52	0	0	0	6.22	3937.31	8513.01	13993.47	70141.82	354
1553327	37044.44	27940.93	22538.18	18244.98	10268.12	0	0	0	0	10137.19	20590.59	32561.57	179326.00	152
2133053	0	0	0	0	0	0	0	0	0	0	0	0	0.00	257
2133091	90561.33	89558.55	99250.43	89678.42	92099.7	95077	88288.18	89737.23	82706.28	89231.22	95859.8	96863.6	1098911.74	278
2027509	27998.97	23982.68	19720.06	17475.56	10443.74	7945.5	7434.82	7242.69	7268.09	8849.85	14597.13	22476.77	175435.86	450
2064979	18984.46	19282.59	10909.75	11324.05	15542.04	13214.91	5033.03	12979.4	15208.13	9088.3	3896.68	14165.44	149628.78	235
1658884	73310.54	67447.19	45379.03	38195.6	21639.47	6645.53	10206.9	17933.65	13736.73	27430.46	35924	53974.99	411824.09	240
1553324	36044.69	31858.21	17006.61	11609.57	1920.18	0	0	0	0	4959.54	20963.53	33479.33	157841.66	167
1724219	30.52	0	0	0	0	0	0	0	0	0	0	0	30.52	251
1601878	51453.31	33814.14	8493.36	0	0	0	0	0	0	0	0	0	93760.81	429
2188218	21357.7	18117.72	3847	2543.86	316.07	0	0	0	0	1338.92	8613.57	14683.12	70817.96	100
1987803	56059.1	45657.73	35367.04	35626.15	43770.79	63444.14	85497.14	99988.09	85323.42	57811.69	51630.87	52387.69	712563.85	296
2024719	8928.62	7415.53	4634.44	3447.57	1608.8	1230.8	1171.54	1517.25	1454.91	1312.79	3054.48	7971.41	43748.14	573
1989421	20620.08	20128.8	0	15450.73	2.2	0	0	0	0	1121.82	6556.12	17830.44	81710.19	400
1621319	39072.19	31180.46	25890.96	19137.33	12781.68	8265.19	9117.47	8894.25	8213.95	12724.66	19422.42	33647.99	228348.55	65
2027392	10993.68	11801.37	9588.74	7809.68	6326.66	6024.04	4926.19	5478.34	5347.02	6954.67	9045.28	11175.15	95470.82	400
2023955	89181.17	76171.03	53071.68	32658.06	14108.3	8484.64	6556.47	1521.06	1618.68	20876.71	48410.18	85476.96	436134.94	149
2171233	36381.33	30503.65	17879.43	13679.38	5764.03	2700.93	2923.51	2814.29	2916.78	9416.02	16184.72	32789.54	176533.61	650
2027498	25013.62	27593.32	32655.4	27616.19	29579.14	30358.28	27289.39	29124.45	24845.37	21605.38	24501.21	27076.02	327257.77	90
2035986	5693.56	5127	3686.76	3158.35	2544.32	2187.42	2433.17	2372.45	2164.08	2521.61	2649.24	3491.5	38029.46	599
2036046	3782.71	3647.07	1574.41	413.67	0	0	0	0	3.1	0	2633.55	3035.18	15089.69	120
2116023	0	0	0	0	0	0	0	0	1578.21	2166.41	1431.61	2359.58	7535.81	201
2123512	3876.52	3382.38	2184.34	1773.53	0	0	0	0	406.69	4654.06	10742.64	15880.52	42900.68	201
2025156	7441.85	6546.35	3136.91	2032.54	778.45	0	0	0	43.56	2372.47	4706.73	7416.39	34475.25	139
2188222	41618.08	36850.73	27694.2	18024.6	8269.83	5640.45	4320.71	3877.25	4823.57	13392.48	26689.99	41253.67	232455.56	599
1954684	75074.21	63658.57	33047.07	25169.22	4923.84	0	0	0	0	13741.46	32403.67	66744.99	314763.03	296
1514011	146274.97	126391.28	85429.28	86831.51	54435.76	0	0	0	0	25386.37	69266.67	124112.27	718128.11	254
2036186	123999.53	104332.66	71660.58	50073.94	18423.05	0	0	0	0	28895.51	59300.82	98013.73	554699.82	141
1806080	11569.3	9835.55	7322.56	7002.82	4799.65	3947.42	3756.07	1636.88	238.46	8135.27	8917.77	10805.93	7796.68	120
2115831	31866.06	28171.62	14923.11	1076.9	0	83.47	6889.71	502.59	13.88	0	10609.45	39308.81	133445.60	330
2036191	35543.99	48315.08	69608.64	59270.49	36285.2	36816.73	49073.5	46056.11	42637.43	32388.52	12995.61	34885.79	503877.09	120
2036194	376912.05	381084.96	366974.47	320362.86	290947.21	211122.1	255493.83	283024.52	276266.11	289389.35	294943.82	316228.52	3662749.80	89
2012857	2986.14	2653.26	2070.95	1389.69	240.27	115.19	246.14	205.18	334.29	818.91	2000.2	3242.08	16302.70	72
2012851	4140.52	3980.76	2610.25	2161.11	1366.45	498.35	197.12	298.99	472.75	1662.66	2402.48	3587.5	23378.94	90
2012853	3789.02	3657.01	2781.22	2465.32	1526.01	122.44	127.16	222.88	442.53	2043.54	2658.16	3759.37	23594.66	72
2027476	9565.94	8127.59	8259.17	7673.78	6276.23	4873.83	4931.1	6279.9	6273.71	7761.87	8056.62	9200.62	212879.85	82
2025082	2425.32	1917.05	1301.68	1210.32	839.7	74.7	0	0	112	1021.73	1463.61	2401.47	12767.58	75
2025003	6099.85	5079.21	3789.04	3549.08	2916.46	2607.21	1855.2	2146.02	2611.96	3133.79	3663.12	5484.47	42935.41	54
1987801	32543.18	26992.59	18346.49	12992.73	6986.91	7475.51	24120.15	21432.43	7913.44	10057.15	16149.25	27807.02	212879.85	75
2027524	35368.66	28963.74	20010.26	14431.61	8081.87	8831.15	26565.3	23642.72	8877.9	11195.61	17804.95	30127.31	233901.08	207
2198739	8718.23	7021.81	2936.25	1641.2	0	0	1.04	1.04	3.12	649.68	3226.9	8088.05	32287.32	189
2024703	24482.7	13378.05	6673.24	4442.92	2343.41	85.09	0	0	0	2886.4	8513.88	17009.18	79814.87	50
2123490	6941.25	5594.18	2510.84	1330.09	2009.69	4045.58	9090.01	4804.82	5471.33	630.3	2008.54	4973.1	49409.73	50
1526435	95290.2	85541.29	59865.67	61546.72	53735.74	43421.77	36211.86	37628.37	44390	61092.57	71242.27	89241.63	739208.09	600
2116157	46922.82	41133.13	33790.67	32091.19	31452.99	21856.79	20933.28	20147.36	21780.07	29085.61	37650.89	47385.17	384229.97	86
1658874	45734.42	43060.34	45856.34	41278.24	43341.36	36512.28	20826.64	31865.05	33733.69	39115.02	42173.7	34924.07	458421.15	402
2123517	24216.72	21582.31	13409.78	10401.17	5658.34	3282.55	3277.01	3366.55	3773.02	7603.71	13211.78	22671.35	132457.29	430
2026874	4323.01	3461.87	2190.43	1758.43	753.33	0	0	0	0	536.47	1788.94	3421.83	18234.31	703
1954683	29410.29	49282.51	41767.75	27698.68	21705.56	18079.5	16622.15	17530.78	16885.51	41038.05	29277.79	43476.03	352774.60	200
1685268	9472.21	7379.14	3184.02	2151.92	105.59	0	0	0	31.1	334.56	1886.69	5520.12	30065.35	144
2027381	5019.11	4614.02	3036.37	2403.42	1405.71	1012.57	848.97	1018.13	869.16	1032.06	2539.08	4712.85	28511.45	513
2027430	5036.96	4603.56	3032.31	2394.01	1414.08	1001.13	855.44	1018.11	875.29	1031.04	2541.18	4868.88	28671.99	232
2027642	21369.97	16160.46	7442.31	4418.94	0	0	0	1.17	0	1393.44	5948.29	17379.58	74114.16	392
2115832	24804.98	20916.61	12333.37	12033.67	8682.92	5744.57	5353.59	5075.75	6075.7	9610.74	14349.75	25031.09	150012.74	375
2115589	9980.32	9118.52	6088.31	4103.46	2108.52	1649.52	1506.25	1472.65	1524.62	2539.05	4650.64	8310.45	50523.31	168
2115588	11100.22	10228.19	6586.19	4405.92	2179.86	1761.64	1704.29	1664.45	1750.81	2799.3	5238.88	9171.73	58591.48	100
2023812	15532.51	13253.61	8164.6	6388.12	4397.84	2194.76	1986.72	1914.25	2060.75	4859.43	6767.63	13128.32	80648.54	235
1402992	48547.06	39860.34	25431.15	19146.49	9193.32	2399.56	2264.45	2167.84	2313.68	11276.29	23330.27	41663.27	227593.72	500
2023952	41985.33	36173.66	23334.83	16758.82	8559.62	4924	4330.84	4002.29	4220.73	15155.92	25401.96	36707.45	221555.45	140
1771898	7964.4	13182.1	0	68701.67	105389.35	59813.12	54691.16	100057.71	105733.34	100061.23	72951.48	39117.25	727662.81	648
1722906	18528.24	17824.24	10151.46	5000.15	4953.18	0	1.17	0	0	4153.42	13371.99	19758.79	93742.64	222
2036145	21142.91	18638.31	10738.88	8148.78	5168.8	2438.96	2357.49	2455.54	2523.49	4479	7469.58	19223.48	104783.22	24.6
2027591	4071.82	4055.48	2773.49	1872.44	1570.04	114								

**PHILADELPHIA GAS WORKS
JANUARY 2016 - DECEMBER 2016**

53.64(c) 8-9

MTR_NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL_CCF	Max Daily Qty (Dth)
2024389	4368.59	3581.96	1006.84	723.1	0	0	0	0	0	690.58	1904.23	3514.98	15790.28	90
1906630	5531.19	4368.53	1454.13	613.4	0	0	0	0	0	427.16	1599.55	4925.09	18919.05	43
2115141	6760.61	5791.15	2002.67	1725.34	303.22	0	0	0	21.77	808.22	2306.51	4544.03	24263.52	26
2024367	7657.08	6232.15	4239.01	1462.8	0	0	0	0	3.22	254.94	1530.62	4276.47	25656.29	26
2024706	8014.77	6962.64	3609.52	2147.44	207.08	0	0	0	1.03	332.6	2154.66	6891.35	30321.09	156
2116149	7283.09	8555.65	3782.26	2029.28	0	0	0	0	0	586.27	2218.89	5875.89	30331.33	341
2115842	8531.84	7209.17	3001.99	1796.37	452.02	0	0	0	3.12	687.65	2550.07	6806.58	31038.81	748
2115136	9941.46	7485.87	2974	1652.17	301.19	0	0	0	1.07	208.49	3102.78	6166.35	31833.38	72
2115833	7982.97	6959.94	3109.43	2228.16	434.04	0	0	0	46.65	644.66	2805.99	8096.29	32308.13	690
2027484	6219.18	5004.93	2022.1	1242.41	170.09	0	0	1.04	0	741.57	3471.45	14689.14	33581.91	98
1987786	10413.85	8245.94	4710.12	2292.32	208.05	0	0	0	0	54.57	2329.75	7667.75	35922.35	48
2123489	9498	6767.04	3959.91	2623.67	403.93	2.14	1.07	1.07	4.28	874.33	3629.18	10165.01	37929.63	190
2123520	11622.62	9274.92	3845.58	935.56	0	0	0	0	10.96	770.5	2651.2	10488.33	39599.67	250
1553328	9989.06	8818.33	4418.83	1988.93	633.58	0	0	0	42.88	1275.79	6710.63	6148.87	40026.90	27.4
1526470	11976.73	10190.31	4573.24	2366.19	682.66	0	0	0	0	955.95	2889.52	8518.74	42153.34	186
2115143	11837.17	8548.11	3394.02	2843.96	534.1	0	0	0	7.33	1820.02	4508.04	10194.49	43687.24	750
2157690	13027.3	7055.04	4306.15	3799.35	1942.25	0	0	0	21.44	863.58	3481.26	11544.49	46040.86	90
2123521	13784.16	11646.68	3394.98	2021.86	0	10.73	0	0	0	1666.08	3310.71	11361.93	47197.13	380
2027483	0	11486.13	0	14902.27	3238.11	1.08	0	0	1.07	2200.51	5655.02	11104.42	48588.61	95
1987496	22985.83	13446.98	2735.41	0	0	0	0	0	0	1380.37	4499.79	13210.5	58258.88	50
2036193	19061.66	13364.38	5541.72	2823.1	0	0	0	0	0	1569.72	5004.83	14988.27	62353.68	126
2027464	17572.43	15672.38	6898.4	3527.99	864.69	0	1.04	0	309.09	1786.09	5756.67	14332.38	66721.16	424
2036185	20025.34	15445.36	7730.91	3805.9	567.09	0	0	0	51.87	2878.24	4545.48	13206.51	68256.70	72
2036189	21350.03	20843.42	10565.88	4509.47	1642.03	0	0	10.95	0	1828.42	4683.27	16515.15	81748.62	168
2116151	20390.4	16375.31	8082.45	6544.48	3773.97	0	0	0	0	3245.8	9711.16	16883.12	85006.69	455
2123513	22182.55	21003.84	8738.59	6369.63	2466.36	0	0	41.65	0	1861.87	14759.83	10173.14	87597.46	380
1658876	24036.27	23531.71	14356.81	8280.08	0	0	0	0	0	1604.42	7143.21	28457.78	107410.28	54
1414492	31978.68	23481.54	10758.12	6589.58	1263.84	0	0	0	0	2931.07	10523.08	25589.17	113115.08	154
2036195	33462.03	32624.69	13677.31	12235.06	3582.01	0	0	0	0	5348.48	10837.1	33018.1	144784.78	120
2064980	70659.9	59085.64	27879.2	18194.02	6177.77	0	0	0	0	10058.28	22919.22	64897.62	279871.65	223
1987810	8805.88	9607.22	3817.7	2070.22	0	0	0	0	0	620.72	4335.36	9601.21	38918.31	2087
2025031	13651	11159.95	5808.49	2557.46	1.06	1.06	5.36	7.49	69.77	3971.09	10264.25	14400.32	61897.30	90
2027520	18792.54	15622.23	7552.61	3534.94	0	0	0	0	0	2250.33	6752.8	14814.44	69319.89	149
1658875	28857.86	28868.62	14915.85	2355.63	0	0	0	0	0	2808.62	16392.02	28144.66	122343.26	400
1724856	38707.21	27759.11	9113.14	4286.2	0	103.9	0	0	0	2518.74	12316.34	34339.84	129144.48	701
2123528	18912.7	20684.81	16840.56	13868.38	9477.37	622.61	0	0	51.85	10884.14	18584.78	24017.22	133944.40	430
2133093	36641.34	28605.17	16260.45	7312.43	0	0	0	0	1.38	3047.08	14491.04	37893.39	144252.28	500
2115137	29382.83	23982.89	16548.55	11052.39	0	0	0	0	0	6519.03	25688.16	33881.53	147055.38	417
2024702	35142.12	31529.54	18501.11	12206.62	0	0	0	0	0	4347.69	19690.95	28796.8	150214.83	58
1546148	25498.85	19685.4	18956.24	0	17109.45	0	0	0	0	28478.33	40018.67	54607.39	202354.33	844
1553325	54109.74	42454.42	30188.74	27451.85	9617.8	207.86	0	0	0	10181.59	38565.9	62800.27	275578.17	397
2064977	0	0	0	0	0	25247.86	0	0	114.06	1664.67	3011.42	6986.1	37024.11	250
2024694	11337.4	9358.38	3481.45	2521.33	963.35	0	0	0	4.16	975.3	3071.5	8806.65	40519.52	377
2024285	7768.91	6614.21	4367.44	3463.19	2110.96	576.36	466.31	458.45	508.36	2183.72	4068.23	6611.02	39197.16	4740
2024299	9364.65	7698.89	4912.4	3749.62	2032.06	630.41	545.62	674.23	611.63	2520.77	4738.48	7547.25	45026.01	64
2024290	9814.75	8332.49	5846.38	4707.04	3117.31	775.72	554.05	516.83	553.24	3629.76	5955.96	8285.06	52088.59	64
2027403	18878.29	16298.93	10285.42	7210.13	4404.48	1463.53	1279.3	2509.96	3773.96	6750.86	11077.17	18774.75	102706.78	400
2133071	23091.22	20380.44	13882	10924.43	8880.42	5827.56	5279.35	4957.06	3153.27	5854.79	10155.69	18302.56	130688.79	1269
2024675	8042.57	6719.25	4768.24	3701.4	1919.46	430.44	379.54	372.63	413.5	3517	8384.49	668.87	39317.39	64
2027527	17724.54	14462.99	9529.33	8030.31	3736.05	1530.62	1430.45	1407.32	1428.57	4469.72	10210.79	20279.98	94239.68	64
2123460	8389.33	6754.98	2336	1543.09	265.11	0	0	0	0	12.57	2309.77	6217.19	27828.04	89
1884576	38108.8	34021.47	18190.87	16096.6	7503.93	44.31	0	0	0	12040.31	17270.74	28364.82	171841.85	89
1611635	79381.85	68353.26	39558.83	26436.5	15772.21	5202.01	4819.22	4495.46	5608.96	17682.04	35412.7	67247.16	369970.20	3300
2027387	17059.82	14338.1	11546.95	9052.74	6243.75	4022.33	4190.86	4053.34	4146.41	6038.64	9732	16370.12	106795.06	224
1885276	12902.69	9244.43	4595.9	2705.75	475.09	0	0	0	0	1121.81	4191.9	9686.08	44923.65	437
1658882	41701.58	30314.87	17537.07	8361.43	2650.27	0	0	0	0	3585.14	17942.48	28312.93	150405.77	31
1723900	40929.92	34201.82	26530.12	24617.16	24444	22127.77	21184.53	20950.32	21157.85	23633.27	25313.89	33524.78	318615.43	453
2171234	74761.41	69182.78	63914.57	50419.56	47559.93	0	94800.19	47451.77	45493.15	54453.45	62071.41	73339.3	683447.52	500
2115901	714.95	555.34	301.04	169.03	0	0	0	0	0	62.76	295.99	545.81	2644.92	925
2115434	1027.99	823.8	396.2	203.71	35.91	0	0	0	0	35.4	410.59	834.88	3768.48	541
2035694	1841.14	1460.05	697.33	418.72	0	0	0	0	0	65.04	626.63	1220.02	6328.93	60
1987683	1852.2	1567.8	707.15	508.78	0	0	0	0	0	138.93	697.33	1287.29	6759.48	302
1987633	4329.37	3237.51	1545.18	924.67	0	0	0	0	0	273.84	1623.21	3400.31	15334.09	1252
2023825	7324.87	6387.81	3068.51	1308.64	14.53	0	0	0	0	459.78	2431.95	5988	26984.09	541
2027536	7674.43	6427.07	2803.14	2160.51	0	0	0	0	0	0	3049.83	6220.69	28335.67	416
2027563	9629.43	7815.84	3153.44	1823.39	0	0	0	0	0	0	3492.99	9203.31	35118.40	388
1722889	11579.36	8809.93	3803.53	3632.91	1180.17	0	0	0	0	2117.35	5208.98	9345.86	45678.09	373
1528423	18012.16	13228.68	9698.96	7098.52	4350.16	2004.83	1762.9	1896.86	1969.83	5400.9	10343.84	14601.4	88369.04	400
2026870	6929.66	6210.19	1841.8	822.39	223	0	0	0	5.18	430.79	1822.56	3295.55	21581.12	1851
1806079	26940.01	22109.78	10422.29	9810.39	4971.55	111.15	13.95	0	599.43	9308.81	16655.16	23493.98	124436.50	107
2027641	15030.19	11357.76	4732.21	3096.01	1436.33	0	0	0	0	1717.85	6540.71	10346.46	54257.52	368
2024992	1860.45	1593.81	831.29	601.64	279.47	0	0	0	0	193.71	872.29	1674.13	7906.79	1851
2025099	4233.99	3431.75	1524.21	1053.85	327.99	0	9.37	0	14.51	242.76	2272.91	4413.13	17524.47	54
1986388	6293.97	4956.9	2508.62	1751.6	441.31	0	0	0	0	538.66	2402.69	5072.11	23965.86	38
2188225	17187.42	14806.17	10291.66	7900.09	6433.65	5204.27	5175.57	5398.71	4878.88	8538.19	12874.73	16		

**PHILADELPHIA GAS WORKS
JANUARY 2016 - DECEMBER 2016**

53.64(c) 8-9

MTR_NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL_CCF	Max Daily Qty (Dth)
2123522	0	0	0	0	0	0	0	0	0	0	17578.83	5246.83	22825.66	430
1611015	0	0	5423.09	32740.54	35526.23	29814.16	37138.86	48359.56	53498.64	55641.82	29865.33	16761.95	344770.18	547
2188223	11861.72	8343.15	3834.73	1682.63	831.14	0	438.71	10.41	31.09	1664.74	3865.8	8751.32	41315.44	1225
1658886	0	0	0	0	0	0	0	0	0	0	0	0	0.00	90
2064981	0	0	0	0	0	0	0	0	313.14	0	0	0	313.14	11586
1658885	4353.25	4014.27	312.6	416.36	2487.74	623.18	66379.83	22603.78	11990.14	2209.05	517.95	2732.77	118640.92	400
2036192	68350.46	64663.41	46856.94	42188.17	34591.88	25036.42	24869.86	26797.34	28326.37	35132.23	40869.8	53155.03	490837.91	740
1786009	375631.29	335096.98	265206.56	224905.3	187709.54	142420.62	131797.9	131748.88	151619.45	195374.64	242921.76	343673.76	2728106.68	5500
1786008	404607.91	360558.1	284528.79	241179.53	200886.22	152289.04	141192.07	141234.01	163079.39	210540.9	262505.82	372902.36	2935504.14	5500
2064982	920957.46	758476.51	572064.06	503620.64	405111.79	308950.54	294280.24	288720.36	308459.62	414699.84	543980.54	805001.82	6124323.42	5500
2027386	6455.9	9576.78	7685.18	5856.21	4824.82	4556.42	4907.93	6807.38	7512.12	7492.15	4775.17	5454.52	75904.58	141
2026820	18234.02	12473.37	17147.27	16589.41	17568.61	15891.73	16598.47	16586.89	16074.65	18123.48	18124.18	19037.85	202449.93	300
2023953	75323.28	63968.37	50377.38	47701.52	37691.67	21064.26	18687.44	18732.39	24798.59	42921.88	48077.1	64507.88	513851.76	576
2027625	5073.08	4165.37	2046.81	1827.43	463.56	0	40.89	220.78	750.16	1145.41	2245.29	3757.39	21736.17	1565
2027564	5125.36	4223.51	2048	1741.14	532.49	210.75	88.95	212.51	720.96	1292.76	2621.43	4769.05	23586.91	728
2027529	58324.75	45559.73	28817.03	20075.39	10775.46	6112.92	5612.09	5340.96	5616.47	14957.06	32171.1	50051.9	281414.86	706
2035886	9473.61	7896.79	5636.21	1854.65	3938.13	5718.25	4421.58	4791.36	4610.48	7378.78	6238.15	5078.19	67036.18	95
1526433	59501.02	53726.7	47463.17	43620.36	38282.62	31143.95	28813.07	27717.28	29960.01	36650.6	46019.69	59130.79	502029.26	1043
2116160	31092.16	29147.98	11908.34	8142.46	0	0	0	0	0	0	8345.29	19687.55	108323.78	547
2027434	6983.12	5777.78	3059.67	2196.55	1021.49	2054.95	3669.21	3633.99	2248.37	1595.22	2902.05	6106.91	41249.31	455
2027433	8603.31	7017.59	3758.42	2677.89	1151.61	2196.32	4226.35	4361.31	2576.12	1847.49	3477.7	7392.73	49286.84	450
1909300	199701.472	195714.014	111419.345	202467.338	53749.075	46675.3514	16017.8381	1230.0253	2464.91111	89708.7851	110791.096	190010.67	1219949.92	0
1685277	30278.22	18667.26	8035.52	4530.57	673.13	0	0	10.42	31.11	804.53	5003.56	20854.21	88888.53	380
1546146	23535.39	20440.99	13436.77	10958.31	6899.42	4175.76	3652.61	3554.32	4074.21	7585.28	11173.65	19994.99	129481.70	313
1526425	24634.65	21292.82	15164.28	10042.87	2879.39	2240.89	2072.92	2059.2	1881.61	8114.33	13510.06	20797.26	124690.28	360
1582089	59181.58	49863.4	31329.56	23460.26	4777.14	3838.52	3521.97	3428.43	3617.04	18040.86	31050.09	50745.82	282854.67	479
2024714	12185.3	9596.29	4681.8	3041.15	0	0	0	0	0	1320.76	4949.94	9548.45	45323.69	167
2064820	3116.43	2381.21	1081.29	787.42	147.05	0	0	0	1.03	308.58	643.72	2103.69	10570.42	99
2157702	33850.2	31416.68	22525.69	20114.8	21702.18	15856.73	13693.7	15212.44	17859.84	21834.52	21062.26	28331.23	263460.27	43
2036187	43116.62	40187.79	21710.21	14732.36	8322.1	125.04	0	0	430.58	10558.65	16909.28	32921.04	189013.67	576
2027583	29482.52	27492.17	28675.1	28400.74	29471.01	28693.09	29750.37	29970.77	29199.55	30312.98	37137.4	39242.58	367828.28	202
2116162	167188.5	150984.26	137754.97	123825.79	104579.8	83205.78	73382.64	81508.64	87128.93	107396.91	130117.19	157616.25	1404689.66	2549
1685275	3930	3570	4040	3590	3380	3850	3080	3430	3090	3970	3840	5500	45270.00	375
2027494	22212.25	19778.38	13278.69	6484.18	1830.1	0	0	0	0	2340.3	14217.42	20755.15	100896.47	100
2123484	4074.86	3657.55	2398.32	2142.33	1945.91	1548.71	1408.73	1469.52	1628.85	2025.37	2228.06	3402.68	27930.89	119
2123463	4538.19	4080.6	2698.02	2410.43	2184.23	1740.9	1569.48	1618.58	1810.13	2281.6	2501.93	3764.09	31198.18	80
2123467	6796.3	5888.76	3909.62	2654.91	1248.87	548.35	455.95	433.41	444.82	1495.96	3712.75	6197.47	33787.17	80
2115593	19006.2	17592.34	13099.52	10478.65	10392.12	6941.26	4383.29	7444.61	6652.41	7783.85	10141.64	14608.12	128524.01	388
1575425	14800.3	8976.42	4356.42	2247.31	0	0	0	0	0	0	6141.69	13748.48	50270.62	383
2211334	17705.8	16197.7	9857.24	3904.01	3678.69	2045.92	1467.15	2634.81	1431.48	2855.78	6916.78	11277.89	79973.25	449
2025172	10978.92	10508.54	3111.25	2109.04	0	0	6.7	2.64	0	553.14	2036.29	5151.89	34458.41	175
2025146	12066.3	11613.42	3414.33	2297.88	0	0	6.7	1.32	1.31	618.45	2285.55	5607.89	37913.15	140
2027443	22714.98	19556.9	11628.3	8288.93	4872.49	2962.3	2520.39	2557.91	2821.05	5470.7	9879.43	18438.29	111711.67	430
1526478	32905.86	29424.62	11185.13	5811.36	564.3	0	0	0	0	1454.24	9126.78	25735.14	116207.43	135
2027160	9068.83	7864.96	5147.86	2714.95	0	0	0	0	0	1582.39	4783.46	8425.34	39587.79	164
2024698	7645.81	6511.36	3468.56	2382.24	777.65	0	0	0	0	246.32	3376.78	7185.31	31594.03	272
1601880	14510.96	11489.69	5741.44	3697.88	1463.48	0	0	0	0	1077.9	4964.74	11411.04	54357.13	272

Tab 8

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.64(c) Thirty days prior to the filing of a tariff reflecting an increase or decrease in natural gas costs, each Section 1307(f) gas utility seeking recovery of purchased gas costs under that section shall provide notice to the public, under § 53.68 (relating to notice requirements), and shall file the following supporting information with the Commission, with a copy to the Consumer Advocate, Small Business Advocate and to intervenors upon request:

- (9) A schedule depicting historic monthly end-user transportation through-put by customer. Each customer or account shall be identified solely by a unique alphanumeric code, the key to which may be provided subject to § 5.423 (relating to orders to limit availability of proprietary information).

Response:

Please see the attached schedule depicting the monthly end-user transportation through-put by customer.

