Pennsylvania Utility Commission, et al v. Philadelphia Gas Works	Docket No.: R-2023-3038069 C-2023-3038375 C-2023-3038286 C-2023-3038722
Initial Evidentiary Call-In Telephonic	

Pages 35 - 113

Judge's Chambers
State Office Building
801 Market Street
Philadelphia, PA

Tuesday, April 25, 2023
Commencing at 10:00 a.m.

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Hearing Date: April 25, 2023

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800 West Montgomery Avenue • Philadelphia, PA 19122

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February 1, 2023

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

Re: Philadelphia Gas Works ("PGW") 2023-2024 Gas Cost Rate Filing
Docket No. R-2023-XXXXXX

Dear Secretary Chiavetta:

On behalf of Philadelphia Gas Works ("PGW"), enclosed for filing is the supporting information for the pre-filing for PGW's annual 2023-2024 Gas Cost Rate ("GCR") Filing. The information is presented in two volumes. Volume 1 contains Tabs 1-3 and Volume 2 contains Tabs 4-37. Consistent with the Commission's September 11, 2001 Order entered at Docket No. R-00016378, and the process followed in prior GCR filings, PGW is submitting the pre-filing information required by the Commission's regulations on or before February 1, 2023, and will submit its annual GCR filing on or before March 1, 2023.

Contained in this submission is the information required by 66 Pa. C.S. §§ 1307(f), 1317, and 1318, as well as 52 Pa. Code§ 53.64 and 53.65, in accordance with Ordering Paragraph No. 14 of the Commission's November 2, 2000 Order, Docket No. R-00005619. The data required by 53.64(c)(1) is being filed pursuant to the attached schedule, as agreed upon by the Bureau of Investigation & Enforcement and the Office of the Consumer Advocate in prior Gas Cost Rate proceedings.

Finally, pursuant to the Commission's July 14, 2022 Order at Docket No. R-2022-3030686 approving the parties' Settlement, at Ordering Paragraph 6, PGW intends to depart from certain requirements of 52 Pa. Code Sections 53.45(b), 53.64(c), 53.68(a) and 53.64(i)(5)(i) regarding the timing of bill inserts, public notice, and underlying data to be relied upon for the March 1, 2023 Section 1307(f) filing. Specifically, PGW intends to:

(1) provide written notice to customers by bill insert in the one-month billing cycle commencing on the date of the annual 1307(f) filing, on March 1, of a tariff addendum and tariff or tariff supplement reflecting changes in purchased gas costs and ending no later than thirty (30) days after the filing of such tariff addendum and tariff or tariff supplement, instead of beginning such notice with the one-month

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billing cycle commencing thirty (30) days prior to the filing of the tariff addendum and tariff or tariff supplement as required by 52 Pa. Code§ 53.68(a);

(2) in company offices in which payments are accepted, provide public notice on die date of the annual 1307(f) filing, March 1, of a tariff addendum and tariff or tariff supplement reflecting changes in purchased gas costs, instead of thirty (30) days prior to the filing of such tariff addendum and tariff or tariff supplement as required by 52 Pa. Code §§ 53.68(a) and 53.45(b); and

(3) provide estimated data for both January and February in the March 1 quarterly 1307(f) filing instead of providing actual data for January done as required by 52 Pa. Code § 53.64(i)(5)(i).

Please do not hesitate to contact me if you have any questions.

Respectfully,

/s/ Craig W. Berry

Craig W. Berry, Esquire

Enclosure
cc: Cert. of Service w/enc.
Paul Diskin (pdiskin@pa.gov)

Filing Schedule for the Data Required by 52 Pa. Code § 53.64(c)(1)

Filing Requirement:	Data Filed with the February 1, 2023 Pre-Filing:	Data Filed with the March 1, 2023 Annual Filing:
Schedule 1 - Twelve (12) month purchased gas costs expressed in terms of volumes and dollars for the period January 1, 2022 to December 31, 2022.	Actual data for the eleven (11) months ending November 30, 2022 and actual/estimated data for the one (1) month ending December 31, 2022.	Actual data for the twelve (12) months ending December 31, 2022.
Schedule 2 - Capacity release credits by pipeline by month for the period January 1, 2022 to December 31, 2022.	Actual data for the twelve (12) months ending December 31, 2022.	Actual data for the twelve (12) months ending December 31, 2022.
Schedule 3 - Twenty (20) month forecasted summary of total fuel purchased for the period of January 1, 2023 through August 31, 2024.		Twenty (20) month forecast.
Schedule 4 - Twenty (20) month forecast of capacity release credits by pipeline by month for the period of January 1, 2023 through August 31, 2024.		Twenty (20) month forecast.

CERTIFICATE OF SERVICE

I hereby certify that this day I served a copy of PGW's Supporting Information for the February 1, 2023 Pre-filing of its Annual GCR Filing upon the persons listed below in the manner indicated in accordance with the requirements of 52 Pa. Code Section 1.54.

Via Email

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Dated: February 1, 2023

/s/ Craig W. Berry
Craig W. Berry, Esq.

Docket R-2023-XXXXXXX

Volume 1

Philadelphia Gas Works

Before The

Pennsylvania Public Utility Commission

Computation of Annual Purchased Gas Costs
For Twelve Months Ending August 31, 2024

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, 2023

Philadelphia Gas Works 1307(f) - 2023 Prefiling

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Docket No. R-2023-XXXXXXX
Item 53.64(c)(1)

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:

(1) A complete list in schedule format of each spot and each long term source of gas supply, production, transportation and storage, used in the past 12 months, which 12-month period shall end 2 months prior to the date of the tariff filing, separately setting forth on a monthly basis the quantity and price of gas delivered, produced, transported or stored, maximum daily quantity levels, maximum annual quantity levels, a detailed description of warrantee or penalty provisions, including liquidated damages, take or pay provisions or minimum bill or take provisions of the purchases, balancing provisions and copies of Federal tariffs and contract provisions relating to the purchases—including demand and commodity components. With regard to each contemplated future source of supply, production, transportation or storage, during each of the next 20 months for each source, provide the name of the source, the maximum daily quantity, the maximum annual quantity, the minimum take levels, a detailed description of warrantee or penalty provisions, including liquidated damages, take or pay provisions or minimum bill or take provisions of the purchases, balancing provisions and contractual or tariffed terms of the purchases, copies of applicable Federal tariffs, the expiration date of each contract, the date when each contract was most recently negotiated and the details of the negotiation—such as meeting held, offers made, and changes in contractual obligation—and whether current proceedings, negotiations or renegotiations are pending before the Federal Energy Regulatory Commission, and the like, to modify the price, quantity or another condition of purchase, and if so, the details of the proceedings, negotiations or renegotiations. Gas supply sources which individually represent

less than 3% of the total system supply may be shown collectively, such as other local gas purchases.

Response:

The attached schedules described below contain details of the requested information. Information concerning PGW's Transportation and Storage contracts are addressed in Tab #2, responding to the requirements of section 53.64(c)(3).

Schedule 1 – Twelve (12) month purchased gas costs expressed in terms of volumes and dollars for the period January 1, 2022 to December 31, 2022. Actual data is provided for the eleven (11) months ending November 30, 2022 and actual/estimated data for the one (1) month ending December 31, 2022. Actual data for the twelve (12) months ending December 31, 2022 will be provided in the 1307(f) filing of March 1, 2023.

Schedule 2 – Actual capacity release credits by pipeline by month for the period January 1, 2022 through December 31, 2022.

Schedule 3 – Twenty (20) month forecasted summary of total fuel purchased for the period January 1, 2022 through August 31, 2023 will be provided in the 1307(f) filing of March 1, 2023.

Schedule 4 – Twenty (20) month forecast of capacity release credits by pipeline by month for the period January 1, 2022 through August 31, 2023 will be provided in the 1307(f) filing of March 1, 2023.

Schedule 5 - Detailed description of warrantee or penalty provisions, including liquidated damages, take or pay provisions or minimum bill or take provisions of the purchases, balancing provisions and copies of Federal tariffs and contract provisions relating to the purchases—including demand and commodity components.

1307F 53.64 C1-Schedule 1

Philadelphia Gas Works

Summary Of Total Purchased

	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
Williams	$ 2,453,780	$ 2,216,013	$ 2,346,485	$ 2,766,184	$ 2,859,372	$ 1,852,972	$ 1,897,936	$ 2,329,253	$ 2,552,589	$ 2,856,260	$ 1,304,930	$ 1,428,829
Texas Eastern	$ 2,204,686	$ 4,162,651	$ 4,018,623	$ 4,615,747	$ 4,192,828	$ 4,247,992	$ 4,330,161	$ 4,176,341	$ 4,126,970	$ 4,740,460	$ 3,061,208	$ 2,991,939
Eastern Gas	$ 140,168	$ 133,434	$ 133,688	$ 243,846	$ 249,809	$ 247,393	$ 249,495	$ 249,495	$ 245,902	$ 243,183	$ 258,042	$ 258,330
Spot Purchases -Transco	$ 3,484	$ 217,841	$ 74,632	$ 51,655	$ 157,684	$ 126,703	$ 3,818	$ 57,514	$ 398,999	$ 6,850	$ 76,706	$ 399,467
Spot Purchases -Transco												
Spot Purchases -Tetco												
Transco Supply2												
Transco Supply3												
Transco Supply6	$ 1,838,455	$ 2,586,220	$ 2,063,205									
Transco Supply7				$ 785,585	$ 1,118,325	$ 1,343,250	$ 1,107,475	$ 5,207,225	$ 3,599,250	$ 2,584,005	$ 791,701	$ 1,104,507
Transco Supply8												
Transco Supply10												
Transco Supply12												
Transco Supply14												
Transco Supply17												
Transco Supply20												
Transco Supply21												
Transco Supply22												
Transco Supply23												
Transco Supply24												
Transco Supply25												
Transco Supply26												
Transco Supply27												
Transco Supply28												
Transco Supply29												
Transco Supply30	$ 2,681,000	$ 2,246,242	$ 906,900	$ 1,727,900	$ 388,200	$ 6,000	$ 6,200	$ 6,200	$ 6,000	$ 284,400		
Transco Supply31												
Transco Supply32	$ 3,362,875	$ 2,987,375	$ 1,335,500	$ 3,780,775	$ 5,002,945	$ 2,165,250	$ 2,070,025	$ 2,070,025	$ 1,666,000	$ 2,690,125	$ 2,726,225	$ 6,429,889
Transco Supply33												
Transco Supply34	$ 1,257,283	$ 1,772,610	$ 1,405,895									
Transco Supply35												
Transco Supply36												
Transco Supply37	$ 3,007,698	$ 4,312,630	$ 3,395,198	$ 1,887,229	$ 2,908,938	$ 3,487,009	$ 3,088,019	$ 3,042,851	$ 2,559,137	$ 2,644,441	$ 4,583,100	$ 6,445,985
Transco Supply40	$ 2,007,112	$ 2,903,710	$ 2,255,540	$ 624,300	$ 959,760	$ 1,149,300	$ 848,160	$ 1,231,010	$ 1,159,800	$ 642,010	$ 2,578,003	$ 3,636,219
Transco Supply41											$ 111,075	$ 828,425
Transco Supply42											$ 439,275	$ 2,448,250
Tetco Supply1												
Tetco Supply2												
Tetco Supply3												
Tetco Supply4												
Tetco Supply5												
Tetco Supply7												
Tetco Supply13				$ 1,972,125	$ 2,930,663	$ 3,529,125	$ 3,566,550	$ 3,343,350	$ 3,003,750	$ 2,552,850		
Tetco Supply14												
Tetco Supply16	$ 1,226,438	$ 2,003,750	$ 1,466,688	$ 395,100	$ 586,830	$ 706,500	$ 560,790	$ 560,790	$ 542,700	$ 560,790		
Tetco Supply17												
Tetco Supply18												
Tetco Supply19												
Tetco Supply20												
Tetco Supply21												
Tetco Supply22												
Tetco Supply23												
Tetco Supply24	$ 499,100	$ 809,200	$ 595,200	$ 1,059,150	$ 1,570,615	$ 1,889,550	$ 1,501,640	$ 1,501,640	$ 1,453,200	$ 1,501,640	$ 3,893,550	$ 7,244,219
Tetco Supply25												
Tetco Supply26	$ 2,942,550	$ 2,600,000	$ 850,200	$ 227,184	$ 704,700	$ 135,990	$ 3,271,710	$ 2,331,465	$ 1,148,780	$ 2,202,175		
Tetco Supply27												
Tetco Supply28											$ 1,042,695	$ 2,266,999
Tetco Supply29												
Tetco Supply30												
Tetco Supply31												
Tetco Supply32												
Tetco Supply33	$ 1,501,541	$ 2,580,955	$ 1,793,435	$ 597,000	$ 914,500	$ 1,116,000	$ 798,250	$ 1,128,400	$ 1,104,750	$ 1,141,575	$ 1,724,772	$ 2,947,530
Tetco Supply34	$ 266,213	$ 455,490	$ 323,873	$ 368,100	$ 558,930	$ 679,500	$ 684,015	$ 640,770	$ 499,500	$ 516,150	$ 336,150	$ 520,800
Tetco Supply35	$ 1,734,807	$ 1,798,655	$ 1,061,891	$ 129,900	$ 293,825	$ 2,250	$ 255,475	$ 2,325	$ 29,400	$ 346,300		
Tetco Supply36												
Tetco Supply37	$ 1,226,438	$ 2,003,750	$ 1,466,688									
Tetco Supply38											$ 695,850	$ 2,195,288
TOTAL COSTS	**$ 28,353,626**	**$ 35,790,528**	**$ 25,493,638**	**$ 21,231,780**	**$ 25,397,924**	**$ 22,684,785**	**$ 24,239,718**	**$ 27,878,654**	**$ 24,096,727**	**$ 25,513,213**	**$ 23,623,282**	**$ 41,146,674**
Storage Injection	$ 17,210	$ 16,286	$ 16,452	$ 9,708	$ 90,693	$ 52,457	$ 90,737	$ 72,081	$ 77,223	$ 57,225	$ 87,801	$ 9,060
Storage Withdrawal	$ 174,325	$ 95,894	$ 98,837	$ 56,350	$ 3,858	$ 2,158	$ -	$ -	$ -	$ 5,544	$ 51,279	$ 96,160

Philadelphia Gas Works
Volumes Purchased

PGW Exh. 1

Volume	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
Spot Purchases -Transco	357	55,998	21,090	9,088	23,447	21,907	735	7,119	112,091	1,474	30,667	43,009
Spot Dem-Transco												
Spot Purchases -Tetco												
Spot for Resale												
Firm Contracts												
Transco Supply2 - Dem												
Commodity												
Transco Supply3 - Dem												
Commodity												
Transco Supply6 - Dem												
Commodity	449,500	406,000	449,500									
Transco Supply7 - Dem												
Commodity				149,209	155,000	150,000	155,000	155,000	150,000	155,000	149,660	153,831
Transco Supply7 - Dem												
Commodity								217,000	210,000	217,000		
Transco Supply8 - Dem												
Commodity												
Transco Supply10 - Dem												
Commodity												
Transco Supply14 - Dem												
Commodity												
Transco Supply22 - Dem												
Commodity												
Transco Supply23 - Dem												
Commodity												
Transco Supply25 - Dem												
Commodity												
Transco Supply26 - Dem												
Commodity												
Transco Supply29 - Dem												
Commodity												
Transco Supply30 - Dem												
Commodity												
Transco Supply30 - Dem	620,000	560,000	620,000	600,000	620,000	600,000	620,000	620,000	600,000	620,000		
Commodity	620,000	418,193	180,000	280,000	55,000					50,000		
Transco Supply30 - Dem												
Commodity		60,000										
Transco Supply31 - Dem												
Commodity												
Transco Supply32 - Dem	775,000	700,000	775,000	750,000	775,000	750,000	775,000	775,000	750,000	775,000	750,000	775,000
Commodity	775,000	625,000	265,000	425,000	180,000				5,000	200,000	165,000	635,000
Transco Supply32 - Dem												
Commodity				270,000	279,000	270,000	279,000	279,000	270,000	279,000	300,000	310,000
Transco Supply32 - Dem												
Commodity					310,000							
Transco Supply33 - Dem												
Commodity												
Transco Supply34 - Dem												
Commodity	155,000	140,000	155,000									
Transco Supply34 - Dem												
Commodity	155,000	140,000	154,959									
Transco Supply35 - Dem												
Commodity												
Transco Supply36 - Dem												
Commodity												
Transco Supply37 - Dem												
Commodity	108,500	98,000	108,500	105,000	108,500	105,000	108,500	108,500	105,000	108,500	105,000	108,500
Transco Supply37 - Dem												
Commodity												
Transco Supply37 - Dem												
Commodity	108,500	98,000	108,500	105,000	108,500	105,000	108,500	108,500	105,000	108,500	105,000	108,500
Transco Supply37 - Dem												
Commodity												
Transco Supply37 - Dem												
Commodity	248,000	224,000	248,000	112,080	115,816	112,080	115,816	115,816	112,080	115,816	240,000	248,000
Transco Supply37 - Dem												
Commodity	310,000	280,000	310,000								300,000	310,000
Transco Supply37 - Dem												
Commodity				135,000	139,500	135,000	139,500	139,500	135,000	139,500	135,000	139,500
Transco Supply40 - Dem												
Commodity	242,885	219,380	242,885	90,000	93,000	90,000	93,000	93,000	90,000	93,000	235,050	242,885
Transco Supply40 - Dem												
Commodity												
Transco Supply40 - Dem												
Commodity	286,812	259,056	286,812	60,000	62,000	60,000	62,000	62,000	60,000	62,000	277,560	286,812
Transco Supply41 - Dem											150,000	155,000
Commodity											15,000	125,000
Transco Supply42 - Dem											450,000	465,000
Commodity											60,000	365,000
Tetco Supply1 - Dem												
Commodity												
Tetco Supply3 - Dem												
Commodity												
Tetco Supply5 - Dem												
Commodity												
Tetco Supply13 - Dem												
Commodity				450,000	465,000	450,000	465,000	465,000	450,000	465,000		
Tetco Supply16 - Dem												
Commodity	387,500	350,000	387,500	90,000	93,000	90,000	93,000	93,000	90,000	93,000		
Tetco Supply16 - Dem												
Commodity												
Tetco Supply19 - Dem												
Commodity												
Tetco Supply24 - Dem												
Commodity	155,000	140,000	155,000	150,000	155,000	150,000	155,000	155,000	150,000	155,000	150,000	155,000
Tetco Supply24 - Dem												
Commodity				90,000	93,000	90,000	93,000	93,000	90,000	93,000	600,000	620,000
Tetco Supply24 - Dem											600,000	620,000
Commodity											150,000	519,300
Tetco Supply25 - Dem												
Commodity												
Tetco Supply26 - Dem												
Commodity	759,680	600,000	190,000	35,597	100,000	24,000	522,000	304,000	195,000	510,000		
Tetco Supply26 - Dem												
Commodity												
Tetco Supply28 - Dem												
Commodity											282,000	384,400
Tetco Supply29 - Dem												
Commodity												
Tetco Supply30 - Dem												
Commodity												
Tetco Supply31 - Dem												
Commodity												
Tetco Supply32 - Dem												
Commodity												
Tetco Supply33 - Dem												
Commodity	374,666	338,408	374,666								362,580	374,666
Tetco Supply33 - Dem												
Commodity												
Tetco Supply33 - Dem												
Commodity	155,000	140,000	155,000	150,000	155,000	150,000	155,000	155,000	150,000	155,000	150,000	155,000
Tetco Supply33 - Dem												
Commodity												
Tetco Supply34 - Dem												
Commodity	93,000	84,000	93,000	90,000	93,000	90,000	93,000	93,000	90,000	93,000	90,000	93,000
Tetco Supply34 - Dem												
Commodity												
Tetco Supply35 - Dem												
Commodity	168,764	149,352	168,764									
Tetco Supply35 - Dem	310,000	280,000	310,000	300,000	310,000	300,000	310,000	310,000	300,000	310,000		
Commodity	310,000	220,000	90,000	20,000	40,000		50,000		5,000	80,000		
Tetco Supply35 - Dem												
Commodity												
Tetco Supply36 - Dem												
Commodity												
Tetco Supply37 - Dem												
Commodity	387,500	350,000	387,500									
Tetco Supply38 - Dem											450,000	465,000
Commodity											120,000	420,000
Tetco Supply38 - Dem												
Commodity												

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Philadelphia Gas Works
Cost Of Fuels Purchased

Rate - $	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
Spot Purchases -Transco	$ 9.7600	$ 3.8902	$ 3.5387	$ 5.6839	$ 6.7251	$ 5.7837	$ 5.1947	$ 8.0790	$ 3.5596	$ 4.6470	$ 2.5012	$ 9.2880
Spot Dem-Transco												
Spot Purchases -Tetco												
Spot for Resale												
Firm Contracts												
Transco Supply2 - Dem												
Commodity												
Transco Supply3 - Dem												
Commodity												
Transco Supply6 - Dem												
Commodity	$ 4.0900	$ 6.3700	$ 4.5900									
Transco Supply7 - Dem												
Commodity				$ 5.2650	$ 7.2150	$ 8.9550	$ 7.1450	$ 13.9950	$ 9.9950	$ 6.8850	$ 5.2900	$ 7.1800
Transco Supply7 - Dem												
Commodity								$ 14.0000	$ 10.0000	$ 6.9900		
Transco Supply8 - Dem												
Commodity												
Transco Supply10 - Dem												
Commodity												
Transco Supply14 - Dem												
Commodity												
Transco Supply22 - Dem												
Commodity												
Transco Supply23 - Dem												
Commodity												
Transco Supply25 - Dem												
Commodity												
Transco Supply26 - Dem												
Commodity												
Transco Supply29 - Dem												
Commodity												
Transco Supply30 - Dem												
Commodity												
Transco Supply30 - Dem	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100		
Commodity	$ 4.3142	$ 4.7804	$ 5.0039	$ 6.1496	$ 6.9455					$ 5.5640		
Transco Supply30 - Dem												
Commodity		$ 4.0250										
Transco Supply31 - Dem												
Commodity												
Transco Supply32 - Dem	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0800	$ 0.0800
Commodity	$ 4.3142	$ 4.7518	$ 4.9665	$ 6.0248	$ 6.9131				$ 5.4500	$ 4.9838	$ 6.2135	$ 6.4449
Transco Supply32 - Dem												
Commodity				$ 4.4500	$ 6.4800	$ 7.9500	$ 7.3500	$ 7.3500	$ 6.0000	$ 6.0000	$ 5.4700	$ 7.3400
Transco Supply32 - Dem												
Commodity					$ 6.2300							
Transco Supply33 - Dem												
Commodity												
Transco Supply34 - Dem												
Commodity	$ 4.0370	$ 6.2870	$ 4.4970									
Transco Supply34 - Dem												
Commodity	$ 4.0745	$ 6.3745	$ 4.5745									
Transco Supply35 - Dem												
Commodity												
Transco Supply36 - Dem												
Commodity												
Transco Supply37 - Dem												
Commodity	$ 3.8000	$ 6.0800	$ 4.3000	$ 4.1625	$ 6.1925	$ 7.6625	$ 6.2725	$ 6.2725	$ 5.6325	$ 5.6325	$ 5.0400	$ 6.9100
Transco Supply37 - Dem												
Commodity												
Transco Supply37 - Dem												
Commodity	$ 3.8350	$ 6.1150	$ 4.3350	$ 4.1850	$ 6.2150	$ 7.6850	$ 6.2950	$ 6.2950	$ 5.6550	$ 5.6550	$ 5.1800	$ 7.0500
Transco Supply37 - Dem												
Commodity												
Transco Supply37 - Dem												
Commodity	$ 3.7250	$ 6.0050	$ 4.2250	$ 4.0525	$ 6.0825	$ 7.5525	$ 7.3825	$ 6.9925	$ 5.5225	$ 5.5225	$ 5.0500	$ 6.9200
Transco Supply37 - Dem												
Commodity	$ 4.0500	$ 6.3300	$ 4.5500								$ 5.4100	$ 7.2800
Transco Supply37 - Dem												
Commodity				$ 4.1225	$ 6.1525	$ 7.6225	$ 6.2325	$ 6.2325	$ 5.5925	$ 5.5925	$ 5.0000	$ 6.8700
Transco Supply40 - Dem												
Commodity	$ 3.8000	$ 6.0800	$ 4.3000	$ 4.1700	$ 6.2000	$ 7.6700	$ 5.4800	$ 7.9500	$ 7.7400	$ 4.1500	$ 5.0400	$ 6.9100
Transco Supply40 - Dem												
Commodity												
Transco Supply40 - Dem												
Commodity	$ 3.7800	$ 6.0600	$ 4.2800	$ 4.1500	$ 6.1800	$ 7.6500	$ 5.4600	$ 7.9300	$ 7.7200	$ 4.1300	$ 5.0200	$ 6.8900
Transco Supply41 - Dem											$ 0.1150	$ 0.1150
Commodity											$ 6.2550	$ 6.4848
Transco Supply42 - Dem											$ 0.1400	$ 0.1400
Commodity											$ 6.2713	$ 6.5292
Tetco Supply1 - Dem												
Commodity												
Tetco Supply3 - Dem												
Commodity												
Tetco Supply5 - Dem												
Commodity												
Tetco Supply13 - Dem												
Commodity				$ 4.3825	$ 6.3025	$ 7.8425	$ 7.6700	$ 7.1900	$ 6.6750	$ 5.4900		
Tetco Supply16 - Dem												
Commodity	$ 3.1650	$ 5.7250	$ 3.7850	$ 4.3900	$ 6.3100	$ 7.8500	$ 6.0300	$ 6.0300	$ 6.0300	$ 6.0300		
Tetco Supply16 - Dem												
Commodity												
Tetco Supply19 - Dem												
Commodity												
Tetco Supply24 - Dem												
Commodity	$ 3.2200	$ 5.7800	$ 3.8400	$ 4.4300	$ 6.3500	$ 7.8900	$ 6.0700	$ 6.0700	$ 6.0700	$ 6.0700	$ 5.4200	$ 5.9300
Tetco Supply24 - Dem												
Commodity				$ 4.3850	$ 6.3050	$ 7.8450	$ 6.0300	$ 6.0300	$ 6.0300	$ 6.0300	$ 3.6900	$ 5.8900
Tetco Supply24 - Dem											$ 0.0100	$ 0.0100
Commodity											$ 5.7370	$ 5.1359
Tetco Supply25 - Dem												
Commodity												
Tetco Supply26 - Dem												
Commodity	$ 3.8734	$ 4.3333	$ 4.4747	$ 6.3821	$ 7.0470	$ 5.6663	$ 6.2676	$ 7.6693	$ 5.8912	$ 4.3180		
Tetco Supply26 - Dem												
Commodity												
Tetco Supply28 - Dem												
Commodity											$ 3.6975	$ 5.8975
Tetco Supply29 - Dem												
Commodity												
Tetco Supply30 - Dem												
Commodity												
Tetco Supply31 - Dem												
Commodity												
Tetco Supply32 - Dem												
Commodity												
Tetco Supply33 - Dem												
Commodity	$ 2.8700	$ 5.4300	$ 3.4900								$ 3.4000	$ 5.6000
Tetco Supply33 - Dem												
Commodity												
Tetco Supply33 - Dem												
Commodity	$ 2.7500	$ 5.3100	$ 3.3700	$ 3.9800	$ 5.9000	$ 7.4400	$ 5.1500	$ 7.2800	$ 7.3650	$ 7.3650	$ 3.2800	$ 5.4800
Tetco Supply33 - Dem												
Commodity												
Tetco Supply34 - Dem												
Commodity	$ 2.8625	$ 5.4225	$ 3.4825	$ 4.0900	$ 6.0100	$ 7.5500	$ 7.3550	$ 6.8900	$ 5.5500	$ 5.5500	$ 3.7350	$ 5.6000
Tetco Supply34 - Dem												
Commodity												
Tetco Supply35 - Dem												
Commodity	$ 3.1700	$ 5.7300	$ 3.7900									
Tetco Supply35 - Dem	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075		
Commodity	$ 3.8629	$ 4.2625	$ 4.6661	$ 6.3825	$ 7.2875		$ 5.0630		$ 5.4300	$ 4.2997		
Tetco Supply35 - Dem												
Commodity												
Tetco Supply36 - Dem												
Commodity												
Tetco Supply37 - Dem												
Commodity	$ 3.1650	$ 5.7250	$ 3.7850									
Tetco Supply38 - Dem											$ 0.0225	$ 0.0225
Commodity											$ 5.7144	$ 5.2020
Tetco Supply38 - Dem												
Commodity												

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Philadelphia Gas Works
Cost Of Fuels Purchased

Amounts - $	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
Spot Purchases -Transco	$ 3,484	$ 217,841	$ 74,632	$ 51,655	$ 157,684	$ 126,703	$ 3,818	$ 57,514	$ 398,999	$ 6,850	$ 76,706	$ 399,467
Spot -Transco												
Spot Purchases -Tetco												
Spot for Resale												
Firm Contracts												
Transco Supply2 - Dem												
Commodity												
Transco Supply3 - Dem												
Commodity												
Transco Supply6 - Dem												
Commodity	$ 1,838,455	$ 2,586,220	$ 2,063,205									
Transco Supply7 - Dem												
Commodity				$ 785,585	$ 1,118,325	$ 1,343,250	$ 1,107,475	$ 2,169,225	$ 1,499,250	$ 1,067,175	$ 791,701	$ 1,104,507
Transco Supply7 - Dem												
Commodity								$ 3,038,000	$ 2,100,000	$ 1,516,830		
Transco Supply8 - Dem												
Commodity												
Transco Supply10 - Dem												
Commodity												
Transco Supply14 - Dem												
Commodity												
Transco Supply22 - Dem												
Commodity												
Transco Supply23 - Dem												
Commodity												
Transco Supply25 - Dem												
Commodity												
Transco Supply26 - Dem												
Commodity												
Transco Supply29 - Dem												
Commodity												
Transco Supply30 - Dem												
Commodity												
Transco Supply30 - Dem	$ 6,200	$ 5,600	$ 6,200	$ 6,000	$ 6,200	$ 6,000	$ 6,200	$ 6,200	$ 6,000	$ 6,200		
Commodity	$ 2,674,800	$ 1,999,142	$ 900,700	$ 1,721,900	$ 382,000					$ 278,200		
Transco Supply30 - Dem												
Commodity		$ 241,500										
Transco Supply31 - Dem												
Commodity												
Transco Supply32 - Dem	$ 19,375	$ 17,500	$ 19,375	$ 18,750	$ 19,375	$ 18,750	$ 19,375	$ 19,375	$ 18,750	$ 19,375	$ 60,000	$ 62,000
Commodity	$ 3,343,500	$ 2,969,875	$ 1,316,125	$ 2,560,525	$ 1,244,350				$ 27,250	$ 996,750	$ 1,025,225	$ 4,092,489
Transco Supply32 - Dem												
Commodity				$ 1,201,500	$ 1,807,920	$ 2,146,500	$ 2,050,650	$ 2,050,650	$ 1,620,000	$ 1,674,000	$ 1,641,000	$ 2,275,400
Transco Supply32 - Dem												
Commodity					$ 1,931,300							
Transco Supply33 - Dem												
Commodity												
Transco Supply34 - Dem												
Commodity	$ 625,735	$ 880,180	$ 697,035									
Transco Supply34 - Dem												
Commodity	$ 631,548	$ 892,430	$ 708,860									
Transco Supply35 - Dem												
Commodity												
Transco Supply36 - Dem												
Commodity												
Transco Supply37 - Dem												
Commodity	$ 412,300	$ 595,840	$ 466,550	$ 437,063	$ 671,886	$ 804,563	$ 680,566	$ 680,566	$ 591,413	$ 611,126	$ 529,200	$ 749,735
Transco Supply37 - Dem												
Commodity												
Transco Supply37 - Dem												
Commodity	$ 416,098	$ 599,270	$ 470,348	$ 439,425	$ 674,328	$ 806,925	$ 683,008	$ 683,008	$ 593,775	$ 613,568	$ 543,900	$ 764,925
Transco Supply37 - Dem												
Commodity												
Transco Supply37 - Dem												
Commodity	$ 923,800	$ 1,345,120	$ 1,047,800	$ 454,204	$ 704,451	$ 846,484	$ 855,012	$ 809,843	$ 618,962	$ 639,594	$ 1,212,000	$ 1,716,160
Transco Supply37 - Dem												
Commodity	$ 1,255,500	$ 1,772,400	$ 1,410,500								$ 1,623,000	$ 2,256,800
Transco Supply37 - Dem												
Commodity				$ 556,538	$ 858,274	$ 1,029,038	$ 869,434	$ 869,434	$ 754,988	$ 780,154	$ 675,000	$ 958,365
Transco Supply40 - Dem												
Commodity	$ 922,963	$ 1,333,830	$ 1,044,406	$ 375,300	$ 576,600	$ 690,300	$ 509,640	$ 739,350	$ 696,600	$ 385,950	$ 1,184,652	$ 1,678,335
Transco Supply40 - Dem												
Commodity**			$ (16,421)									$ (18,251)
Transco Supply40 - Dem												
Commodity	$ 1,084,149	$ 1,569,879	$ 1,227,555	$ 249,000	$ 383,160	$ 459,000	$ 338,520	$ 491,660	$ 463,200	$ 256,060	$ 1,393,351	$ 1,976,135
Transco Supply41 - Dem											$ 17,250	$ 17,825
Commodity											$ 93,825	$ 810,600
Transco Supply42 - Dem											$ 63,000	$ 65,100
Commodity											$ 376,275	$ 2,383,150
Tetco Supply1 - Dem												
Commodity												
Tetco Supply3 - Dem												
Commodity												
Tetco Supply5 - Dem												
Commodity												
Tetco Supply13 - Dem												
Commodity				$ 1,972,125	$ 2,930,663	$ 3,529,125	$ 3,566,550	$ 3,343,350	$ 3,003,750	$ 2,552,850		
Tetco Supply16 - Dem												
Commodity	$ 1,226,438	$ 2,003,750	$ 1,466,688	$ 395,100	$ 586,830	$ 706,500	$ 560,790	$ 560,790	$ 542,700	$ 560,790		
Tetco Supply16 - Dem												
Commodity												
Tetco Supply19 - Dem												
Commodity												
Tetco Supply24 - Dem												
Commodity	$ 499,100	$ 809,200	$ 595,200	$ 664,500	$ 984,250	$ 1,183,500	$ 940,850	$ 940,850	$ 910,500	$ 940,850	$ 813,000	$ 919,150
Tetco Supply24 - Dem												
Commodity				$ 394,650	$ 586,365	$ 706,050	$ 560,790	$ 560,790	$ 542,700	$ 560,790	$ 2,214,000	$ 3,651,800
Tetco Supply24 - Dem											$ 6,000	$ 6,200
Commodity											$ 860,550	$ 2,667,069
Tetco Supply25 - Dem												
Commodity												
Tetco Supply26 - Dem												
Commodity	$ 2,942,550	$ 2,600,000	$ 850,200	$ 227,184	$ 704,700	$ 135,990	$ 3,271,710	$ 2,331,465	$ 1,148,780	$ 2,202,175		
Tetco Supply26 - Dem												
Commodity												
Tetco Supply28 - Dem												
Commodity											$ 1,042,695	$ 2,266,999
Tetco Supply29 - Dem												
Commodity												
Tetco Supply30 - Dem												
Commodity												
Tetco Supply31 - Dem												
Commodity												
Tetco Supply32 - Dem												
Commodity												
Tetco Supply33 - Dem												
Commodity	$ 1,075,291	$ 1,837,555	$ 1,307,584								$ 1,232,772	$ 2,098,130
Tetco Supply33 - Dem												
Commodity**			$ (36,500)									
Tetco Supply33 - Dem												
Commodity	$ 426,250	$ 743,400	$ 522,350	$ 597,000	$ 914,500	$ 1,116,000	$ 798,250	$ 1,128,400	$ 1,104,750	$ 1,141,575	$ 492,000	$ 849,400
Tetco Supply33 - Dem												
Commodity												
Tetco Supply34 - Dem												
Commodity	$ 266,213	$ 455,490	$ 323,873	$ 368,100	$ 558,930	$ 679,500	$ 684,015	$ 640,770	$ 499,500	$ 516,150	$ 336,150	$ 520,800
Tetco Supply34 - Dem												
Commodity												
Tetco Supply35 - Dem												
Commodity	$ 534,982	$ 855,787	$ 639,616									
Tetco Supply35 - Dem	$ 2,325	$ 2,100	$ 2,325	$ 2,250	$ 2,325	$ 2,250	$ 2,325	$ 2,325	$ 2,250	$ 2,325		
Commodity	$ 1,197,500	$ 937,750	$ 419,950	$ 127,650	$ 291,500		$ 253,150		$ 27,150	$ 343,975		
Tetco Supply35 - Dem												
Commodity*		$ 3,018										
Tetco Supply36 - Dem												
Commodity												
Tetco Supply37 - Dem												
Commodity	$ 1,226,438	$ 2,003,750	$ 1,466,688									
Tetco Supply38 - Dem											$ 10,125	$ 10,463
Commodity											$ 685,725	$ 2,184,825
Tetco Supply38 - Dem												
Commodity												

*Supplier purchased gas back from PGW at a discounted price.
**Annual return

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Philadelphia Gas Works
Volumes Purchased
Williams Pipeline Company

Volumes-DTH	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
S-2 Storage Capacity	1,088,612	1,205,249	1,166,370	1,205,249	1,166,370	1,205,249	1,205,249	1,166,370	1,205,249	1,166,370	1,205,249	1,205,249
S-2 Demand	145,348	160,921	155,730	160,921	155,730	160,921	160,921	155,730	160,921	155,730	160,921	160,921
Handling fr Stg.	124,887	77,167	6,182	(30)							20,720	58,945
Handling to Stg.				10,461	56,398	54,000	55,800	55,800	54,000	23,250	14,162	
GSS Demand	1,908,577	1,723,876	1,908,577	1,847,010	1,908,577	1,847,010	1,908,577	1,908,577	1,847,010	1,908,577	1,847,010	1,908,577
Stg. Cap.Vol. Chg.	127,835,723	115,464,524	127,835,723	123,711,990	127,835,723	123,711,990	127,835,723	127,835,723	123,711,990	127,835,723	123,711,990	127,835,723
Handling fr Stg.	1,202,333	741,673	572,089	259,240	7,125						208,605	471,401
Storage Injection	5,652	19,421	37,193	39,859	403,056	532,724	557,746	559,548	540,125	320,778	155,963	34,064
WSS Demand	1,088,565	983,220	1,088,565	1,053,450	1,088,565	1,053,450	1,088,565	1,088,565	1,053,450	1,088,565	1,053,450	1,088,565
Stg. Cap Vol Chg.	103,413,179	93,405,452	103,413,179	100,077,270	103,413,179	100,077,270	103,413,179	103,413,179	100,077,270	103,413,179	100,077,270	103,413,179
Handling fr Stg.	564,048	175,673	53,704	87,521	40,425	2,198					92,050	364,968
Handling to Stg.	19,483	73,547	217,778	80,749	121,984	59,822	98,074	316,116	300,121	197,887	23,664	873
FT Demand/.3691	5,121,572	4,625,936	5,145,349	4,979,370	5,145,349	4,979,370	5,145,349	5,145,349	4,979,370	5,145,349	4,979,370	5,121,572
FT Commodity/.3691	1,214,682	905,336	548,747	1,841,812	1,670,581	1,109,864	1,108,727	1,320,277	1,288,400	1,601,035	481,193	838,995
PSFT Demand/5001	84,754	76,552										84,754
PSFT Commodity/5001												
Eminence Cust.Dem.												
Eminence Cust. Cap.												
Eminence Storage Dem.												
Eminence Storage Cap.												
Handling fr Stg.												
Handling to Stg.												
Capacity Rel. Dem.Credit #3691*	(3,848,000)	(3,640,000)	(4,030,000)	(2,250,000)	(2,325,000)	(4,249,583)	(4,703,750)	(4,320,000)	(3,600,000)	(2,325,000)	(3,600,000)	(3,720,000)
Capacity Rel.Dem. Credit #5001	(482,329)	(434,896)	(483,011)	(478,470)	(460,600)	(450,604)	(460,071)	(464,628)	(471,090)	(459,296)	(477,210)	(510,260)
S2 Credit												
Eminence #2 Demand												
Eminence #2 Capacity												
Handling to Stg.												
Handling fr. Stg.												
Eminence #2 adj.												
Cashout / Cashout Majority Sell			998									
S 2 Adj. (02/1/16 - 02/29/16)												
WSS Capacity Release												
Eminence Capacity Release												
Unathorized Overrun 02/2016												
Eminence Capacity Release												
Cashout / Cashout 03/31/16												

* While the amount charged for the release is zero, the money will be recovered in the Sales Service Charge to make the GCR whole.

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Philadelphia Gas Works
Cost Of Fuel Purchased
Williams Pipeline Company

Rate - $	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
S-2 Capacity	0.01086	0.01710	0.01414	0.01564	0.01490	0.01490	0.01490	0.01490	0.01490	0.01490	0.01490	0.01490
Storage Demand	0.20365	0.38356	0.30539	0.30862	0.30468	0.30468	0.30468	0.30497	0.30482	0.30482	0.30482	0.30468
Handling fr Stg.	0.07787	0.07647	0.18162	0.08500	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.08637	0.07397
Handling to Stg.	0.00000	0.00000	0.00000	0.04635	0.04635	0.04635	0.04635	0.04635	0.04635	0.04665	0.04665	0.00000
GSS Demand	0.10537	0.10537	0.10537	0.13161	0.13161	0.13161	0.13161	0.13161	0.13161	0.13161	0.13186	0.13186
Stg. Cap.Vol. Chg.	0.00063	0.00063	0.00063	0.00097	0.00097	0.00097	0.00097	0.00097	0.00097	0.00097	0.00097	0.00097
Handling fr Stg.	0.04304	0.04306	0.04306	0.05615	0.05615	0.00000	0.00000	0.00000	0.00000	0.00000	0.05720	0.05720
Storage Injection	0.04619	0.04621	0.04621	0.05688	0.05688	0.05688	0.05688	0.05688	0.05688	0.05688	0.05928	0.05928
WSS Demand	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102
Stg. Cap Vol Chg.	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033
Handling fr Stg.	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00000	0.00000	0.00000	0.00000	0.00440	0.00440
Handling to Stg.	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440
FT Demand/.3691	0.52781	0.52781	0.52584	0.52699	0.52699	0.52699	0.52699	0.52699	0.52699	0.52699	0.52699	0.52896
FT Commodity/.3691	0.03595	0.03442	0.02679	0.02731	0.01973	0.01956	0.01804	0.01613	0.01635	0.02222	0.04657	0.05305
PSFT Demand/.5001	0.73977	0.73977	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.74195
PSFT Commodity/.5001												
Eminence Cust.Dem.												
Eminence Cust. Cap.												
Eminence Storage Dem.												
Eminence Storage Cap.												
Handling fr Stg.												
Handling to Stg.												
Capacity Rel. Dem.Credit #3691*	0.14070	0.13942	0.13673	0.06939	0.06939	0.25151	0.23827	0.15898	0.09966	0.06939	0.44292	0.44292
Capacity Rel. Dem Credit #5001	0.54595	0.54595	0.54595	0.54718	0.54718	0.54718	0.54629	0.54718	0.54718	0.54718	0.54718	0.54718
S2 Credit												
Eminence #2 Demand												
Eminence #2 Capacity												
Handling to Stg.												
Handling fr Stg.												
WSS Capacity Release												
Eminenec Capacity Release												
S 2 Adj. (02/1/15 - 02/29/16)												
Cashout / Cashout Majority Sell			4.66690									
Unathorized Overrun 02/2016												
Cashout / Cashout 03/31/16												

* While the amount charged for the release is zero, the money will be recovered in the Sales Service Charge to make the GCR whole.

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Philadelphia Gas Works
Cost of Fuel Purchased
Williams Pipeline Company

Amount - $	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
S-2 Capacity	$ 11,822	$ 20,613	$ 16,493	$ 18,845	$ 17,379	$ 17,958	$ 17,958	$ 17,379	$ 17,958	$ 17,379	$ 17,958	$ 17,958
Storage Demand	$ 29,600	$ 61,723	$ 47,558	$ 49,663	$ 47,448	$ 49,029	$ 49,029	$ 47,492	$ 49,052	$ 47,470	$ 49,052	$ 49,029
Handling fr Stg.	$ 9,725	$ 5,901	$ 1,123	$ (3)							$ 1,790	$ 4,360
Handling to Stg.				$ 485	$ 2,614	$ 2,503	$ 2,586	$ 2,586	$ 2,503	$ 1,085	$ 661	
GSS Demand	$ 201,107	$ 181,645	$ 201,107	$ 243,085	$ 251,188	$ 243,085	$ 251,188	$ 251,188	$ 243,085	$ 251,188	$ 243,547	$ 251,665
Stg. Cap.Vol. Chg.	$ 80,536	$ 72,743	$ 80,536	$ 120,001	$ 124,001	$ 120,001	$ 124,001	$ 124,001	$ 120,001	$ 124,001	$ 120,001	$ 124,001
Handling fr Stg.	$ 51,748	$ 31,936	$ 24,634	$ 14,556	$ 400						$ 11,932	$ 26,964
Storage Injection	$ 261	$ 897	$ 1,719	$ 2,267	$ 22,926	$ 30,301	$ 31,725	$ 31,827	$ 30,722	$ 18,246	$ 9,246	$ 2,019
WSS Demand	$ 33,767	$ 30,499	$ 33,767	$ 32,678	$ 33,767	$ 32,678	$ 33,767	$ 33,767	$ 32,678	$ 33,767	$ 32,678	$ 33,767
Stg. Cap Vol Chg.	$ 34,126	$ 30,824	$ 34,126	$ 33,026	$ 34,126	$ 33,026	$ 34,126	$ 34,126	$ 33,026	$ 34,126	$ 33,026	$ 34,126
Handling fr Stg.	$ 2,482	$ 773	$ 236	$ 385	$ 178	$ 10					$ 405	$ 1,606
Handling to Stg.	$ 86	$ 324	$ 958	$ 355	$ 537	$ 263	$ 432	$ 1,391	$ 1,321	$ 871	$ 104	$ 4
FT Demand/.3691	$ 2,703,200	$ 2,441,600	$ 2,705,653	$ 2,624,071	$ 2,711,540	$ 2,624,071	$ 2,711,540	$ 2,711,540	$ 2,624,071	$ 2,711,540	$ 2,624,071	$ 2,709,084
FT Commodity/.3691	$ 43,673	$ 31,162	$ 14,699	$ 50,291	$ 32,960	$ 21,710	$ 19,996	$ 21,295	$ 21,060	$ 35,581	$ 22,407	$ 44,510
PSFT Demand/5001	$ 62,698	$ 56,631										$ 62,883
PSFT Commodity												
Eminence Cust.Dem.												
Eminence Cust. Cap.												
Eminence Storage Dem.												
Eminence Storage Cap.												
Handling fr Stg.												
Handling to Stg.												
Capacity Rel. Dem.Credit #3691*	$ (541,415)	$ (507,500)	$ (551,025)	$ (156,120)	$ (161,324)	$ (1,068,800)	$ (1,120,774)	$ (686,774)	$ (358,770)	$ (161,324)	$ (1,594,500)	$ (1,647,650)
Capacity Rel. Dem.Credit #5001	$ (263,327)	$ (237,432)	$ (263,699)	$ (261,808)	$ (252,032)	$ (246,561)	$ (251,334)	$ (254,234)	$ (257,772)	$ (251,317)	$ (261,120)	$ (279,202)
S2 Credit	$ (6,310)	$ (6,327)	$ (6,057)	$ (5,593)	$ (6,335)	$ (6,302)	$ (6,304)	$ (6,332)	$ (6,345)	$ (6,351)	$ (6,326)	$ (6,295)
Eminence #2 Demand												
Eminence #2 Capacity												
Handling to Stg.												
Handling fr Stg.												
Eminence #2 ajd.												
Cashout / Cashout 02/29/2016												
S2 Adj. (02/1/15 - 02/28/15)												
WSS Capacity Release												
Eminence Capacity Release												
FT-Demand Charges Paid by VA Power												
Cashout / Cashout 03/31/16												
S2 Adj. (02/1/16 - 02/29/16)												
Cashout / Cashout Majority Sell			$ 4,658									
Unathorized Overrun 02/2016												
TOTAL	$ 2,453,780	$ 2,216,013	$ 2,346,485	$ 2,766,184	$ 2,859,372	$ 1,852,972	$ 1,897,936	$ 2,329,253	$ 2,552,589	$ 2,856,260	$ 1,304,930	$ 1,428,829

* While the amount charged for the release is zero, the money will be recovered in the Sales Service Charge to make the GCR whole.