**PHILADELPHIA GAS WORKS
JANUARY 2016 - DECEMBER 2016**

53.64(c) 8-9

MTR_NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL_CCF	Max Daily Qty (Dth)
1457534	103372.05	81970.4	44557.61	30760.85	8492.64	0	12.53	0	0	17344.07	48558.03	93127.08	428195.26	267
2026784	9620.07	8146.96	6004.57	5306.84	2893.85	620.43	569.97	540.87	595.2	2880.94	5487.85	9220.04	51887.59	420
2024683	31039.31	29578.85	19107.07	12846.57	7142.25	1895.68	1703.99	1611.23	1901.06	10125.87	15796.22	26823.27	159571.37	360
2188212	17913.82	14828.43	7532.07	5933.51	590.61	0	0	0	10.36	3121.37	9279.11	15862.93	75072.21	706
1611639	13485.74	11203.6	2621.51	1596.44	0	44.42	0	0	0	1028.64	3734.47	11736.6	45451.42	1465
1519033	24987.85	21309.16	17947.78	12307.23	2676.42	0	0	0	31.1	4918.88	11452.19	21612.92	117243.53	994
1582086	0	0	0	0	0	0	0	0	0	0	0	0	0.00	450
1546132	85089.77	97585.07	98009.2	77932.22	97830.44	77436.54	95572.11	64022.14	92145.73	66453.71	88825.93	97381.94	1038284.80	500
1582085	2304010.81	2621060.63	2246575.08	2213287.03	2509437.07	2186695.89	2330979.1	2320904.7	2205390.56	1906992.69	2313661.47	2533209.7	27692204.77	2400
2064973	191120.57	167328.58	142305.36	127987.29	117267.88	104248.16	114868.72	116186.76	111242	118135.82	140142.41	183285.06	1634118.61	400
1724230	9016.75	7712.52	2958.41	1819.83	440.71	3.1	5.21	4.16	5.19	635.15	3857.38	9571.43	36029.84	280
1571006	12585.01	9632.55	3896.43	2693.21	885.01	0	0	0	0	870.1	4892.24	12116.57	47571.12	348
1571005	17630.16	13882.16	6339.09	3725.84	1183.58	0	0	0	0	1410.13	7328.03	16747.59	68246.58	1032
2027533	18026.47	13121.47	6730.09	5771.06	2296.51	18.23	0	0	0	2614.6	6169.65	12447.66	67195.74	58
1987805	12626.15	10576.16	5020.81	3357.27	1629.47	301.11	252.34	253.1	247.75	1666.82	5423.54	10553.43	51907.95	340
1724005	0	0	0	0	0	0	0	0	0	0	0	0	0.00	452
2027459	0	0	0	0	0	0	0	0	0	0	0	0	0.00	417
2035554	4747.97	4045.31	2859.53	2263.59	1266.19	621.07	568.59	526.21	589.76	1560.16	2937.15	4747.02	26732.55	240
2123525	31234.21	23185.97	18969.58	0	0	0	0	0	0	0	15639.05	23935.42	112964.23	81
1553337	26466.58	24896.1	15828.49	11252.39	3462.87	0	0	0	0	7544.67	13410.66	22957.84	125819.60	720
2064975	18574.35	19253.79	19496.14	17782.26	18962.15	18323.28	15378.6	16487.16	16585.37	17044.32	18366.61	20169.95	216423.98	200
2211338	69428.59	63973.31	64149.78	55876	54153.03	49162.25	53575.64	50780.37	43230.03	59398.96	62618.17	71711.74	698057.87	200
2027375	23161.06	21277.9	14369.83	10950.33	7443.57	3887.03	3221.5	3083.01	3567.78	7434.96	13717.77	21495.87	133610.61	180
1806081	43674.77	47874.09	50709.41	46438.29	47794.47	44536.84	43903	46503.05	49024.89	56482.68	55706.22	57379.53	59027.24	700
2035210	3033.69	2450.8	1483.46	840.6	0	0	0	0	1.03	547.34	1515.48	2328.04	12200.44	403
2035366	4001.1	3056.61	1720.81	1083.29	0	0	0	0	0	560.17	1553.44	2792.86	14768.28	311
1989426	31691.7	27426.73	17109.92	13262.78	5989.55	2354.88	2107.46	2097.91	2287.28	7725.86	15650.06	26749.79	154453.92	383
2024644	9953.56	8886.49	5082.54	3797.34	1749.67	1133.16	859.75	998.34	1342.87	2529.79	6365.39	9641.07	52339.97	340
2123519	66883.83	64857.47	60788.23	51892.22	45131.88	27123.17	23460.66	24004.62	25479.37	40831.3	55352.42	75092.98	560897.95	475
1723873	4293.8	3615.01	2107.45	1192.36	127.58	0	0	0	0	501.55	1762.09	4225.32	17825.16	958
2188210	25551.26	20074.88	14901.1	12409.14	7944.4	3054.02	3214.08	0	3939.63	4251.95	6517.55	0	101858.01	407
2064976	24859.12	23769.79	9714.17	5230.03	0	0	0	0	0	1841.96	14864.62	23742.44	104022.13	172
1989652	20769.64	15848.12	0	9624.15	8387.85	7349.25	5838.1	3927.26	3595.78	3795.38	13477.46	0	92612.99	228
2035356	3003.48	2320.28	1369.41	798.28	49.47	0	0	0	0	377.85	215.47	2345.75	10479.99	31
2024712	19575.33	14009.88	4566.92	2303.41	428.92	0	0	0	0	1606.07	4968.43	16304.87	63763.83	120
2188215	31014.38	23438.55	6299.98	3586.78	0	0	0	0	0	876.68	6633.1	23881.85	95731.32	1833
1553331	65867.87	53325.21	25384.62	16959.73	4529.1	1186.88	1103.2	1346.59	1055.97	7771.04	22889.35	53413.47	254833.03	300
2070242	2951.39	2603.1	1332.87	993.77	370.49	0	0	0	0	511.21	1294.94	2900.77	12958.54	302
2070260	3671.88	2927.64	1764.44	1339.32	506.95	0	0	0	0	461.67	1591.01	3307.35	15570.26	958
2070271	3729.35	3304.48	2108.6	1438.35	463.89	0	0	0	0	643.76	2656.94	3966.43	18311.80	419
2070249	4924.46	4216.43	3266.56	2751.52	1345.14	0	0	0	0	853.34	1837.42	3768.31	22963.18	336
1906628	12775.13	8798.06	2148.32	1757.2	197.67	0	0	0	0	154.98	5382.6	10649.07	41863.03	90
2025139	14592.7	12189.18	8426.47	3700.18	0	0	0	0	2.07	1322.95	8906.63	14493.07	63633.25	408
1987495	11983.1	12302.84	12208.93	10879.92	11635.05	10905.71	6377.51	13100.9	10865.68	10600.33	13147.65	10034.4	134042.02	216
1884508	12435.79	8862.78	3800.31	869.52	0	0	0	0	0	303.72	2129.36	9421.03	37822.51	266
1756663	77840.29	60984.36	29468.53	15226.13	1837.49	0	0	0	0	4336.07	26663.01	61540.78	277896.66	223
1658879	12153.04	10678.51	7033.11	5469	3042.21	1215.15	991.3	906.66	771.41	2114.15	5078.33	10727.78	60180.65	360
2026819	0	0	0	0	17615.93	12884.4	12761	4538.18	16451.78	18321.07	19888.92	21375.69	123836.97	425
1724853	43518.17	40009.29	12843.1	5140.87	1015.57	0	0	0	0	3019.64	11010.84	35830.11	152387.59	144
2024307	14547.5	11962.99	7124.56	4583.05	684.35	0	0	0	0	1217.68	4951.07	12862.08	57933.28	360
2188226	85662.35	69388.1	39658.97	27979.12	8583.59	7977.46	7443.03	7039.41	0	25718.04	52390.4	79937.96	411778.43	825
2188226	85662.35	69388.1	39658.97	27979.12	8583.59	7977.46	7443.03	7039.41	0	25718.04	52390.4	79937.96	411778.43	600
1921578	7957.88	7341.73	3594.65	4111.94	1845.74	1655.39	2024.04	1969.27	2324.61	2631.18	6276.42	6888.96	48601.81	81
2027635	4917.36	4544.86	3635.23	3316.87	4639.12	4805.8	4956.81	4674.56	4444.47	3883.6	3041.92	4451.67	51312.27	500
2157700	60377.8	56817.99	50542.28	47982.25	41602.11	37291.95	34020.28	31999.11	33869.47	42567.88	48231.56	64516.23	549818.91	2847
2012886	4540.51	3803.32	2130.69	1549.53	659.76	0	0	0	0	726.69	2130.72	3769.75	19310.97	75
1594769	0	0	0	0	0	0	65217.24	32536.6	0	0	0	0	97753.84	92
2090400	199684.33	177533.39	157017.65	136139.24	141191.06	129666.12	64316.8	89748.37	112427.07	115853.9	140226.7	208602.99	1672407.62	419
1621317	403270.85	354145.84	287145.37	240548.22	236803.23	197118.42	277659.97	298244.48	413189.09	197860.48	300872	347306.35	3554164.30	92
1987777	9878	8705.45	8764.34	7668.1	7554.72	7799.25	6583.27	6614.19	6636.56	7345.35	7982.62	8574.35	94106.20	43
1987797	12730.76	12135.7	10015.95	8261.64	7981.91	8073.97	7261.26	8358.14	8207.35	8708.03	9709.86	16543.45	117988.02	302
1884577	27704.98	23635.37	11312.34	9842.24	3719.56	0	0	0	0	3341.96	10973.77	21574.69	112104.91	624
2157694	14524.15	12353.18	7985.35	5009.03	1414.47	0	0	0	0	1309.62	5518.68	13097.71	61212.19	325
2027531	19491.04	14868.05	8264.36	7093.11	1659.67	0	0	0	5.18	1922.64	5388.48	14150.54	72843.07	3128
1685273	28475.61	22467.13	13785.13	10861.96	5897.68	2016.82	1718.64	1660.72	1813.94	5530.37	14082.87	25067.07	133377.94	782
2115837	26508.88	21690.59	17786.99	14165.21	11824.06	7412.97	6598.62	7659.64	9363.97	14990.49	20902.25	24712.71	183616.38	782
1906625	10188.58	9666.2	10243.55	7551.15	7341.89	6564.37	6065.57	6664.05	6562.37	6450.93	8779.65	9966.44	96024.75	30
1724008	41723.31	35455.47	30123.77	25512.34	21169.11	17638.37	16920.48	14777.19	13252.95	20904.67	27462.96	34762.29	299702.91	522
2027477	4000.39	3861.56	3565.58	3598.26	3404.75	2281.55	1752.42	2806.57	2003.57	3519.21	3576.33	2569.49	36937.68	162
2036147	8485.96	6853.29	3078.65	1900.07	1030.38	0	0	0	91.29	790.59	2489.4	4911.92	29631.55	312
2024704	12157.97	9753.64	3206.59	2520.97	1024.96	0	9.37	0	2.07	1788.18	4067.55	10715.94	45247.24	313
2157692	76887.51	67407.04	34239.98											

**PHILADELPHIA GAS WORKS
JANUARY 2016 - DECEMBER 2016**

53.64(c) 8-9

MTR_NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL_CCF	Max Daily Qnty (Dth)
2115543	5605.83	4601.09	2411.12	1596.52	421.21	0	0	0	0	804.12	2716.36	4888.85	23045.10	64
2157683	42578.51	40228.55	41931.07	38115.23	37524.39	32687.83	30813.77	33394.18	33352.35	34041.44	35229.71	43931.97	443829.00	550
2026758	15968.74	12162.34	7707.2	5109.03	2301.82	395.02	0	0	0	2211.61	5914.98	12515.53	64286.27	250
1806092	34112.78	40293.04	39854.35	35181.6	41272.81	41455.26	42001.95	35818.35	38069.45	30254.95	32960.09	34451.24	445725.87	384
2094623	0	174623.85	90405.78	89855.83	84392.32	86853.97	83862.67	73837.93	79726.53	73542.23	77874.02	77080.16	992055.29	1046
1987500	55214.87	38407.04	21944.29	11789.22	0	0	0	0	0	6568.29	12915.81	49357.79	196197.31	479
2027401	10249.52	8203.76	6715.51	7176.75	6476.96	6323.02	3388.06	6319.05	6552.34	5872.83	6886.72	8375.38	82539.90	305
2027402	12228.33	9699.01	7992.26	8652.65	7803.18	7752.43	3954.01	7747.98	8042.53	7050.39	8271.72	10021.82	99214.31	707
1658880	0	0	20019.29	17293.24	17136.7	15777.18	13927.44	16538.68	16323.46	18005.81	18325.98	19591.61	172939.39	272
2157688	13024.64	25753.4	22776.53	19464.29	18905.91	13491.38	21551.75	15366.2	15609.23	2411.82	0	0	168355.15	750
2157696	54318.11	48898.56	31558.37	22712.23	14565.94	7988.19	8588.7	9464.01	9045.43	17263	20778.92	16604.82	261786.28	450
1724001	19954.89	18194.79	11062.09	5680.15	738.87	0	0	0	0	1002.87	8698.65	13315.11	78647.42	173
1658881	27365.98	22508.1	14683.21	10947.02	2408.23	0	0	0	0	0	0	0	77912.54	403
1989625	5324.97	4882.75	1486.39	1006.1	0	0	0	0	0	11.49	88.76	1041.13	13841.59	454
2035891	8277.49	8347.98	11131.27	9363.46	3798.22	2338.4	1749.84	2052.47	2024.14	4028.04	6704.35	7983.77	67799.43	591
2036188	26918.38	20677.8	14337.35	13551.01	10197.29	11406.12	12673.64	12742.44	12658.53	13632.67	13272.82	24476.24	186544.09	1300
1921579	5089.16	3127.59	1854.76	1587.25	1595.44	1487.62	1124.22	1057.29	1763.89	2666.95	2715.88	3610.74	27680.79	843
1909351	7551.02	6341.37	3809.27	2294.07	775.1	0	0	0	0	1610.59	3445.51	6621.36	32448.29	504
2198755	14372.88	12124.95	7192.48	4696.66	1359.98	0	0	0	153.08	3578.38	10555.44	16234.49	70268.34	400
2024690	57058.92	48879.92	38501.61	36356.9	27665.88	9190.91	6663.14	5607.39	13214.68	9063.54	16146.62	32376.5	300726.01	300
2198741	0	0	0	0	0	0	0	73258.32	55512.16	73032.16	70349.6	71620.97	343773.21	300
2024715	32795.86	23141.96	10137.32	4173.82	0	0	0	0	0	2011.87	11593.26	24821.03	108675.12	503
2035967	5198.25	5243.46	6266.81	5986.3	6579.68	6173.34	6445.93	6621.58	6606.91	7083.7	6821.31	7290.72	76317.99	685
2024851	19185.38	17531.75	12081.52	8713.86	2495.68	0	0	0	17.62	3647.98	8245.61	16120.49	88039.89	244
2025158	22943.55	15922.29	4447.39	2307.52	0	0	775.93	1.1	1.09	0	7924.08	9652.69	63975.64	626
2171231	70244.01	59553.67	47851.08	41417.87	37936.84	30749.12	29221.77	33145.43	29908.25	41200.4	52081.24	71547.44	544857.12	860
1724011	13093.96	9343.46	2246.37	1139.63	31.48	0	0	0	134.84	1141.08	2418.47	10305.83	39855.12	907
2023840	5931.9	5440.01	4086.94	3048.02	1747.69	891.15	823.29	807.66	853.67	1955.97	3759.58	6023.73	35369.61	934
1658873	5276.77	0	0	0	0	0	0	0	0	1108.75	4270.19	11610.66	22266.37	1400
2036167	16859.75	14269.92	9113.3	5560.09	1632.67	0	1.04	0	0	3622.68	9368.22	15513.53	75941.20	4372
1806077	73406.81	65989.73	57748.41	26735.96	3133.36	2596.92	2296.25	1564.01	2083.51	28949.27	49996.71	67145.52	381646.46	277
2025150	8374.78	6594.71	3887.58	2727.26	436.81	0	0	0	0	1883.44	5798.72	7608.26	37311.56	178
2123510	9420.81	5305.64	3754.66	2123.86	398.02	14.52	0	0	0	1209.39	4315.19	7999.54	34541.63	90
2116171	44947.22	35397.62	25061.56	18195.99	10142.36	0	0	0	0	9865.19	22274.07	34612.96	200496.97	1252
2116174	81028.97	64082.32	47006.39	33718.25	19232.85	0	0	0	0	18767.8	41567.02	62122.02	367525.62	1252
2157697	61665.77	55892.07	51768.81	31222.13	28166.55	10367.12	9715.6	9161.63	9816.58	34074.89	39233.74	52626.64	393711.53	550
1989428	76556.26	62855.04	48274.38	40013.94	29700.28	18803.58	11036.76	11692.27	12740.24	33204.62	42047.97	60430.78	447356.12	302
2035975	11680.6	11875.39	10896.25	9963.42	10016.86	8430.48	6872.2	7215.11	6976.25	8868.52	9478.92	11886.09	114160.09	554
1826616	7007.15	6065.52	4120.88	3243.53	1881.76	0	0	0	0	2085.92	3695.14	6738.29	34838.19	703
2123526	21935.77	15818.86	7583.87	3479.62	0	0	0	0	0	721.19	6733.31	21597.39	77870.01	305
2027599	4678.44	4559.94	3439.83	2972.54	2314.01	1747.48	1705.63	1788.87	1911.68	2564.97	3056.89	4717.79	35458.07	123
1723898	49622.81	35473.55	15577.6	7845.84	0	0	0	0	0	6802.82	20312.43	42546.29	178181.34	424
2171221	29451.16	24752.89	22963.97	21856.12	20048.91	19349.21	17777.29	17744.29	18490.03	21407.86	23706.34	26807.73	264355.80	400
2132738	67086.76	55637.81	48663.65	47776.59	79765.47	66301.98	77054.78	86100.42	87132.42	101119.13	112072.58	131306.92	960018.51	424
2123509	27225.67	19488.1	5503.71	2280.55	1.1	1.1	0	1.1	1.09	186.17	4062.27	16296.77	75047.63	430
2188219	57887.34	49746.72	38227.86	36530.67	22441.07	17430.85	16739.22	16082.36	16236.64	25816.72	42540.94	53883.54	393563.93	324
1987785	6721.57	6280.05	5224.76	3218.67	1146.1	970.08	879.52	844.12	952.35	2300.55	5285.7	6200.86	40024.33	120
1884513	8815.86	7599.55	5750.39	4620.05	4470.18	3973.4	4611.64	4546.38	3436.92	4175.27	6627.01	9062.67	67689.32	241
1884573	30465.35	22731.16	10238.11	6068.67	1373.46	0	0	0	0	2516.13	8753.8	23996.48	106143.16	698
1611640	12026.84	8226.42	2314.75	1401.35	0	0	0	0	0	0	1544.83	8490.11	34004.30	240
2116154	11442.87	11352.51	8412.05	7030.96	9049.38	9772.94	4744.91	8639.76	6114.15	7251.73	6873.6	9138.48	99823.34	141
1921703	30204.29	25034.32	17329.68	13164.26	3420.38	0	0	0	0	6352.95	20226.62	38798.11	154530.61	400
2123295	6187.04	5567.11	5587.89	3330.97	4215.78	2079.86	3279.63	4894.75	4776.02	4352.84	6452.95	6580.77	57305.61	430
2171230	39471.45	30631.15	12446.21	5441.87	0	0	0	0	0	1888.67	11465.63	33540.13	134885.11	340
1724240	11040.17	10327.23	2653.57	2103.28	0	0	0	0	0	1209.07	4249.27	10264.85	41847.44	703
1514012	15546.85	12177.08	4249.59	2425.65	1345.47	0	0	0	0	1412.32	4480.7	10398.95	52036.61	264
2188213	9111.03	6775.53	3167.84	2141.53	326.91	0	0	0	0	1088.28	2770.66	5740.06	31121.84	418
2023947	9095.98	8116.52	5992.3	5273.97	4169.77	3256.92	3366.34	4203.14	3954.8	4063.34	6924.58	9032.12	67449.78	418
2133386	1856.61	1551.95	778.29	524.44	26.39	0	0	0	0	166.85	821.23	1249.81	6975.57	495
1987808	21.29	73.2	62.35	249.78	0	0	2291.22	8890.55	10637.07	2340.33	0	0	24565.79	370
1724003	10291.08	25846.65	16474.73	11795.26	7588.68	3542.11	3704.95	2491.47	4157.56	9325.95	14514.12	25968.92	135701.48	305
2171219	107978.92	90175.87	59035.05	45088.85	27546.79	14334.81	7727.75	104.1	104.6	27418.82	57204.77	88934.36	525654.69	449
1621318	28244.73	20474	6163.13	4178.15	0	0	10.4	0	0	2612.02	8036.45	26585.65	96304.53	550
1909301	1088834.83	1047529.15	1036097.84	669688.59	965296.56	649741.53	879086.306	1038992.6	985510.427	827273.835	855213.012	1007089.9	11050354.59	0
2027485	41323.2	33519.55	21883.61	13727.94	4511.04	3535.66	3207.34	1626.44	3043.72	11511.41	23350.64	37941.55	199182.10	1461
2023712	3723.2	3047.99	1310.95	1244.21	25.33	0	0	0	0	314.6	722.14	1973.6	12362.02	1461
2025166	5745.71	4011.56	877.84	530.81	0	0	0	0	6.24	279.17	1259.08	4167.8	16878.21	192
1987812	15230.76	11294.95	5818.69	3815.08	1070.13	0	0	0	0	2114.89	5498.8	11750.49	56593.79	1046
2115067	6542.98	5973.42	5095.91	3614.8	0	0	0	0	0	1749.6	3604.24	4627.73	31208.68	316
1826506	6219.23	6394.46	4825.7	4403.32	3940.84	4583.98	3983.12	3555.44	2718.71	4247.9	4275.25	6833.51	55981.46	302
2116016	3452.94	2922.33	1483.99	1089.31	411.54	0	0	0	0	463.87				

**PHILADELPHIA GAS WORKS
JANUARY 2016 - DECEMBER 2016**

53.64(c) 8-9

MTR_NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL_CCF	Max Daily
														Qty (Dth)
1884510	26875.89	23108.94	15120.63	10521.32	7051.44	5456.41	4191.97	4086.83	4443.66	8245.53	12813.32	22466.76	144382.70	34
1826674	15803.38	14486.72	13280.4	9974.26	10450.56	10326.67	9362.3	9384.22	8182.01	8754.43	10126.52	12779.01	132910.48	114
2023831	3232.02	3314.82	3222.84	2986.13	2961.29	2540.88	2367.69	2227.23	2241.57	2753.37	2954.67	3374.34	34176.85	89
2025178	16984.1	14712.74	9520.62	5716.29	3583.33	1652.54	3231.26	5842.85	5524.06	8288.26	11082.57	15350.26	101488.88	149
1582087	20814.41	16089.29	9700.25	3988.82	10.87	0	0	0	0	1392.96	7067.39	18978.48	78042.47	676
1685278	44546	34434.19	18521.91	12560.42	4814.31	2607.04	2351.22	2493.29	2203.23	8638.94	16679.84	35009.03	184859.42	133
1658878	48322.32	34292.27	0	0	0	0	0	0	0	0	0	0	82614.59	1222
2198744	0	0	0	0	0	0	0	0	0	98704.4	80501.99	92546.42	271752.81	644
2198748	191601.89	209915.1	183083.02	135921.51	174805.39	159818.34	138793.17	158670.73	404975.58	103429.03	105141.59	121456.05	2087611.40	644
2115595	6635.91	7752.91	3310.57	2.35	1859.78	6644.75	10148.27	10287.07	6904.21	426.47	1.18	17882.96	71856.43	301
1406184	10227.58	8053.73	2863.07	1661.4	0	0	0	0	0	909.97	3731.06	8857.59	36304.40	144
1724851	78136.48	72378.44	63708.89	61026.64	51983.9	37189.24	34857.64	27623.99	39288.39	42142.63	56471.86	75478.9	640287.00	1461
1724852	92309.58	85002.58	75823.48	72919.38	61918.21	44564.57	41222.8	32523.28	46688.35	50404.66	67617.96	89510.69	760505.54	228
2023960	18847.65	17349.83	17887.49	18576.48	17479.92	17384.79	16764.99	17304.34	11714.5	9939.76	14218.01	12743.42	190211.18	1151
1722879	14249.19	13087.82	9510.13	7453.08	2951.55	1802.42	1181.48	1156.46	1676.72	3735.72	9296.1	14299.26	80399.93	302
1884404	2298.76	2168.4	1648.59	1310.36	350.07	38.36	235.75	231.25	242.71	872.57	1641.72	2196.09	13234.63	1500
2188099	2280.29	2144.63	1499.54	1269.05	388.7	318.77	297.27	284.38	280.2	837.57	1720.75	2301.6	13622.75	89
2188130	2212.18	2099.09	1999.79	1612.43	507.94	376.97	347.31	375.06	431.25	1267.3	1932.29	2281.4	15443.01	89
2211303	2699.46	2321.08	2012.53	1243.53	568.85	422.65	330.65	318.77	337.52	1178.66	1935.59	2934.87	16040.16	130
2123504	34183.12	23204.94	11432.46	6953.01	1474.87	0	1.38	1.38	1.39	5273.27	19673.44	30259.8	132459.06	276
2024604	5864.79	5637.43	6249.33	6388.87	8202.05	8349.44	7301.91	8625.41	8737.44	8167.91	5334.29	4662.57	83521.44	110
1906623	9354.18	7806.25	5566.54	4953.04	2100.85	848.68	916.14	869.12	940.89	5839.15	6360.3	8356.12	53911.26	89
1546144	5828.62	5274.98	2478.35	983.19	147.88	0	0	0	0	355.71	1500.63	4548.45	21117.81	285
2115841	52905.45	54980.02	49219.18	43237.45	37451.88	40884.42	40909.02	38055.19	38938.07	45272.77	48628.74	45785.81	536268.00	183
2115844	64321.55	66103.3	60319.86	53631.94	48635.48	51818.86	52215.2	49928.5	49725.95	56391.76	59858.15	57530.39	670480.94	240
2123527	16633.44	13332.85	7490.61	5228.21	1601.87	0	0	0	0	229.83	1310.22	9884.56	55711.59	831
1553331	65867.87	53325.21	25384.62	16959.73	4529.1	1186.88	1103.2	1346.59	1055.97	7771.04	22889.35	53413.47	254833.03	225
1723998	65908.58	57551.39	45587.56	40076.58	32750.53	18729.1	13430.25	12976.8	15348.21	25862.16	43889.13	56389.71	428500.00	907
2027560	6251.23	6324.67	4120.62	4079.49	2752.04	1729.6	1492.69	1620.71	1910.25	2868.48	4227.57	7547.17	44924.52	432
2024645	13300.4	12617.37	0	0	0	0	0	24557.37	985.48	3886.3	9838.24	14729.21	7919.37	313
2025149	7506.86	7165.62	4658.94	9624.63	10005.99	10194.11	2421.99	2288.01	7044	11573.13	6206.43	5757.65	84447.36	13.7
2116156	15874.34	13596.3	7654.5	6469.65	3487.01	2294.89	2222.69	2428.44	2816.63	7392.17	14151.11	21666.79	100054.52	76
2132737	63030.42	51094.13	31749.22	27205.28	17692.19	13538.2	12833.46	12817.09	19384.26	24290.27	36590.21	51200.26	361424.99	800
2036151	10280.5	8966.83	6659.53	4537.04	1869.18	0	0	0	0	2197.27	5406.79	9131.95	49049.09	202
2064880	3083.31	2597.81	2582.79	2549.66	2782.9	3288.05	2787.22	2941.56	2448.82	1741.37	1775.07	1992.79	30571.35	115
2023958	24500.06	22112.72	13014.48	7408.67	282.09	0	0	0	0	1401.48	4188.45	8972.24	81880.19	397
2024684	8447.79	7126.47	2596.89	1508.7	552.41	0	0	0	3.11	1183.61	3572.96	7325.9	32317.84	281
2116148	11602.71	9983.51	6574.71	4655.51	2262.62	903.59	897.26	927.54	948.07	1964.55	5466.75	10608.82	56795.64	500
2064974	29585.93	0	22283.91	8396.38	5257.46	0	0	0	0	2052.36	7816.14	24384.68	99776.86	456
2171222	19676.63	17001.18	5701.62	2840.75	832.51	0	0	0	0	1457.75	3114.62	8780.62	59405.68	300
1420497	128280.6	120774.87	100235.89	105177.57	98970.11	90398.71	77670.34	87777.89	73603.4	84279.29	70494.6	82851.14	1120514.41	2847
2012880	8089.63	7121.38	5161.72	4499.89	2966.96	1154.99	1014.16	1032.79	1108.83	2685.58	4587.1	7873.6	47296.83	396
1724854	95275.86	89330.5	85204.13	80316.95	58433.3	37398.53	35692.83	38566.32	38141.89	52396.55	71055.92	74225.99	756038.77	240
2188214	29198.02	21867.86	15773.95	13319.78	10230.26	1938.43	992.88	1946.26	2955.3	10066.88	14727.99	2384.24	146858.85	272
2171232	43925.64	43881.63	19672.45	8259.55	3041.5	0	0	0	0	4299.13	18244.78	34155.21	175479.89	400
2116159	27229.89	20232.54	8726.41	3602.38	2379.69	0	0	0	0	3740.11	2499.83	3003.64	71764.49	170
2116158	49438.81	41664.26	21324.05	7597.05	6326.34	0	0	0	10.36	6975.88	26498.54	49417.01	209252.30	2169
2133065	9131.57	7023.15	3960.32	1985.81	362.22	0	0	0	0	1129.47	3290.88	6155.72	33039.14	269
2116152	10835.36	8089.02	2672.93	1494.47	464.58	0	0	0	0	973.75	2971.57	8843.02	36344.70	245
2157693	9385.82	6880.85	2704.85	1557.1	200.46	0	0	0	10.37	335.49	2075.16	6509.48	29659.58	300
2123523	8454.91	6701.08	4354.83	2967.42	757.85	0	0	0	0	931.36	3190.47	8281.89	35639.81	375
2027510	7952.1	7922.52	6933.68	6409.06	6821.14	7067.51	7284.11	7643.01	8119.33	8907.62	8691.25	7515.57	91266.88	215
1954681	60915.24	48602.03	37720.97	35800.33	28322.17	30747.73	24105.16	23035.27	20844.09	25828.43	37836.28	55406	429163.70	127
2027454	8754.99	6980.19	5131.67	2312.99	0	0	0	0	0	832.94	5138.76	7217.92	36369.46	127
2035408	2964.88	2422.85	1156.28	633.12	0	0	0	0	0	250.85	1309.95	2748.93	11486.84	127
1685269	24518.65	25848.51	28703.55	23776.43	26278.85	25260.51	21244.42	23919.61	21921.01	24191.34	25141.64	28876.41	299680.93	216
2116004	6867.83	5182.8	2865.26	1667.22	0	0	0	0	0	1445.44	2066.25	4591.96	24686.76	103
2123495	15089.81	12836.4	9549.08	7614.46	6091.28	2219.21	2218.3	2228.63	3285.28	6067.92	8197.97	11916.02	87314.36	120
1987815	70247.26	61570.03	46015.46	38280.55	27737.32	5429.22	1674.31	6281.08	13398.22	32082.92	50648.53	68988.33	422353.23	131
1724010	22152.57	25061.57	25430.75	21469.14	23278.44	21752.8	21867.17	21587.71	22872.58	23338.1	21225.99	23517.47	273554.29	76
1826561	9568.22	7783.58	5221.21	4051.06	2138.86	891.09	830.55	796.15	853.37	2300.24	5766.56	9206.85	49407.74	132
2035839	6275.75	5559.48	3632	2948.62	2378.75	1612.95	1730.53	1617.19	1954.54	1858.73	3326.51	5574.9	38369.95	112
1756664	29869.52	24860.57	14573.1	9450.47	2307.25	0	0	0	0	3221.73	16172.67	30091.15	130546.46	346
1921700	43906.97	42437.56	20459.44	9843.54	2787.71	11.09	55.63	1291.06	0	6733.94	18436.2	40604.84	186367.78	549
2025107	9938.57	8465.44	3384.1	1640.04	0	0	0	0	0	0	2558.44	8446.38	34432.97	576
2116161	196831.4	185740.76	134149.91	69235.63	0	0	0	208.49	0	2729.55	106554.34	192971.28	888421.36	518
2157680	63438.51	56218.82	49497.42	44554.67	41294.66	36999.67	36050.75	35728.91	37121.4	50703.36	50774.95	61846.07	584229.19	267
2036180	46405.45	44685.93	42966.22	34896.33	31527.5	26226.91	24106.55	22107	21779.82	24995.56	30072.32	39474.1	389243.69	1362
1884579	8250.58	7197.75	5025.01	2173.75	0	10.4	0	0	0	2102.44	4532.82	6495.23	35787.98	174
1685272														