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Philadelphia Gas Works
Volumes Purchased
Texas Eastern

Volumes - Dth	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
CDS Market Area Demand	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
CDS Access Area Demand	97,573	97,573	97,573	97,573	97,573	97,573	97,573	97,573	97,573	97,573	97,573	97,573
CDS Commodity	1,343,232	1,142,864	702,732	917,363	1,029,756	886,044	1,457,921	1,192,297	1,060,486	1,475,767	658,921	1,405,097
CDS ACA Charge	1,343,232	1,142,864	702,732	917,363	1,029,756	886,044	1,457,921	1,192,297	1,060,486	1,475,767	658,921	1,405,097
CDS PCB True-up Settlement												
FT1 Market Area Demand	23,822	23,822	23,822	23,822	23,822	23,822	23,822	23,822	23,822	23,822	23,822	23,822
FT1 Access Area Demand	54,878	54,878	54,878	54,878	54,878	54,878	54,878	54,878	54,878	54,878	54,878	54,878
FT1 Commodity												
FT1 ACA Charge												
FT1 PCB True-up Settlement												
SS1 Demand 400121	44,118	44,118	44,118	44,118	44,118	44,118	44,118	44,118	44,118	44,118	44,118	44,118
Space Charge	220,590	220,590	220,590	220,590	220,590	220,590	220,590	220,590	220,590	220,590	220,590	220,590
Handling fr Storage	632,472	218,729	348,907	143,768	9,006	23,483				13,871	101,989	266,713
Excess Withdrawal												
Storage Injection	30,093	31,800	27,212	17,879	100,911		421,786	88,474	365,171	97,004	65,698	28,088
Excess Injection		22,605	6,462		72,800					23,276		5,184
Storage Surcharge Credit												
PCB True-up Settlement 400121												
SS1 Demand 400209	20,847	20,847	20,847	20,847	20,847	20,847	20,847	20,847	20,847	20,847	20,847	20,847
Space Charge	205,177	205,177	205,177	205,177	205,177	205,177	205,177	205,177	205,176	205,176	205,176	205,176
Handling fr Storage	467,940	275,754	392,941	232,183	26,839					46,065	178,345	242,345
Excess Withdrawal												
Storage Injection	16,907	46,576	40,243	92,884	183,019	86,033	269,618	384,315	81,316	128,059	118,501	75,990
Excess Injection	35,473						18,630		22,154	13,621	120,904	
Storage Surcharge Credit												
PCB True-up Settlement 400209												
FTS-2 Demand	5,394	5,394	5,394	5,394	5,394	5,394	5,394	5,394	5,394	5,394	5,394	5,394
FTS-7 Demand	7,788	7,788	7,788	7,788	7,788	7,788	7,788	7,788	7,788	7,788	7,788	7,788
FTS-8 Demand	25,709	25,709	25,709	25,709	25,709	25,709	25,709	25,709	25,709	25,709	25,709	25,709
FTS-2 PCB True-up Settlement												
FT-1 Market Demand 800514	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
FT-1 Access Area Demand 800514	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474
FT Commodity	558,000	504,000	558,000								540,000	558,000
FT-1 ACA Charge	558,000	504,000	558,000								540,000	558,000
FT3-3 Cap.Rel. dem.credit 800514				(540,000)	(558,000)	(540,000)	(558,000)	(558,000)	(540,000)	(558,000)		
FT3-3 Cap.Rel. dem.credit 800514												
PCB True-up Settlement 800514												
FT-1 Market Demand 800515	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
FT-1 Access Area Demand 800515	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474
FT Commodity	558,000	500,980	558,000								540,000	558,000
FT-1 ACA Charge	558,000	500,980	558,000								540,000	558,000
FT1-3 Cap.Rel. dem. credit 800515				(540,000)	(558,000)	(540,000)	(558,000)	(558,000)	(540,000)	(558,000)		
FT1-3 Cap.Rel. dem. credit 800515												
PCB True-up Settlement 800515												
CDS 800232 M1-M1 Cap. Rel.	(481,864)	(434,476)	(482,701)	(477,990)	(461,001)	(450,570)	(459,513)	(464,256)	(470,580)	(459,017)	(476,520)	(509,578)
FT1-800233 M3-M3 Cap. Rel.	(579,948)	(523,824)	(579,948)	(561,240)	(579,948)	(561,240)	(579,948)	(579,948)	(561,240)	(579,948)	(1,032,480)	(1,066,896)
CDS-800232 M2-M3 Cap. Rel.*	(125,100)	(40,000)										(52,916)
FTS-2,7,8 ACA	1,062,212	731,828	429,284	414,377	155,000	150,000	155,000	155,000	150,000	155,000	560,421	976,544
FTS-2,7,8 Commodity												
CSHOUT UNDER 5% DS												

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Philadelphia Gas Works
Cost Of Fuel Purchased
Texas Eastern

Volumes - Dth	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
CDS Market Area Demand	12.5140	21.4680	21.4680	21.7240	21.7240	21.7240	21.7240	21.7410	21.7410	21.7410	21.7410	21.7260
CDS Access Area Demand	4.1013	5.8936	5.8936	5.9708	5.9708	5.9708	5.9708	6.0039	6.0039	6.0039	6.0039	6.0039
CDS Commodity	0.0777	0.1223	0.1223	0.1255	0.1255	0.1255	0.1255	0.1292	0.1292	0.1292	0.1292	0.1167
CDS ACA Charge	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0015	0.0015	0.0015
CDS PCB True-up Settlement	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FT1 Market Area Demand	12.2910	21.2450	21.2450	21.5010	21.5010	21.5010	21.5010	21.5180	21.5180	21.5180	21.5180	21.5030
FT1 Access Area Demand	4.2994	6.4168	6.4168	6.5363	6.5363	6.5363	6.5363	6.5754	6.5754	6.5754	6.5754	6.5754
FT1 Commodity	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FT1 ACA Charge	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FT1 PCB True-up Settlement	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SS1 Demand 400121	6.5700	9.5100	9.5100	9.6340	9.6340	9.6340	9.6340	9.6380	9.6380	9.6380	9.6380	9.6360
Space Charge	0.3371	0.4368	0.4368	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599
Handling fr Storage	0.0827	0.0903	0.0903	0.0915	0.0915	0.0915	0.0000	0.0000	0.0000	0.0925	0.0925	0.0801
Excess Withdrawal	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Storage Injection	0.0537	0.0468	0.0468	0.0470	0.0470	0.0000	0.0470	0.0470	0.0470	0.0470	0.0470	0.0426
Excess Injection	0.0000	0.4837	0.4837	0.0000	0.5069	0.0000	0.0000	0.0000	0.0000	0.5069	0.0000	0.5021
Storage Surcharge Credit	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PCB True-up Settlement 400121	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SS1 Demand 400209	6.5700	9.5100	9.5100	9.6340	9.6340	9.6340	9.6340	9.6380	9.6380	9.6380	9.6380	9.6360
Space Charge	0.3371	0.4368	0.4368	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599
Handling fr Storage	0.0827	0.0903	0.0903	0.0915	0.0915	0.0000	0.0000	0.0000	0.0000	0.0925	0.0925	0.0801
Excess Withdrawal	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Storage Injection	0.0537	0.0468	0.0468	0.0470	0.0470	0.0470	0.0470	0.0470	0.0470	0.0470	0.0470	0.0426
Excess Injection	0.3912	0.0000	0.0000	0.0000	0.0000	0.0000	0.5069	0.0000	0.5069	0.5069	0.5069	0.0000
Storage Surcharge Credit	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PCB True-up Settlement 400209	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FTS-2 Demand	8.4670	10.1930	10.1930	10.2410	10.2410	10.2410	10.2410	10.2410	10.2410	10.2410	10.2410	10.2400
FTS-7 Demand	7.4250	9.1510	9.1510	9.1990	9.1990	9.1990	9.1990	9.1990	9.1990	9.1990	9.1990	9.1990
FTS-8 Demand	7.2810	8.6900	8.6900	8.7730	8.7730	8.7730	8.7730	8.7730	8.7730	8.7730	8.7730	8.7730
FTS-2 PCB True-up Settlement	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FT-1 Market Demand 800514	12.2910	21.2450	21.2450	21.5010	21.5010	21.5010	21.5010	21.5180	21.5180	21.5180	21.5180	21.5030
FT-1 Access Area Demand 800514	2.8711	3.8859	3.8859	3.8618	3.8618	3.8618	3.8618	3.8809	3.8809	3.8809	3.8809	3.8809
FT Commodity	0.0777	0.1223	0.1223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1292	0.1167
FT-1 ACA Charge	0.0012	0.0012	0.0012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
FT3-3 Cap.Rel. demand credit 800514	0.0000	0.0000	0.0000	0.0610	0.4078	0.4045	0.4053	0.5031	0.5198	0.0460	0.0000	0.0000
FT3-3 Cap.Rel. demand credit 800514	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PCB True-up Settlement 800514	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FT-1 Market Demand 800515	12.2910	21.2450	21.2450	21.5010	21.5010	21.5010	21.5010	21.5180	21.5180	21.5180	21.5180	21.5030
FT-1 Access Area Demand 800515	2.8711	3.8859	3.8859	3.8618	3.8618	3.8618	3.8618	3.8809	3.8809	3.8809	3.8809	3.8809
FT Commodity	0.0777	0.1223	0.1223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1292	0.1167
FT-1 ACA Charge	0.0012	0.0012	0.0012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
FT1-3 Cap.Rel. demand credit 800515	0.0000	0.0000	0.0000	0.0600	0.4078	0.4045	0.4053	0.5031	0.5198	0.0460	0.0000	0.0000
FT1-3 Cap.Rel. demand credit 800515	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PCB True-up Settlement 800515	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CDS 800232 M1-M1 Cap. Rel.	0.5591	0.5683	0.5683	0.9082	0.9082	0.9180	0.9180	0.9170	0.9195	0.9194	0.9194	0.9187
FT1-800233 M3-M3 Cap. Rel.	1.7005	1.7005	1.7005	0.1082	0.1082	0.1082	0.1082	0.1082	0.1082	0.1082	1.8123	1.8123
CDS-800232 M2-M3 Cap. Rel.*	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FTS-2,7,8 ACA	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0015	0.0015	0.0015
FTS-2,7,8 Commodity	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CSHOUT UNDER 5%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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Philadelphia Gas Works
Cost Of Fuel Purchased
Texas Eastern

Amount - $	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
CDS Market Area Demand	$ 938,550	$ 1,610,100	$ 1,610,100	$ 1,629,300	$ 1,629,300	$ 1,629,300	$ 1,629,300	$ 1,630,575	$ 1,630,575	$ 1,630,575	$ 1,630,575	$ 1,629,450
CDS Access Area Demand	$ 400,177	$ 575,053	$ 575,053	$ 582,586	$ 582,586	$ 582,586	$ 582,586	$ 585,822	$ 585,822	$ 585,822	$ 585,822	$ 585,822
CDS Commodity	$ 104,369	$ 139,772	$ 85,944	$ 115,129	$ 129,234	$ 111,199	$ 182,969	$ 154,045	$ 137,015	$ 190,669	$ 85,133	$ 163,975
CDS ACA Charge	$ 1,612	$ 1,371	$ 843	$ 1,101	$ 1,236	$ 1,063	$ 1,750	$ 1,431	$ 1,273	$ 2,214	$ 988	$ 2,108
CDS PCB True-up Settlement												
FT1 Market Area Demand	$ 292,796	$ 506,098	$ 506,098	$ 512,197	$ 512,197	$ 512,197	$ 512,197	$ 512,602	$ 512,602	$ 512,602	$ 512,602	$ 512,244
FT1 Access Area Demand	$ 235,945	$ 352,140	$ 352,140	$ 358,702	$ 358,702	$ 358,702	$ 358,702	$ 360,845	$ 360,845	$ 360,845	$ 360,845	$ 360,845
FT1 Commodity												
FT1 ACA Charge												
FT1 PCB True-up Settlement												
SS1 Demand 400121	$ 289,855	$ 419,562	$ 419,562	$ 425,033	$ 425,033	$ 425,033	$ 425,033	$ 425,209	$ 425,209	$ 425,209	$ 425,209	$ 425,121
Space Charge	$ 74,361	$ 96,354	$ 96,354	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449
Handling fr Storage	$ 52,305	$ 19,751	$ 31,506	$ 13,155	$ 824	$ 2,149				$ 1,283	$ 9,434	$ 21,364
Excess Withdrawal												
Storage Injection	$ 1,616	$ 1,488	$ 1,274	$ 840	$ 4,743		$ 19,824	$ 4,158	$ 17,163	$ 4,559	$ 3,088	$ 1,197
Excess Injection		$ 10,934	$ 3,126		$ 36,902					$ 11,799		$ 2,603
Storage Surcharge Credit	$ (53,872)	$ (51,578)	$ (49,669)	$ (53,940)	$ (53,665)	$ (53,680)	$ (53,915)	$ (54,027)	$ (54,081)	$ (53,867)	$ (53,604)	$ (53,955)
PCB True-up Settlement 400121												
SS1 Demand 400209	$ 136,965	$ 198,255	$ 198,255	$ 200,840	$ 200,840	$ 200,840	$ 200,840	$ 200,923	$ 200,923	$ 200,923	$ 200,923	$ 200,882
Space Charge	$ 69,165	$ 89,621	$ 89,621	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,360	$ 94,360	$ 94,360	$ 94,360
Handling fr Storage	$ 38,699	$ 24,901	$ 35,483	$ 21,245	$ 2,456					$ 4,261	$ 16,497	$ 19,412
Excess Withdrawal												
Storage Injection	$ 908	$ 2,180	$ 1,883	$ 4,366	$ 8,602	$ 4,044	$ 12,672	$ 18,063	$ 3,822	$ 6,019	$ 5,570	$ 3,237
Excess Injection	$ 13,877						$ 9,444		$ 11,230	$ 6,904	$ 61,286	
Storage Surcharge Credit	$ (25,412)	$ (24,330)	$ (23,429)	$ (25,444)	$ (25,314)	$ (25,322)	$ (25,434)	$ (25,486)	$ (25,512)	$ (25,411)	$ (25,287)	$ (25,452)
PCB True-up Settlement 400209												
FTS-2 Demand	$ 45,671	$ 54,981	$ 54,981	$ 55,240	$ 55,240	$ 55,240	$ 55,240	$ 55,240	$ 55,240	$ 55,240	$ 55,240	$ 55,235
FTS-7 Demand	$ 57,826	$ 71,268	$ 71,268	$ 71,642	$ 71,642	$ 71,642	$ 71,642	$ 71,642	$ 71,642	$ 71,642	$ 71,642	$ 71,642
FTS-8 Demand	$ 187,187	$ 223,411	$ 223,411	$ 225,545	$ 225,545	$ 225,545	$ 225,545	$ 225,545	$ 225,545	$ 225,545	$ 225,545	$ 225,545
FTS-2 PCB True-up Settlement												
FT-1 Market Demand 800514	$ 221,238	$ 382,410	$ 382,410	$ 387,018	$ 387,018	$ 387,018	$ 387,018	$ 387,324	$ 387,324	$ 387,324	$ 387,324	$ 387,054
FT-1 Access Area Demand 800514	$ 32,943	$ 44,587	$ 44,587	$ 44,311	$ 44,311	$ 44,311	$ 44,311	$ 44,529	$ 44,529	$ 44,529	$ 44,529	$ 44,529
FT Commodity	$ 43,357	$ 61,639	$ 68,243								$ 69,768	$ 65,119
FT-1 ACA Charge	$ 670	$ 605	$ 670								$ 810	$ 837
FT3-3 Cap.Rel. dem. credit 800514				$ (32,940)	$ (227,552)	$ (218,430)	$ (226,157)	$ (280,730)	$ (280,692)	$ (25,668)		
FT3-3 Cap.Rel. dem. credit 800514												
PCB True-up Settlement 800514												
FT-1 Market Demand 800515	$ 221,238	$ 382,410	$ 382,410	$ 387,018	$ 387,018	$ 387,018	$ 387,018	$ 387,324	$ 387,324	$ 387,324	$ 387,324	$ 387,054
FT-1 Access Area Demand 800515	$ 32,943	$ 44,587	$ 44,587	$ 44,311	$ 44,311	$ 44,311	$ 44,311	$ 44,529	$ 44,529	$ 44,529	$ 44,529	$ 44,529
FT Commodity	$ 43,357	$ 61,270	$ 68,243								$ 69,768	$ 65,119
FT-1 ACA Charge	$ 670	$ 601	$ 670								$ 810	$ 837
FT1-3 Cap.Rel. dem. credit 800515				$ (32,400)	$ (227,552)	$ (218,430)	$ (226,157)	$ (280,730)	$ (280,692)	$ (25,668)		
FT1-3 Cap.Rel. dem. credit 800515												
PCB True-up Settlement 800515												
CDS 800232 M1-M1 Cap. Rel.	$ (269,425)	$ (246,927)	$ (274,339)	$ (434,132)	$ (418,667)	$ (413,601)	$ (421,817)	$ (425,735)	$ (432,691)	$ (422,033)	$ (438,124)	$ (468,161)
FT1-800233 M3 - M3 Cap. Rel.	$ (986,179)	$ (890,742)	$ (986,179)	$ (60,730)	$ (62,755)	$ (60,730)	$ (62,755)	$ (62,755)	$ (60,730)	$ (62,755)	$ (1,871,154)	$ (1,933,526)
CDS-800232 M2-M3 Cap. Rel.*												
FTS-2,7,8 ACA	$ 1,275	$ 878	$ 515	$ 497	$ 186	$ 180	$ 186	$ 186	$ 180	$ 233	$ 841	$ 1,465
FTS-2,7,8 Commodity												
CSHOUT UNDER 5% DS												
PRIOR ADJUSTMENTS			$ 3,001	$ (20,551)							$ (117)	
O.F.O CREDITS					$ (95,401)				$ (37,234)		$ (2,419)	
EPC Refund												
ASA Refund												
PCB Refund												
Interest on Past Due Balance												
TOTAL	$ 2,204,686	$ 4,162,651	$ 4,018,623	$ 4,615,747	$ 4,192,828	$ 4,247,992	$ 4,330,161	$ 4,176,341	$ 4,126,970	$ 4,740,460	$ 3,061,208	$ 2,991,939

Philadelphia Gas Works
Volumes, Rates, and Total Amounts
Eastern Gas

Volumes	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
GSS Storage Demand	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047
GSS Storage Capacity	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971
GSS Storage Injection	16,940	16,940	274,466	39,080	402,498	429,850	393,700	393,700	293,070	216,892	198,153	-
GSS Handling from Storage	922,167	601,533	278,827	268,648	-	-	-	-	-	-	417,160	834,750
GSS-TE Surcharge	922,167	601,533	278,827	268,648	-	-	-	-	-	-	417,160	834,750
GSS-TE Excess Injection	-	-	-	-	-	-	-	-	-	-	-	-
Unathorized Overrun Charges	-	-	-	-	-	-	-	-	-	-	3,459	-
Rates - $												
GSS Storage Demand	$ 1.8655	$ 1.8655	$ 1.8655	$ 3.2548	$ 3.2548	$ 3.2548	$ 3.2548	$ 3.2548	$ 3.2548	$ 3.2548	$ 3.2676	$ 3.2676
GSS Storage Capacity	$ 0.0145	$ 0.0145	$ 0.0145	$ 0.0318	$ 0.0318	$ 0.0318	$ 0.0318	$ 0.0318	$ 0.0318	$ 0.0318	$ 0.0318	$ 0.0318
GSS Storage Injection	$ 0.0273	$ 0.0273	$ 0.0273	$ 0.0357	$ 0.0357	$ 0.0357	$ 0.0357	$ 0.0357	$ 0.0357	$ 0.0357	$ 0.0396	$ 0.0396
GSS Handling from Storage	$ 0.0165	$ 0.0165	$ 0.0165	$ 0.0263	$ 0.0263	$ 0.0263	$ 0.0263	$ 0.0263	$ 0.0263	$ 0.0266	$ 0.0277	$ 0.0277
GSS-TE Surcharge	$ 0.0045	$ 0.0045	$ 0.0045	$ (0.0002)	$ (0.0002)	$ (0.0002)	$ (0.0002)	$ (0.0002)	$ (0.0002)	$ (0.0002)	$ (0.0008)	$ (0.0008)
GSS-TE Excess Injection	$ 0.2364	$ 0.2364	$ 0.2364	$ 0.5305	$ 0.5305	$ 0.5305	$ 0.5305	$ 0.5305	$ 0.5305	$ 0.5305	$ 0.5344	$ 0.5344
Unathorized Overrun Charges	$ 0.6303	$ 0.6303	$ 0.6303	$ 0.8899	$ 0.8899	$ 0.8899	$ 0.8899	$ 0.8899	$ 0.8899	$ 0.8899	$ 0.8956	$ 0.8956
Total Amount - $												
GSS Storage Demand	$ 63,515	$ 63,515	$ 63,515	$ 110,816	$ 110,816	$ 110,816	$ 110,816	$ 110,816	$ 110,816	$ 110,816	$ 111,252	$ 111,252
GSS Storage Capacity	$ 56,825	$ 56,825	$ 56,825	$ 124,623	$ 124,623	$ 124,623	$ 124,623	$ 124,623	$ 124,623	$ 124,623	$ 124,623	$ 124,623
GSS Storage Injection	$ 462	$ 462	$ 7,493	$ 1,395	$ 14,369	$ 15,346	$ 14,055	$ 14,055	$ 10,463	$ 7,743	$ 7,847	$ -
GSS Handling from Storage	$ 15,216	$ 9,925	$ 4,601	$ 7,065	$ -	$ -	$ -	$ -	$ -	$ -	$ 11,555	$ 23,122.57
GSS-TE Surcharge	$ 4,150	$ 2,707	$ 1,255	$ (54)	$ -	$ -	$ -	$ -	$ -	$ -	$ (334)	$ (668)
GSS-TE Excess Injection	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
*Overrun/Penalty Distribution	$ -	$ -	$ -	$ -	$ -	$ (3,392)	$ -	$ -	$ -	$ -	$ -	$ -
Unathorized Overrun Charges	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,098	$ -
TOTAL	**$ 140,168**	**$ 133,434**	**$ 133,688**	**$ 243,846**	**$ 249,809**	**$ 247,393**	**$ 249,495**	**$ 249,495**	**$ 245,902**	**$ 243,183**	**$ 258,042**	**$ 258,330**

Philadelphia Gas Works
Pennsylvania Public Utilities Commission
52 Pa. Code §53.61, et seq.
For the Twelve Months Ending December 2022

Schedule 2
Item 53.64(C)(1)

	TGPL		TETCO		Combined Total	
	Total	Volume	Total	Volume	Total	Volume
MONTH	Credits	DTH'S	Credits	DTH'S	Credits	DTH'S
Jan-22	$ 804,742	4,330,329	$ 1,255,604	1,186,912	$ 2,060,347	5,517,241
Feb-22	$ 744,932	4,074,896	$ 1,137,669	998,300	$ 1,882,601	5,073,196
Mar-22	$ 814,724	4,513,011	$ 1,260,518	1,062,649	$ 2,075,242	5,575,660
Apr-22	$ 417,928	2,728,470	$ 560,202	2,119,230	$ 978,130	4,847,700
May-22	$ 413,356	2,785,600	$ 936,526	2,156,949	$ 1,349,883	4,942,549
Jun-22	$ 1,315,361	4,700,187	$ 911,191	2,091,810	$ 2,226,552	6,791,997
Jul-22	$ 1,372,108	5,163,821	$ 936,886	2,155,461	$ 2,308,994	7,319,282
Aug-22	$ 941,008	4,784,628	$ 1,049,949	2,160,204	$ 1,990,957	6,944,832
Sep-22	$ 616,542	4,071,090	$ 1,054,805	2,111,820	$ 1,671,347	6,182,910
Oct-22	$ 412,641	2,784,296	$ 536,123	2,154,965	$ 948,764	4,939,261
Nov-22	$ 1,855,620	4,077,210	$ 2,309,278	1,509,000	$ 4,164,898	5,586,210
Dec-22	$ 1,926,852	4,230,260	$ 2,401,687	1,629,390	$ 4,328,540	5,859,650
	$ 11,635,816	48,243,798	$ 14,350,440	21,336,690	$ 25,986,256	69,580,488

Federal Tariff Provisions

Schedule 5

Item 53.64(c) (1)

TRANSCONTINENTAL

GAS PIPELINE CORPORATION

FERC GAS TARIFF
FIFTH REVISED VOLUME NO. 1

(SUPERSEDING FOURTH REVISED VOLUME NO. 1)

OF

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

FILED WITH THE

FEDERAL ENERGY REGULATORY COMMISSION

Communications Concerning This Tariff Should Be Addressed To:

Transcontinental Gas Pipe Line Company, LLC

Attention: **Jordan Kirwin**
Director, Rates & Regulatory
jordan.kirwin@williams.com

Mailing Address: **P. O. Box 1396**
Houston, TX 77251-1396

Street Address: **2800 Post Oak Boulevard**
Houston, TX 77056

Telephone Number: **(713) 215-3723**
Facsimile Number: **(918) 594-1003**

PART I - OVERVIEW

Transcontinental Gas Pipe Line Company, LLC
Fifth Revised Volume No. 1
Tariff

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PRELIMINARY STATEMENT

Transcontinental Gas Pipe Line Company, LLC owns and operates an interstate natural gas transmission system extending from its sources of supply in Texas, Louisiana and Mississippi through the States of Texas, Louisiana, Mississippi, Alabama, Georgia, South Carolina, North Carolina, Virginia, Maryland, Pennsylvania and New Jersey to its termini in the New York Metropolitan Area.

The locations of the Company's transmission lines, compressor stations and the principal points at which it delivers gas are shown on the maps included herein.

Sales will be made under specific service agreements and rate schedules and the Company reserves the right to limit its agreements for transportation and sale of gas for resale to customers acceptable to the Company after consideration of its existing commitments, supplies of gas, delivery capacity, point of delivery and other factors deemed pertinent by the Company.

MAPS

The System Map and maps for each zone are available at the internet website below.

System Map:
http://www.1line.williams.com/Transco/files/TariffSystemMaps/TranscoTariffSystem.pdf

Zone 1:
http://www.1line.williams.com/Transco/files/TariffSystemMaps/TranscoTariffZone1.pdf

Zone 2:
http://www.1line.williams.com/Transco/files/TariffSystemMaps/TranscoTariffZone2.pdf

Zone 3:
http://www.1line.williams.com/Transco/files/TariffSystemMaps/TranscoTariffZone3.pdf

Zone 4:
http://www.1line.williams.com/Transco/files/TariffSystemMaps/TranscoTariffZone4.pdf

Zone 4A:
http://www.1line.williams.com/Transco/files/TariffSystemMaps/TranscoTariffZone4A.pdf

Zone 4B:
http://www.1line.williams.com/Transco/files/TariffSystemMaps/TranscoTariffZone4B.pdf

Zone 5:
http://www.1line.williams.com/Transco/files/TariffSystemMaps/TranscoTariffZone5.pdf

Zone 6:
http://www.1line.williams.com/Transco/files/TariffSystemMaps/TranscoTariffZone6.pdf

PART II – STATEMENT OF RATES AND FUEL

PART II - STATEMENT OF RATES AND FUEL

SECTION 1
OPEN ACCESS FIRM TRANSPORTATION RATES

PART II - STATEMENT OF RATES AND FUEL

SECTION 1
OPEN ACCESS FIRM TRANSPORTATION RATES

SECTION 1.1
RATE SCHEDULE FT

STATEMENT OF RATES AND FUEL
RATE SCHEDULE FT – NON-INCREMENTAL

Daily Reservation Rate per dt (Except for Former PS/ACQ Rate Schedules)

Receipt & Delivery Zone	Fixed Cost Unit Rate ($)	Variable Cost Unit Rate ($)	Electric Power Unit Rate ($)	Maximum Rate 1/ ($)	Minimum Rate 2/ 3/ ($)
1-1	0.06395	0.00000	0.00032	0.06427	0.00032
1-2, 2-1	0.09871	0.00000	0.00093	0.09964	0.00093
1-3, 3-1	0.15051	0.00000	0.00162	0.15213	0.00162
1-4, 4-1	0.34339	0.00000	0.00405	0.34744	0.00405
1-5, 5-1	0.47740	0.00000	0.00595	0.48335	0.00595
1-6, 6-1	0.55358	0.00000	0.00707	0.56065	0.00707
2-2	0.08556	0.00000	0.00061	0.08617	0.00061
2-3, 3-2	0.13736	0.00000	0.00130	0.13866	0.00130
2-4, 4-2	0.33024	0.00000	0.00373	0.33397	0.00373
2-5, 5-2	0.46425	0.00000	0.00563	0.46988	0.00563
2-6, 6-2	0.54043	0.00000	0.00675	0.54718	0.00675
3-3	0.10260	0.00000	0.00069	0.10329	0.00069
3-4, 4-3	0.29548	0.00000	0.00312	0.29860	0.00312
3-5, 5-3	0.42949	0.00000	0.00502	0.43451	0.00502
3-6, 6-3	0.50567	0.00000	0.00614	0.51181	0.00614
4-4	0.24368	0.00000	0.00243	0.24611	0.00243
4-5, 5-4	0.37769	0.00000	0.00433	0.38202	0.00433
4-6, 6-4	0.45387	0.00000	0.00545	0.45932	0.00545
4A-4A	0.09789	0.00000	0.00048	0.09837	0.00048
4B-4B	0.07859	0.00000	0.00042	0.07901	0.00042
4B-4A, 4A-4B	0.12568	0.00000	0.00090	0.12658	0.00090
5-5	0.18481	0.00000	0.00190	0.18671	0.00190
5-6, 6-5	0.26099	0.00000	0.00302	0.26401	0.00302
6-6	0.12698	0.00000	0.00112	0.12810	0.00112

Daily Reservation Rate per dt for the Former PS Rate Schedule (December – February)

Receipt & Delivery Zone	Fixed Cost Unit Rate ($)	Variable Cost Unit Rate ($)	Electric Power Unit Rate ($)	Maximum Rate 1/ ($)	Minimum Rate 2/ 3/ ($)
3-3	0.10260	0.00000	0.00069	0.10329	0.00069
1-4	0.61311	0.00000	0.00769	0.62080	0.00769
2-4	0.58963	0.00000	0.00708	0.59671	0.00708
3-4	0.52757	0.00000	0.00592	0.53349	0.00592
1-5	0.86593	0.00000	0.01151	0.87744	0.01151
2-5	0.84245	0.00000	0.01090	0.85335	0.01090
3-5	0.78039	0.00000	0.00974	0.79013	0.00974
1-6	1.03351	0.00000	0.01415	1.04766	0.01415
2-6	1.01003	0.00000	0.01354	1.02357	0.01354
3-6	0.94797	0.00000	0.01238	0.96035	0.01238

Daily Reservation Rate per dt for the Former ACQ Rate Schedule (March – November)

Receipt & Delivery Zone	Fixed Cost Unit Rate ($)	Variable Cost Unit Rate ($)	Electric Power Unit Rate ($)	Maximum Rate 1/ ($)	Minimum Rate 2/ 3/ ($)
1-6	0.29840	0.00000	0.00367	0.30207	0.00367
2-6	0.29116	0.00000	0.00350	0.29466	0.00350
3-6	0.27203	0.00000	0.00318	0.27521	0.00318

Gathering Charges

In addition to the charges above, the gathering rates on the Statement of Rates and Fuel for Firm and Interruptible Gathering Service in Section 9.1 of this Tariff shall apply to quantities transported through gathering facilities.
Notes:

1/ The Fixed and Variable Cost unit rates plus the Electric Power unit rate.

2/ The Variable Cost unit rate plus the Electric Power unit rate.

3/ The minimum reservation rate applicable to capacity release transactions that are not permanent releases shall not be less than zero.

Commodity Rate per dt (excluding surcharge) 1/

Receipt & Delivery Zone	Fixed Cost Unit Rate ($)	Variable Cost Unit Rate ($)	Electric Power Unit Rate ($)	Cash Out Surcharge Rate ($)	Maximum Rate 2/ ($)	Minimum Rate 3/ ($)
1-1	0.00000	0.00213	0.00504	0.00068	0.00785	0.00785
1-2, 2-1	0.00000	0.00516	0.01073	0.00068	0.01657	0.01657
1-3, 3-1	0.00000	0.00749	0.01467	0.00068	0.02284	0.02284
1-4, 4-1, 1-Sta 95 Zn 4 Pool	0.00000	0.01791	0.03216	0.00068	0.05075	0.05075
1- Sta 85 Zn 4 Pool	0.00000	0.00749	0.01467	0.00068	0.02284	0.02284
1-Sta 85 Zn 4A Pool	0.00000	0.01791	0.03216	0.00068	0.05075	0.05075
1-5, 5-1, 1-Sta 134 Zn 5 Pool	0.00000	0.02376	0.04520	0.00068	0.06964	0.06964
1-Sta 165 Zn 5 Pool	0.00000	0.01791	0.03216	0.00068	0.05075	0.05075
1-6, 6-1	0.00000	0.02745	0.05624	0.00068	0.08437	0.08437
1-Sta 210 Zn 6 Pool	0.00000	0.02376	0.04520	0.00068	0.06964	0.06964
2-2	0.00000	0.00350	0.00569	0.00068	0.00987	0.00987
2-3, 3-2	0.00000	0.00583	0.00963	0.00068	0.01614	0.01614
2-4, 4-2, 2-Sta 95 Zn 4 Pool	0.00000	0.01625	0.02712	0.00068	0.04405	0.04405
2- Sta 85 Zn 4 Pool	0.00000	0.00583	0.00963	0.00068	0.01614	0.01614
2-Sta 85 Zn 4A Pool	0.00000	0.01625	0.02712	0.00068	0.04405	0.04405
2-5, 5-2, 2-Sta 134 Zn 5 Pool	0.00000	0.02210	0.04016	0.00068	0.06294	0.06294
2-Sta 165 Zn 5 Pool	0.00000	0.01625	0.02712	0.00068	0.04405	0.04405
2-6, 6-2	0.00000	0.02579	0.05120	0.00068	0.07767	0.07767
2-Sta 210 Zn 6 Pool	0.00000	0.02210	0.04016	0.00068	0.06294	0.06294
3-3	0.00000	0.00280	0.00394	0.00068	0.00742	0.00742
3-4, 4-3, 3-Sta 95 Zn 4 Pool	0.00000	0.01322	0.02143	0.00068	0.03533	0.03533
3- Sta 85 Zn 4 Pool	0.00000	0.00280	0.00394	0.00068	0.00742	0.00742
3-Sta 85 Zn 4A Pool	0.00000	0.01322	0.02143	0.00068	0.03533	0.03533
3-5, 5-3, 3-Sta 134 Zn 5 Pool	0.00000	0.01907	0.03447	0.00068	0.05422	0.05422
3-Sta 165 Zn 5 Pool	0.00000	0.01322	0.02143	0.00068	0.03533	0.03533
3-6, 6-3	0.00000	0.02276	0.04551	0.00068	0.06895	0.06895
3-Sta 210 Zn 6 Pool	0.00000	0.01907	0.03447	0.00068	0.05422	0.05422
3-1 (WSS Wth)	0.00000	0.00516	0.01073	0.00068	0.01657	0.01657
3-2 (WSS Wth)	0.00000	0.00350	0.00569	0.00068	0.00987	0.00987
3-3 (WSS Wth)	0.00000	0.00047	0.00000	0.00068	0.00115	0.00115
3-4, 3-Sta 95 Zn 4 Pool (WSS Wth)	0.00000	0.01089	0.01749	0.00068	0.02906	0.02906
3- Sta 85 Zn 4 Pool (WSS Wth)	0.00000	0.00047	0.00000	0.00068	0.00115	0.00115
3- Sta 85 Zn 4A Pool (WSS Wth)	0.00000	0.01089	0.01749	0.00068	0.02906	0.02906
3-5, 3-Sta 134 Zn 5 Pool (WSS Wth)	0.00000	0.01674	0.03053	0.00068	0.04795	0.04795
3-Sta 165 Zn 5 Pool (WSS Wth)	0.00000	0.01089	0.01749	0.00068	0.02906	0.02906
3-6 (WSS Wth)	0.00000	0.02043	0.04157	0.00068	0.06268	0.06268
3-Sta 210 Zn 6 Pool (WSS Wth)	0.00000	0.01674	0.03053	0.00068	0.04795	0.04795

Receipt & Delivery Zone		Fixed Cost Unit Rate ($)	Variable Cost Unit Rate ($)	Electric Power Unit Rate ($)	Cash Out Surcharge Rate ($)	Maximum Rate 2/ ($)	Minimum Rate 3/ ($)
4-4, 4-Sta 95 Zn 4 Pool		0.00000	0.01089	0.01749	0.00068	0.02906	0.02906
4- Sta 85 Zn 4 Pool		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
4- Sta 85 Zn 4A Pool		0.00000	0.01089	0.01749	0.00068	0.02906	0.02906
4-5, 5-4, 4-Sta 134 Zn 5 Pool		0.00000	0.01674	0.03053	0.00068	0.04795	0.04795
4-Sta 165 Zn 5 Pool		0.00000	0.01089	0.01749	0.00068	0.02906	0.02906
4-6, 6-4		0.00000	0.02043	0.04157	0.00068	0.06268	0.06268
4-Sta 210 Zn 6 Pool		0.00000	0.01674	0.03053	0.00068	0.04795	0.04795
4A-4A		0.00000	0.00303	0.00509	0.00068	0.00880	0.00880
4A- Sta 85 Zn 4 Pool		0.00000	0.00303	0.00509	0.00068	0.00880	0.00880
4A- Sta 85 Zn 4A Pool		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Sta 85 Zn 4 Pool - 1		0.00000	0.01791	0.03216	0.00068	0.05075	0.05075
Sta 85 Zn 4 Pool - 2		0.00000	0.01625	0.02712	0.00068	0.04405	0.04405
Sta 85 Zn 4 Pool - 3		0.00000	0.01322	0.02143	0.00068	0.03533	0.03533
Sta 85 Zn 4 Pool – 4, Sta 85 Zn 4 Pool – Sta 95 Zn 4 Pool		0.00000	0.01089	0.01749	0.00068	0.02906	0.02906
Sta 85 Zn 4 Pool - 4A	4/	0.00000	0.01392	0.02258	0.00068	0.03718	0.03718
Sta 85 Zn 4 Pool - Sta 85 Zn 4A Pool	4/	0.00000	0.01089	0.01749	0.00068	0.02906	0.02906
Sta 85 Zn 4 Pool - 4B	4/	0.00000	0.01574	0.02642	0.00068	0.04284	0.04284
Sta 85 Zn 4 Pool – 5, Sta 85 Zn 4 Pool – Sta 134 Zn 5 Pool		0.00000	0.01674	0.03053	0.00068	0.04795	0.04795
Sta 85 Zn 4 Pool - Sta 165 Zn 5 Pool		0.00000	0.01089	0.01749	0.00068	0.02906	0.02906
Sta 85 Zn 4 Pool - 6		0.00000	0.02043	0.04157	0.00068	0.06268	0.06268
Sta 85 Zn 4 Pool - Sta 210 Zn 6 Pool		0.00000	0.01674	0.03053	0.00068	0.04795	0.04795
Sta 85 Zn 4A Pool - 1	5/	0.00000	0.02094	0.03725	0.00068	0.05887	0.05887
Sta 85 Zn 4A Pool - 2	5/	0.00000	0.01928	0.03221	0.00068	0.05217	0.05217
Sta 85 Zn 4A Pool - 3	5/	0.00000	0.01625	0.02652	0.00068	0.04345	0.04345
Sta 85 Zn 4A Pool – 4, Sta 85 Zn 4A Pool – Sta 95 Zn 4 Pool	5/	0.00000	0.01392	0.02258	0.00068	0.03718	0.03718
Sta 85 Zn 4A Pool – Sta 85 Zn 4 Pool	5/	0.00000	0.00303	0.00509	0.00068	0.00880	0.00880
Sta 85 Zn 4A Pool - 4A		0.00000	0.00303	0.00509	0.00068	0.00880	0.00880
Sta 85 Zn 4A Pool - 4B		0.00000	0.00485	0.00893	0.00068	0.01446	0.01446
Sta 85 Zn 4A Pool – 5, Sta 85 Zn 4A Pool – Sta 134 Zn 5 Pool	5/	0.00000	0.01977	0.03562	0.00068	0.05607	0.05607
Sta 85 Zn 4A Pool - Sta 165 Zn 5 Pool	5/	0.00000	0.01392	0.02258	0.00068	0.03718	0.03718
Sta 85 Zn 4A Pool - 6	5/	0.00000	0.02346	0.04666	0.00068	0.07080	0.07080
Sta 85 Zn 4A Pool - Sta 210 Zn 6 Pool	5/	0.00000	0.01977	0.03562	0.00068	0.05607	0.05607

Receipt & Delivery Zone	Fixed Cost Unit Rate ($)	Variable Cost Unit Rate ($)	Electric Power Unit Rate ($)	Cash Out Surcharge Rate ($)	Maximum Rate 2/ ($)	Minimum Rate 3/ ($)
Sta 95 Zn 4 Pool – 1	0.00000	0.00749	0.01467	0.00068	0.02284	0.02284
Sta 95 Zn 4 Pool – 2	0.00000	0.00583	0.00963	0.00068	0.01614	0.01614
Sta 95 Zn 4 Pool - 3	0.00000	0.00280	0.00394	0.00068	0.00742	0.00742
Sta 95 Zn 4 Pool – 4, Sta 95 Zn 4 Pool – Sta 85 Zn 4A Pool	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Sta 95 Zn 4 Pool – 5, Sta 95 Zn 4 Pool - Sta 134 Zn 5 Pool	0.00000	0.00632	0.01304	0.00068	0.02004	0.02004
Sta 95 Zn 4 Pool – Sta 165 Zn 5 Pool	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Sta 95 Zn 4 Pool - 6	0.00000	0.01001	0.02408	0.00068	0.03477	0.03477
Sta 95 Zn 4 Pool – Sta 210 Zn 6 Pool	0.00000	0.00632	0.01304	0.00068	0.02004	0.02004
4B-4B	0.00000	0.00229	0.00384	0.00068	0.00681	0.00681
4B-4A, 4A-4B	0.00000	0.00485	0.00893	0.00068	0.01446	0.01446
4B- Sta 85 Zn 4 Pool	0.00000	0.00485	0.00893	0.00068	0.01446	0.01446
4B- Sta 85 Zn 4A Pool	0.00000	0.00229	0.00384	0.00068	0.00681	0.00681
5- Sta 85 Zn 4 Pool	0.00000	0.00632	0.01304	0.00068	0.02004	0.02004
5- Sta 85 Zn 4A Pool, 5- Sta 95 Zn 4 Pool	0.00000	0.01674	0.03053	0.00068	0.04795	0.04795
5-5, 5- Sta 134 Zn 5 Pool	0.00000	0.00632	0.01304	0.00068	0.02004	0.02004
5- Sta 165 Zn 5 Pool	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
5-6, 6-5	0.00000	0.01001	0.02408	0.00068	0.03477	0.03477
5- Sta 210 Zn 6 Pool	0.00000	0.00632	0.01304	0.00068	0.02004	0.02004
Sta 134 Zn 5 Pool - 1	0.00000	0.01791	0.03216	0.00068	0.05075	0.05075
Sta 134 Zn 5 Pool - 2	0.00000	0.01625	0.02712	0.00068	0.04405	0.04405
Sta 134 Zn 5 Pool - 3	0.00000	0.01322	0.02143	0.00068	0.03533	0.03533
Sta 134 Zn 5 Pool – 4, Sta 134 Zn 5 Pool – Sta 95 Zn 4 Pool	0.00000	0.01089	0.01749	0.00068	0.02906	0.02906
Sta 134 Zn 5 Pool – Sta 85 Zn 4 Pool	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Sta 134 Zn 5 Pool – Sta 85 Zn 4A Pool	0.00000	0.01089	0.01749	0.00068	0.02906	0.02906
Sta 134 Zn 5 Pool – 5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Sta 134 Zn 5 Pool – 6	0.00000	0.00416	0.01104	0.00068	0.01588	0.01588
Sta 134 Zn 5 Pool – Sta 210 Zn 6 Pool	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Sta 165 Zn 5 Pool - 1	0.00000	0.02376	0.04520	0.00068	0.06964	0.06964
Sta 165 Zn 5 Pool - 2	0.00000	0.02210	0.04016	0.00068	0.06294	0.06294
Sta 165 Zn 5 Pool - 3	0.00000	0.01907	0.03447	0.00068	0.05422	0.05422
Sta 165 Zn 5 Pool – 4, Sta 165	0.00000	0.01674	0.03053	0.00068	0.04795	0.04795

Receipt & Delivery Zone	Fixed Cost Unit Rate ($)	Variable Cost Unit Rate ($)	Electric Power Unit Rate ($)	Cash Out Surcharge Rate ($)	Maximum Rate 2/ ($)	Minimum Rate 3/ ($)
Zn 5 Pool – Sta 95 Zn 4 Pool						
Sta 165 Zn 5 Pool – Sta 85 Zn 4 Pool	0.00000	0.00632	0.01304	0.00068	0.02004	0.02004
Sta 165 Zn 5 Pool - Sta 85 Zn 4A Pool	0.00000	0.01674	0.03053	0.00068	0.04795	0.04795
Sta 165 Zn 5 Pool – 5, Sta 165 Zn 5 Pool – Sta 134 Zn 5 Pool	0.00000	0.00632	0.01304	0.00068	0.02004	0.02004
Sta 165 Zn 5 Pool - 6	0.00000	0.01001	0.02408	0.00068	0.03477	0.03477
Sta 165 Zn 5 Pool - Sta 210 Zn 6 Pool	0.00000	0.00632	0.01304	0.00068	0.02004	0.02004
6- Sta 85 Zn 4 Pool	0.00000	0.01001	0.02408	0.00068	0.03477	0.03477
6- Sta 85 Zn 4A Pool, 6-Sta 95 Zn 4 Pool	0.00000	0.02043	0.04157	0.00068	0.06268	0.06268
6 – Sta 134 Zn 5 Pool	0.00000	0.01001	0.02408	0.00068	0.03477	0.03477
6- Sta 165 Zn 5 Pool	0.00000	0.00416	0.01104	0.00068	0.01588	0.01588
6-6	0.00000	0.00416	0.01104	0.00068	0.01588	0.01588
6- Sta 210 Zn 6 Pool	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Sta 210 Zn 6 Pool - 1	0.00000	0.02745	0.05624	0.00068	0.08437	0.08437
Sta 210 Zn 6 Pool - 2	0.00000	0.02579	0.05120	0.00068	0.07767	0.07767
Sta 210 Zn 6 Pool - 3	0.00000	0.02276	0.04551	0.00068	0.06895	0.06895
Sta 210 Zn 6 Pool – 4, Sta 210 Zn 6 Pool – Sta 95 Zn 4 Pool	0.00000	0.02043	0.04157	0.00068	0.06268	0.06268
Sta 210 Zn 6 Pool – Sta 85 Zn 4 Pool	0.00000	0.01001	0.02408	0.00068	0.03477	0.03477
Sta 210 Zn 6 Pool - Sta 85 Zn 4A Pool	0.00000	0.02043	0.04157	0.00068	0.06268	0.06268
Sta 210 Zn 6 Pool – 5, Sta 210 Zn 6 Pool – Sta 134 Zn 5 Pool	0.00000	0.01001	0.02408	0.00068	0.03477	0.03477
Sta 210 Zn 6 Pool - Sta 165 Zn 5 Pool	0.00000	0.00416	0.01104	0.00068	0.01588	0.01588
Sta 210 Zn 6 Pool - 6	0.00000	0.00416	0.01104	0.00068	0.01588	0.01588

Gathering Charges

In addition to the charges above, the gathering rates on the Statement of Rates and Fuel for Firm and Interruptible Gathering Service in Section 9.1 of this Tariff shall apply to quantities transported through gathering facilities.

Notes:

1/ Pursuant to Section 27 of the General Terms and Conditions, the above charges shall be increased to include the ACA unit rate, if applicable, as published on the Commission's website, http://www.ferc.gov.

2/ The Fixed and Variable Cost unit rates plus the Electric Power unit rate plus the Cash Out Surcharge Rate.

3/ The Variable Cost unit rate plus the Electric Power unit rate plus the Cash Out Surcharge Rate.

4/ The Zone 4-4 commodity charge, which charge applies to quantities transported from the Zone 4 Pools for delivery to Zone(s) 4A or 4B, is included in the rates shown.

5/ The Zone 4A-4A commodity charge, which charge applies to quantities transported from the Zone 4A Pool for delivery to zones other than Zone(s) 4A or 4B, is included in the rates shown.

PART II - STATEMENT OF RATES AND FUEL

SECTION 3
OPEN ACCESS FIRM STORAGE RATES AND FUEL

STATEMENT OF RATES AND FUEL
RATE SCHEDULE WSS-OPEN ACCESS
WASHINGTON STORAGE SERVICE – OPEN ACCESS

Section		Maximum Daily Rate (dt) ($)	Minimum Daily Rate (dt) ($)
3.3 (a)	Demand Charge	0.03102	0.00000
3.3 (b)	Storage Capacity Quantity Charge	0.00033	0.00000
3.3 (c)	Quantity Injected Charge	0.00440	0.00440
3.3 (d)	Quantity Withdrawn Charge	0.00440	0.00440

5	Injection Fuel Retention %	1.60%

PART II - STATEMENT OF RATES AND FUEL

SECTION 7
FIRM 7(c) STORAGE RATES AND FUEL

STATEMENT OF RATES AND FUEL
RATE SCHEDULE GSS
GENERAL STORAGE SERVICE

Section		Base Rate (dt) ($)	Electric Power Rate (dt) ($)	Cash Out Surcharge Rate ($)	Third Party Rate (dt) ($)	Total Daily Rate (dt) ($)
3.2(a)	Demand Charge	0.07682	0.00046		0.05458	0.13186
3.2(b)	Storage Capacity Quantity Charge	0.00040	0.00000		0.00057	0.00097
3.2(c)	Quantity Injected Charge 1/	0.02633	0.01104	0.00068	0.02123	0.05928
3.2(d)	Quantity Withdrawn Charge	0.02633	0.01104	0.00068	0.01915	0.05720
3.2(e)	Excess Delivery from Buyer's Storage Gas Balance Charge	0.61740	0.01371	0.00068	0.54342	1.17521
3.2(f)	Excess End of Season Inventory Charge. See Section 14 of Rate Schedule GSS.					

		Seller's Fuel	Third Party Fuel	Total Fuel
3.3, 9	Injection Fuel	1.99%	0.90%	2.89%

Notes:

1/ Pursuant to Section 27 of the General Terms and Conditions, the quantity injection charge shall be increased to include the ACA unit rate, if applicable, as published on the Commission's website, http://www.ferc.gov.

STATEMENT OF RATES AND FUEL
RATE SCHEDULE S-2

Section		Daily Charge (dt) ($)
3.2 (a)	Demand Charge	0.30475
3.2 (b)	Capacity Charge	0.01490
3.2 (c)	Injection Charge	0.04225
3.2 (d)	Withdrawal Charge	0.07397
3.4	Injection Fuel	0.56%
3.4	Withdrawal Fuel:	
	i. Winter Period – December 1 through March 31	0.87%
	ii. Spring, Summer and Fall Periods – April 1 through November 30	0.79%
3.4	Inventory Level Fuel	0.05%

PART II - STATEMENT OF RATES AND FUEL

SECTION 12
TRANSPORTATION FUEL RETENTION FACTORS

STATEMENT OF RATES AND FUEL
FIRM AND INTERRUPTIBLE TRANSPORTATION FUEL

Fuel Retention Percentages (for Receipts other than Zone 4A or Zone 4B) 1/

Receipt	Delivery										
	Zone 1	Zone 2	Zone 3	Zone 4 & Sta 95 Zone 4 Pool	Sta 85 Zone 4 Pool	Sta 85 Zone 4A Pool	Zones 4A & 4B 2/	Zone 5 & Sta 134 Zone 5 Pool	Sta 165 Zone 5 Pool	Zone 6	Sta 210 Zone 6 Pool
Zone 1	0.30%	0.63%	0.86%	1.95%	0.86%	1.95%	2.25%	2.72%	1.95%	3.37%	2.72%
Zone 2	0.63%	0.33%	0.56%	1.65%	0.56%	1.65%	1.95%	2.42%	1.65%	3.07%	2.42%
Zone 3	0.86%	0.56%	0.23%	1.32%	0.23%	1.32%	1.62%	2.09%	1.32%	2.74%	2.09%
Zone 4 3/	0.86%	0.56%	0.23%	1.09%	0.00%	1.09%	1.39%	1.86%	1.09%	2.51%	1.86%
Sta 85 Zone 4 Pool 4/	0.86%	0.56%	0.23%	1.09%	0.00%	1.09%	1.39%	1.86%	1.09%	2.51%	1.86%
Sta 95 Zone 4 Pool	0.86%	0.56%	0.23%	0.00%	-	0.00%	0.30%	0.77%	0.00%	1.42%	0.77%
Zone 5	1.63%	1.33%	1.00%	0.77%	0.77%	0.77%	1.07%	0.77%	0.00%	1.42%	0.77%
Sta 134 Zone 5 Pool	0.86%	0.56%	0.23%	0.00%	0.00%	0.00%	0.30%	0.00%	-	0.65%	0.00%
Sta 165 Zone 5 Pool	1.63%	1.33%	1.00%	0.77%	0.77%	0.77%	1.07%	0.77%	0.00%	1.42%	0.77%
Zone 6 5/	2.28%	1.98%	1.65%	1.42%	1.42%	1.42%	1.72%	1.42%	0.65%	0.65%	0.00%
Sta 210 Zone 6 Pool	2.28%	1.98%	1.65%	1.42%	1.42%	1.42%	1.72%	1.42%	0.65%	0.65%	0.00%

Fuel Retention Percentages (for Receipts in Zone 4A or Zone 4B) 1/

Receipt	Delivery										
	Zone 1	Zone 2	Zone 3	Fwd Haul In Zone 4 & Sta 95 Pool	Back-haul In Zone 4 & Sta 85 Zone 4 Pool	Sta 85 Zone 4A Pool	Zone 4A	Zone 4B	Sta 165 Zone 5 Pool	Zone 5, Sta 134 Zone 5 Pool & Sta 210 Zone 6 Pool	Zone 6
Zone 4A	1.16%	0.86%	0.53%	1.39%	0.30%	0.00%	0.30%	0.30%	1.39%	2.16%	2.81%
Sta 85 Zone 4A Pool 6/	1.16%	0.86%	0.53%	1.39%	0.30%	0.00%	0.30%	0.30%	1.39%	2.16%	2.81%
Zone 4B	1.39%	1.09%	0.76%	1.62%	0.53%	0.23%	0.53%	0.23%	1.62%	2.39%	3.04%

Incremental Project Fuel

	Zonal Combination	Transportation Fuel	Fuel Retention Surcharge	Total Fuel
New York Bay Expansion Project	6-6	0.65%	-1.60%	-0.95%

Notes:

1/ The fuel retention percentages apply only to the forward-haul portion, if any, of a transportation. All movement in Zones 1, 2, 3, 4A, 5 and 6 will be considered forward haul movement as these zones are bi-directional. No fuel will be retained on transportation which does not include a forward-haul movement of gas.

2/ Transportation deliveries to Zone 4B do not entail the forward-haul movement of gas in Zone 4B.

3/ The Zone 4 fuel retention percentage for deliveries to Zones 1, 2 and 3 assumes no forward haul movement in Zone 4.

4/ The Zone 4 fuel retention percentage, which percentage applies to quantities transported from the Zone 4 Pools, is included in the fuel retention percentages for deliveries to Zones 4, 4A, 4B, 5 and 6.

5/ In accordance with Section 3.8 of Rate Schedule FT and Section 3.4 of Rate Schedule IT, transportation from the Clermont NFG receipt point in Zone 6 will be assessed an additional fuel retention percentage of 1.15% for third party lease fuel.

6/ The Zone 4A fuel retention percentage, which percentage applies to quantities transported from the Station 85 Zone 4A Pool, is included in the fuel retention percentages shown.

PART III - RATE SCHEDULES

PART III – RATE SCHEDULES

SECTION 1
OPEN ACCESS FIRM TRANSPORTATION SERVICE

RATE SCHEDULE FT
Firm Transportation Service

1. AVAILABILITY

Service under this rate schedule is available to any gas company or any other party (hereinafter referred to as "Buyer") for the transportation of natural gas by Transcontinental Gas Pipe Line Company, LLC (hereinafter referred to as "Seller") on Seller's system when:

1.1 Buyer desires firm transportation service of gas under this rate schedule; and

(a) Buyer has converted from firm sales service under Seller's CD, G or OG rate schedules or Seller's non-jurisdictional direct industrial sales agreement to firm transportation service pursuant to this rate schedule; or
(b) Buyer has converted from firm sales service under Seller's PS or ACQ rate schedules to firm transportation service pursuant to this rate schedule; or
(c) Buyer and Seller have agreed to convert existing firm service to service under this rate schedule; or
(d) Buyer has submitted a valid request in accordance with Section 8 hereof for service under this rate schedule and Seller has available capacity to render such service; and

1.2 Buyer and Seller have executed a service agreement for service under this rate schedule.

1.3 Service under this rate schedule is also available for transportation when Buyer has obtained released firm capacity from a Rate Schedule FT Buyer releasing such firm capacity ("Releasing Shipper") pursuant to Section 42 of the General Terms and Conditions.

2. APPLICABILITY AND CHARACTER OF SERVICE

2.1 This rate schedule shall apply to all firm transportation service rendered by Seller for Buyer including firm transportation service released under this rate schedule pursuant to Section 42 of the General Terms and Conditions. Service shall be rendered pursuant to Seller's blanket certificate or Part 284 of the Commission's regulations and the executed service agreement for service under this rate schedule.

2.2 Transportation service provided under the terms of this rate schedule shall be limited to the delivery by Seller of up to Buyer's Transportation Contract Quantity (TCQ) specified in the executed service agreement plus fuel attributable to Rate Schedule GSS injections, if applicable.

2.3 Transportation service provided under this rate schedule shall be on a firm basis and shall not be subject to reduction or interruption, except as provided in Section 11 or 42 of the General Terms and Conditions.

2.4 Transportation service available hereunder to a Buyer of capacity resulting from a conversion from Seller's PS Rate Schedule shall be limited to the period commencing on

December 1 of each year through the last day of February of the following year unless otherwise specified in the service agreement.

2.5 Transportation service available hereunder to a Buyer of capacity resulting from a conversion from Seller's ACQ Rate Schedule shall be limited to the period commencing on March 1 of each year through November 30 of the same year.

2.6 Except as otherwise agreed to by Buyer and approved by the Commission, Section 284.221(d)(1) of the Commission's regulations shall apply to service under this rate schedule subject to the right of first refusal procedures, if applicable, set forth in Section 48 of the General Terms and Conditions.

2.7 (a) Transportation service available hereunder to a Buyer of capacity resulting from a conversion from Seller's Rate Schedules X-289 through X-313 (certificated in Docket No. CP88-760, "Southern Expansion Capacity") shall be limited to the period commencing on November 1 of each year through March 31 of the following year.