**PHILADELPHIA GAS WORKS
JANUARY 2016 - DECEMBER 2016**

53.64(c) 8-9

MTR_NBR													TOTAL_CCF	Max Daily Qty (Dth)
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
2064920	0	0	0	0	0	2501.86	2603.63	3213.41	3472.07	4353.57	7081.73	19184.63	42410.90	375
2123514	25338.85	21280.14	7939.36	2859.29	1102.6	979.18	663.92	165.66	71.1	451.13	6416.73	11652.94	78920.90	291
2012845	0	0	0	0	5543.4	4824.03	4479.52	4225.58	4568.37	6183.69	6792.86	7222.08	43839.53	400
2123515	27845.98	23286.96	9230.23	5542.53	345.78	0	11.84	11.84	35.41	2462.38	9040.63	21672.5	99486.08	211
2123516	30164.72	26252.26	13712.17	11690.09	7362.45	2867.04	2598.42	2522.22	2719.95	5305.42	11871.16	21182	138247.90	260
1685280	56650.51	44953.08	44963.52	52866.37	71994.42	54560.77	50658.43	52209.82	36425.18	53171.66	46134.87	59251.11	623839.74	625
2026766	17715.2	14373.49	7341.53	0	0	5103.11	0	0	0	1932.77	9098.15	14281.9	69846.15	272
2027581	17133.47	13748.21	7315.75	4858.86	635.52	0	0	0	6.22	3937.31	8513.01	13993.47	70141.82	354
1553327	37044.44	27940.93	22538.18	18244.98	10268.12	0	0	0	0	10137.19	20590.59	32561.57	179326.00	152
2133053	0	0	0	0	0	0	0	0	0	0	0	0	0.00	257
2133091	90561.33	89558.55	99250.43	89678.42	92099.7	95077	88288.18	89737.23	82706.28	89231.22	95859.8	96863.6	1098911.74	278
2027509	27998.97	23982.68	19720.06	17475.56	10443.74	7945.5	7434.82	7242.69	7268.09	8849.85	14597.13	22476.77	175435.86	450
2064979	18984.46	19282.59	10909.75	11324.05	15542.04	13214.91	5033.03	12979.4	15208.13	9088.3	3896.68	14165.44	149628.78	235
1658884	73310.54	67447.19	45379.03	38195.6	21639.47	6645.53	10206.9	17933.65	13736.73	27430.46	35924	53974.99	411824.09	240
1553324	36044.69	31858.21	17006.61	11609.57	1920.18	0	0	0	0	4959.54	20963.53	33479.33	157841.66	167
1724219	30.52	0	0	0	0	0	0	0	0	0	0	0	30.52	251
1601878	51453.31	33814.14	8493.36	0	0	0	0	0	0	0	0	0	93760.81	429
2188218	21357.7	18117.72	3847	2543.86	316.07	0	0	0	0	1338.92	8613.57	14683.12	70817.96	100
1987803	56059.1	45657.73	35367.04	35626.15	43770.79	63444.14	85497.14	99988.09	85323.42	57811.69	51630.87	52387.69	712563.85	296
2024719	8928.62	7415.53	4634.44	3447.57	1608.8	1230.8	1171.54	1517.25	1454.91	1312.79	3054.48	7971.41	43748.14	573
1989421	20620.08	20128.8	0	15450.73	2.2	0	0	0	0	1121.82	6556.12	17830.44	81710.19	400
1621319	39072.19	31180.46	25890.96	19137.33	12781.68	8265.19	9117.47	8894.25	8213.95	12724.66	19422.42	33647.99	228348.55	65
2027392	10993.68	11801.37	9588.74	7809.68	6326.66	6024.04	4926.19	5478.34	5347.02	6954.67	9045.28	11175.15	95470.82	400
2023955	89181.17	76171.03	53071.68	32658.06	14108.3	8484.64	6556.47	1521.06	1618.68	20876.71	46410.18	85476.96	436134.94	149
2171233	36381.33	30503.65	17879.43	13679.38	5764.03	2700.93	2923.51	2814.29	2916.78	9416.02	18764.72	32789.54	175333.61	650
2027498	25013.62	27593.32	32655.4	27616.19	29579.14	30358.28	27289.39	29124.45	24845.37	21605.38	24501.21	27076.02	327257.77	90
2035986	5693.56	5127	3686.76	3158.35	2544.32	2187.42	2433.17	2372.45	2164.08	2521.61	2649.24	3491.5	38029.46	599
2036046	3782.71	3647.07	1574.41	413.67	0	0	0	0	3.1	0	2633.55	3035.18	15089.69	120
2116023	0	0	0	0	0	0	0	0	1578.21	2166.41	1431.61	2359.58	7535.81	201
2123512	3876.52	3382.38	2184.34	1773.53	0	0	0	0	406.69	4654.06	10742.64	15880.52	42900.68	201
2025156	7441.85	6546.35	3136.91	2032.54	778.45	0	0	0	43.56	2372.47	4706.73	7416.39	34475.25	139
2188222	41618.08	36850.73	27694.2	18024.6	8269.83	5640.45	4320.71	3877.25	4823.57	13392.48	26689.99	41253.67	232455.56	599
1954684	75074.21	63658.57	33047.07	25169.22	4923.84	0	0	0	0	13741.46	32403.67	66744.99	314763.03	296
1514011	146274.97	126391.28	85429.28	86831.51	54435.76	0	0	0	0	25386.37	69266.67	124112.27	718128.11	254
2036186	123999.53	104332.66	71660.58	50073.94	18423.05	0	0	0	0	28895.51	59300.82	98013.73	554699.82	141
1806080	11569.3	9835.55	7322.56	7002.82	4799.65	3947.42	3756.07	1636.88	238.46	8135.27	8917.77	10805.93	77967.68	120
2115831	31866.06	28171.62	14923.11	1076.9	0	83.47	6889.71	502.59	13.88	0	10609.45	39308.81	133445.60	330
2036191	35543.99	48315.08	69608.64	59270.49	36285.2	36816.73	49073.5	46056.11	42637.43	32388.52	12995.61	34885.79	503877.99	120
2036194	376912.05	381084.96	366974.47	320362.86	290947.21	211122.1	255493.83	283024.52	276266.11	289389.35	294943.82	316228.52	3662749.80	89
2012857	2986.14	2653.26	2070.95	1389.69	240.67	115.19	246.14	205.18	334.29	818.91	2000.2	3242.08	16302.70	72
2012851	4140.52	3980.76	2610.25	2161.11	1366.45	498.35	197.12	298.99	472.75	1662.66	2402.48	3587.5	23378.94	90
2012853	3789.02	3657.01	2781.22	2465.32	1526.01	122.44	127.16	222.88	442.53	2043.54	2658.16	3759.37	23594.66	72
2027476	9565.94	8127.59	8259.17	7673.78	6276.23	4873.83	4931.1	6279.9	6273.71	7761.87	8056.92	9200.62	87280.46	82
2025082	2425.32	1917.05	1301.68	1210.32	839.7	74.7	0	0	112	1021.73	1463.61	2401.47	12767.58	75
2025003	6099.85	5079.21	3789.04	3549.08	2916.46	2607.21	1855.2	2146.02	2611.96	3133.79	3663.12	5484.47	42935.41	54
1987801	32543.18	26992.59	18346.49	12992.73	6986.91	7475.51	24120.15	21432.43	7913.44	10057.15	16149.25	27870.02	212879.85	75
2027524	35368.66	28963.74	20010.26	14431.61	8081.87	8831.15	26565.3	23642.72	8877.9	11195.61	17804.95	30127.31	233901.08	207
2198739	8718.23	7021.81	2936.25	1641.2	0	1.04	1.04	3.12	649.68	3226.9	8088.05	32827.32	189	
2024703	24482.7	13378.05	6673.24	4442.92	2343.41	85.09	0	0	0	2886.4	8513.88	17009.18	79814.87	50
2123490	6941.25	5594.18	2510.84	1330.09	2009.69	4045.58	9090.01	4804.82	5471.33	630.3	2008.54	4973.1	49409.73	50
1526435	95290.2	8541.29	59865.67	61546.72	53735.74	43421.77	36211.86	37628.37	44390	61092.57	71242.27	89241.63	739208.09	600
2116157	46922.82	41133.13	33790.67	32091.19	31452.99	21856.79	20933.28	20147.36	21780.07	29085.61	37650.89	47385.17	384229.97	86
1658874	45734.42	43060.34	45856.34	41278.24	43341.36	36512.28	20826.64	31865.05	33733.69	39115.02	42173.7	34924.07	458421.15	402
2123517	24216.72	21582.31	13409.78	10404.17	5658.34	3282.55	3277.01	3366.55	3773.02	7603.71	13211.78	22671.35	132457.29	430
2026874	4323.01	3461.87	2190.43	1758.43	753.33	0	0	0	0	536.47	1788.94	3421.83	18234.31	703
1954683	29410.29	49282.51	41767.75	27698.68	21705.56	18079.5	16622.15	17530.78	16885.51	41038.05	29277.79	43476.03	352774.60	200
1685268	9472.21	7379.14	3184.02	2151.92	105.59	0	0	0	31.1	334.56	1886.69	5520.12	30065.35	144
2027381	5019.11	4614.02	3036.37	2403.42	1405.71	1012.57	848.97	1018.13	869.16	1032.06	2539.08	4712.85	28511.45	513
2027430	5036.96	4603.56	3032.31	2394.01	1414.08	1001.13	855.44	1018.11	875.29	1031.04	2541.18	4868.88	28671.99	232
2027642	21369.97	16160.46	7442.31	4418.94	0	0	0	1.17	0	1393.44	5948.29	17379.58	74114.16	392
2115832	24804.98	20916.61	12333.37	12033.67	8682.92	5744.57	5353.59	5075.75	6075.7	9610.74	14349.75	25031.09	150012.74	375
2115589	9980.32	9118.52	6088.31	4103.46	2108.52	1649.52	1506.25	1472.65	1524.62	2539.05	4650.64	8310.45	53052.31	168
2115588	11100.22	10228.19	6586.19	4405.92	2179.86	1761.64	1704.29	1664.45	1750.81	2799.3	5238.88	9171.73	58591.48	100
2023812	15532.51	13253.61	8164.6	6388.12	4397.84	2194.76	1986.72	1914.25	2060.75	4859.43	6767.63	13128.32	80648.54	235
1402992	48547.06	39860.34	25431.15	19146.49	9193.32	2399.56	2264.45	2167.84	2313.68	11276.29	23330.27	41663.27	227593.72	500
2023952	41985.33	36173.66	23334.83	16758.82	8559.62	4924	4330.84	4002.29	4220.73	15155.92	20401.96	36707.45	221555.45	140
1771898	7964.4	13182.1	0	68701.67	105389.35	59813.12	54691.16	100057.71	105733.34	100061.23	72951.48	39117.25	727662.81	648
1722906	18528.24	17824.24	10151.46	5000.15	4953.18	0	1.17	0	0	4153.42	13371.99	19758.79	93742.64	222
2036145	21142.91	18636.31	10738.88	8148.78	5168.8	2438.96	2357.49	2455.54	2523.49	4479	7469.58	19223.48	107833.22	24.6
2027591	4071.82	4055.48	2773.49	1872.44</										

**PHILADELPHIA GAS WORKS
JANUARY 2016 - DECEMBER 2016**

53.64(c) 8-9

MTR_NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL_CCF	Max Daily Qty (Dth)
2024389	4368.59	3581.96	1006.84	723.1	0	0	0	0	0	690.58	1904.23	3514.98	15790.28	90
1906630	5531.19	4368.53	1454.13	613.4	0	0	0	0	0	427.16	1599.55	4925.09	18919.05	43
2115141	6760.61	5791.15	2002.67	1725.34	303.22	0	0	0	21.77	808.22	2306.51	4544.03	24263.52	26
2024367	7657.08	6232.15	4239.01	1462.8	0	0	0	0	3.22	254.94	1530.62	4276.47	25656.29	26
2024706	8014.77	6962.64	3609.52	2147.44	207.08	0	0	0	1.03	332.6	2154.66	6891.35	30321.09	156
2116149	7283.09	8555.65	3782.26	2029.28	0	0	0	0	0	586.27	2218.89	5875.89	30331.33	341
2115842	8531.84	7209.17	3001.99	1796.37	452.02	0	0	0	3.12	687.65	2550.07	6806.58	31038.81	748
2115136	9941.46	7485.87	2974	1652.17	301.19	0	0	0	1.07	208.49	3102.78	6166.35	31833.38	72
2115833	7982.97	6959.94	3109.43	2228.16	434.04	0	0	0	46.65	644.66	2805.99	8096.29	32308.13	690
2027484	6219.18	5004.93	2022.1	1242.41	170.09	0	0	1.04	0	741.57	3471.45	14689.14	33561.91	98
1987786	10413.85	8245.94	4710.12	2292.32	208.05	0	0	0	0	54.57	2329.75	7667.75	35922.35	48
2123489	9498	6767.04	3959.91	2623.67	403.93	2.14	1.07	1.07	4.28	874.33	3629.18	10165.01	37929.63	190
2123520	11622.62	9274.92	3845.58	935.56	0	0	0	0	10.96	770.5	2651.2	10488.33	39299.67	250
1553328	9989.06	8818.33	4418.83	1988.93	633.58	0	0	0	42.88	1275.79	6710.63	6148.87	40026.90	27.4
1526470	11976.73	10190.31	4573.24	2366.19	682.66	0	0	0	0	955.95	2889.52	8518.74	42153.34	186
2115143	11837.17	8548.11	3394.02	2843.96	534.1	0	0	0	7.33	1820.02	4508.04	10194.49	43687.24	750
2157690	13027.3	7055.04	4306.15	3799.35	1942.25	0	0	0	21.44	863.58	3481.26	11544.49	46040.86	90
2123521	13784.16	11646.68	3394.98	2021.86	0	10.73	0	0	0	1666.08	3310.71	11361.93	47197.13	380
2027483	11486.13	0	14902.27	3238.11	1.08	0	0	0	1.07	2200.51	5655.02	11104.42	48588.61	95
1987496	22985.83	13446.98	2735.41	0	0	0	0	0	0	1380.37	4499.79	13210.5	58258.88	50
2036193	19061.66	13364.38	5541.72	2823.1	0	0	0	0	0	1569.72	5004.83	14988.27	62353.68	126
2027464	17572.43	15672.38	6898.4	3527.99	864.69	0	1.04	0	309.09	1786.09	5756.67	14332.38	66721.16	424
2036185	20025.34	15445.36	7730.91	3805.9	567.09	0	0	0	51.87	2878.24	4545.48	13206.51	68256.70	72
2036189	21350.03	20643.42	10565.88	4509.47	1642.03	0	0	10.95	0	1828.42	4683.27	16515.15	81748.62	168
2116151	20390.4	16375.31	8082.45	6544.48	3773.97	0	0	0	0	3245.8	9711.16	16883.12	85006.69	455
2123513	22182.55	21003.84	8738.59	6369.63	2466.36	0	0	41.65	0	1861.87	14759.83	10173.14	87597.46	380
1658876	24036.27	23531.71	14356.81	8280.08	0	0	0	0	0	1604.42	7143.21	28457.78	107410.28	54
1414492	31978.68	23481.54	10758.12	6589.58	1263.84	0	0	0	0	2931.07	10523.08	25589.17	113115.08	154
2036195	33462.03	32624.69	13677.31	12235.06	3582.01	0	0	0	0	5348.48	10837.1	33018.1	144784.78	120
2064980	70659.9	59085.64	27879.2	18194.02	6177.77	0	0	0	0	10058.28	22919.22	64897.62	279871.65	223
1987810	8805.88	9607.22	3817.7	2070.22	0	0	0	0	0	620.72	4335.36	9661.21	38918.31	2087
2025031	13651	11159.95	5808.49	2557.46	1.06	1.06	5.36	7.49	69.77	3971.09	10264.25	14400.32	61897.30	90
2027520	18792.54	15622.23	7552.61	3534.94	0	0	0	0	0	2250.33	6752.8	14814.44	69319.89	149
1658875	28857.86	28868.62	14915.85	2355.63	0	0	0	0	0	2808.62	16392.02	28144.66	122343.26	400
1724856	38707.21	27759.11	9113.14	4286.2	0	103.9	0	0	0	2518.74	12316.34	34339.84	129144.48	701
2123528	18912.7	20684.81	16840.56	13868.38	9477.37	622.61	0	0	51.85	10884.14	18584.76	24017.22	133944.40	430
2133093	36641.34	28605.17	16280.45	7312.43	0	0	0	0	1.38	3047.08	14491.04	37893.39	144252.28	500
2115137	29382.83	23982.89	16548.55	11052.39	0	0	0	0	0	6519.03	25688.16	33881.53	147055.38	417
2024702	35142.12	31529.54	18501.11	12206.62	0	0	0	0	0	4347.69	19690.95	28796.8	150214.83	58
1546148	25498.85	19685.4	18956.24	0	17109.45	0	0	0	0	26478.33	40018.67	54607.39	202354.33	844
1553325	54109.74	42454.42	30188.74	27451.85	9617.8	207.86	0	0	0	10181.59	38565.9	62800.27	275578.17	397
2064977	0	0	0	0	0	25247.86	0	0	114.06	1664.67	3011.42	6986.1	37024.11	250
2024694	11337.4	9358.38	3481.45	2521.33	963.35	0	0	0	4.16	975.3	3071.5	8806.65	40519.52	377
2024285	7768.91	6614.21	4367.44	3463.19	2110.96	576.36	466.31	458.45	508.36	2183.72	4088.23	6611.02	39197.16	4740
2024299	9364.65	7698.89	4912.4	3749.62	2032.06	630.41	545.62	674.23	611.63	2520.77	4738.48	7547.25	40526.01	64
2024290	9814.75	8332.49	5846.38	4707.04	3117.31	775.72	554.05	516.83	553.24	3629.76	5955.96	8285.06	52088.59	64
2027403	18878.29	16298.93	10285.42	7210.13	4404.48	1463.53	1279.3	2509.96	3773.96	6750.86	11077.17	18774.75	102706.78	400
2133071	23091.22	20380.44	13882	10924.43	8880.42	5827.56	5279.35	4957.06	3153.27	5854.79	10155.69	18302.56	130688.79	1269
2024675	8042.57	6719.25	4768.24	3701.4	1919.46	430.44	379.54	372.63	413.5	3517	8384.49	668.87	39317.39	64
2027527	17724.54	14462.99	9529.33	8030.31	3736.05	1530.62	1430.45	1407.32	1428.57	4469.72	10210.79	20278.99	94239.68	64
2123460	8389.33	6754.98	2336	1543.09	265.11	0	0	0	0	12.57	2309.77	6217.19	27828.04	89
1884576	38108.8	34021.47	18190.87	16096.6	7503.93	44.31	0	0	0	12040.31	17270.74	28364.82	171641.85	89
1611635	79381.85	68353.26	39558.83	26436.5	15772.21	5202.01	4819.22	4495.46	5608.96	17682.04	35412.7	67247.16	369970.20	3300
2027387	17059.82	14338.1	11546.95	9052.74	6243.75	4022.33	4190.86	4053.34	4146.41	6038.64	9732	16370.12	106795.06	224
1885276	12902.69	9244.43	4595.9	2705.75	475.09	0	0	0	0	1121.81	4191.9	9686.08	44923.65	437
1658882	41701.58	30314.87	17537.07	8361.43	2650.27	0	0	0	0	3585.14	17942.48	28312.93	150405.77	31
1723900	40929.92	34201.82	26530.12	24617.16	24444	22127.77	21184.53	20950.32	21157.85	23633.27	25313.89	33524.78	318615.43	453
2171234	74761.41	69182.78	63914.57	50419.56	47559.93	0	94800.19	47451.77	45493.15	54453.45	62071.41	73339.3	683447.52	500
2115901	714.95	555.34	301.04	169.03	0	0	0	0	0	62.76	295.99	545.81	2644.92	925
2115434	1027.99	823.8	396.2	203.71	35.91	0	0	0	0	35.4	410.59	834.88	3768.48	541
2035694	1841.14	1460.05	697.33	418.72	0	0	0	0	0	65.04	626.63	1220.02	6328.93	60
1987683	1852.2	1567.8	707.15	508.78	0	0	0	0	0	138.93	697.33	1287.29	6759.48	302
1987633	4329.37	3237.51	1545.18	924.67	0	0	0	0	0	273.84	1623.21	3400.31	15334.09	1252
2023825	7324.87	6387.81	3068.51	1308.64	14.53	0	0	0	0	459.78	2431.95	5988	26984.09	541
2027536	7674.43	6427.07	2803.14	2160.51	0	0	0	0	0	0	3049.83	6220.69	28335.67	416
2027563	9629.43	7815.84	3153.44	1823.39	0	0	0	0	0	0	3492.99	9203.31	35118.40	388
1722889	11579.36	8809.93	3803.53	3632.91	1180.17	0	0	0	0	2117.35	5208.98	9345.86	45678.09	373
1526423	16012.16	13228.68	9698.96	7098.52	4350.16	2004.83	1762.9	1896.86	1969.83	5400.9	10343.84	14601.4	88369.04	400
2026870	6929.66	6210.19	1841.8	822.39	223	0	0	0	5.18	430.79	1822.56	3295.55	21581.12	1851
1806079	26940.01	22109.78	10422.29	9810.39	4971.55	111.15	13.95	0	599.43	9308.81	16655.16	23493.98	124436.50	107
2027641	15030.19	11357.76	4732.21	3096.01	1436.33	0	0	0	0	1717.85	6540.71	10346.46	54257.52	368
2024992	1860.45	1593.81	831.29	601.64	279.47	0	0	0	0	193.71	872.29	1674.13	7906.79	1851
2025099	4233.99	3431.75	1524.21	1053.85	327.99	0	9.37	0	14.51	242.76	2272.91	4413.13	17524.47	54
1986388	6293.97	4956.9	2508.62	1751.6	441.31	0	0	0	0	538.66	2402.69	5072.11	23965.86	38
2188225	17187.42	14806.17	10291.66	7900.09	6433.65	5204.27	5175.57	5398.71	4878.88	8538.19	12874.73	16		

**PHILADELPHIA GAS WORKS
JANUARY 2016 - DECEMBER 2016**

53.64(c) 8-9

MTR_NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL_CCF	Max Daily Qty (Dth)
2123522	0	0	0	0	0	0	0	0	0	0	17578.83	5246.83	22825.66	430
1611015	0	0	5423.09	32740.54	35526.23	29814.16	37138.86	48359.56	53498.64	55641.82	29865.33	16761.95	344770.18	547
2188223	11861.72	8343.15	3834.73	1682.63	831.14	0	438.71	10.41	31.09	1664.74	3865.8	8751.32	41315.44	1225
1658886	0	0	0	0	0	0	0	0	0	0	0	0	0.00	90
2064981	0	0	0	0	0	0	0	0	313.14	0	0	0	313.14	11586
1658885	4353.25	4014.27	312.6	416.36	2487.74	623.18	66379.83	22603.78	11990.14	2209.05	517.95	2732.77	118640.92	400
2036192	68350.46	64663.41	46856.94	42188.17	34591.88	25036.42	24869.86	26797.34	28326.37	35132.23	40869.8	53155.03	490837.91	740
1786009	375631.29	335096.98	265206.56	224905.3	187709.54	142420.62	131797.9	131748.88	151619.45	195374.64	242921.76	343673.76	2728106.68	5500
1786008	404607.91	360558.1	284528.79	241179.53	200886.22	152289.04	141192.07	141234.01	163079.39	210540.9	262505.82	372902.36	2935504.14	5500
2064982	920957.46	758476.51	572064.06	503620.64	405111.79	308950.54	294280.24	288720.36	308459.62	414699.84	543980.54	805001.82	6124323.42	5500
2027386	6455.9	9576.78	7685.18	5856.21	4824.82	4556.42	4907.93	6807.38	7512.12	7492.15	4775.17	5454.52	75904.58	141
2026820	18234.02	12473.37	17147.27	16589.41	17568.61	15891.73	16598.47	16586.89	16074.65	18123.48	18124.18	19037.85	202449.93	300
2023953	75323.28	63968.37	50377.38	47701.52	37691.67	21064.26	18687.44	18732.39	24798.59	42921.88	48077.1	64507.88	513851.76	576
2027625	5073.08	4165.37	2046.81	1827.43	463.56	0	40.89	220.78	750.16	1145.41	2245.29	3757.39	21736.17	1565
2027564	5125.36	4223.51	2048	1741.14	532.49	210.75	88.95	212.51	720.96	1292.76	2621.43	4769.05	23586.91	728
2027529	56324.75	45559.73	28817.03	20075.39	10775.46	6112.92	5612.09	5340.96	5616.47	14957.06	32171.1	50051.9	281414.86	706
2035886	9473.61	7896.79	5636.21	1854.65	3938.13	5718.25	4421.58	4791.36	4610.48	7378.78	6238.15	5078.19	67036.18	95
1526433	59501.02	53726.7	47463.17	43620.36	38282.62	31143.95	28813.07	27717.28	29960.01	36650.6	46019.69	59130.79	502029.26	1043
2116160	31092.16	29147.98	11908.34	8142.46	0	0	0	0	0	0	8345.29	19687.55	108323.78	547
2027434	6983.12	5777.78	3059.67	2196.55	1021.49	2054.95	3669.21	3633.99	2248.37	1595.22	2902.05	6106.91	41249.31	455
2027433	8603.31	7017.59	3758.42	2677.89	1151.61	2196.32	4226.35	4361.31	2576.12	1847.49	3477.7	7392.73	49286.84	450
1909300	199701.472	195714.014	111419.345	202467.338	53749.075	46675.3514	16017.8381	1230.0253	2464.91111	89708.7851	110791.096	190010.67	1219949.92	0
1685277	30278.22	18667.26	8035.52	4530.57	673.13	0	0	10.42	31.11	804.53	5003.56	20854.21	88888.53	380
1546146	23535.39	20440.99	13436.77	10958.31	6899.42	4175.76	3652.61	3554.32	4074.21	7585.28	11173.65	19994.99	129481.70	313
1526425	24634.65	21292.82	15164.28	10042.87	2879.39	2240.89	2072.92	2059.2	1881.61	8114.33	13510.06	20797.26	124690.28	360
1582089	59181.58	49863.4	31329.56	23460.26	4777.14	3838.52	3521.97	3428.43	3617.04	18040.86	31050.09	50745.82	282854.67	479
2024714	12185.3	9596.29	4681.8	3041.15	0	0	0	0	0	1320.76	4949.94	9548.45	45323.69	167
2064820	3116.43	2381.21	1081.29	787.42	147.05	0	0	0	1.03	308.58	643.72	2103.69	10570.42	99
2157702	33850.2	31416.68	22525.69	20114.8	21702.18	15856.73	13693.7	15212.44	17859.84	21834.52	21062.26	28331.23	263460.27	43
2036187	43116.62	40187.79	21710.21	14732.36	8322.1	125.04	0	0	430.58	10558.65	16909.28	32921.04	189013.67	576
2027583	29482.52	27492.17	28675.1	28400.74	29471.01	28693.09	29750.37	29970.77	29199.55	30312.98	37137.4	39242.58	367828.28	202
2116162	167188.5	150984.26	137754.97	123825.79	104579.8	83205.78	73382.64	81508.64	87128.93	107396.91	130117.19	157616.25	1404689.66	2549
1685275	3930	3570	4040	3590	3380	3850	3080	3430	3090	3970	3840	5500	45270.00	375
2027494	22212.25	19778.38	13278.69	6484.18	1830.1	0	0	0	0	2340.3	14217.42	20755.15	100896.47	100
2123484	4074.86	3657.55	2398.32	2142.33	1945.91	1548.71	1408.73	1469.52	1628.85	2025.37	2228.06	3402.68	27930.89	119
2123463	4538.19	4080.6	2698.02	2410.43	2184.23	1740.9	1569.48	1618.58	1810.13	2281.6	2501.93	3764.09	31198.18	80
2123467	6796.3	5888.76	3909.62	2654.91	1248.87	548.35	455.95	433.41	444.82	1495.96	3712.75	6197.47	33787.17	80
2115593	19006.2	17592.34	13099.52	10478.65	10392.12	6941.26	4383.29	7444.61	6652.41	7783.85	10141.64	14608.12	128524.01	388
1575425	14800.3	8976.42	4356.42	2247.31	0	0	0	0	0	0	6141.69	13748.48	50270.82	383
2211334	17705.8	16197.7	9857.24	3904.01	3678.69	2045.92	1467.15	2634.81	1431.48	2855.78	6916.78	11277.89	79973.25	449
2025172	10978.92	10508.54	3111.25	2109.04	0	0	6.7	2.64	0	553.14	2036.29	5151.89	34458.41	175
2025146	12066.3	11613.42	3414.33	2297.88	0	0	6.7	1.32	1.31	618.45	2285.55	5607.89	37913.15	140
2027443	22714.98	19556.9	11628.3	8288.93	4872.49	2962.3	2520.39	2557.91	2821.05	5470.7	9879.43	18438.29	111711.67	430
1526478	32905.86	29424.62	11185.13	5811.36	564.3	0	0	0	0	1454.24	9126.78	25735.14	116207.43	135
2027160	9068.83	7864.96	5147.86	2714.95	0	0	0	0	0	1582.39	4783.46	8425.34	39587.79	164
2024698	7645.81	6511.36	3468.56	2382.24	777.65	0	0	0	0	246.32	3376.78	7185.31	31594.03	272
1601880	14510.96	11489.69	5741.44	3697.88	1463.48	0	0	0	0	1077.9	4964.74	11411.04	54357.13	272

Tab 9

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.64(c) Thirty days prior to the filing of a tariff reflecting an increase or decrease in natural gas costs, each Section 1307(f) gas utility seeking recovery of purchased gas costs under that section shall provide notice to the public, under § 53.68 (relating to notice requirements), and shall file the following supporting information with the Commission, with a copy to the Consumer Advocate, Small Business Advocate and to intervenors upon request:

- (10) A schematic system map, locating and identifying by name, the pressure and capacity of all interstate or intrastate transmission pipeline connections, compressor stations, utility transmission or distribution mains 6 inches or larger in size, storage facilities, including maximum daily injection and withdrawal rates, production fields, and each individual supply or transportation customer which represents 5% or more of total system throughput in a month. Each customer or account shall be identified solely by a unique alphanumeric code, the key to which may be provided subject to § 5.423.

Response:

Following the lead of the industry, as well as federal policy guidelines regarding the security of information relating to energy transmission sites, PGW will no longer provide this data to the general public. However, upon request PGW will provide this information to the Commission and will also provide this information, upon written request, to parties to this proceeding that have legitimate business reasons to view this information.

Tab 10

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.64(c) Thirty days prior to the filing of a tariff reflecting an increase or decrease in natural gas costs, each Section 1307(f) gas utility seeking recovery of purchased gas costs under that section shall provide notice to the public, under § 53.68 (relating to notice requirements), and shall file the following supporting information with the Commission, with a copy to the Consumer Advocate, Small Business Advocate and to intervenors upon request:

(11) If any rate structure or rate allocation changes are to be proposed, a detailed explanation of each proposal, reasons therefore, number of customers affected, net effect on each customer class, and how the change relates to or is justified by changes in gas costs proposed in the Section 1307(f) tariff filing. Explain how gas supply, transportation and storage capacity costs are allocated to customers which are primarily nonheating, interruptible or transportation customers.

Response:

PGW is not proposing any rate structure or rate allocation changes in the instant proceeding, therefore, no testimony or schedules have been provided in this pre-filing to support such changes.

PGW will provide testimony regarding gas procurement policies, strategies and the GCR calculation in its 1307f March 1 filing.

Tab 11

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.64(c) Thirty days prior to the filing of a tariff reflecting an increase or decrease in natural gas costs, each Section 1307(f) gas utility seeking recovery of purchased gas costs under that section shall provide notice to the public, under § 53.68 (relating to notice requirements), and shall file the following supporting information with the Commission, with a copy to the Consumer Advocate, Small Business Advocate and to intervenors upon request:

(12) A schedule depicting the most recent 5-year consecutive 3-day peak data by customer class (or other historic peak day data used for system planning), daily volumetric throughput by customer class (including end-user transportation throughput), gas interruptions and high, low and average temperature during each day.

Response:

Schedule 1 – Three-day peak for FY 11-12 through FY 15-16.

There were not any gas interruptions during the period of FY 11-12 through FY 15-16.

3 DAY PEAK ANALYSIS

Winter	Average	Hi	Low	Total	Firm	Cogen	LBS	BPS	GTS	IT
2011 - 2012	24	32	17	466,478	403,819	44	197	1,140	3,364	57,914
2011 - 2012	31	38	21	450,472	388,053	43	188	1,069	3,749	57,371
2011 - 2012	38	42	34	377,446	320,686	45	178	936	3,873	51,728
2012 - 2013	21	24	19	542,095	474,747	40	78	235	3,499	63,496
2012 - 2013	23	28	19	520,871	454,814	40	79	225	3,697	62,016
2012 - 2013	23	31	20	532,130	467,509	41	79	224	3,645	60,632
2013 - 2014	14	19	8	576,853	513,402	59	0	114	2,422	60,855
2013 - 2014	18	26	13	550,700	485,528	61	0	104	1,698	63,310
2013 - 2014	22	29	15	544,086	478,302	61	0	114	3,716	61,893
2014 - 2015	11	17	4	645,370	563,253	0	0	0	4,018	78,099
2014 - 2015	16	21	9	617,947	527,584	0	0	0	3,957	86,406
2014 - 2015	24	30	19	532,242	452,250	0	0	0	3,751	76,241
2015 - 2016	26	30	22	490,537	407,974	43	0	0	3,984	78,536
2015 - 2016	16	24	9	583,377	498,793	43	0	0	3,870	80,671
2015 - 2016	18	24	11	562,929	489,468	43	0	0	3,653	69,765

Tab 12

Docket No. R-17XXX

Item 53.64 (c)(13)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.64(c) Thirty days prior to the filing of a tariff reflecting an increase or decrease in natural gas costs, each Section 1307(f) gas utility seeking recovery of purchased gas costs under that section shall provide notice to the public, under § 53.68 (relating to notice requirements), and shall file the following supporting information with the Commission, with a copy to the Consumer Advocate, Small Business Advocate and to intervenors upon request:

(13) Identification and support for any peak day methodology used to project future gas demands and studies supporting the validity of the methodology.

Response: Please see the attached Peak Day analysis. Also attached are excerpts from the August, 2006 ICF International *Natural Gas Supply Study* which supports PGW's peak day methodology.

Peak Day Analysis

PGW performs a peak day analysis on an annual basis to determine its projected sendout requirements during peak conditions. Essentially this process is completed by collecting sendout and average temperature data for all days where the temperature is at or below 32 degrees Fahrenheit, excluding holidays and weekends. All interruptible transportation volumes are removed from total sendout to arrive at firm sendout on a daily basis.

Common statistical practices warrant that no less than thirty (30) data points be utilized in the analysis to ensure its integrity. For this analysis, PGW has utilized data from the period winter of FY 13-14 through FY 15-16 which would reflect the most current consumption behaviors of its customers. This period yielded 77 data points where the average temperature was at or below 32 degrees Fahrenheit.

Degree days are calculated by subtracting the average daily temperature from sixty-five (65).

A standard linear regression was performed on the data using the calculated degree-days and the actual firm daily sendout information. Additionally, in order to confirm the accuracy of the analysis, and to smooth the charting of the data, a quadratic and a cubic regression analysis were also completed.

A resulting R^2 (Correlation Coefficient) indicates a 86.7 % correlation between firm sendout and degree-days. The multiple regression correlation co-efficient, R^2 , is a measure of the proportion of variability explained by, or due to the regression (linear relationship) in a sample of paired data. It is a number between zero and one and a value close to zero suggests a poor model.

To verify the level of confidence we can ascribe to the model, we developed the attached Linear Regression Confidence Level Table. Essentially, this table compares the actual versus projected sendout to determine the level of variance expressed as a standard deviation. A standard deviation represents the positive square root of the variance where the variance simply represents the dispersion about the mean. In this analysis the sample standard deviation is 16,777 MCF.

The sample loses one degree of freedom for each estimated parameter. Thus, with a sample of 100 paired values and two estimated parameters (one for the constant and one for the coefficient of "degree days"), there are $100-2=98$ degrees of freedom. In this analysis we had 66 data points and there were 64 Degrees of Freedom.

Finally, based upon the models developed, it can be determined that the company's projected peak day sendout should be set at 652,781 MCF per day at 0 degree Fahrenheit. This calculation is performed using the X Coefficient (i.e. slope) multiplied by the number of degree days and adding the Constant (Y Intercept).

Winter 14-16 Data for Daily Temperatures <= 32 Degrees Fahrenheit
W/O Holidays, Weekends

Day	Date	Daily Temp	Degree Days X	X^2	X^3	Actual Firm Sendout (Mcf)	Firm Sendout Per DD (Mcf)	Linear Projected Firm Sendout (Mcf)	Quadratic Projected Firm Sendout (Mcf)	Cubic Projected Firm Sendout (Mcf)
Wednesday	12/11/2013	32	33	1,089	35,937	345,621	10,473	352,303	348,620	345,945
Thursday	12/12/2013	29	36	1,296	46,656	383,330	10,648	380,473	380,736	382,575
Monday	12/16/2013	31	34	1,156	39,304	361,869	10,643	361,693	359,520	359,027
Tuesday	12/17/2013	31	34	1,156	39,304	359,059	10,561	361,693	359,520	359,027
Thursday	1/2/2014	26	39	1,521	59,319	384,574	9,861	408,643	411,103	412,706
Friday	1/3/2014	17	48	2,304	110,592	470,146	9,795	493,152	488,444	488,444
Monday	1/6/2014	26	39	1,521	59,319	400,578	10,271	408,643	411,103	412,706
Tuesday	1/7/2014	13	52	2,704	140,608	527,569	11,660	530,712	522,497	527,553
Wednesday	1/8/2014	26	39	1,521	59,319	454,741	11,660	408,643	411,103	412,706
Tuesday	1/21/2014	16	49	2,401	117,649	454,261	9,271	502,542	499,704	497,456
Wednesday	1/22/2014	14	51	2,601	132,651	513,403	10,067	521,322	515,094	516,921
Thursday	1/23/2014	18	47	2,209	103,823	485,527	10,330	483,762	483,538	479,791
Friday	1/24/2014	22	43	1,849	79,507	478,302	11,123	446,202	448,874	446,977
Monday	1/27/2014	28	37	1,369	50,653	411,075	11,110	389,863	391,052	393,221
Tuesday	1/28/2014	16	49	2,401	117,649	497,124	10,145	502,542	499,704	497,456
Wednesday	1/29/2014	20	45	2,025	91,125	492,387	10,942	464,982	466,594	463,205
Thursday	1/30/2014	27	38	1,444	54,872	422,136	11,109	399,253	401,175	403,234
Monday	2/3/2014	32	33	1,089	35,937	340,943	10,332	352,303	348,620	345,945
Thursday	2/6/2014	30	35	1,225	42,875	379,892	10,854	371,083	370,225	371,207
Friday	2/7/2014	31	34	1,156	39,304	363,342	10,687	361,693	359,520	359,027
Monday	2/10/2014	25	40	1,600	64,000	419,035	10,476	418,033	420,837	421,726
Tuesday	2/11/2014	22	43	1,849	79,507	438,956	10,208	446,202	448,874	446,977
Wednesday	2/12/2014	27	38	1,444	54,872	430,300	11,324	399,253	401,175	403,234
Tuesday	2/25/2014	32	33	1,089	35,937	360,362	10,920	352,303	348,620	345,945
Wednesday	2/26/2014	27	38	1,444	54,872	389,769	10,257	399,253	401,175	403,234
Thursday	2/27/2014	23	42	1,764	74,088	450,050	10,715	436,813	439,723	438,771
Friday	2/28/2014	22	43	1,849	79,507	440,399	10,242	446,202	448,874	446,977
Monday	3/3/2014	20	45	2,025	91,125	468,269	10,406	464,982	466,594	463,205
Tuesday	3/4/2014	28	37	1,369	50,653	408,710	11,046	389,863	391,052	393,221
Thursday	3/6/2014	30	35	1,225	42,875	372,518	10,643	371,083	370,225	371,207
Thursday	3/13/2014	30	35	1,225	42,875	377,063	10,773	371,083	370,225	371,207
Monday	3/17/2014	32	33	1,089	35,937	346,592	10,503	352,303	348,620	345,945
Monday	3/24/2014	32	33	1,089	35,937	328,314	9,949	328,314	348,620	345,945
Wednesday	3/26/2014	32	33	1,089	35,937	343,473	10,408	352,303	348,620	345,945
Tuesday	1/18/2014	28	37	1,369	50,653	350,906	9,484	389,863	391,052	393,221
Wednesday	12/31/2014	32	33	1,089	35,937	340,403	10,315	352,303	348,620	345,945
Monday	1/5/2015	29	36	1,296	46,656	348,249	9,674	380,473	380,736	382,575
Tuesday	1/6/2015	25	40	1,600	64,000	400,833	10,021	418,033	420,837	421,726
Wednesday	1/7/2015	18	47	2,209	103,823	488,236	10,388	483,762	483,538	479,791
Thursday	1/8/2015	22	43	1,849	79,507	479,237	11,145	446,202	448,874	446,977
Friday	1/9/2015	28	37	1,369	50,653	413,890	11,186	389,863	391,052	393,221
Tuesday	1/13/2015	26	39	1,521	59,319	391,385	10,036	408,643	411,103	412,706
Wednesday	1/14/2015	31	34	1,156	39,304	373,561	10,987	361,693	359,520	359,027
Friday	1/16/2015	31	34	1,156	39,304	357,367	10,511	361,693	359,520	359,027

Day	Daily Temp	Degree Days	X	X ²	X ³	Actual Firm Sendout		Firm Sendout Per DD		Linear Projected Firm Sendout		Quadratic Projected Firm Sendout		Cubic Projected Firm Sendout	
						(Mcf)	(Mcf)	(Mcf)	(Mcf)	(Mcf)	(Mcf)	(Mcf)	(Mcf)	(Mcf)	(Mcf)
Wednesday	32	33	1,089	35,937	344,596	10,442	352,303	348,620	345,945						
Monday	28	37	1,369	50,653	379,785	10,264	389,863	391,052	393,221						
Tuesday	27	38	1,444	54,872	407,871	10,733	399,253	401,175	403,234						
Wednesday	29	36	1,296	46,656	397,632	11,045	380,473	380,736	382,575						
Friday	27	38	1,444	54,872	396,701	10,440	399,253	401,175	403,234						
Monday	28	37	1,369	50,653	391,048	10,569	389,863	391,052	393,221						
Tuesday	28	37	1,369	50,653	395,063	10,677	389,863	391,052	393,221						
Thursday	23	42	1,764	74,088	426,585	10,157	436,813	439,723	438,771						
Friday	31	34	1,156	39,304	393,873	11,584	361,693	359,520	359,027						
Monday	30	35	1,225	42,875	365,974	10,456	371,083	370,225	371,207						
Thursday	27	38	1,444	54,872	399,536	10,514	399,253	401,175	403,234						
Friday	22	43	1,849	79,507	454,929	10,580	446,202	448,874	446,977						
Tuesday	24	41	1,681	68,921	452,250	11,030	427,423	430,377	430,384						
Wednesday	25	40	1,600	64,000	420,596	10,515	418,033	420,837	421,726						
Thursday	12	53	2,809	148,877	539,717	10,183	540,102	529,706	538,906						
Friday	16	49	2,401	117,649	552,584	11,277	502,542	499,704	497,456						
Monday	19	46	2,116	97,336	463,598	10,078	474,372	475,163	471,409						
Tuesday	24	41	1,681	68,921	445,516	10,866	427,423	430,377	430,384						
Thursday	29	36	1,296	46,656	379,463	10,541	380,473	380,736	382,575						
Friday	25	40	1,600	64,000	405,365	10,134	418,033	420,837	421,726						
Thursday	21	44	1,936	85,184	421,654	9,583	455,592	457,831	455,092						
Friday	23	42	1,764	74,088	423,507	10,084	436,813	439,723	438,771						
Monday	21	44	1,936	85,184	407,940	9,271	455,592	457,831	455,092						
Tuesday	27	38	1,444	54,872	398,646	10,491	399,253	401,175	403,234						
Monday	31	34	1,156	39,304	334,881	9,849	361,693	359,520	359,027						
Wednesday	28	37	1,369	50,653	379,941	10,269	389,863	391,052	393,221						
Tuesday	26	39	1,521	59,319	430,686	11,043	408,643	411,103	412,706						
Thursday	31	34	1,156	39,304	361,668	10,637	361,693	359,520	359,027						
Friday	27	38	1,444	54,872	397,773	10,468	399,253	401,175	403,234						
Wednesday	31	34	1,156	39,304	355,015	10,442	361,693	359,520	359,027						
Thursday	24	41	1,681	68,921	435,736	10,628	427,423	430,377	430,384						
Friday	26	39	1,521	59,319	419,340	10,752	408,643	411,103	412,706						
Thursday	32	33	1,089	35,937	345,555	10,471	352,303	348,620	345,945						
Count		65	4,225	274,625	409,984	10,490	652,781	601,068	764,165						

**Firm Sendout Projection Based Data From 14-16
Data for Daily Temperatures <= 32 Degrees Fahrenheit**

<u>R Squared</u>	<u>Change</u>	<u>Student's T</u>	<u>Degrees of Freedom</u>	<u>Critical Value</u>	<u>@ 97.5% Significant</u>
0.866811	0.866811	22.093158	75	1.99	Yes
0.8669860	0.003050	1.316890	74	1.98	No
0.871898	0.002038	1.077546	73	1.98	No
		<u>75</u>	<u>74</u>	<u>1.98</u>	<u>73</u>
		<u>1.99</u>	<u>1.98</u>	<u>1.98</u>	<u>1.98</u>
		<u>1.66</u>	<u>1.66</u>	<u>1.66</u>	<u>1.66</u>

Degrees of Freedom
97.5% Significance Level
95.0% Significance Level

Linear Projection at Zero Degrees Fahrenheit
Linear Projection at 15 Degrees Fahrenheit

652,781 Mcf
511,932 Mcf

*Student's T = Square Root[(Increase * Degrees of Freedom)/(1 - R Squared)]*

*Linear SO = Constant + (X * X Coefficient)*

*Quadratic SO = Constant + (X * X Coeff) + (X1u2 * X1u2 Coeff)*

*Cubic SO = Constant + (X * X Coeff) + (X1u2 * X1u2 Coeff) + (X1u3 * X1u3 Coeff)*

Linear Regression Confidence Level Table

Count	Degree Days	Firm Sendout (Mcf)	Y	Projected Linear Firm Sendout (Mcf)	Yc	Difference Actual Versus Projected Y - Yc	Actual Versus Projected Squared (Y - Yc) ²	X - Xm	(Degree Days - Xm)	Squared (X - Xm) ²	sdyce	t*sdyce	Lower Acc		Upper Acc		"- 1 SD"		"+ 1 SD"		"- 2 SD"		"+ 2 SD"	
													Lower	Ydc + t*sdyce	Lower	Ydc + t*sdyce	Lower	Ydc + t*sdyce	Lower	Ydc + t*sdyce	Lower	Ydc + t*sdyce	Lower	Ydc + t*sdyce
1	33	345,621		352,303	(6,682)	44,651,279	38	3,392	6,755	345,548	359,058	333,547	371,059	333,547	371,059	314,791	389,815							
2	33	340,943		352,303	(11,360)	129,045,112	38	3,392	6,755	345,548	359,058	333,547	371,059	333,547	371,059	314,791	389,815							
3	33	360,362		352,303	8,059	64,943,509	38	3,392	6,755	345,548	359,058	333,547	371,059	333,547	371,059	314,791	389,815							
4	33	346,592		352,303	(5,711)	32,617,363	38	3,392	6,755	345,548	359,058	333,547	371,059	333,547	371,059	314,791	389,815							
5	33	328,314		352,303	(23,989)	575,479,858	38	3,392	6,755	345,548	359,058	333,547	371,059	333,547	371,059	314,791	389,815							
6	33	343,473		352,303	(8,830)	77,971,748	38	3,392	6,755	345,548	359,058	333,547	371,059	333,547	371,059	314,791	389,815							
7	33	340,403		352,303	(11,900)	141,602,298	38	3,392	6,755	345,548	359,058	333,547	371,059	333,547	371,059	314,791	389,815							
8	33	344,596		352,303	(7,707)	59,394,521	38	3,392	6,755	345,548	359,058	333,547	371,059	333,547	371,059	314,791	389,815							
9	33	345,555		352,303	(6,748)	45,535,759	38	3,392	6,755	345,548	359,058	333,547	371,059	333,547	371,059	314,791	389,815							
10	34	361,869		361,693	176	30,945	26	3,077	6,127	355,566	367,820	342,937	380,449	342,937	380,449	324,181	399,205							
11	34	359,059		361,693	(2,634)	6,938,425	26	3,077	6,127	355,566	367,820	342,937	380,449	342,937	380,449	324,181	399,205							
12	34	363,342		361,693	1,648	2,717,382	26	3,077	6,127	355,566	367,820	342,937	380,449	342,937	380,449	324,181	399,205							
13	34	373,561		361,693	11,868	140,841,143	26	3,077	6,127	355,566	367,820	342,937	380,449	342,937	380,449	324,181	399,205							
14	34	357,367		361,693	(4,327)	18,718,678	26	3,077	6,127	355,566	367,820	342,937	380,449	342,937	380,449	324,181	399,205							
15	34	393,873		361,693	32,180	1,035,523,139	26	3,077	6,127	355,566	367,820	342,937	380,449	342,937	380,449	324,181	399,205							
16	34	334,881		361,693	(26,812)	718,903,945	26	3,077	6,127	355,566	367,820	342,937	380,449	342,937	380,449	324,181	399,205							
17	34	361,668		361,693	(26)	652	26	3,077	6,127	355,566	367,820	342,937	380,449	342,937	380,449	324,181	399,205							
18	34	355,015		361,693	(6,679)	44,602,840	26	3,077	6,127	355,566	367,820	342,937	380,449	342,937	380,449	324,181	399,205							
19	35	379,892		371,083	8,809	77,606,714	17	2,791	5,558	365,525	376,641	352,327	389,839	352,327	389,839	333,571	408,595							
20	35	372,518		371,083	1,435	2,059,177	17	2,791	5,558	365,525	376,641	352,327	389,839	352,327	389,839	333,571	408,595							
21	35	377,063		371,083	5,980	35,760,198	17	2,791	5,558	365,525	376,641	352,327	389,839	352,327	389,839	333,571	408,595							
22	35	365,974		371,083	(5,109)	26,097,357	17	2,791	5,558	365,525	376,641	352,327	389,839	352,327	389,839	333,571	408,595							
23	36	383,330		380,473	2,857	8,162,765	10	2,545	5,067	375,406	385,540	361,717	399,229	361,717	399,229	342,961	417,985							
24	36	348,249		380,473	(32,224)	1,038,379,261	10	2,545	5,067	375,406	385,540	361,717	399,229	361,717	399,229	342,961	417,985							
25	36	397,632		380,473	17,159	294,439,753	10	2,545	5,067	375,406	385,540	361,717	399,229	361,717	399,229	342,961	417,985							
26	36	379,463		380,473	(1,010)	1,020,284	10	2,545	5,067	375,406	385,540	361,717	399,229	361,717	399,229	342,961	417,985							
27	37	411,075		389,863	21,212	449,954,352	5	2,349	4,679	385,184	394,541	371,107	408,619	371,107	408,619	352,351	427,375							
28	37	408,710		389,863	18,847	355,214,214	5	2,349	4,679	385,184	394,541	371,107	408,619	371,107	408,619	352,351	427,375							
29	37	350,906		389,863	(38,957)	1,517,629,972	5	2,349	4,679	385,184	394,541	371,107	408,619	371,107	408,619	352,351	427,375							
30	37	413,890		389,863	24,027	577,308,189	5	2,349	4,679	385,184	394,541	371,107	408,619	371,107	408,619	352,351	427,375							
31	37	379,785		389,863	(10,078)	101,563,898	5	2,349	4,679	385,184	394,541	371,107	408,619	371,107	408,619	352,351	427,375							
32	37	391,048		389,863	1,185	1,404,317	5	2,349	4,679	385,184	394,541	371,107	408,619	371,107	408,619	352,351	427,375							
33	37	379,941		389,863	(9,922)	98,443,434	5	2,349	4,679	385,184	394,541	371,107	408,619	371,107	408,619	352,351	427,375							
34	37	422,136		399,253	22,883	523,640,827	1	2,220	4,420	394,833	403,673	380,497	418,009	380,497	418,009	361,741	436,765							
35	38	430,300		399,253	31,047	963,937,632	1	2,220	4,420	394,833	403,673	380,497	418,009	380,497	418,009	361,741	436,765							
36	38	389,769		399,253	(9,484)	89,942,494	1	2,220	4,420	394,833	403,673	380,497	418,009	380,497	418,009	361,741	436,765							
37	38	407,871		399,253	8,618	74,267,980	1	2,220	4,420	394,833	403,673	380,497	418,009	380,497	418,009	361,741	436,765							
38	38	396,701		399,253	(2,551)	6,510,014	1	2,220	4,420	394,833	403,673	380,497	418,009	380,497	418,009	361,741	436,765							
39	38	399,536		399,253	284	80,485	1	2,220	4,420	394,833	403,673	380,497	418,009	380,497	418,009	361,741	436,765							
40	38	398,646		399,253	(607)	368,310	1	2,220	4,420	394,833	403,673	380,497	418,009	380,497	418,009	361,741	436,765							
41	38	397,773		399,253	(1,480)	2,190,876	1	2,220	4,420	394,833	403,673	380,497	418,009	380,497	418,009	361,741	436,765							
42	38	384,574		408,643	(24,069)	579,303,675	0	2,167	4,314	404,328	412,957	389,887	427,399	389,887	427,399	371,131	446,155							
43	39	400,578		408,643	(8,065)	65,039,840	0	2,167	4,314	404,328	412,957	389,887	427,399	389,887	427,399	371,131	446,155							
44	39	454,741		408,643	46,098	2,125,050,668	0	2,167	4,314	404,328	412,957	389,887	427,399	389,887	427,399	371,131	446,155							
45	39			408,643			0	2,167	4,314	404,328	412,957	389,887	427,399	389,887	427,399	371,131	446,155							

Count	Degree Days	Firm Sendout (Mef)	Y	Projected Linear Firm Sendout (Mef) Ydc	Difference		Actual		Days - Xm	Squared (X - Xm) ²	sdyc	t*sdyc	Lower Acc		Upper Acc		Lower	Ydc + t*sdyc	Lower	Ydc + t*sdyc	Ydc + 2*sdyc
					Actual Versus Projected	Y - Yc	Actual Versus Projected	Ydc - Yc					Lower	Ydc + t*sdyc	Lower	Ydc + t*sdyc					
46	39	391.385		408.643	(17.258)	297.842,303	(0)	0	2.167	4.314	404.328	412.957	389.887	427.399	371.131	446.155					
47	39	430.686		408.643	22.043	485.884,207	(0)	0	2.167	4.314	404.328	412.957	389.887	427.399	371.131	446.155					
48	39	419.340		408.643	10.697	114.432,459	(0)	0	2.167	4.314	404.328	412.957	389.887	427.399	371.131	446.155					
49	40	419.035		418.033	1.003	1,005,500	1	1	2.196	4.373	413.659	422.406	399.277	436.789	380.520	455.545					
50	40	400.833		418.033	(17.199)	295.819,631	1	1	2.196	4.373	413.659	422.406	399.277	436.789	380.520	455.545					
51	40	420.596		418.033	2.564	6,572,248	1	1	2.196	4.373	413.659	422.406	399.277	436.789	380.520	455.545					
52	40	405.365		418.033	(12.668)	160.472,450	1	1	2.196	4.373	413.659	422.406	399.277	436.789	380.520	455.545					
53	41	452.250		427.423	24.827	616.382,627	2	3	2.305	4.590	422.832	432.013	408.666	446.179	389.910	464.935					
54	41	445.516		427.423	18.093	327.360,977	2	3	2.305	4.590	422.832	432.013	408.666	446.179	389.910	464.935					
55	41	435.736		427.423	8.314	69.114,566	2	3	2.305	4.590	422.832	432.013	408.666	446.179	389.910	464.935					
56	42	450.050		436.813	13.237	175.228,076	3	8	2.483	4.944	431.868	441.757	418.056	455.569	399.300	474.325					
57	42	426.585		436.813	(10.228)	104.610,161	3	8	2.483	4.944	431.868	441.757	418.056	455.569	399.300	474.325					
58	42	423.507		436.813	(13.305)	177.032,170	3	8	2.483	4.944	431.868	441.757	418.056	455.569	399.300	474.325					
59	43	478.302		446.202	32.100	1,030.381,790	4	15	2.716	5.409	440.794	451.611	427.446	464.959	408.690	483.715					
60	43	438.956		446.202	(7.247)	52.517,676	4	15	2.716	5.409	440.794	451.611	427.446	464.959	408.690	483.715					
61	43	440.399		446.202	(5.803)	33.679,909	4	15	2.716	5.409	440.794	451.611	427.446	464.959	408.690	483.715					
62	43	479.237		446.202	33.035	1,091.303,257	4	15	2.716	5.409	440.794	451.611	427.446	464.959	408.690	483.715					
63	43	454.929		446.202	8.727	76.161,503	4	15	2.716	5.409	440.794	451.611	427.446	464.959	408.690	483.715					
64	44	421.654		455.592	(33.938)	1,151.813,475	5	24	2.992	5.958	449.634	461.550	436.836	474.348	418.080	493.105					
65	44	407.940		455.592	(47.653)	2,270.761,503	5	24	2.992	5.958	449.634	461.550	436.836	474.348	418.080	493.105					
66	45	492.387		464.982	27.405	751.017,854	6	34	3.300	6.571	458.412	471.553	446.226	483.738	427.470	502.495					
67	45	468.269		464.982	(6.693)	116.808,416	6	34	3.300	6.571	458.412	471.553	446.226	483.738	427.470	502.495					
68	46	463.598		474.372	(10.774)	116.808,416	7	47	3.631	7.230	467.142	481.603	455.616	493.128	436.860	511.884					
69	47	485.527		483.762	1.765	3,114,693	8	62	3.980	7.926	475.836	491.688	465.006	502.518	446.250	521.274					
70	47	488.236		483.762	4.474	20.018,426	8	62	3.980	7.926	475.836	491.688	465.006	502.518	446.250	521.274					
71	48	470.146		493.152	(23.006)	529.279,647	9	78	4.343	8.648	484.504	501.800	474.396	511.908	455.640	530.664					
72	49	454.261		502.542	(48.281)	2,331.055,570	10	97	4.716	9.391	493.151	511.933	483.786	521.298	465.030	540.054					
73	49	497.124		502.542	(5.418)	29.354,792	10	97	4.716	9.391	493.151	511.933	483.786	521.298	465.030	540.054					
74	49	532.584		502.542	50.042	2,504.164,748	10	97	4.716	9.391	493.151	511.933	483.786	521.298	465.030	540.054					
75	51	513.403		521.322	(7.919)	62.708,374	12	141	5.485	10.923	510.399	532.244	502.566	540.078	483.810	558.834					
76	52	527.569		530.712	(3.143)	9.877,127	13	165	5.878	11.705	519.007	542.417	511.956	549.468	493.200	568.224					
77	53	539.717		540.102	(385)	148,040	14	192	6.275	12.496	527.606	552.597	521.346	558.858	502.590	577.614					
Total	39	409,984		652,781	(652,781)	426,122,839,893	26	669	11,201	22,305	630,476	675,086	634,025	671,537	615,269	690,293					
Xm =	39					27,087,944,664		1,999													
Population Variance=						351,791,489															
Population Standard Deviation of Regression						18,756	1s	Upper Range													
							2s	Lower Range													
								391,228													
								372,472													
Standard error of sendout projection						19,005															
T-factor						1.99															
(T factor) * (Std error of projection)						37,844															

t = 1.99

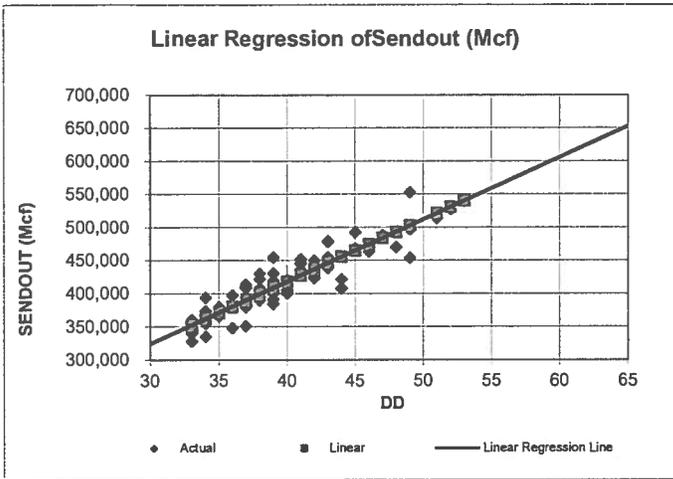
Regression Results

Winter 14-16

Based On Data for Daily Temperatures ≤ 32 Degrees Fahrenheit

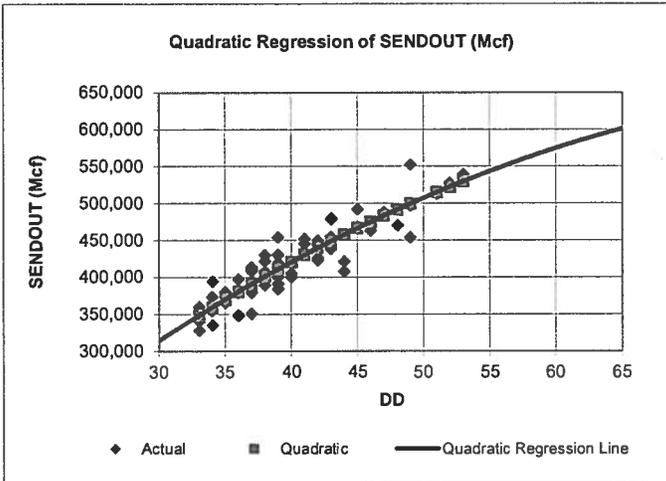
Regression Output:		Quadratic			Cubic		
Regression Output:		Regression Output:			Regression Output:		
Constant	42,436	Constant	(120,016)	Constant	(1,182,272)		
Std Err of Y Est	16,777	Std Err of Y Est	124,484	Std Err of Y Est	993,622		
R Squared	0.8668	R Squared	1	R Squared	1		
No. of Observations	77	No. of Observations	77	No. of Observations	77		
Degrees of Freedom	75	Degrees of Freedom	74	Degrees of Freedom	73		
X Coefficient(s)	9,390	X Coefficient(s)	17405.6938	X Coefficient(s)	95,421	X	X ²
Std Err of Coef.	425	Std Err of Coef.	6101.5670	Std Err of Coef.	72,657	X	X ³
Zero Degree Temp Sendout	652,781						764,165
DD	65						