The service agreement for Southern Expansion Capacity may have one of the following TCQs:

(i) A TCQ applicable to the peak winter months of December, January, and February, and a lower TCQ applicable to the shoulder months of November and March;

(ii) A TCQ applicable to the winter months of December, January, and February, and a higher TCQ applicable to the shoulder months of November and March;

(iii) A TCQ applicable to the winter months of December, January, and February, and the same TCQ applicable to the shoulder months of November and March; or

(iv) A TCQ applicable only to the shoulder months of November and March.

(b) Transportation service available hereunder to a Buyer of capacity resulting from the unbundling/conversion of Rate Schedule SS-1, or from a conversion from Rate Schedule SS-1 Section 7(c) Transportation Service shall be limited to the period commencing on November 1 of each year through March 31 of the following year.

2.8 In any zone for which Buyer pays a reservation charge to Seller under this rate schedule, Buyer shall have access, on a secondary basis, to receipt and delivery points within that zone which are (i) located on Seller's mainline system upstream of Station 85, which does not include points upstream of Station 30, (ii) located on Seller's Mobile Bay Lateral, or (iii) downstream of Station 85 but not located within Buyer's firm contract path, as defined by those receipt and delivery points specifically identified in Buyer's FT service agreement; provided however, Buyer shall not have access on a secondary basis to receipt or delivery points located on any of Seller's delivery laterals as enumerated in Section 21.2 of the General Terms and Conditions.

The quantities to be received or delivered on a secondary basis will be (i) those quantities in excess of Buyer's firm capacity entitlement at the respective point of receipt or delivery, and shall not exceed Buyer's total firm capacity entitlement for the zone in which the point of receipt or delivery is located, but not including quantities in excess of any maximum daily capacity entitlement specified in Buyer's service agreement hereunder at Buyer's traditional delivery points, as defined in Section 4.1 below, and within Buyer's total firm capacity entitlement for the zone in which the traditional delivery point is located, and (ii) quantities within Buyer's firm capacity entitlement at the respective point of receipt or delivery when Buyer's TCQ at those points consists entirely of secondary firm capacity entitlements obtained pursuant to Section 42 of the General Terms and Conditions. Notwithstanding anything to the contrary in the foregoing, the sum of all quantities that can be nominated in any segment in a zone by Buyer and by any and all Replacement Shippers that derive a firm capacity entitlement in that zone from Buyer shall be limited to Buyer's original firm capacity entitlement under this Rate Schedule FT in that segment of the zone. If the sum of all such nominated quantities exceeds Buyer's original firm capacity entitlement under this Rate Schedule FT in that segment of the zone, the nominations using capacity on a secondary basis in any segment covered by the nomination shall be reduced on a pro rata basis, based upon nominated quantities in each segment. Nominations that are not using capacity on a secondary basis in any segment shall not be subject to reduction under this Section 2.8. Further, Reverse Path transportation, as defined in Section 2.9(b) herein, which results in the delivery of gas to a point downstream of the point of receipt will be scheduled on a secondary basis. Quantities received or delivered on a secondary basis shall have the priority set forth in Section 57 of the General Terms and Conditions and shall be subject to reduction or interruption as specified in Sections 59 and 60 of the General Terms and Conditions.

2.9 For transportation service under this rate schedule the following terms shall apply in order to indicate direction of flow:

(a) Primary Path

The transportation path established by the receipt and delivery points as set forth in Buyer's executed service agreement.

(b) Reverse Path

The transportation path that is in the opposite direction of the Primary Path as defined in Section 2.9(a) above.

3. RATES AND CHARGES

3.1 For transportation service rendered to Buyer each month under this rate schedule, Buyer shall pay to Seller the sum of Seller's Reservation and Commodity Charge(s) determined as follows:

(a) Reservation Charge: Buyer's applicable TCQ(s) multiplied by the applicable reservation rate(s) multiplied by the number of days in the

month that capacity was held. If Buyer acquires capacity through a volumetric release, the reservation charge shall be the rate set forth in the applicable capacity release award posted on 1Line multiplied by the quantities (dts) delivered each day (up to Buyer's TCQ); provided, however, Buyer's monthly bill may be subject to adjustment to account for any minimum volumetric commitment specified in such capacity release award.

(b) Commodity Charge: The applicable FT commodity rate(s) multiplied by the quantities (dts) delivered.

3.2 For transportation service under this rate schedule, Seller's Reservation Charges shall be calculated as follows:

(a) Except as otherwise provided in Section 3.2(c) below, the Reservation Charge each month for a Conversion Buyer (as defined in Section 7 of this rate schedule) shall be determined as the sum of the following:

(i) 17% x Buyer's TCQ x the applicable reservation rate from Zone 1 (Station 30) to Buyer's delivery zone x the number of days in the month that capacity was held.

(ii) 25% x Buyer's TCQ x the applicable reservation rate from Zone 2 (Station 45) to Buyer's delivery zone x the number of days in the month that capacity was held.

(iii) 19% x Buyer's TCQ x the applicable reservation rate from Zone 3 (Station 50) to Buyer's delivery zone x the number of days in the month that capacity was held.

(iv) 39% x Buyer's TCQ x the applicable reservation rate from Zone 3 (Station 62) to Buyer's delivery zone x the number of days in the month that capacity was held.

(b) In addition to the above, Conversion Buyers electing firm capacity entitlements described in Section 7.4 of this rate schedule shall pay a Reservation Charge each month under this rate schedule determined by multiplying Buyer's TCQ attributable to the firm capacity so elected by the Zone 3-3 Reservation Rate for each day in the month that capacity was held.

(c) Conversion Buyers with an executed service agreement reflecting telescoped capacity with stated quantities which do not equate to those percentages at the locations set forth in Section 7.3 hereof shall be billed based on the percentage of the Buyer’s TCQ such stated quantities represent for each zone in lieu of the percentages listed in Section 3.2(a) above.

(d) The Reservation Charge each month for all other Buyers under this rate schedule shall be determined by multiplying Buyer's TCQ by the applicable reservation rate for each day in the month that capacity was held.

3.3 If, under the provisions of Section 11.1 through 11.4 of the General Terms and Conditions, Seller orders interruption or reduction of service to Buyer, then the Reservation Charge for the month in which such day or days occur shall be computed as follows: Determine for each such day the number of dt which Seller was unable to deliver, and multiply the sum of all such days' deficiencies by the reservation rate per dt of TCQ, and the result shall be subtracted from the Reservation Charge for such month as otherwise computed. No adjustment to the Reservation Charge shall be made as a result of a reduction or interruption of service under the provisions of Sections 11.5 or 11.6 of the General Terms and Conditions.

3.4 For transportation service under this rate schedule, the Commodity Charge shall consist of the applicable FT commodity rate multiplied by the quantities (dts) delivered.

3.5 The maximum and minimum reservation and commodity rates for firm transportation service are shown on the effective Statement of Rates and Fuel in Part II, Section 1.1 of this tariff. Buyer shall pay such maximum rates for service under this rate schedule unless Seller, in its sole judgment, agrees to discount its rate to Buyer. Such discount may be granted consistent with the applicable provisions of Section 40 of the General Terms and Conditions. Further, Buyer and Seller may mutually agree to a negotiated rate pursuant to the provisions of Section 53 of the General Terms and Conditions. Such negotiated rate shall be set forth in the executed service agreement.

3.6 For purposes of capacity release, the Reservation Charges per TCQ payable by Buyer shall be as set forth in the applicable capacity release award posted on 1Line consistent with the provisions of Section 42 of the General Terms and Conditions. The maximum reservation rates for firm transportation service are shown on the effective Statement of Rates and Fuel in Part II, Section 1.1 of this tariff, however, for releases that become effective on or after July 30, 2008, the maximum rate ceiling does not apply to such releases provided the release is for a term of one year or less and the release is to take effect on or before one year from the date on which the pipeline is notified of the release. The rate paid in any capacity release transaction not subject to the maximum rate ceiling will not be subject to refund. The minimum reservation rate applicable to capacity release transactions that are not permanent releases shall be zero unless otherwise specified in the capacity release offer. The maximum and minimum commodity rates for firm transportation service are shown on the effective Statement of Rates and Fuel in Part II, Section 1.1 of this tariff.

3.7 Seller shall retain from the quantities of gas delivered by Buyer at the point(s) of receipt for transportation under this rate schedule a percentage(s) of such gas for compressor fuel and line loss make-up. Such percentage(s) are specified on the effective Statement of Rates and Fuel in Part II, Section 12.1 of this tariff.

In order to recover quantities of fuel retained by National Fuel Gas Supply Corporation ("NFGS") associated with transportation under this rate schedule through capacity

constructed under NFGS' FM100 Project certificated in Docket No. CP19-491 and leased to Seller, Seller shall retain from quantities of gas delivered by Buyer at the Clermont receipt point in Zone 6 in McKean County, Pennsylvania (the point of interconnection between NFGS' pipeline system and the northern terminus of National Fuel Gas Midstream LLC's gathering system, "Clermont NFG receipt point") a percentage(s) of such gas equivalent to the percentage(s) of fuel retention payable by Seller to NFGS under NFGS' FERC gas tariff for transportation though the leased capacity. Such percentage(s) are specified on the effective Statement of Rates and Fuel in Part II, Section 12.1 of this tariff, and shall be in addition to the fuel retention percentage(s) applicable to transportation on Seller's system as set forth in the preceding paragraph. Seller shall file to track any fuel retention percentage change by NFGS which affects Seller's fuel retention associated with gas delivered by Buyer at the Clermont NFG receipt point no later than thirty (30) days following the issuance date of the Commission order which accepts and makes effective NFGS' fuel retention change. The effective date of such change shall coincide with the effective date of any change in the associated fuel retention percentages by NFGS.

3.8 Buyer shall pay Seller any and all filing fees incurred as a result of Buyer's request for Seller's performance of service under this rate schedule, to the extent such fees are imposed upon Seller by the FERC or any other governmental authority having jurisdiction. Buyer shall pay Seller for such fees at Seller's designated office or depository within ten days of receipt of Seller's invoice detailing the amount of such fees.

3.9 Buyer shall reimburse Seller for the costs of any facilities installed by Seller with Buyer's consent which are necessary to receive, measure, transport or deliver gas to or for the account of Buyer.

3.10 To the extent that Buyer elects to use this rate schedule to transport withdrawal quantities from Seller's Washington Storage Field, the following commodity charges shall apply:

(a) For deliveries downstream of Zone 3 - transportation charges commence in Zone 4 and end in the zone of delivery.

(b) For deliveries upstream of Zone 3 - transportation charges commence in Zone 2 and end in the zone of delivery.

(c) For deliveries in Zone 3 - see the effective Statement of Rates and Fuel in Part II, Section 1.1.1 of this tariff.

3.11 Any quantities pooled at Seller's Station 85 Zone 4 pool that are nominated and delivered in Zone 4A or Zone 4B will be assessed, as a component of the total commodity charges and fuel retention applicable to such deliveries, the Zone 4 to Zone 4 commodity charges and fuel retention under this rate schedule.

Any quantities pooled at Seller's Station 85 Zone 4A pool that are nominated and delivered in zones other than Zone 4A or Zone 4B will be assessed, as a component of the total commodity charges and fuel retention applicable to such deliveries, the Zone 4A to Zone 4A commodity charges and fuel retention under this rate schedule.

4. RECEIPTS AND DELIVERIES

4.1 Transportation service under this rate schedule shall consist of: (a) the receipt of gas on behalf of Buyer up to Buyer's TCQ quantity (plus fuel retained pursuant to the provisions of Section 3.7 hereof and injection fuel under Seller's Rate Schedule GSS, if applicable) at (i) primary points of receipt which include the furthest upstream point(s) of receipt specified in the executed service agreement and all points of receipt within Buyer's firm contract path, or (ii) at secondary point(s) of receipt pursuant to Section 2.8 hereof; (b) the transportation of gas through Seller's pipeline; (c) the delivery of equivalent quantities (dts) of natural gas (less fuel retained pursuant to the provisions of Section 3.7 hereof) by Seller to Buyer, or for Buyer's account, at (i) the point(s) of delivery specified in the executed service agreement ("traditional delivery point(s)"), (ii) the point(s) of delivery within Buyer's firm contract path upstream of Buyer's traditional delivery point(s) ("non-traditional delivery points"), or (iii) secondary delivery points pursuant to Section 2.8 of this rate schedule.

4.2 Buyer shall make any necessary arrangements with other parties so as to be able to deliver gas to Seller at the point(s) of receipt and receive gas at the point(s) of delivery where Seller delivers gas after transportation; provided, however, that such arrangements shall be compatible with the operating conditions of Seller's pipeline system and shall provide for coordinated scheduling with Seller. Buyer shall deliver, or cause to be delivered to Seller the scheduled daily quantities hereunder as nearly as possible at uniform hourly rates.

4.3 Seller's ability to receive gas under this rate schedule at specific point(s) of receipt is subject to the operating limitations of Seller and the upstream party at such point(s) and to the availability of capacity after performance by Seller of any existing certificated firm service arrangements under other rate schedules between Seller and third parties at such point(s) of receipt. If an allocation of capacity at a point of receipt is required by Seller, Seller shall allocate available capacity in accordance with Section 59.1(b) of the General Terms and Conditions.

4.4 A Buyer under this rate schedule that has rights to nominate quantities of gas for delivery into or receipt from Seller's Station 85 Zone 4 pool (located at the point of interconnection between Seller's mainline and Mobile Bay Lateral at milepost 784.66 in Choctaw County, Alabama), may also nominate quantities of gas for delivery into or receipt from Seller's Station 85 Zone 4A pool (located at the point of interconnection between Seller's mainline and Mobile Bay Lateral at milepost 0.00 in Choctaw County, Alabama). Similarly, a Buyer under this rate schedule that has rights to nominate quantities of gas for delivery into or receipt from Seller's Station 85 Zone 4A pool, may also nominate quantities of gas for delivery into or receipt from Seller's Station 85 Zone 4 pool.

4.5 Each executed service agreement shall specify Buyer's traditional FT delivery point(s). In addition, all delivery point(s) upstream of such traditional FT delivery point(s) ("non-traditional delivery points") located within Buyer's TCQ entitlements, as specified in Sections 7.2 and 7.3 hereof, shall be made available to Buyer by Seller posting such delivery points on 1Line. Buyer's ability to nominate transportation service to such upstream non-traditional delivery point(s) will be subject to: (a) operating and tariff limitations at such point(s); (b)

confirmation and acceptance by the delivery point operator; and further, may be subordinate to any firm services requested to such point(s) which are traditional FT, FTN, FTP or FT-G delivery points of another firm Buyer.

Additionally, a Buyer under this rate schedule may nominate quantities of gas for transportation to secondary delivery points pursuant to Section 2.8 of this rate schedule.

4.6 Transportation service under this rate schedule, from the receipt point(s) and to the delivery point(s) specified in this Section 4 shall be subject to any applicable tariff limitations and contract capacity entitlements. The sum of Buyer's deliveries through a given segment of Seller's pipeline shall be limited to Buyer's TCQ quantity as specified in the executed service agreement for such segment of capacity.

4.7 Buyers under this rate schedule shall schedule transportation service to valid delivery points from valid receipt points without restriction to the direction of flow, provided however, the sum of the volumes scheduled on any day (upstream and/or downstream) through a given segment of Seller's pipeline shall not exceed Buyer's TCQ quantity as specified in the executed service agreement for such segment of capacity. Reverse Path transportation, as defined in Section 2.9(b) hereof, is subject to the operating conditions of Seller's pipeline and will not be made available to Buyer if Seller, in Seller's sole discretion, determines that such transportation is operationally infeasible.

Subject to the foregoing and to other provisions of this rate schedule, Buyer, and any and all Replacement Shippers that derive a firm capacity entitlement from Buyer, may schedule on any day forwardhaul transportation up to Buyer's TCQ quantity and backhaul transportation up to Buyer's TCQ quantity, within or outside Buyer's firm contract path (as defined by those receipt and delivery points specifically identified in Buyer's FT service agreement), for delivery at the same valid delivery point at the same time; provided however, at a Swing Service Delivery Point, (1) the sum of Buyer’s Primary Path scheduled quantities, as defined in Section 2.9(a) hereof, and Buyer’s high burn limit values at such point, as provided by the delivery point operator’s predetermined allocation (PDA) in accordance with Section 18.1(a) of the General Terms and Conditions, shall not exceed Buyer’s TCQ, and (2) Buyer’s Reverse Path scheduled quantities shall not exceed Buyer’s TCQ.

4.8 For capacity release transactions, receipt and delivery points will be established by the terms of the capacity release agreement. The rights of the Replacement Shipper at any particular point shall be those rights of the Releasing Shipper.

5. SCHEDULING AND BALANCING

5.1 Buyer shall nominate service under this rate schedule in accordance with the procedures set forth in Section 28.1 of the General Terms and Conditions subject to (a) and (b) below. Seller, in its sole judgment, may waive any nomination and ranking deadlines, on a non-discriminatory basis, if Seller determines that operating conditions permit. Buyer shall nominate receipt point quantities for delivery to the nominated points of delivery. Such nominated quantities shall be subject to confirmation by Seller which shall be based on the best operating information available to Seller, and confirmation by the upstream and

downstream point operators as provided in Section 60 of the General Terms and Conditions. Such confirmed quantity shall be deemed the scheduled quantity. Buyer and Seller shall have scheduling personnel available to be contacted 7 days a week, 24 hours a day, and Buyer shall cause the operators at the point(s) of receipt and delivery to do the same.

(a) Buyer may request to renominate gas supplies from available alternative receipt point(s) during the day (subject to verification and confirmation by Seller) in accordance with Section 28.1 of the General Terms and Conditions in order to mitigate unexpected gas production outages. Seller will use all reasonable efforts to accommodate such requests, when operating conditions on Seller's system permit.

(b) Buyer may take daily delivery, at the point(s) of delivery set forth in Buyer's service agreement hereunder (traditional delivery point(s)), of quantities greater than or less than the quantities scheduled in advance pursuant to this Section 5.1, pursuant to the procedures outlined in Section 18.1(a) of the General Terms and Conditions governing designation of delivery point "swing" services at Swing Service Delivery Points; provided, however, nothing herein shall give Buyer the right to take delivery hereunder on any day of quantities in excess of Buyer's TCQ, as adjusted pursuant to Section 11 of the General Terms and Conditions.

Notwithstanding the foregoing, if Seller determines in its sole opinion that it is operationally feasible to provide additional “swing” service for Buyer (i) at traditional delivery point(s) beyond that provided pursuant to the immediately preceding paragraph, and/or (ii) at non-traditional delivery point(s) and/or secondary delivery point(s) under Buyer’s service agreement hereunder, then Buyer may take daily delivery at such point(s) of quantities that are greater than or less than the quantities scheduled in advance pursuant to this Section 5.1, pursuant to the procedures outlined in Section 18.1(a) of the General Terms and Conditions governing designation of delivery point “swing” services at Swing Service Delivery Points; provided, however, that nothing herein shall give Buyer the right to take delivery at any such point of quantities in excess of Buyer’s TCQ, as adjusted pursuant to Section 11 of the General Terms and Conditions. Seller shall have no obligation to allow such “swing” service and shall post on 1Line any limitations applicable to such “swing” service, subject to change if, in Seller’s sole discretion, operating conditions so require.

5.2 Buyer shall have the responsibility to adjust and maintain a concurrent balance between receipts and deliveries based on the best information available to Buyer. Seller shall have the responsibility to monitor daily receipts and daily deliveries during the month based on the best operating information available to Seller (including electronic gas measurement - estimates or actuals) and shall make such information available in accordance with Section 29 of the General Terms and Conditions. Seller shall install the appropriate equipment and facilities on its pipeline system as determined by Seller to accurately measure gas receipts and deliveries. Any imbalances between Buyer's deliveries of gas for transportation and Seller's redeliveries shall be kept to a minimum. For daily imbalances between receipts and deliveries exceeding 10 percent or 1,000 dth (whichever is greater) or cumulative imbalances exceeding 5 percent or 1,000 dth (whichever is greater) Seller, upon notice to Buyer, which notice shall be given at least 24 hours in advance, unless exigent circumstances

dictate otherwise, may issue Operational Controls or Operational Flow Orders pursuant to Sections 51 and 52 of the General Terms and Conditions to require adjustments to Buyer's daily scheduling of receipts or deliveries over a reasonable period of time to maintain a concurrent balance when the operational integrity of Seller's pipeline system would otherwise be threatened.

5.3 Each month imbalances shall be resolved in accordance with the provisions of Sections 25 and 37 of the General Terms and Conditions.

6. BYPASS OF A LOCAL DISTRIBUTION COMPANY

6.1 In the event Seller bypasses a Buyer that is a local distribution company to provide service directly to a gas burning facility that, prior to the date of such direct service, was served by that local distribution company, then the bypassed local distribution company will have certain options, as described below, related to such bypass provided the local distribution company meets the following conditions:

(a) Buyer is a Conversion Buyer as defined in Section 7.1 of this rate schedule; and

(b) Buyer formerly contracted for sales service under Seller's now-terminated Rate Schedule FS for a term of at least three (3) years.

6.2 If Seller is required to provide firm or interruptible transportation service directly to an existing gas burning facility that prior to the date of commencement of such direct service was receiving gas service from Buyer (Existing Facility), thereby excluding Buyer from such transaction:

Seller shall offer firm or interruptible transportation service, as applicable, to Buyer under the same terms and conditions (including rates) offered to the Existing Facility for a volume of gas equal to the maximum daily transportation service provided directly to the Existing Facility by Seller.

6.3 If Seller voluntarily provides firm or interruptible transportation service directly to an Existing Facility thereby excluding Buyer from such transaction:

(a) Seller shall offer firm or interruptible transportation service, as applicable, to Buyer under the same terms and conditions (including the lowest rates) offered to any facility served directly by Seller in Buyer's existing service territory for a volume of gas equal to the maximum daily transportation service provided directly to the Existing Facility by Seller, or

(b) Buyer shall have the right to elect, within six (6) months following receipt of notice that such direct service will be provided to an Existing Facility by Seller, to reduce its Rate Schedule FT entitlements. Buyer agrees to specify, at the

time of such election, the date, which shall be a date no earlier than six (6) months following the date of Buyer's election and no later than thirty-six (36) months following the date of Buyer's election, on which such reductions will become effective. Such reductions in Rate Schedule FT service shall be no greater than the maximum daily transportation service provided directly by Seller to such Existing Facility.

(c) Transco will provide written notice to Buyer sixty (60) days prior to commencement of voluntary direct transportation service to an Existing Facility.

(d) For purposes of this Section 6.3, Seller shall be deemed to have voluntarily provided direct service to an Existing Facility if Seller voluntarily constructs facilities connecting its system to an Existing Facility or if Seller does not oppose a tap into its system by an Existing Facility or a third party the purpose of which, at the time the tap is constructed, is to bypass Buyer and serve an Existing Facility.

7. SERVICE RIGHTS OF CONVERSION BUYERS

7.1 A Conversion Buyer for purposes of this Section 7, is a Buyer that has converted a firm sales contract to service under this rate schedule or a Buyer that receives service under this rate schedule by virtue of a reallocation of firm daily sales or firm mainline transportation capacity on Seller's system.

7.2 A Conversion Buyer shall be allocated its full firm TCQ capacity through Seller's mainline facilities commencing at Seller's Station 65 and terminating downstream at the Conversion Buyer's market area delivery points.

7.3 Conversion Buyers shall be allocated capacity through Seller's mainline system upstream of Station 65 as follows: Each Conversion Buyer shall be allocated capacity equal to the quantity determined by multiplying (i) such Conversion Buyer's TCQ commencing at Station 65 by (ii) the following percentages as applicable to each of the following sections of Seller's system; provided however, if a Conversion Buyer's executed service agreement reflects stated capacity quantities which do not equate to the following percentages, the Conversion Buyer shall be allocated capacity through Seller's mainline system upstream of Station 65 in accordance with the capacities stated in the Conversion Buyer's executed service agreement.

Section of Seller's Mainline System Upstream of Station 65 (Compressor Station to Compressor Station)	Cumulative Percentage

30 - 45	17%
45 - 50	42%
50 - 65	61%
62 - 65	39%

Transportation service from an off mainline receipt point upstream of one of the above designated compressor stations to any such compressor station which is a firm receipt point for Buyer under this rate schedule shall be provided by Seller under an interruptible feeder arrangement as set forth in Section 3.9 of Rate Schedule IT.

7.4 In addition to the capacity entitlements specified in Section 7.3 hereof, Buyers converting from Rate Schedule PS to firm transportation service hereunder may elect to purchase a firm daily capacity entitlement on an annual basis from Seller's Station 54 to 65 equal to the difference between Buyer's Station 50-65 capacity entitlement as set forth in Section 7.3 hereof and 100% of Buyer's PS conversion TCQ.

8. OTHER CONDITIONS OF SERVICE

8.1 Requests for transportation hereunder shall be considered acceptable only if Buyer has completed and returned Seller's transportation service request form (which is available to all Buyers and potential Buyers on request) electronically via 1Line or to the following address:

Transcontinental Gas Pipe Line Company, LLC
Attention: Customer Services
P. O. Box 1396
Houston, Texas 77251

Such request for service shall contain the information specified in Seller's transportation service request form, as such may be revised from time to time, and

(a) Either with the request for service or at the time of execution of the service agreement, such other information, in writing, as is required to comply with regulatory reporting or filing requirements; and

(b) Sufficient information to determine Buyer's creditworthiness in accordance with Section 32 of the General Terms and Conditions.

8.2 Requests for transportation hereunder shall be void unless Buyer executes a service agreement for service under this rate schedule within thirty (30) days after Seller has tendered such agreement to Buyer and provides the following information to Seller in writing prior to or at the time that Buyer executes such service agreement.

(a) If the transportation service is to be provided pursuant to Section 311(a) of the Natural Gas Policy Act (NGPA), certification including sufficient information to verify that Buyer's transportation service qualifies under Section 311(a) of the NGPA. Such

certification shall include a statement by the intrastate pipeline or local distribution company on whose behalf such transportation service is to be performed that:

(i) The intrastate pipeline or local distribution company has physical custody of and transports the natural gas at some point; or

(ii) The intrastate pipeline or local distribution company holds title to the natural gas at some point, which may occur prior to, during, or after the time that the gas is being transported by the interstate pipeline, for a purpose related to its status and functions as an intrastate pipeline or its status and functions as a local distribution company; or

(iii) The gas is delivered at some point to a customer that either is located in a local distribution company's service area or is physically able to receive direct deliveries of gas from an intrastate pipeline, and that local distribution company or intrastate pipeline certifies that it is on its behalf that the interstate pipeline is providing transportation service.

8.3 If the transportation service is to be provided under one service agreement for multiple affiliated Buyers ("Principals") that have designated an affiliate to act as agent on their behalf ("Agent"), Principals shall provide notice of such to Seller and shall also provide sufficient information to verify:

(a) that Principals collectively meet the "shipper must have title" requirement as set forth in Section 13 hereof;

(b) that each Principal agrees that it is jointly and severally liable for all of the obligations of Buyer under the service agreement; and

(c) that Principals agree that they shall be treated collectively as one Buyer for nomination, allocation and billing purposes.

Agent shall be permitted to unilaterally amend the service agreement to remove a Principal or to add a Principal that satisfies the requirements of Section 8.1(b) of this rate schedule and of this Section 8.3 without using the procedures set forth in Section 42 of the General Terms and Conditions. No such amendment shall be binding on Seller prior to the date that notice thereof has been given to Seller.

8.4 Seller shall not be required to perform service under this rate schedule in the event all facilities necessary to render the requested service do not exist at the time the request is made.

9. RESERVED FOR FUTURE USE

10. BUYER'S RESPONSIBILITIES

Buyer recognizes that, as between it and Seller, Buyer has sole control over its physical takes of gas from Seller's system and therefore has a duty to refrain from taking delivery of volumes in excess of Buyer's TCQ, as adjusted pursuant to Section 11 of the General Terms and Conditions. Buyer further recognizes that Buyer may cause hardship and economic damage to other Buyers in the event Buyer takes delivery of volumes in excess of Buyer's TCQ, as adjusted, for which Buyer may be held accountable either through a direct cause of action by such other Buyers or as an impleaded or third party defendant in a suit by such other Buyers. In no event shall the payment of a penalty for an overrun quantity pursuant to Section 18 of the General Terms and Conditions be considered as giving Buyer the right to take such overrun quantity nor shall such payment be considered as a substitute for all other rights and remedies (including but not limited to consequential damages) available to any other Buyer against Buyer for failure to respect its obligation to stay within its TCQ, as adjusted.

11. SELLER'S RESPONSIBILITIES

Seller recognizes that it has a duty to use reasonable care and prudent operating procedures to allow Buyer to schedule for delivery within its TCQ, as adjusted pursuant to Section 11 of the General Terms and Conditions, the gas quantities available to Buyer up to the amount verified and confirmed by Seller based on the best operating information available to Seller. Seller also recognizes that unless forces beyond Seller's control (including, but not limited to, force majeure, or the failure of Buyer or Buyer's gas supplier to deliver scheduled gas quantities into Seller's system) cause interference with Seller's ability to redeliver, Seller has a duty to tender to Buyer for redelivery the gas quantities which Seller has verified and confirmed as available to Buyer. Seller further recognizes that a breach of its duties herein may cause hardship and economic damage to Buyer, for which Buyer reserves all rights and remedies (including but not limited to consequential damages), and for which Seller may be held accountable. In addition to the foregoing, Seller shall be responsible to Buyer for penalties in the same manner as an overrun by a Buyer, for service deficiencies (i.e., the failure to allow Buyer to schedule gas quantities for redelivery or the failure to tender to Buyer gas quantities for redelivery) caused by Seller allocating to Seller's sales service or to any other Buyer in a knowing, willful or grossly negligent manner the gas quantities which Seller has verified and confirmed as available to Buyer.

12. PROCEDURES USED TO PROVIDE GENERAL INFORMATION TO BUYERS AND POTENTIAL BUYERS

12.1 Information regarding Seller's maximum and minimum rates for firm transportation services, general rate discounting advisories, gas scheduling or allocation procedures, available firm transportation capacity and other general announcements pertaining to transportation services will be made available to all Buyers and potential Buyers by electronic means on a twenty-four hour basis on 1Line.

12.2 Any general firm transportation service announcements will be made available to all Buyers and potential Buyers by electronic means on a twenty-four hour basis through 1Line. Overnight delivery of this information will be available to Buyers and potential Buyers upon written request provided that such overnight delivery services are prepaid.

13. WARRANTY OF TITLE TO GAS

PART III – RATE SCHEDULES

SECTION 3
OPEN ACCESS FIRM STORAGE SERVICE

RATE SCHEDULE WSS-OPEN ACCESS
Washington Storage Service-Open Access

1. AVAILABILITY

1.1 This open-access rate schedule is available for the purchase from Transcontinental Gas Pipe Line Company, LLC (hereinafter referred to as Seller) of Washington Storage Service by any person, company or agency (hereinafter referred to as Buyer), when Buyer and Seller execute a service agreement for Washington Storage Service under this rate schedule.

1.2 Service under this rate schedule is also available when Buyer has obtained released firm capacity from a Rate Schedule WSS-Open Access Buyer releasing such firm capacity ("Releasing Shipper") pursuant to Section 42 of the General Terms and Conditions.

2. APPLICABILITY AND CHARACTER OF SERVICE

2.1 Applicability

This rate schedule shall apply to storage service rendered from the Washington Storage Field by Seller to Buyer including service released under this rate schedule pursuant to Section 42 of the General Terms and Conditions. Service shall be rendered pursuant to the service agreement executed for service hereunder and subject to Part 284 of the Commission's regulations. Service rendered under this rate schedule, within the limitations described in Sections 6 and 7 hereof, shall not be subject to curtailment or interruption except that caused by force majeure or by operating conditions beyond Seller's or Buyer's control.

2.2 Pregranted Abandonment and Right of First Refusal

Section 284.221(d) of the Commission's regulations shall apply to service under this rate schedule subject to the right of first refusal procedures, if applicable, set forth in Section 48 of the General Terms and Conditions.

3. RATES AND CHARGES

3.1 The maximum and minimum rates for service under this rate schedule are shown on the currently effective Statement of Rates and Fuel in Part II, Section 3.1 of this tariff. Buyer shall pay such maximum rates for service under this rate schedule unless Seller, in its sole judgment, agrees to discount its rate to Buyer. Such discount may be granted consistent with the applicable provisions of Section 40 of the General Terms and Conditions. Further, Buyer and Seller may mutually agree to a negotiated rate pursuant to the provisions of Section 53 of the General Terms and Conditions. Such negotiated rate shall be set forth in the executed service agreement.

3.2 For purposes of capacity release, the Demand and Storage Capacity Quantity charges payable by Buyer shall be at a rate set forth in the applicable capacity release award posted on 1Line consistent with the provisions of Section 42 of the General Terms and Conditions.

The maximum and minimum rates for service are shown on the effective Statement of Rates and Fuel in Part II, Section 3.1 of this tariff, however, for releases that become effective on or after July 30, 2008, the maximum rate ceiling does not apply to such releases provided the release is for a term of one year or less and the release is to take effect on or before one year from the date on which the pipeline is notified of the release. The rate paid in any capacity release transaction not subject to the maximum rate ceiling will not be subject to refund.

3.3 For natural gas storage service rendered to Buyer under this rate schedule, Buyer shall pay Seller for each day of each month the sum of the following amounts:

(a) Demand Charge: A charge per day per dt of Storage Demand. If Buyer acquires storage capacity through a volumetric storage release, the demand charge shall be the rate set forth in the applicable capacity release award posted on 1Line multiplied by the allocated withdrawal quantity (up to the contract maximum daily withdrawal quantity for each day); provided, however, Buyer's monthly bill may be subject to adjustment to account for any minimum volumetric commitment specified in such capacity release award.

(b) Storage Capacity Quantity Charge: A charge per day per dt of Storage Capacity Quantity. If Buyer acquires storage capacity through a volumetric storage release, the Storage Capacity Quantity Charge shall be the rate set forth in the applicable capacity release award posted on 1Line multiplied by the end of day storage balance.

(c) Quantity Injected Charge: A charge per dt for gas delivered into storage for Buyer's account.

(d) Quantity Withdrawal Charge: A charge per dt for gas withdrawn from storage for Buyer's account.

3.4 If, under the provisions of Section 11.3 of the General Terms and Conditions, Seller orders interruption or reduction of service to Buyer on a day or days (Service Reduction Day), then Seller shall credit Buyer’s Demand Charge and Storage Capacity Quantity Charge in accordance with the provisions of Sections 3.6 and 3.7 of this rate schedule for the day(s) on which such interruption or reduction occurs. Additionally, on a Service Reduction Day, Seller shall suspend, as necessary, the provisions of Section 6.1(b) and/or 7.1(b) of this rate schedule. Seller shall post notice of such suspension on 1Line, including whether the Service Reduction Day affects injections, withdrawals, or injections and withdrawals.

3.5 Determination of Service Reduction Quantities

(a) For each Service Reduction Day, Seller shall determine the interruption or reduction in Buyer’s Storage Demand in the following manner:

(i) Seller shall endeavor to withdraw and deliver, on any one day, as much of Buyer's nomination for such day as operating conditions permit. If, however,

the total of all nominations for a day exceeds the total quantity which Seller can withdraw from storage on such day, the nominations for such day shall be allocated pro rata among the nominating Buyers based upon each Buyer's nomination up to Buyer's Storage Demand, subject to the provisions set forth in Sections 7.2 and 7.3 hereof. The final nominated quantity upon conclusion of each of the nomination cycles identified in Section 28.1 of the General Terms and Conditions, as prorated if necessary, shall be the scheduled withdrawal quantity for such day. Seller shall thereupon withdraw for Buyer the quantity of gas scheduled.

(ii) The difference each day, if any (but not less than zero), between Buyer's nominated quantity (not to exceed Buyer's Storage Demand, subject to the provisions set forth in Sections 7.2 and 7.3 hereof) and the quantity scheduled in accordance with Section 3.5(a)(i) is Buyer's Storage Demand Reduction Quantity.

(b) For each Service Reduction Day, Seller shall determine the interruption or reduction in Buyer's Storage Capacity Quantity in the following manner:

(i) Seller shall endeavor to inject, on any one day, as much of Buyer's nomination for such day as operating conditions permit. If, however, the total of all nominations for a day exceeds the total quantity which Seller can inject into storage on such day, the nominations for such day shall be allocated pro rata among the nominating Buyers based upon each Buyer's nomination, subject to the provisions set forth in Sections 6.2 and 6.3 hereof. The final nominated quantity upon conclusion of each of the nomination cycles identified in Section 28.1 of the General Terms and Conditions, as prorated if necessary, shall be the scheduled injection quantity for such day. Seller shall thereupon inject for Buyer the quantity of gas scheduled.

(ii) The difference each day, if any (but not less than zero), between Buyer's nominated quantity (subject to the provisions set forth in Sections 6.2 and 6.3 hereof) and the quantity scheduled in accordance with Section 3.5(b)(i) is Buyer's Storage Injection Reduction Quantity.

3.6 For each Service Reduction Day due to a force majeure event, Buyer's Demand Charge credit and Storage Capacity Quantity Charge credit shall be computed as follows:

(a) Demand Charge credit:

Buyer's Storage Demand Reduction Quantity calculated in Section 3.5(a)(ii) multiplied by the return on equity and associated income tax component of Buyer's Demand Charge.

(b) Storage Capacity Quantity Charge credit:

Buyer's Storage Injection Reduction Quantity calculated in Section 3.5(b)(ii) multiplied by the return on equity and associated income tax component of Buyer's Storage Capacity Quantity Charge.

3.7 For each Service Reduction Day due to a non-force majeure event, Buyer's Demand Charge credit and Storage Capacity Quantity Charge credit shall be computed as follows:

(a) Demand Charge credit:

Buyer's Storage Demand Reduction Quantity calculated in Section 3.5(a)(ii) multiplied by Buyer's Demand Charge.

(b) Storage Capacity Quantity Charge credit:

Buyer's Storage Injection Reduction Quantity calculated in Section 3.5(b)(ii) multiplied by Buyer's Storage Capacity Quantity Charge.

4. DEFINITIONS

4.1 Storage Demand

The Storage Demand shall be that quantity set forth in the executed service agreement and shall be utilized to determine the Demand Charges payable by Buyer hereunder.

4.2 Storage Capacity Quantity

The Storage Capacity Quantity shall be specified in the executed service agreement and shall be utilized to determine the Storage Capacity Quantity Charges payable by Buyer hereunder.

4.3 Storage Gas Balance

The Storage Gas Balance of Buyer at any particular time shall be the quantity of gas in storage for Buyer's account at such time.

5. GENERAL DESCRIPTION OF OPERATION

Subject to the limitations described in Sections 6 and 7 hereof, Buyer shall provide Seller with a quantity of gas up to Buyer's Storage Capacity Quantity plus a percentage or percentages of such quantity as compensation for compressor fuel and gas otherwise used, or lost and unaccounted for, in Seller's operations. Such percentage(s) is specified in the currently effective Statement of Rates and Fuel in Part II, Section 3.1 of this tariff and does not include the fuel to be retained by Seller under Seller's firm and interruptible transportation rate schedules to transport gas to and from the Washington Storage Field.

6. INJECTIONS INTO STORAGE

6.1 General Procedure

(a) When Buyer desires Seller to store gas for its account under this rate schedule, Buyer or Buyer's designee shall nominate quantities to be delivered for injection in accordance with Seller's nomination and ranking deadlines as set forth in Section 28.1 of the General Terms and Conditions. Seller, in its sole judgment, may waive any nomination and ranking deadlines, on a non-discriminatory basis, if Seller determines that operating conditions permit. Such nominated quantities shall be subject to confirmation by Seller which shall be based on the best operating information available to Seller. Such confirmed quantity shall be deemed the scheduled quantity. Buyer shall make available such scheduled quantity, plus fuel as determined in accordance with Section 5 hereof, and Seller shall thereupon inject the scheduled quantity into storage for Buyer's account on such day, subject to the provisions of Section 6.1(b) hereof. Gas for injection hereunder shall be made available by Buyer at the receipt point set forth in the executed WSS-Open Access service agreement as a result of transportation services performed for Buyer or Buyer's designee.

(b) Buyer may cause Seller to inject quantities of gas into storage for Buyer's account under this rate schedule which are greater than or less than the quantity scheduled in advance pursuant to Section 6.1(a) hereof, pursuant to the procedures outlined in Section 18.1 of the General Terms and Conditions governing designation of delivery point "swing" services; provided, however, nothing herein shall give Buyer the right to inject on any day a quantity of gas into storage under this rate schedule in excess of the quantity which Buyer would otherwise be entitled to inject under the terms of this rate schedule on such day.

6.2 Daily Injection Quantity

The maximum quantity of gas which Seller can inject into storage on any one day is dependent in part upon operating conditions at the particular time. Seller shall endeavor to inject on any one day, as much of Buyer's storage nomination for such day as operating conditions will permit. If, however, the total of all nominations for such day exceeds the total quantity which Seller can inject into storage on such day, the nominations for such day shall be reduced in an equitable manner; provided, however, that Seller shall be obligated to inject into storage on any one day for Buyer at Buyer's request, at least one-one hundred eightieth (1/180) of Buyer's Storage Capacity Quantity until such time as Buyer's Storage Gas Balance is equal to one-half (1/2) of Buyer's Storage Capacity Quantity and thereafter at least one-two hundred fourteenth (1/214) of Buyer's Storage Capacity Quantity. Seller shall provide notice on 1Line of the availability of daily injection quantities in excess of the foregoing daily injection obligations.

6.3 Limitation Upon Total Injection

Seller shall be obligated to inject gas into storage for Buyer's account in accordance with the above procedures only when Buyer's Storage Gas Balance is less than Buyer's Storage Capacity Quantity by an amount greater than or equal to Buyer's nominated injection quantity.

7. WITHDRAWALS FROM STORAGE

7.1 General Procedure

(a) When Buyer desires the withdrawal or delivery of gas stored for Buyer's account under this rate schedule, Buyer or Buyer's designee shall nominate quantities to be received subsequent to withdrawal in accordance with Seller's nomination and ranking deadlines as set forth in Section 28.1 of the General Terms and Conditions. Seller, in its sole judgment, may waive any nomination and ranking deadlines, on a non-discriminatory basis, if Seller determines that operating conditions permit. Such nominated quantities shall be subject to confirmation by Seller which shall be based on the best operating information available to Seller. Such confirmed quantity shall be deemed the scheduled quantity. Seller shall thereupon withdraw or deliver for Buyer or Buyer's designee the quantity of gas scheduled and Buyer's Storage Gas Balance shall be reduced by the quantity of gas scheduled for withdrawal on such day, subject to Section 7.1(b) hereof. Gas for withdrawal hereunder shall be made available by Seller at the delivery point set forth in the executed WSS-Open Access service agreement for subsequent transportation service for Buyer or Buyer's designee.

(b) Buyer may cause Seller to withdraw quantities from storage for Buyer's account under this rate schedule which are greater than or less than the quantity scheduled in advance pursuant to Section 7.1(a) hereof, pursuant to the procedures outlined in Section 18.1 of the General Terms and Conditions governing designation of delivery point "swing" services; provided, however, nothing herein shall give Buyer the right to

take delivery on any day of a quantity of gas under this rate schedule in excess of the quantity which Buyer would otherwise be entitled to take under the terms of this rate schedule on such day.

7.2 Daily Withdrawal Quantity

The maximum quantity of gas which Seller can withdraw from storage on any day is dependent upon operating conditions in the Washington Storage Field and on Seller's system at the particular time. Seller shall endeavor to withdraw and deliver on any one day, as much of Buyer's nomination for such day as operating conditions will permit.

If, however, the total of all of the nominations exceed the total quantity which Seller can withdraw from storage on such day, each Buyer's storage withdrawal on such day shall be prorated in proportion to each Buyer's current Storage Gas Balance utilizing Seller's records, provided that on any day Buyer shall be entitled to withdraw the following daily quantity:

Buyer's Storage Gas Balance As a Percent of Buyer's Storage Capacity Quantity	Buyer's Daily Withdrawal Entitlement As A Factor of Buyer's Storage Capacity Quantity
20- 0	1/173
40-21	1/140
60-41	1/117
80-61	1/106
100-81	1/95

Seller shall provide notice on 1Line of the availability of daily withdrawal quantities in excess of the foregoing daily withdrawal entitlements.

7.3 Limitation Upon Total Withdrawal

Seller shall not withdraw gas for Buyer in excess of Buyer's Storage Gas Balance existing at any time.

8. BASE GAS

This provision shall not apply to releases of capacity under Section 42 of the General Terms and Conditions that are not permanent releases for the remaining term of the service agreement.

8.1 Seller's Obligation to Provide Base Gas

Seller is obligated to maintain sufficient base gas to support total top gas capacity entitlements of its customers.

8.2 Right to Certain Buyers to Purchase Base Gas

Seller shall be the owner of Base Gas injected into the Washington Storage Field; however, Buyers who are former Rate Schedule WSS customers, that have converted to service under this rate schedule, shall be entitled to purchase and receive the quantity of Base Gas as shown below, when such Buyer no longer receives service from the Washington Storage Field, less two (2) percent of such quantity for injection and withdrawal fuel. Buyer shall pay Seller for such gas received a charge per dt equal to the sum of (1) the average demand charge per dt credited to Buyer's bill at the time gas was injected into storage as Base Gas, (2) the average commodity charge in effect under the applicable rate schedule for each Buyer at the time gas was injected into storage as Base Gas, and (3) the Quantity Withdrawal Charge in effect at the time of withdrawal.

Base Gas attributable to each Buyer is as follows:

	MCF @ 14.73 PSIA
Atlanta Gas Light Company	2,329,800
Brooklyn Union Gas Company	5,798,096
Chesapeake Utilities Corp. d/b/a Delaware Division	53,585
Chesapeake Utilities Corp. d/b/a Maryland Division	12,426
Clinton-Newberry Natural Gas Authority	155,320
City of Greenwood, South Carolina	23,298
City of Laurens, South Carolina	33,471
City of Shelby, North Carolina	9,708
City of Union, South Carolina	17,862
Consolidated Edison Company of N.Y. Inc.	4,629,190
Delmarva Power & Light Company	432,212
Elizabethtown Gas Company	1,183,242
Fort Hill Natural Gas Authority	77,660
KeySpan Energy Delivery Long Island	1,672,962
Liberty Utilites (Peach State Natural Gas) Corp.	149,718
Owens-Corning Sales, LLC	291,225
Patriots Energy Group	317,323
PECO Energy Company	1,383,433
Philadelphia Gas Works	1,251,530
Piedmont Natural Gas Company, Inc.	3,521,080
Public Service Company of North Carolina	1,048,410
South Carolina Electric & Gas Co.	168,052
Virginia Natural Gas, Inc.	271,810
Six One Commodities LLC	723,706

The Base Gas purchase rights shall apply to Rate Schedule WSS-Open Access Buyers receiving service from Seller as of November 1, 1998 or to Rate Schedule WSS Buyers receiving service from Seller as of November 1, 1998 that subsequently convert to service under this rate schedule. If a Buyer under this rate schedule exercises its right to purchase Base Gas as shown above, such right must be exercised upon the termination of service hereunder; however, with respect to a permanent release under Section 42.14 of the General Terms and Conditions, Buyer may exercise its right to purchase Base Gas as shown above at the time of such permanent release or may assign such right to a Replacement Shipper.

8.3 Seller's Replenishment of Base Gas

If a Buyer exercises the right to purchase Base Gas pursuant to Section 8.2 of this rate schedule and Seller replenishes all, or any portion, of the Base Gas in order to support the top gas capacity entitlements of a new Buyer(s) under this rate schedule that contracts for capacity vacated by the terminating Buyer, then Seller shall either make a limited Section 4 rate filing to recover from the new Buyer(s) any increase in the cost of service attributable to Seller's replenishment of Base Gas to serve the new Buyer(s) or make an informational filing detailing the volume of replenishment base gas purchased and the cost of that gas. Subject to Seller demonstrating that the cost of the base gas included in the limited Section 4 rate filing is the actual cost incurred by Seller to replenish the Base Gas, the level of such costs shall not be subject to challenge. Seller's purchase of additional base gas quantities will be conducted pursuant to a posting and bidding process consistent with the procedures set forth in Section 43 of the General Terms and Conditions.

9. TRANSFERS OF STORAGE INVENTORY

Refer to Section 47 of the General Terms and Conditions.

10. RIGHT OF FIRST REFUSAL PROCEDURES

Refer to Section 48 of the General Terms and Conditions.

11. PROCEDURES FOR ALLOCATING AVAILABLE CAPACITY

Refer to Section 49 of the General Terms and Conditions.

12. REQUEST FOR SERVICE

12.1 Requests for service hereunder shall be considered acceptable only if Buyer has completed and returned Seller's storage service request form (which is available to all Buyers and potential Buyers on request) electronically via 1Line or to the following address:

Transcontinental Gas Pipe Line Company, LLC
Attention: Customer Services
P. O. Box 1396
Houston, Texas 77251

Such request for service shall contain the information specified in Seller's storage service request form, as such may be revised from time to time, and

(a) Either with the request for service or at the time of execution of the service agreement, such other information, in writing, as is required to comply with regulatory reporting or filing requirements; and

(b) Sufficient information to determine Buyer's credit worthiness in accordance with Section 32 of the General Terms and Conditions.

12.2 Requests for service hereunder shall be void unless Buyer executes a service agreement for service under this rate schedule within thirty (30) days after Seller has tendered such agreement to Buyer.

13. RECORDS OF INJECTION, WITHDRAWAL AND STORAGE GAS BALANCES

Seller shall keep accurate records of quantities injected to or withdrawn from Buyer's account, and of Buyer's Storage Gas Balance, which records shall be made available to Buyer at its request.

14. GENERAL TERMS AND CONDITIONS

All of the applicable General Terms and Conditions of Seller's Volume No. 1 Tariff are hereby made a part hereof. However, in the event of any inconsistencies between the General Terms and Conditions and this Rate Schedule WSS-Open Access, the terms and conditions of this Rate Schedule WSS-Open Access shall control.

PART III – RATE SCHEDULES

SECTION 6
FIRM 7(c) STORAGE SERVICE

RATE SCHEDULE GSS
General Storage Service

1. AVAILABILITY

This rate schedule is available for the purchase from Transcontinental Gas Pipe Line Company, LLC (hereinafter called Seller) of natural gas storage service by any utility or gas distribution agency (hereinafter referred to as Buyer), when Buyer and Seller execute a service agreement for storage service under this rate schedule.

2. APPLICABILITY AND CHARACTER OF SERVICE

This rate schedule shall apply to storage service rendered by Seller to Buyer under the service agreement executed for service hereunder. Service rendered under this rate schedule, within the limitations described in Sections 6 and 7 hereof, shall be considered to be firm, and shall not be subject to curtailment or interruption except that caused by force majeure or by operating conditions beyond Seller's or Buyer's control.

3. RATES, CHARGES, AND FUEL

3.1 The applicable charges set forth in that portion of the currently effective Statement of Rates and Fuel in Part II, Section 7.1 of this tariff.

3.2 For natural gas storage service rendered to Buyer under this rate schedule, Buyer shall pay Seller for each day of each month the sum of the following amounts:

(a) Demand Charge: A charge per day per dt of Storage Demand.
(b) Storage Capacity Quantity Charge: A charge per day per dt of Storage Capacity Quantity.
(c) Quantity Injected Charge: A charge per dt for gas delivered into storage for Buyer's account.
(d) Quantity Withdrawn Charge: A charge per dt for gas withdrawn from storage for Buyer's account.
(e) Excess Delivery from Buyer's Storage Gas Balance Charge: A charge per dt for all gas withdrawn from storage for Buyer in excess of Buyer's firm withdrawal entitlement.
(f) Excess End of Season Inventory Charge: The portion of Eastern Gas Transmission and Storage Inc.'s (EGTS) excess end of season inventory charge under EGTS's Rate Schedule GSS which is allocated to Buyers under this rate schedule.

3.3 In addition to the fuel allowance set forth in Section 9 of this rate schedule, Seller shall retain from Buyer's nominated storage injections a percentage or percentages as compensation for compressor fuel and gas otherwise used, or lost and unaccounted for, in Seller's operations. The respective fuel retention percentages pursuant to Section 3.3 and Section 9 of this rate schedule are specified on the Statement of Rates and Fuel in Part II, Section 7.1 of this tariff. The total fuel retention percentage under this rate schedule is shown on such Statement of Rates and Fuel in Part II, Section 7.1.

3.4 If, under the provisions of Section 11.3 of the General Terms and Conditions, Seller orders interruption or reduction of service to Buyer on a day or days (Service Reduction Day), then Seller shall credit Buyer's Demand Charge and Storage Capacity Quantity Charge in accordance with the provisions of Sections 3.6 and 3.7 of this rate schedule. Additionally, on a Service Reduction Day, Seller shall suspend, as necessary, the provisions of Section 7.1(b) and/or 8.1(b) of this rate schedule. Seller shall post notice of such suspension on 1Line, including whether the Service Reduction Day affects injections, withdrawals, or injections and withdrawals.