Regression Chart Analysis
Based Upon Data For Temperatures Of <=32 Degrees F.
Winters 14-16



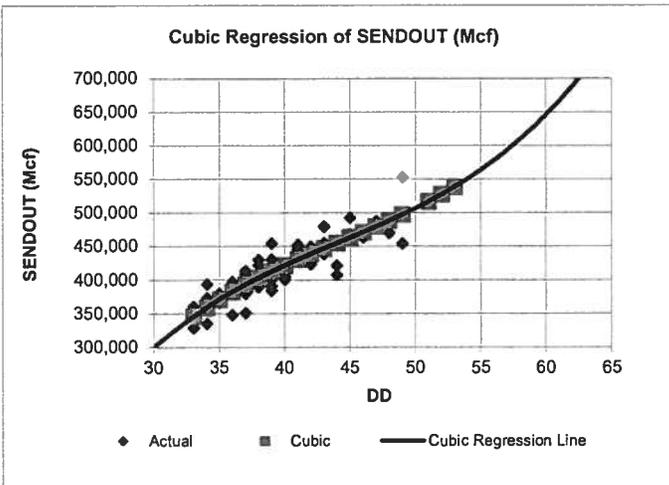
Linear Regression Output

Constant		42,436
Std. Error of Y Estimate		16,777
R Squared		0.867
Number of Observations		77
Degrees of Freedom		75
	X	
X Coefficient	9390	
Std. Err. Of Coefficeint	425	



Quadratic Regression Output

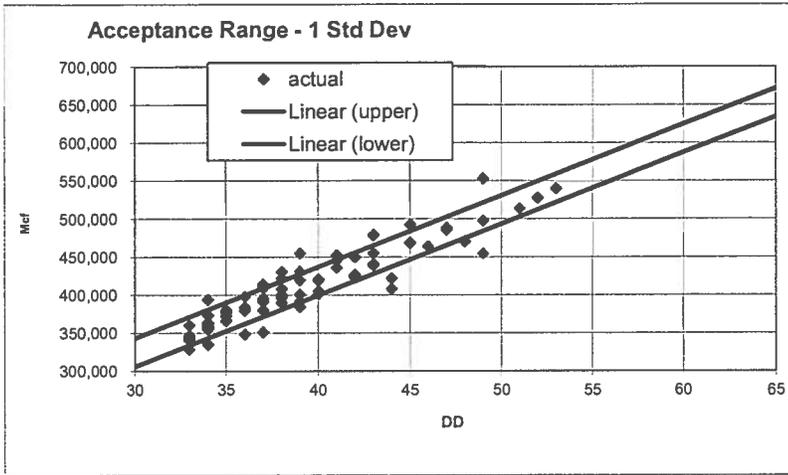
Constant		(120,016)
Std. Error of Y Estimate		124,484
R Squared		0.870
Number of Observations		77
Degrees of Freedom		74
	X	X ^ 2
X Coefficient	17,406	(97)
Std. Err. Of Coefficeint	6,102	74



Cubic Regression Output

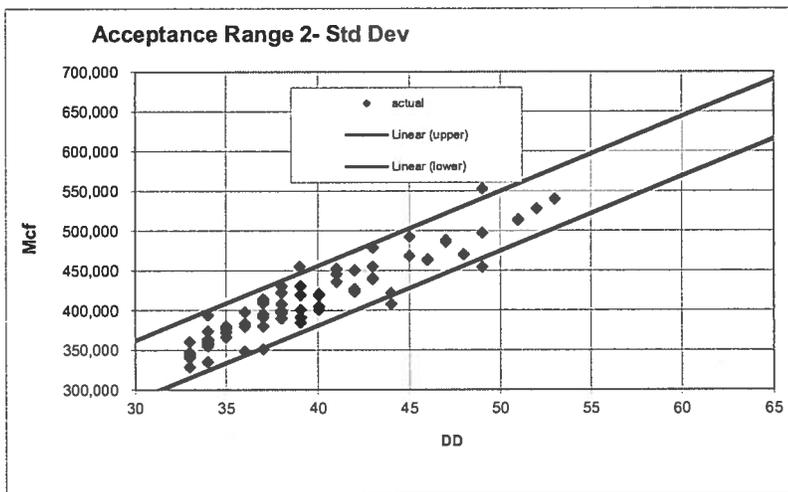
Constant		(1,182,272)	
Std. Error of Y Estimate		993,622	
R Squared		0.872	
Number of Observations		77	
Degrees of Freedom		73	
	X	X ^ 2	X ^ 3
X Coefficient	95421	(1984)	15
Std. Err. Of Coefficeint	72657	1753	14

Regression Chart Analysis
Based Upon Data For Temperatures Of <=32 Degrees F.
Winters 14-16



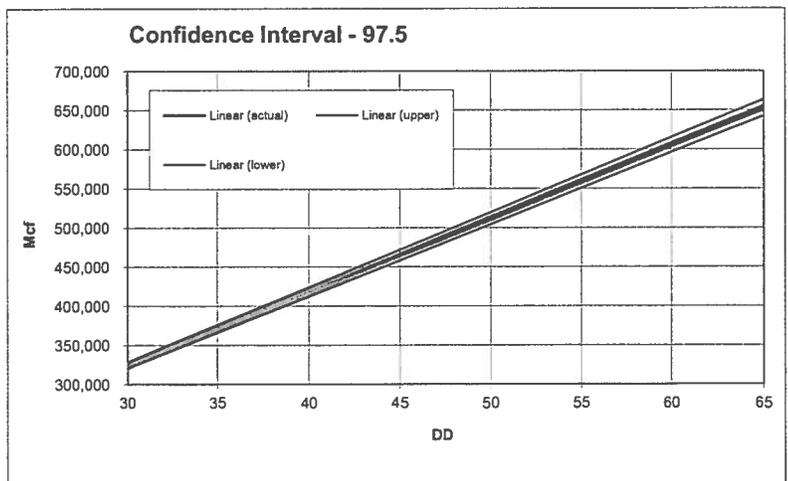
Acceptance Range @ 1 Standard Deviation

Regression Squared	351,791,489
Regression	18,756
Upper Range 1sd	428,740
Lower Range 1sd	391,228



Acceptance Range @ 2 Standard Deviation

Regression Squared	351,791,489
Regression	18,756
Upper Range 2sd	447,496
Lower Range 2sd	372,472



Confidence Interval: 97.5%

Regression Squared	351,791,489
Standard error of sendout projection	19,005
X Mean	39
T Distribution	1.99



PGW Natural Gas Supply Study

Prepared for
Philadelphia Gas Works



August 2006

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icfi.com

Outline

- Introduction
- Market Context
- Design Winter and Day Analysis
- Supply Analysis and Issues
- Conclusions and Recommendations

Purpose of Demand Estimation Review



- Design day and winter parameters drive investment decisions and asset allocations
 - Pipeline capacity
 - Storage capacity and utilization
 - LNG storage and vaporization
- Design parameters in turn impact system costs
 - Capacity payments
 - Inventory holding costs
- ICF used design day and design winter estimates to determine the appropriate gas asset mix

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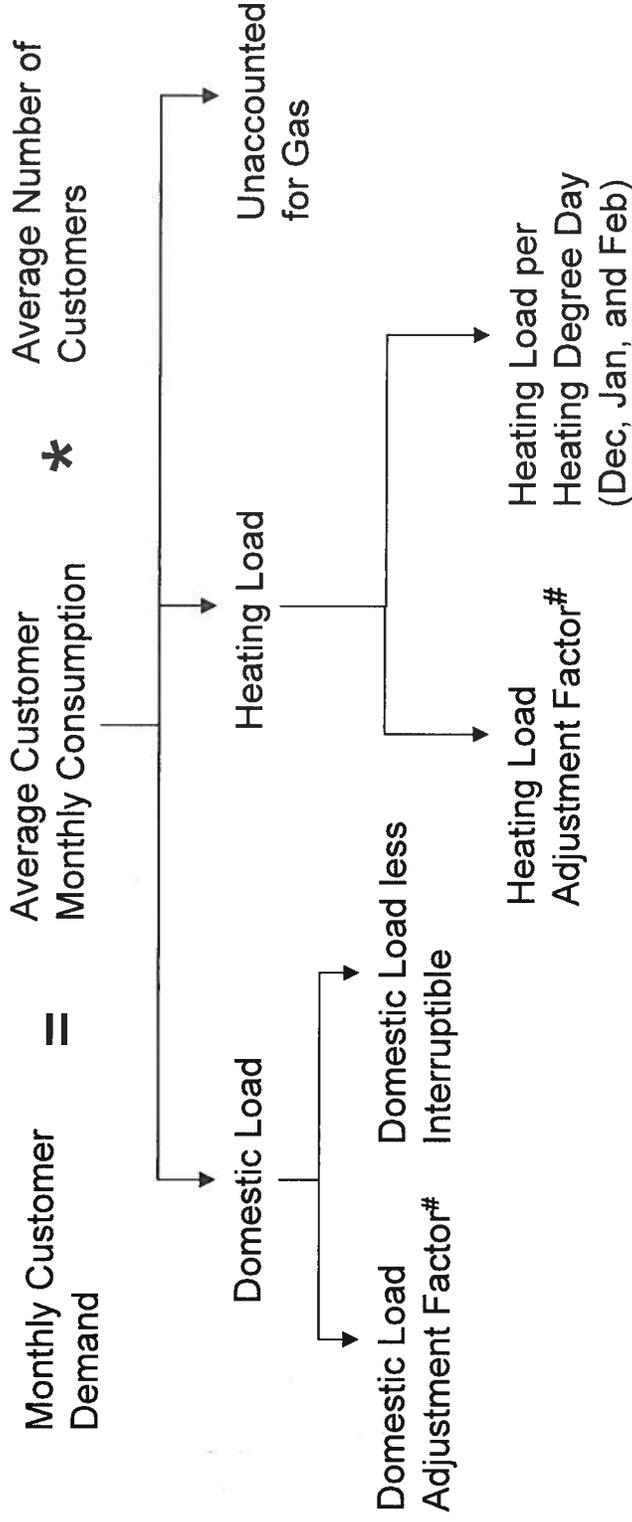
PGW's Approach to Estimating Demand



- PGW uses a combination of inputs into demand estimation
 - Historical demand trends for each customer class
 - Customer surveys
 - End use studies – appliance characteristics
 - Judgment of system operators
- Demand is related to temperature through heating degree days (HDD)
- Capacity planning focuses on the “Design Winter” and “Design Day”
 - These are concepts of peak demand that define the largest amount of gas that PGW must be able to deliver to meet system requirements and maintain system integrity
 - These represent statistically derived historical system peak limits

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PGW Demand Estimation Methodology Overview



#Adjustment Factors account for error in estimation of demand in previous year

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PGW Demand Estimation Methodology

Evaluation



- Domestic Load is estimated by using latest year customer load thus accounting for improvements in energy efficiency of customer appliances
- Heating Load Adjustment Factor is estimated using normalized Heating Degree Days thus representing only error in estimation methodology
- Design Day demand estimated using firm load thus making the forecasting regression methodology robust
- Design Day demand estimated using four year peak day heating degree days allowing for a good fit

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Philadelphia Winter Heating Degree Days



Data Set (1976-2005)	Nov	Dec	Jan	Feb	Mar	Winter Season
Historical Mean Degree Days	533	862	1,028	844	671	3,938 ^b
Historical Peak Degree Days	762	1,219	1,400	1,183	911	4,535 ^b
No. of Sample Observations	30	30	30	30	30	30
Sample Standard Deviation	95	144	162	129	99	213
Data Relative to Mean ^a (%)	18	17	16	15	15	5 ^b
PGW's Design Degree Days	608	1,005	1,191	973	778	4,555

Notes:

^a It is coefficient of variation, calculated as (sample standard deviation/sample mean)*100.

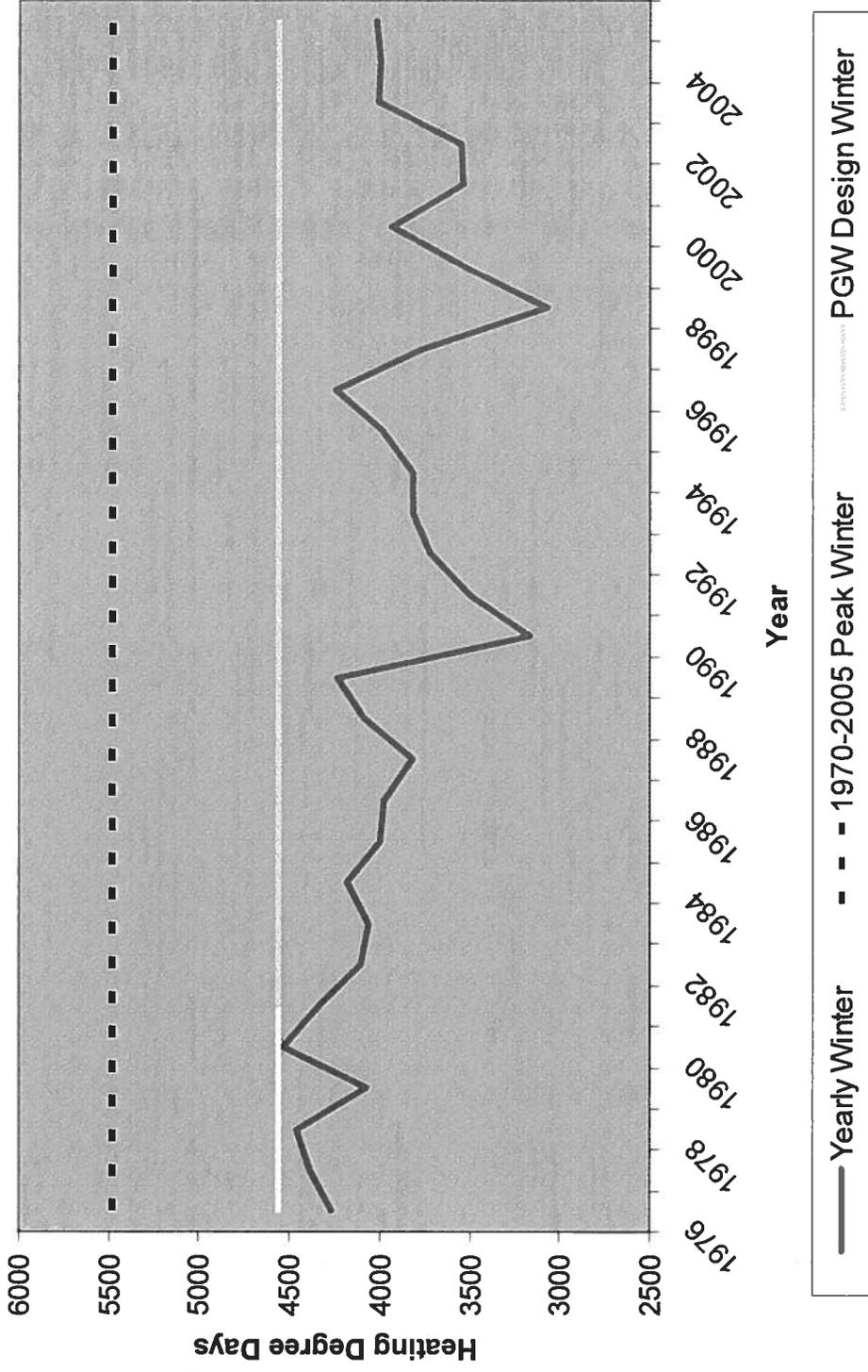
^b Individual months do not add up to this total, because it has been calculated independently using the historical winter season data or the standard deviation for the season total.

PGW Design Degree Days are higher than NOAA estimate because of the location and frequency of measurements. PGW measures several times per day at the Richmond Plant. NOAA uses a simple average of the high and low temperatures.

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PGW Design Winter Heating Degree Days

Philadelphia Winter Heating Degree Days



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PGW's Design Year Estimates



- The previous slide compares the design winter based on coldest winter in 30 years with historical winter weather and the theoretically coldest winter, measured in heating degree days (HDDs).
- Recent winters have been warmer than in the 1980s, and the trend suggests warming.
- PGW's design winter is still substantially below the theoretical coldest winter
 - Theoretical coldest winter includes the coldest winter months picked from the last 30 years and assumes each month is the thirty year cold month

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Findings on Peak and Winter Demand



- PGW's approach remains essentially the same as was reviewed in the previous study.
- PGW's approach yields a forecast of design day and design winter that are reasonable estimations.
 - The design conditions are below "theoretical" worst case (which could yield higher than necessary investments)
 - The probability of meeting design winter conditions remains approximately once in every 16 years.
- PGW's approach incorporates recent trends in local markets towards more efficient equipment and demand response to prices.
- Potential for demand growth is modest (given local and national trends).

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ICF's Approach to Estimating Design Winter Sendout



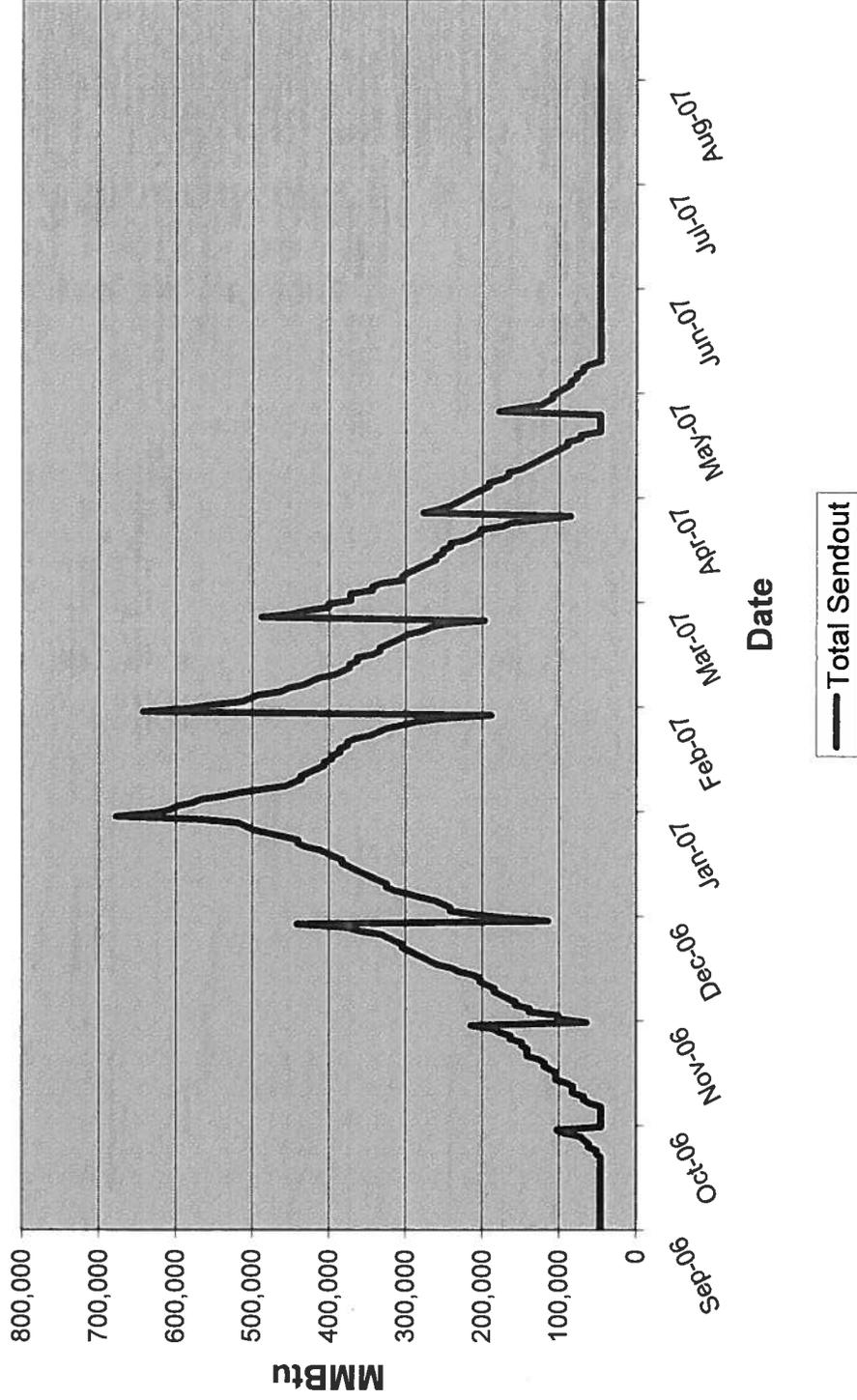
- First step is to use design winter parameters for 2006-2007 provided by PGW for its PGC filings with the Philadelphia Gas Commission.
 - These data are from September through August and in the form of load duration curves for each month.
- Data were converted to April through March and randomized to reflect typical random weather and gas pricing patterns.
 - Converting data for April through March makes modeling storage easier
 - Gas sendout and prices are correlated
- Design and average years were differentiated.
 - All the analysis is based on daily, sequential sendout
 - Average and design years differ only in winter sendout

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Design Year Sendout for Planning – Sept. 1 to August 31



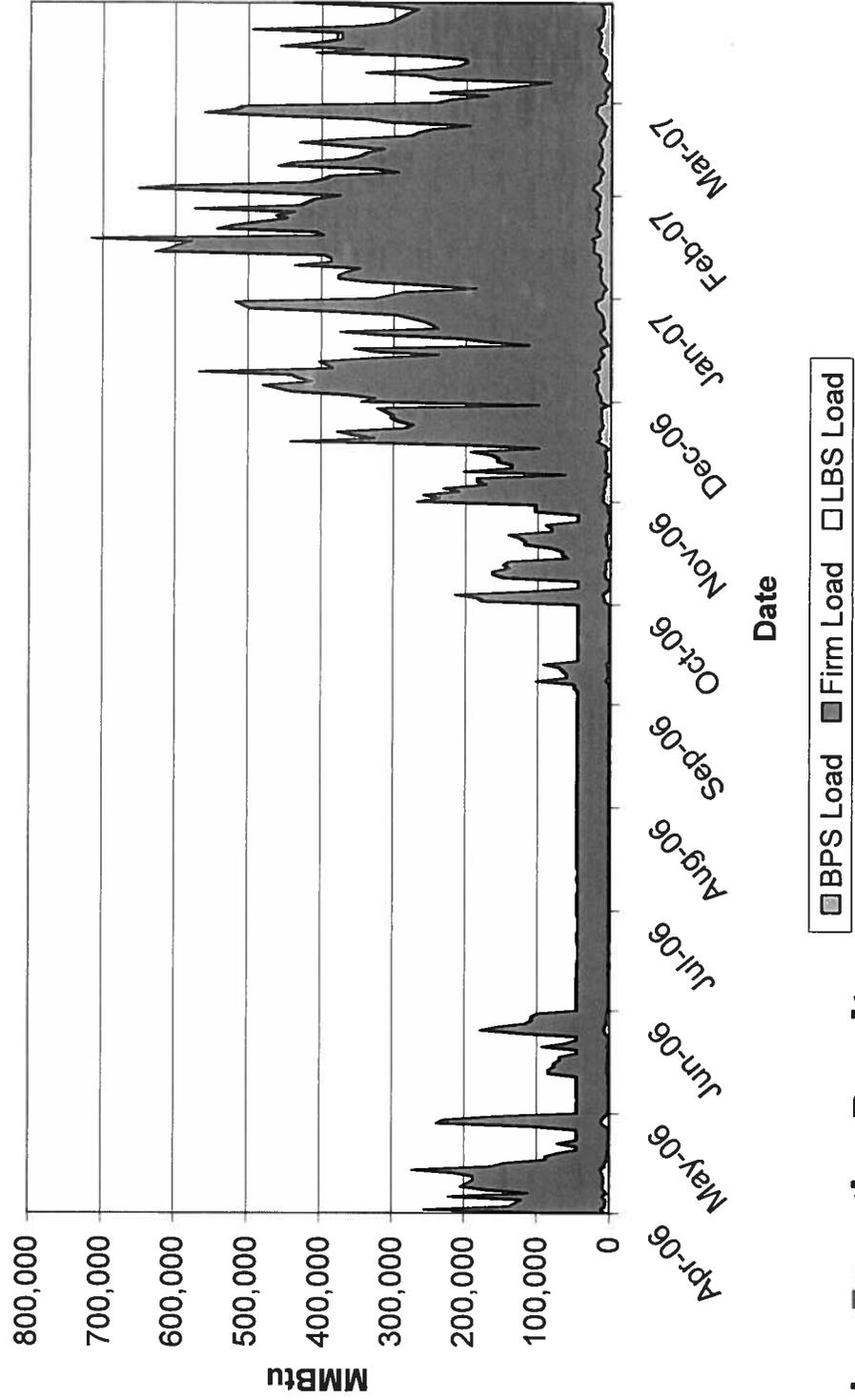
Design Year Sendout



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Sendout Reordered and Randomized – April 1 to March 31

PGW Reference Case Sendout

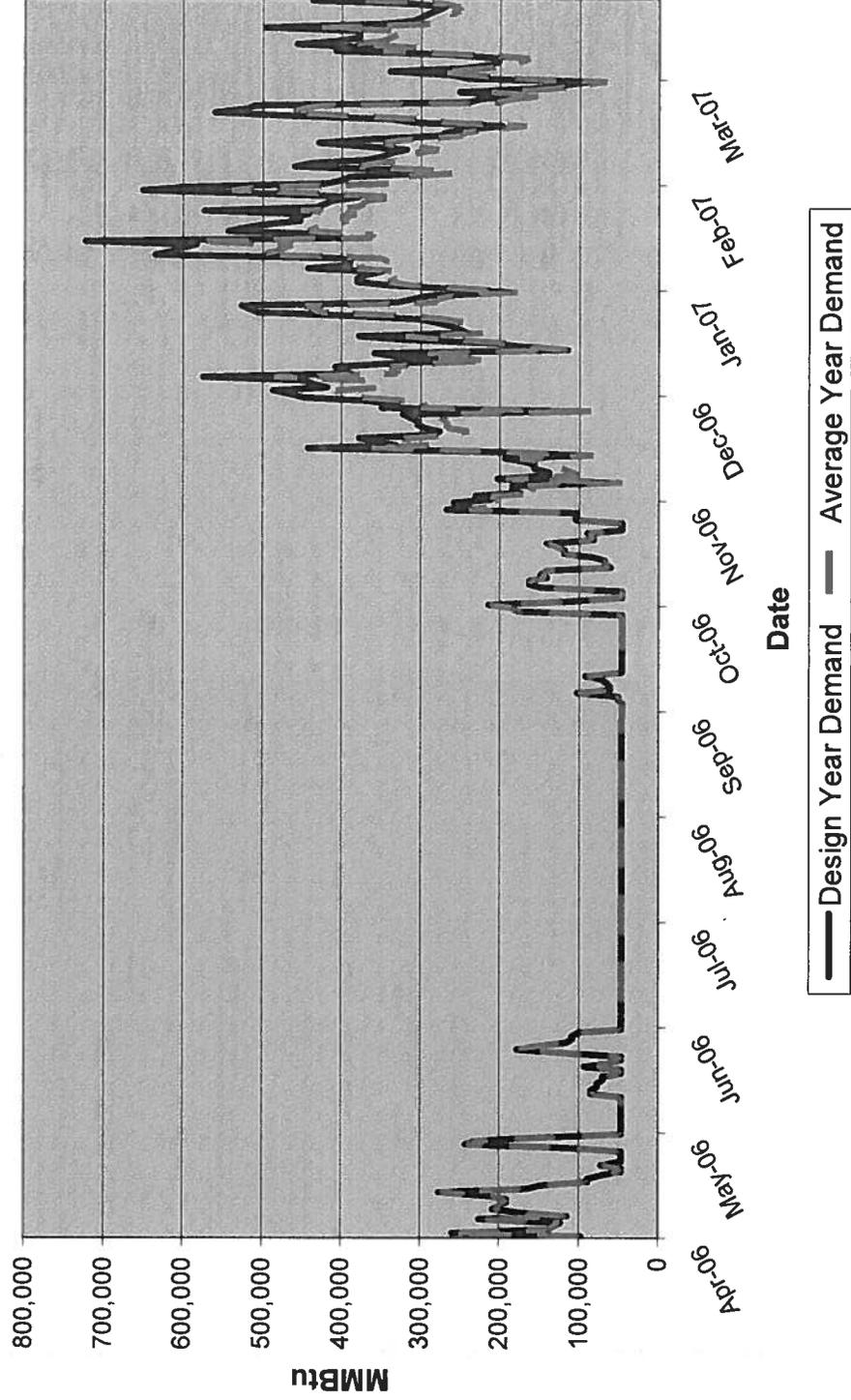


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Demand Patterns Modeled Consistent with Gas Prices



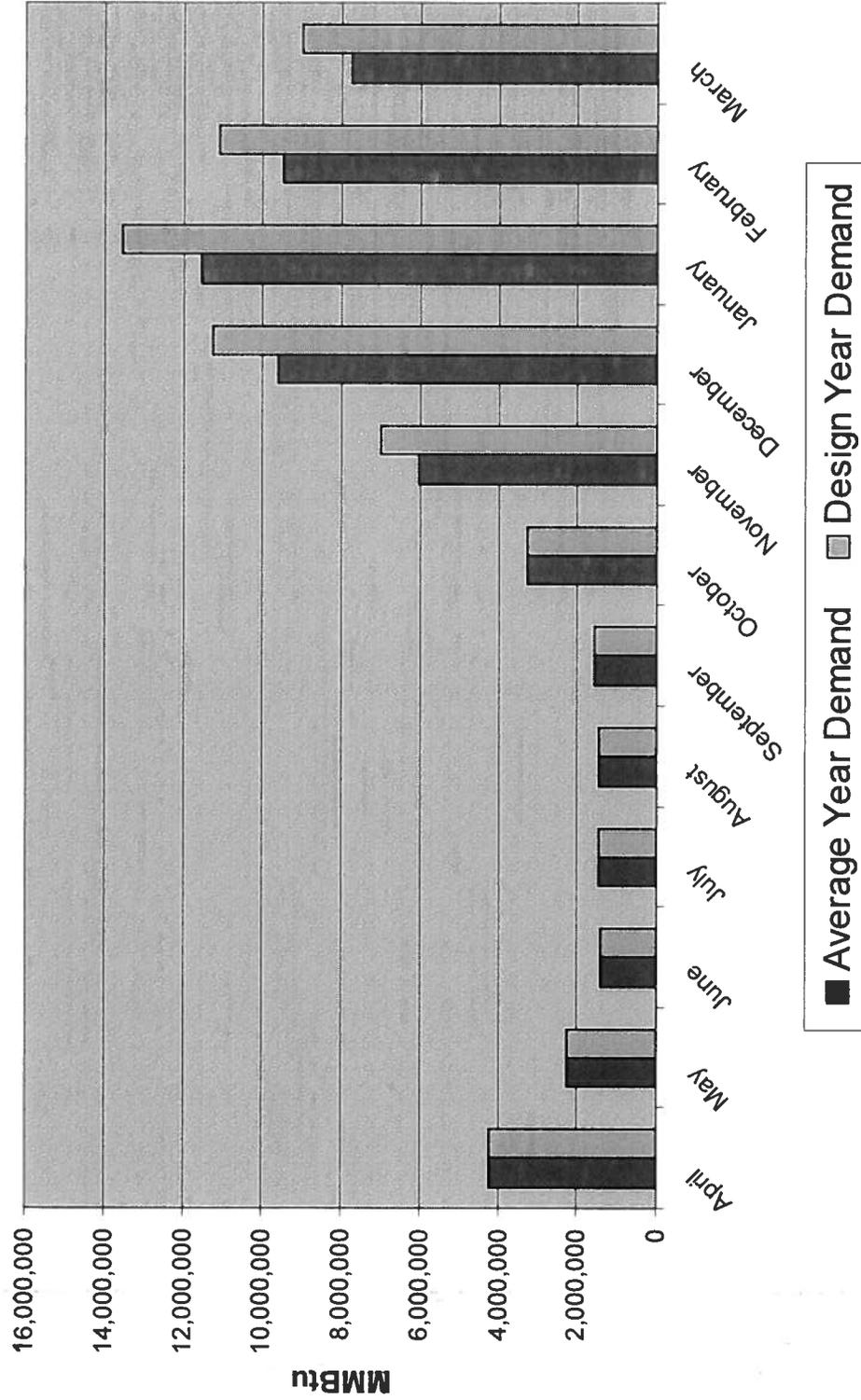
Design and Average Year Total Demand



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Design and Average Winter Demand -- Simplified

Design and Average Year Total Demand



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Observation: Design Day Deliverability is an Incomplete Measure of Asset Value



- Comparing Design Day requirements with available options is not a complete analysis.
- PGW operates with a 12 percent reserve margin over Design Day sendout requirements. This does not appear unreasonable.
 - Deliverability options on Design Day include
 - Transco long haul pipeline capacity
 - Transco GSS storage
 - Tetco/Dominion/Equitrans Storage delivered through Tetco FTS services
 - LNG
 - PAID – released capacity which has no long term fixed costs
- Design Day does not account for “Design Hour” requirements to maintain system pressures
- Design Day does not account for storage optionality in volatile gas markets.