3.5 Determination of Service Reduction Quantities

(a) For each Service Reduction Day, Seller shall determine the interruption or reduction in Buyer's Storage Demand in the following manner:

i. Seller shall endeavor to withdraw and deliver, on any one day, as much of Buyer's nomination for such day as operating conditions permit. If, however, the total of all nominations for a day exceeds the total quantity which Seller can withdraw from storage on such day, the nominations for such day shall be allocated pro rata among the nominating Buyers based upon each Buyer's nomination up to Buyer's Storage Demand, subject to the provisions set forth in Section 8.3 hereof. The final nominated quantity upon conclusion of each of the nomination cycles identified in Section 28.1 of the General Terms and Conditions, as prorated if necessary, shall be the scheduled withdrawal quantity for such day. Seller shall thereupon withdraw for Buyer the quantity of gas scheduled.

ii. When the Service Reduction Day is due to a non-force majeure event, Buyer's Storage Demand Reduction Quantity is calculated as the difference each day, if any (but not less than zero), between Buyer's nominated quantity (not to exceed Buyer's Storage Demand, subject to the provisions set forth in Section 8.3 hereof) and the quantity scheduled in accordance with Section 3.5(a)(i).

iii. When the Service Reduction Day is due to a force majeure event, Buyer's Storage Demand Reduction Quantity is calculated as the difference each day, if any (but not less than zero), between Buyer's nominated quantity (not to exceed Buyer's Storage Demand, subject to the provisions set forth in Section 8.3 hereof) and the quantity scheduled in accordance with Section 3.5(a)(i); provided however, if Seller posts notice on 1Line of the force majeure event, beginning with the Timely nomination cycle following such 1Line notice, Buyer's Storage Demand Reduction Quantity will be calculated as the difference each day between (A) Buyer's average delivered quantity for each transaction that would have been impacted by the force majeure event for the seven (7) gas days immediately prior to the first gas day of the force majeure event and (B) the quantity scheduled for the Service Reduction Day in accordance with Section 3.5(a)(i). To the extent reasonably known, the 1Line notice will include a description of the force majeure event, when the event

commenced, the anticipated duration of the event, and the areas of Seller's system expected to be impacted during the event.

(b) For each Service Reduction Day, Seller shall determine the interruption or reduction in Buyer's Storage Capacity Quantity in the following manner:

(i) Seller shall endeavor to inject, on any one day, as much of Buyer's nomination for such day as operating conditions permit. If, however, the total of all nominations for a day exceeds the total quantity which Seller can inject into storage on such day, the nominations for such day shall be allocated pro rata among the nominating Buyers based upon each Buyer's nomination, subject to the provisions set forth in Sections 7.3 and 7.4 hereof. The final nominated quantity upon conclusion of each of the nomination cycles identified in Section 28.1 of the General Terms and Conditions, as prorated if necessary, shall be the scheduled injection quantity for such day. Seller shall thereupon inject for Buyer the quantity of gas scheduled.

(ii) When the Service Reduction Day is due to a non-force majeure event, Buyer's Storage Capacity Reduction Quantity is calculated as the difference each day, if any (but not less than zero), between Buyer's nominated quantity (subject to the provisions set forth in Sections 7.3 and 7.4 hereof) and the quantity scheduled in accordance with Section 3.5(b)(i).

(iii) When the Service Reduction Day is due to a force majeure event, Buyer's Storage Capacity Reduction Quantity is calculated as the difference each day, if any (but not less than zero), between Buyer's nominated quantity (subject to the provisions set forth in Sections 7.3 and 7.4 hereof) and the quantity scheduled in accordance with Section 3.5(b)(i); provided however, if Seller posts notice on 1Line of the force majeure event, beginning with the Timely nomination cycle following such 1Line notice, Buyer's Storage Capacity Reduction Quantity will be calculated as the difference each day between (A) Buyer's average quantity delivered for injection for each transaction that would have been impacted by the force majeure event for the seven (7) gas days immediately prior to the first gas day of the force majeure event and (B) the quantity scheduled for the Service Reduction Day in accordance with Section 3.5(b)(i). To the extent reasonably known, the 1Line notice will include a description of the force majeure event, when the event commenced, the anticipated duration of the event, and the areas of Seller's system expected to be impacted during the event.

3.6 For each Service Reduction Day due to a force majeure event, Buyer's Demand Charge credit and Storage Capacity Quantity Charge credit shall be computed as follows:

(a) Demand Charge credit:

For a total of ten (10) Service Reduction Days due to a force majeure event, there shall be no Demand Charge credit for Buyer's storage Demand Reduction Quantity. For

each additional Service Reduction Day due to the force majeure event, the Demand Charge credit shall be Buyer's Storage Demand Reduction Quantity calculated in Section 3.5(a)(iii) multiplied by Buyer's Demand Charge.

(b) Storage Capacity Quantity Charge credit:

For a total of ten (10) Service Reduction Days due to a force majeure event, there shall be no Storage Capacity Quantity Charge credit for Buyer's Storage Injection Reduction Quantity. For each additional Service Reduction Day due to the force majeure event, the Storage Capacity Quantity Charge credit shall be Buyer's Storage Capacity Reduction Quantity calculated in Section 3.5(b)(iii) multiplied by Buyer's Storage Capacity Quantity Charge.

3.7 For each Service Reduction Day due to a non-force majeure event, Buyer's Demand Charge credit and Storage Capacity Quantity Charge credit shall be computed as follows:

(a) Demand Charge credit:

Buyer's Storage Demand Reduction Quantity calculated in Section 3.5(a)(ii) multiplied by Buyer's Demand Charge.

(b) Storage Capacity Quantity Charge credit:

Buyer's Storage Capacity Reduction Quantity calculated in Section 3.5(b)(ii) multiplied by Buyer's Storage Capacity Quantity Charge.

4. CHANGES IN RATES FOR THIS RATE SCHEDULE TO REFLECT A CHANGE IN RATES BY THE PIPELINE PROVIDING RELATED STORAGE SERVICE TO SELLER

4.1 Application - This section sets forth the procedures to (i) change Seller's rates under this rate schedule when EGTS, a provider of storage service necessary for Seller to provide storage service under this rate schedule, changes the rates and charges payable by Seller for such storage service and (ii) to flow-through refunds received from EGTS attributable to such storage service. The effective date of a change in Seller's rates filed pursuant to this Section 4.1 shall coincide with the effective date of any change in rates by EGTS under EGTS's Rate Schedule GSS.

(a) Rate Change - The charges under this rate schedule as shown on the effective Statement of Rates and Fuel in Part II, Section 7.1 of this tariff include amounts payable by Seller to EGTS for storage service under EGTS's Rate Schedule GSS. The service provided by EGTS is used by Seller to render a portion of the service to Buyers under Seller's Rate Schedule GSS. A change by EGTS in the charges payable by Seller shall be reflected in this rate schedule by the following procedure:

(i) Demand Charge - The Demand Charge shown on the Statement of Rates and Fuel in Part II, Section 7.1 of this tariff is based, in part, on EGTS's Storage Demand Charge and on the ratio of Seller's Storage Demand with EGTS to the

Storage Demand of all Buyers under Seller's Rate Schedule GSS. Seller shall reduce or increase, as appropriate, the Demand Charge shown on such Statement of Rates and Fuel in Part II, Section 7.1 by an amount equal to the change in EGTS's Storage Demand Charge times the then-current ratio, rounded to the nearest one-thousandth of a cent.

(ii) Storage Capacity Quantity Charge - The Storage Capacity Quantity Charge is based, in part, on EGTS's Storage Capacity Charge and on the ratio of Seller's Storage Capacity with EGTS to the Storage Capacity of all Buyers under Seller's Rate Schedule GSS. Seller shall reduce or increase, as appropriate, the Storage Capacity Quantity Charge shown on the Statement of Rates and Fuel in Part II, Section 7.1 of this tariff by an amount equal to the change in EGTS's Storage Capacity Quantity Charge times the then-current ratio, rounded to the nearest one-thousandth of a cent.

(iii) Quantity Injected Charge and Quantity Withdrawn Charge - The Quantity Injected charge and the Quantity Withdrawn Charge are based, in part, on EGTS's Injection and Withdrawal Charges and on the ratio of Seller's projected injections and withdrawals with EGTS to the total projected injections and withdrawals of all Buyers under Seller's Rate Schedule GSS. Seller shall reduce or increase, as appropriate, the Quantity Injected Charge and the Quantity Withdrawn Charge shown on the Statement of Rates and Fuel in Part II, Section 7.1 of this tariff by an amount equal to the change in EGTS's Injection and Withdrawal Charges times the then-current ratio, rounded to the nearest one-thousandth of a cent.

(iv) Other Charges - The other charges contained in this rate schedule shall be changed to reflect any changes filed pursuant to Sections 3.4(a)(i), (ii) and (iii) hereof.

(b) Notification - Seller shall give notice on 1Line of any proposed rate change filed by EGTS which Seller is authorized to track under this rate schedule within three (3) business days following Seller's receipt of such filing. Such notice shall include the expected effect on Seller's rates under this rate schedule.

(c) Seller's Tracker Filings - Seller shall file to track any rate change by EGTS which affects Seller's rates under this rate schedule no later than thirty (30) days following the issuance date of the Commission order which accepts and makes effective EGTS 's rate change. The effective date of such change in Seller's rates shall coincide with the effective date of any change in rates by EGTS.

(d) Refunds and Surcharges - Within forty-five (45) days of receipt thereof, Seller shall refund to Buyers under Seller's Rate Schedule GSS the proportion of the amount refunded to Seller by EGTS under EGTS's Rate Schedule GSS which pertains to service provided by Seller under Seller's Rate Schedule GSS, including any interest paid by EGTS. Such refund shall also include interest accrued by Seller while the funds received from EGTS are in Seller's possession. Seller shall bill Buyers under this rate

schedule for any surcharges paid by Seller, including any interest paid by Seller. Each Buyer's proportionate share of any refund or surcharge shall be determined in the same manner as the refund or surcharge from EGTS was determined.

5. MINIMUM BILL

The minimum bill shall be the sum of the Demand Charge and the Storage Capacity Quantity Charge.

6. DEFINITIONS

6.1 Storage Demand

The Storage Demand shall be that quantity set forth in the service agreement, as adjusted in accordance with Section 23 of the General Terms and Conditions, and shall be utilized to determine the Demand Charges payable by Buyer hereunder.

6.2 Storage Capacity Quantity

The Storage Capacity Quantity shall be that quantity set forth in the service agreement, as adjusted in accordance with Section 23 of the General Terms and Conditions, and shall be utilized to determine the Storage Capacity Quantity Charges payable by Buyer hereunder. The Storage Capacity Quantity shall be at least fifty (50) times and not more than one hundred ten (110) times Buyer's Storage Demand.

6.3 Storage Gas Balance

The Storage Gas Balance of Buyer at any particular time shall be the quantity of gas in storage for Buyer's account at such time.

7. INJECTIONS INTO STORAGE

7.1 General Procedure

(a) When Buyer desires Seller to store gas for its account under this rate schedule, Buyer shall nominate quantities for injection in accordance with Seller's nomination and ranking deadlines as set forth in Section 28.1 of the General Terms and Conditions. Seller, in its sole judgment, may waive any nomination and ranking deadlines, on a non-discriminatory basis, if Seller determines that operating conditions permit. Seller shall thereupon inject or cause to be injected into storage for Buyer's account on such day, the quantity of gas so nominated, subject to the limitations set forth below in this section. Gas for injection hereunder shall be made available by Buyer to Seller from gas available as a result of transportation services performed by Seller for Buyer or Buyer's designee.

(b) Buyer may cause Seller to inject quantities of gas into storage for Buyer's account under this rate schedule which are greater than or less than the quantity scheduled in advance pursuant to Section 7.1(a) hereof, pursuant to the procedures outlined in Section 18.1 of the General Terms and Conditions governing designation of delivery point "swing" services; provided, however, nothing herein shall give Buyer the right to inject on any day a quantity of gas into storage under this rate schedule in excess of the quantity which Buyer would otherwise be entitled to inject under the terms of this rate schedule on such day.

7.2 Notice Required

Buyer shall nominate injections under this rate schedule in accordance with Seller's nomination and ranking deadlines as set forth in Section 28.1 of the General Terms and Conditions. Seller, in its sole judgment, may waive any nomination and ranking deadlines, on a non-discriminatory basis, if Seller determines that operating conditions permit.

7.3 Daily Injection Quantity

The maximum quantity of gas which Seller can inject or cause to be injected into storage on any one day is dependent in part upon operating conditions at the particular time. Seller shall endeavor to inject or cause to be injected on any one day, as much of Buyer's storage nomination for such day as operating conditions will permit. If, however, the total of all nominations for such day exceed the total quantity which Seller can inject or cause to be injected into storage on such day, the nominations for such day shall be reduced in an equitable manner; provided, however, that Seller shall be obligated to inject into storage on any one day for Buyer at Buyer's request, at least one-one hundred eightieth (1/180) of Buyer's Storage Capacity Quantity until such time as Buyer's Storage Gas Balance is equal to one-half (1/2) of Buyer's Storage Capacity Quantity and thereafter at least one-two hundred fourteenth (1/214) of Buyer's Storage Capacity Quantity. Seller shall provide notice on 1Line of the availability of daily injection quantities in excess of the foregoing daily injection obligations.

7.4 Limitation upon Total Injection

Seller shall be obligated to inject gas into storage for Buyer's account in accordance with the above procedure only when Buyer's Storage Gas Balance is less than Buyer's Storage Capacity Quantity.

8. WITHDRAWALS FROM STORAGE

8.1 General Procedure

(a) When Buyer desires the delivery of gas stored for Buyer's account under this rate schedule, Buyer shall nominate quantities for withdrawals in accordance with Seller's nomination and ranking deadlines as set forth in Section 28.1 of the General Terms and Conditions. Seller, in its sole judgment, may waive any nomination and ranking deadlines, on a non-discriminatory basis, if Seller determines that operating

conditions permit. Seller shall thereupon deliver to Buyer the quantity of gas so nominated, subject to the limitations set forth below in this section.

(b) Buyer may take delivery of quantities of gas stored for Buyer's account under this rate schedule which are greater than or less than the quantity scheduled in advance pursuant to Section 8.1(a) hereof, pursuant to the procedures outlined in Section 18.1 of the General Terms and Conditions governing designation of delivery point "swing" services; provided, however, nothing herein shall give Buyer the right to take delivery on any day of a quantity of gas under this rate schedule in excess of the quantity which Buyer would otherwise be entitled to take under the terms of this rate schedule on such day.

8.2 Notice Required

Buyer shall nominate withdrawals under this rate schedule in accordance with Seller's nomination and ranking deadlines as set forth in Section 28.1 of the General Terms and Conditions. Seller, in its sole judgment, may waive any nomination and ranking deadlines, on a non-discriminatory basis, if Seller determines that operating conditions permit.

8.3 Quantity and Inventory Limitations

In the event Seller determines that it can make available for withdrawal and delivery quantities in excess of the quantity entitlements and delivery obligations set forth in Section 8.3(a), (b) or (c) hereof, Seller shall provide notice on 1Line of the availability of such excess withdrawals and deliveries.

(a) Subject to the other provisions of this section, Seller will deliver to Buyer on any one day under this rate schedule, the maximum quantity of gas which operating conditions in the storage fields will permit as determined by the operators thereof. Seller shall endeavor to withdraw and deliver, on any one day, the total of each Buyer's nominations for such day, up to, but not exceeding, Buyer's Storage Demand. If, however, all of the nominations exceed the total quantity which Seller can withdraw from storage and deliver, the gas deliverable on such day shall be prorated in proportion to each Buyer's current Storage Gas Balance, utilizing records of Seller's dispatcher, provided that on any day, Buyer shall be entitled to receive the following daily quantities:

(i) Buyer's Storage Demand, provided Buyer's Storage Gas Balance is 35 percent or more of Buyer's Storage Capacity Quantity.
(ii) 99 percent of Buyer's Storage Demand, provided Buyer's Storage Gas Balance is greater than or equal to 20 percent and less than 35 percent of Buyer's Storage Capacity Quantity.
(iii) 74 percent of Buyer's Storage Demand, provided Buyer's Storage Gas Balance is greater than or equal to 7 percent and less than 20 percent of Buyer's Storage Capacity Quantity.
(iv) 55 percent of Buyer's Storage Demand, when Buyer's Storage Gas Balance is less than 7 percent of Buyer's Storage Capacity Quantity.

(b) Seller shall not be obligated to deliver a daily average of more than 87-1/2 percent of Buyer's Storage Demand during any consecutive 30-day period.

(c) Seller shall not be obligated to deliver gas to Buyer hereunder, when:

(i) During the period from November 1 through February 14, such delivery would reduce Buyer's Storage Gas Balance to less than 20 percent of Buyer's Storage Capacity Quantity, and
(ii) During the period from February 15 through March 1, such delivery would reduce Buyer's Storage Gas Balance to less than 7 percent of Buyer's Storage Capacity Quantity.

(d) Minimum Inventory

Buyer must maintain a Storage Gas Balance equal to or greater than the following percentages of Buyer's Storage Capacity Quantity on each day during the following months:

December	35%
January	35%
February	15%

If Buyer does not maintain the required Storage Gas Balance, then commencing on such day and continuing until Buyer's Storage Gas Balance is at the level required above, Seller's obligation to make deliveries to Buyer shall be reduced by five (5) percent of Buyer's Storage Demand.

(e) Minimum Turnover

During the Winter Period, Buyer's total withdrawals from storage must be equal to or greater than the amount by which Buyer's Storage Gas Balance as of the prior November 1 exceeds thirty-five percent (35%) of Buyer's Storage Capacity. If Buyer has failed to withdraw such quantities, then Buyer will be subject to the provisions of Section 15 of this rate schedule.

8.4 Operational Flow Order

(a) Seller shall have the right to issue, if necessary, during the period of February 15 through March 31 of each year, Operational Flow Order(s) ("OFO") to specific Buyers described in Section 8.4(b) hereof if Seller determines that such action is necessary to manage conditions which may inhibit Seller's ability to deliver the Storage Demands of Buyers pursuant to Rate Schedule GSS. Seller may issue an OFO pursuant to this Section 8.4 only when Buyers' Storage Gas Balances, in aggregate, are 35 percent or less of Buyers' Storage Capacity Quantities.

(b) This OFO shall only apply if a portion of Buyer's GSS Storage service is supported by Seller's equity ownership interest in the Wharton Storage Field and that Buyer meets the conditions described in (i) or (ii) below:

(i) If a Buyer's Storage Gas Balance is greater than or equal to 20 percent and less than 28 percent of Buyer's Storage Capacity Quantity, Buyer's Storage Demand during the time period the OFO is in effect shall be reduced to 83 percent of Buyer's Storage Demand.

(ii) If a Buyer's Storage Gas Balance is greater than or equal to 7 percent and less than 13 percent of Buyer's Storage Capacity Quantity, Buyer's Storage Demand during the time period the OFO is in effect shall be reduced to 60 percent of Buyer's Storage Demand.

(c) Seller shall give Buyer at least twenty-four (24) hours advance notice of the OFO, unless exigent circumstances dictate otherwise. Each OFO will contain the following information:

(i) time and date of issuance;

(ii) effective time of the OFO (if no time is specified, the OFO shall be effective immediately);

(iii) anticipated duration of the OFO (if none is specified the OFO shall be effective until further notice); and

(iv) Seller will publish notices of implementation of an OFO pursuant to this Section 8.4 on 1Line as expeditiously as possible.

(d) Each OFO shall remain in effect until the earlier of:

(i) the time when, in Seller's judgment, the conditions that caused the OFO have been alleviated;

(ii) the time when Buyers' Storage Balances, in the aggregate, are equal to or greater than 35% of Buyers' Storage Capacity Quantities; or

(iii) the time when that individual Buyer's Storage Gas Balance no longer falls within levels described in Section 8.4(b)(i) or (ii) hereof.

(e) Seller will publish notice of the termination of an OFO on 1Line as expeditiously as possible.

(f) Nothing in this Section 8.4 shall preclude Seller from issuing a general system OFO pursuant to Section 52 of the General Terms and Conditions that would apply to Rate Schedule GSS service.

9. FUEL ALLOWANCE

In order to recover quantities of fuel retained by EGTS associated with the injection of natural gas quantities into storage, Seller will retain equivalent quantities from Buyer's storage injection quantities hereunder. Provided, however, Buyer may deliver or cause to be delivered to Seller such additional quantities of gas as Seller reasonably determines are required for fuel to effect injection of Buyer's injection quantities.

10. RECORDS OF INJECTION, WITHDRAWAL AND STORAGE GAS BALANCES

Seller shall keep accurate records of quantities injected to or withdrawn from Buyer's account, and of Buyer's Storage Gas Balance, which records shall be made available to Buyer at its request.

11. SCHEDULED DELIVERIES IN EXCESS OF FIRM ENTITLEMENT

Buyer may request Seller to deliver gas to Buyer on any day during the period extending from October 1 through April 30 in excess of Buyer's nomination of its firm storage entitlement for such day. Seller may make such excess delivery to Buyer if, in Seller's judgment, such delivery can be made without adverse effect on Seller's operations.

Buyer shall pay Seller, for any such delivery scheduled by Buyer and Seller, the applicable per dt charges set forth for any such delivery scheduled from Buyer's Storage Gas Balance, in that portion of the currently effective Statement of Rates and Fuel in Part II, Section 7.1 of this tariff.

12. FAILURE TO COMPLY WITH MINIMUM TURNOVER

12.1 If Buyer's Storage Gas Balance on April 15 of any year exceeds the level required by Section 8.3(e) of this rate schedule and Seller is assessed an excess end of season inventory charge by EGTS under EGTS's Rate Schedule GSS, Buyer shall be assessed its proportionate share of Seller's Excess End of Season Inventory Charge under this rate schedule.

12.2 Seller shall collect each Buyer's proportionate share of the Excess End of Season Inventory Charge by deducting the applicable quantity of gas from Buyer's Storage Gas Balance.

13. QUALITY

Refer to Section 3 of the General Terms and Conditions.

14. MEASUREMENT

Refer to Section 4 of the General Terms and Conditions.

15. GENERAL TERMS AND CONDITIONS

The General Terms and Conditions of Seller's Volume No. 1 Tariff which are applicable to this rate schedule are hereby made a part hereof.

RATE SCHEDULE S-2
STORAGE SERVICE - ZONE 6

1. AVAILABILITY

This rate schedule is available for the purchase of storage service from Transcontinental Gas Pipe Line Company, LLC (hereinafter referred to as Seller) by Public Service Electric and Gas Company, PECO Energy Company, The Brooklyn Union Gas Company, Elizabethtown Gas Company, South Jersey Gas Company and Philadelphia Gas Works (each hereinafter referred to as Buyer) provided Buyer has executed a service agreement with Seller for service under this rate schedule. The availability of storage service hereunder is contingent on and subject to the availability of storage service provided by Texas Eastern Transmission, LP (TETCO) to Seller under TETCO's Rate Schedule X-28.

2. APPLICABILITY AND CHARACTER OF SERVICE

This rate schedule shall apply to storage service rendered by Seller to Buyer under the service agreement executed for service hereunder. Service rendered under this rate schedule, within the limitations set forth in Sections 5 and 6 hereof, shall be on a firm basis and shall not be subject to reduction or interruption, except as provided in Section 11 of the General Terms and Conditions; provided, however, that in the event TETCO fails for any reason whatsoever to make deliveries to Seller or receive gas from Seller under TETCO's Rate Schedule X-28 then Seller's obligation hereunder shall be reduced accordingly.

3. RATES AND CHARGES

3.1 The applicable charges set forth in that portion of the currently effective Statement of Rates and Fuel in Part II, Section 7.5 of this tariff which relates to this rate schedule are incorporated herein.

3.2 For natural gas service rendered to Buyer under this rate schedule, Buyer shall pay Seller for each day each month the sum of the following amounts:

(a) Demand Charge: A charge per day per dt of Contract Storage Demand.

(b) Storage Capacity Charge: A charge per day per dt of Storage Capacity Quantity.

(c) Injection Charge: A charge per dt of natural gas nominated by Buyer for injection.

(d) Withdrawal Charge: A charge per dt of natural gas nominated by Buyer for withdrawal.

3.3 Storage Cost Credit - Seller shall credit Buyer's invoice each month by an amount equal to Buyer's proportionate share of the Storage Cost Credit received by Seller from TETCO, if any. Buyer's proportionate share of the Storage Cost Credit shall be calculated each month by multiplying Buyer's Contract Storage Demand as a percentage of total Contract Storage

Demand under this rate schedule times the Storage Cost Credit received by Seller from TETCO.

3.4 Fuel Allowance - In order to recover quantities of fuel that TETCO retains for company use and for calculated normal operational loss associated with the injection, withdrawal and storage of natural gas quantities, Seller will retain equivalent quantities of fuel from Buyer's storage injection quantities (injection allowance) and withdrawal quantities (withdrawal allowance) and from Buyer's average daily balance of gas stored during the month (Inventory Level Allowance). Seller's fuel retention percentages are set forth on the currently effective Statement of Rates and Fuel in Part II, Section 7.5 of this tariff.

3.5 If, under the provisions of Section 11.3 of the General Terms and Conditions, Seller orders interruption or reduction of service to Buyer on a day or days (Service Reduction Day), then Seller shall credit Buyer's Demand Charge and Storage Capacity Charge in accordance with the provisions of Sections 3.7 and 3.8 of this rate schedule. Additionally, on a Service Reduction Day, Seller shall suspend, as necessary, the provisions of Section 5.1(b) and/or 6.1(b) of this rate schedule. Seller shall post notice of such suspension on 1Line, including whether the Service Reduction Day affects injections, withdrawals, or injections and withdrawals.

3.6 Determination of Service Reduction Quantities

(a) For each Service Reduction Day, Seller shall determine the interruption or reduction in Buyer's Storage Demand in the following manner:

(i) Seller shall endeavor to withdraw and deliver, on any one day, as much of Buyer's nomination for such day as operating conditions permit. If, however, the total of all nominations for a day exceeds the total quantity which Seller can withdraw from storage on such day, the nominations for such day shall be allocated pro rata among the nominating Buyers based upon each Buyer's nomination up to Buyer's Storage Demand, subject to the provisions set forth in Section 6.3 hereof. The final nominated quantity upon conclusion of each of the nomination cycles identified in Section 28.1 of the General Terms and Conditions, as prorated if necessary, shall be the scheduled withdrawal quantity for such day. Seller shall thereupon withdraw for Buyer the quantity of gas scheduled.

(ii) When the Service Reduction Day is due to a non-force majeure event, Buyer's Storage Demand Reduction Quantity is calculated as the difference each day, if any (but not less than zero), between Buyer's nominated quantity (not to exceed Buyer's Storage Demand, subject to the provisions set forth in Section 6.3 hereof) and the quantity scheduled in accordance with Section 3.6(a)(i).

(iii) When the Service Reduction Day is due to a force majeure event, Buyer's Storage Demand Reduction Quantity is calculated as the difference each day, if any (but not less than zero), between Buyer's nominated quantity (not to exceed Buyer's Storage Demand, subject to the provisions set forth in Section

6.3 hereof) and the quantity scheduled in accordance with Section 3.6(a)(i); provided however, if Seller posts notice on 1Line of the force majeure event, beginning with the Timely nomination cycle following such 1Line notice, Buyer's Storage Demand Reduction Quantity will be calculated as the difference each day between (A) Buyer's average delivered quantity for each transaction that would have been impacted by the force majeure event for the seven (7) gas days immediately prior to the first gas day of the force majeure event and (B) the quantity scheduled for the Service Reduction Day in accordance with Section 3.6(a)(i). To the extent reasonably known, the 1Line notice will include a description of the force majeure event, when the event commenced, the anticipated duration of the event, and the areas of Seller's system expected to be impacted during the event.

(b) For each Service Reduction Day, Seller shall determine the interruption or reduction in Buyer's Storage Capacity in the following manner:

(i) Seller shall endeavor to inject, on any one day, as much of Buyer's nomination for such day as operating conditions permit. If, however, the total of all nominations for a day exceeds the total quantity which Seller can inject into storage on such day, the nominations for such day shall be allocated pro rata among the nominating Buyers based upon each Buyer's nomination, subject to the provisions set forth in Sections 5.3 and 5.4 hereof. The final nominated quantity upon conclusion of each of the nomination cycles identified in Section 28.1 of the General Terms and Conditions, as prorated if necessary, shall be the scheduled injection quantity for such day. Seller shall thereupon inject for Buyer the quantity of gas scheduled.

(ii) When the Service Reduction Day is due to a non-force majeure event, Buyer's Storage Capacity Reduction Quantity is calculated as the difference each day, if any (but not less than zero), between Buyer's nominated quantity (subject to the provisions set forth in Sections 5.3 and 5.4 hereof) and the quantity scheduled in accordance with Section 3.6(b)(i).

(iii) When the Service Reduction Day is due to a force majeure event, Buyer's Storage Capacity Reduction Quantity is calculated as the difference each day, if any (but not less than zero), between Buyer's nominated quantity (subject to the provisions set forth in Sections 5.3 and 5.4 hereof) and the quantity scheduled in accordance with Section 3.6(b)(i); provided however, if Seller posts notice on 1Line of the force majeure event, beginning with the Timely nomination cycle following such 1Line notice, Buyer's Storage Capacity Reduction Quantity will be calculated as the difference each day between (A) Buyer's average quantity delivered for injection for each transaction that would have been impacted by the force majeure event for the seven (7) gas days immediately prior to the first gas day of the force majeure event and (B) the quantity scheduled for the Service Reduction Day in accordance with Section 3.6(b)(i). To the extent reasonably known, the 1Line notice will include a description of the force majeure event, when the event commenced,

the anticipated duration of the event, and the areas of Seller's system expected to be impacted during the event.

3.7 For each Service Reduction Day due to a force majeure event, Buyer's Demand Charge credit and Storage Capacity Charge credit shall be computed as follows:

(a) Demand Charge credit:

For a total of ten (10) Service Reduction Days due to a force majeure event, there shall be no Demand Charge credit for Buyer's storage Demand Reduction Quantity. For each additional Service Reduction Day due to the force majeure event, the Demand Charge credit shall be Buyer's Storage Demand Reduction Quantity calculated in Section 3.6(a)(iii) multiplied by Buyer's Demand Charge.

(b) Storage Capacity Charge credit:

For a total of ten (10) Service Reduction Days due to a force majeure event, there shall be no Storage Capacity Charge credit for Buyer's Storage Injection Reduction Quantity. For each additional Service Reduction Day due to the force majeure event, the Storage Capacity Charge credit shall be Buyer's Storage Capacity Reduction Quantity calculated in Section 3.6(b)(iii) multiplied by Buyer's Storage Capacity Charge.

3.8 For each Service Reduction Day due to a non-force majeure event, Buyer's Demand Charge credit and Storage Capacity Charge credit shall be computed as follows:

(a) Demand Charge credit:

Buyer's Storage Demand Reduction Quantity calculated in Section 3.6(a)(ii) multiplied by Buyer's Demand Charge.

(b) Storage Capacity Charge credit:

Buyer's Storage Capacity Reduction Quantity calculated in Section 3.6(b)(ii) multiplied by Buyer's Storage Capacity Charge.

4. DEFINITIONS

4.1 Injection Season

The Injection Season shall begin on April 16 and extend through the succeeding November 15.

4.2 Withdrawal Season

The Withdrawal Season shall begin on November 16 and extend through the next succeeding April 15.

4.3 Contract Storage Demand

The Contract Storage Demand shall be that quantity set forth in the service agreement and shall be utilized to determine the Demand Charges payable by Buyer hereunder.

4.4 Storage Capacity Quantity

The Storage Capacity Quantity shall be that quantity set forth in the service agreement and shall be utilized to determine the Storage Capacity Charges payable by Buyer hereunder.

4.5 Storage Gas Balance

The Storage Gas Balance of Buyer at any particular time shall be the quantity of gas in storage for Buyer's account at such time.

5. INJECTIONS INTO STORAGE

5.1 General Procedure

(a) When Buyer desires Seller to store gas for its account under this rate schedule, Buyer shall nominate quantities for injection in accordance with Seller's nomination and ranking deadlines as set forth in Section 28.1 of the General Terms and Conditions. Seller, in its sole judgment, may waive any nomination and ranking deadlines, on a non-discriminatory basis, if Seller determines that operating conditions permit. Seller shall thereupon inject or cause to be injected into storage for Buyer's account on such day, the quantity of gas so nominated and actually tendered to Seller for Buyer's account at the point of receipt specified in the service agreement, subject to the limitations set forth below in this section.

(b) Buyer may cause Seller to inject quantities of gas into storage for Buyer's account under this rate schedule which are greater than or less than the quantity scheduled in advance pursuant to Section 5.1(a) hereof, pursuant to the procedures outlined in Section 18.1 of the General Terms and Conditions governing designation of delivery point "swing" services provided, however, nothing herein shall give Buyer the right to inject on any day a quantity of gas into storage under this rate schedule in excess of the quantity which Buyer would otherwise be entitled to inject under the terms of this rate schedule on such day.

5.2 Notice Required

Buyer shall nominate injections under this rate schedule in accordance with nomination and ranking deadlines as set forth in Section 28.1 of the General Terms and Conditions. Seller, in its sole judgment, may waive any nomination and ranking deadlines, on a non-discriminatory basis, if Seller determines that operating conditions permit.

5.3 Daily Injection Quantity

The maximum quantity of gas which Seller can inject or cause to be injected into storage on any one day is dependent in part upon operating conditions at the particular time. Seller shall endeavor to inject or cause to be injected on any one day as much of Buyer's storage nomination for such day as operating conditions will permit. If, however, the total of all nominations for such day exceed the total quantity which Seller can inject or cause to be injected into storage on such day, the nominations for such day shall be reduced in an equitable manner, based on Buyer's proportionate share of the quantities TETCO is obligated to inject for Seller under TETCO's Rate Schedule X-28.

5.4 Limitation Upon Total Injection

Seller shall be obligated to inject gas into storage for Buyer's account in accordance with the above procedure only when Buyer's Storage Gas Balance is less than Buyer's Storage Capacity Quantity.

6. WITHDRAWALS FROM STORAGE

6.1 General Procedure

(a) When Buyer desires the delivery of gas stored for Buyer's account under this rate schedule, Buyer shall nominate quantities for withdrawals in accordance with Seller's nomination and ranking deadlines as set forth in Section 28.1 of the General Terms and Conditions. Seller, in its sole judgment, may waive any nomination and ranking deadlines, on a non-discriminatory basis, if Seller determines that operating conditions permit. Seller shall thereupon deliver to Buyer the quantity of gas so nominated, subject to the limitations set forth below in this section.

(b) Buyer may take delivery of quantities of gas stored for Buyer's account under this rate schedule which are greater than or less than the quantity scheduled in advance pursuant to Section 6.1(a) hereof, pursuant to the procedures outlined in Section 18.1 of the General Terms and Conditions governing designation of delivery point "swing" services; provided, however, nothing herein shall give Buyer the right to take delivery on any day of a quantity of gas under this rate schedule in excess of the quantity which Buyer would otherwise be entitled to take under the terms of this rate schedule on such day.

6.2 Notice Required

Buyer shall nominate withdrawals under this rate schedule in accordance with nomination and ranking deadlines as set forth in Section 28.1 of the General Terms and Conditions. Seller, in its sole judgment, may waive any nomination and ranking deadlines, on a non-discriminatory basis, if Seller determines that operating conditions permit.

6.3 Quantity Limitations

(a) Subject to the other provisions of this section, Seller will deliver to Buyer on any one day under this rate schedule, the maximum quantity of gas which operating

conditions in the storage fields will permit as determined by the operator thereof. Seller shall endeavor to withdraw and deliver, on any one day, the total of each Buyer's nominations for such day, up to, but not exceeding, Buyer's Contract Storage Demand.

If, however, all of the nominations exceed the total quantity which Seller can withdraw from storage and deliver, the gas deliverable on such day shall be prorated in proportion to each Buyer's current Storage Gas Balance, utilizing records of Seller's dispatcher, provided that on any day during November 16 through April 15, Buyer shall be entitled to receive up to the quantities stated in Buyer's service agreement.

7. QUALITY

Refer to Section 3 of the General Terms and Conditions.

8. MEASUREMENT

Refer to Section 4 of the General Terms and Conditions.

9. GENERAL TERMS AND CONDITIONS

All of the General Terms and Conditions of Seller's Volume No. 1 Tariff which are applicable to this rate schedule are hereby made a part hereof.

PART V – FORMS OF SERVICE AGREEMENT

SECTION 1
OPEN ACCESS FIRM TRANSPORTATION SERVICE

FORM OF SERVICE AGREEMENT
(For Use Under Seller's Rate Schedule FT)

THIS AGREEMENT entered into this _____ day of _____, _____ (year), by and between TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC, a Delaware limited liability company, hereinafter referred to as "Seller," first party, and _____, hereinafter referred to as "Buyer," second party,

[or, when applicable, THIS AGREEMENT entered into this _____ day of _____, _____ (year), by and between TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC, a Delaware limited liability company, hereinafter referred to as "Seller," first party, and _____, as "Agent," for _____ ("Principals"), hereinafter individually and collectively referred to as "Buyer," second party, which Principals meet the requirements set forth in Section 8.3 of Rate Schedule FT which is incorporated herein by reference.]

W I T N E S S E T H

WHEREAS,

NOW, THEREFORE, Seller and Buyer agree as follows:

ARTICLE I
GAS TRANSPORTATION SERVICE

1. Subject to the terms and provisions of this agreement and of Seller's Rate Schedule FT, Buyer agrees to deliver or cause to be delivered to Seller gas for transportation and Seller agrees to receive, transport and redeliver natural gas to Buyer or for the account of Buyer, on a firm basis, up to a Transportation Contract Quantity ("TCQ") of _____ dt per day.

2. Transportation service rendered hereunder shall not be subject to curtailment or interruption except as provided in Section 11 and, if applicable, Section 42 of the General Terms and Conditions of Seller's FERC Gas Tariff.

ARTICLE II
POINT(S) OF RECEIPT

Buyer shall deliver or cause to be delivered gas at the point(s) of receipt hereunder at a pressure sufficient to allow the gas to enter Seller's pipeline system at the varying pressures that may exist in such system from time to time; provided, however, the pressure of the gas delivered or caused to be delivered by Buyer shall not exceed the maximum operating pressure(s) of Seller's pipeline system at such point(s) of receipt. In the event the maximum operating pressure(s) of Seller's pipeline system, at the point(s) of receipt hereunder, is from time to time increased or decreased, then the maximum allowable pressure(s) of the gas delivered or caused to be delivered by Buyer to Seller at the point(s) of

receipt shall be correspondingly increased or decreased upon written notification of Seller to Buyer. The point(s) of receipt for natural gas received for transportation pursuant to this agreement shall be:

See Exhibit A, attached hereto, for points of receipt.

ARTICLE III
POINT(S) OF DELIVERY

Seller shall redeliver to Buyer or for the account of Buyer the gas transported hereunder at the following point(s) of delivery and at a pressure(s) of:

See Exhibit B, attached hereto, for points of delivery and pressures.

ARTICLE IV
TERM OF AGREEMENT

This agreement shall be effective as of _____, _____ (year)
[or, WHEN APPLICABLE, "This agreement shall be effective as of the later of _____, ____(year) or the date that all of Seller's _____ (insert project name) facilities necessary to provide firm transportation service to Buyer have been constructed and are ready for service as determined in Seller's sole opinion"]
[or, WHEN APPLICABLE, "This agreement shall be effective as of the date that all of Seller's _____ (insert project name) facilities necessary to provide firm transportation service to Buyer have been constructed and are ready for service as determined in Seller's sole opinion"] and shall remain in force and effect until 9:00 a.m. Central Clock Time _____, _____ (year) [or, WHEN APPLICABLE, "and shall remain in force and effect for a primary term of _____"] and thereafter until terminated by Seller or Buyer upon at least _____ written notice; provided, however, this agreement shall terminate immediately and, subject to the receipt of necessary authorizations, if any, Seller may discontinue service hereunder if (a) Buyer, in Seller's reasonable judgment fails to demonstrate creditworthiness, and (b) Buyer fails to provide adequate security in accordance with Section 32 of the General Terms and Conditions of Seller's Volume No. 1 Tariff. [OPTION TO DELETE IF NOT APPLICABLE: As set forth in Section 8 of Article II of Seller's August 7, 1989 revised Stipulation and Agreement in Docket Nos. RP88-68 et.al., (a) pregranted abandonment under Section 284.221(d) of the Commission's regulations shall not apply to any long term conversions from firm sales service to transportation service under Seller's Rate Schedule FT and (b) Seller shall not exercise its right to terminate this service agreement as it applies to transportation service resulting from conversions from firm sales service so long as Buyer is willing to pay rates no less favorable than Seller is otherwise able to collect from third parties for such service.]

ARTICLE V
RATE SCHEDULE AND PRICE

1. Buyer shall pay Seller for natural gas delivered to Buyer hereunder in accordance with Seller's Rate Schedule FT and the applicable provisions of the General Terms and Conditions of Seller's

FERC Gas Tariff as filed with the Federal Energy Regulatory Commission, and as the same may be legally amended or superseded from time to time. Such rate schedule and General Terms and Conditions are by this reference made a part hereof. In the event Buyer and Seller mutually agree to a negotiated rate pursuant to the provisions in Section 53 of the General Terms and Conditions and specified term for service hereunder, provisions governing such negotiated rate (including surcharges) and term shall be set forth on Exhibit C to the service agreement.

[WHEN APPLICABLE: The credit support provisions set forth in that certain [*insert description of precedent* agreement(s)] dated _____ (including any amendments thereto) related to this agreement are hereby incorporated herein by reference and made a part of this agreement.]

2. Seller and Buyer agree that the quantity of gas that Buyer delivers or causes to be delivered to Seller shall include the quantity of gas retained by Seller for applicable compressor fuel, line loss make-up (and injection fuel under Seller's Rate Schedule GSS, if applicable) in providing the transportation service hereunder, which quantity may be changed from time to time and which will be specified in the currently effective Statement of Rates and Fuel in Part II, Section 12.1 of this tariff which relates to service under this agreement and which is incorporated herein.

3. In addition to the applicable charges for firm transportation service pursuant to Section 3 of Seller's Rate Schedule FT, Buyer shall reimburse Seller for any and all filing fees incurred as a result of Buyer's request for service under Seller's Rate Schedule FT, to the extent such fees are imposed upon Seller by the Federal Energy Regulatory Commission or any successor governmental authority having jurisdiction.

ARTICLE VI
MISCELLANEOUS

1. This Agreement supersedes and cancels as of [insert effective date of cancellation or description of effective date of cancellation] the following contract(s):

2. No waiver by either party of any one or more defaults by the other in the performance of any provisions of this agreement shall operate or be construed as a waiver of any future default or defaults, whether of a like or different character.

3. The interpretation and performance of this agreement shall be in accordance with the laws of the State of _____, without recourse to the law governing conflict of laws, and to all present and future valid laws with respect to the subject matter, including present and future orders, rules and regulations of duly constituted authorities.

4. This agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective successors and assigns.

5. Notices to either party shall be in writing and shall be considered as duly delivered when mailed or sent by electronic mail to the other party at the following address:

(a) If to Seller:
Transcontinental Gas Pipe Line Company, LLC
P. O. Box 1396
Houston, Texas 77251, or
Email:
Attention:

(b) If to Buyer:

Such addresses may be changed from time to time by sending appropriate notice thereof to the other party.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be signed by their respective officers or representatives thereunto duly authorized.

TRANSCONTINENTAL GAS PIPE LINE
COMPANY, LLC
(Seller)

By_____

Print Name_____

Title _____

_____
(Buyer)

By_____

Print Name_____

Title _____

Exhibit A

Point(s) of Receipt	[OPTIONAL IF AGREED TO: Maximum Daily Capacity Entitlement at each Receipt Point (DT/day)*]

* These quantities do not include the additional quantities of gas retained by Seller for applicable compressor fuel and line loss make-up provided for in Article V, 2 of this service agreement, which are subject to change as provided for in Article V, 2 hereof.

Exhibit B

Point(s) of Delivery	Maximum Daily Capacity Entitlement at each Delivery Point (Dt/Day)	Pressure

Exhibit C

Specification of Negotiated Rate and Term

[OPTIONAL IF AGREED TO: Buyer agrees not to file or cause to be filed with the FERC any action, claim, complaint, or other pleading under Section 5 of the NGA, or support or participate in any such proceeding initiated by any other party, requesting a change to or in any way opposing the negotiated rate set forth above.]

[OPTIONAL IF AGREED TO: Seller agrees not to file or cause to be filed with the FERC under Section 4 of the NGA to seek to modify the negotiated rate set forth above.]

PART V – FORMS OF SERVICE AGREEMENT

SECTION 3
OPEN ACCESS FIRM STORAGE SERVICE

FORM OF SERVICE AGREEMENT
(For Use Under Seller's WSS-Open Access Rate Schedule)

THIS AGREEMENT entered into this day of , , by and between TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC, a Delaware limited liability company, hereinafter referred to as "Seller", first party, and , hereinafter referred to as "Buyer", second party,

W I T N E S S E T H:

WHEREAS, Seller has made available to Buyer storage capacity from its Washington Storage Field under Part 284 of the Commission's regulations; and Buyer desires to purchase and Seller desires to sell natural gas storage service under Seller's Rate Schedule WSS-Open Access as set forth herein;

WHEREAS,

NOW, THEREFORE, Seller and Buyer agree as follows:

ARTICLE I
SERVICE TO BE RENDERED

Subject to the terms and provisions of this agreement and of Seller's Rate Schedule WSS-Open Access, Seller agrees to inject into storage for Buyer's account, store and withdraw from storage, quantities of natural gas as follows:

To withdraw from storage up to a maximum quantity on any day of _____ dt, which quantity shall be Buyer's Storage Demand Quantity, or such greater daily quantity, as applicable from time to time, pursuant to the terms and conditions of Seller's Rate Schedule WSS-Open Access.

To receive and store up to a total quantity at any one time of _____ dt, which quantity shall be Buyer's Storage Capacity Quantity.

ARTICLE II
POINT(S) OF RECEIPT AND DELIVERY

The Point of Receipt for injection of natural gas delivered to Seller by Buyer and the Point of Delivery for withdrawal of natural gas delivered by Seller to Buyer under this agreement shall be Seller's Washington Storage Field located at Seller's Station 54 in St. Landry Parish, Louisiana. Gas delivered or received in Seller's pipeline system shall be at the prevailing pressure not to exceed the maximum allowable operating pressure.

ARTICLE III
TERM OF AGREEMENT

This agreement shall be effective as of _____, _____ (year) [or, when applicable, "This agreement shall be effective as of the later of _____, _____ (year) or the date that all of Seller's _____ (insert project name) facilities necessary to provide firm storage service to Buyer have been constructed and are ready for service as determined in Seller's sole opinion"] and shall remain in force and effect until 9:00 a.m. Central Clock Time _____, _____ (year) [or, when applicable, "shall remain in force and effect for a primary term of _____"] and thereafter [or, when applicable, "and year to year thereafter"] until terminated by Seller or Buyer upon at least _____ written notice.

ARTICLE IV
RATE SCHEDULE AND PRICE

Buyer shall pay Seller for natural gas service rendered hereunder in accordance with Seller's Rate Schedule WSS-Open Access, and the applicable provisions of the General Terms and Conditions of Seller's FERC Gas Tariff as filed with the Federal Energy Regulatory Commission, and as the same may be amended or superseded from time to time. Such rate schedule and General Terms and Conditions are by this reference made a part hereof. In the event Buyer and Seller mutually agree to a negotiated rate pursuant to the provisions of Section 53 of the General Terms and Conditions and specified term for service hereunder, provisions governing such negotiated rate (including surcharges) and term shall be set forth on Exhibit A to the service agreement.

ARTICLE V
MISCELLANEOUS

1. The subject headings of the Articles of this agreement are inserted for the purpose of convenient reference and are not intended to be a part of this agreement nor to be considered in any interpretation of the same.

2. This agreement supersedes and cancels as of [insert effective date of cancellation or description of effective date of cancellation] the following contracts:

3. No waiver by either party of any one or more defaults by the other in the performance of any provisions of this agreement shall operate or be construed as a waiver of any future default or defaults, whether of a like or different character.

4. This agreement shall be interpreted, performed and enforced in accordance with the laws of the State of

5. This agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective successors and assigns.

6. Notices to either party shall be in writing and shall be considered as duly delivered when mailed or sent by electronic mail to the other party at the following address:

(a) If to Seller:

Transcontinental Gas Pipe Line Company, LLC
P. O. Box 1396
Houston, Texas 77251, or
Email:
Attention:

(b) If to Buyer:

Such addresses may be changed from time to time by sending appropriate notice thereof to the other party.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be signed by their respective officers or representatives thereunto duly authorized.

TRANSCONTINENTAL GAS PIPE LINE
COMPANY, LLC
(Seller)

By_____

Print Name _____

Title_____

_____
(Buyer)

By_____

Print Name _____

Title_____

Exhibit A

Specification of Negotiated Rate and Term

[OPTIONAL IF AGREED TO: Buyer agrees not to file or cause to be filed with the FERC any action, claim, complaint, or other pleading under Section 5 of the NGA, or support or participate in any such proceeding initiated by any other party, requesting a change to or in any way opposing the negotiated rate set forth above.]

[OPTIONAL IF AGREED TO: Seller agrees not to file or cause to be filed with the FERC under Section 4 of the NGA to seek to modify the negotiated rate set forth above.]

FORM OF SERVICE AGREEMENT
(For Use Under Seller's GSS Rate Schedule)

THIS AGREEMENT entered into this _____ day of _____, _____ (year), by and between TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC, a Delaware limited liability company, hereinafter referred to as "Seller", first party, and _____ _____, hereinafter referred to as "Buyer", second party,

W I T N E S S E T H:

WHEREAS,

NOW, THEREFORE, Seller and Buyer agree as follows:

ARTICLE I
SERVICE TO BE RENDERED

Subject to the terms and provisions of this agreement and of Seller's Rate Schedule GSS, Seller agrees to receive from Buyer for storage, inject into storage for Buyer's account, store, withdraw from storage (or cause to be injected into storage for Buyer's account, stored, and withdrawn from storage) and deliver to Buyer, quantities of natural gas as follows:

To withdraw from storage or cause to be withdrawn from storage, the gas stored for Buyer's account up to a maximum quantity in any day of _____ dt, which quantity shall be Buyer's Storage Demand.

To receive and store or cause to be stored up to a total quantity at any one time of _____ dt, which quantity shall be Buyer's Storage Capacity Quantity.

ARTICLE II
POINT OF DELIVERY

The Point or Points of Delivery for all natural gas delivered by Seller to Buyer under this agreement shall be at or near:

ARTICLE III
DELIVERY PRESSURE

Seller shall deliver natural gas to Buyer at the Point(s) of Delivery at a pressure(s) of:

ARTICLE IV
TERM OF AGREEMENT

This agreement shall be effective and shall remain in force and effect for a period

ARTICLE V
RATE SCHEDULE AND PRICE

Buyer shall pay Seller for natural gas service rendered hereunder in accordance with Seller's Rate Schedule GSS and the applicable provisions of the General Terms and Conditions of Seller's FERC Gas Tariff as filed with the Federal Energy Regulatory Commission, and as the same may be amended or superseded from time to time at the initiative of either party. Such rate schedule and General Terms and Conditions are by this reference made a part hereof.

ARTICLE VI
MISCELLANEOUS

1. The subject headings of the Articles of this agreement are inserted for the purpose of convenient reference and are not intended to be a part of this agreement nor to be considered in any interpretation of the same.

2. This agreement supersedes and cancels as of [insert effective date of cancellation or description of effective date of cancellation] the following contracts:

3. No waiver by either party of anyone or more defaults by the other in the performance of any provisions of this agreement shall operate or be construed as a waiver of any future default or defaults, whether of a like or different character.

4. This agreement shall be interpreted, performed and enforced in accordance with the laws of the State of .

5. This agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective successors and assigns.

6. Notices to either party shall be in writing and shall be considered as duly delivered when mailed or sent by electronic mail to the other party at the following address:

(a) If to Seller:

Transcontinental Gas Pipe Line Company, LLC
P. O. Box 1396
Houston, Texas 77251, or
Email:

Attention:

(b) If to Buyer:

Such addresses may be changed from time to time by sending appropriate notice thereof to the other party.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be signed by their respective officers or representatives thereunto duly authorized.

TRANSCONTINENTAL GAS PIPE LINE
COMPANY, LLC
(Seller)

By_____

Print Name _____

Title_____

_____
(Buyer)

By_____

Print Name _____

Title_____

FORM OF SERVICE AGREEMENT
(For Use Under Seller's S-2 Rate Schedule)

THIS AGREEMENT entered into this _____ day of _____, _____ (year), by and between TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC, a Delaware limited liability company, hereinafter referred to as Seller, first party, and _____, hereinafter referred to as Buyer, second party

W I T N E S S E T H:

WHEREAS,

NOW, THEREFORE, Seller and Buyer agree as follows:

ARTICLE I
SERVICES TO BE RENDERED

Subject to the terms and provisions of this Agreement and Seller's Rate Schedule S-2, Seller agrees to receive from Buyer for storage, inject into storage for Buyer's account, store, withdraw from storage (or cause to be injected into storage for Buyer's account, stored, and withdrawn from storage) and deliver to Buyer quantities of natural gas stored by Seller (less fuel allowance, if any) as defined in Rate Schedule S-2 and stated in Article II of this Agreement.

ARTICLE II
TERM OF AGREEMENT

Subject to the provisions of Article I hereof, this Agreement shall be effective on _____ ___, _____. Natural gas service rendered hereunder shall commence on _____ ___, _____, and continue for a period of _____ (____)years and thereafter until terminated either by Seller or Buyer upon twelve (12) months prior written notice to the other specifying a termination date of April 15, or any anniversary thereafter.

ARTICLE III
CONTRACT DEMAND
AND STORAGE CAPACITY QUANTITY

Subject to the terms and provisions of this Agreement, Seller, during the period November 16 through April 15th, inclusive, of each contract year, agrees to withdraw or cause to be withdrawn from storage, transport and deliver to Buyer such quantities of natural gas as Buyer shall specify up to the following maximum daily quantities:

The period from November 16 through February 16, _____ dt per day;

Commencing February 17 the Maximum Daily Quantity shall decrease each successive day by _____ dt per day until March 1, on which date the Maximum Daily Quantity shall be _____ dt per day;

Commencing March 2 the Maximum Daily Quantity shall decrease each succes-sive day by _____ dt per day until March 16, on which date the Maximum Daily Quantity shall be _____ dt per day;

Commencing March 17 the Maximum Daily Quantity shall decrease each successive day by _____ dt per day until April 1, and for the period from April 1 through April 15, the Maximum Daily Quantity shall be _____ dt per day;

provided, that Seller shall have no obligation to deliver to Buyer during each contract year a quantity of natural gas in excess of the following total quantities during the periods hereinafter set forth:

From November 16 through February 15, not in excess of _____ dt

From November 16 through March 15, not in excess of _____ dt

From November 16 through April 15, not in excess of _____ dt

For the purpose of computing the demand charge in Seller's Rate Schedule S-2, the foregoing maximum daily quantity of _____ dt shall constitute the Contract Storage Demand of Buyer, and Buyer agrees to pay Seller therefor as provided in Article V hereof. Buyer's Storage Capacity Quantity under Rate Schedule S-2 shall be _____ dts.

The term "contract year" as used in this Contract and in Seller's Rate Schedule S-2 shall mean a period commencing on the sixteenth day of November of each calendar year of the term hereof and continuing through the next ensuing fifteenth day of November.

ARTICLE IV
POINT(S) OF DELIVERY
AND DELIVERY PRESSURE(S)

Seller shall deliver natural gas hereunder to Buyer at the following Point(s) of Delivery and at a pressure(s):

ARTICLE V
PRICE

Commencing on the effective date hereof Buyer shall pay Seller for all natural gas service rendered hereunder in accordance with Seller's Rate Schedule S-2 as filed with the Federal Energy Regulatory Commission, and as same may be amended or superseded, from time to time.

This Agreement in all respects shall be and remain subject to the applicable provisions of Seller's Rate Schedule S-2, which is made a part hereof by reference, and as same may be amended or superseded from time to time.

ARTICLE VI
MISCELLANEOUS

1. The subject headings of the Articles of this agreement are inserted for the purpose of convenient reference and are not intended to be a part of this Agreement nor to be considered in any interpretation of the same.

2. This agreement supersedes and cancels as of [insert effective date of cancellation or description of effective date of cancellation] the following contracts:

3. No waiver by either party of any one or more defaults by the other in the performance of any provisions of this agreement shall operate or be construed as a waiver of any future default or defaults, whether of a like or different character.

4. This agreement shall be interpreted, performed, and enforced in accordance with the laws of the State of

5. This agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective successors and assigns.

6. Notices to either party shall be in writing and shall be considered as duly delivered when mailed or sent by electronic mail to the other party at the following address:

(a) If to Seller:

Transcontinental Gas Pipe Line Company, LLC
P. O. Box 1396
Houston, Texas 77251, or
Email:
Attention:

(b) If to Buyer:

Such addresses may be changed from time to time by sending appropriate notice thereof to the other party.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be signed by their respective officers or representatives thereunto duly authorized.

TRANSCONTINENTAL GAS PIPE LINE
COMPANY, LLC
(Seller)

By_____

Print Name _____

Title_____

_____
(Buyer)

By_____

Print Name _____

Title_____

Transcontinental Gas Pipe Line Company, LLC
Fifth Revised Volume No. 1
Tariff

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TEXAS EASTERN

TRANSMISSION, L.P.

FERC GAS TARIFF

EIGHTH REVISED VOLUME NO. 1

(Supersedes Texas Eastern Transmission, LP
Seventh Revised Volume No. 1)

of

TEXAS EASTERN TRANSMISSION, LP

FILED WITH

FEDERAL ENERGY REGULATORY COMMISSION

Communications Concerning This Tariff
Should Be Addressed To:

Berk Donaldson
Director, Regulatory
Texas Eastern Transmission, LP

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PART 2 - PRELIMINARY STATEMENT

This Federal Energy Regulatory Commission (FERC) Gas Tariff is filed by Texas Eastern Transmission, LP (Texas Eastern) in compliance with Part 154, Subchapter E, Chapter 1, Title 18, of the Code of Federal Regulations and in compliance with Order No. 636 of the FERC. This FERC Gas Tariff reflects the unbundling of services in compliance with Order No. 636 and sets forth the terms and conditions of the transportation and storage services rendered by Texas Eastern. Texas Eastern is a Natural Gas company engaged in the business of transporting and storing Natural Gas in interstate commerce under authorization granted by and subject to the jurisdiction of the FERC.

The facilities owned and operated by Texas Eastern consist of a pipeline system which extends (1) from the State of Texas through the States of Louisiana, Arkansas, Missouri, Illinois, Indiana, Ohio, West Virginia, Pennsylvania and New Jersey to the State of New York, (2) from the State of Mississippi through the States of Alabama, Tennessee, Kentucky and Ohio to the State of Pennsylvania; and which includes storage fields in Maryland and Pennsylvania.

The transportation and storage of Natural Gas is undertaken by Texas Eastern only under written contract acceptable to Texas Eastern after consideration of its commitments to others, delivery capacity and other factors deemed pertinent by Texas Eastern. If any such contract is to become operative only upon performance of certain precedent conditions, Texas Eastern reserves the right to require a separate written agreement specifying the conditions which must be satisfied before the contract for the transportation and/or storage of Natural Gas becomes operative.

Nothing in this tariff is intended to inhibit development of, or discriminate against the use of, Imbalance Management Services or Title Transfer Tracking services provided by third parties or Texas Eastern's Customers. Any party interested in providing Imbalance Management Services or Title Transfer Tracking services must coordinate with Texas Eastern.

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SYSTEM MAP

The System Map may be displayed and downloaded at the Internet Web site below.

https://linkwc.enbridge.com/SystemMaps/TESystemMap.pdf

ACCESS ZONE "STX"

The Access Zone "STX" map may be displayed and downloaded at the Internet Web site below.

https://linkwc.enbridge.com/SystemMaps/TESystemMapSTX.pdf

ACCESS ZONE "ETX"

The Access Zone "ETX" map may be displayed and downloaded at the Internet Web site below.

https://linkwc.enbridge.com/SystemMaps/TESystemMapETX.pdf

ACCESS ZONE "WLA"

The Access Zone "WLA" map may be displayed and downloaded at the Internet Web site below.

https://linkwc.enbridge.com/SystemMaps/TESystemMapWLA.pdf

ACCESS ZONE "ELA"

The Access Zone "ELA" map may be displayed and downloaded at the Internet Web site below.

https://linkwc.enbridge.com/SystemMaps/TESystemMapELA.pdf

MARKET ZONE "1"

The Market Zone "1" map may be displayed and downloaded at the Internet Web site below.

https://linkwc.enbridge.com/SystemMaps/TESystemMapZone1.pdf

MARKET ZONE "2"

The Market Zone "2" map may be displayed and downloaded at the Internet Web site below.

https://linkwc.enbridge.com/SystemMaps/TESystemMapZone2.pdf

MARKET ZONE "3"

The Market Zone "3" map may be displayed and downloaded at the Internet Web site below.

https://linkwc.enbridge.com/SystemMaps/TESystemMapZone3.pdf

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Open-access Storage Rate Schedules
9. Rate Schedule SS-1
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11. Rate Schedule ISS-1

Individual Certificated Transportation Rate Schedules
12. Rate Schedules FTS, FTS-2, FTS-4, FTS-5, FTS-7, and FTS-8

Individual Certificated Storage Rate Schedule
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CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

CDS
RESERVATION
CHARGES

Pursuant to Sections 3.2, 3.3, and 3.5 of Rate Schedule CDS:

	CDS RESERVATION CHARGE* $/dth		CDS RESERVATION CHARGE ADJUSTMENT $/dth	
ACCESS AREA	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM
STX-AAB	12.2150	0.0000	0.4016	0.0000
WLA-AAB	5.8870	0.0000	0.1936	0.0000
ELA-AAB	3.6970	0.0000	0.1216	0.0000
ETX-AAB	3.9570	0.0000	0.1301	0.0000
STX-STX	8.1490	0.0000	0.2680	0.0000
STX-WLA	10.4030	0.0000	0.3420	0.0000
STX-ELA	12.2360	0.0000	0.4023	0.0000
STX-ETX	12.2360	0.0000	0.4023	0.0000
WLA-WLA	4.0790	0.0000	0.1341	0.0000
WLA-ELA	5.9120	0.0000	0.1944	0.0000
WLA-ETX	5.8560	0.0000	0.1925	0.0000
ELA-ELA	3.7130	0.0000	0.1221	0.0000
ETX-ETX	3.9760	0.0000	0.1307	0.0000
ETX-ELA	3.7170	0.0000	0.1222	0.0000
MARKET AREA	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM
M1-M1	4.6280	0.0000	0.1521	0.0000
M1-M2	11.1430	0.0000	0.3664	0.0000
M1-M3	21.5500	0.0000	0.7085	0.0000
M2-M2	8.3950	0.0000	0.2760	0.0000
M2-M3	18.8020	0.0000	0.6182	0.0000
M3-M3	12.2890	0.0000	0.4040	0.0000

* Reservation Charge reflects a storage surcharge of: 0.3200

	ALL ZONES $/dth
PRE-INJECTION CREDIT APPLICABLE TO CUSTOMERS' RESERVATION CHARGE PURSUANT TO SECTION 2.4 OF RATE SCHEDULE CDS.	0.0053

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

CDS USAGE CHARGES — ZONE RATE $/dth

Pursuant to Sections 3.2 and 3.3 of Rate Schedule CDS:

	STX	WLA	ELA	ETX	M1	M2	M3
USAGE-1 - MAXIMUM							
from STX	0.0212	0.0246	0.0408	0.0408	0.0622	0.1057	0.1740
from WLA	0.0246	0.0096	0.0265	0.0265	0.0479	0.0914	0.1597
from ELA	0.0408	0.0265	0.0206	0.0206	0.0420	0.0855	0.1538
from ETX	0.0408	0.0265	0.0206	0.0206	0.0420	0.0855	0.1538
from M1	0.0622	0.0479	0.0420	0.0420	0.0214	0.0649	0.1331
from M2	0.1057	0.0914	0.0855	0.0855	0.0649	0.0465	0.1153
from M3	0.1740	0.1597	0.1538	0.1538	0.1331	0.1153	0.0718
USAGE-1 - MINIMUM							
from STX	0.0182	0.0215	0.0377	0.0377	0.0560	0.0996	0.1678
from WLA	0.0215	0.0065	0.0234	0.0234	0.0417	0.0853	0.1535
from ELA	0.0377	0.0234	0.0175	0.0175	0.0358	0.0794	0.1476
from ETX	0.0377	0.0234	0.0175	0.0175	0.0358	0.0794	0.1476
from M1	0.0560	0.0417	0.0358	0.0358	0.0183	0.0619	0.1300
from M2	0.0996	0.0853	0.0794	0.0794	0.0619	0.0435	0.1122
from M3	0.1678	0.1535	0.1476	0.1476	0.1300	0.1122	0.0688
USAGE-1 - BACKHAUL MAXIMUM							
from STX	0.0198						
from WLA		0.0091					
from ELA			0.0193				
from ETX				0.0193			
from M1				0.0412	0.0206		
from M2				0.0828	0.0622	0.0446	
from M3						0.1101	0.0685
USAGE-1 - BACKHAUL MINIMUM							
from STX	0.0168						
from WLA		0.0060					
from ELA			0.0162				
from ETX				0.0162			
from M1				0.0350	0.0175		
from M2				0.0767	0.0592	0.0416	
from M3						0.1070	0.0655
USAGE-2	0.0318	0.0318	0.0318	0.0318	0.0532	0.0967	0.1649
USAGE-3	0.2552	0.2552	0.2552	0.2552	0.4215	0.6790	1.0894

ACA COMMODITY SURCHARGE TO APPLICABLE CUSTOMERS, PURSUANT TO SECTION 15.5 OF THE GENERAL TERMS AND CONDITIONS.

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

Pursuant to Section 3.14 of the General Terms and Conditions:

CDS
CAPACITY RELEASE CHARGES

	RESERVATION CHARGE* $/dth			RESERVATION CHARGE ADJUSTMENT/ VOLUMETRIC RESERVATION CHARGE* $/dth		
ACCESS AREA	MILEAGE	NON-MILEAGE	TOTAL	MILEAGE	NON-MILEAGE	TOTAL
STX-AAB	10.3550	1.8600	12.2150	0.3404	0.0612	0.4016
WLA-AAB	4.0270	1.8600	5.8870	0.1324	0.0612	0.1936
ELA-AAB	1.8370	1.8600	3.6970	0.0604	0.0612	0.1216
ETX-AAB	2.0970	1.8600	3.9570	0.0689	0.0612	0.1301
STX-STX	6.2680	1.8810	8.1490	0.2061	0.0619	0.2680
STX-WLA	8.5220	1.8810	10.4030	0.2802	0.0618	0.3420
STX-ELA	10.3550	1.8810	12.2360	0.3404	0.0619	0.4023
STX-ETX	10.3550	1.8810	12.2360	0.3404	0.0619	0.4023
WLA-WLA	2.1980	1.8810	4.0790	0.0723	0.0618	0.1341
WLA-ELA	4.0310	1.8810	5.9120	0.1324	0.0620	0.1944
WLA-ETX	3.9750	1.8810	5.8560	0.1306	0.0619	0.1925
ELA-ELA	1.8320	1.8810	3.7130	0.0602	0.0619	0.1221
ETX-ETX	2.0950	1.8810	3.9760	0.0689	0.0618	0.1307
ETX-ELA	1.8360	1.8810	3.7170	0.0604	0.0618	0.1222
MARKET AREA						
M1-M1	2.7420	1.8860	4.6280	0.0902	0.0619	0.1521
M1-M2	9.2440	1.8990	11.1430	0.3039	0.0625	0.3664
M1-M3	19.6310	1.9190	21.5500	0.6454	0.0631	0.7085
M2-M2	6.5010	1.8940	8.3950	0.2137	0.0623	0.2760
M2-M3	16.8890	1.9130	18.8020	0.5553	0.0629	0.6182
M3-M3	10.3880	1.9010	12.2890	0.3415	0.0625	0.4040

*Rates are exclusive of surcharges which can also be recovered.

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

Pursuant to Section 3.14 of the General Terms and Conditions:

CDS
CAPACITY RELEASE
CHARGES $/DTH

USAGE-1 RATE*		STX	WLA	ELA	ETX	M1	M2	M3
MILEAGE								
	from STX	0.0181	0.0215	0.0377	0.0377	0.0560	0.0996	0.1678
	from WLA	0.0215	0.0065	0.0234	0.0234	0.0417	0.0852	0.1535
	from ELA	0.0377	0.0234	0.0175	0.0175	0.0358	0.0793	0.1476
	from ETX	0.0377	0.0234	0.0175	0.0175	0.0358	0.0793	0.1476
	from M1	0.0560	0.0417	0.0358	0.0358	0.0183	0.0618	0.1300
	from M2	0.0996	0.0852	0.0793	0.0793	0.0618	0.0434	0.1122
	from M3	0.1678	0.1535	0.1476	0.1476	0.1300	0.1122	0.0687
NON-MILEAGE								
	from STX	0.0031	0.0031	0.0031	0.0031	0.0062	0.0062	0.0062
	from WLA	0.0031	0.0031	0.0031	0.0031	0.0062	0.0062	0.0062
	from ELA	0.0031	0.0031	0.0031	0.0031	0.0062	0.0062	0.0062
	from ETX	0.0031	0.0031	0.0031	0.0031	0.0062	0.0062	0.0062
	from M1	0.0062	0.0062	0.0062	0.0062	0.0031	0.0031	0.0031
	from M2	0.0062	0.0062	0.0062	0.0062	0.0031	0.0031	0.0031
	from M3	0.0062	0.0062	0.0062	0.0062	0.0031	0.0031	0.0031
TOTAL								
	from STX	0.0212	0.0246	0.0408	0.0408	0.0622	0.1057	0.1740
	from WLA	0.0246	0.0096	0.0265	0.0265	0.0479	0.0914	0.1597
	from ELA	0.0408	0.0265	0.0206	0.0206	0.0420	0.0855	0.1538
	from ETX	0.0408	0.0265	0.0206	0.0206	0.0420	0.0855	0.1538
	from M1	0.0622	0.0479	0.0420	0.0420	0.0214	0.0649	0.1331
	from M2	0.1057	0.0914	0.0855	0.0855	0.0649	0.0465	0.1153
	from M3	0.1740	0.1597	0.1538	0.1538	0.1331	0.1153	0.0718

USAGE-1 BACKHAUL RATE*		STX	WLA	ELA	ETX	M1	M2	M3
MILEAGE								
	from STX	0.0167						
	from WLA		0.0060					
	from ELA			0.0162				
	from ETX				0.0162			
	from M1				0.0350	0.0175		
	from M2				0.0766	0.0591	0.0415	
	from M3						0.1070	0.0654
NON-MILEAGE								
	from STX	0.0031						
	from WLA		0.0031					
	from ELA			0.0031				
	from ETX				0.0031			
	from M1				0.0062	0.0031		
	from M2				0.0062	0.0031	0.0031	
	from M3						0.0031	0.0031
TOTAL								
	from STX	0.0198						
	from WLA		0.0091					
	from ELA			0.0193				
	from ETX				0.0193			
	from M1				0.0412	0.0206		
	from M2				0.0828	0.0622	0.0446	
	from M3						0.1101	0.0685

*Rates are exclusive of surcharges which can also be recovered.

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

FT-1
RESERVATION
CHARGES

Pursuant to Sections 3.2(A), 3.3(A), and 3.5 of Rate Schedule FT-1:

	FT-1 RESERVATION CHARGE* $/dth		FT-1 RESERVATION CHARGE ADJUSTMENT $/dth	
ACCESS AREA	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM
STX-AAB	11.9920	0.0000	0.3943	0.0000
WLA-AAB	5.6640	0.0000	0.1862	0.0000
ELA-AAB	3.4740	0.0000	0.1141	0.0000
ETX-AAB	3.7340	0.0000	0.1228	0.0000
STX-STX	7.9260	0.0000	0.2606	0.0000
STX-WLA	10.1800	0.0000	0.3347	0.0000
STX-ELA	12.0130	0.0000	0.3950	0.0000
STX-ETX	12.0130	0.0000	0.3950	0.0000
WLA-WLA	3.8560	0.0000	0.1268	0.0000
WLA-ELA	5.6890	0.0000	0.1870	0.0000
WLA-ETX	5.6330	0.0000	0.1852	0.0000
ELA-ELA	3.4900	0.0000	0.1147	0.0000
ETX-ETX	3.7530	0.0000	0.1234	0.0000
ETX-ELA	3.4940	0.0000	0.1149	0.0000
MARKET AREA	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM
M1-M1	4.4050	0.0000	0.1448	0.0000
M1-M2	10.9200	0.0000	0.3589	0.0000
M1-M3	21.3270	0.0000	0.7011	0.0000
M2-M2	8.1720	0.0000	0.2687	0.0000
M2-M3	18.5790	0.0000	0.6109	0.0000
M3-M3	12.0660	0.0000	0.3967	0.0000

* Reservation Charge reflects a storage surcharge of: 0.0970

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

FT-1
USAGE CHARGES — ZONE RATE $/dth

Pursuant to Sections 3.2(A) and 3.3(A) of Rate Schedule FT-1:

	STX	WLA	ELA	ETX	M1	M2	M3
USAGE-1 - MAXIMUM							
from STX	0.0212	0.0246	0.0408	0.0408	0.0622	0.1057	0.1740
from WLA	0.0246	0.0096	0.0265	0.0265	0.0479	0.0914	0.1597
from ELA	0.0408	0.0265	0.0206	0.0206	0.0420	0.0855	0.1538
from ETX	0.0408	0.0265	0.0206	0.0206	0.0420	0.0855	0.1538
from M1	0.0622	0.0479	0.0420	0.0420	0.0214	0.0649	0.1331
from M2	0.1057	0.0914	0.0855	0.0855	0.0649	0.0465	0.1153
from M3	0.1740	0.1597	0.1538	0.1538	0.1331	0.1153	0.0718
USAGE-1 - MINIMUM							
from STX	0.0182	0.0215	0.0377	0.0377	0.0560	0.0996	0.1678
from WLA	0.0215	0.0065	0.0234	0.0234	0.0417	0.0853	0.1535
from ELA	0.0377	0.0234	0.0175	0.0175	0.0358	0.0794	0.1476
from ETX	0.0377	0.0234	0.0175	0.0175	0.0358	0.0794	0.1476
from M1	0.0560	0.0417	0.0358	0.0358	0.0183	0.0619	0.1300
from M2	0.0996	0.0853	0.0794	0.0794	0.0619	0.0435	0.1122
from M3	0.1678	0.1535	0.1476	0.1476	0.1300	0.1122	0.0688
USAGE-1 - BACKHAUL MAXIMUM							
from STX	0.0198						
from WLA		0.0091					
from ELA			0.0193				
from ETX				0.0193			
from M1				0.0412	0.0206		
from M2				0.0828	0.0622	0.0446	
from M3						0.1101	0.0685
USAGE-1 - BACKHAUL MINIMUM							
from STX	0.0168						
from WLA		0.0060					
from ELA			0.0162				
from ETX				0.0162			
from M1				0.0350	0.0175		
from M2				0.0767	0.0592	0.0416	
from M3						0.1070	0.0655
USAGE-2	0.2552	0.2552	0.2552	0.2552	0.4215	0.6790	1.0894

ACA COMMODITY SURCHARGE TO APPLICABLE CUSTOMERS, PURSUANT TO SECTION 15.5 OF THE GENERAL TERMS AND CONDITIONS.

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

Pursuant to Section 3.14 of the General Terms and Conditions:

FT-1
CAPACITY RELEASE CHARGES

	RESERVATION CHARGE* $/dth			RESERVATION CHARGE ADJUSTMENT/ VOLUMETRIC RESERVATION CHARGE* $/dth		
ACCESS AREA	MILEAGE	NON-MILEAGE	TOTAL	MILEAGE	NON-MILEAGE	TOTAL
STX-AAB	10.3550	1.6370	11.9920	0.3404	0.0539	0.3943
WLA-AAB	4.0270	1.6370	5.6640	0.1324	0.0538	0.1862
ELA-AAB	1.8370	1.6370	3.4740	0.0604	0.0537	0.1141
ETX-AAB	2.0970	1.6370	3.7340	0.0689	0.0539	0.1228
STX-STX	6.2680	1.6580	7.9260	0.2061	0.0545	0.2606
STX-WLA	8.5220	1.6580	10.1800	0.2802	0.0545	0.3347
STX-ELA	10.3550	1.6580	12.0130	0.3404	0.0546	0.3950
STX-ETX	10.3550	1.6580	12.0130	0.3404	0.0546	0.3950
WLA-WLA	2.1980	1.6580	3.8560	0.0723	0.0545	0.1268
WLA-ELA	4.0310	1.6580	5.6890	0.1324	0.0546	0.1870
WLA-ETX	3.9750	1.6580	5.6330	0.1306	0.0546	0.1852
ELA-ELA	1.8320	1.6580	3.4900	0.0602	0.0545	0.1147
ETX-ETX	2.0950	1.6580	3.7530	0.0689	0.0545	0.1234
ETX-ELA	1.8360	1.6580	3.4940	0.0604	0.0545	0.1149
MARKET AREA						
M1-M1	2.7420	1.6630	4.4050	0.0902	0.0546	0.1448
M1-M2	9.2440	1.6760	10.9200	0.3039	0.0550	0.3589
M1-M3	19.6310	1.6960	21.3270	0.6454	0.0557	0.7011
M2-M2	6.5010	1.6710	8.1720	0.2137	0.0550	0.2687
M2-M3	16.8890	1.6900	18.5790	0.5553	0.0556	0.6109
M3-M3	10.3880	1.6780	12.0660	0.3415	0.0552	0.3967

*Rates are exclusive of surcharges which can also be recovered.

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

Pursuant to Section 3.14 of the General Terms and Conditions:

FT-1
CAPACITY RELEASE
CHARGES

$/DTH

USAGE-1 RATE*		STX	WLA	ELA	ETX	M1	M2	M3
MILEAGE								
	from STX	0.0181	0.0215	0.0377	0.0377	0.0560	0.0995	0.1678
	from WLA	0.0215	0.0065	0.0234	0.0234	0.0417	0.0852	0.1535
	from ELA	0.0377	0.0234	0.0175	0.0175	0.0358	0.0793	0.1476
	from ETX	0.0377	0.0234	0.0175	0.0175	0.0358	0.0793	0.1476
	from M1	0.0560	0.0417	0.0358	0.0358	0.0183	0.0618	0.1300
	from M2	0.0995	0.0852	0.0793	0.0793	0.0618	0.0434	0.1122
	from M3	0.1678	0.1535	0.1476	0.1476	0.1300	0.1122	0.0687
NON-MILEAGE								
	from STX	0.0031	0.0031	0.0031	0.0031	0.0062	0.0062	0.0062
	from WLA	0.0031	0.0031	0.0031	0.0031	0.0062	0.0062	0.0062
	from ELA	0.0031	0.0031	0.0031	0.0031	0.0062	0.0062	0.0062
	from ETX	0.0031	0.0031	0.0031	0.0031	0.0062	0.0062	0.0062
	from M1	0.0062	0.0062	0.0062	0.0062	0.0031	0.0031	0.0031
	from M2	0.0062	0.0062	0.0062	0.0062	0.0031	0.0031	0.0031
	from M3	0.0062	0.0062	0.0062	0.0062	0.0031	0.0031	0.0031
TOTAL								
	from STX	0.0212	0.0246	0.0408	0.0408	0.0622	0.1057	0.1740
	from WLA	0.0246	0.0096	0.0265	0.0265	0.0479	0.0914	0.1597
	from ELA	0.0408	0.0265	0.0206	0.0206	0.0420	0.0855	0.1538
	from ETX	0.0408	0.0265	0.0206	0.0206	0.0420	0.0855	0.1538
	from M1	0.0622	0.0479	0.0420	0.0420	0.0214	0.0649	0.1331
	from M2	0.1057	0.0914	0.0855	0.0855	0.0649	0.0465	0.1153
	from M3	0.1740	0.1597	0.1538	0.1538	0.1331	0.1153	0.0718

USAGE-1 BACKHAUL RATE*		STX	WLA	ELA	ETX	M1	M2	M3
MILEAGE								
	from STX	0.0167						
	from WLA		0.0060					
	from ELA			0.0162				
	from ETX				0.0162			
	from M1				0.0350	0.0175		
	from M2				0.0766	0.0591	0.0415	
	from M3						0.1070	0.0654
NON-MILEAGE								
	from STX	0.0031						
	from WLA		0.0031					
	from ELA			0.0031				
	from ETX				0.0031			
	from M1				0.0062	0.0031		
	from M2				0.0062	0.0031	0.0031	
	from M3						0.0031	0.0031
TOTAL								
	from STX	0.0198						
	from WLA		0.0091					
	from ELA			0.0193				
	from ETX				0.0193			
	from M1				0.0412	0.0206		
	from M2				0.0828	0.0622	0.0446	
	from M3						0.1101	0.0685

*Rates are exclusive of surcharges which can also be recovered.

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

FT-1 CHARGES — CHARGES $/dth

APPLICABLE TO CUSTOMERS UTILIZING CAPACITY PURSUANT TO INCREMENTAL FACILITY EXPANSIONS IMPLEMENTED ON NOVEMBER 8, 2021:

Docket No. CP19-512-000, Cameron Extension Project:

	Maximum	Minimum
Rates Pursuant to Section 3.2 of Rate Schedule FT-1:		
RESERVATION CHARGE	3.3880	0.0000
USAGE-1 CHARGE	0.0076	0.0076
USAGE-2 CHARGE	0.1190	
RESERVATION CHARGE ADJUSTMENT	0.1114	0.0000
Rates Pursuant to Section 3.14 of the General Terms and Conditions:		
VOLUMETRIC RESERVATION CHARGE	0.1114	0.0000

BASE UNIT ELECTRIC POWER COST	0.0000
ELECTRIC POWER COST ADJUSTMENT	0.0000
ADJUSTED ELECTRIC POWER COST	0.0000
ASA USAGE SURCHARGE	0.0054

APPLICABLE SHRINKAGE PERCENTAGE (including LAUF) for FT-1 (Cameron Extension Project)

December 1 through November 30:	0.76%

ACA COMMODITY SURCHARGE TO APPLICABLE CUSTOMERS, PURSUANT TO SECTION 15.5 OF THE GENERAL TERMS AND CONDITIONS.

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

FT-1
RESERVATION
CHARGES

Pursuant to Sections 3.2(A), 3.3(A), and 3.5 of Rate Schedule FT-1:

	FT-1 RESERVATION CHARGE* $/dth		FT-1 RESERVATION CHARGE ADJUSTMENT $/dth	
ACCESS AREA	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM
STX-AAB	11.9350	0.0000	0.3924	0.0000
WLA-AAB	5.6450	0.0000	0.1856	0.0000
ELA-AAB	3.4610	0.0000	0.1137	0.0000
ETX-AAB	3.7220	0.0000	0.1224	0.0000
STX-STX	7.8980	0.0000	0.2597	0.0000
STX-WLA	10.1400	0.0000	0.3334	0.0000
STX-ELA	11.9610	0.0000	0.3932	0.0000
STX-ETX	11.9620	0.0000	0.3933	0.0000
WLA-WLA	3.8500	0.0000	0.1266	0.0000
WLA-ELA	5.6720	0.0000	0.1865	0.0000
WLA-ETX	5.6390	0.0000	0.1854	0.0000
ELA-ELA	3.4860	0.0000	0.1145	0.0000
ETX-ETX	3.7480	0.0000	0.1232	0.0000
ETX-ELA	3.4880	0.0000	0.1146	0.0000
MARKET AREA	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM
M1-M1	4.4500	0.0000	0.1463	0.0000
M1-M2	11.0490	0.0000	0.3632	0.0000
M1-M3	21.5180	0.0000	0.7074	0.0000
M2-M2	8.2610	0.0000	0.2716	0.0000
M2-M3	18.7320	0.0000	0.6159	0.0000
M3-M3	12.1350	0.0000	0.3990	0.0000

* Reservation Charge reflects a storage surcharge of: 0.0970

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

FT-1
USAGE CHARGES — ZONE RATE $/dth

Pursuant to Sections 3.2(A) and 3.3(A) of Rate Schedule FT-1:

	STX	WLA	ELA	ETX	M1	M2	M3
USAGE-1 - MAXIMUM							
from STX	0.0252	0.0302	0.0456	0.0456	0.0719	0.1214	0.1935
from WLA	0.0302	0.0127	0.0312	0.0312	0.0575	0.1070	0.1791
from ELA	0.0456	0.0312	0.0255	0.0255	0.0518	0.1013	0.1734
from ETX	0.0456	0.0312	0.0255	0.0255	0.0518	0.1013	0.1734
from M1	0.0719	0.0575	0.0518	0.0518	0.0263	0.0758	0.1479
from M2	0.1214	0.1070	0.1013	0.1013	0.0758	0.0540	0.1292
from M3	0.1935	0.1791	0.1734	0.1734	0.1479	0.1292	0.0788
USAGE-1 - MINIMUM							
from STX	0.0222	0.0271	0.0425	0.0425	0.0657	0.1153	0.1873
from WLA	0.0271	0.0096	0.0281	0.0281	0.0513	0.1009	0.1729
from ELA	0.0425	0.0281	0.0224	0.0224	0.0456	0.0952	0.1672
from ETX	0.0425	0.0281	0.0224	0.0224	0.0456	0.0952	0.1672
from M1	0.0657	0.0513	0.0456	0.0456	0.0232	0.0728	0.1448
from M2	0.1153	0.1009	0.0952	0.0952	0.0728	0.0510	0.1261
from M3	0.1873	0.1729	0.1672	0.1672	0.1448	0.1261	0.0758
USAGE-1 - BACKHAUL MAXIMUM							
from STX	0.0201						
from WLA		0.0092					
from ELA			0.0195				
from ETX				0.0195			
from M1				0.0472	0.0217		
from M2				0.0908	0.0653	0.0466	
from M3						0.1115	0.0679
USAGE-1 - BACKHAUL MINIMUM							
from STX	0.0171						
from WLA		0.0061					
from ELA			0.0164				
from ETX				0.0164			
from M1				0.0410	0.0186		
from M2				0.0847	0.0623	0.0436	
from M3						0.1084	0.0649
USAGE-2	0.2603	0.2603	0.2603	0.2603	0.4329	0.6993	1.1156

ACA COMMODITY SURCHARGE TO APPLICABLE CUSTOMERS, PURSUANT TO SECTION 15.5 OF THE GENERAL TERMS AND CONDITIONS.

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

Pursuant to Section 3.14 of the General Terms and Conditions:

FT-1
CAPACITY RELEASE CHARGES

	RESERVATION CHARGE* $/dth			RESERVATION CHARGE ADJUSTMENT/ VOLUMETRIC RESERVATION CHARGE* $/dth		
ACCESS AREA	MILEAGE	NON-MILEAGE	TOTAL	MILEAGE	NON-MILEAGE	TOTAL
STX-AAB	10.2980	1.6370	11.9350	0.3386	0.0538	0.3924
WLA-AAB	4.0080	1.6370	5.6450	0.1318	0.0538	0.1856
ELA-AAB	1.8240	1.6370	3.4610	0.0600	0.0537	0.1137
ETX-AAB	2.0850	1.6370	3.7220	0.0686	0.0538	0.1224
STX-STX	6.2340	1.6640	7.8980	0.2050	0.0547	0.2597
STX-WLA	8.4760	1.6640	10.1400	0.2787	0.0547	0.3334
STX-ELA	10.2970	1.6640	11.9610	0.3385	0.0547	0.3932
STX-ETX	10.2980	1.6640	11.9620	0.3386	0.0547	0.3933
WLA-WLA	2.1860	1.6640	3.8500	0.0719	0.0547	0.1266
WLA-ELA	4.0080	1.6640	5.6720	0.1317	0.0548	0.1865
WLA-ETX	3.9750	1.6640	5.6390	0.1306	0.0548	0.1854
ELA-ELA	1.8220	1.6640	3.4860	0.0599	0.0546	0.1145
ETX-ETX	2.0840	1.6640	3.7480	0.0685	0.0547	0.1232
ETX-ELA	1.8240	1.6640	3.4880	0.0600	0.0546	0.1146
MARKET AREA						
M1-M1	2.7790	1.6710	4.4500	0.0914	0.0549	0.1463
M1-M2	9.3610	1.6880	11.0490	0.3078	0.0554	0.3632
M1-M3	19.8070	1.7110	21.5180	0.6512	0.0562	0.7074
M2-M2	6.5800	1.6810	8.2610	0.2163	0.0553	0.2716
M2-M3	17.0280	1.7040	18.7320	0.5598	0.0561	0.6159
M3-M3	10.4480	1.6870	12.1350	0.3435	0.0555	0.3990

*Rates are exclusive of surcharges which can also be recovered.

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

Pursuant to Section 3.14 of the General Terms and Conditions:

FT-1
CAPACITY RELEASE
CHARGES

$/DTH

USAGE-1 RATE*		STX	WLA	ELA	ETX	M1	M2	M3
MILEAGE								
	from STX	0.0221	0.0271	0.0425	0.0425	0.0657	0.1152	0.1873
	from WLA	0.0271	0.0096	0.0281	0.0281	0.0513	0.1008	0.1729
	from ELA	0.0425	0.0281	0.0224	0.0224	0.0456	0.0951	0.1672
	from ETX	0.0425	0.0281	0.0224	0.0224	0.0456	0.0951	0.1672
	from M1	0.0657	0.0513	0.0456	0.0456	0.0232	0.0727	0.1448
	from M2	0.1152	0.1008	0.0951	0.0951	0.0727	0.0509	0.1261
	from M3	0.1873	0.1729	0.1672	0.1672	0.1448	0.1261	0.0757
NON-MILEAGE								
	from STX	0.0031	0.0031	0.0031	0.0031	0.0062	0.0062	0.0062
	from WLA	0.0031	0.0031	0.0031	0.0031	0.0062	0.0062	0.0062
	from ELA	0.0031	0.0031	0.0031	0.0031	0.0062	0.0062	0.0062
	from ETX	0.0031	0.0031	0.0031	0.0031	0.0062	0.0062	0.0062
	from M1	0.0062	0.0062	0.0062	0.0062	0.0031	0.0031	0.0031
	from M2	0.0062	0.0062	0.0062	0.0062	0.0031	0.0031	0.0031
	from M3	0.0062	0.0062	0.0062	0.0062	0.0031	0.0031	0.0031
TOTAL								
	from STX	0.0252	0.0302	0.0456	0.0456	0.0719	0.1214	0.1935
	from WLA	0.0302	0.0127	0.0312	0.0312	0.0575	0.1070	0.1791
	from ELA	0.0456	0.0312	0.0255	0.0255	0.0518	0.1013	0.1734
	from ETX	0.0456	0.0312	0.0255	0.0255	0.0518	0.1013	0.1734
	from M1	0.0719	0.0575	0.0518	0.0518	0.0263	0.0758	0.1479
	from M2	0.1214	0.1070	0.1013	0.1013	0.0758	0.0540	0.1292
	from M3	0.1935	0.1791	0.1734	0.1734	0.1479	0.1292	0.0788

USAGE-1 BACKHAUL RATE*		STX	WLA	ELA	ETX	M1	M2	M3
MILEAGE								
	from STX	0.0170						
	from WLA		0.0061					
	from ELA			0.0164				
	from ETX				0.0164			
	from M1				0.0410	0.0186		
	from M2				0.0846	0.0622	0.0435	
	from M3						0.1084	0.0648
NON-MILEAGE								
	from STX	0.0031						
	from WLA		0.0031					
	from ELA			0.0031				
	from ETX				0.0031			
	from M1				0.0062	0.0031		
	from M2				0.0062	0.0031	0.0031	
	from M3						0.0031	0.0031
TOTAL								
	from STX	0.0201						
	from WLA		0.0092					
	from ELA			0.0195				
	from ETX				0.0195			
	from M1				0.0472	0.0217		
	from M2				0.0908	0.0653	0.0466	
	from M3						0.1115	0.0679

*Rates are exclusive of surcharges which can also be recovered.

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

SS-1
CHARGES

Pursuant to Sections 3.2 and 3.4 of Rate Schedule SS-1:

		RATE $/dth
MAXIMUM	RESERVATION CHARGE*	9.5900
	SPACE CHARGE	0.4599
	INJECTION CHARGE	0.0426
	WITHDRAWAL CHARGE	0.0794
	EXCESS INJECTION CHARGE	0.5021
	EXCESS WITHDRAWAL CHARGE	1.7472
	RESERVATION CHARGE ADJUSTMENT	0.3154
TRANSMISSION COMPONENT OF RESERVATION CHARGE		6.8350
TRANSMISSION COMPONENT OF WITHDRAWAL CHARGE		0.0351
MINIMUM	RESERVATION CHARGE	0.0000
	SPACE CHARGE	0.0000
	INJECTION CHARGE	0.0426
	WITHDRAWAL CHARGE	0.0794
	EXCESS INJECTION CHARGE	0.0426
	EXCESS WITHDRAWAL CHARGE	0.0794
	RESERVATION CHARGE ADJUSTMENT	0.0000

* Reservation Charge reflects a storage surcharge of: 0.0970

ACA COMMODITY SURCHARGE TO APPLICABLE CUSTOMERS, PURSUANT TO SECTION 15.5 OF THE GENERAL TERMS AND CONDITIONS.

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO OPEN ACCESS, PART 284, RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

SS-1
CAPACITY RELEASE
CHARGES*

Pursuant to Section 3.14 of the General Terms and Conditions:

		RATE $/dth		
		MILEAGE	NON-MILEAGE	TOTAL
MAXIMUM	RESERVATION CHARGE	5.1980	4.3920	9.5900
	SPACE CHARGE	0.0000	0.4599	0.4599
	VOLUMETRIC RESERVATION CHARGE	0.1708	0.1446	0.3154
	DAILY SPACE CHARGE	0.0000	0.0013	0.0013
MINIMUM	RESERVATION CHARGE	0.0000	0.0000	0.0000
	SPACE CHARGE	0.0000	0.0000	0.0000
	VOLUMETRIC RESERVATION CHARGE	0.0000	0.0000	0.0000
	DAILY SPACE CHARGE	0.0000	0.0000	0.0000

*Rates are exclusive of surcharges which can also be recovered.

CURRENTLY EFFECTIVE SERVICE RATES APPLICABLE TO NGA SECTION 7(C) RATE SCHEDULES IN FERC GAS TARIFF, EIGHTH REVISED VOLUME NO. 1

		ZONE RATE $/dth		
		M1	M2	M3
FTS	RESERVATION CHARGE			6.7840
	USAGE-2			0.2230
	RESERVATION CHARGE ADJUSTMENT			0.2230
FTS-2	Pursuant to Sections 3.2 and 3.5 of Rate Schedule FTS-2:			
	RESERVATION CHARGE			10.2400
	USAGE-2			0.3367
	RESERVATION CHARGE ADJUSTMENT			0.3367
FTS-4	RESERVATION CHARGE			8.5450
	USAGE-2			0.2809
	RESERVATION CHARGE ADJUSTMENT			0.2809
FTS-5	RESERVATION CHARGE			7.4810
	USAGE-2			0.2460
	RESERVATION CHARGE ADJUSTMENT			0.2460
FTS-7	RESERVATION CHARGE	9.1990	9.1990	9.1990
	USAGE-2	0.3024	0.3024	0.3024
	RESERVATION CHARGE ADJUSTMENT	0.3024	0.3024	0.3024
FTS-8	RESERVATION CHARGE	8.7730	8.7730	8.7730
	USAGE-2	0.2884	0.2884	0.2884
	RESERVATION CHARGE ADJUSTMENT	0.2884	0.2884	0.2884

* Reservation Charge reflects a storage surcharge of: 0.0970

CURRENTLY EFFECTIVE PERCENTAGES FOR APPLICABLE SHRINKAGE FOR ASA RATE SCHEDULES
Effective During the Winter Period: December 1 through March 31

FOR TRANSPORTATION SERVICE		STX (%)	WLA (%)	ELA (%)	ETX (%)	M1 (%)	M2 (%)	M3 (%)
|	from STX	1.09	1.25	2.12	2.12	3.08	4.70	5.81
Base	from WLA	0.50	0.50	1.38	1.38	2.34	3.96	5.07
Applicable	from ELA	1.05	1.05	1.05	1.05	2.01	3.63	4.74
Shrinkage	from ETX	1.09	1.05	1.05	1.05	2.01	3.63	4.74
Percentage	from M1	3.08	2.34	2.01	2.01	0.96	2.58	3.69
|	from M2	4.70	3.96	3.63	3.63	2.58	1.80	2.90
|	from M3	5.81	5.07	4.74	4.74	3.69	2.90	1.28
|	from STX	-0.93	-1.06	-1.78	-1.78	-2.57	-3.8	-4.29
Applicable	from WLA	-0.31	-0.44	-1.14	-1.14	-1.93	-3.16	-3.65
Shrinkage	from ELA	-0.71	-0.81	-0.77	-0.77	-1.56	-2.79	-3.28
Adjustment	from ETX	-0.75	-0.81	-0.77	-0.77	-1.56	-2.79	-3.28
Percentage	from M1	-2.57	-1.93	-1.56	-1.56	-0.79	-2.02	-2.51
|	from M2	-3.80	-3.16	-2.79	-2.79	-2.02	-1.41	-1.88
|	from M3	-4.29	-3.65	-3.28	-3.28	-2.51	-1.88	-0.65
|	from STX	0.16	0.19	0.34	0.34	0.51	0.90	1.52
Applicable	from WLA	0.19	0.06	0.24	0.24	0.41	0.80	1.42
Shrinkage	from ELA	0.34	0.24	0.28	0.28	0.45	0.84	1.46
Percentage	from ETX	0.34	0.24	0.28	0.28	0.45	0.84	1.46
|	from M1	0.51	0.41	0.45	0.45	0.17	0.56	1.18
|	from M2	0.90	0.80	0.84	0.84	0.56	0.39	1.02
|	from M3	1.52	1.42	1.46	1.46	1.18	1.02	0.63

FOR TRANSPORTATION SERVICE UNDER CONTRACTS WITH PARTIAL BACKHAUL PATHS		STX (%)	WLA (%)	ELA (%)	ETX (%)	M1 (%)	M2 (%)	M3 (%)
|	from STX	0.00						
Base	from WLA		0.00					
Applicable	from ELA			0.00				
Shrinkage	from ETX				0.00			
Percentage	from M1				0.00	0.00		
|	from M2				0.00	0.00	0.00	
|	from M3						0.00	0.00
|	from STX	0.00						
Applicable	from WLA		0.00					
Shrinkage	from ELA			0.00				
Adjustment	from ETX				0.28			
Percentage	from M1				0.28	0.00		
|	from M2				0.28	0.00	0.00	
|	from M3						0.00	0.00
|	from STX	0.00						
Applicable	from WLA		0.00					
Shrinkage	from ELA			0.00				
Percentage	from ETX				0.28			
|	from M1				0.28	0.00		
|	from M2				0.28	0.00	0.00	
|	from M3						0.00	0.00

FOR STORAGE SERVICE	Base Applicable Shrinkage Percentage	Applicable Shrinkage Adjustment Percentage	Applicable Shrinkage Percentage
Monthly W/d (SS,SS-1,X-28)	2.86 %	-1.99 %	0.87 %
Monthly W/d (FSS,ISS-1)	1.76 %	-1.20 %	0.56 %
Monthly Injections	1.76 %	-1.20 %	0.56 %
Monthly Inventory Level	0.08 %	-0.03 %	0.05 %

Footnote: Due to the bidirectional flow patterns of Pipeline's Access Area Zones, there is no distinction between forwardhauls and backhauls for applicable Shrinkage purposes in the Access Area Zones.

CURRENTLY EFFECTIVE PERCENTAGES FOR APPLICABLE SHRINKAGE FOR ASA RATE SCHEDULES
Effective During the Spring, Summer and Fall Periods: April 1 through November 30

FOR TRANSPORTATION SERVICE		STX (%)	WLA (%)	ELA (%)	ETX (%)	M1 (%)	M2 (%)	M3 (%)
|	from STX	0.93	1.04	1.64	1.64	2.49	3.59	4.34
Base	from WLA	0.53	0.53	1.13	1.13	1.98	3.08	3.83
Applicable	from ELA	0.91	0.91	0.91	0.91	1.76	2.86	3.61
Shrinkage	from ETX	0.93	0.91	0.91	0.91	1.76	2.86	3.61
Percentage	from M1	2.49	1.98	1.76	1.76	0.85	1.95	2.70
|	from M2	3.59	3.08	2.86	2.86	1.95	1.42	2.17
|	from M3	4.34	3.83	3.61	3.61	2.70	2.17	1.07
|	from STX	-0.81	-0.90	-1.39	-1.39	-2.12	-2.92	-3.20
Applicable	from WLA	-0.39	-0.48	-0.95	-0.95	-1.68	-2.48	-2.76
Shrinkage	from ELA	-0.66	-0.73	-0.70	-0.70	-1.43	-2.23	-2.51
Adjustment	from ETX	-0.68	-0.73	-0.70	-0.70	-1.43	-2.23	-2.51
Percentage	from M1	-2.12	-1.68	-1.43	-1.43	-0.73	-1.53	-1.81
|	from M2	-2.92	-2.48	-2.23	-2.23	-1.53	-1.12	-1.41
|	from M3	-3.20	-2.76	-2.51	-2.51	-1.81	-1.41	-0.60
|	from STX	0.12	0.14	0.25	0.25	0.37	0.67	1.14
Applicable	from WLA	0.14	0.05	0.18	0.18	0.30	0.60	1.07
Shrinkage	from ELA	0.25	0.18	0.21	0.21	0.33	0.63	1.10
Percentage	from ETX	0.25	0.18	0.21	0.21	0.33	0.63	1.10
|	from M1	0.37	0.30	0.33	0.33	0.12	0.42	0.89
|	from M2	0.67	0.60	0.63	0.63	0.42	0.30	0.76
|	from M3	1.14	1.07	1.10	1.10	0.89	0.76	0.47

FOR TRANSPORTATION SERVICE UNDER CONTRACTS WITH PARTIAL BACKHAUL PATHS		STX (%)	WLA (%)	ELA (%)	ETX (%)	M1 (%)	M2 (%)	M3 (%)
|	from STX	0.00						
Base	from WLA		0.00					
Applicable	from ELA			0.00				
Shrinkage	from ETX				0.00			
Percentage	from M1				0.00	0.00		
|	from M2				0.00	0.00	0.00	
|	from M3						0.00	0.00
|	from STX	0.00						
Applicable	from WLA		0.00					
Shrinkage	from ELA			0.00				
Adjustment	from ETX				0.21			
Percentage	from M1				0.21	0.00		
|	from M2				0.21	0.00	0.00	
|	from M3						0.00	0.00
|	from STX	0.00						
Applicable	from WLA		0.00					
Shrinkage	from ELA			0.00				
Percentage	from ETX				0.21			
|	from M1				0.21	0.00		
|	from M2				0.21	0.00	0.00	
|	from M3						0.00	0.00

FOR STORAGE SERVICE	Base Applicable Shrinkage Percentage	Applicable Shrinkage Adjustment Percentage	Applicable Shrinkage Percentage
Monthly W/d (SS,SS-1,X-28)	2.70 %	-1.91 %	0.79 %
Monthly W/d (FSS,ISS-1)	1.76 %	-1.20 %	0.56 %
Monthly Injections	1.76 %	-1.20 %	0.56 %
Monthly Inventory Level	0.08 %	-0.03 %	0.05 %

Footnote: Due to the bidirectional flow patterns of Pipeline's Access Area Zones, there is no distinction between forwardhauls and backhauls for applicable Shrinkage purposes in the Access Area Zones.

CURRENTLY EFFECTIVE PERCENTAGES FOR APPLICABLE SHRINKAGE FOR NON-ASA RATE SCHEDULES

Effective year round - June 1 through May 31

		Applicable Shrinkage Percentage			Applicable Shrinkage Percentage
Rate Schedule FTS		1.29 %		Rate Sch X-127	0.00 %
Rate Schedule FTS-2		0.00 %		Rate Sch X-129	0.00 %
Rate Schedule FTS-4	Leidy (Nov15-Mar31)	4.89 %		Rate Sch X-130	0.00 %
	(Apr1-Nov14)	1.00 %		Rate Sch X-135	0.00 %
	Chambersburg	0.00 %		Rate Sch X-136	0.00 %
Rate Schedule FTS-5		0.00 %		Rate Sch X-137	1.30 %
Rate Schedule FTS-7	(Delv to Zone M1,M2)	0.00 %			
	(Delv to Zone M3)	2.00 %			
Rate Schedule FTS-8	(Delv to Zone M1,M2)	0.00 %			
	(Delv to Zone M3)	1.50 %			
Rate Schedule LLFT	(M2 - M2)(Dec1-Mar31)	0.39 %	Winter Period		
Rate Schedule LLFT	(M2 - M2)	0.30 %	Non Winter Period		
Rate Schedule LLIT	(M2 - M2)(Dec1-Mar31)	0.39 %	Winter Period		
Rate Schedule LLIT	(M2 - M2)	0.30 %	Non Winter Period		
Rate Schedule VKFT		0.00 %			
Rate Schedule VKIT		0.00 %			

PART 5 - RATE SCHEDULES
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RATE SCHEDULE CDS

COMPREHENSIVE DELIVERY SERVICE

1. AVAILABILITY

This Open-access Rate Schedule is available to any party (hereinafter called Customer) which has requested firm transportation service pursuant to Section 3 of Texas Eastern Transmission, LP's (hereinafter called Pipeline) General Terms and Conditions and, after review and acceptance of such request by Pipeline, has entered into a service agreement with Pipeline for service under Rate Schedule CDS. Such service agreement shall be in the form contained in Pipeline's FERC Gas Tariff of which this Rate Schedule CDS is a part. Service under this Rate Schedule is not available from capacity subject to Rate Schedules MLS-1, MLS-2, VKFT and VKIT or from capacity on the Marietta Extension, the Manhattan Extension, the Ohio Extension, the Petronila Extension, the Brazoria Extension, or the Middlesex Extension.

2. APPLICABILITY AND CHARACTER OF SERVICE

2.1 Transportation service hereunder will be firm, except as provided herein and in Pipeline's General Terms and Conditions. Service under this Rate Schedule constitutes one of the No-notice Service options as that term is used in Order No. 636 available from Pipeline.

2.2 Subject to Sections 2.3 and 2.4 of this Rate Schedule CDS, Pipeline shall deliver to those delivery points on Pipeline's system as specified in the executed service agreement or available to Customer pursuant to Section 14 of the General Terms and Conditions (hereinafter referred to as "Point(s) of Delivery"), for Customer's account, as requested for any Day, Natural Gas quantities up to Customer's Maximum Daily Quantity (MDQ). Customer's MDQ shall be a uniform quantity throughout the contract year, except that Pipeline may, on a not unduly discriminatory basis, agree to certain differing levels in Customer's MDQ during specified periods during the year. Customer's MDQ and any differing levels in MDQ, as well as the period of such differing MDQ levels, shall be specified in the executed service agreement.

2.3 Subject to variances as may be permitted by Section 2.4 of this Rate Schedule CDS or the General Terms and Conditions, Customer shall deliver to Pipeline and Pipeline shall receive, for Customer's account, at those points on Pipeline's system available to Customer pursuant to Section 14 of the General Terms and Conditions (hereinafter referred to as "Point(s) of Receipt"), daily Quantities of Gas equal to the daily quantities delivered to Customer pursuant to Section 2.2 up to Customer's MDQ, plus Applicable Shrinkage.

2.4 (A) Pursuant to this Section 2.4, Customer may cause Natural Gas to be delivered to Pipeline for the purpose of receiving No-notice Service in a manner which is different from that required by Section 2.3 of this Rate Schedule CDS as provided in Section 2.4(B) or Section 2.4(C) below. If Customer does not elect to tender Natural Gas quantities in advance for No-notice Service as provided in Section 2.4(B), Customer must tender Natural Gas quantities to Pipeline no more than two (2) Business Days after commencement of such "no-notice" service in order to initiate correction of the scheduling variance created while receiving No-notice Service. The difference in scheduled receipts and scheduled deliveries must be at a minimum, equal to the level of No-notice Service received (whether an increase or decrease) two (2) Business Days prior and must continue for the period of time required to correct the scheduling variance created while receiving such No-notice Service; provided, however, Customer is not required on any Day to tender in excess of its MDQ. If a Customer schedules the delivery of its MDQ, that Customer is not required to, but may include in the Quantity of Gas scheduled for receipt, Quantities of Gas for the purpose of correcting prior scheduling variances. Any remaining scheduling variance will be corrected as an imbalance at the end of the Month in accordance with Section 2.4(D) herein. To the extent Customer notifies Pipeline of Customer's tender of Natural Gas prior to the date such Natural Gas will be delivered to Customer and Pipeline agrees to such pre-injection, Customer will receive a credit against the Reservation component of its invoice for such pre-injection Quantities of Gas. The applicable Pre-injection Credit Rate is set forth on the Statement of Rates for Rate Schedule CDS.