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Conclusions and Recommendations



- PGW's approach to estimating design winter and day conditions is reasonable and yields results that are prudent for capacity planning purposes.
- PGW uses its full pipeline capacity during winter seasons. Overall capacity utilization is higher for Transco, which is the lower cost pipeline, than it is for Tectco.
 - PGW has some opportunities to release capacity on these pipes, or engage in off-system sales when capacity is not needed for native load.
 - PGW should not permanently release capacity without call-back rights for winter seasons.
- PGW storage services appear adequate to meet peak requirements.

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Tab 13

Docket No. R-17XXX

Item 53.64 (c)(14)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.64(c) Thirty days prior to the filing of a tariff reflecting an increase or decrease in natural gas costs, each Section 1307(f) gas utility seeking recovery of purchased gas costs under that section shall provide notice to the public, under § 53.68 (relating to notice requirements), and shall file the following supporting information with the Commission, with a copy to the Consumer Advocate, Small Business Advocate and to intervenors upon request:

(14) Analysis and data demonstrating, on an historic and projected future basis, the minimum gas entitlements needed to provide reliable and uninterrupted service to priority one customers during peak periods.

Response: Attached is the Capacity Resource and Asset Management Evaluation Report completed by Summit Energy in January, 2011.

JAN 25, 2011

Capacity Resource and Asset Management EVALUATION REPORT



Table of Contents

Executive Summary.....3

Introduction and Scope.....5

Background.....6

Summit Approach.....6

PGW Historical Operations.....7

Assumptions.....10

Market Dynamics.....14

Summit Analysis Process.....16

Outsourced Asset Management.....20

Summit Recommendations.....23

Adoption of Recommendations and Path Forward.....25

Executive Summary

After conducting a thorough review of PGW's existing asset portfolio, historical operations, and future load projections; and based upon the assumptions and market dynamics stated herein, Summit has identified several recommendations for the utility's consideration. All recommendations have been made based upon the fundamental premise that PGW's primary objective is providing reliable and cost-effective natural gas supply to its customer base. Each of the recommendations can be considered independently of the others.

After comparing PGW's capacity to its design forecast, Summit recommends the utility evaluate eliminating or reducing portions of its existing asset base, provided favorable asset management arrangements cannot be attained. A stack ranking methodology of the cost of each asset was utilized to help determine the most appropriate areas of focus. Based upon its volume and high cost, Summit recommends the release of PGW's Equitrans storage. In addition to eliminating the Equitrans storage from the utility's portfolio, Summit also recommends consideration be given to reducing its Dominion storage (in addition to its associated Tetco FTS-7 and FTS-8 contracts). We estimate that with a reduction of 10,000 Dth of demand of the Dominion storage (along with the associated storage capacity and FTS transport contracts) PGW would still be capable of serving design scenarios. Despite the utility's ability to meet design scenarios with the recommended capacity reductions, it is important to note that such reductions will increase the utility's reliance on LNG and reduce capacity release credits to the gas cost rate. Additionally, reduction of the Dominion storage from approximately 4 Bcf to 3 Bcf could result in new contract rates that may diminish some or all of the potential savings.

While Summit recommends consideration of the elimination and reduction of some assets, we also recommend maintaining others due to their associated value. First and foremost, we recommend PGW retain all existing long-haul interstate capacity due to both its cost-effectiveness as well as the utility's lateral delivery requirements. Additionally, as both Tetco and Transco are fully subscribed it is questionable whether such capacity could ever be regained in the future if it were surrendered.

While we also currently recommend the retention of PGW's production area storage, the market should continue to be monitored for changing dynamics that would impact or alter the future value of the storage assets. Despite the protection that is afforded against balancing penalties and supply disruptions in the production area, this type of storage becomes less valuable in a marketplace lacking volatility.

Summit also recommends PGW continue to actively monitor potential new asset opportunities. With the significant changes that are taking place in the natural gas complex and particularly in the Northeastern US, it is possible that new supply and/or capacity alternatives could develop that could displace or replace current assets.

When taking into account PGW's assets and historical operations, one additional recommendation is to evaluate the feasibility of creating a more dynamic management of the utility's underutilized long-haul capacity. While the utility currently manages an active capacity release program, it is possible that additional benefits could be gained through administering an even more vigorous program. More participation in weekly long-haul capacity releases could yield incremental returns over and above what has historically been received. Based on current market conditions and the complexities involved, Summit would recommend PGW manage any enhanced release program at this time versus relying on a third party.

The market dynamics in the Northeast have vastly changed in the past several years and are still rapidly evolving. Therefore, Summit recommends a short-term approach to any further contractual asset retention. It is also Summit's belief that PGW would be well served to internally re-evaluate its asset portfolio on a regular basis (annual to every two years) to ensure it can take better advantage of any future market developments.

In conclusion, Summit advocates that PGW utilize the enclosed report to consider these recommendations and take action accordingly.

Introduction and Scope

The following report outlines independent analysis conducted by Summit Energy Services, Inc. (Summit) regarding the natural gas capacity resources of Philadelphia Gas Works (PGW). This assessment was constructed based upon a thorough investigation of the utility's existing gas capacity asset portfolio, the utility's servicing obligations, and a detailed review of existing and projected market fundamentals. The study consisted of the following:

- Review and analysis of PGW current gas supply infrastructure assets (pipeline capacity, storage, and LNG)
- Assessment of range of appropriate levels of capacity resources
- Investigation of alternative supply and/or capacity options
- Examination of value of utilizing third party asset management
- Review of asset management payment structures

Background

PGW initially engaged Summit through a competitive request for proposal to perform a thorough evaluation of both PGW's capacity portfolio holdings and its commodity purchasing strategies. PGW program evaluations have been periodically performed by independent parties in the past, the most recent being a study issued by a third party in 2006. Such studies must be re-evaluated at discrete time intervals to consider changes not only in the load characteristics of PGW itself, but also to evaluate changes that occur in both the commodity and capacity markets.

Summit Approach

Upon engagement, Summit reviewed historical testimony of PGW personnel outlining the utility's operational practices as well as the aforementioned study from 2006. In addition, Summit reviewed testimony from prior Gas Cost Rate (GCR) proceedings.

PGW has historically maintained the perspective that keeping the existing infrastructure portfolio intact best enables the utility to provide safe, adequate, and reliable service to its customers. Although there were recommendations which advocated the future consideration of shedding the most marginal economic assets in the portfolio, the previous study largely supported the utility's viewpoint. A contrary opinion from a GCR proceeding participant, however, called for more definitive action, stating that PGW had a large amount of excess capacity that needed to be relinquished, and that its current portfolio holdings were causing the GCR to be inflated.

As Summit prepared to re-evaluate the PGW portfolio and provide its own assessment, the utility collected and disseminated updated information to Summit including the following:

- Most current information concerning historical design day, design year, and actual delivery send out data
- Utility-controlled Liquefied Natural Gas (LNG) liquefaction and vaporization capacities, boil-off histories, and historical monthly inventories
- Capacity release and off-system sales histories, including both long-term and short-term transactions
- Third party supplier agreements designating volumes, price structures, optionality, delivery points, etc.
- Commodity purchasing program details, including historical purchase information

The provided data was supplemented with questions set forth by Summit as additional information was required, as well as with detailed interviews of PGW strategic and tactical personnel. These discussions provided opportunities to learn about operational constraints and details that were not set forth in the provided documentation. This was particularly necessary with the LNG asset evaluation, as this was not jurisdictional at the interstate level and lacked the visibility of FERC-mandated tariffs for long-haul and storage capacity.

Summit next engaged in its own analysis independent of PGW. This consisted of first establishing a set of assigned costs for each capacity asset in the PGW portfolio. This included a standard set of assumptions involving the commodity cost, heating values, utilization of current interstate pipeline tariffs, and other factors to make sure assets were evaluated using equivalent measures.

Summit included all relevant costs for each asset to assign an “as delivered” cost. This included demand charges, commodity charges, fuel, as well as any carrying costs for assets such as storage and LNG. Storage assets also included transportation for both injection and withdrawal capacity to deliver to the PGW city gate. Additional considerations such as storage cycling requirements and load factor assumptions were also integrated. After each asset was assigned a cost, Summit then stack ranked the assets to ascertain relative costs.

Once such analysis was complete, Summit prepared both a “snapshot analysis” of how PGW is currently managed, as well as a set of recommendations to best position PGW in the future in light of market shifts. These findings and recommendations are incorporated herein.

PGW Historical Operations

Reviewing the historical performance of PGW operations, Summit concludes that PGW has succeeded in its core mission of ensuring that all system delivery requirements are fulfilled. PGW has not had to curtail firm service customers and has been able to satisfy all design day and design winter delivery scenarios. Thus, it is evident that the current asset portfolio is adequate to meet needs now and into the anticipated future. This does not answer the question, however, of whether PGW carries excess capacity in its portfolio. This issue is discussed in the recommendation section of this report.

Long-haul Transportation Capacity

Due to the nature of peaking assets not being required at all times, utilities are naturally over-subscribed (or “long”) on their capacity during most periods. While it would be optimal to have “load following” capacity, it is not feasible for pipelines to provide this service. Thus, most interstate pipeline long-haul firm transportation and storage are based upon demand charges for the largest amount of capacity the purchaser requires on a given day. This requires a careful balancing of one’s needs.

Generally, PGW has performed well balancing such needs. Interstate long-haul capacity is first scheduled to serve “as needed” daily demand, with any unutilized capacity next being scheduled to deliver gas into either interstate storage or PGW-owned LNG liquefaction facilities. Any excess capacity beyond such needs is released into a relatively liquid secondary capacity market using an internal bidding system supplemented by the applicable interstate pipeline electronic bulletin board (EBB) system. This allows other entities to bid on such capacity, though PGW permits the originally selected bidder to retain a right of first refusal to match the right of the highest bid.

PGW's participation in the secondary capacity markets allows them to effectively recoup or "monetize" assets on otherwise sunk costs. The values of these assets can fluctuate over time, and are typically less valuable in times of lower demand.

Storage Capacity

Storage is critical towards achieving the goal of delivering peak day needs, as interstate capacity alone is insufficient for this task. Interstate storage is another asset that PGW extensively utilizes, and is largely divided into production area storage (Gulf region) and market area storage (Pennsylvania market area). These classifications are important due to their very different strategic characteristics.

Production area storage tends to have large amounts of capacity associated per storage field (many are abandoned gas reservoirs), and usually does not have equivalent long-haul transportation contracts associated directly with it, although there are usually receipt point rights that match the storage field.

Production storage has three primary functions. First, it can be used when there are temporary issues with obtaining gas from the furthest points in the Gulf due to hurricanes or well freeze-offs in the winter season. Owners of such storage can make withdrawals until the supply disruption ends.

Second, variations between actual usage and nominations can be managed with storage assets to avoid daily balancing penalties. Additionally, the potential for large penalties (upward of \$50/Dth) to be incurred during Operational Flow Order (OFO) periods would be less likely to materialize, as needed gas can be drawn from storage or unnecessary gas can be injected. This is valuable during crisis times when it is difficult to purchase or sell incremental gas.

Finally, the use of storage in "contango" markets (those where future pricing is significantly higher than current month pricing) make it less expensive to purchase gas in current months, carry volumes in storage, and then withdraw it during higher priced periods. As long as the future month price premium exceeds the cost of the storage assets, storage is a tool for price risk management, in addition to its physical reliability.

Market area storage shares many of the same characteristics as production area storage, but there are some key differentiators. As many of the storage fields have physically less capacity, PGW is required to contract for multiple storage services, each of which has differing pricing and deliverability structures. This does have an ancillary benefit, however, since it effectively diversifies their portfolio across multiple locations, and allows for receipt of gas at additional delivery points in the event of force majeure.

Market area storage is designed to provide security of supply in the event long line purchases are lost, to meet peak day demand and design year requirements, and to provide swing and balancing service. In addition, it provides a physical price hedge for a

portion of the portfolio. PGW manages these fields to be regularly “cycled” according to minimum pipeline requirements.

PGW-Owned LNG Infrastructure

PGW has substantial LNG assets that are owned and maintained internally, including storage facilities at Richmond (4,045,800 Mcf capacity) and Passyunk (253,000 Mcf capacity). These assets are critical to the utility’s ability to meet design day capacity needs due to their large vaporization and send out capabilities (411,000 Mcf/day and 47,000 Mcf/day, respectively). As is typical with LNG storage managed by utilities, PGW holds LNG in order to meet high deliverability needs on a short-term basis, often in the form of “needle-peak” demand spikes in the winter season.

LNG has several drawbacks when compared to more traditional natural gas deliveries. First, liquefaction occurs at much slower rates than the vaporization itself, so replenishing exhausted supplies requires considerably more time. While a market exists for delivered LNG, the associated costs are uneconomical. Second, PGW’s current liquefaction system achieves maximum efficiency only during select parts of the year (late winter and autumn), so it is a rigid schedule.

While there are limitations, the LNG capacity PGW owns has some unique benefits. First, the capacity itself is substantial (approximately 4.3 Bcf). Although it would only satisfy 10 days of deliverability at full utilization, the LNG provides insurance against a catastrophic upstream event. Second, it serves as an economic arbitrage tool in the event of a price spike. In such an event, PGW could look to sell incoming pipeline/storage gas to another delivery point for a short period of time, and displace such delivery with LNG. Thus, while illiquid relative to capacity markets, LNG assets could actually result in higher monetization in selected instances. Lastly, as they are self-owned, these LNG assets are not subject to the same rules governing interstate storage, including cycling requirements, variable tariff pricing over time, etc.

Capacity Monetization

PGW employs a variety of strategies to balance its own load requirements and effectively mitigate demand charges. They have increasingly become an active participant in the capacity release market and generally have had little difficulty finding a third party to whom it could release its excess pipeline demand. PGW releases capacity as available on either a monthly or semi-monthly basis dependent upon how actual load is performing relative to plan. They have been successful at obtaining values for some longer term and winter releases near, at, or above maximum tariff rates. This practice helps to offset nearly all demand charges associated with those volumes that are released. Conversely, shorter term releases made during the summer season have often yielded values that are well below actual demand cost, which in turn fail to recover the total cost of the released volumes. Over recent years, PGW’s expanded capacity release activities have yielded an average release benefit increase of over 600% when comparing the early 2000’s to the years leading up to 2010.

In addition to the capacity release strategy, PGW historically has looked at off-system sales (i.e., bundling capacity availability with natural gas itself and selling to third parties at delivery points other than PGW). This option has several limitations per PGW's current resource mix. The off-system sales market is much more short-term in nature (often for a few days at most) and for maximum benefits requires marketing of the supply. Additionally, unlike capacity release, which utilizes the pipeline EBB to monitor and credit back demand dollars, PGW has to devote resources to nominate gas and bill the buyer accordingly. This method of cost recovery works best when pricing substantially rises due to system constraints or extreme weather conditions. In select years past, this was strictly done during instances where PGW was solicited by a third party. Such activities yielded financial benefit for the utility and were based upon existing market conditions.

PGW has also recently employed a one year asset management agreement for a portion of its storage capacity. This type of release has the potential to recover all or more than the value of the actual demand charges. A third party will often pay a premium for such assets (as often pipeline storage can be oversubscribed) to more effectively arbitrage trading positions.

PGW has utilized this strategy successfully for their Transco WSS production storage, releasing approximately half of their storage position to a third party at a rate that exceeded the utility's actual tariff costs. Under this Asset Management Agreement (AMA), PGW releases 1.5 Bcf of Transco WSS storage capacity in return for \$1.1 million via monthly payment installments. The third party arrangement, which is currently the only instance of PGW utilizing the services of an outsourced asset manager, has been a lucrative agreement for the utility based on the market value of the storage capacity. That said, it should be noted such values of storage will fluctuate with the market and the value that can be derived will vary.

Assumptions

Summit approached its analysis with a core set of assumptions. Some of these are more numerical in nature to better evaluate the assets in the portfolio on an "apples to apples" basis. Others more specifically focus around organizational goals.

Reliability

Summit operated under the fundamental premise that PGW has a mandated public service duty to ensure that its service delivery requirements must always be met. This is a different operational mindset than what is held by many non-utility entities. For instance, a for-profit industrial might elect to shut down production and sell off any gas if premium prices existed in the marketplace. Other companies, such as trading entities, might incorporate a greater element of risk into their decision-making by reducing capacity commitments and relying on supply availability at the time it is required.

Summit also focused on unique attributes of the PGW system, especially its reliance on interstate pipeline laterals and its limited LNG liquefaction capabilities. Although PGW

is served by the interstate pipeline system, PGW is actually fed by laterals off of the main pipeline system which constrains deliveries during winter peak demand times when the laterals are delivering full requirements. In addition, Summit examined the relative subscription rates of capacity and storage on the interstate systems to determine the availability to replace any asset removed from the capacity portfolio. Based on such analysis, one core assumption is that there currently tends to be a limited ability to replace service with alternative firm asset commitments. Last, Summit assumed that a financial commitment (i.e., a delivered contract with liquidated damages) was inferior to a physical asset, due to downstream damage that could be created in the event the supplier was unable to fulfill delivery requirements during a peak day.

Economics

Summit prepared its analysis with a standard set of economic assumptions to ensure uniformity as it evaluated each capacity asset in the PGW portfolio. While such assumptions would change over the contract life of the respective assets and under varying commodity pricing thresholds, the relative values of each asset generally remain consistent.

Forward pricing of natural gas changes daily, so to incorporate consistency in our analysis, our first assumption was a base case NYMEX estimate of \$5.00/Dth. Additionally, analysis was run using NYMEX estimates ranging from \$3.50/Dth to \$7.00/Dth in various scenarios.

Summit also used currently effective tariffs to project demand and commodity charges, fuel ratios and storage ratchet requirements. Such numbers are subject to future rate case adjustments, but generally have more stability than the natural gas commodity itself. While different pipeline filings could affect the value of one capacity asset versus another, such changes occur infrequently and can be evaluated periodically to ensure where they each rank from a cost standpoint. PGW has swing contracts within their supply portfolio that carry an additional pipeline demand component, as these are no-notice contracts. The models do not take these additional demand charges into account, as the impact of these charges on the stack ranking would be negligible.

Operations

Where necessary, Summit assumed a Btu conversion of 1.03 to convert Mcf measurements to Dth. This is also the value used by PGW in many of their conversions, and typically, there is low variation in Btu factors across interstate pipelines.

Historical data indicates consistent year-over-year load declines independent of weather factors, which has been confirmed by PGW's own analysis. While this decline is generally modest (approximately half a percent per year), this reinforces the need to perform an internal review of its assets based on current and future needs. For our analysis, Summit used the 2010/2011 Design Day/Year model (shown on next page). Summit did not model asset needs based on a normal load forecast as this was considered imprudent given PGW's core mission of customer reliability.

Second, Summit assumed historical storage injection and withdrawal patterns, including fulfilling cycling requirements as governed by tariffs. This includes injecting gas on a daily and seasonal basis, which limits maximizing more aggressive “fill” strategies that would be based solely on price. Similarly, withdrawal from each individual storage field creates both a floor and a cap on deliverability. Summit assumed compliance with applicable pipeline tariffs as well as a fairly consistent cycling pattern based upon historical data.

2010-11 Design Forecast* (MDth)

	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11
1	42.0	42.5	62.3	115.3	678.7	645.5	475.2	282.3	189.3	42.6	42.6	42.3
2	42.0	42.5	89.7	174.6	628.6	585.8	447.3	264.7	155.0	42.6	42.6	42.3
3	42.0	42.5	108.0	204.3	598.6	555.9	419.4	238.4	129.3	42.6	42.6	42.3
4	42.0	42.5	126.2	224.1	588.6	516.1	400.7	229.6	120.7	42.6	42.6	42.3
5	42.0	42.5	135.3	243.8	558.5	506.2	391.4	220.8	112.2	42.6	42.6	42.3
6	42.0	42.5	144.5	273.5	538.5	486.3	382.1	212.0	103.6	42.6	42.6	42.3
7	42.0	42.5	153.6	283.4	518.5	466.4	372.8	203.2	95.0	42.6	42.6	42.3
8	42.0	57.7	162.7	293.3	498.4	456.4	363.5	194.4	95.0	42.6	42.6	42.3
9	42.0	57.7	171.9	303.2	488.4	446.4	354.2	185.6	86.5	42.6	42.6	42.3
10	42.0	65.4	181.0	313.1	478.4	436.5	344.9	176.8	86.5	42.6	42.6	42.3
11	42.0	73.0	190.1	322.9	468.4	426.5	335.6	176.8	77.9	42.6	42.6	42.3
12	42.0	80.6	199.2	332.8	458.4	416.6	326.3	168.0	69.3	42.6	42.6	42.3
13	42.0	80.6	208.4	342.7	448.4	406.6	317.0	159.2	69.3	42.6	42.6	42.3
14	42.0	88.2	217.5	352.6	438.3	396.7	307.7	150.4	60.8	42.6	42.6	42.3
15	42.0	95.9	226.6	362.5	428.3	386.7	298.4	141.6	60.8	42.6	42.6	42.3
16	42.0	103.5	235.7	372.4	418.3	376.8	289.1	132.8	43.6	42.6	42.6	42.3
17	42.0	103.5	244.9	382.3	418.3	366.8	279.8	124.1	43.6	42.6	42.6	42.3
18	42.0	111.1	254.0	392.2	408.3	356.9	270.5	115.3	43.6	42.6	42.6	42.3
19	42.0	111.1	263.1	402.0	398.3	346.9	261.1	106.5	43.6	42.6	42.6	42.3
20	42.0	118.8	272.2	411.9	388.3	337.0	251.8	97.7	43.6	42.6	42.6	42.3
21	42.0	118.8	281.4	421.8	378.3	327.0	242.5	88.9	43.6	42.6	42.6	42.3
22	42.0	126.4	290.5	431.7	368.2	317.1	233.2	88.9	43.6	42.6	42.6	42.3
23	47.5	126.4	299.6	441.6	358.2	307.1	223.9	71.3	43.6	42.6	42.6	42.3
24	47.5	134.0	308.8	451.5	348.2	297.2	214.6	71.3	43.6	42.6	42.6	42.3
25	53.0	134.0	308.8	471.3	338.2	267.3	205.3	44.9	43.6	42.6	42.6	42.3
26	58.6	141.7	317.9	481.2	328.2	257.4	196.0	44.9	43.6	42.6	42.6	42.3
27	58.6	149.3	327.0	491.0	318.2	247.4	177.4	44.9	43.6	42.6	42.6	42.3
28	69.6	164.6	345.3	510.8	298.1	197.6	168.1	44.9	43.6	42.6	42.6	42.3
29	80.7	172.2	372.6	510.8	288.1		149.5	44.9	43.6	42.6	42.6	42.3
30	97.2	195.1	427.4	530.6	258.1		121.6	44.9	43.6	42.6	42.6	42.3
31		218.0		580.0	188.0		84.3		43.6		42.6	42.3

*Based on the temperature pattern for a design year in the PGW Model. PGW's design day send out at 0° is 681,200 Mcf.

Market Dynamics

An analysis of historical market drivers and pricing trends is often effective for establishing a forecast for future contingencies. This approach, however, loses efficacy if new pricing drivers are introduced such that the supply and demand fundamentals of the market are altered. The following analysis reveals that many pre-2007 market conditions are no longer domestic driving factors today. Further, a new paradigm has evolved in the natural gas complex specifically impacting Northeast gas transportation markets.

US Natural Gas Landscape

In 2006 and 2007, most, if not all, energy markets were indicative of the rapid economic growth experienced both domestically in the US, and abroad. Natural gas consumption continued to witness an upward growth trend into 2007, pushing demand to record levels. Optimism of seemingly unstoppable growth for energy helped push fuel prices to elevated levels and had most market analysts expecting an extended upward trend in prices, which in turn resulted in growing investor interest.

Coming out of 2007, demand evidence was compelling: US natural gas consumption in the first half of 2008 exceeded that of 2007, setting new five-year highs. Demand was not alone in supporting prices during this time. After many years of strong investment in natural gas exploration and production (the gas rig count had been setting new highs for four years running), natural gas production in the US was unable to keep pace with demand. The amount of gas in storage was insufficient at five-year average levels. The result: a steady uptrend in pricing through 2008.

The impact of the “Great Recession” on US natural gas consumption was delayed, but by early 2009, demand had fallen to five-year minimums. Despite this, US natural gas production remained very strong as a result of the favorable investment environment of 2008. In fact, gas production in the US set new highs in 2009. High volumes of natural gas in storage resulted and subsequently persisted throughout 2009. As such, gas prices fell coming out of 2008 and heading into 2009.

In mid 2009, US natural gas consumption began showing signs of recovery and had recovered to near five-year highs by early 2010. US natural gas production also continued to show impressive growth as a result of shale production and storage volumes reached an all-time high in November 2010. Logically, gas prices have remained near the \$4-\$5 range since March.

As we turn to 2011 and beyond, a few major themes emerge as key drivers for the US natural gas market. Demand hinges on industrial market recovery as well as technological advancements through increased investment in the exploration and production industry. The fundamental outlook going forward is for strong growth in production to persist at rates greater than the expected growth in consumption. As such, Summit anticipates prices to remain relatively flat through 2011 and into 2012. Over the next 5 years, our outlook is for the market to move in a slightly upward direction; however, prices are not expected to reach the highs seen pre-2009.

Regional Transportation Pricing Landscape: Northeast

Basis costs in the Northeast historically have been heavily influenced by the incremental escalation of regional natural gas demand while interstate pipeline capacity infrastructure has remained relatively static. The resulting shortage of pipeline capacity to bring sufficient gas into the region created a floor for regional transportation prices making the Northeast a premium gas market. Other regional market drivers like weather, particularly the severity and duration of winter temperatures and precipitation, LNG capabilities, and Canadian gas imports into the region have also been key pricing drivers.

Much has changed in the Northeast since the 2006 study of PGW's assets was completed. The 2006 study was written in the wake of two major hurricanes in 2005 that introduced extreme national natural gas pricing volatility and took significant Gulf supplies off-system for the winter of 2005-2006. Since 2006, we have not seen similar destructive hurricane activity hit producing regions in the Gulf. Subsequently, the credit crisis of 2008 introduced another macro-environment alteration to the industry. Additionally, the cost of obtaining capital for the whole of the industry increased.

The largest market drivers in the Northeast post-2006 have not been the credit crisis nor hurricane activity. Rather, the Northeast natural gas market has responded to simple supply and demand fundamentals consisting of an increase in production and pipeline infrastructure and a simultaneous dip in consumer demand.

In 2008, Northeast natural gas consumption was approximately 9 Bcf/day. In late 2008, the last leg of the Rockies Express Pipeline brought an additional 1.8 Bcf/day into the region via the TCO pipeline system. This provided a 20% boost to Northeast supplies and brought immediate relief to the historically premium regional pricing complex.

Marcellus Shale gas has also introduced increased supply into the Northeast. This intra-region supply is expected to eventually bring as much as 6 Bcf/day into the Northeast's supply mix. Currently, Marcellus Shale is contributing 0.7 to 1.3 Bcf/day of supply. The long-term impact of this shale find is dependent on the following: further build-out of a pipeline gathering system that will connect Marcellus Shale gas to major interstate pipelines, the domestic price of natural gas (which will impact break-even rates for Marcellus drilling rigs), and environmental legislation regarding the hydraulic fracturing required to pull shale gas from underground formations.

The natural gas pipeline infrastructure in the Northeast has experienced exponential growth since 2009. Fifteen new pipeline extensions are set to be completed in the Northeast region by 2013 that will allow approximately 11 Bcf/day¹ in additional gas throughput. This increase in infrastructure is a dramatic shift from the early to mid 2000's when new pipeline build-outs were far less common. Historically, due to the lack of infrastructure, basis prices were bid up to premium levels as various parties competed for the remaining pipeline volumes that were not consumed by upstream pipeline market

¹ www.ferc.gov/industries/gas/gen-info/horizon-pipe.pdf

participants. The new infrastructure has already provided significant relief to regional basis prices and has allowed the new supply from the Rockies and Marcellus Shale to move with more freedom in the region.

While the EIA has not yet released its calendar-year 2010 natural gas consumption numbers for the Northeast states, we expect demand to have decreased proportionately to the broader macro-economic impact of the United States recession.

The changes to the supply and demand landscape of the Northeast outlined above have caused regional transportation prices and assets to decline in value. Excess intra-region supply threatens to displace a large portion of gas entering the region from the Gulf, Rockies, and Canada. While interstate pipeline capacity assets into the Northeast, particularly from the Gulf, have managed to retain value (likely due to a 'wait-and-see' approach as to whether the new supply paradigm will persist in the Northeast), regional basis prices have retreated significantly since early 2009. The new supplies have all but removed the historical pricing volatility in the region.

Summit Analysis Process

Based upon Summit's historical findings of the PGW program as well as the above mentioned dynamics in the marketplace that have occurred in the last several years, Summit designed its own "cost to deliver" model that effectively stack ranks each contracted capacity asset in the PGW portfolio. While the model is based upon the assumptions stated herein, these have been examined through multiple scenarios, and our analysis indicates relative asset rankings generally remain consistent.

The model integrated financial costs including the natural gas commodity as well as associated tariff charges. Additional costs associated with storage assets, such as transportation costs to deliver withdrawals from storage and applicable carrying costs unique to each storage agreement, were also incorporated.

These assets were stack ranked solely on a cost basis. In the first set of scenarios, cost models assumed no spread between winter and summer prices (i.e., NYMEX values flat throughout year). As seen in the table on the following page, the impact of increases in commodity cost to the relative weighted average costs is marginal. Even if NYMEX values were to return to their historical settlement highs, the stack rankings within each category remain consistent.

		NYMEX: \$3.5/Dth Year- Round	NYMEX: \$5/Dth Year- Round	NYMEX: \$7/Dth Year- Round
Market Area Storage	Equitrans SS3	\$7.665	\$9.442	\$11.811
	Tetco SS1-A*	\$6.307	\$8.035	\$10.339
	Dom GSS Tetco FTS8	\$6.062	\$7.766	\$10.037
	Dom GSS Tetco FTS7	\$6.022	\$7.726	\$9.998
	Tetco SS1-B	\$5.743	\$7.471	\$9.776
	Transco GSS	\$5.314	\$6.976	\$9.192
	Transco S2	\$5.290	\$6.955	\$9.174
	LNG	\$4.329	\$5.953	\$8.119
Production Area Storage	Transco ESS1	\$5.447	\$7.036	\$9.155
	Transco ESS2	\$5.447	\$7.036	\$9.155
	WSS Transco FT*	\$4.594	\$6.200	\$8.341
Long-Haul Transport	Tetco CDS	\$4.504	\$6.145	\$8.333
	Tetco FT-1	\$4.490	\$6.130	\$8.318
	Transco FT	\$4.237	\$5.827	\$7.947

*Tetco SS1-A and WSS Transco FT are primary tools employed by PGW to avoid interstate pipeline balancing penalties on differentials between actual consumed and delivered volumes.

Next, cost models assumed \$5.00 NYMEX in summer months, with summer-to-winter spreads of \$.50, \$1.00, and \$2.00. Since most gas is consumed in the winter months, the model assumed storage gas was bought in the summer and used in the winter, while long-haul was based on winter pricing. As seen in the table below, growth in summer-to-winter spreads increases the value of all storage assets, and the lowest cost storage options begin to provide a lower weighted average cost of gas than long-haul; however, the increased value does not outweigh the costs for Equitrans in any of the sample scenarios. In addition, such large summer-to-winter commodity spreads are not expected to materialize in the foreseeable future, as spreads have eroded in recent years due to gas-fired power generation and high storage levels.

		NYMEX: \$5/Dth Summer, \$5.5/Dth Winter	NYMEX: \$5/Dth Summer, \$6/Dth Winter	NYMEX: \$5/Dth Summer, \$7/Dth Winter
Market Area Storage	Equitrans SS3	\$9.442	\$9.442	\$9.442
	Tetco SS1-A	\$8.035	\$8.035	\$8.035
	Dom GSS Tetco FTS8	\$7.766	\$7.766	\$7.766
	Dom GSS Tetco FTS7	\$7.726	\$7.726	\$7.726
	Tetco SS1-B	\$7.471	\$7.471	\$7.471
	Transco GSS	\$6.976	\$6.976	\$6.976
	Transco S2	\$6.955	\$6.955	\$6.955
	LNG	\$5.953	\$5.953	\$5.953
Production Area Storage	Transco ESS1	\$7.036	\$7.036	\$7.036
	Transco ESS2	\$7.036	\$7.036	\$7.036
	WSS Transco FT	\$6.200	\$6.200	\$6.200
Long-Haul Transport	Tetco CDS	\$6.692	\$7.239	\$8.333
	Tetco FT-1	\$6.677	\$7.224	\$8.318
	Transco FT	\$6.357	\$6.887	\$7.947

Based on the scenarios examined on the previous page, changes in the absolute cost of gas do not have a significant impact on the relative cost of delivery options. Additionally, large summer-to-winter commodity spreads are not expected, and modest spreads do not result in changes to the assessment of the highest cost assets. Thus, recommendations for optimization are based on the \$5.00 year-round NYMEX scenario.

Asset Stack Ranking

Market Area Storage	Max Storage Quantity (Dth)	Storage Demand (Dth)	Estimated WACOG (\$/Dth)
Equitrans SS3	522,500	4,998	\$9.442
Tetco SS1-A	2,647,080	44,118	\$8.035
Dom GSS Tetco FTS8	3,007,810	22,495	\$7.766
Dom GSS Tetco FTS7	911,161	6,815	\$7.726
Tetco SS1-B	2,462,120	20,847	\$7.471
Transco GSS	4,123,733	53,871	\$6.976
Transco S2	466,554	5,191	\$6.955
LNG	4,428,073	469,680	\$5.953

Production Area Storage	Max Storage Quantity (Dth)	Storage Demand (Dth)	Estimated WACOG (\$/Dth)
Transco ESS1	482,792	47,986	\$7.036
Transco ESS2	656,013	65,201	\$7.036
WSS Transco FT	3,335,909	39,246	\$6.200

Long-Haul Transport	Capacity (Dth)	Estimated WACOG (\$/Dth)
Tetco CDS	75,000	\$6.145
Tetco FT-1	59,822	\$6.130
Transco FT	167,179	\$5.827

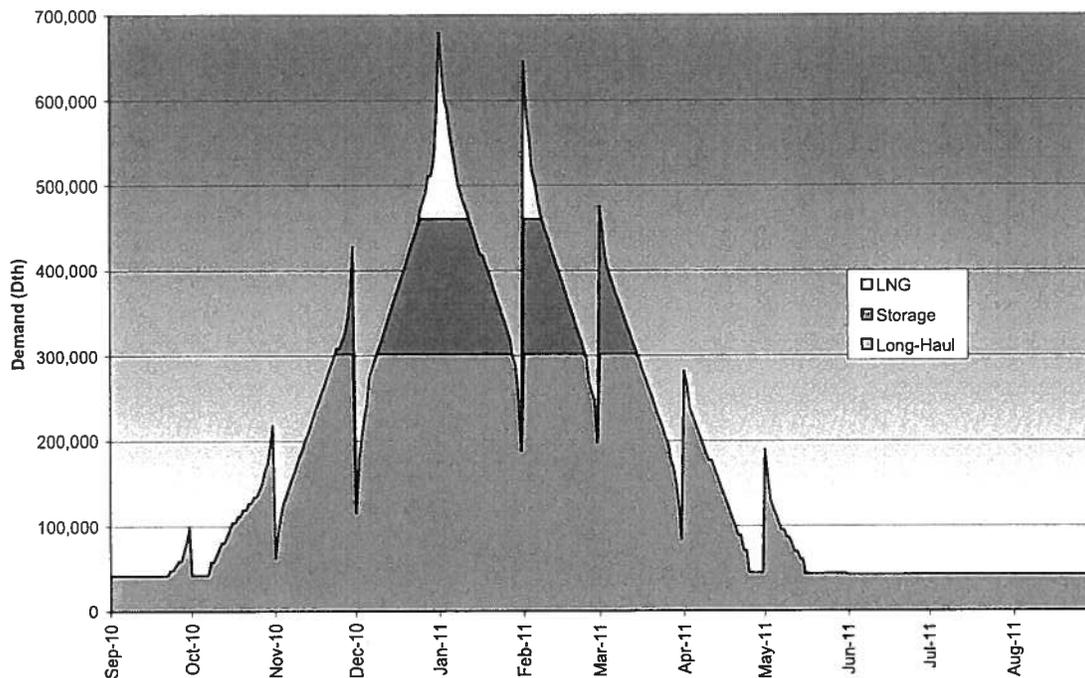
Based upon our initial analysis of storage assets (table above), Equitrans storage was the highest cost delivered asset to serve PGW. Tetco SS1-A was the next highest cost asset due to its relatively high reservation of demand, though this asset plays a significant part in meeting PGW's balancing needs on the Tetco pipeline. Long-haul transportation across Tetco or Transco is intuitively the cheapest option, as it is taken directly from the production area, assessed fuel and transportation costs, and then delivered directly to the market. Storage requires additional costs (demand, storage capacity, fuel, and associated transportation), which raise the total cost of delivery.

After the initial stage of cost-based stack ranking, Summit next created a delivery prioritization model that incorporated relative receipt and delivery constraints of each asset. Thus, long-haul and short-haul interstate capacity is inherently limited by the maximum daily quantity (MDQ) of each transport agreement. Similarly, some storage agreements not only have limits on their injections, withdrawals, and total capacity, but also on seasonal requirements such as ensuring certain percentages of gas in storage are actually withdrawn. Finally, PGW-owned LNG not only has capacity restrictions, but also operational constraints on its liquefaction. These constraints are more physical than contractual.

Summit then incorporated the 2010-2011 peak design consumption model and evaluated alternative scenarios when considering the appropriate ways to guarantee deliveries are met. This included ensuring that maximum deliveries were made via already contracted assets delivering at variable costs, thus avoiding additional incremental purchases. Also, LNG reserves were always maintained to ensure adequate deliverability from vaporization would exist for any necessary peak day/year.

Given PGW’s limited capability to aggressively refill its LNG capacity, Summit not only evaluated the needs of a single design year, but also that of two consecutive design years. The results illustrate that as the highest cost storage capacity is eliminated, PGW quickly approaches a scenario where it might not be able to meet its operational requirements.

Design Year Profile



LNG Usage – Design Year Scenarios

Non-LNG Assets	Non-LNG Capacity (1)	LNG Inventory Needed for Design Winter (1,2)	LNG Inventory Needed for Consecutive Design Winters (1,3)
All current assets	460,336	2,237,800	2,965,601
Current asset mix less 5,000 Dth of demand	455,336	2,371,900	3,233,801
Current asset mix less 7,500 Dth of demand	452,836	2,441,900	3,373,801
Current asset mix less 10,000 Dth of demand	450,336	2,513,053	3,516,106
Current asset mix less 12,500 Dth of demand	447,836	2,586,075	3,662,151
Current asset mix less 15,000 Dth of demand	445,336	2,664,129	3,818,257

(1) Volumes in Dth.

(2) Volume represents the design demand in excess of non-LNG capacity, inclusive of boil-off volumes for withdrawal season.

(3) Volume represents the minimum amount of LNG necessary at the beginning of withdrawal season in year 1 to meet two consecutive design winters; this assumes 2,000,000 Dth of liquefaction in a calendar year.

Summit’s modeling revealed that any combination of assets that satisfy consecutive design year requirements would always result in some unutilized capacity in any reasonable asset mix. Given that PGW will necessarily be “long” in most circumstances, Summit then proceeded to evaluate which assets could either be directly monetized (capacity release) or indirectly monetized (asset management relationships, off-system sales).

Outsourced Asset Management

PGW requested that Summit advise the Company regarding possible AMAs, including a review of the best practices regarding the payment structure of such arrangements. An asset management program provides for the utility to turn over the management of all or some of its assets to a third party. Under this arrangement, the asset manager commits to satisfy the utility’s delivery obligations in return for having the ability to use the asset or assets however the manager decides when such deliveries are not required. The release of one’s entire asset portfolio is a popular strategy for smaller municipalities (~5 Bcf or less of annual firm requirements) who will bundle and assign their assets while simultaneously fulfilling their delivery requirements. It enables the utility to reap a larger recovery of dollars than they would have by self-managing their portfolio.

With the exception of the aforementioned AMA for a portion of PGW’s storage, PGW does not currently employ this type of asset management strategy and generally retains institutional self-control of its asset base with the exception of capacity release programs. There are numerous asset managers in the marketplace with the primary objectives of providing reliable gas supply to the utility city gate, managing the utility’s existing asset

base, and optimizing the value of such contracts. Additionally, there are numerous natural gas distributors who utilize the services of a third party asset manager. Despite this utilization, however, the strategy is not necessarily the most appropriate approach for all gas distributors, nor does it appear to be a rapidly increasing practice. Instead, many utilities regularly perform internal review of their capacity needs.

For a utility, releasing control and management of one's assets to a third party can, at times, pose significant risks and complexities that may offset the benefits achieved by the program. The primary benefit that can be achieved under a third party asset management agreement is the optimization of those assets, some of whose benefits may otherwise be unrealized. Outsourced firms may be better positioned to deliver optimization value because of the following:

- Inherently possess larger scale and flexibility
- More substantial and broader market presence/expertise
- Greater resource availability
- Core operational function

Additionally, there may be value derived from an outsourced AMA as it may enable the utility to focus more intently on customer service and its distribution operations.

While there can be benefits from AMAs, there are also numerous risks to consider. Some of the risks that may exist for a gas distributor evaluating such an arrangement consist of the following:

- Diminished control over a primary business function
- Loss of expertise in a key operational arena
- Exposure to counterparty risk
- Program profitability limitations
- Performance/auditing validation

If PGW considers the possible utilization of an outsourced asset management firm, the utility should carefully weigh the pertinent risks and benefits to ensure the goals of the program align with their overall business objectives. PGW should also consider any internal operational benefits or constraints that may enhance or deter the introduction of such a third party firm. In addition, it is prudent to be cognizant of futures pricing and market dynamics in order to assess the potential viability and profitability of entering an AMA.

Current market levels reflect a summer-to-winter spread differential of approximately \$0.55/Dth, therefore demonstrating a relatively low level of potential profit should any holder look to arbitrage a storage asset. This can be contrasted with market levels from December 2009 (one year ago) when a summer-to-winter spread differential of approximately \$1.00/Dth existed in the market. In this example, the asset's potential value was nearly cut in half over just a 12-month span. A more distant market snapshot from the 2006 – 2007 timeframe would reflect a \$3.00/Dth differential. This second example renders a \$2.45/Dth decrease in value when compared to current market. These

various points in time demonstrate how storage profitability can rapidly erode in an ever-changing marketplace.

Due to Summit's market outlook, we do not anticipate a significant increase in the summer-to-winter spreads over the short-term, thus reducing the overall value that can be derived from PGW's storage assets. Because of current market conditions and the aforementioned spread analysis, the likelihood of interested parties willing to enter AMAs is reduced as is the compensation that could be realized.

However, due to the nature of the evolving natural gas market, individual PGW assets may present an AMA opportunity (as opposed to a third party assuming the entire utility portfolio). This is due to the fact that many niche counterparties might ascribe a higher value to a specific asset than another based upon their own unique requirements. As an example, a growing producer with Marcellus Shale production in Pennsylvania might highly value storage and short-haul capacity, but have little interest in long-haul capacity from the Gulf coast. Thus, an exploration of the options surrounding each independent asset could yield greater value than the entire portfolio as well as increase the number of interested parties.

Should market fundamentals support entering into an AMA, there are various forms of compensation that can be structured with the asset manager. The most prevalent payment constructs consist of 1) outright fixed payment over the term of the agreement and 2) shared-benefit payments based on a percentage split of the gains from the optimization. An asset with a greater value will typically render increased flexibility in terms of negotiating compensation structures as well as potentially other contractual criteria. Ultimately, each party's projected valuations of the asset(s), risk appetite, and regulatory constraints can shape the compensation structure of the agreement.

Due to the nature of PGW's core objectives of providing reliable and cost-effective gas supply to its customer base, Summit would consider a set monthly payment schedule as a best practice, provided such payment represents a value PGW deems as fair and appropriate for such asset(s) in the marketplace. This type of structure would produce guaranteed payments that would benefit ratepayers. By securing a set value for the asset upon entering the AMA, market risk can be eliminated and therefore a known compensation threshold would be established. Furthermore, a fixed price agreement avoids the speculative nature associated with a shared-benefit arrangement that is reliant upon future market outcomes to determine its revenue.

Summit Recommendations

Based upon our analysis of current PGW operating parameters, existing and continuing market trends, and an integrated analysis, Summit makes the following recommendations.

1. Evaluate elimination or reduction of portion of current asset base after assessing asset management opportunities, and leverage PGW-owned LNG assets.

- Eventual release of Equitrans storage as it is the highest unit cost asset in the PGW portfolio; the net cost of this asset per year is approximately \$541,000 (after adjustments for net capacity release credits). However, due to contractual notification of abandonment provisions and the unique geographical position of this asset within the Marcellus Shale supply basin, it would be prudent to first perform an RFP to determine if opportunity exists for a third party AMA that would guarantee value above PGW's cost.
- While Tetco SS1-A is the next highest cost delivery option in the stack ranking, it provides PGW with flexibility in balancing load. For every 1 degree of variance between actual and expected temperatures, PGW experiences a change in demand of approximately 10,000 Dth. Since PGW is able to retroactively balance their load through their SS1 assets, PGW's exposure to balancing penalties is reduced. Hence, Tetco SS1 assets should be retained.
- The next highest cost asset is Dominion storage, along with its Tetco FTS-7 and FTS-8 contracts. Reduction of 10,000 Dth of demand at contract renewal (along with associated storage capacity and FTS transport contracts) would not impede PGW's ability to serve customers in design scenarios. The net cost of this asset per year is approximately \$670,000 (after adjustments for net capacity release credits). It is important to note that there is potential that FTS-7 and FTS-8 contracts could eventually bring Marcellus Shale gas into PGW, thereby changing their functionality and subsequent value. Since the Dominion agreement is specially negotiated, any subsequent renewal needs to factor in both the risk and opportunities of both new pricing and delivery terms changing; reduction of the Dominion storage from approximately 4 Bcf to 3 Bcf could result in new contract rates that may diminish some or all of the potential savings.
- PGW should maintain their LNG inventory consistent with the appropriate level of risk, understanding that their liquefaction capabilities are limited, in order to serve consecutive design winters. Any elimination and/or reduction of designated assets would necessarily entail a greater reliance upon PGW's own LNG assets.
- Many natural gas utilities in PA and surrounding areas do not have utility-owned LNG facilities. For those that do, LNG usage on a peak design day comprises of approximately 27% of the total portfolio; however, when propane is incorporated with LNG into peak day usage for these same utilities, the proportion increases to 32%. Currently, PGW's LNG comprises 32% of their peak design day portfolio. Reducing portions of their non-LNG capacity as referenced in this report would increase this amount to 34%.

2. Production area storage still worthwhile assets; however internal evaluation should be an on-going process

- It serves as protection against supply area production “shocks” and interstate pipeline balancing penalties.
- It is valued as a hedging tool on inter-seasonal basis becoming less valuable as market volatility has flattened.
- Monetization opportunities exist with asset managers, but value may decrease with lessened volatility.
- Internal evaluation of WSS and Eminence storage value should occur regularly.

3. Maintain current long-haul interstate capacity allocations

- Pipeline lateral delivery requirements necessitate preservation of delivery rights.
- It is the least expensive delivery option.
- Transco and Tetco capacity to market area is currently fully subscribed and could potentially be lost if surrendered.
- Long-haul assets are easiest to monetize when not required due to liquid secondary release market.

4. Evaluate more dynamic/active resource management (internal or external) for underutilized assets

- Traditional asset management (entire portfolio turnover to third party with payment/shared savings structure) is likely unworkable due to complexity and declining liquidity of capable providers.
- Certain individual assets, particularly those where long-term elimination or reduction is contemplated, should be bid out for potential AMAs to validate the market value of such assets against PGW’s costs.
- More aggressive tactics such as weekly long-haul capacity releases marketed to others should be considered even if potentially requiring additional resources.

5. Monitor supply/capacity market for more economical infrastructure

- Marcellus Shale/transport projects should be entertained to determine if they can displace Transco/Tetco storage and/or portion of LNG-filled capacity.
- Opportunities to increase long-haul capacity at expense of short-haul capacity/storage also should be considered.
- Both history and anticipated infrastructure projects strongly suggest that market pricing will be fluid and volatile for the foreseeable future. This makes forecasting the optimal asset mix impossible for any substantial length of time. Thus, PGW is best positioned to continuously evaluate its assets by not committing to long-term contracts, thus maintaining flexibility to shift its portfolio between short-haul and long-haul pipeline capacity and its own LNG capacity.

Adoption of Recommendations and Path Forward

Summit advocates that PGW utilize this report and consider these recommendations, while also establishing processes to more fully monetize its existing capacity assets. In addition, the market dynamics in the Northeast have vastly changed over the past several years and appear to be still evolving rapidly. Thus, Summit recommends a short-term approach to any further contractual asset retention and PGW would be well served to internally re-evaluate its asset portfolio on a regular (annual to every two years) basis to ensure it can take better advantage of any future market developments.

Tab 14

Docket No. R-17XXX

Item 53.64(i)(1)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 PA Code 53.61, et seq.

Item 53.64(i) Utilities shall comply with the following:

- (1) Thirty days prior to the filing of a tariff reflecting increases or decreases in purchased gas expenses, gas utilities under 66 Pa.C.S. § 1307 (f) recovering expenses under that section shall file a statement for the 12-month period ending 2 months prior to the filing date under 66 Pa.C.S. § 1307(f) as published in accordance with subsection (b) which shall specify:
 - (i) The total revenues received under 66 Pa.C.S. § 1307(a), (b) or (f), including fuel revenues received, whether shown on the bill as 66 Pa.C.S. § 1307(f) as published in accordance with subsection (b) which shall specify:
 - (ii) The total gas expenses incurred.
 - (iii) The difference between the amounts in sub paragraphs (I) and (ii).
 - (iv) Evidence explaining how actual costs incurred differ from the costs allowed under subparagraph (ii).
 - (v) How these costs are consistent with a least cost fuel procurement policy, as required by 66 Pa.C.S. § 1318 (relating to determination of just and reasonable natural gas rates).

Response: Please see attached schedule. Additionally, please refer to Item 53.64(c)(6) for a detailed discussion regarding the company's least cost fuel procurement policy.

**CALENDAR YEAR 2016
PHILADELPHIA GAS WORKS
C-FACTOR RECONCILIATION**

MONTH	NET COST	TOTAL	C FACTOR	LOAD BALANCING	LNG SALES GCR	TOTAL	NATURAL GAS	OVER/
	OF FUEL	GCR	% of GCR	REVENUE	BILLED REVENUE	C FACTOR	REFUNDS	(UNDER)
	1	2	3	5	6	7 = (4 + 5 + 6)	8	9 = (7 + 8 - 1)
	(\$)	(\$)		(\$)	(\$)	(\$)	(\$)	(\$)
JANUARY 2016	26,541,391	24,255,062	106.1%	96,731	0	25,839,558	1,197	(700,636)
FEBRUARY	21,760,564	28,266,729	107.3%	95,271	7,561	30,423,278	6,382	8,669,097
MARCH	13,895,507	20,633,034	107.3%	93,915	4,902	22,230,943	0	8,335,436
APRIL	9,593,675	13,050,528	111.8%	89,738	0	14,678,333	0	5,084,658
MAY	9,541,183	8,232,518	116.7%	90,134	0	9,696,998	0	155,815
JUNE	5,887,695	4,666,423	116.7%	89,807	0	5,535,248	0	(352,447)
JULY	6,215,584	3,073,877	108.1%	90,851	0	3,413,604	8,769	(2,793,211)
AUGUST *	6,675,834	2,756,457	101.5%	90,851	0	2,889,023	0	(3,786,811)
SEPTEMBER	6,304,036	3,457,095	101.5%	91,214	0	3,600,627	0	(2,703,409)
OCTOBER*	7,755,475	5,070,159	101.4%	91,214	0	5,229,902	0	(2,525,573)
NOVEMBER*	14,028,425	10,825,976	101.2%	91,214	0	11,045,819	1,431	(2,981,174)
DECEMBER*	27,056,975	23,143,420	101.2%	91,214	7,493	23,517,107	0	(3,539,868)
Totals	155,256,344	147,431,278		1,102,152	19,956	158,100,439	17,780	2,861,876

*Load Balancing Revenue-Estimated

Tab 15

Docket No. R-17XXX

Item 53.65 (1)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.65 (1)

The costs of the affiliated gas, transportation or storage as compared to the average market price of other gas, transportation or storage and the price of other sources of gas, transportation and storage.

Response:

PGW has no affiliates, see response to 53.64(c)(1) for price of gas, transportation and storage.

Tab 16

Docket No. R-17XXX

Item 53.65 (2)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.65 (2)

Estimates of the quantity of gas, transportation or storage available to the utility from all sources.

Response:

PGW has no affiliates and provided is a summary of all transport and storage.

Philadelphia Gas Works
Gas Supply Group – Supply and Transportation
Abstract of Natural Gas Contracts

This document contains confidential information for the use of the Gas Operations personnel only. It is important to note that this is a brief summary of the terms and conditions of our contracts. The pipeline tariffs and contract files should be referenced for complete information.

PHILA.GAS WORKS

TABLE OF CONTENTS
SUPPLY

Tetco Gas Supply Contract #1
Tetco Gas Supply Contract #3
Tetco Gas Supply Contract #5
Tetco Gas Supply Contract #13
Tetco Gas Supply Contract #16
Tetco Gas Supply Contract #24
Tetco Gas Supply Contract #25
Tetco Gas Supply Contract #26
Tetco Gas Supply Contract #28
Tetco Gas Supply Contract #29
Tetco Gas Supply Contract #30
Tetco Gas Supply Contract #31

Transco Gas Supply Contract #2
Transco Gas Supply Contract #3
Transco Gas Supply Contract #6
Transco Gas Supply Contract #7
Transco Gas Supply Contract #8
Transco Gas Supply Contract #10
Transco Gas Supply Contract #14
Transco Gas Supply Contract #22
Transco Gas Supply Contract #25
Transco Gas Supply Contract #29
Transco Gas Supply Contract #30
Transco Gas Supply Contract #31
Transco Gas Supply Contract #32

TRANSPORTATION CONTRACTS

Transco FT (Firm Transportation)
Transco PSFT (Peaking Service Firm Transportation)
Transco IT (Interruptible Transportation)
Tetco CDS (Comprehensive Delivery Service)
Tetco FT1 (Firm Transportation Service)
Tetco FT1 (Firm Transportation Service)
Tetco FT1 (Firm Transportation Service)
Tetco FTS 2 (Firm Transportation Service)
Tetco FTS 7 (Firm Transportation Service)
Tetco FTS 8 (Firm Transportation Service)
Tetco IT (Interruptible Transportation)

PHILA.GAS WORKS

TABLE OF CONTENTS
UNDERGROUND STORAGE

Dominion GSSTE
Tetco SS1
Tetco SS1
Transco GSS
Transco S2
Transco WSS
Transco ES
Transco ES

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #24
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	1 Year
Initial Contract Date:	11/01/2015
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	20,000 DT
Availability:	Year Round
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	None
Nomination & Scheduling:	Next day nomination change. Nominations subject to Tetco rules. No limit to amount of changes within the month.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #26
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	1 Year
Initial Contract Date:	11/01/2015
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	10,000 DT
Availability:	Year Round
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	None
Nomination & Scheduling:	Next day nomination change. Nominations subject to Tetco rules. No limit to amount of changes within the month.
Other Terms & Conditions:	Pricing for each day is priced at gas daily index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #5
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	12/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	10,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	10,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #25
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #16
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #13
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #26
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #28
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #24
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS and FTS-2
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	15,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	15,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #24
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS and FTS-2
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #29
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #16
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Summer Supply
Initial Contract Date:	04/01/2016
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Apr-Oct.
Availability:	Summer Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #16
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Summer Supply
Initial Contract Date:	04/01/2016
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Apr-Oct.
Availability:	Summer Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #24
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT2
Contract Term:	Summer Supply
Initial Contract Date:	04/01/2016
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Apr-Oct.
Availability:	Summer Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #1
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Summer Supply
Initial Contract Date:	04/01/2016
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Apr-Oct.
Availability:	Summer Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #28
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Summer Supply
Initial Contract Date:	04/01/2016
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Apr-Oct.
Availability:	Summer Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #26
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Summer Supply
Initial Contract Date:	04/01/2016
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Apr-Oct.
Availability:	Summer Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #30
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Summer Supply
Initial Contract Date:	04/01/2016
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Apr-Oct.
Availability:	Summer Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #3
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 03/31/17.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #26
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 03/31/17.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #16
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	10,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	10,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 03/31/17.

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PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #13
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 03/31/17.

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PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #31
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 03/31/17.

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PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #24
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	10,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	10,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 03/31/17.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #24
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 03/31/17.

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PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #28
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	10,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	10,000 DT per Day
Nomination & Scheduling:	Nominations subject to Tetco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 03/31/17.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #24
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	1 Year
Initial Contract Date:	11/01/2016
Contract Expiration Date:	10/31/2017
Quality of Service:	Firm
Daily Maximum:	10,000 DT
Availability:	Year Round
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	None
Nomination & Scheduling:	Next day nomination change. Nominations subject to Tetco rules. No limit to amount of changes within the month.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 10/31/17.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Tetco Gas Supply Contract #26
Delivery Pipeline & Contract #:	Tetco
Associated Transportation Contract:	Tetco FT and CDS
Contract Term:	1 Year
Initial Contract Date:	11/01/2016
Contract Expiration Date:	10/31/2017
Quality of Service:	Firm
Daily Maximum:	25,000 DT
Availability:	Year Round
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	None
Nomination & Scheduling:	Next day nomination change. Nominations subject to Tetco rules. No limit to amount of changes within the month.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 10/31/17.

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PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #8
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract # 1003691
Contract Term:	1 Year
Initial Contract Date:	11/01/2015
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	15,000 DT per Day
Availability:	Year Round
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	None
Nomination & Scheduling:	24 hour notice business day. Next day nomination change. Nominations subject to Transco rules. No limit to amount of changes within the month.
Other Terms & Conditions:	Pricing for each day defaults to an index.
Most Recent Negotiation:	Contract expired 10/31/16.

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PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #22
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract # 1003691
Contract Term:	1 Year
Initial Contract Date:	11/01/2015
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	15,000 DT per Day
Availability:	Year Round
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	None
Nomination & Scheduling:	24 hour notice business day. Next day nomination change. Nominations subject to Transco rules. No limit to amount of changes within the month.
Other Terms & Conditions:	Pricing for each month defaults to an index.
Most Recent Negotiation:	Contract expired 10/31/16.