(B) In the event Customer desires to pre-inject receipts or reduce receipts in anticipation of an increase or decrease in its scheduled deliveries, Customer shall notify Pipeline of such desire pursuant to Section 4 of Pipeline's General Terms and Conditions. Pipeline shall perform No-notice Service at the level of increased or decreased receipts for a period of two (2) Business Days beginning upon Pipeline's initiation of No-notice Service.

(C) In the event Customer requires an increase or decrease in its scheduled deliveries, and (1) Customer provides notice to Pipeline of such requirement pursuant to Section 4 of Pipeline's General Terms and Conditions, (2) such corresponding increase or decrease in Customer's scheduled receipts cannot be confirmed contemporaneously by Pipeline, and (3) Customer has not previously scheduled increased or decreased receipts into Pipeline's system for No-notice Service, Pipeline shall perform service at the level of scheduled increased or decreased deliveries for a period of two (2) Business Days beginning upon Pipeline's receipt of such notice.

(D) If Customer is out of balance at the end of any Month due to invocation of the No-notice Service provisions of Rate Schedule CDS, Customer will be allowed to reduce by in-kind balancing any No-notice Service imbalance to zero within five (5) Days after notification by Pipeline. Any remaining imbalance shall be reconciled in accordance with Section 8.5 of the General Terms and Conditions.

2.5 Pipeline shall not be obligated to add any facilities or expand the capacity of its pipeline system in any manner in order to provide transportation service to Customer pursuant to this Rate Schedule; provided, it is agreed by all Rate Schedule CDS Customers that Pipeline may, but is not obligated to, develop new storage fields and add facilities as necessary to provide service hereunder.

3. RATE

3.1 The applicable rates for service hereunder in each Zone are those uniform rates set forth in the currently effective Statement of Rates for Rate Schedule CDS of this FERC Gas Tariff and are hereby incorporated herein, or, in the event the capacity is subject to the Customized Reservation Pattern™ program pursuant to Section 3.7 of this rate schedule are those CRP™ reservation charge rates determined pursuant to said Section 3.7 applicable to Customer. The rates in this rate schedule are subject to adjustment pursuant to Section 15 of Pipeline's General Terms and Conditions. Unless Pipeline and Customer agree in writing upon a rate for service provided hereunder, the rate applicable to a Customer for service hereunder shall be the applicable maximum rate(s). In the event a rate less than the applicable maximum rate(s) and not less than the applicable minimum rate(s) is agreed upon, such rate shall be applicable for the period agreed upon by Customer and Pipeline.

3.2 For Customers executing a service agreement for transportation which is not solely a backhaul transportation arrangement, Customer shall pay Pipeline each Month the sum of the following amounts:

(A) Reservation Charge:

The Reservation Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by the Applicable Billing Determinants; and

(B) Monthly Usage Charge consisting of the sum of the following daily charges:

(1) The Usage-1 Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement,

which is not in excess of 110% of scheduled service levels for such Day.

(2) The Usage-2 Charge Rate, as set forth on the Statement of Rates for Rate Schedule CDS, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day and less than 110% of Customer's maximum daily contractual entitlement for such Day.

(3) The Usage-3 Charge Rate, as set forth on the Statement of Rates for Rate Schedule CDS, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of Customer's maximum daily contractual entitlement for such Day.

Usage Charge Rates will be assessed upon the Zones of initial receipt and ultimate delivery of each Dth on Pipeline's system.

3.3 For Customers executing a service agreement for transportation which is solely a backhaul transportation arrangement, Customer shall pay Pipeline each Month the sum of the following amounts:

(A) Reservation Charge:

The Reservation Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by the Applicable Billing Determinants; and

(B) Monthly Usage Charge consisting of the sum of the following daily charges:

(1) The Usage-1 Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is not in excess of 110% of scheduled service levels for such Day.

(2) The Usage-2 Charge Rate, as set forth on the Statement of Rates for Rate Schedule CDS, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day and less than 110% of Customer's maximum daily contractual entitlement for such Day.

(3) The Usage-3 Charge Rate, as set forth on the Statement of Rates for Rate Schedule CDS, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of Customer's maximum daily contractual entitlement for such Day.

Usage Charge Rates will be assessed upon the Zones of initial receipt and ultimate delivery of each Dth on Pipeline's system.

3.4 In addition to all other charges hereunder, Customers shall pay Pipeline the applicable Incremental Facility Charge, as set forth on the Statement of Rates for Rate Schedule CDS, per Month per Dth of additional MDQ for which each Customer contracted under Pipeline's various incremental facility expansions. The additional Dth applicable for each Customer under each applicable incremental facility expansion are set forth on the Statement of Rates for Rate Schedule CDS.

3.5 The Reservation Charge Adjustment (as set forth on the Statement of Rates for Rate Schedule CDS of Pipeline's FERC Gas Tariff, Volume No. 1, as such Statement of Rates may be revised, superseded or supplemented from time to time) shall be applied to the Reservation Charge hereunder pursuant to the provisions of Section 31 of the General Terms and Conditions.

3.6 [RESERVED FOR FUTURE USE]

3.7 Customized Reservation Pattern™ (CRP™)

(A) The CRP™ election provides an alternative to uniform monthly billing of the Reservation Charge as contemplated by the rates set forth on the Statement of Rates for Rate Schedule CDS. Billing and payment of CRP™ Reservation Charges shall be in accordance with the reservation pattern elected by Customer on the LINK® System. Rates reflecting such Customer election shall be posted on the LINK® System. The total Reservation Charges resulting from CRP™ will not exceed the total Reservation Charges Customer would pay without the CRP™ election for the same 12 Month period. An adjustment, if necessary, will be included on the invoice for the last Month of the CRP™ period (November 1 - October 31) to ensure Reservation Charges due Pipeline under Pipeline's uniform effective rates equal the Reservation Charges received by Pipeline under the CRP™ rates. All rights and obligations of Section 10 of the General Terms and Conditions shall apply to the Reservation Charge for each billing Month as elected by Customer. In the event any CRP™ invoice shall be based on rates in effect subject to refund and refunds shall be required, refunds shall be calculated as if the CRP™ election had not been made.

(B) Customer who is the primary capacity holder paying maximum reservation rates and has contracted for capacity for the full CRP™ period may elect flexible maximum reservation rates under CRP™ that are derived from the maximum uniform rates for service on the effective Statement of Rates for Rate Schedule CDS. Customer shall submit to Pipeline by September 1 on an annual basis via the LINK® System its election to participate in the CRP™ program. Customers electing CRP™ will be allowed to spread Reservation Charges excluding cost components subject to adjustment pursuant to trackers due for the period April through October over the preceding November through March period. Customers with seasonal contracts, i.e., different MDQs for winter and summer, will only be allowed to elect their lower MDQ for participating in the CRP™ program. Annual CRP™ rate and volume elections by contract will be due by October 1 of each year to be effective November 1. Rate elections may vary by Month and path; however, annual volume elections will be pro-rata across all paths that apply to a Customer's contract.

(C) The usage rates set forth on the Statement of Rates for Rate Schedule CDS shall not be adjusted and shall be the rates utilized for determining the Monthly Usage Charge.

4. MINIMUM COMMODITY BILL

None.

5. SCHEDULING OF RECEIPTS AND DELIVERIES

If Customer desires transportation of Natural Gas on any Day under this Rate Schedule, Customer shall give notice to Pipeline in accordance with Section 4 of Pipeline's General Terms and Conditions.

6. DETERMINATION OF DELIVERIES

If Pipeline delivers Natural Gas to Customer under this Rate Schedule at the same Point(s) of Delivery on the same Day that Pipeline delivers Natural Gas to Customer under any other rate schedule, then the quantity of Natural Gas delivered under this Rate Schedule shall be determined in accordance with the provisions of Section 18 of Pipeline's General Terms and Conditions of this FERC Gas Tariff.

7. POINTS OF RECEIPT

See Section 14 of Pipeline's General Terms and Conditions.

8. IMPAIRMENT OF RECEIPTS AND DELIVERIES

Where Pipeline on any Day is unable to receive and/or deliver the total requests of all of its Customers due to force majeure on Pipeline's system, then Pipeline shall limit receipts and/or deliveries of Gas hereunder in accordance with Section 4 of Pipeline's General Terms and Conditions.

9. IMBALANCES

Except to the extent Point of Receipt and Point of Delivery imbalances are reconciled and resolved pursuant to Rate Schedule(s) TABS-1 and/or MBA, as applicable, imbalances shall be reconciled and resolved pursuant to Section 8 of Pipeline's General Terms and Conditions.

10. GOVERNMENTAL AUTHORIZATIONS

Transportation service under executed CDS Service Agreements shall be implemented pursuant to any applicable self-implementing authorizations or program of the FERC for which Pipeline has filed or in which Pipeline has agreed to participate.

11. [RESERVED FOR FUTURE USE]

12. GENERAL TERMS AND CONDITIONS

All of the General Terms and Conditions of Pipeline's FERC Gas Tariff of which this Rate Schedule is a part are applicable to this Rate Schedule and are made a part hereof to the extent that such terms and conditions are not contradicted by any provision herein.

13. SEGMENTED TRANSPORTATION RIGHTS

See Section 30 of the General Terms and Conditions.

RATE SCHEDULE FT-1

FIRM TRANSPORTATION SERVICE

1. AVAILABILITY

This Open-access Rate Schedule is available to any party (hereinafter called Customer) which has requested firm transportation service pursuant to Section 3 of Texas Eastern Transmission, LP's (hereinafter called Pipeline) General Terms and Conditions and, after review and acceptance of such request by Pipeline, has entered into a service agreement with Pipeline for service under Rate Schedule FT-1. Such service agreement shall be in the form contained in Pipeline's FERC Gas Tariff of which this Rate Schedule FT-1 is a part. Under this Rate Schedule FT-1, a single FT-1 service agreement is available to multiple parties who meet the qualifications set forth in the Multiple Shipper Option Agreement ("MSOA") and such MSOA has been executed by the Customers, Pipeline and other relevant parties. Service under this Rate Schedule is not available from capacity subject to Rate Schedules MLS-1, MLS-2, VKFT and VKIT. With the exception of TEMAX and TIME III customers, firm service from capacity on the Marietta Extension is available only to those Customers that execute a separate service agreement with Pipeline for service on the Marietta Extension under Rate Schedule FT-1. With the exception of NJ-NY Project Customers, firm service from capacity on the Manhattan Extension is available only to those Customers that execute a separate service agreement with Pipeline for service on the Manhattan Extension under Rate Schedule FT-1. With the exception of OPEN Project Customers, firm service from capacity on the Ohio Extension is available only to those Customers that execute a separate service agreement with Pipeline for service on the Ohio Extension under Rate Schedule FT-1. With the exception of STEP Project Customers, firm service from capacity on the Petronila Extension is available only to those Customers that execute a separate service agreement with Pipeline for service on the Petronila Extension under Rate Schedule FT-1. With the exception of Stratton Ridge Expansion Project Customers, firm service from capacity on the Brazoria Extension is available only to those Customers that execute a separate service agreement with Pipeline for service on the Brazoria Extension under Rate Schedule FT-1. Firm service from capacity on the Middlesex Extension is available only to those Customers that execute a separate service agreement with Pipeline for service on the Middlesex Extension under Rate Schedule FT-1.

2. APPLICABILITY AND CHARACTER OF SERVICE

2.1 Transportation service hereunder will be firm, except as provided herein and in Pipeline's General Terms and Conditions. Service under this Rate Schedule does not constitute No-notice Service as that term is used in Order No. 636, unless Pipeline and Customer have made the necessary arrangements as contemplated by Section 11 below.

2.2 (A) Pipeline shall receive for Customer's account, at those points on Pipeline's system available to Customer pursuant to Section 14 of the General Terms and Conditions (hereinafter referred to as "Point(s) of Receipt"), for transportation hereunder daily Quantities of Gas up to Customer's Maximum Daily Quantity (MDQ), plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account at those points on Pipeline's system as specified in the executed service agreement or those points available to Customer pursuant to Section 14 of the General Terms and Conditions (hereinafter referred to as "Point(s) of Delivery"), such daily quantities tendered up to such Customer's MDQ.

(B) Pipeline will charge Customer with a service agreement under this Rate Schedule FT-1 that has a Primary Point of Delivery at the head of a delivery lateral or mainline extension ("Mainline Service Agreement") and a firm service agreement for service limited solely to such delivery lateral or mainline extension that has a Primary Point of Receipt at the interconnection between Pipeline's mainline system and such delivery lateral or mainline extension ("Lateral Service Agreement") a single combined Applicable Shrinkage, which will be applied to the Mainline Service Agreement, (where such combined Applicable Shrinkage is the aggregate of the Applicable Shrinkage for the Mainline Service Agreement and the Applicable Shrinkage for the Lateral Service Agreement) when Customer submits nominations on both agreements for the same Gas Day, subject to the following conditions:

(1) Prior to the nomination deadline for the Timely Nomination Cycle set forth in Section 4.1(B)(2) of Pipeline's General Terms and Conditions for the desired effective date, Customer submits a valid request via the LINK® System to establish a relationship between a Mainline Service Agreement and a Lateral Service Agreement that will allow Customer to be charged a single combined Applicable Shrinkage under the circumstances described in this Section 2.2; provided, such relationship shall become effective at the start of the next Gas Day, or any later Gas Day specified by Customer;

(2) The Transportation Path on the two service agreements contemplates the movement of gas from Pipeline's mainline system onto the delivery lateral or mainline extension;

(3) The nominations on the two service agreements reflect the movement of gas from Pipeline's mainline system onto the delivery lateral or mainline extension;

(4) The nominated delivery point on the Mainline Service Agreement is at the Primary Point of Delivery at the head of a delivery lateral or mainline extension;

(5) The nominated receipt point on the Lateral Service Agreement is at the Primary Point of Receipt at the interconnection between Pipeline's mainline system and such delivery lateral or mainline extension;

(6) The nominated quantity at the Point of Receipt under the Mainline Service Agreement does not exceed the Applicable Shrinkage for both service agreements on the transportation transaction plus the lesser of the MDDO under the Mainline Service Agreement or the MDRO under the Lateral Service Agreement;

(7) The nominations are for the same delivered quantity; and

(8) The combined Applicable Shrinkage applies to all capacity release transactions related to such service agreements, provided that the Replacement Customer's nomination and firm capacity satisfy the foregoing requirements, subject to or restricted by the rights of the Releasing Customer's service agreement.

(C) Customer's MDQ shall be a uniform quantity throughout the contract year, except that Pipeline may, on a not unduly discriminatory basis, agree to certain differing levels in Customer's MDQ during specified periods during the year. Customer's MDQ and any differing levels in MDQ, as well as the period of such differing MDQ levels, shall be specified in the executed service agreement.

2.3 Upon request by Customer, Pipeline will estimate the facilities and costs required to provide a firm Maximum Hourly Quantity (MHQ) at any Point of Delivery under Customer's service agreement. Subject to the agreement between Pipeline and Customer on an appropriate rate or cost reimbursement for such MHQ facilities, the receipt of all necessary approvals for construction of such facilities on terms and conditions acceptable to Pipeline and Customer, and the placement of such facilities into service, as well as Pipeline's finding that such enhanced service for Customer will not have an adverse impact on existing firm Customers, such MHQ shall be specified in Customer's executed service agreement. Such MHQ will not limit Customer's right to hourly flow flexibility that otherwise would be available to customers under Rate Schedule FT-1.

2.4 Pipeline shall not be obligated to add any facilities or expand the capacity of its pipeline system in any manner in order to provide transportation service to Customer pursuant to this Rate Schedule. Pipeline may, at its option, add

facilities or expand capacity to provide such transportation service, pursuant to Section 11 of Pipeline's General Terms and Conditions.

3. RATE

3.1 The applicable rates for service hereunder in each Zone are those uniform rates set forth in the currently effective Statement of Rates for Rate Schedule FT-1 of this FERC Gas Tariff and are hereby incorporated herein, or, in the event the capacity is subject to the Customized Reservation Pattern™ program pursuant to Section 3.7 of this Rate Schedule, are those CRP™ reservation charge rates determined pursuant to said Section 3.7 applicable to Customer. The rates in this rate schedule are subject to adjustment pursuant to Section 15 of Pipeline's General Terms and Conditions. Unless Pipeline and Customer agree in writing upon a rate for service provided hereunder, the rate applicable to a Customer for service hereunder shall be the applicable maximum rate(s).

In the event a rate less than the applicable maximum rate(s) and not less than the applicable minimum rate(s) is agreed upon, such rate shall be applicable for the period agreed upon by Customer and Pipeline.

3.2 (A) For Customers executing a service agreement for transportation which is not solely a backhaul transportation arrangement and which is not available from capacity pursuant to incremental facility expansions implemented on or after June 1, 1993, Customer shall pay Pipeline each Month the sum of the amounts set forth in this Section 3.2(A):

(1) Reservation Charge:

The Reservation Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by the Applicable Billing Determinants; and

(2) Monthly Usage Charge consisting of the sum of the following daily charges:

(a) The Usage-1 Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is not in excess of 110% of scheduled service levels for such Day.

(b) The Usage-2 Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day. Or,

(B) For Customers executing a service agreement for transportation which is available from capacity pursuant to incremental facility expansions implemented on or after June 1, 1993, Customer shall pay Pipeline each Month the sum of the amounts set forth in this Section 3.2(B), unless the service provided to Customer utilizes capacity on the incremental facility expansions described in Section 3.2(C) or Section 3.2(D) herein:

(1) Reservation Charge:

The Reservation Charge Rate for the applicable incremental service, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by each Dth of additional MDQ for which each Customer contracted under Pipeline's various incremental facility expansions. The additional Dth applicable for each Customer under each applicable incremental facility expansion are set forth on the Statement of Rates for Rate Schedule FT-1. And,

(2) Monthly Usage Charge consisting of the sum of the following daily charges:

(a) The Usage-1 Charge Rate for the applicable incremental service, as set forth in the Statement of Rates for Rate Schedule FT-1, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is not in excess of 110% of scheduled service levels for such Day.

(b) The Usage-2 Charge Rate for the applicable incremental service, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day.

(C) For Customers executing a service agreement for transportation service on the Marietta Extension, with the exception of TEMAX and TIME III Customers, Customer shall pay Pipeline each Month the sum of the amounts set forth in this Section 3.2(C):

(1) Reservation Charge:

The Reservation Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by each Dth of MDQ for

which each Customer contracted under the Marietta Extension Service. And,

(2) Monthly Usage Charge consisting of the sum of the following daily charges:

(a) The Usage-2 Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day.

(D) For Customers executing a service agreement for transportation service on the Manhattan Extension, with the exception of NJ-NY Project Customers, Customer shall pay Pipeline each Month the sum of the amounts set forth in this Section 3.2(D):

(1) Reservation Charge:

The Reservation Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by each Dth of MDQ for which each Customer contracted for service on the Manhattan Extension. And,

(2) Monthly Usage Charge consisting of the sum of the following daily charges:

(a) The Usage-2 Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day.

(E) For Customers executing a service agreement for transportation service on the Ohio Extension, with the exception of OPEN Project Customers, Customer shall pay Pipeline each Month the sum of the amounts set forth in this Section 3.2(E):

(1) Reservation Charge:

The Reservation Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by each Dth of MDQ for which each Customer contracted for service on the Ohio Extension. And,

(2) Monthly Usage Charge consisting of the sum of the following daily charges:

(a) The Usage-2 Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day.

(F) For Customers executing a service agreement for transportation service on the Petronila Extension, with the exception of STEP Project Customers, Customer shall pay Pipeline each Month the sum of the amounts set forth in this Section 3.2(F):

(1) Reservation Charge:

The Reservation Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by each Dth of MDQ for which each Customer contracted for service on the Petronila Extension. And,

(2) Monthly Usage Charge consisting of the sum of the following daily charges:

The Usage-2 Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day.

(G) For Customers executing a service agreement for transportation service on the Brazoria Extension, with the exception of Stratton Ridge Expansion Project Customers, Customer shall pay Pipeline each Month the sum of the amounts set forth in this Section 3.2(G):

(1) Reservation Charge:

The Reservation Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by each Dth of MDQ for which each Customer contracted for service on the Brazoria Extension. And,

(2) Monthly Usage Charge consisting of the sum of the following daily charges:

(a) The Usage-2 Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day.

(H) For Customers executing a service agreement for transportation service on the Middlesex Extension, Customer shall pay Pipeline each Month the sum of the amounts set forth in this Section 3.2(H):

(1) Reservation Charge:

The Reservation Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by each Dth of MDQ for which each Customer contracted for service on the Middlesex Extension. And,

(2) Monthly Usage Charge consisting of the sum of the following daily charges:

(a) The Usage-2 Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day.

(I) Usage Charge Rates will be assessed upon the Zones of initial receipt and ultimate delivery of each Dth on Pipeline's system.

3.3 (A) For Customers executing a service agreement for transportation which is solely a backhaul transportation arrangement, Customer shall pay Pipeline each Month the sum of the amounts set forth in this Section 3.3(A):

(1) Reservation Charge:

The Reservation Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by the Applicable Billing Determinants; and

(2) Monthly Usage Charge consisting of the sum of the following daily charges:

(a) The Usage-1 Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the

executed service agreement, which is not in excess of 110% of scheduled service levels for such Day.

(b) The Usage-2 Charge Rate, as set forth on the Statement of Rates for Rate Schedule FT-1, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day.

(B) Usage Charge Rates will be assessed upon the Zones of initial receipt and ultimate delivery of each Dth on Pipeline's system.

3.4 In addition to all other charges hereunder, Customers shall pay Pipeline the applicable Incremental Facility Charge, as set forth on the Statement of Rates for Rate Schedule FT-1, per Month per Dth of additional MDQ for which each Customer contracted under Pipeline's various incremental facility expansions. The additional Dth applicable for each Customer under each applicable incremental facility expansion are set forth on the Statement of Rates for Rate Schedule FT-1.

3.5 The Reservation Charge Adjustment (as set forth on the Statement of Rates for Rate Schedule FT-1 of Pipeline's FERC Gas Tariff, Volume No. 1, as such Statement of Rates may be revised, superseded or supplemented from time to time) shall be applied to the Reservation Charge hereunder pursuant to the provisions of Section 31 of the General Terms and Conditions.

3.6 [RESERVED FOR FUTURE USE]

3.7 Customized Reservation Pattern™ (CRP™)

(A) The CRP™ election provides an alternative to uniform monthly billing of the Reservation Charge as contemplated by the rates set forth on the Statement of Rates for Rate Schedule FT-1. Billing and payment of CRP™ Reservation Charges shall be in accordance with the reservation pattern elected by Customer on the LINK® System. Rates reflecting such Customer election shall be posted on the LINK® System. The total Reservation Charges resulting from CRP™ will not exceed the total Reservation Charges Customer would pay without the CRP™ election for the same 12 Month period. An adjustment, if necessary, will be included on the invoice for the last Month of the CRP™ period (November 1 - October 31) to ensure Reservation Charges due Pipeline under Pipeline's uniform effective rates equal the Reservation Charges received by Pipeline under the CRP™ rates. All rights and obligations of Section 10 of the General Terms and Conditions shall apply to the Reservation Charge for each billing Month as elected by Customer. In the event any CRP™

invoice shall be based on rates in effect subject to refund and refunds shall be required, refunds shall be calculated as if the CRP™ election had not been made.

(B) Customer who is the primary capacity holder paying maximum reservation rates and has contracted for capacity for the full CRP™ period may elect flexible maximum reservation rates under CRP™ that are derived from the maximum uniform rates for service on the effective Statement of Rates for Rate Schedule FT-1. Customer shall submit to Pipeline by September 1 on an annual basis via the LINK® System its election to participate in the CRP™ program. Customers electing CRP™ will be allowed to spread Reservation Charges excluding cost components subject to adjustment pursuant to trackers due for the period April through October over the preceding November through March period. Customers with seasonal contracts, i.e., different MDQs for winter and summer, will only be allowed to elect their lower MDQ for participating in the CRP™ program. Annual CRP™ rate and volume elections by contract will be due by October 1 of each year to be effective November 1. Rate elections may vary by Month and path; however, annual volume elections will be pro-rata across all paths that apply to a Customer's contract.

(C) The usage rates set forth on the Statement of Rates for Rate Schedule FT-1 shall not be adjusted and shall be the rates utilized for determining the Monthly Usage Charge.

4. MINIMUM COMMODITY BILL

None.

5. SCHEDULING OF RECEIPTS AND DELIVERIES

If Customer desires transportation of Natural Gas on any Day under this Rate Schedule, Customer shall give notice to Pipeline in accordance with Section 4 of Pipeline's General Terms and Conditions.

6. DETERMINATION OF DELIVERIES

6.1 If Pipeline delivers Natural Gas to Customer under this Rate Schedule at the same Point(s) of Delivery on the same Day that Pipeline delivers Natural Gas to Customer under any other rate schedule, then the quantity of Natural Gas delivered under this Rate Schedule shall be determined in accordance with the provisions of Section 18 of Pipeline's General Terms and Conditions of this FERC Gas Tariff.

6.2 Hourly Flow Quantities.

With respect to Points of Delivery subject to an MHQ, Customer shall be entitled to accept delivery of Gas on a firm basis from Pipeline pursuant to this Rate Schedule at such Point of Delivery at a flow rate per hour that is different than $1/24^{th}$ of the scheduled daily quantity, up to the applicable quantity and time period duration limits as specified in Customer's executed service agreement. In no event shall Customer be entitled to a delivery of a quantity of gas on any Day in excess of Customer's MDQ.

7. POINTS OF RECEIPT

See Section 14 of Pipeline's General Terms and Conditions.

8. IMPAIRMENT OF RECEIPTS AND DELIVERIES

Where Pipeline, on any Day is unable to receive and/or deliver the total requests of all of its Customers due to force majeure on Pipeline's system, then Pipeline shall limit receipts and/or deliveries of Gas hereunder in accordance with Section 4 of Pipeline's General Terms and Conditions.

9. IMBALANCES

Except to the extent Point of Receipt and Point of Delivery imbalances are reconciled and resolved pursuant to Rate Schedule(s) TABS-1 and/or MBA, as applicable, imbalances shall be reconciled and resolved pursuant to Section 8 of Pipeline's General Terms and Conditions.

10. GOVERNMENTAL AUTHORIZATIONS

Transportation service under executed FT-1 Service Agreements shall be implemented pursuant to any applicable self-implementing authorizations or program of the FERC for which Pipeline has filed or in which Pipeline has agreed to participate.

11. NO-NOTICE SERVICE AVAILABILITY

11.1 No-notice Service Supported by Rate Schedule CDS, SCT or SS-1

(A) No-notice Service is available to any Customer under Rate Schedule FT-1 for delivery to a primary firm point of delivery designated in Customer's Rate Schedule FT-1 service agreement where the primary firm point(s) of delivery specified in the Rate Schedule CDS, SCT or SS-1 service agreement(s) ("No-notice Service Agreement") align with the primary firm point(s) of receipt specified in the executed Rate Schedule FT-1 service agreement ("Alignment Point(s)") and to the extent of the lesser of

Customer's MDDO rights under the executed No-notice Service Agreement(s) and the MDRO rights under the FT-1 service agreement at these Alignment Point(s).

(B) Customer shall be responsible for identifying, via the LINK® System, the relationship between Customer's FT-1 service agreement and the No-notice Service Agreement that will be used to support the No-notice Service on Customer's FT-1 service agreement. Such relationship shall be established for a period of no less than one Day and must be established prior to the nomination deadline for the Timely Nomination Cycle set forth in Section 4.1(B)(2) of Pipeline's General Terms and Conditions.

(C) In the event that Customer desires to utilize its No-notice Service under Rate Schedule FT-1, Customer shall notify Pipeline of such desire by submitting a nomination pursuant to Section 4 of Pipeline's General Terms and Conditions. In order for such nomination to be treated as a no-notice nomination, the nomination on Customer's FT-1 service agreement must qualify as a primary firm nomination as defined in, and scheduled in accordance with, Section 4.1(I)(1) of the General Terms and Conditions; in addition, Customer must have submitted, or caused to be submitted, a nomination on a related No-notice Service Agreement, as identified pursuant to Section 11.1(B) above, for a primary firm delivery at the Alignment Point.

(D) No-notice Service under Rate Schedule FT-1 is available to Customer on any Day only to the extent that (i) such Customer has sufficient unutilized contractual entitlements at the primary point of delivery for such Day on the related No-notice Service Agreement, and (ii) Customer's nomination on the FT-1 service agreement qualifies as a primary firm nomination as defined in, and scheduled in accordance with, Section 4.1(I)(1) of the General Terms and Conditions. In addition, No-notice Service is not available to the extent that the primary firm point(s) of delivery specified in the executed No-notice Service Agreement and primary firm point(s) of receipt specified in the executed service agreement under Rate Schedule FT-1 no longer meet the criteria set forth in Section 11.1(A) above following capacity release of, segmentation by capacity release of, or primary point amendments to either the No-notice Service Agreement or the Rate Schedule FT-1 service agreement.

(E) Variations between scheduled delivered quantities and actual delivered quantities to Customer under the FT-1 service agreement shall be subject to the assessment of any applicable charges and penalties. Imbalances created by utilization of No-notice Service Agreements, if such imbalances are created to support No-notice Service on an FT-1 service

agreement, shall be resolved in accordance with the balancing provisions applicable to the No-notice Service Agreement.

12. CONVERSIONS TO RATE SCHEDULE FT-1

12.1 [RESERVED FOR FUTURE USE]

12.2 Service agreements under Rate Schedule LLFT and those individual certificated rate schedule agreements previously entered into by Customers with Pipeline for firm service under Rate Schedules FTS, FTS-2, FTS-4, FTS-5, SS-2, excluding the storage component, (i.e. - Rate Schedule FTS-7) and SS-3, excluding the storage component, (i.e. - Rate Schedule FTS-8), X-127, X-129, X-130, X-135 and X-137 may be converted at any time to Rate Schedule FT-1 Service Agreements, at the Customer's request, subject to (1) Pipeline's receipt of any necessary authorization as required by the Commission, and (2) such Customer's agreement to continue to pay Pipeline an incremental surcharge for such service in order for Pipeline to fully recover its approved cost of service. As of the date Pipeline receives any necessary authorization as required by the Commission, the rights and obligations of the parties to the individual certificated rate schedule agreements shall be determined pursuant to this Rate Schedule FT-1.

13. [RESERVED FOR FUTURE USE]

14. GENERAL TERMS AND CONDITIONS

All of the General Terms and Conditions of Pipeline's FERC Gas Tariff of which this Rate Schedule is a part are applicable to this Rate Schedule and are made a part hereof to the extent that such terms and conditions are not contradicted by any provision herein.

15. SEGMENTED TRANSPORTATION RIGHTS

See Section 30 of the General Terms and Conditions.

RATE SCHEDULE SS-1

STORAGE SERVICE

1. AVAILABILITY

This Open-access Rate Schedule is available to any party (hereinafter called Customer) which has requested storage service hereunder pursuant to Section 3 of Texas Eastern Transmission, LP's (hereinafter called Pipeline) General Terms and Conditions and after review and acceptance of such request by Pipeline, has entered into a service agreement with Pipeline for service under Rate Schedule SS-1. Such service agreements shall be in the form contained in Pipeline's FERC Gas Tariff of which this Rate Schedule SS-1 is a part. Service under this Rate Schedule is not available from capacity on the Marietta Extension, the Manhattan Extension, the Ohio Extension, the Petronila Extension, the Brazoria Extension, or the Middlesex Extension.

2. APPLICABILITY AND CHARACTER OF SERVICE

2.1 This Rate Schedule shall apply to all firm storage service rendered hereunder pursuant to an executed service agreement providing for a Maximum Storage Quantity (MSQ), Maximum Daily Injection Quantity (MDIQ) and a Maximum Daily Withdrawal Quantity (MDWQ). Service under this Rate Schedule constitutes one of the No-notice Service options as that term is used in Order No. 636 available from Pipeline.

2.2 Pipeline shall receive for Customer's account Quantities of Gas and inject into storage in accordance with Section 5 of this Rate Schedule for Customer's account such Quantities of Gas. Pipeline shall withdraw from storage for Customer, at Customer's request, in accordance with Section 6 of this Rate Schedule, Quantities of Gas from Customer's Storage Inventory, plus Applicable Shrinkage, and deliver for Customer's account such quantities. Such service shall be firm except as provided herein and in Pipeline's General Terms and Conditions of this FERC Gas Tariff of which this Rate Schedule is a part and shall be available to Customer each Day of the Contract Year, which consists of an annual period commencing May 1 and ending the following April 30.

2.3 Provided the receipt of Gas and the injection of such Gas into storage from Customer can be accomplished by Pipeline without detriment to Pipeline's facilities and/or Pipeline's ability to meet its firm obligations to other Customers, Pipeline upon request of Customer shall inject on an interruptible basis Quantities of Gas in excess of the limitations set forth in Section 5.3. Such excess quantities shall be deemed to be Excess Injection Gas.

2.4 Provided such withdrawal from storage and delivery of such Gas to Customer can be accomplished by Pipeline without detriment to Pipeline's facilities and/or

Pipeline's ability to meet its firm obligations to other Customers, Pipeline upon request of Customer shall schedule and withdraw on an interruptible basis Gas in excess of the limitations set forth in Section 6.3. Such excess quantities shall be deemed to be Excess Withdrawal Gas.

2.5 Service under this Rate Schedule is provided as a result of bundling transportation and storage service. Such storage service is otherwise available under Rate Schedule FSS-1 and such transportation service is otherwise available under Rate Schedule FT-1. A Customer executing a service agreement under this Rate Schedule SS-1 has the right to make an election to release all or a portion of its firm service under this Rate Schedule as firm service under Rate Schedule SS-1, or as firm storage service under Rate Schedule FSS-1 and firm transportation service under Rate Schedule FT-1 pursuant to Section 3.14 of the General Terms and Conditions.

3. RATE

3.1 The applicable rates for service hereunder in each Zone are set forth in the currently effective Statement of Rates for Rate Schedule SS-1 of this FERC Gas Tariff and are hereby incorporated herein. The rates in this Rate Schedule are subject to adjustment pursuant to Section 15 of Pipeline's General Terms and Conditions. Unless Pipeline and Customer agree in writing upon a rate for service provided hereunder, the rate applicable to a Customer for service hereunder shall be the applicable maximum rate(s) as set forth on the effective Statement of Rates for Rate Schedule SS-1. In the event a rate less than the applicable maximum rate(s) and not less than the applicable minimum rate(s) is agreed upon, such rate shall be applicable for the period agreed upon by Customer and Pipeline.

3.2 For all service rendered hereunder to Customer each Month under this Rate Schedule, Customer shall pay Pipeline each Month the sum of the following amounts:

(A) Reservation Charge:

The Reservation Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by the MDWQ specified in the executed service agreement;

(B) Space Charge:

The Space Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by one-twelfth (1/12) of the MSQ specified in the executed service agreement;

(C) Injection Charge:

The Injection Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by the Quantity of Gas scheduled and injected for the Month, other than Excess Injection Gas pursuant to the executed service agreement;

(D) Withdrawal Charge:

The Withdrawal Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by the Quantity of Gas scheduled and withdrawn for the Month, other than Excess Withdrawal Gas, pursuant to the executed service agreement;

(E) Excess Injection Charge:

The Excess Injection Charge Rate, as determined by Section 3.1 herein, multiplied by the quantities of Excess Injection Gas received for the Month pursuant to the executed service agreement;

(F) Excess Withdrawal Charge:

The Excess Withdrawal Charge Rate, as determined by Section 3.1 herein, multiplied by the quantities of Excess Withdrawal Gas delivered for the Month pursuant to the executed service agreement;

3.3 In addition to all other charges hereunder, the Customers specified on the Statement of Rates for Rate Schedule SS-1 shall pay Pipeline the applicable Incremental Facility Charge, as set forth on the Statement of Rates for Rate Schedule SS-1, per Month per Dth of additional MSQ, MDWQ and/or MDIQ, as applicable, for which each Customer contracted under Pipeline's various incremental facility expansions. The additional Dth applicable for each Customer under each applicable incremental facility expansion are set forth on the Statement of Rates for Rate Schedule SS-1.

3.4 The Reservation Charge Adjustment (as set forth on the Statement of Rates for Rate Schedule SS-1 of Pipeline’s FERC Gas Tariff, Volume No. 1, as such Statement of Rates may be revised, superseded or supplemented from time to time) shall be applied to the Reservation Charge hereunder pursuant to the provisions of Section 31 of the General Terms and Conditions.

3.5 [RESERVED FOR FUTURE USE]

3.6 Storage Cost Credit Mechanism. A cost increment to reflect the use of storage facilities is incorporated into the Rate Schedule CDS, FT-1, and SCT rates. A

portion of the revenue attributable to this storage cost increment will be credited to Rate Schedule SS, SS-1, FSS-1 and X-28 Customers. The credit will compensate for the temporary use of storage service to support the No-notice Service and "instantaneous" transportation services as directed in Order No. 636, and such credit will be eliminated or reduced subject to Commission review and certification of additional storage capacity. Pipeline will credit to Rate Schedule SS, SS-1, FSS-1 and X-28 Customers an amount equal to the storage costs recovered (less any Rate Schedule CDS pre-injection credits and less $351,207 per Month associated with the Oakford Storage Expansion Project approved in Docket No. CP97-774) through the Rate Schedules CDS, SCT, SS-1 and FT-1 rates. Storage costs recovered in a particular Month will be subject to credit to Rate Schedule SS, SS-1, FSS-1 and X-28 Customers in the same Month. Such amounts to be credited will be allocated to Rate Schedule SS, SS-1, FSS-1 and X-28 Customers based upon their pro rata share of respective MDWQ's under Rate Schedules SS, SS-1, FSS-1 and X-28 and will be credited to Reservation Charges for the Month.

4. MINIMUM COMMODITY BILL

None.

5. INJECTION PROVISIONS

5.1 General Procedure. If Customer desires Pipeline to store Gas for Customer's account under this Rate Schedule, it shall give notice to Pipeline specifying the Quantity of Gas, not in excess of the quantity determined pursuant to Section 5.3, which Customer desires to be injected into storage under this Rate Schedule on such Day. Pipeline shall thereupon inject the Quantity of Gas so nominated subject to the limitations set forth herein. Except as provided in Section 5.2 and 5.3 herein, the Natural Gas received by Pipeline for Customer's account for storage injection pursuant to this Rate Schedule shall be those quantities scheduled for delivery pursuant to Service Agreements for transportation service between Pipeline and Customer under transactions which specify as a Point of Delivery the "SS-1 Storage Point". For purposes of billing of Usage Charges under transportation Rate Schedules for deliveries of Gas to the "SS-1 Storage Point", such deliveries for injection into storage scheduled directly to the "SS-1 Storage Point" shall be deemed to have been delivered 60% in Market Zone 2 and 40% in Market Zone 3. In addition, at Customer's request any positive or negative variance between scheduled deliveries and actual deliveries on any Day at Customer's Points of Delivery under Rate Schedules CDS, FT-1, SCT, or IT-1 shall be deemed for billing purposes delivered at the Point of Delivery and shall be injected into or withdrawn from storage for Customer's account. In addition to accepting Gas for storage injection at the SS-1 Storage Point, Pipeline will accept Gas tendered at points of interconnection between Pipeline and third party facilities at Oakford and Leidy Storage Fields provided that such receipt does not

result in Customer tendering aggregate quantities for storage in excess of the Customer MDIQ.

5.2 Pipeline shall permit transfers of title of Gas in Storage Inventory between Customers, provided both Customers have executed a service agreement under Rate Schedules SS-1, FSS-1 and/or ISS-1 and that such transfer does not permit either Customer to exceed its MSQ specified in such service agreement. Such transferred quantities shall not be included in any Customer's Storage Inventory for purposes of determining Customer's daily withdrawal rights pursuant to Section 6 until twenty-four (24) hours following the date of transfer or as provided in Section 6.3 of this Rate Schedule. In lieu of transferring its Storage Inventory to another storage service Customer, Customer may transfer all or a portion of its Storage Inventory to another of its Open-Access storage service agreements, provided that no portion of the term of the agreements involved in the transfer overlap. A Customer that desires to transfer Storage Inventory to another Customer or to another of its Open-Access storage service agreements must submit the required information, which shall include, at a minimum, the identification of the storage service agreements involved in the transfer, the quantity to be transferred, and the effective date of the transfer, via the LINK® System. If a proposed transfer involves a storage service agreement that has terminated, the required information must be submitted within three (3) Business Days after the end of the term of the applicable agreement. The proposed transfer must be confirmed via the LINK® System by the Customer to whom the Storage Inventory is to be transferred before the transfer is processed by Pipeline.

5.3 In addition to accepting Gas for storage injection at the SS-1 Storage Point, Pipeline will accept Gas tendered at points of interconnection between Pipeline and third party facilities at Oakford and Leidy Storage Fields provided that such receipt does not result in Customer tendering aggregate quantities for storage in excess of the Customer MDIQ.

5.4 Notice Required. The notice given by Customer to Pipeline for injections on any Day shall be in accordance with Section 4 of Pipeline's General Terms and Conditions of this FERC Gas Tariff.

5.5 Injection Quantities. The maximum injection Quantity of Gas which Pipeline is obligated on any Day to inject into storage under this Rate Schedule shall be the MDIQ.

5.6 Limitation Upon Total Injections. Pipeline shall be obligated to accept Gas for storage for Customer's account in accordance with the above procedure only when Customer's Storage Inventory is less than Customer's MSQ.

6. WITHDRAWAL PROVISIONS

6.1 General Procedure. If Customer desires the delivery of Gas stored for Customer's account under this Rate Schedule, it shall give notice to Pipeline specifying the Quantity of Gas, not in excess of the quantity determined pursuant to Section 6.3, plus Applicable Shrinkage, which Customer desires to be withdrawn from storage and delivered under this Rate Schedule during such Day. Pipeline shall thereupon deliver to Customer the Quantity of Gas subject to the limitations set forth herein.

6.2 Notice Required. The notice given by Customer to Pipeline for withdrawals on any Day shall be in accordance with Section 4 of Pipeline's General Terms and Conditions of this FERC Gas Tariff.

6.3 Withdrawal Quantities. Pipeline shall not be obligated to withdraw for Customer on any Day a total daily quantity in excess of the following:

(A) the MDWQ if Customer's Storage Inventory is more than 20% of Customer's MSQ;

(B) five-sixths (5/6) of Customer's MDWQ if Customer's Storage Inventory is 20% or less of Customer's MSQ, but more than 10% of Customer's MSQ; or

(C) two-thirds (2/3) of Customer's MDWQ if Customer's Storage Inventory is 10% or less of Customer's MSQ.

If at any time during the period from November 16 through April 15 of each contract year the aggregate Storage Inventory of all Customers hereunder equals or is less than 10% of the aggregate MSQ of all Customers hereunder, then for the balance of the period ending April 15 for such contract year injections into storage or transfers of title of Gas in Storage Inventory shall not be included in Customer's Storage Inventory for purposes of determining Customer's daily withdrawal rights pursuant to this Section 6. Pipeline shall notify Customer verbally and then in writing when the aggregate Storage Inventory of all Customers hereunder and/or when Customer's individual Storage Inventory equals or is less than 20% and 10% of the aggregate MSQ or Customer's individual MSQ, respectively.

6.4 Limitation Upon Total Withdrawals. Pipeline shall deliver to Customer Gas for Customer's account only when Customer's Storage Inventory is greater than zero.

7. DETERMINATION OF DELIVERIES

If Pipeline delivers Natural Gas to Customer under this Rate Schedule at the same Point(s) of Delivery on the same Day that Pipeline delivers Natural Gas to Customer under any other rate schedule, then the quantity of Natural Gas delivered under this Rate Schedule shall be determined in accordance with the provisions of Section 18 of Pipeline's General Terms and Conditions of this FERC Gas Tariff.

8. IMPAIRMENT OF DELIVERIES

When Pipeline, on any Day, is unable to deliver the total requests of all its Customers for Excess Withdrawal Gas hereunder due to insufficient capacity on Pipeline's system, then Pipeline shall limit deliveries of Excess Withdrawal Gas requested by Customers hereunder on a pro rata basis for all Customers requesting Excess Withdrawal Gas. Each Customer shall receive the same percentage of Excess Withdrawal Gas available to Customers on such Day; provided, however, that a Customer may nominate a smaller percentage.

9. IMBALANCES

Except to the extent Point of Receipt and Point of Delivery imbalances are reconciled and resolved pursuant to Rate Schedule(s) TABS-1 and/or MBA, as applicable, imbalances shall be reconciled and resolved pursuant to Section 8 of Pipeline's General Terms and Conditions.

10. RATE SCHEDULE SS AND SECOND REVISED VOLUME NO. 2 RATE SCHEDULE X-28 CONVERSIONS

10.1 Those Rate Schedule SS agreements previously entered into by Customers with Pipeline for firm storage service may be converted at any time to Rate Schedule SS-1 Service Agreements, at the Customer's request. As of the effective date of such conversion, the rights and obligations of the parties to the Rate Schedule SS agreements shall be determined pursuant to this Rate Schedule SS-1.

10.2 The Second Revised Volume No. 2 Rate Schedule X-28 agreement previously entered into by Customer with Pipeline for firm storage service may be converted at any time to a Rate Schedule SS-1 Service Agreement, at the Customer's request. As of the effective date of such conversion, the rights and obligations of the parties to the Second Revised Volume No. 2 Rate Schedule X-28 agreement shall be determined pursuant to this Rate Schedule SS-1.

11. [RESERVED FOR FUTURE USE]

12. GENERAL TERMS AND CONDITIONS

All of the General Terms and Conditions of Pipeline's FERC Gas Tariff of which this Rate Schedule is a part are applicable to this Rate Schedule and are made a part hereof to the extent that such terms and conditions are not contradicted by any provision herein.

13. SECONDARY POINTS

See Section 30.5 of the General Terms and Conditions.

RATE SCHEDULE FTS-2

FIRM TRANSPORTATION SERVICE

1. AVAILABILITY

This Rate Schedule is available to any party (hereinafter called Customer) when Customer and Texas Eastern Transmission, LP (hereinafter called Pipeline) have executed a service agreement for service under Rate Schedule FTS-2. Such service agreement shall be in the form contained in Pipeline's FERC Gas Tariff of which this Rate Schedule FTS-2 is a part.

2. APPLICABILITY AND CHARACTER OF SERVICE

2.1 Transportation service hereunder shall be firm, except as provided herein and in Pipeline's General Terms and Conditions of this FERC Gas Tariff of which this Rate Schedule is a part. Service under this Rate Schedule does not constitute No-notice Service as that term is used in Order No. 636.

2.2 Pipeline shall receive for Customer's account, at the Customer Point(s), for transportation hereunder daily Quantities of Gas up to Customer's Maximum Daily Quantity (MDQ), plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the Equitrans Point(s), such daily quantities tendered up to such Customer's MDQ. Customer's MDQ shall be specified in the executed service agreement.

2.3 Pipeline shall receive for Customer's account, at the Equitrans Point(s), for transportation hereunder daily Quantities of Gas up to Customer's Maximum Daily Quantity (MDQ), plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the Customer Point(s), such daily quantities tendered up to such Customer's MDQ. Customer's MDQ shall be specified in the executed service agreement.

3. RATE

3.1 The applicable rates for service hereunder are set forth in the currently effective Statement of Rates for Rate Schedule FTS-2 of this FERC Gas Tariff and are hereby incorporated herein. The rates in this Rate Schedule are subject to adjustment pursuant to Section 15 of Pipeline's General Terms and Conditions.

3.2 For transportation which is a forwardhaul transportation arrangement, Customer shall pay Pipeline each Month the sum of the following amounts:

(A) Reservation Charge:

The Reservation Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by the MDQ specified in the executed service agreement, and

(B) Monthly Usage Charge consisting of the sum of the following daily charges:

(1) The Usage-2 Charge Rate, as set forth on the Statement of Rates for Rate Schedule FTS-2, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day.

3.3 In the event that the service agreement is effective on a date other than the first Day of the Month, then, for that initial Month, the Reservation Charge hereunder shall be prorated based on the ratio of the number of Days remaining in that Month starting with and including the effective date of the service agreement to the total number of Days in the Month in which the initial service occurs. A similar proration shall be made for the last Month of the term of the FTS-2 Service Agreement if the last Day of such term occurs on a Day other than the last Day of a Month.

3.4 The Reservation Charge Adjustment (as set forth on the Statement of Rates for Rate Schedule FTS-2 of Pipeline's FERC Gas Tariff, Volume No. 1, as such Statement of Rates may be revised, superseded or supplemented from time to time) shall be applied to the Reservation Charge hereunder pursuant to the provisions of Section 31 of the General Terms and Conditions.

3.5 [RESERVED FOR FUTURE USE]

4. MINIMUM COMMODITY BILL

None.

5. SCHEDULING OF RECEIPTS AND DELIVERIES

If Customer desires the transportation of Gas on any Day under this Rate Schedule, Customer shall give notice to Pipeline in accordance with Section 4 of Pipeline's General Terms and Conditions.

6. DETERMINATION OF DELIVERIES

If Pipeline delivers Natural Gas to Customer under this Rate Schedule at the same Point(s) of Delivery on the same Day that Pipeline delivers Natural Gas to Customer under any other rate schedule, then the quantity of Natural Gas delivered under this Rate Schedule shall be determined in accordance with the provisions of Section 18 of Pipeline's General Terms and Conditions of this FERC

7. IMPAIRMENT OF RECEIPTS AND DELIVERIES

Where Pipeline, on any Day is unable to receive and/or deliver the total requests of all of its Customers due to force majeure on Pipeline's system, then Pipeline shall limit receipts and/or deliveries of Gas hereunder in accordance with Section 4 of Pipeline's General Terms and Conditions.

8. IMBALANCES

Except to the extent Point of Receipt and Point of Delivery imbalances are reconciled and resolved pursuant to Rate Schedule(s) TABS-1 and/or MBA, as applicable, imbalances shall be reconciled and resolved pursuant to Section 8 of Pipeline's General Terms and Conditions.

9. GENERAL TERMS AND CONDITIONS

All of the General Terms and Conditions of Pipeline's FERC Gas Tariff of which this Rate Schedule is a part are applicable to this Rate Schedule and are made a part hereof to the extent that such terms and conditions are not contradicted by any provision herein.

RATE SCHEDULE FTS-7

FIRM TRANSPORTATION SERVICE

1. AVAILABILITY

This Rate Schedule is available to any party (hereinafter called Customer) when Customer and Texas Eastern Transmission, LP (hereinafter called Pipeline) have executed a service agreement for service under Rate Schedule FTS-7. Such service agreements shall be in the form contained in Pipeline's FERC Gas Tariff of which this Rate Schedule FTS-7 is a part.

2. APPLICABILITY AND CHARACTER OF SERVICE

2.1 Transportation service hereunder shall be firm, except as provided herein and in Pipeline's General Terms and Conditions of this FERC Gas Tariff of which this Rate Schedule is a part. Service under this Rate Schedule does not constitute No-notice Service as that term is used in Order No. 636.

2.2 Pipeline shall receive for Customer's account, at Customer's Point(s), for transportation hereunder daily Quantities of Gas up to Customer's Maximum Daily Quantity (MDQ), plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the CNG Point(s), such daily quantities tendered up to such Customer's MDQ. Customer's MDQ shall be specified in the executed service agreement.

2.3 Pipeline shall receive for Customer's account, at the CNG Points(s), for transportation hereunder daily Quantities of Gas up to Customer's Maximum Daily Quantity (MDQ), plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the Customer's Point(s), such daily quantities tendered up to such Customer's MDQ. Customer's MDQ shall be specified in the executed service agreement.

3. RATE

3.1 The applicable rates for service hereunder are set forth in the currently effective Statement of Rates for Rate Schedule FTS-7 of this FERC Gas Tariff and are hereby incorporated herein. The rates in this Rate Schedule are subject to adjustment pursuant to Section 15 of Pipeline's General Terms and Conditions.

3.2 Customer shall pay Pipeline each Month the sum of the following amounts:

(A) Reservation Charge:

The Reservation Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by the MDQ specified in the executed service agreement, and

(B) Monthly Usage Charge consisting of the sum of the following daily charges:

(1) The Usage-2 Charge Rate, as set forth on the Statement of Rates for Rate Schedule FTS-7, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day.

(C) System Expansion Adjustment:

The Reservation Charge, in Section 3.2(A) above, reflects the costs of all system expansions pursuant to Section 10, herein. The Reservation Charge shall be automatically adjusted to reflect the impact of each such system expansion completed pursuant to FERC certificate authorization.

3.3 In the event that the service agreement is effective on a date other than the first Day of the Month or the date of any subsequent change in Customer's MDQ is other than the first Day of the Month, then, for that initial Month, the Reservation Charge hereunder shall be prorated based on the ratio of the number of Days remaining in that Month starting with and including the effective date of the service agreement to the total number of Days in the Month in which the initial service occurs. A similar proration shall be made for the last Month of the term of the FTS-7 Service Agreement if the last Day of such term occurs on a Day other than the last Day of a Month.

3.4 The Reservation Charge Adjustment (as set forth on the Statement of Rates for Rate Schedule FTS-7 of Pipeline’s FERC Gas Tariff, Volume No. 1, as such Statement of Rates may be revised, superseded or supplemented from time to time) shall be applied to the Reservation Charge hereunder pursuant to the provisions of Section 31 of the General Terms and Conditions.