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PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #2
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract # 1003691
Contract Term:	1 Year
Initial Contract Date:	11/01/2015
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	15,000 DT per Day
Availability:	Year Round
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	None
Nomination & Scheduling:	24 hour notice business day. Next day nomination change. Nominations subject to Transco rules. No limit to amount of changes within the month.
Other Terms & Conditions:	Pricing for each day defaults to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #10
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Summer Supply
Initial Contract Date:	04/01/2016
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Apr.-Oct.
Availability:	Summer Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #14
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Summer Supply
Initial Contract Date:	04/01/2016
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Apr.-Oct.
Availability:	Summer Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #7
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Summer Supply
Initial Contract Date:	04/01/2016
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Apr.-Oct.
Availability:	Summer Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #3
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Summer Supply
Initial Contract Date:	04/01/2016
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Apr.-Oct.
Availability:	Summer Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

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PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #29
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Summer Supply
Initial Contract Date:	04/01/2016
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Apr.-Oct.
Availability:	Summer Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #32
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Summer Supply
Initial Contract Date:	04/01/2016
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Apr.-Oct.
Availability:	Summer Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 10/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #8
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #8
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #10
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	10,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	10,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #7
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	10,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	10,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #22
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #30
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #31
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #6
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #6
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2015
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expired on 3/31/2016.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #10
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	10,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	10,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 03/31/2017.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #8
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 03/31/2017.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #6
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 03/31/2017.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #7
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 03/31/2017.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #14
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires on 3/31/2017.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #25
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires 3/31/2017.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #25
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires 3/31/2017.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #29
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires 3/31/2017.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #29
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires 3/31/2017.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #30
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract 1003691
Contract Term:	Winter Supply
Initial Contract Date:	11/01/2016
Contract Expiration Date:	03/31/2017
Quality of Service:	Firm
Daily Maximum:	5,000 DT per Day Nov.-Mar.
Availability:	Winter Supply Contract
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	5,000 DT per Day
Nomination & Scheduling:	Firm must take contract. Nominations subject to Transco rules.
Other Terms & Conditions:	Pricing for each month can be negotiated or default to an index.
Most Recent Negotiation:	Contract expires 3/31/2017.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #8
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract # 1003691
Contract Term:	1 Year
Initial Contract Date:	11/01/2016
Contract Expiration Date:	10/31/2017
Quality of Service:	Firm
Daily Maximum:	20,000 DT per Day
Availability:	Year Round
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	None
Nomination & Scheduling:	24 hour notice business day. Next day nomination change. Nominations subject to Transco rules. No limit to amount of changes within the month.
Other Terms & Conditions:	Pricing for each month defaults to an index.
Most Recent Negotiation:	Contract expires 10/31/17.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
GAS SUPPLY CONTRACT

Name & Type of Service:	Transco Gas Supply Contract #22
Delivery Pipeline & Contract #:	Transco
Associated Transportation Contract:	Transco FT Contract # 1003691
Contract Term:	1 Year
Initial Contract Date:	11/01/2016
Contract Expiration Date:	10/31/2017
Quality of Service:	Firm
Daily Maximum:	25,000 DT per Day
Availability:	Year Round
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	None
Nomination & Scheduling:	24 hour notice business day. Next day nomination change. Nominations subject to Transco rules. No limit to amount of changes within the month.
Other Terms & Conditions:	Pricing for each month defaults to an index.
Most Recent Negotiation:	Contract expires 10/31/17.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Transportation Contract

Name & Type of Service:	Transco FT
Delivery Pipeline & Contract #:	Transco FT 1003691
Associated Transportation Contract:	Transco Supply Contracts, WSS, ES, and Spot Supply contracts.
Contract Term:	13 Years
Initial Contract Date:	02/01/1992
Contract Expiration Date:	03/31/2005
Quality of Service:	Firm
Daily Maximum:	165,212 DT
Availability:	Year Round
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	N/A
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	N/A
Most Recent Negotiation:	Contract is now in the evergreen state.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Transportation Contract

Name & Type of Service:	Transco Peaking Service FT
Delivery Pipeline & Contract #:	Transco FT 1005001
Associated Transportation Contract:	Transco Supply Contracts, WSS, ES, and Spot Supply contracts.
Contract Term:	13 Years
Initial Contract Date:	02/01/1992
Contract Expiration Date:	03/31/2005
Quality of Service:	Firm
Daily Maximum:	1,967 DT
Availability:	Winter Peaking Dec-Feb
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	N/A
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	N/A
Most Recent Negotiation:	Contract is now in the evergreen state.

PHILA.GAS WORKS
PGW NATURAL GAS CONTRACT INFORMATION
Interruptible Transportation Contract

Name & Type of Service:	Transco Interruptible Transportation
Delivery Pipeline & Contract #:	Transco IT 1002427
Associated Transportation Contract:	Transco Supply Contracts, WSS, ES, and Spot Supply contracts.
Contract Term:	13 Years
Initial Contract Date:	02/01/1992
Contract Expiration Date:	03/31/2005
Quality of Service:	Firm
Daily Maximum:	See Transco Tariff
Availability:	See Transco Tariff
Fuel (%):	Subject to Transco fuel rates
Minimum Take Level:	N/A
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	N/A
Most Recent Negotiation:	Contract is now in the evergreen state.

PHILA.GAS WORKS
NATURAL GAS CONTRACT INFORMATION
Comprehensive Delivery Service

Name & Type of Service:	Tetco CDS
Delivery Pipeline & Contract #:	Tetco #800232
Associated Transportation Contract:	Tetco Supply Contracts, Spot Supply contracts.
Contract Term:	2.8 Years
Initial Contract Date:	12/15/1998
Contract Expiration Date:	10/31/2001
Quality of Service:	Firm
Daily Maximum:	75,000 DT per Day
Availability:	See Tetco Tariff
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	N/A
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	See Tetco Tariff
Most Recent Negotiation:	Contract is now in the evergreen state.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Firm Transportation

Name & Type of Service:	Tetco FT 1
Delivery Pipeline & Contract #:	Tetco #800233
Associated Transportation Contract:	Tetco Supply Contracts, Spot Supply contracts.
Contract Term:	2.8 Years
Initial Contract Date:	12/15/1998
Contract Expiration Date:	10/31/2001
Quality of Service:	Firm
Daily Maximum:	23,822 DT per Day
Availability:	See Tetco Tariff
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	N/A
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	See Tetco Tariff
Most Recent Negotiation:	Contract is now in the evergreen state.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Firm Transportation

Name & Type of Service:	Tetco FT 1
Delivery Pipeline & Contract #:	Tetco #800514
Associated Transportation Contract:	Tetco Supply Contracts & Spot Supply contracts.
Contract Term:	7.8 Years
Initial Contract Date:	12/15/1996
Contract Expiration Date:	10/31/2003
Quality of Service:	Firm
Daily Maximum:	18,000 DT per Day
Availability:	See Tetco Tariff
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	N/A
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	See Tetco Tariff
Most Recent Negotiation:	Contract in Evergreen state.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Firm Transportation

Name & Type of Service:	Tetco FT 1
Delivery Pipeline & Contract #:	Tetco #800515
Associated Transportation Contract:	Tetco Supply Contracts & Spot Supply contracts.
Contract Term:	10.8 Years
Initial Contract Date:	12/15/1996
Contract Expiration Date:	10/31/2007
Quality of Service:	Firm
Daily Maximum:	18,000 DT per Day
Availability:	See Tetco Tariff
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	N/A
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	See Tetco Tariff
Most Recent Negotiation:	Contract in Evergreen state.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Firm Transportation

Name & Type of Service:	Tetco FTS 2
Delivery Pipeline & Contract #:	Tetco #800232
Associated Contract:	
Contract Term:	8.75 Years
Initial Contract Date:	06/01/1993
Contract Expiration Date:	03/31/2002
Quality of Service:	Firm
Daily Maximum:	5,394 DT per Day
Availability:	See Tetco Tariff
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	N/A
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	See Tetco Tariff
Most Recent Negotiation:	Contract in Evergreen state.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Firm Transportation

Name & Type of Service:	Tetco FTS 7
Delivery Pipeline & Contract #:	Tetco #331725
Associated Contract:	Dominion GSS
Contract Term:	10 Years
Initial Contract Date:	08/07/1996
Contract Expiration Date:	03/31/2005
Quality of Service:	Firm
Daily Maximum:	7,788 DT per Day
Availability:	See Tetco Tariff
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	N/A
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	See Tetco Tariff
Most Recent Negotiation:	Contract in Evergreen state.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Firm Transportation

Name & Type of Service:	Tetco FTS 8
Delivery Pipeline & Contract #:	Tetco #331822
Associated Contract:	Dominion GSS
Contract Term:	10 Years
Initial Contract Date:	08/07/1996
Contract Expiration Date:	03/31/2005
Quality of Service:	Firm
Daily Maximum:	25,709 DT per Day
Availability:	See Tetco Tariff
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	N/A
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	See Tetco Tariff
Most Recent Negotiation:	Contract in Evergreen state.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Interruptible Transportation

Name & Type of Service:	Tetco IT
Delivery Pipeline & Contract #:	Tetco #710468
Associated Contract:	Supply Contracts, Spot Supply
Contract Term:	1 Year
Initial Contract Date:	04/01/1993
Contract Expiration Date:	03/31/1994
Quality of Service:	Interruptible
Daily Maximum:	See Tetco Tariff
Availability:	See Tetco Tariff
Fuel (%):	Subject to Tetco fuel rates
Minimum Take Level:	N/A
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	See Tetco Tariff
Most Recent Negotiation:	Contract in Evergreen status.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Underground Storage Contract

Name & Type of Service: Dominion GSS Storage Service

Delivery Pipeline & Contract #: Tetco

Associated Contract: Tetco FTS 7 Contract#331725
Tetco FTS 8 Contract#331822

Contract Term: 13 Years

Initial Contract Date: 09/30/1993

Contract Expiration Date: 03/31/2006

Quality of Service: Firm (Unbundled)

Daily Maximum Withdrawal: 34,047 DT Inventory % W/D Rate
>35% 34,047
<35% 31,323
<16% 23,833
<10% 21,450

Availability (Withdrawal/Injection): Year round

Daily Maximum Injection: 21,772 DT <50%
18,313 DT >50%

Maximum Storage Quantity: 3,918,971 DT

Fuel (%): 1.95 % injection

Nomination & Scheduling: GISB Standards.

Within day nomination changes may be accomplished as long as both Tetco and Dominion parties are notified and can confirm.

Other Terms & Conditions: Contract in Evergreen state.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Underground Storage Contract

Name & Type of Service:	SS1
Delivery Pipeline & Contract #:	Tetco Contract #400121
Associated Contract:	None
Contract Term:	19 Years
Initial Contract Date:	06/01/1993
Contract Expiration Date:	04/30/2012
Quality of Service:	Firm (Bundled)
Daily Maximum Withdrawal:	44,118 DT <u>Inventory % W/D Rate</u> 100%>20% 44,118 <20%>=10% 36,764 <10%>= 0% 29,413
Availability (Withdrawal/Injection):	Year round
Daily Maximum Injection:	13,606 DT
Maximum Storage Quantity:	2,647,080 DT
Fuel (%) Injection & Withdrawal:	Subject to Tetco Tariff Revisions
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	Storage is a No Notice Service

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Underground Storage Contract

Name & Type of Service:	SS1
Delivery Pipeline & Contract #:	Tetco Contract #400209
Associated Contract:	None
Contract Term:	19 Years
Initial Contract Date:	06/01/1993
Contract Expiration Date:	04/30/2012
Quality of Service:	Firm (Bundled)
Daily Maximum Withdrawal:	20,847 DT <u>Inventory % W/D Rate</u>
	100%>20% 20,847
	<20%>=10% 17,372
	<10%>= 0% 13,899
Availability (Withdrawal/Injection):	Year round
Daily Maximum Injection:	12,656 DT
Maximum Storage Quantity:	2,462,120 DT
Fuel (%) Injection & Withdrawal:	Subject to Tetco Tariff Revisions
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	Storage is a No Notice Service

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Underground Storage Contract

Name & Type of Service: GSS

Delivery Pipeline & Contract #: Transco Contract #1000791

Associated Contract: None

Contract Term: 10 Years

Initial Contract Date: 07/09/2012

Contract Expiration Date: 03/31/2023

Quality of Service: Firm (Bundled)

Daily Maximum Withdrawal: 61,567 DT

<u>Inventory % W/D Rate</u>	
100%>35%	61,567
35%>=20%	60,951
20%>= 7%	45,560
7%>=0%	33,862

Availability (Withdrawal/Injection): Year round

Daily Maximum Injection:

<50%	22,910
>50%	19,270

Maximum Storage Quantity: 4,123,733 DT

Fuel (%) Injection : Subject to Transco Tariff Revisions

Nomination & Scheduling: GISB Standards.

Other Terms & Conditions: Storage is a No Notice Service

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Underground Storage Contract

Name & Type of Service: S 2

Delivery Pipeline & Contract #: Transco Contract #1000943

Associated Contract: None

Contract Term: 5 Years

Initial Contract Date: 04/16/1996

Contract Expiration Date: 04/15/2001

Quality of Service: Firm (Bundled)

Daily Maximum Withdrawal: 5,191 DT Inventory % W/D Rate
100%>20% 5,191
20%>=10% 4,238
10%>= 0% 3,482

Availability (Withdrawal/Injection): Injection from April 16 to Nov 15
Withdrawal from Nov 16 to April 15

Daily Maximum Injection: 3,900 DT

Maximum Storage Quantity: 466,548 DT

Fuel (%) Injection & Withdrawal: Subject to Transco Tariff Revisions

Nomination & Scheduling: GISB Standards.

Other Terms & Conditions: Contract is now in the evergreen state.
Storage is a No Notice Service.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Underground Storage Contract

Name & Type of Service: WSS

Delivery Pipeline & Contract #: Transco Contract #1038582

Associated Contract: Transco 1003691 & 1005001

Contract Term: 1 Year

Initial Contract Date: 04/01/2001

Contract Expiration Date: 03/31/2002

Quality of Service: Firm (Unbundled)

Daily Maximum Withdrawal: 35,115 Inventory % W/D Rate

100%>80%	35,115
80%>=60%	31,471
60%>= 40%	28,512
40%>=20%	23,828
20%>=0 %	19,283

Availability (Withdrawal/Injection): Year Round

Daily Maximum Injection: <50% 18,533
>50% 15,588

Maximum Storage Quantity: 3,335,909 DT

Fuel (%) Injection : Subject to Transco Tariff Revisions

Nomination & Scheduling: GISB Standards.

Other Terms & Conditions: Storage converted to Part 284G. Contract is now in the evergreen state.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Underground Storage Contract

Name & Type of Service:	ES
Delivery Pipeline & Contract #:	Transco Contract #1010416
Associated Contract:	Transco 1003691 & 1005001
Contract Term:	Contract Pending
Initial Contract Date:	N/A
Contract Expiration Date:	10/31/2016
Quality of Service:	Firm (Unbundled)
Daily Maximum Withdrawal:	38,327 DT non-ratcheted
Availability (Withdrawal/Injection):	Year Round
Daily Maximum Injection:	3,198 DT
Maximum Storage Quantity:	323,416 DT
Fuel (%) Injection :	Subject to Transco Tariff Revisions
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	Storage contract 1010416 has been abandoned.back to the pipeline.

PHILA.GAS WORKS

PGW NATURAL GAS CONTRACT INFORMATION
Underground Storage Contract

Name & Type of Service:	ES
Delivery Pipeline & Contract #:	Transco Contract #1039085
Associated Contract:	Transco 1003691 & 1005001
Contract Term:	June 1, 2001 through March 31, 2005
Initial Contract Date:	06/01/2001
Contract Expiration Date:	03/31/2016
Quality of Service:	Firm (Unbundled)
Daily Maximum Withdrawal:	52,077 DT non-ratcheted
Availability (Withdrawal/Injection):	Year Round
Daily Maximum Injection:	4,346 DT
Maximum Storage Quantity:	439,455 DT
Fuel (%) Injection :	Subject to Transco Tariff Revisions
Nomination & Scheduling:	GISB Standards.
Other Terms & Conditions:	Storage contract 1039085 has been abandoned back to the pipeline.

Tab 17

Docket No. R-17XXX

Item 53.65 (3)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.65 (3)

Efforts made by the utility to obtain gas, transportation or storage from nonaffiliated interests.

Response:

PGW has no affiliates, therefore, all gas purchases were made from non-affiliated interests. Also see the response to 53.64(c)(6) outlining PGW's current least cost fuel procurement practices.

Tab 18

Docket No. R-17XXX

Item 53.65 (4)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.65 (4)

The specific reasons why the utility has purchased gas, transportation or storage from an affiliated interest and demonstration that the purchases are consistent with a least cost fuel procurement policy.

Response:

PGW has no affiliates, therefore, all gas purchases were made from non-affiliated interests. Also see the response to 53.64(c)(6) outlining PGW's current least cost fuel procurement practices.

Tab 19

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 53.65 (5) The sources and amounts of gas, transportation or storage, which have been withheld from the market by the utility or, affiliated interest and the reasons why the gas, transportation or storage has been withheld?

Response: PGW has no affiliates.

PGW operates two LNG Peak shaving facilities with a total usable storage capacity of 3.9 Bcf, 18.84 percent of PGW's total storage capacity. When pipeline and underground storage deliveries are insufficient to meet sendout requirements, LNG storage withdrawals will be considered. These LNG storage withdrawals are based upon incremental costs, weather forecasts, inventory balances, distribution system requirements, and other variables such as plant maintenance and operating requirements all of which can influence the vaporization and liquefaction rates of PGW's LNG facilities.

PGW used a total of 1,248,686 Mcf of LNG to meet city sendout requirements during fiscal year 2016.

Tab 20

Docket No. R-17XXX

Item 1317 (a)(1)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1317 (a)(1)

General rule.--In every rate proceeding instituted by a natural gas distribution utility, pursuant to section 1307(f) (relating to sliding scale of rates; adjustments), each such utility shall be required to supply to the commission such information, to be established by commission regulation within 120 days of the passage of this section, that will permit the commission to make specific findings as to whether the utility is pursuing a least cost fuel procurement policy, consistent with the utility's obligation to provide safe, adequate and reliable service to its customers. Such information shall include, but need not be limited to, information, data and statements regarding:

(1) The utility's participation in rate proceedings before the Federal Energy Regulatory Commission which affect the utility's gas costs.

Response:

Please refer to Item 53.64(c)(4) contained in this filing.

Tab 21

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1317 (a)(2)

General rule.--In every rate proceeding instituted by a natural gas distribution utility, pursuant to section 1307(f) (relating to sliding scale of rates; adjustments), each such utility shall be required to supply to the commission such information, to be established by commission regulation within 120 days of the passage of this section, that will permit the commission to make specific findings as to whether the utility is pursuing a least cost fuel procurement policy, consistent with the utility's obligation to provide safe, adequate and reliable service to its customers. Such information shall include, but need not be limited to, information, data and statements regarding:

(2) The utility's efforts to negotiate favorable contracts with gas suppliers and to renegotiate existing contracts with gas suppliers or take legal actions necessary to relieve the utility from existing contract terms which are or may be adverse to the interests of the utility's ratepayers.

Response:

Please refer to Item 53.64(c)(1) contained in this filing.

Tab 22

Docket No. R-17XXX

Item 1317 (a)(3)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1317 (a)(3)

General rule.--In every rate proceeding instituted by a natural gas distribution utility, pursuant to section 1307(f) (relating to sliding scale of rates; adjustments), each such utility shall be required to supply to the commission such information, to be established by commission regulation within 120 days of the passage of this section, that will permit the commission to make specific findings as to whether the utility is pursuing a least cost fuel procurement policy, consistent with the utility's obligation to provide safe, adequate and reliable service to its customers. Such information shall include, but need not be limited to, information, data and statements regarding:

(3) The utility's efforts to secure lower cost gas supplies both within and outside of the Commonwealth, including the use of transportation arrangements with pipelines and other gas distribution companies.

Response:

Please refer to Item 53.64(c)(1) contained in this filing.

Tab 23

Docket No. R-17XXX

Item 1317 (a)(4)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1317 (a)(4)

General rule.--In every rate proceeding instituted by a natural gas distribution utility, pursuant to section 1307(f) (relating to sliding scale of rates; adjustments), each such utility shall be required to supply to the commission such information, to be established by commission regulation within 120 days of the passage of this section, that will permit the commission to make specific findings as to whether the utility is pursuing a least cost fuel procurement policy, consistent with the utility's obligation to provide safe, adequate and reliable service to its customers. Such information shall include, but need not be limited to, information, data and statements regarding:

(4) The sources and amounts of all gas supplies which have been withheld or have been caused to be withheld from the market by the utility and the reasons why such gas is not to be utilized.

Response:

Please refer to Item 53.65 (5) contained in this filing.

Tab 24

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1317 (b)(1)

Integrated gas companies.--In the case of a natural gas distribution utility which purchases all or part of its gas supplies from an affiliated interest, as that term is defined in section 2101 (relating to definition of affiliated interest), such utility shall, in addition to the materials required in subsection (a), be required to provide to the commission such information, to be established by commission regulation within 120 days of the passage of this section, that will permit the commission to make specific findings as to whether any purchases of gas from an affiliated interest are consistent with a least cost fuel procurement policy, consistent with the utility's obligation to provide safe, adequate and reliable service to its customers. Such information shall include, but need not be limited to, statements regarding:

(1) Efforts made by the utility to obtain gas supplies from nonaffiliated interests.

Response:

Please refer to Item 53.65 (3) contained in this filing.

Tab 25

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1317 (b)(2)

Integrated gas companies.--In the case of a natural gas distribution utility which purchases all or part of its gas supplies from an affiliated interest, as that term is defined in section 2101 (relating to definition of affiliated interest), such utility shall, in addition to the materials required in subsection (a), be required to provide to the commission such information, to be established by commission regulation within 120 days of the passage of this section, that will permit the commission to make specific findings as to whether any purchases of gas from an affiliated interest are consistent with a least cost fuel procurement policy, consistent with the utility's obligation to provide safe, adequate and reliable service to its customers. Such information shall include, but need not be limited to, statements regarding:

(2) The specific reasons why the utility has purchased gas supplies from an affiliated interest and demonstration that such purchases are consistent with a least cost fuel procurement policy.

Response:

Please refer to Item 53.65 (4) contained in this filing.

Tab 26

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1317 (b)(3)

Integrated gas companies.--In the case of a natural gas distribution utility which purchases all or part of its gas supplies from an affiliated interest, as that term is defined in section 2101 (relating to definition of affiliated interest), such utility shall, in addition to the materials required in subsection (a), be required to provide to the commission such information, to be established by commission regulation within 120 days of the passage of this section, that will permit the commission to make specific findings as to whether any purchases of gas from an affiliated interest are consistent with a least cost fuel procurement policy, consistent with the utility's obligation to provide safe, adequate and reliable service to its customers. Such information shall include, but need not be limited to, statements regarding:

(3) The sources and amounts of all gas supplies which have been withheld from the market by the utility or any affiliated interest and the reasons why such gas is not being utilized.

Response:

Please refer to Item 53.65 (5) contained in this filing.

Tab 27

Docket No. R-17XXX

Item 1317 (c)(1)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1317 (c)(1)

Reliability plans.--As part of its filing under section 1307(f) or if it is not required to make such a filing on an annual basis, a natural gas distribution company, as defined in section 2202 (relating to definitions), shall file a proposed reliability plan with the commission which shall, at a minimum, identify the following:

(1) The projected peak day and seasonal requirements of the firm customers utilizing the distribution system of the natural gas distribution company during the 12-month projected period specified in section 1307(f)(1). Where operationally required, the design peak day requirements shall be specified for discrete segments of each natural gas distribution system.

Response:

Please refer to Item 53.64(c)(13) contained in this filing.

Tab 28

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1317 (c)(2)

Reliability plans.--As part of its filing under section 1307(f) or if it is not required to make such a filing on an annual basis, a natural gas distribution company, as defined in section 2202 (relating to definitions), shall file a proposed reliability plan with the commission which shall, at a minimum, identify the following:

(2) The transportation capacity, storage, peaking or on-system production that ensures deliverability of the natural gas supplies necessary to meet such projected period peak day and seasonal requirements.

Response:

PGW does not maintain a specific document entitled a Reliability Plan, however, all of the components that would be contained in such a document are prepared by PGW and are contained in this filing in Items 53.64 (c)(1), 53.64 (c)(3), 53.64 (c)(5), 53.64 (c)(6), 53.64 (c)(10), 53.64 (c)(12), 53.64 (c)(13), 53.64 (c)(14), 53.65 (2) and 53.65 (5).

Tab 29

Docket No. R-17XXX

Item 1317 (d)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1317 (d)

Supply plans.--As part of its filing under section 1307(f), a natural gas distribution company shall file a proposed plan with the commission for acquisition or receipt of natural gas supplies.

Response:

Please refer to Item 53.64(c)(1) and 53.65 (2) contained in this filing.

Tab 30

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1318 (a)(1)

General rule.--In establishing just and reasonable rates for those natural gas distribution companies, as defined in section 2202 (relating to definitions), with gross intrastate operating revenues in excess of \$40,000,000 under section 1307(f) (relating to sliding scale of rates; adjustments) or 1308(d) (relating to voluntary changes in rates) or any other rate proceeding, the commission shall consider the materials provided by the utilities pursuant to section 1317 (relating to regulation of natural gas costs). No rates for a natural gas distribution utility shall be deemed just and reasonable unless the commission finds that the utility is pursuing a least cost fuel procurement policy, consistent with the utility's obligation to provide safe, adequate and reliable service to its customers. In making such a determination, the commission shall be required to make specific findings which shall include, but need not be limited to, findings that:

(1) The utility has fully and vigorously represented the interests of its ratepayers in proceedings before the Federal Energy Regulatory Commission.

Response:

Please refer to Item 53.64(c)(4) contained in this filing.

Tab 31

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1318 (a)(2)

General rule.--In establishing just and reasonable rates for those natural gas distribution companies, as defined in section 2202 (relating to definitions), with gross intrastate operating revenues in excess of \$40,000,000 under section 1307(f) (relating to sliding scale of rates; adjustments) or 1308(d) (relating to voluntary changes in rates) or any other rate proceeding, the commission shall consider the materials provided by the utilities pursuant to section 1317 (relating to regulation of natural gas costs). No rates for a natural gas distribution utility shall be deemed just and reasonable unless the commission finds that the utility is pursuing a least cost fuel procurement policy, consistent with the utility's obligation to provide safe, adequate and reliable service to its customers. In making such a determination, the commission shall be required to make specific findings which shall include, but need not be limited to, findings that:

(2) The utility has taken all prudent steps necessary to negotiate favorable gas supply contracts and to relieve the utility from terms in existing contracts with its gas suppliers which are or may be adverse to the interests of the utility's ratepayers.

Response:

Please refer to Item 53.64(c)(1) contained in this filing.

Tab 32

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1318 (a)(3)

General rule.--In establishing just and reasonable rates for those natural gas distribution companies, as defined in section 2202 (relating to definitions), with gross intrastate operating revenues in excess of \$40,000,000 under section 1307(f) (relating to sliding scale of rates; adjustments) or 1308(d) (relating to voluntary changes in rates) or any other rate proceeding, the commission shall consider the materials provided by the utilities pursuant to section 1317 (relating to regulation of natural gas costs). No rates for a natural gas distribution utility shall be deemed just and reasonable unless the commission finds that the utility is pursuing a least cost fuel procurement policy, consistent with the utility's obligation to provide safe, adequate and reliable service to its customers. In making such a determination, the commission shall be required to make specific findings which shall include, but need not be limited to, findings that:

(3) The utility has taken all prudent steps necessary to obtain lower cost gas supplies on both short-term and long-term bases both within and outside the Commonwealth, including the use of gas transportation arrangements with pipelines and other distribution companies.

Response:

Please refer to Item 53.64(c)(1) contained in this filing.

Tab 33

Docket No. R-17XXX

Item 1318 (a)(4)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1318 (a)(4)

General rule.--In establishing just and reasonable rates for those natural gas distribution companies, as defined in section 2202 (relating to definitions), with gross intrastate operating revenues in excess of \$40,000,000 under section 1307(f) (relating to sliding scale of rates; adjustments) or 1308(d) (relating to voluntary changes in rates) or any other rate proceeding, the commission shall consider the materials provided by the utilities pursuant to section 1317 (relating to regulation of natural gas costs). No rates for a natural gas distribution utility shall be deemed just and reasonable unless the commission finds that the utility is pursuing a least cost fuel procurement policy, consistent with the utility's obligation to provide safe, adequate and reliable service to its customers. In making such a determination, the commission shall be required to make specific findings which shall include, but need not be limited to, findings that:

(4) The utility has not withheld from the market or caused to be withheld from the market any gas supplies which should have been utilized as part of a least cost fuel procurement policy.

Response:

Please refer to Item 53.65 (5) contained in this filing.

Tab 34

Docket No. R-17XXX

Item 1318 (b)(1)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1318 (b)(1)

Limitation on gas purchased from affiliates.--In any instance in which a natural gas distribution company purchases all or part of its gas supplies from an affiliated interest, as that term is defined in section 2101 (relating to definition of affiliated interest), the commission, in addition to the determinations and findings set forth in subsection (a), shall be required to make specific findings with regard to the justness and reasonableness of all such purchases. Such findings shall include, but not be limited to findings:

(1) That the utility has fully and vigorously attempted to obtain less costly gas supplies on both short-term and long-term bases from nonaffiliated interests.

Response:

Please refer to Item 53.65 (3) contained in this filing.

Tab 35

Docket No. R-17XXX

Item 1318 (b)(2)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1318 (b)(2)

Limitation on gas purchased from affiliates.--In any instance in which a natural gas distribution company purchases all or part of its gas supplies from an affiliated interest, as that term is defined in section 2101 (relating to definition of affiliated interest), the commission, in addition to the determinations and findings set forth in subsection (a), shall be required to make specific findings with regard to the justness and reasonableness of all such purchases. Such findings shall include, but not be limited to findings:

(2) That each contract for the purchase of gas from its affiliated interest is consistent with a least cost fuel procurement policy.

Response:

Please refer to Item 53.65 (4) contained in this filing.

Tab 36

Docket No. R-17XXX

Item 1318 (b)(3)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1318 (b)(3)

Limitation on gas purchased from affiliates.--In any instance in which a natural gas distribution company purchases all or part of its gas supplies from an affiliated interest, as that term is defined in section 2101 (relating to definition of affiliated interest), the commission, in addition to the determinations and findings set forth in subsection (a), shall be required to make specific findings with regard to the justness and reasonableness of all such purchases. Such findings shall include, but not be limited to findings:

(3) That neither the utility nor its affiliated interest has withheld from the market any gas supplies which should have been utilized as part of a least cost fuel procurement policy.

Response:

Please refer to Item 53.65 (5) contained in this filing.

Tab 37

Docket No. R-17XXX

Item 1318 (c)

Philadelphia Gas Works

Pennsylvania Public Utility Commission
52 Pa. Code §53.61, et seq.

Item 1318 (c)

Shut-in gas; special rule.--In determining whether a gas utility has purchased the least costly natural gas available, the commission shall consider as available to the utility any gas supplies that reasonably could have been brought to market during the relevant period but which were voluntarily withheld from the market by the utility or an affiliated interest of the utility.

Response:

Please refer to Item 53.65 (5) contained in this filing.