3.5 [RESERVED FOR FUTURE USE]

4. MINIMUM COMMODITY BILL

None.

5. SCHEDULING OF RECEIPTS AND DELIVERIES

If Customer desires transportation of Natural Gas on any Day under this Rate Schedule, Customer shall give notice to Pipeline in accordance with Section 4 of Pipeline's General Terms and Conditions.

6. DETERMINATION OF DELIVERIES

If Pipeline delivers Natural Gas to Customer under this Rate Schedule at the same Point(s) of Delivery on the same Day that Pipeline delivers Natural Gas to Customer under any other rate schedule, then the quantity of Natural Gas delivered under this Rate Schedule shall be determined in accordance with the provisions of Section 18 of Pipeline's General Terms and Conditions of this FERC Gas Tariff.

7. IMPAIRMENT OF RECEIPTS AND DELIVERIES

Where Pipeline, on any Day is unable to receive and/or deliver the total requests of all of its Customers due to force majeure on Pipeline's system, then Pipeline shall limit receipts and/or deliveries of Gas hereunder in accordance with Section 4 of Pipeline's General Terms and Conditions.

8. RATE SCHEDULE SS-2 CONVERSIONS

Those Rate Schedule SS-2 service agreements previously entered into by Customers with Pipeline for firm storage service shall be deemed Rate Schedule FTS-7 Service Agreements to the extent of such firm service. Interruptible service previously provided under Customer's SS-2 Agreement shall be offered pursuant to a Rate Schedule IT-1 Service Agreement. As of the effective date of this Section 8, the rights and obligations of the parties to Rate Schedule SS-2 to the extent of such firm service shall be determined pursuant to this Rate Schedule FTS-7.

9. IMBALANCES

Except to the extent Point of Receipt and Point of Delivery imbalances are reconciled and resolved pursuant to Rate Schedule(s) TABS-1 and/or MBA, as applicable, imbalances shall be reconciled and resolved pursuant to Section 8 of Pipeline's General Terms and Conditions.

10. FIRM UP ELECTION PROCEDURES

As stated in Section 8 herein, the following Customers executed Rate Schedule IT-1 Service Agreements for interruptible service previously provided under Rate Schedule SS-2 Service Agreements prior to June 1, 1993:

Customer	Rate Schedule IT-1 MDQ (Dth)
City of Norwich, CT	37
Columbia Gas of Ohio, Incorporated	9,000
Columbia Gas of Pennsylvania, Incorporated	6,000
Liberty Utilities (New England Natural Gas Company) Corp	100
UGI Utilities, Inc.	6,000

Such Customers at any time may request, in a form suitable to Pipeline, to firm up, as firm service under this Rate Schedule, any portion of its MDQ under the applicable Rate Schedule IT-1 Service Agreement. Upon receipt of such a request, Pipeline shall inquire of all Customers under this Rate Schedule if they also desire at such time to firm up any portion of their respective Rate Schedule IT-1 MDQ. If Pipeline receives sufficient requests for firmed up MDQ which, in Pipeline's sole opinion, makes it economically feasible to expand Pipeline's system, Pipeline shall make the necessary expansion of its system as soon as practicable after all necessary regulatory and governmental authorizations on terms and conditions acceptable to Pipeline are granted. Upon completion of the system expansion, Pipeline shall notify each Customer which requested a firmed up MDQ of its new MDQ under this Rate Schedule and the effective date thereof. The annual costs associated with all facilities which must be added to Pipeline's system to enable the establishment of and firm up of the MDQ's of Customers hereunder shall be borne by those Customers which have MDQ's hereunder by means of the Reservation Charge.

11. GENERAL TERMS AND CONDITIONS

All of the General Terms and Conditions of Pipeline's FERC Gas Tariff of which this Rate Schedule is a part are applicable to this Rate Schedule and are made a part hereof to the extent that such terms and conditions are not contradicted by any provision herein.

RATE SCHEDULE FTS-8

FIRM TRANSPORTATION SERVICE

1. AVAILABILITY

This Rate Schedule is available to any party (hereinafter called Customer) when Customer and Texas Eastern Transmission, LP (hereinafter called Pipeline) have executed a service agreement for service under Rate Schedule FTS-8. Such service agreements shall be in the form contained in Pipeline's FERC Gas Tariff of which this Rate Schedule FTS-8 is a part.

2. APPLICABILITY AND CHARACTER OF SERVICE

2.1 Transportation service hereunder shall be firm, except as provided herein and in Pipeline's General Terms and Conditions of this FERC Gas Tariff of which this Rate Schedule is a part. Service under this Rate Schedule does not constitute No-notice Service as that term is used in Order No. 636.

2.2 Pipeline shall receive for Customer's account, at Customer's Point(s), for transportation hereunder daily Quantities of Gas up to Customer's Maximum Daily Quantity (MDQ), plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the CNG Point(s), such daily quantities tendered up to such Customer's MDQ. Customer's MDQ shall be specified in the executed service agreement.

2.3 Pipeline shall receive for Customer's account, at the CNG Points(s), for transportation hereunder daily Quantities of Gas up to Customer's Maximum Daily Quantity (MDQ), plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the Customer's Point(s), such daily quantities tendered up to such Customer's MDQ. Customer's MDQ shall be specified in the executed service agreement.

3. RATE

3.1 The applicable rates for service hereunder are set forth in the currently effective Statement of Rates for Rate Schedule FTS-8 of this FERC Gas Tariff and are hereby incorporated herein. The rates in this Rate Schedule are subject to adjustment pursuant to Section 15 of Pipeline's General Terms and Conditions.

3.2 Customer shall pay Pipeline each Month the sum of the following amounts:

(A) Reservation Charge:

The Reservation Charge Rate, as determined pursuant to Section 3.1 herein, multiplied by the MDQ specified in the executed service agreement, and

(B) Monthly Usage Charge consisting of the sum of the following daily charges:

(1) The Usage-2 Charge Rate, as set forth on the Statement of Rates for Rate Schedule FTS-8, multiplied by that portion of the total Quantity of Gas deliveries on any Day pursuant to the executed service agreement, which is in excess of 110% of scheduled service levels for such Day.

(C) System Expansion Adjustment:

The Reservation Charge, in Section 3.2(A) above, reflects the costs of all system expansions pursuant to Section 10, herein. The Reservation Charge shall be automatically adjusted to reflect the impact of each such system expansion completed pursuant to FERC certificate authorization.

3.3 In the event that the service agreement is effective on a date other than the first Day of the Month or the date of any subsequent change in Customer's MDQ is other than the first Day of the Month, then, for that initial Month, the Reservation Charge hereunder shall be prorated based on the ratio of the number of Days remaining in that Month starting with and including the effective date of the service agreement to the total number of Days in the Month in which the initial service occurs. A similar proration shall be made for the last Month of the term of the FTS-8 Service Agreement if the last Day of such term occurs on a Day other than the last Day of a Month.

3.4 The Reservation Charge Adjustment (as set forth on the Statement of Rates for Rate Schedule FTS-8 of Pipeline's FERC Gas Tariff, Volume No. 1, as such Statement of Rates may be revised, superseded or supplemented from time to time) shall be applied to the Reservation Charge hereunder pursuant to the provisions of Section 31 of the General Terms and Conditions.

3.5 [RESERVED FOR FUTURE USE]

4. MINIMUM COMMODITY BILL

None.

5. SCHEDULING OF RECEIPTS AND DELIVERIES

If Customer desires transportation of Natural Gas on any Day under this Rate Schedule, Customer shall give notice to Pipeline in accordance with Section 4 of Pipeline's General Terms and Conditions.

6. DETERMINATION OF DELIVERIES

If Pipeline delivers Natural Gas to Customer under this Rate Schedule at the same Point(s) of Delivery on the same Day that Pipeline delivers Natural Gas to Customer under any other rate schedule, then the quantity of Natural Gas delivered under this Rate Schedule shall be determined in accordance with the provisions of Section 18 of Pipeline's General Terms and Conditions of this FERC Gas Tariff.

7. IMPAIRMENT OF RECEIPTS AND DELIVERIES

Where Pipeline, on any Day is unable to receive and/or deliver the total requests of all of its Customers due to force majeure on Pipeline's system, then Pipeline shall limit receipts and/or deliveries of Gas hereunder in accordance with Section 4 of Pipeline's General Terms and Conditions.

8. RATE SCHEDULE SS-3 CONVERSIONS

Those Rate Schedule SS-3 agreements previously entered into by Customers with Pipeline for firm storage service shall be deemed Rate Schedule FTS-8 Service Agreements to the extent of such firm service. Interruptible service previously provided under Customer's SS-3 Agreement shall be offered pursuant to a Rate Schedule IT-1 Service Agreement. As of the effective date of this Section 8, the rights and obligations of the parties to Rate Schedule SS-3 to the extent of such firm service shall be determined pursuant to this Rate Schedule FTS-8.

9. IMBALANCES

Except to the extent Point of Receipt and Point of Delivery imbalances are reconciled and resolved pursuant to Rate Schedule(s) TABS-1 and/or MBA, as applicable, imbalances shall be reconciled and resolved pursuant to Section 8 of Pipeline's General Terms and Conditions.

10. FIRM UP ELECTION PROCEDURES

As stated in Section 8 herein, the following Customers executed Rate Schedule IT-1 Service Agreements for interruptible service previously provided under Rate Schedule SS-3 Service Agreements prior to June 1, 1993:

Customer	Rate Schedule IT-1 MDQ (Dth)
Boston Gas Company d/b/a National Grid	10,639
Brooklyn Union Gas Company d/b/a National Grid	160
City of Norwich, CT	480
Southern Connecticut Gas Company	3,290

Such Customers at any time may request, in a form suitable to Pipeline, to firm up, as firm service under this Rate Schedule, any portion of its MDQ under the applicable Rate Schedule IT-1 Service Agreement. Upon receipt of such a request, Pipeline shall inquire of all Customers under this Rate Schedule if they also desire at such time to firm up any portion of their respective Rate Schedule IT-1 MDQ. If Pipeline receives sufficient requests for firmed up MDQs which, in Pipeline's sole opinion, makes it economically feasible to expand Pipeline's system, Pipeline shall make the necessary expansion of its system as soon as practicable after all necessary regulatory and governmental authorizations on terms and conditions acceptable to Pipeline are granted. Upon completion of the system expansion, Pipeline shall notify each Customer which requested a firmed up MDQ of its new MDQ under this Rate Schedule and the effective date thereof. The annual costs associated with all facilities which must be added to Pipeline's system to enable the establishment of and firm up of the MDQs of Customers hereunder shall be borne by those Customers which have MDQs hereunder by means of the Reservation Charge.

11. GENERAL TERMS AND CONDITIONS

All of the General Terms and Conditions of Pipeline's FERC Gas Tariff of which this Rate Schedule is a part are applicable to this Rate Schedule and are made a part hereof to the extent that such terms and conditions are not contradicted by any provision herein.

PART 7 - FORM OF SERVICE AGREEMENTS
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FORM OF SERVICE AGREEMENT
FOR RATE SCHEDULE CDS

Date: _____, Contract No.) _____

SERVICE AGREEMENT

This AGREEMENT is entered into by and between Texas Eastern Transmission, LP, ("Pipeline") and _____ ("Customer").

WHEREAS, [this and an additional clause(s) may be included to describe the historical or factual context of the Agreement, to describe or identify a precedent agreement, and any other agreements if applicable, between Pipeline and Customer related to the Agreement, and/or to describe or define the facilities necessary to provide service under the Agreement, and will not include binding consideration.]

[***In the event that the capacity was awarded as Interim Capacity pursuant to Section 3.11(F) of the General Terms and Conditions of Pipeline's Tariff, the following language will be included as a Whereas clause in Customer's Agreement:*** "The service provided to Customer under this Agreement will utilize capacity that was acquired by Customer as Interim Capacity pursuant to the provisions of Section 3.11(F) of the General Terms and Conditions of Pipeline's Tariff."]

NOW THEREFORE, in consideration of the premises and of the mutual covenants herein contained, the parties do agree as follows:

1. Pipeline shall deliver and Customer shall take and pay for service pursuant to the terms of this Agreement and subject to Pipeline's Rate Schedule CDS and the General Terms and Conditions of Pipeline's Tariff, which are incorporated herein by reference and made a part hereof.

   [***In the event that a precedent agreement for a new or an expansion project contains credit provisions applicable to Customer's capacity related to such project, the following language shall be included in Customer's Service Agreement***: "The credit requirements applicable to this Agreement are set forth in that certain Precedent Agreement dated _____ between Texas Eastern and Customer related to this Agreement."]

2. The Maximum Daily Quantity (MDQ) for service under this Agreement and any right to increase or decrease the MDQ during the term of this Agreement are listed on Exhibit D attached hereto. The Point(s) of Receipt and Point(s) of Delivery, respectively, are listed on Exhibits A and B attached hereto. Customer's Zone Boundary Entry Quantity and Zone Boundary Exit Quantity for each of Pipeline's Zones are specified on Exhibit C attached hereto. Exhibit(s) A, B, C, and D are incorporated herein by reference and made a part hereof.

   Pipeline shall not be obligated to, but may at its discretion, receive at any Point of Receipt on any Day a Quantity of Gas in excess of the applicable Maximum Daily Receipt Obligation (MDRO), plus Applicable Shrinkage, but shall not receive in the aggregate at all Points of Receipt on any Day a Quantity of Gas in excess of the applicable MDQ, plus Applicable Shrinkage. Pipeline shall not be obligated to, but may at its discretion, deliver at any Point of Delivery on any Day a Quantity of Gas in excess of the applicable Maximum Daily Delivery Obligation (MDDO), but shall not deliver in the aggregate at all Points of Delivery on any Day a Quantity of Gas in excess of the MDQ.

3. This Agreement shall be effective on _____ [this blank may include a date certain, a date either earlier or later than a specified date certain based on the completion of construction of facilities necessary to provide service under the Agreement, a date set forth in or established by a relevant order from the Federal Energy Regulatory Commission or a commencement date as defined in a precedent agreement between Customer and Pipeline]and shall continue for a term

ending on and including _____ [or, when applicable, shall continue for a term of _____ years"] ("Primary Term") and shall remain in force from year to year thereafter [***In the event that the capacity was awarded as Interim Capacity pursuant to Section 3.11(F) of Pipeline's Tariff, the following phrase will be included in Customer's Agreement:*** ",but in no event beyond _____,"] unless terminated by either party upon _____ prior written notice [at least one (1) year prior notice for Long-Term Service Agreements, with the exception that, for Service Agreements with a Primary Term of exactly one (1) year, the notice must be submitted within ten (10) Business Days of the beginning of the Primary Term of the Service Agreement, and at least one (1) year for subsequent notices for such Service Agreement; mutually agreeable for Short-Term Service Agreements] prior to the end of the Primary Term or any successive term thereof. [In the event that Pipeline and Customer agree to a fixed term, the evergreen and notice of termination language shall be omitted from Customer's Agreement.] This Agreement may be terminated at any time by Pipeline in the event Customer fails to pay part or all of the amount of any bill for service hereunder and such failure continues for thirty (30) days after payment is due; provided, Pipeline gives thirty (30) days prior written notice to Customer of such termination and provided further such termination shall not be effective if, prior to the date of termination, Customer either pays such outstanding bill or furnishes a good and sufficient surety bond or other form of security reasonably acceptable to Pipeline guaranteeing payment to Pipeline of such outstanding bill. Any portions of this Agreement necessary to correct or cash-out imbalances under this Agreement as required by the General Terms and Conditions of Pipeline's Tariff shall survive the other parts of this Agreement until such time as such balancing has been accomplished.

If this Agreement qualifies as a "ROFR Agreement" as defined in the General Terms and Conditions of Pipeline's Tariff, the provision of a termination notice by either Customer or Pipeline, pursuant to the preceding paragraph, a notice of partial reduction in MDQ pursuant to Exhibit D or the expiration of this Agreement of its own terms triggers Customer's right of first refusal under Section 3.13 of the General Terms and Conditions of Pipeline's Tariff.

[***In the event that the capacity was awarded as Interim Capacity pursuant to Section 3.11(F) of the General Terms and Conditions of Pipeline's Tariff, the previous paragraph will be replaced with the following language:*** "This Agreement does not qualify as a ROFR Agreement, as such term is defined in Section 1 of the General Terms and Conditions of Pipeline's Tariff."]

4. Maximum rates, charges, and fees shall be applicable to service pursuant to this Agreement except during the specified term of a discounted rate or a Negotiated Rate to which Customer and Pipeline have agreed. Provisions governing such discounted rate shall be as specified in the Discount Confirmation to this Agreement. Provisions governing such Negotiated Rate and term shall be as specified on an appropriate Statement of Negotiated Rates filed, with the consent of Customer, as part of Pipeline's Tariff. It is further agreed that Pipeline may seek authorization from the Commission and/or other appropriate body at any time and from time to time to change any rates, charges or other provisions in the applicable Rate Schedule and General Terms and Conditions of Pipeline's Tariff, and Pipeline shall have the right to place such changes in effect in accordance with the Natural Gas Act. Notwithstanding the foregoing, Customer does not agree that Pipeline shall have the unilateral right without the consent of Customer subsequent to the execution of this Agreement and Pipeline shall not have the right during the effectiveness of this Agreement to make any filings pursuant to Section 4 of the Natural Gas Act to change the MDQ, the term of the agreement, the Point(s) of Receipt, the Point(s) of Delivery, or the firm character of the service hereunder. Nothing contained herein shall be construed to deny Customer any rights it may have under the Natural Gas Act, including the right to participate fully in rate or other proceedings by intervention or otherwise to contest such changes in whole or in part.

5. All Natural Gas tendered to Pipeline for Customer's account shall conform to the quality specifications set forth in Section 5 of Pipeline's General Terms and Conditions. Customer

agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept Natural Gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such Gas as necessary to comply with such quality specifications. Customer shall execute or cause its supplier to execute, if such supplier has retained processing rights to the Gas delivered to Customer, the appropriate agreements prior to the commencement of service for the transportation and processing of any liquefiable hydrocarbons and any PVR quantities associated with the processing of Gas received by Pipeline at the Point(s) of Receipt under such Customer's service agreement. In addition, subject to the execution of appropriate agreements, Pipeline is willing to transport liquids associated with the Gas produced and tendered for transportation hereunder.

6. Unless otherwise required in the Tariff, all notices shall be in writing and shall be considered duly delivered when mailed to the applicable address below or transmitted via facsimile. Customer or Pipeline may change the addresses or other information below by written notice to the other without the necessity of amending this Agreement:

   Pipeline:

   Customer:

7. The interpretation and performance of this Agreement shall be in accordance with the laws of the state of _____, excluding conflicts of law principles that would require the application of the laws of a different jurisdiction.

8. This Agreement supersedes and cancels, as of the effective date of this Agreement, the contract(s) between the parties hereto as described below:

   [None or an appropriate description]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed by their respective Officers and/or Representatives thereunto duly authorized to be effective as of the date stated above.

CUSTOMER: _____

By:_____

TEXAS EASTERN TRANSMISSION, LP
by its General Partner
Spectra Energy Transmission Services, LLC

By:_____

**EXHIBIT A, TRANSPORTATION PATHS
FOR BILLING PURPOSES, DATED _____,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE CDS
BETWEEN TEXAS EASTERN TRANSMISSION, LP ("Pipeline")
AND _____ ("Customer"), DATED _____:**

Exhibit A Effective Date: _____

(1) Customer's firm Point(s) of Receipt:

Point of Receipt	Description	Maximum Daily Receipt Obligation (plus Applicable Shrinkage)	Measurement Responsibilities	Owner	Operator

(2) Customer shall have Pipeline's Master Location List ("MLL"). Customer hereby agrees that Pipeline's MLL as revised and published by Pipeline from time to time is incorporated herein by reference.

Customer hereby agrees to comply with the Receipt Pressure Obligation as set forth in Section 6 of Pipeline's General Terms and Conditions at such Point(s) of Receipt.

Transportation Path	Transportation Path Quantity

[Notice: The Maximum Daily Receipt Obligation at any Point of Receipt may also be further limited by a specified aggregate MDRO ("AMDRO"), as applicable, where the same Point(s) of Receipt is(are) reflected as a Point of Receipt on one or more of Customer's Service Agreements.]

[Notice: Additional information may be included where the Transportation Path cannot be clearly identified from the MDRO and the Transportation Path set forth on Exhibit A to Customer's CDS Service Agreement and/or the MDDO set forth on Exhibit B to Customer's CDS Service Agreement.]

SIGNED FOR IDENTIFICATION

PIPELINE: _____

CUSTOMER: _____

SUPERSEDES EXHIBIT A DATED: _____

EXHIBIT B, POINT(S) OF DELIVERY, DATED _____,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE CDS
BETWEEN TEXAS EASTERN TRANSMISSION, LP ("Pipeline")
AND _____ ("Customer"), DATED _____:

Exhibit B Effective Date: _____

Point of Delivery	Description	Maximum Daily Delivery Obligation	Delivery Pressure Obligation	Measurement Responsibilities	Owner	Operator

[NOTICE: The Maximum Daily Delivery Obligation ("MDDO") at any Point of Delivery may also be further limited by a specified aggregate MDDO ("AMDDO"), as applicable, where the same Point(s) of Delivery is(are) reflected as a Point of Delivery on one or more of Customer's service agreements.]

SIGNED FOR IDENTIFICATION:

PIPELINE: _____

CUSTOMER: _____

SUPERSEDES EXHIBIT B DATED _____

EXHIBIT C, ZONE BOUNDARY ENTRY QUANTITY AND ZONE BOUNDARY EXIT QUANTITY, DATED _____, TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE CDS BETWEEN TEXAS EASTERN TRANSMISSION, LP ("Pipeline") AND _____ ("Customer"), DATED _____:

Exhibit C Effective Date: _____

[INSTRUCTIONAL NOTES - NOT TO BE INCLUDED IN CUSTOMER'S SERVICE AGREEMENT:

1. For a Service Agreement on which the Transportation Path reflected on Exhibit A runs in a south to north direction from the Access Area to the Market Area and the Access Area Zone Boundary Entry and Exit Quantities are subject to the Operational Segment Capacity Entitlements recalculation provision of Section 9.1 of the General Terms and Conditions of Pipeline's FERC Gas Tariff ("Section 9.1 Recalculation"), this Exhibit C shall be populated with the applicable Zone Boundary Entry Quantities into M1 from ETX and ELA along with the applicable Zone Boundary Entry Quantities and Zone Boundary Exit Quantities within the Market Area Zones. The applicable Zone Boundary Entry Quantities and Zone Boundary Exit Quantities within the Access Area Zones will be displayed in the LINK® System.
2. For all other Service Agreements, with the exception of those with a Transportation Path that is solely in the Access Area and is subject to the Section 9.1 Recalculation, this Exhibit C will be populated with all applicable Zone Boundary Entry Quantities and Zone Boundary Exit Quantities.
3. For those Service Agreements with a Transportation Path that is solely in the Access Area and is subject to the Section 9.1 Recalculation, the applicable Zone Boundary Entry Quantities and Zone Boundary Exit Quantities will be displayed in the LINK® System.]

ZONE BOUNDARY ENTRY QUANTITY
Dth/D

TO

FROM	STX	ETX	WLA	ELA	M1-24	M1-30	M2-24	M2-30	M2	M3
STX										
ETX										
WLA										
ELA										
M1-24										
M1-30										
M2-24										
M2-30										
M2										
M3										

EXHIBIT C (Continued)

ZONE BOUNDARY EXIT QUANTITY
Dth/D

TO

FROM	STX	ETX	WLA	ELA	M1-24	M1-30	M2-24	M2-30	M2	M3
STX										
ETX										
WLA										
ELA										
M1-24										
M1-30										
M2-24										
M2-30										
M2										
M3										

SIGNED FOR IDENTIFICATION:

PIPELINE: _____

CUSTOMER: _____

SUPERSEDES EXHIBIT C DATED _____

EXHIBIT D, TRANSPORTATION QUANTITIES,
DATED _____,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE CDS
BETWEEN TEXAS EASTERN TRANSMISSION, LP ("Pipeline")
AND _____ ("Customer"), DATED _____:

Exhibit D Effective Date: _____

MAXIMUM DAILY QUANTITY (MDQ): _____ Dth

Dth	Period

PARTIAL QUANTITY REDUCTION RIGHTS: Customer elects to partially reduce Customer's Maximum Daily Quantity by _____ Dth as of _____, or any subsequent anniversary date, upon providing _____ [Notice period to be not less than the notice period required to terminate the entire contract] year(s) prior written notice to Pipeline.

Pipeline and Customer agree that, if this Agreement qualifies as a "ROFR Agreement", (i) the foregoing contractual right to partially reduce Customer's MDQ is in addition to and not in lieu of any ROFR right to reduce Customer's MDQ on a non-geographic basis upon termination or expiration of this Agreement and (ii) only the partial reduction pursuant to the foregoing contractual right to partially reduce Customer's MDQ is subject to the ROFR procedures specified in the General Terms and Conditions of Pipeline's Tariff and Customer may retain the balance of the MDQ without being subject to the ROFR procedures.

PIPELINE: _____

CUSTOMER: _____

SUPERCEDES EXHIBIT D DATED: _____

FORM OF SERVICE AGREEMENT
FOR RATE SCHEDULE FT-1

Date: _____, Contract No. _____

SERVICE AGREEMENT

This AGREEMENT is entered into by and between Texas Eastern Transmission, LP, ("Pipeline") and _____ ("Customer").

[or, when applicable, this AGREEMENT entered into by and between Texas Eastern Transmission, LP, ("Pipeline") and _____, as "Administrator" on behalf of the Principals as set forth in MSOA Contract No. _____, hereinafter individually and collectively referred to as "Customer," which Principals meet the requirements set forth in such Multiple Shipper Option Agreement which is incorporated herein by reference.]

WHEREAS, [this and an additional clause(s) may be included to describe the historical or factual context of the Agreement, to describe or identify a precedent agreement, and any other agreements if applicable, between Pipeline and Customer related to the Agreement, and/or to describe or define the facilities necessary to provide service under the Agreement, and will not include binding consideration.]

[***In the event that the capacity was awarded as Interim Capacity pursuant to Section 3.11(F) of the General Terms and Conditions of Pipeline's Tariff, the following language will be included as a Whereas clause in Customer's Agreement:*** "The service provided to Customer under this Agreement will utilize capacity that was acquired by Customer as Interim Capacity pursuant to the provisions of Section 3.11(F) of the General Terms and Conditions of Pipeline's Tariff."]

NOW THEREFORE, in consideration of the premises and of the mutual covenants herein contained, the parties do agree as follows:

1. Pipeline shall deliver and Customer shall take and pay for service pursuant to the terms of this Agreement and subject to Pipeline's Rate Schedule FT-1 and the General Terms and Conditions of Pipeline's Tariff, which are incorporated herein by reference and made a part hereof.

   [***In the event that a precedent agreement for a new or an expansion project contains credit provisions applicable to Customer's capacity related to such project, the following language shall be included in Customer's Service Agreement***: "The credit requirements applicable to this Agreement are set forth in that certain Precedent Agreement dated _____ between Texas Eastern and Customer related to this Agreement."]

2. The Maximum Daily Quantity (MDQ) for service under this Agreement and any right to increase or decrease the MDQ during the term of this Agreement are listed on Exhibit D attached hereto. The Point(s) of Receipt and Point(s) of Delivery, respectively, are listed on Exhibits A and B attached hereto. Customer's Zone Boundary Entry Quantity and Zone Boundary Exit Quantity for each of Pipeline's Zones are specified on Exhibit C attached hereto. Exhibit(s) A, B, C, and D are incorporated herein by reference and made a part hereof.

   Pipeline shall not be obligated to, but may at its discretion, receive at any Point of Receipt on any Day a Quantity of Gas in excess of the applicable Maximum Daily Receipt Obligation (MDRO), plus Applicable Shrinkage, but shall not receive in the aggregate at all Points of Receipt on any Day a Quantity of Gas in excess of the applicable MDQ, plus Applicable Shrinkage. Pipeline shall not be obligated to, but may at its discretion, deliver at any Point of Delivery on any Day a Quantity of Gas in excess of the applicable Maximum Daily Delivery Obligation (MDDO), but shall not deliver in the aggregate at all Points of Delivery on any Day a Quantity of Gas in excess of the applicable MDQ.

3. This Agreement shall be effective on _____ [this blank may include a date certain, a date either earlier or later than a specified date certain based on the completion of construction of facilities necessary to provide service under the Agreement, a date set forth in or established by a relevant order from the Federal Energy Regulatory Commission or a commencement date as defined in a precedent agreement between Customer and Pipeline] and shall continue for a term ending on and including _____ [or, when applicable, shall continue for a term of _____ years"] ("Primary Term") and shall remain in force from year to year thereafter [***In the event that the capacity was awarded as Interim Capacity pursuant to Section 3.11(F) of Pipeline's Tariff, the following phrase will be included in Customer's Agreement:*** ",but in no event beyond _____,"] unless terminated by either party upon _____ prior written notice [at least one (1) year prior notice for Long-Term Service Agreements, with the exception that, for Service Agreements with a Primary Term of exactly one (1) year, the notice must be submitted within ten (10) Business Days of the beginning of the Primary Term of the Service Agreement, and at least one (1) year for subsequent notices for such Service Agreement; mutually agreeable for Short-Term Service Agreements] prior to the end of the Primary Term or any successive term thereof. [In the event that Pipeline and Customer agree to a fixed term, the evergreen and notice of termination language shall be omitted.] This Agreement may be terminated at any time by Pipeline in the event Customer fails to pay part or all of the amount of any bill for service hereunder and such failure continues for thirty (30) days after payment is due; provided, Pipeline gives thirty (30) days prior written notice to Customer of such termination and provided further such termination shall not be effective if, prior to the date of termination, Customer either pays such outstanding bill or furnishes a good and sufficient surety bond or other form of security reasonably acceptable to Pipeline guaranteeing payment to Pipeline of such outstanding bill. Any portions of this Agreement necessary to correct or cash-out imbalances under this Agreement as required by the General Terms and Conditions of Pipeline's Tariff shall survive the other parts of this Agreement until such time as such balancing has been accomplished.

   If this Agreement qualifies as a "ROFR Agreement" as defined in the General Terms and Conditions of Pipeline's Tariff, the provision of a termination notice by either Customer or Pipeline, pursuant to the preceding paragraph, a notice of partial reduction in MDQ pursuant to Exhibit D or the expiration of this Agreement of its own terms triggers Customer's right of first refusal under Section 3.13 of the General Terms and Conditions of Pipeline's Gas Tariff.

   [***In the event that the capacity was awarded as Interim Capacity pursuant to Section 3.11(F) of the General Terms and Conditions of Pipeline's Tariff, the previous paragraph will be replaced with the following language:*** "This Agreement does not qualify as a ROFR Agreement, as such term is defined in Section 1 of the General Terms and Conditions of Pipeline's Tariff."]

4. Maximum rates, charges, and fees shall be applicable to service pursuant to this Agreement except during the specified term of a discounted rate or a Negotiated Rate to which Customer and Pipeline have agreed. Provisions governing such discounted rate shall be as specified in the Discount Confirmation to this Agreement. Provisions governing such Negotiated Rate and term shall be as specified on an appropriate Statement of Negotiated Rates filed, with the consent of Customer, as part of Pipeline's Tariff. It is further agreed that Pipeline may seek authorization from the Commission and/or other appropriate body at any time and from time to time to change any rates, charges or other provisions in the applicable Rate Schedule and General Terms and Conditions of Pipeline's Tariff, and Pipeline shall have the right to place such changes in effect in accordance with the Natural Gas Act. Notwithstanding the foregoing, Customer does not agree that Pipeline shall have the unilateral right without the consent of Customer subsequent to the execution of this Agreement and Pipeline shall not have the right during the effectiveness of this Agreement to make any filings pursuant to Section 4 of the Natural Gas Act to change the MDQ, the term of the agreement, the Point(s) of Receipt, the Point(s) of Delivery, or the firm character of the service hereunder. Nothing contained herein shall be construed to deny Customer any

rights it may have under the Natural Gas Act, including the right to participate fully in rate or other proceedings by intervention or otherwise to contest such changes in whole or in part.

5. All Natural Gas tendered to Pipeline for Customer's account shall conform to the quality specifications set forth in Section 5 of Pipeline's General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept Natural Gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such Gas as necessary to comply with such quality specifications. Customer shall execute or cause its supplier to execute, if such supplier has retained processing rights to the Gas delivered to Customer, the appropriate agreements prior to the commencement of service for the transportation and processing of any liquefiable hydrocarbons and any PVR quantities associated with the processing of Gas received by Pipeline at the Point(s) of Receipt under such Customer's service agreement. In addition, subject to the execution of appropriate agreements, Pipeline is willing to transport liquids associated with the Gas produced and tendered for transportation hereunder.

6. Unless otherwise required in the Tariff, all notices shall be in writing and shall be considered duly delivered when mailed to the applicable address below or transmitted via facsimile. Customer or Pipeline may change the addresses or other information below by written notice to the other without the necessity of amending this Agreement:

   Pipeline:

   Customer:

7. The interpretation and performance of this Agreement shall be in accordance with the laws of the state of _____, excluding conflicts of law principles that would require the application of the laws of a different jurisdiction.

8. This Agreement supersedes and cancels, as of the effective date of this Agreement, the contract(s) between the parties hereto as described below:

   [None or an appropriate description]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed by their respective Officers and/or Representatives thereunto duly authorized to be effective as of the date stated above.

CUSTOMER: _____

TEXAS EASTERN TRANSMISSION, LP
by its General Partner
Spectra Energy Transmission Services, LLC

By:_____

By:_____

**EXHIBIT A, TRANSPORTATION PATHS
FOR BILLING PURPOSES, DATED _____,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE FT-1
BETWEEN TEXAS EASTERN TRANSMISSION, LP ("Pipeline")
AND _____ ("Customer"), DATED _____:**

Exhibit A Effective Date: _____

(1) Customer's firm Point(s) of Receipt:

Point of Receipt	Description	Maximum Daily Receipt Obligation (plus Applicable Shrinkage)	Measurement Responsibilities	Owner	Operator

(2) Customer shall have Pipeline's Master Location List ("MLL"). Customer hereby agrees that Pipeline's MLL as revised and published by Pipeline from time to time is incorporated herein by reference.

Customer hereby agrees to comply with the Receipt Pressure Obligation as set forth in Section 6 of Pipeline's General Terms and Conditions at such Point(s) of Receipt.

Transportation Path	Transportation Path Quantity

[Notice: The Maximum Daily Receipt Obligation at any Point of Receipt may also be further limited by a specified aggregate MDRO ("AMDRO"), as applicable, where the same Point(s) of Receipt is(are) reflected as a Point of Receipt on one or more of Customer's Service Agreements.]

[Notice: Additional information may be included where the Transportation Path cannot be clearly identified from the MDRO and the Transportation Path set forth on Exhibit A to Customer's FT-1 Service Agreement and/or the MDDO set forth on Exhibit B to Customer's FT-1 Service Agreement.]

[Notice: ***In the event that Customer and Pipeline have agreed that the receipt of Customer's Gas from Customer will be accomplished by displacement at a Point of Receipt listed above, the Point of Receipt will be identified with an "*" and the following language will be included in Exhibit A to Customer's service agreement***: "Receipts at (enter the information for the applicable Point of Receipt) shall be by displacement and if displacement is not available, by physical flow, if possible, subject to the agreement of (enter the name of the interconnected party and an appropriate abbreviation) to the delivery of such volumes. Arrangements for deliveries by (enter the abbreviation for the interconnected party) shall be the sole responsibility of Customer.]

SIGNED FOR IDENTIFICATION

PIPELINE: _____

CUSTOMER: _____

SUPERSEDES EXHIBIT A DATED: _____

EXHIBIT B, POINT(S) OF DELIVERY, DATED _____,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE FT-1
BETWEEN TEXAS EASTERN TRANSMISSION, LP ("Pipeline")
AND _____ ("Customer"), DATED _____:

Exhibit B Effective Date: _____

Point of Delivery	Description	Maximum Daily Delivery Obligation	[Maximum Hourly Quantity]	Delivery Pressure Obligation	Measurement Responsibilities	Owner	Operator

[NOTICE: The Maximum Daily Delivery Obligation ("MDDO") at any Point of Delivery may also be further limited by a specified aggregate MDDO ("AMDDO"), as applicable, where the same Point(s) of Delivery is(are) reflected as a Point of Delivery on one or more of Customer's service agreements.]

[NOTICE: In the event that Customer and Pipeline have reached an agreement for an MHQ at a Point of Delivery under Customer's Service Agreement, the column heading Maximum Hourly Quantity will be included in Exhibit B to Customer's Service Agreement, followed by Customer's MHQ.]

[NOTICE: ***In the event that Customer and Pipeline have agreed that the delivery of Customer's Gas to Customer will be accomplished by displacement at a Point of Delivery listed above, the Point of Delivery will be identified with an "*" and the following language will be included in Exhibit B to Customer's service agreement***: "Deliveries at (enter the information for the applicable Point of Delivery) shall be by displacement and if displacement is not available, by physical flow, if possible, subject to the agreement of (enter the name of the interconnected party and an appropriate abbreviation) to the receipt of such volumes. Arrangements for receipts by (enter the abbreviation for the interconnected party) shall be the sole responsibility of Customer.]

SIGNED FOR IDENTIFICATION:

PIPELINE: _____

CUSTOMER: _____

SUPERSEDES EXHIBIT B DATED _____

EXHIBIT C, ZONE BOUNDARY ENTRY QUANTITY AND ZONE BOUNDARY EXIT QUANTITY, DATED _____, TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE FT-1 BETWEEN TEXAS EASTERN TRANSMISSION, LP ("Pipeline") AND _____ ("Customer"), DATED _____:

Exhibit C Effective Date: _____

[INSTRUCTIONAL NOTES - NOT TO BE INCLUDED IN CUSTOMER'S SERVICE AGREEMENT:

1. For a Service Agreement on which the Transportation Path reflected on Exhibit A runs in a south to north direction from the Access Area to the Market Area and the Access Area Zone Boundary Entry and Exit Quantities are subject to the Operational Segment Capacity Entitlements recalculation provision of Section 9.1 of the General Terms and Conditions of Pipeline's FERC Gas Tariff ("Section 9.1 Recalculation"), this Exhibit C shall be populated with the applicable Zone Boundary Entry Quantities into M1 from ETX and ELA along with the applicable Zone Boundary Entry Quantities and Zone Boundary Exit Quantities within the Market Area Zones. The applicable Zone Boundary Entry Quantities and Zone Boundary Exit Quantities within the Access Area Zones will be displayed in the LINK® System.
2. For all other Service Agreements, with the exception of those with a Transportation Path that is solely in the Access Area and is subject to the Section 9.1 Recalculation, this Exhibit C will be populated with all applicable Zone Boundary Entry Quantities and Zone Boundary Exit Quantities.
3. For those Service Agreements with a Transportation Path that is solely in the Access Area and is subject to the Section 9.1 Recalculation, the applicable Zone Boundary Entry Quantities and Zone Boundary Exit Quantities will be displayed in the LINK® System.]

ZONE BOUNDARY ENTRY QUANTITY
Dth/D

TO

FROM	STX	ETX	WLA	ELA	M1-24	M1-30	M2-24	M2-30	M2	M3
STX										
ETX										
WLA										
ELA										
M1-24										
M1-30										
M2-24										
M2-30										
M2										
M3										

EXHIBIT C (Continued)

ZONE BOUNDARY EXIT QUANTITY
Dth/D

TO

FROM	STX	ETX	WLA	ELA	M1-24	M1-30	M2-24	M2-30	M2	M3
STX										
ETX										
WLA										
ELA										
M1-24										
M1-30										
M2-24										
M2-30										
M2										
M3										

SIGNED FOR IDENTIFICATION:

PIPELINE: _____

CUSTOMER: _____

SUPERSEDES EXHIBIT C DATED _____

EXHIBIT D, TRANSPORTATION QUANTITIES,
DATED _____,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE FT-1
BETWEEN TEXAS EASTERN TRANSMISSION, LP ("Pipeline")
AND _____ ("Customer"), DATED _____:

Exhibit D Effective Date: _____

MAXIMUM DAILY QUANTITY (MDQ): _____ Dth

Dth	Period

PARTIAL QUANTITY REDUCTION RIGHTS: Customer elects to partially reduce Customer's Maximum Daily Quantity by _____ Dth as of _____, or any subsequent anniversary date, upon providing _____ [Notice period to be not less than the notice period required to terminate the entire contract] year(s) prior written notice to Pipeline.

Pipeline and Customer agree that, if this Agreement qualifies as a "ROFR Agreement", (i) the foregoing contractual right to partially reduce Customer's MDQ is in addition to and not in lieu of any ROFR right to reduce Customer's MDQ on a non-geographic basis upon termination or expiration of this service agreement and (ii) only the partial reduction pursuant to the foregoing contractual right to partially reduce Customer's MDQ is subject to the ROFR procedures specified in the General Terms and Conditions of Pipeline's Tariff and Customer may retain the balance of the MDQ without being subject to the ROFR procedures.

PIPELINE: _____

CUSTOMER: _____

SUPERCEDES EXHIBIT D DATED: _____

FORM OF SERVICE AGREEMENT
FOR RATE SCHEDULE SS-1

Date: _____, Contract No. _____

SERVICE AGREEMENT

This AGREEMENT is entered into by and between Texas Eastern Transmission, LP,("Pipeline") and _____ ("Customer").

WHEREAS, [this and an additional clause(s) may be included to describe the historical or factual context of the Agreement, to describe or identify a precedent agreement, and any other agreements if applicable, between Pipeline and Customer related to the Agreement, and/or to describe or define the facilities necessary to provide service under the Agreement, and will not include binding consideration.]

[***In the event that the capacity was awarded as Interim Capacity pursuant to Section 3.11(F) of the General Terms and Conditions of Pipeline's Tariff, the following language will be included as a Whereas clause in Customer's Agreement:*** "The service provided to Customer under this Agreement will utilize capacity that was acquired by Customer as Interim Capacity pursuant to the provisions of Section 3.11(F) of the General Terms and Conditions of Pipeline's Tariff."]

NOW THEREFORE, in consideration of the premises and of the mutual covenants herein contained, the parties do agree as follows:

1. Pipeline shall deliver and Customer shall take and pay for service pursuant to the terms of this Agreement and subject to Pipeline's Rate Schedule SS-1 and the General Terms and Conditions of Pipeline's Tariff, which are incorporated herein by reference and made a part hereof.

2. The Maximum Daily Injection Quantity (MDIQ), Maximum Storage Quantity (MSQ), and Maximum Daily Withdrawal Quantity (MDWQ) for service under this Agreement and any right to increase or decrease the MDIQ, MSQ, and MDWQ during the term of this Agreement are listed on Exhibit C attached hereto. The Point(s) of Delivery are listed on Exhibit A attached hereto. Customer's Storage Withdrawal Quantities are specified on Exhibit B attached hereto. Exhibit(s) A, B, and C are incorporated herein by reference and made a part hereof.

3. This Agreement shall be effective on _____ and shall continue for a term ending on and including _____ ("Primary Term") and shall remain in force from year to year thereafter [***In the event that the capacity was awarded as Interim Capacity pursuant to Section 3.11(F) of Pipeline's Tariff, the following phrase will be included in Customer's Agreement:*** ",but in no event beyond _____,"] unless terminated by either party upon _____ prior written notice [at least one (1) year prior notice for Long-Term Service Agreements, with the exception that, for Service Agreements with a Primary Term of exactly one (1) year, the notice must be submitted within ten (10) Business Days of the beginning of the Primary Term of the Service Agreement, and at least one (1) year for subsequent notices for such Service Agreement; mutually agreeable for Short-Term Service Agreements] prior to the end of the Primary Term or any successive term thereof. [In the event that Pipeline and Customer agree to a fixed term, the evergreen and notice of termination language shall be omitted from Customer's Agreement.] This Agreement may be terminated at any time by Pipeline in the event Customer fails to pay part or all of the amount of any bill for service hereunder and such failure continues for thirty (30) days after payment is due; provided, Pipeline gives thirty (30) days prior written notice to Customer of such termination and provided further such termination shall not be effective if, prior to the date of termination, Customer either pays such outstanding bill or furnishes a good and sufficient surety bond or other form of security reasonably acceptable to Pipeline guaranteeing payment to Pipeline of such outstanding bill. In the event there is Gas in storage for Customer's account on April 30 of the year of termination of this Agreement, this Agreement shall continue in force and

effect for the sole purpose of withdrawal and delivery of said Gas to Customer for an additional one-hundred and twenty (120) Days.

If this Agreement qualifies as a "ROFR Agreement" as defined in the General Terms and Conditions of Pipeline's Tariff, the provision of a termination notice by either Customer or Pipeline, pursuant to the preceding paragraph, a notice of partial reduction in MDIQ, MSQ and MDWQ pursuant to Exhibit C or the expiration of this Agreement of its own terms triggers Customer's right of first refusal under Section 3.13 of the General Terms and Conditions of Pipeline's Tariff.

[***In the event that the capacity was awarded as Interim Capacity pursuant to Section 3.11(F) of the General Terms and Conditions of Pipeline's Tariff, the previous paragraph will be replaced with the following language:*** "This Agreement does not qualify as a ROFR Agreement, as such term is defined in Section 1 of the General Terms and Conditions of Pipeline's Tariff."]

4. Maximum rates, charges, and fees shall be applicable to service pursuant to this Agreement except during the specified term of a discounted rate or a Negotiated Rate to which Customer and Pipeline have agreed. Provisions governing such discounted rate shall be as specified in the Discount Confirmation to this Agreement. Provisions governing such Negotiated Rate and term shall be as specified on an appropriate Statement of Negotiated Rates filed, with the consent of Customer, as part of Pipeline's Tariff. It is further agreed that Pipeline may seek authorization from the Commission and/or other appropriate body at any time and from time to time to change any rates, charges or other provisions in the applicable Rate Schedule and General Terms and Conditions of Pipeline's Tariff, and Pipeline shall have the right to place such changes in effect in accordance with the Natural Gas Act. Notwithstanding the foregoing, Customer does not agree that Pipeline shall have the unilateral right without the consent of Customer subsequent to the execution of this Agreement and Pipeline shall not have the right during the effectiveness of this Agreement to make any filings pursuant to Section 4 of the Natural Gas Act to change the MDIQ, MSQ, MDWQ, the term of the agreement, the Point(s) of Receipt, the Point(s) of Delivery, or the firm character of the service hereunder. Nothing contained herein shall be construed to deny Customer any rights it may have under the Natural Gas Act, including the right to participate fully in rate or other proceedings by intervention or otherwise to contest such changes rates in whole or in part.

5. All Natural Gas tendered to Pipeline for Customer's account shall conform and be subject to the provisions of Section 5 of the General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept Natural Gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such Gas as necessary to comply with such quality specifications.

6. Unless otherwise required in the Tariff, all notices shall be in writing and shall be considered duly delivered when mailed to the applicable address below or transmitted via facsimile. Customer or Pipeline may change the addresses or other information below by written notice to the other without the necessity of amending this Agreement:

   Pipeline:

   Customer:

7. The interpretation and performance of this Agreement shall be in accordance with the laws of the state of _____, excluding conflicts of law principles that would require the application of the laws of a different jurisdiction.

8. This Agreement supersedes and cancels, as of the effective date of this Agreement, the contract(s) between the parties hereto as described below:

[None or an appropriate description]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed by their respective Officers and/or Representatives thereunto duly authorized to be effective as of the date stated above.

CUSTOMER: _____

TEXAS EASTERN TRANSMISSION, LP
by its General Partner
Spectra Energy Transmission Services, LLC

By:_____

By:_____

**EXHIBIT A, POINT(S) OF DELIVERY, DATED _____,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE SS-1
BETWEEN TEXAS EASTERN TRANSMISSION, LP ("Pipeline")
AND _____ ("Customer"), DATED _____:**

Exhibit A Effective Date: _____

Point of Delivery	Description	Maximum Daily Delivery Obligation	Delivery Pressure Obligation	Measurement Responsibilities	Owner	Operator

[NOTICE: The Maximum Daily Delivery Obligation ("MDDO") at any Point of Delivery may also be further limited by a specified aggregate MDDO ("AMDDO"), as applicable, where the same Point(s) of Delivery is(are) reflected as a Point of Delivery on one or more of Customer's service agreements.]

SIGNED FOR IDENTIFICATION:

PIPELINE: _____

CUSTOMER: _____

SUPERSEDES EXHIBIT A DATED _____

**EXHIBIT B, WITHDRAWAL QUANTITIES, DATED _____,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE SS-1
BETWEEN TEXAS EASTERN TRANSMISSION, LP ("Pipeline")
AND _____ ("Customer"), DATED _____:**

Exhibit B Effective Date: _____

STORAGE WITHDRAWAL QUANTITIES

Pipeline shall not be obligated to withdraw for Customer on any Day a total daily quantity in excess of the following:

the MDWQ if Customer's Storage Inventory is equal to or less than _____Dth, but more than _____Dth;

a daily entitlement of _____ if Customer's Storage Inventory is equal to or less than _____Dth, but more than _____Dth;

a daily entitlement of _____ if Customer's Storage Inventory is equal to or less than _____Dth, but more than _____Dth.

If at any time during the period from November 16 through April 15 of each contract year the aggregate Storage Inventory of all Customers under Rate Schedule SS-1 equals or is less than __% of the aggregate MSQ of all Customers under Rate Schedule SS-1, then for the balance of the period ending April 15 for such contract year injections into storage or transfers of title of Gas in Storage Inventory shall not be included in Customer's Storage Inventory for purposes of determining Customer's daily withdrawal rights pursuant to this Exhibit B. Pipeline shall notify Customer verbally and then in writing when the aggregate Storage Inventory of all Customers under Rate Schedule SS-1 and/or when Customer's individual Storage Inventory equals or is less than __% and __% of the aggregate MSQ or Customer's individual MSQ, respectively.

SIGNED FOR IDENTIFICATION:

PIPELINE: _____

CUSTOMER: _____

SUPERSEDES EXHIBIT B DATED _____

EXHIBIT C, STORAGE SERVICE QUANTITIES,
DATED _____,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE SS-1
BETWEEN TEXAS EASTERN TRANSMISSION, LP ("Pipeline")
AND _____ ("Customer"), DATED _____:

Exhibit C Effective Date: _____

Pipeline agrees to receive and store for Customer's account quantities of Natural Gas up to the following quantities:

Maximum Daily Injection Quantity (MDIQ) _____ Dth
Maximum Storage Quantity (MSQ) _____ Dth
Maximum Daily Withdrawal Quantity (MDWQ) _____ Dth

Customer may elect to partially reduce Customer's MDIQ by _____ Dth, MSQ by _____ Dth, and MDWQ by _____ Dth, maintaining the existing MDIQ, MSQ, and MDWQ relationship, as of _____, or any subsequent anniversary date, upon providing _____[Notice period to be not less than the notice period required to terminate the entire contract] year(s) prior written notice to Pipeline.

Pipeline and Customer agree that, if this Agreement qualifies as a "ROFR Agreement", (i) the foregoing contractual right to partially reduce Customer's MDIQ, MSQ, and MDWQ is in addition to and not in lieu of any ROFR right to reduce Customer's MDIQ, MSQ, and MDWQ on a non-geographic basis upon termination or expiration of this Agreement and (ii) only the partial reduction pursuant to the foregoing contractual right to partially reduce Customer's MDIQ, MSQ, and MDWQ is subject to the ROFR procedures specified in the General Terms and Conditions of Pipeline's Tariff and Customer may retain the balance of the MDIQ, MSQ, and MDWQ without being subject to the ROFR procedures.

PIPELINE: _____

CUSTOMER: _____

SUPERCEDES EXHIBIT C DATED: _____

FORM OF SERVICE AGREEMENT
FOR RATE SCHEDULE FTS-2

This Service Agreement, made and entered into this _____ day of _____,_____, by and between TEXAS EASTERN TRANSMISSION, LP, a Delaware Limited Partnership (herein called "Pipeline") and (herein called "Customer", whether one or more),

W I T N E S S E T H:

WHEREAS, [this and an additional clause(s) may be included to describe the historical or factual context of the Agreement, to describe or identify a precedent agreement, and any other agreements if applicable, between Pipeline and Customer related to the Agreement, and/or to describe or define the facilities necessary to provide service under the Agreement, and will not include binding consideration.]

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the parties do covenant and agree as follows:

ARTICLE I

SCOPE OF AGREEMENT

Subject to the terms, conditions and limitations hereof and of Pipeline's Rate Schedule FTS-2, Pipeline agrees to deliver on a firm basis for Customer's account Quantities of Gas up to the following quantity:

Maximum Daily Quantity (MDQ)_____dth

Pipeline shall receive for Customer's account, at the Customer Point(s), for transportation hereunder daily Quantities of Gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the Equitrans Point(s), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall receive for Customer's account, at the Equitrans Point(s), for transportation hereunder daily Quantities of Gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the Customer Point(s), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall not be obligated to, but may at its discretion, receive at any Point of Receipt on any Day a Quantity of Gas in excess of the applicable Maximum Daily Receipt Obligation (MDRO), plus Applicable Shrinkage, but shall not receive in the aggregate at all Points of Receipt on any Day a Quantity of Gas in excess of the applicable MDQ, plus Applicable Shrinkage, as specified in the executed service agreement. Pipeline shall not be obligated to, but may at its discretion, deliver at any Point of Delivery on any Day a Quantity of Gas in excess of the applicable Maximum Daily Delivery Obligation (MDDO), but shall not deliver in the aggregate at all Points of Delivery on any Day a Quantity of Gas in excess of the applicable MDQ, as specified in the executed service agreement.

ARTICLE II

TERM OF AGREEMENT

This Service Agreement shall become effective on _____ , and shall continue in effect until and including_____ [or, when applicable, shall continue in force for a primary term of ____ years"] [the term of the agreement shall not be less than one year.], and from year to year thereafter unless terminated by either party upon one (1) year prior notice, prior to the end of the primary term or any successive term.

Customer hereby expressly acknowledges and agrees that, to the extent not utilized by Customer for transportation of Gas for Customer's account, Pipeline has the sole right to utilize any pipeline capacity attributable to facilities constructed by Pipeline to provide service pursuant to this Service Agreement as part of Pipeline's overall general system capacity. To that end, Customer agrees not to instigate or cause to be instigated any action designed to alter or increase Customer's right to utilize the pipeline capacity attributable to facilities constructed by Pipeline to provide service pursuant to this Service Agreement. Upon termination of this Service Agreement, all rights of Customer to the transportation service provided by the facilities constructed and utilized to provide service hereunder shall terminate and the capacity provided by such facilities shall be available without limitation for Pipeline's use as Pipeline in its sole discretion deems desirable. If Customer elects to terminate this Service Agreement, then notwithstanding such termination Customer shall continue to pay the monthly charge provided under Section 3.2(A) of Rate Schedule FTS-2 until the earlier of (i) the date Pipeline recovers through said monthly charge the full original cost of the facilities attributable to the service which has been terminated, or (ii) the date Pipeline makes effective its next general rate filing and begins receiving recovery on an alternate basis, which may include systemwide recovery, of the costs of facilities attributable to the service which has been terminated. At such time Customer shall cease paying the monthly charge attributable to the terminated service. In addition, if and to the extent that Customer terminates this Service Agreement and the Federal Energy Regulatory Commission or any other Agency having jurisdiction over the premises ever determines that the facilities attributable to such service are not used or useful in providing Natural Gas service on Pipeline's system or otherwise precludes Pipeline from recovering the full original cost of such facilities then Customer shall reimburse Pipeline the remaining initial cost of said facilities not previously recovered by Pipeline through depreciation charges. Such reimbursement shall not be applicable if and to the extent that Pipeline elects to terminate this Service Agreement.

Any portions of this Service Agreement necessary to correct or cash-out imbalances under this Service Agreement as required by the General Terms and Conditions of Pipeline's FERC Gas Tariff, Volume No. 1, shall survive the other parts of this Service Agreement until such time as such balancing has been accomplished.

ARTICLE III

RATE SCHEDULE

This Service Agreement in all respects shall be and remain subject to the applicable provisions of Rate Schedule FTS-2 and of the General Terms and Conditions of Pipeline's FERC Gas Tariff on file with the Federal Energy Regulatory Commission, all of which are by this reference made a part hereof.

Customer shall pay Pipeline, for all services rendered hereunder and for the availability of such service in the period stated, the applicable prices established under Pipeline's Rate Schedule FTS-2 as filed with the Federal Energy Regulatory Commission and as the same may be hereafter revised or changed.

Customer agrees that Pipeline shall have the unilateral right to file with the appropriate regulatory authority and make changes effective in (a) the rates and charges applicable to service pursuant to Pipeline's Rate Schedule FTS-2, (b) Pipeline's Rate Schedule FTS-2, pursuant to which service hereunder is rendered provided, however, that the firm character of service shall not be subject to change hereunder, or (c) any provision of the General Terms and Conditions applicable to Rate Schedule FTS-2. Pipeline agrees that Customer may protest or contest the aforementioned filings, or may seek authorization from duly constituted regulatory authorities for such adjustment of Pipeline's existing FERC Gas Tariff as may be found necessary to assure that the provisions in (a), (b), or (c) above are just and reasonable.

ARTICLE IV

CUSTOMER POINT(S) AND EQUITRANS POINT(S)

Natural Gas to be received by Pipeline or for Customer's account for service hereunder shall be received on the outlet side of the measuring station at or near the following designated Customer Point(s) or Equitrans Point(s), and Natural Gas to be delivered by Pipeline for Customer's account hereunder shall be delivered at the outlet side of the measuring stations at or near the following designated Equitrans Point(s) or Customer Point(s), in accordance with the Maximum Daily Receipt Obligation (MDRO) plus Applicable Shrinkage, Maximum Daily Delivery Obligation (MDDO), and receipt and delivery pressure obligations and measurement responsibilities indicated below for each:

Customer Point	Maximum Daily Obligation	Pressure Obligation	Measurement Responsibilities

[NOTICE: The Maximum Daily Receipt Obligation ("MDRO") at any Customer Point may also be further limited by a specified aggregate MDRO ("AMDRO"), as applicable, where the same Customer Point(s) is(are) reflected as a Point of Receipt on one or more of Customer's service agreements.]

[NOTICE: The Maximum Daily Delivery Obligation ("MDDO") at any Customer Point may also be further limited by a specified aggregate MDDO ("AMDDO"), as applicable, where the same Customer Point(s) is(are) reflected as a Point of Delivery on one or more of Customer's service agreements.]

Equitrans Point	Maximum Daily Obligation	Pressure Obligation	Measurement Responsibilities

[NOTICE: The Maximum Daily Receipt Obligation ("MDRO") at any Equitrans Point may also be further limited by a specified aggregate MDRO ("AMDRO"), as applicable, where the same Equitrans Point(s) is(are) reflected as a Point of Receipt on one or more of Customer's service agreements.]

[NOTICE: The Maximum Daily Delivery Obligation ("MDDO") at any Equitrans Point may also be further limited by a specified aggregate MDDO ("AMDDO"), as applicable, where the same Equitrans Point(s) is(are) reflected as a Point of Delivery on one or more of Customer's service agreements.]

[***In the event that Pipeline and Customer desire to further describe Pipeline's obligation to deliver gas to Customer, the following language will be included in Customer's Service Agreement***: "and provided further that Pipeline shall have no obligation to deliver natural gas designated as MDQ at any point other than that listed below:
Point:]

ARTICLE V

QUALITY

All Natural Gas tendered to Pipeline for Customer's account shall conform to the quality specifications set forth in Section 5 of Pipeline's General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept Natural Gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such Gas as necessary to comply with such quality specifications.

ARTICLE VI

ADDRESSES

Except as herein otherwise provided or as provided in the General Terms and Conditions of Pipeline's FERC Gas Tariff, any notice, request, demand, statement, bill or payment provided for in this Service Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when mailed by registered, certified, or regular mail to the post office address of the parties hereto, as the case may be, as follows:

(a) Pipeline:

(b) Customer:

or such other address as either party shall designate by formal written notice.

ARTICLE VII

ASSIGNMENTS

Any company which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of Customer, or of Pipeline, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Service Agreement; and either Customer or Pipeline may assign or pledge this Service Agreement under the provisions of any mortgage, deed of trust, indenture, bank credit agreement, assignment, receivable sale, or similar instrument which it has executed or may execute hereafter; otherwise, neither Customer nor Pipeline shall assign this Service Agreement or any of its rights hereunder unless it first shall have obtained the consent thereto in writing of the other; provided further, however, that neither Customer nor Pipeline shall be released from its obligations hereunder without the consent of the other.

ARTICLE VIII

INTERPRETATION

The interpretation and performance of this Service Agreement shall be in accordance with the laws of the State of Texas without recourse to the law regarding conflict of laws.

This Service Agreement and the obligations of the parties are subject to all present and future valid laws with respect to the subject matter, State and Federal, and to all valid present and future orders, rules, and regulations of duly constituted authorities having jurisdiction.

ARTICLE IX

CANCELLATION OF PRIOR CONTRACT(S)

This Service Agreement supersedes and cancels, as of the effective date of this Service Agreement, the contract(s) between the parties hereto as described below:

IN WITNESS WHEREOF, the parties hereto have caused this Service Agreement to be signed by their respective Presidents, Vice Presidents or other duly authorized agents, the day and year first above written.

TEXAS EASTERN TRANSMISSION, LP
by its General Partner
Spectra Energy Transmission Services, LLC

By _____

_____

By_____

FORM OF SERVICE AGREEMENT
FOR RATE SCHEDULE FTS-7

This Service Agreement, made and entered into this ____day of _____, ____, by and between TEXAS EASTERN TRANSMISSION, LP, a Delaware Limited Partnership (herein called "Pipeline") and _____ (herein called "Customer", whether one or more),

W I T N E S S E T H:

WHEREAS, [this and an additional clause(s) may be included to describe the historical or factual context of the Agreement, to describe or identify a precedent agreement, and any other agreements if applicable, between Pipeline and Customer related to the Agreement, and/or to describe or define the facilities necessary to provide service under the Agreement, and will not include binding consideration.]

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the parties do covenant and agree as follows:

ARTICLE I

SCOPE OF AGREEMENT

Subject to the terms, conditions and limitations hereof and of Pipeline's Rate Schedule FTS-7, Pipeline agrees to deliver on a firm basis for Customer's account Quantities of Gas up to the following quantity:

Maximum Daily Quantity (MDQ)_____dth

Pipeline shall receive for Customer's account, at the Customer Point(s), for transportation hereunder daily Quantities of Gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the CNG Point(s), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall receive for Customer's account, at the CNG Point(s), for transportation hereunder daily Quantities of Gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the Customer Point(s), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall not be obligated to, but may at its discretion, receive at any Point of Receipt on any Day a Quantity of Gas in excess of the applicable Maximum Daily Receipt Obligation (MDRO), plus Applicable Shrinkage, but shall not receive in the aggregate at all Points of Receipt on any Day a Quantity of Gas in excess of the applicable MDQ, plus Applicable Shrinkage, as specified in the executed service agreement. Pipeline shall not be obligated to, but may at its discretion, deliver at any Point of Delivery on any Day a Quantity of Gas in excess of the applicable Maximum Daily Delivery Obligation (MDDO), but shall not deliver in the aggregate at all Points of Delivery on any Day a Quantity of Gas in excess of the applicable MDQ, as specified in the executed service agreement.

ARTICLE II

TERM OF AGREEMENT

This Service Agreement shall become effective on _____ and shall continue in force for a primary term of _____ years [or, when applicable, “shall continue in force for a primary term ending on and including _____] [the term of the agreement shall not be less than one year]; and from year to year thereafter unless terminated by either party upon _____ year(s) prior written notice. Subject to

Section 22 of Pipeline's General Terms and Conditions and without prejudice to such rights, this Service Agreement may be terminated at any time by Pipeline in the event Customer fails to pay part or all of the amount of any bill for service hereunder and such failure continues for thirty (30) days after payment is due; provided, Pipeline gives thirty (30) days prior written notice to Customer of such termination and provided further such termination shall not be effective if, prior to the date of termination, Customer either pays such outstanding bill or furnishes a good and sufficient surety bond guaranteeing payment to Pipeline of such outstanding bill. Notwithstanding the foregoing, service shall not be terminated unless and until Pipeline has received abandonment authority pursuant to Section 7 of the Natural Gas Act. Customer shall have the right to oppose Pipeline's application to the Federal Energy Regulatory Commission, or any successor agency, for such abandonment authority. For the 120 Days following termination of this Service Agreement, Pipeline shall utilize its best efforts to provide Customer with such additional interruptible transportation service, to be provided pursuant to Rate Schedule IT-1 or successor of Rate Schedule IT-1, as is necessary for Customer to withdraw and receive delivery of all Gas remaining in storage pursuant to CNG's Rate Schedule GSS.

Any portions of this Service Agreement necessary to correct or cash-out imbalances under this Service Agreement as required by the General Terms and Conditions of Pipeline's FERC Gas Tariff, Volume No. 1, shall survive the other parts of this Service Agreement until such time as such balancing has been accomplished.

ARTICLE III

RATE SCHEDULE

This Service Agreement in all respects shall be and remain subject to the applicable provisions of Rate Schedule FTS-7 and of the General Terms and Conditions of Pipeline's FERC Gas Tariff on file with the Federal Energy Regulatory Commission, all of which are by this reference made a part hereof.

Customer shall pay Pipeline for, all services rendered hereunder and for the availability of such service in the period stated, the applicable prices established under Pipeline's Rate Schedule FTS-7 as filed with the Federal Energy Regulatory Commission and as the same may be hereafter revised or changed.

Pipeline shall have the right from time to time, by the filing of a revised rate schedule, to increase or decrease the rates, to change the form of the applicable rate schedule and to take such other and further action with respect thereto without further consent by Customer and such changes in rates and other changes shall become the Rate Schedule and Terms and Conditions under which the Gas shall be transported hereunder. Customer shall have the right to oppose any of the foregoing and to request reduction in rates to the extent that Customer is legally permitted to do so under the Natural Gas Act.

ARTICLE IV

CUSTOMER POINT(S) AND CNG POINT(S)

Natural Gas to be received by Pipeline for Customer's account for service hereunder shall be received on the outlet side of the measuring station at or near the following designated Customer Point(s) or CNG Point(s), and Natural Gas to be delivered by Pipeline for Customer's account hereunder shall be delivered at the outlet side of the measuring stations at or near the following designated CNG Point(s) or Customer Point(s), in accordance with the Maximum Daily Receipt Obligation (MDRO) plus Applicable Shrinkage, Maximum Daily Delivery Obligation (MDDO), receipt and delivery pressure obligations and measurement responsibilities indicated below for each:

Customer Point	Maximum Daily Obligation	Pressure Obligation	Measurement Responsibilities

[NOTICE: The Maximum Daily Receipt Obligation ("MDRO") at any Customer Point may also be further limited by a specified aggregate MDRO ("AMDRO"), as applicable, where the same Customer Point(s) is(are) reflected as a Point of Receipt on one or more of Customer's service agreements.]

[NOTICE: The Maximum Daily Delivery Obligation ("MDDO") at any Customer Point may also be further limited by a specified aggregate MDDO ("AMDDO"), as applicable, where the same Customer Point(s) is(are) reflected as a Point of Delivery on one or more of Customer's service agreements.]

CNG Point	Maximum Daily Obligation	Pressure Obligation	Measurement Responsibilities

[NOTICE: The Maximum Daily Receipt Obligation ("MDRO") at any CNG Point may also be further limited by a specified aggregate MDRO ("AMDRO"), as applicable, where the same CNG Point(s) is(are) reflected as a Point of Receipt on one or more of Customer's service agreements.]

[NOTICE: The Maximum Daily Delivery Obligation ("MDDO") at any CNG Point may also be further limited by a specified aggregate MDDO ("AMDDO"), as applicable, where the same CNG Point(s) is(are) reflected as a Point of Delivery on one or more of Customer's service agreements.]

provided, however, receipt of Gas by Pipeline for Customer's account at Customer Point(s) shall be accomplished solely by the displacement of Gas quantities otherwise deliverable to Customer by Pipeline pursuant to other contractual arrangements between Pipeline and Customer, and which quantities shall be billed by Pipeline and paid by Customer as if such deliveries in fact occurred pursuant to the relevant contractual arrangements.

[***In the event that Pipeline and Customer desire to further describe Pipeline's obligation to deliver gas to Customer, the following language will be included in Customer's Service Agreement***: "and provided further that Pipeline shall have no obligation to deliver natural gas designated as MDQ at any point other than that listed below:

Point:]

ARTICLE V

QUALITY

All Natural Gas tendered to Pipeline for Customer's account shall conform to the quality specifications set forth in Section 5 of Pipeline's General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept Natural Gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such Gas as necessary to comply with such quality specifications.

ARTICLE VI

ADDRESSES

Except as herein otherwise provided or as provided in the General Terms and Conditions of Pipeline's FERC Gas Tariff, any notice, request, demand, statement, bill or payment provided for in this Service Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when mailed by registered, certified, or regular mail to the post office address of the parties hereto, as the case may be, as follows:

(a) Pipeline:

(b) Customer:

or such other address as either party shall designate by formal written notice.

ARTICLE VII

ASSIGNMENTS

Any Company which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of Customer, or of Pipeline, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Service Agreement; and either Customer or Pipeline may assign or pledge this Service Agreement under the provisions of any mortgage, deed of trust, indenture, bank credit agreement, assignment, receivable sale, or similar instrument which it has executed or may execute hereafter; otherwise, neither Customer nor Pipeline shall assign this Service Agreement or any of its rights hereunder unless it first shall have obtained the consent thereto in writing of the other; provided further, however, that neither Customer nor Pipeline shall be released from its obligations hereunder without the consent of the other.

ARTICLE VIII

INTERPRETATION

The interpretation and performance of this Service Agreement shall be in accordance with the laws of the State of Texas without recourse to the law governing conflict of laws.

This Service Agreement and the obligations of the parties are subject to all present and future valid laws with respect to the subject matter, State and Federal, and to all valid present and future orders, rules, and regulations of duly constituted authorities having jurisdiction.

ARTICLE IX

CANCELLATION OF PRIOR CONTRACT(S)

This Service Agreement supersedes and cancels, as of the effective date of this Service Agreement, the contract(s) between the parties hereto as described below:

IN WITNESS WHEREOF, the parties hereto have caused this Service Agreement to be signed by their respective Presidents, Vice Presidents or other duly authorized agents, the day and year first above written.

TEXAS EASTERN TRANSMISSION, LP
by its General Partner
Spectra Energy Transmission Services, LLC

By _____

_____

By_____

FORM OF SERVICE AGREEMENT
FOR RATE SCHEDULE FTS-8

This Service Agreement, made and entered into this ____day of _____, ____, by and between TEXAS EASTERN TRANSMISSION, LP, a Delaware Limited Partnership (herein called "Pipeline") and _____ (herein called "Customer", whether one or more),

W I T N E S S E T H:

WHEREAS, [this and an additional clause(s) may be included to describe the historical or factual context of the Agreement, to describe or identify a precedent agreement, and any other agreements if applicable, between Pipeline and Customer related to the Agreement, and/or to describe or define the facilities necessary to provide service under the Agreement, and will not include binding consideration.]

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the parties do covenant and agree as follows:

ARTICLE I

SCOPE OF AGREEMENT

Subject to the terms, conditions and limitations hereof and of Pipeline's Rate Schedule FTS-8, Pipeline agrees to deliver on a firm basis for Customer's account Quantities of Gas up to the following quantity:

Maximum Daily Quantity (MDQ)_____dth

Pipeline shall receive for Customer's account, at the Customer Point(s), for transportation hereunder daily Quantities of Gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the CNG Point(s), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall receive for Customer's account, at the CNG Point(s), for transportation hereunder daily Quantities of Gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the Customer Point(s), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall not be obligated to, but may at its discretion, receive at any Point of Receipt on any Day a Quantity of Gas in excess of the applicable Maximum Daily Receipt Obligation (MDRO), plus Applicable Shrinkage, but shall not receive in the aggregate at all Points of Receipt on any Day a Quantity of Gas in excess of the applicable MDQ, plus Applicable Shrinkage, as specified in the executed service agreement. Pipeline shall not be obligated to, but may at its discretion, deliver at any Point of Delivery on any Day a Quantity of Gas in excess of the applicable Maximum Daily Delivery Obligation (MDDO), but shall not deliver in the aggregate at all Points of Delivery on any Day a Quantity of Gas in excess of the applicable MDQ, as specified in the executed service agreement.

ARTICLE II

TERM OF AGREEMENT

This Service Agreement shall become effective on _____ and shall continue in force for a primary term of _____ years [or, when applicable, “shall continue in force for a primary term ending on and including _____] [the term of the agreement shall not be less than one year]; and from year to year thereafter unless terminated by either party upon _____ year(s) prior written notice. Subject to

Section 22 of Pipeline's General Terms and Conditions and without prejudice to such rights, this Service Agreement may be terminated at any time by Pipeline in the event Customer fails to pay part or all of the amount of any bill for service hereunder and such failure continues for thirty (30) days after payment is due; provided, Pipeline gives thirty (30) days prior written notice to Customer of such termination and provided further such termination shall not be effective if, prior to the date of termination, Customer either pays such outstanding bill or furnishes a good and sufficient surety bond guaranteeing payment to Pipeline of such outstanding bill. Notwithstanding the foregoing, service shall not be terminated unless and until Pipeline has received abandonment authority pursuant to Section 7 of the Natural Gas Act. Customer shall have the right to oppose Pipeline's application to the Federal Energy Regulatory Commission, or any successor agency, for such abandonment authority. For the 120 Days following termination of this Service Agreement, Pipeline shall utilize its best efforts to provide Customer with such additional interruptible transportation service, to be provided pursuant to Rate Schedule IT-1 or successor of Rate Schedule IT-1, as is necessary for Customer to withdraw and receive delivery of all Gas remaining in storage pursuant to CNG's Rate Schedule GSS.

Any portions of this Service Agreement necessary to correct or cash-out imbalances under this Service Agreement as required by the General Terms and Conditions of Pipeline's FERC Gas Tariff, Volume No. 1, shall survive the other parts of this Service Agreement until such time as such balancing has been accomplished.

ARTICLE III

RATE SCHEDULE

This Service Agreement in all respects shall be and remain subject to the applicable provisions of Rate Schedule FTS-8 and of the General Terms and Conditions of Pipeline's FERC Gas Tariff on file with the Federal Energy Regulatory Commission, all of which are by this reference made a part hereof.

Customer shall pay Pipeline for, all services rendered hereunder and for the availability of such service in the period stated, the applicable prices established under Pipeline's Rate Schedule FTS-8 as filed with the Federal Energy Regulatory Commission and as the same may be hereafter revised or changed.

Pipeline shall have the right from time to time, by the filing of a revised rate schedule, to increase or decrease the rates, to change the form of the applicable rate schedule and to take such other and further action with respect thereto without further consent by Customer and such changes in rates and other changes shall become the Rate Schedule and Terms and Conditions under which the Gas shall be transported hereunder. Customer shall have the right to oppose any of the foregoing and to request reduction in rates to the extent that Customer is legally permitted to do so under the Natural Gas Act.

ARTICLE IV

CUSTOMER POINT(S) AND CNG POINT(S)

Natural Gas to be received by Pipeline for Customer's account for service hereunder shall be received on the outlet side of the measuring station at or near the following designated Customer Point(s) or CNG Point(s), and Natural Gas to be delivered by Pipeline for Customer's account hereunder shall be delivered at the outlet side of the measuring stations at or near the following designated CNG Point(s) or Customer Point(s), in accordance with the Maximum Daily Receipt Obligation (MDRO) plus Applicable Shrinkage, Maximum Daily Delivery Obligation (MDDO), receipt and delivery pressure obligations and measurement responsibilities indicated below for each:

Customer Point	Maximum Daily Obligation	Pressure Obligation	Measurement Responsibilities

[NOTICE: The Maximum Daily Receipt Obligation ("MDRO") at any Customer Point may also be further limited by a specified aggregate MDRO ("AMDRO"), as applicable, where the same Customer Point(s) is(are) reflected as a Point of Receipt on one or more of Customer's service agreements.]

[NOTICE: The Maximum Daily Delivery Obligation ("MDDO") at any Customer Point may also be further limited by a specified aggregate MDDO ("AMDDO"), as applicable, where the same Customer Point(s) is(are) reflected as a Point of Delivery on one or more of Customer's service agreements.]

CNG Point	Maximum Daily Obligation	Pressure Obligation	Measurement Responsibilities

[NOTICE: The Maximum Daily Receipt Obligation ("MDRO") at any CNG Point may also be further limited by a specified aggregate MDRO ("AMDRO"), as applicable, where the same CNG Point(s) is(are) reflected as a Point of Receipt on one or more of Customer's service agreements.]

[NOTICE: The Maximum Daily Delivery Obligation ("MDDO") at any CNG Point may also be further limited by a specified aggregate MDDO ("AMDDO"), as applicable, where the same CNG Point(s) is(are) reflected as a Point of Delivery on one or more of Customer's service agreements.]

provided, however, receipt of Gas by Pipeline for Customer's account at Customer Point(s) shall be accomplished solely by the displacement of Gas quantities otherwise deliverable to Customer by Pipeline pursuant to other contractual arrangements between Pipeline and Customer, and which quantities shall be billed by Pipeline and paid by Customer as if such deliveries in fact occurred pursuant to the relevant contractual arrangements.

[***In the event that Pipeline and Customer desire to further describe Pipeline's obligation to deliver gas to Customer, the following language will be included in Customer's Service Agreement***: "and provided further that Pipeline shall have no obligation to deliver natural gas designated as MDQ at any point other than that listed below:

Point:]

ARTICLE V

QUALITY

All Natural Gas tendered to Pipeline for Customer's account shall conform to the quality specifications set forth in Section 5 of Pipeline's General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept Natural Gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such Gas as necessary to comply with such quality specifications.

ARTICLE VI

ADDRESSES

Except as herein otherwise provided or as provided in the General Terms and Conditions of Pipeline's FERC Gas Tariff, any notice, request, demand, statement, bill or payment provided for in this Service Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when mailed by registered, certified, or regular mail to the post office address of the parties hereto, as the case may be, as follows:

(a) Pipeline:

(b) Customer:

or such other address as either party shall designate by formal written notice.

ARTICLE VII

ASSIGNMENTS

Any Company which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of Customer, or of Pipeline, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Service Agreement; and either Customer or Pipeline may assign or pledge this Service Agreement under the provisions of any mortgage, deed of trust, indenture, bank credit agreement, assignment, receivable sale, or similar instrument which it has executed or may execute hereafter; otherwise, neither Customer nor Pipeline shall assign this Service Agreement or any of its rights hereunder unless it first shall have obtained the consent thereto in writing of the other; provided further, however, that neither Customer nor Pipeline shall be released from its obligations hereunder without the consent of the other.

ARTICLE VIII

INTERPRETATION

The interpretation and performance of this Service Agreement shall be in accordance with the laws of the State of Texas without recourse to the law governing conflict of laws.

This Service Agreement and the obligations of the parties are subject to all present and future valid laws with respect to the subject matter, State and Federal, and to all valid present and future orders, rules, and regulations of duly constituted authorities having jurisdiction.

ARTICLE IX

CANCELLATION OF PRIOR CONTRACT(S)

This Service Agreement supersedes and cancels, as of the effective date of this Service Agreement, the contract(s) between the parties hereto as described below:

IN WITNESS WHEREOF, the parties hereto have caused this Service Agreement to be signed by their respective Presidents, Vice Presidents or other duly authorized agents, the day and year first above written.

TEXAS EASTERN TRANSMISSION, LP
by its General Partner
Spectra Energy Transmission Services, LLC

By _____

_____

By_____

Federal Tariff Provisions

Schedule 5

Item 53.64(c) (1)

EASTERN GAS TRANSMISSION AND STORAGE, INC

Eastern Gas Transmission and Storage, Inc.
Sixth Revised Volume No. 1
Tariff

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FERC GAS TARIFF

SIXTH REVISED VOLUME NO. 1

(Superseding Fifth Revised Volume No. 1)

of

EASTERN GAS TRANSMISSION AND STORAGE, INC.

Filed with

The Federal Energy Regulatory Commission

Communications Concerning This Tariff
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PRELIMINARY STATEMENT

Eastern Gas Transmission and Storage, Inc. ("EGTS") is a Delaware corporation, and a subsidiary of Berkshire Hathaway Energy, Inc. EGTS produces, transports, stores, purchases and sells natural gas to customers principally in New York, Ohio, West Virginia and Pennsylvania. It renders transportation and storage service to customers throughout its system and in off-system markets, under authorization granted by the Federal Energy Regulatory Commission.

EGTS's main transmission facilities are located in West Virginia, Ohio, Pennsylvania, New York, Virginia and Maryland, and its storage facilities are located in West Virginia, Pennsylvania and New York. It produces gas from local sources in West Virginia, Pennsylvania, and New York. EGTS ships gas from these and other Appalachian sources, and from interconnections with various other interstate pipelines.

EGTS performs the services described in this FERC Gas Tariff only under written contract, which EGTS determines to be acceptable. If any such contract is to become operative only upon performance of certain conditions precedent, EGTS reserves the right to require a separate written agreement specifying the conditions that must be satisfied before the contract or service from EGTS becomes operative.

EGTS maintains this FERC Gas Tariff in compliance with Part 154, Subpart B, Title 18 of the Code of Federal Regulations.

SYSTEM MAP

Eastern Gas Transmission and Storage, Inc. system map(s) can be displayed and downloaded using the hyperlink below. If the hyperlink does not work, please copy and paste the entire URL below into your browser's address bar and press enter.

http://Dekaflow.com/jsp/systemMap.jsp?&company=dti

STATEMENT OF APPLICABLE RATES

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1/ Applicable to Settling Parties Pursuant to the December 6, 2013 Stipulation in Docket No. RP14-262

2/ Applicable to Severed Parties Pursuant to the December 6, 2013 Stipulation in Docket No. RP14-262

GSS RATE SCHEDULE

GENERAL STORAGE SERVICE

Eastern Gas Transmission and Storage, Inc.
FERC Gas Tariff
Sixth Revised Volume No. 1

RATES APPLICABLE TO RATE SCHEDULES IN
FERC GAS TARIFF, VOLUME NO. 1
($ per DT)

Rate Schedule	Rate Component	Base Tariff Rate [1]	Current Acct 858 Base	Current EPCA Base	TCRA [5] Surcharge	EPCA [6] Surcharge	Current Rate [7]	FERC ACA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
GSS [2], [3]								
	Maximum							
	Storage Demand	$2.6065	$0.0696	$0.0041	($0.0009)	($0.0009)	$2.6784	-
	Storage Capacity	$0.0258	-	-	-	-	$0.0258	-
	Injection Charge	$0.0252	-	$0.0134	$0.0000	$0.0010	$0.0396	-
	Withdrawal Charge	$0.0252	-	-	$0.0000	$0.0010	$0.0262	[8]
	GSS-TE Surcharge	-	-	-	($0.0008)	-	($0.0008)	-
	From Customers Balance	$0.7282	$0.0149	$0.0009	($0.0002)	$0.0008	$0.7446	[8]
	Minimum							
	Storage Demand	$0.0000	-	-	-	-	$0.0000	-
	Storage Capacity	$0.0000	-	-	-	-	$0.0000	-
	Injection Charge	$0.0252	-	-	-	-	$0.0252	-
	Withdrawal Charge	$0.0252	-	-	-	-	$0.0252	[8]
	GSS-TE Surcharge	$0.0000	-	-	-	-	$0.0000	-
	From Customers Balance	$0.7282	$0.0149	$0.0009	($0.0002)	$0.0008	$0.7446	[8]
GSS-E [2], [3]								
	Maximum							
	Storage Demand	$2.4565	$0.0696	$0.0041	($0.0009)	($0.0009)	$2.5284	-
	Storage Capacity	$0.0409	-	-	-	-	$0.0409	-
	Injection Charge	$0.0252	-	$0.0134	$0.0000	$0.0010	$0.0396	-
	Withdrawal Charge	$0.0252	-	-	$0.0000	$0.0010	$0.0262	[8]
	Authorized Overruns	$1.4160	$0.0149	$0.0009	($0.0002)	$0.0008	$1.4324	[8]
	Minimum							
	Storage Demand	$0.0000	-	-	-	-	$0.0000	-
	Storage Capacity	$0.0000	-	-	-	-	$0.0000	-
	Injection Charge	$0.0252	-	-	-	-	$0.0252	-
	Withdrawal Charge	$0.0252	-	-	-	-	$0.0252	[8]
	Authorized Overruns	$1.4160	$0.0149	$0.0009	($0.0002)	$0.0008	$1.4324	[8]

Issued On: December 15, 2022

Effective On: November 1, 2022

Rate Schedule (1)	Rate Component (2)	Base Tariff Rate [1] (3)	Current Acct 858 Base (4)	Current EPCA Base (5)	TCRA [5] Surcharge (6)	EPCA [6] Surcharge (7)	Current Rate [7] (8)	FERC ACA (9)
ISS [2]								
	Maximum							
	ISS Capacity	$0.1123	$0.0023	$0.0001	$0.0000	$0.0000	$0.1147	-
	Injection Charge	$0.0252	-	$0.0134	$0.0000	$0.0010	$0.0396	-
	Withdrawal Charge	$0.0252	-	-	$0.0000	$0.0010	$0.0262	[8]
	Authorized Overrun/from Cust. Bal	$0.7282	$0.0149	$0.0009	($0.0002)	$0.0008	$0.7446	[8]
	Excess Injection Charge	$0.4209	-	$0.0134	$0.0000	$0.0010	$0.4353	-
	Minimum							
	ISS Capacity	$0.0000	-	-	-	-	$0.0000	-
	Injection Charge	$0.0252	-	-	-	-	$0.0252	-
	Withdrawal Charge	$0.0252	-	-	-	-	$0.0252	[8]
	Authorized Overrun/from Cust. Bal	$0.7282	$0.0149	$0.0009	($0.0002)	$0.0008	$0.7446	[8]
	Excess Injection Charge	$0.4209	-	$0.0134	$0.0000	$0.0010	$0.4353	-

[1] The base tariff rate is the effective rate on file with the FERC, excluding adjustments approved by the Commission.

[2] Storage Service Fuel Retention Percentage is 1.43%.

[3] Applies to withdrawals made under Rate Schedule GSS, Section 5.1.G.

[4] Daily Capacity Release Rate for GSS per Dt is $0.7184. Daily Capacity Release Rate for GSS-E per Dt is $1.4062.

[5] 858 over/under from previous TCRA period.

[6] Electric over/under from previous EPCA period.

[7] The Current Rate shall be increased for the Annual Charge Adjustment (ACA) as applicable.

[8] The applicable ACA rate is set forth on the FERC website (https://www.ferc.gov/industries-data/natural-gas/overview/general-information/annual-charges).

GSS RATE SCHEDULE
General Storage Service

1. Availability

1.1 This open-access Rate Schedule is available to any person ("Customer"), its assignee or Replacement Customer, without undue discrimination or preference, for the purchase of natural gas storage service from Eastern Gas Transmission and Storage, Inc. ("Pipeline"), where:

A. Customer has entered into a Service Agreement prior to April 1, 2002, or has been awarded capacity in accordance with Section 23, 24, or 43 of the General Terms and Conditions ("GT&C") of this Tariff. And,

B. Pipeline and Customer have entered into a Service Agreement that conforms to the form of Service Agreement for Part 284 storage service contained in this Tariff, in which Pipeline agrees to receive and redeliver stated quantities of gas to Customer at specified Delivery Point(s) at which facilities of Pipeline and Customer connect or at which gas is received and redelivered for the account of Customer. All necessary transportation services will be the sole responsibility of Customer unless otherwise agreed by Pipeline. And,

C. Customer is willing and able to pay the maximum rates hereunder, or such other rate to which Pipeline and Customer mutually agree in accordance with the General Terms and Conditions of this Tariff.

1.2 This Rate Schedule will be made available for new or expanded service only when, in Pipeline's judgment, it has capability to render such service after meeting its other obligations. Pipeline is not required to provide any requested services for which it does not have such available capability, or that would require Pipeline to construct or acquire any new facilities, except as provided in GT&C Section 37.

2. Applicability and Character of Service

This Rate Schedule shall apply to storage service rendered by Pipeline to Customer under the Service Agreement executed for service hereunder. Service rendered under this Rate Schedule, within the limitations described in Sections 7 and 8 below, shall be firm and shall not be subject to curtailment, interruption, or discontinuance except as provided herein or in the General Terms and Conditions of this Tariff.

3. Storage Demand and Capacity

The executed Service Agreement shall specify the Storage Demand and the Storage Capacity, as defined in the General Terms and Conditions of this Tariff.

4. Rate

The applicable rates and charges under this Rate Schedule shall include all applicable rates and charges set forth in the currently effective Statement of Applicable Rates of this Tariff, and these rates and charges are incorporated herein by reference.

5. Monthly Bill

5.1 For natural gas storage service under this Rate Schedule, Customer shall pay Pipeline each month the following:

A. A Storage Demand Charge. A charge per month per Dt of Storage Demand.

B. A Storage Capacity Charge. A charge per month per Dt of Storage Capacity.

C. An Injection Charge. A charge per Dt for all gas injected during the billing month.

D. A Withdrawal Charge. A charge per Dt for all gas withdrawn during the billing month.

E. A "From Customer's Balance" Charge. A charge per Dt for all gas withdrawn for Customer under Section 9 of this Rate Schedule, during the billing month.

F. Any Applicable Penalties. For excess daily injection overruns, injections in excess of Storage Capacity, and excess withdrawals, as required by Section 35.3 of the General Terms and Conditions.

G. A GSS-TETCO Charge. A charge per Dt for all gas withdrawn during the billing month. This charge shall apply only to service rendered under this Rate Schedule to former customers of Texas Eastern Transmission Corporation under Texas Eastern's Rate Schedule(s) SS-2 and/or SS-3.

H. Any other applicable rates, charges, and penalties as set forth in the General Terms and Conditions of this Tariff.

5.2 Fuel Retention. Pipeline will retain the percentage of gas received for injection as set forth on Tariff Record No. 10.30 as the Storage Service Fuel Retention Percentage.

5.3 In the event Customer has failed to meet the minimum turnover requirements of Section 8.7 below, Pipeline shall retain the quantity of gas required by Section 35.3.D of the General Terms and Conditions.

5.4 Notwithstanding the provisions of Sections 5.1-5.3, for any Day during the Summer Period that a Customer gives Pipeline both (a) notice under Section 7 of this Rate Schedule for injections into storage, and (b) notice under Section 8 of this Rate Schedule for withdrawals from storage, to the extent that quantities tendered for injection and the quantities requested to be withdrawn are equal and such quantities are redelivered by Pipeline at the same injection/withdrawal point for subsequent transportation, the injection withdrawal charges in Section 5.1 above shall not apply. Instead, there shall be a Usage Charge of $0.01 per dekatherm times the quantity of gas tendered for injection plus $0.01 per dekatherm times the quantity of gas requested for withdrawal. To the extent that such quantities tendered for injection and requested for withdrawal are not equal, the injection/withdrawal charges reflected on the currently effective Tariff Record No. 10.30 shall apply to the net difference.

5.5 Notwithstanding the general provision of Sections 4 and 5.1, above, if Pipeline and Customer mutually agree to negotiated rates for service hereunder, such negotiated rates shall apply in lieu of the otherwise applicable charges identified in Sections 5.1.A through 5.1.E and/or 5.1.G of this Rate Schedule.

6. Minimum Monthly Bill

Unless Pipeline and Customer agree otherwise as provided in Section 5.5, above, the minimum monthly bill shall be the sum of the Storage Demand Charge and the Storage Capacity Charge, and any other applicable charges as set forth in the General Termsand Conditions of Pipeline's Tariff .

7. Injections into Storage

7.1 Receipt Points. The executed Service Agreement shall specify the Receipt Point(s) for quantities tendered by Customer to Pipeline for storage injection, as follows:

A. All Customers receiving service under this Rate Schedule pursuant to a Service Agreement executed as a result of conversions from sales service as part of the Settlement in Docket No.

RP88-211 and/or the restructuring of Pipeline's services in Docket No. RS92-14, or any similar or related proceeding, may deliver gas to Pipeline for injection into storage in accordance with Section 7.2 below by nominating storage injection quantities under Customer's FT or FTNN Service Agreement at any Primary or Secondary Receipt Point specified therein, for delivery into storage; provided however, that nothing in this Section 7.1.A. shall excuse Customer from complying with any provision of the executed Service Agreement requiring delivery of gas for storage injection at specific Receipt Points.

B. As to any quantities injected by Pipeline for Customer's account which were delivered to Pipeline under Customer's FT or FTNN Service Agreement, payment of the demand and injection charges under this Rate Schedule, or, if applicable, such other charges mutually agreed upon by Pipeline and Customer, shall be deemed to satisfy Customer's obligation to pay the usage charge specified in Section 5.1.B., and the Transportation Service Fuel Retention Percentage specified in Section 5.2, of Rate Schedule FT or FTNN (excluding any applicable Tariff Record No. 10.70 provision).

C. Any Customers receiving service under this Rate Schedule pursuant to a Service Agreement that is not subject to Section 7.1.A. above may deliver gas to Pipeline under such Service Agreements in accordance with Section 7.2 below for injection at the Receipt Points specified in the executed Service Agreement. Such Receipt Points will be deemed to be Primary Receipt Points, as defined in the General Terms and Conditions of this Tariff, for quantities tendered up to the Daily Injection Entitlement described in Section 7.4.A. of this Rate Schedule.

7.2 General Procedure. For any Day when Customer desires Pipeline to store gas for its account under this Rate Schedule, it shall nominate to Pipeline in accordance with the General Terms and Conditions of this Tariff, specifying the quantity of gas it desires to have injected into storage on such Day. When Customer's nominations are confirmed and scheduled as required by this Tariff, Pipeline shall inject into storage for Customer's account on such Day, the quantity of gas so nominated, subject to the limitations set forth below in this Section 7.

7.3 Reserved.

7.4 Summer Period Injections.

A. Daily Injection Entitlement. Unless provided otherwise in Customer's Service Agreement, during any Summer Period, the quantity of gas which Customer shall be entitled to tender to Pipeline for injection into storage on any one Day is one- one hundred eightieth (1/180th) of Customer's Storage Capacity whenever Customer's Storage Gas Balance is less than or equal to one half of Customer's Storage Capacity, and one-two hundred fourteenth (1/214th) of Customer's Storage Capacity whenever Customer's Storage Gas Balance is greater than one half of Customer's Storage Capacity. These limitations upon daily injection entitlement are subject to the tolerance levels set forth in Section 35.3.A of the General Terms and Conditions.

B. Additional Injections. Any Customer may nominate to Pipeline under Section 7.2 above quantities for injection that are in addition to Customer's daily injection entitlements, as set forth in Section 7.4.A. Additional storage injections shall include gas injected into storage under Rate Schedule FTNN, to the extent such injections exceed Customer's daily entitlements. Pipeline shall endeavor to inject on any one Day, as much of Customer's storage nominations for such Day as operating conditions will permit. If the total of all nominations for storage injection for such Day together with Pipeline's injections into storage under Rate Schedule FTNN exceed the total quantity which Pipeline can inject or cause to be injected into storage on such Day, then the nominations for additional injections on such Day shall be allocated pro rata at each storage injection Receipt Point, based upon Customer's actual confirmed nomination to tender gas for injection at that Receipt Point.

C. Maximum Daily Injection Quantity. The maximum daily injection quantity for Customer shall be the sum of Customer's daily injection entitlement as set forth in Section 7.4.A. above, plus any additional injection quantities that Pipeline has agreed to accept pursuant to Section 7.4.B. above.

7.5 Winter Period Injections.

A. Unless provided otherwise in Customer's Service Agreement, during the Winter Period, Customer may tender to Pipeline quantities up to one two- hundred fourteenth (1/214th) of Customer's Storage Capacity for injection into storage, unless Pipeline has issued an operational flow order in accordance with Section 11B of the General Terms and Conditions, governing Winter Period injections. This limitation upon daily injections is subject to the tolerance levels set forth in Section 35.3.A of the General Terms and Conditions.

B. While such operational flow order is in effect:

1. From time to time, Pipeline may post, on its Electronic Bulletin Board ("EBB"), Receipt Points where Customer may tender quantities for injection and any conditions applicable to injection through such Receipt Points.

2. Pipeline may limit or refuse to accept injections not tendered in accordance with the operational flow order and EBB notice, unless Pipeline has expressly agreed in the executed Service Agreement to accept specific quantities at specified points on a firm basis during the Winter Period.

3. Pipeline will continue to inject gas for balancing purposes under FTNN, but Customer's Storage Gas Balance will not be credited with such quantities for the purposes of establishing Customer's daily entitlement to withdraw gas, as set forth in Section 8 of this Rate Schedule, until March 31 of the Winter Period in which the operational flow order is in effect, unless the gas is received by Pipeline at the Receipt Points specified in the EBB notice.

7.6 Pipeline shall be obligated to inject gas into storage for Customer's account only when Customer's Storage Gas Balance is less than Customer's Storage Capacity.

8. Withdrawals from Storage

8.1 Delivery Points. Each executed Service Agreement shall specify the Delivery Points for all gas withdrawn from storage.

A. If Customer does not require firm transportation by Pipeline from Pipeline's storage pools, or if Pipeline requires that deliveries be made to Customer at points distant from Pipeline's storage pools for operational reasons, the Delivery Point(s) shall be the point(s) of interconnection between Pipeline's facilities and Customer's or Customer's Transporter's facilities, as specified in the Service Agreement.

B. If Customer's Service Agreement specifies a single Receipt Point for injection quantities and Customer requires delivery of all withdrawal quantities at that same point, then the Delivery Point shall be the same as the Receipt Point.

C. If Customer requires transportation by Pipeline from Pipeline's storage pools then the Delivery Point(s) shall be the storage pool withdrawal point(s) specified in Customer's FT-GSS Service Agreement under Rate Schedule FT, Section 9 or Customer's FTNN-GSS Service Agreement under Rate Schedule FTNN, Section 8.

D. Such Delivery Point(s) will be deemed to be Primary Delivery Points, within the meaning set forth in the General Terms and Conditions of this Tariff.

8.2 General Procedure. For any Day when Customer desires the delivery of gas stored for Customer's account under this Rate Schedule, Customer shall nominate to Pipeline in accordance with the General Terms and Conditions of this Tariff the quantity of gas under this Rate Schedule during such Day. Upon any necessary confirmation, Pipeline shall thereupon deliver to Customer at the Delivery Points the quantity of gas so nominated, subject to each of the limitations set forth below in this Section 8.

8.3 Reserved.

8.4 Reduction in Customer's Daily Entitlement.

A. To the extent not otherwise provided in Customer's Service Agreement, if at the end of any Day Customer's Storage Gas Balance is less than or equal to 35 percent, but greater than 16 percent of Customer's Storage Capacity, then Pipeline's obligation to make deliveries to Customer shall be reduced by 8 percent of such Customer's Storage Demand. If Customer's Storage Gas Balance at the end of any Day is less than or equal to 16 percent, but greater than 10 percent of Customer's Storage Capacity, then Pipeline's obligation to make deliveries to Customer shall be reduced by 30 percent of such Customer's Storage Demand. If Customer's Storage Gas Balance at the end of any Day is less than or equal to 10 percent of Customer's Storage Capacity, then Pipeline's obligation to make deliveries to Customer shall be reduced by 37 percent of such Customer's Storage Demand.

B. If Customer's Storage Demand is equal to or less than one-one hundred fortieth (1/140th) of Customer's Storage Capacity, or if the Service Agreement provides that Pipeline has the right to interrupt the storage service, then the reductions in daily entitlement specified in Section 8.4.A. above shall not apply.

C. Transfers of storage inventory in accordance with Section 34 of the General Terms and Conditions shall be treated as a reduction in the Storage Gas Balance of the Transferring Customer, and an increase in the Storage Gas Balance of the Receiving Customer.

8.5 Minimum Storage Gas Balance and Additional Reduction in Customer's Daily Entitlement.

A. Each Customer must maintain a Storage Gas Balance equal to or greater than the following percentages of Storage Capacity on each Day during the following Winter Period months:

December	35%
January	35%
February	15%

B. If Customer does not maintain the required Storage Gas Balance then, commencing on such Day and continuing until Customer's Storage Gas Balance is at the level required under Section 8.5.A., Pipeline's obligation to make deliveries to Customer shall be reduced by 10 percent of the lesser of (1) Customer's Storage Demand or (2) Pipeline's obligation to deliver as established pursuant to Section 8.4 above.

8.6 Limitations on Withdrawals. During any calendar month, Pipeline shall not be obligated to deliver a daily average in excess of the following: (1) more than 70 percent of the Customer's daily entitlement described under Section 8.4, if Customer's Storage Demand is equal to or greater than one-sixtieth (1/60th) of Customer's Storage Capacity, or (2) more than 87.5 percent of the Customer's daily entitlement described under Section 8.4, if Customer's Storage Demand is less than one-sixtieth (1/60th) of Customer's Storage Capacity. Pipeline may issue an operational flow order to limit storage withdrawals, in accordance with Section 11B of the General Terms and Conditions of this Tariff. The limitations under this Section 8.6 shall

not apply to transfers of storage inventory in accordance with Section 34 of the General Terms and Conditions.

8.7 Minimum Turnover. The "Aggregate Minimum Turnover" obligation associated with each GSS capacity entitlement during the Minimum Turnover Period (i.e., each period beginning November 1 of any calendar year and ending April 15 of the next succeeding calendar year) shall be equal to the amount by which Customer's Storage Gas Balance as of November 1 exceeds 35 percent of Customer's Storage Capacity as of that same date. "Turnover" shall mean withdrawals from storage during the Minimum Turnover Period, as such may be adjusted as appropriate (whether upward or downward) for one or more Inventory Transfers (other than transfers of Winter Period Injections) during the Minimum Turnover Period effectuated pursuant to GT&C Section 34.4. If the required Aggregate Minimum Turnover has not been met or exceeded, then Customer(s) will be subject to the charges set forth in GT&C Section 35.3.D. The Aggregate Minimum Turnover obligation shall be the responsibility, in the first instance, of the Customer holding such GSS capacity entitlement on November 1 ("November 1 Customer"); however, the November 1 Customer (and any Storage Replacement Customer) may reassign responsibility for some or all of the Aggregate Minimum Turnover obligation through establishment of a Minimum Turnover obligation applicable to (1) any release of such GSS capacity entitlement, as specified in GT&C Section 23.2.F.14.c, and/or (2) any inventory transfer, as specified in GT&C Section 34.4.

9. Deliveries of Storage Gas in Excess of Entitlement

9.1 From Customer's Balance. Customer may request Pipeline to deliver gas to Customer on any Day in addition to the quantity that Customer is entitled to withdraw, as established pursuant to Section 8 of this Rate Schedule, and Pipeline will make such delivery if such gas is available from Customer's Storage Gas Balance, unless Pipeline issues an OFO pursuant to Section 11B.3.E. of the General Terms and Conditions because, in Pipeline's sole judgment, such delivery cannot be made without adverse effect upon deliveries to other Customers or to Pipeline's other operations.

9.2 For all quantities of gas delivered under the provisions of this Section, unless Pipeline and Customer agree otherwise, Customer shall pay Pipeline at the rate per Dt set forth at the currently effective Tariff Record No. 10.30 of this Tariff for Excess Deliveries from Customer's Balance.

10. General Terms and Conditions

The General Terms and Conditions of this Tariff, and any revisions thereof that may be proposed and made effective from time to time hereafter, to the extent not inconsistent with the provisions of this Rate Schedule, shall apply to and are made a part of this Rate Schedule.

GSS RATE SCHEDULE
General Storage Service , Section 7(c)

1. Availability

1.1 This Rate Schedule is available to any person ("Customer") for the purchase of natural gas storage service from Eastern Gas Transmission and Storage, Inc. ("Pipeline"), where Pipeline has obtained case-specific Commission authorization pursuant to Section 7(c) of the Natural Gas Act to serve Customer under this Rate Schedule or its predecessor, Rate Schedule GSS; and subsequent to January 6, 1998, also where

A. Customer has requested service under this Rate Schedule pursuant to Section 11A of the General Terms and Conditions of this Tariff. And,

B. After review and acceptance of such request by Pipeline, Pipeline and Customer have entered into a Service Agreement that conforms to the form of Service Agreement for Section 7(c) storage service contained in this Tariff, in which Pipeline agrees to receive and redeliver stated quantities of gas to Customer at specified Delivery Point(s) at which facilities of Pipeline and Customer connect or at which gas is received and redelivered for the account of Customer. All necessary transportation services will be the sole responsibility of Customer unless otherwise agreed by Pipeline. And,

C. Customer is willing and able to pay the maximum rates hereunder, or such other rate to which Pipeline and Customer mutually agree in accordance with the General Terms and Conditions of this Tariff.

1.2 This Rate Schedule will be made available for new or expanded service only when, in Pipeline's judgment, it has capability to render such service after meeting its other obligations. Pipeline is not required to provide any requested service for which it does not have available capability, or that would require Pipeline to file an application with the Commission, or that would require Pipeline to construct or acquire any new facilities.

2. Applicability and Character of Service

This Rate Schedule shall apply to storage service rendered by Pipeline to Customer under the service agreement executed for service hereunder. Service rendered under this Rate Schedule, within the limitations described in Sections 7 and 8 below, shall be firm and shall not be subject to curtailment, interruption, or discontinuance except as provided herein or in the General Terms and Conditions of this Tariff.

3. Storage Demand and Capacity

The executed Service Agreement shall specify the Storage Demand and the Storage Capacity, as defined in the General Terms and Conditions of this Tariff. For those Service Agreements executed prior to April 1, 1978 where the Storage Capacity and Storage Demand is expressed in Mcf, the Storage Capacity and Storage Demand in Dt for billing hereunder shall be determined based upon an average heating value of 1028 Btu.

4. Rate

The applicable rates and charges under this Rate Schedule shall include all applicable rates and charges set forth in the currently effective Statement of Applicable Rates of this Tariff, and these rates and charges are incorporated herein by reference.

5. Monthly Bill

5.1 For natural gas storage service under this Rate Schedule, Customer shall pay Pipeline each month the following:

A. A Storage Demand Charge. A charge per month per Dt of Storage Demand.

B. A Storage Capacity Charge. A charge per month per Dt of Storage Capacity.

C. An Injection Charge. A charge per Dt for all gas injected during the billing month.

D. A Withdrawal Charge. A charge per Dt for all gas withdrawn during the billing month.

E. A "From Customer's Balance" Charge. A charge per Dt for all gas withdrawn for Customer under Section 9 of this Rate Schedule, during the billing month.

F. Any Applicable Penalties. For excess daily injection overruns, injections in excess of Storage Capacity, and excess withdrawals, as required by Section 35.3 of the General Terms and Conditions.

G. A GSS-TETCO Charge. A charge per Dt for all gas withdrawn during the billing month. This charge shall apply only to service rendered under this Rate Schedule to former customers of Texas Eastern Transmission Corporation under Texas Eastern's Rate Schedule(s) SS-2 and/or SS-3.

H. Any other applicable rates, charges, and penalties as set forth in the General Terms and Conditions of this Tariff.

5.2 Fuel Retention. Pipeline will retain the percentage of gas received for injection as set forth on Tariff Record No. 10.30 as the Storage Service Fuel Retention Percentage.

5.3 In the event Customer has failed to meet the minimum turnover requirements of Section 8.7 below, Pipeline shall retain the quantity of gas required by Section 35.3.D of the General Terms and Conditions.

5.4 Notwithstanding the provisions of Sections 5.1-5.3, for any Day during the Summer Period that a Customer gives Pipeline both (a) notice under Section 7 of this Rate Schedule for injections into storage, and (b) notice under Section 8 of this Rate Schedule for withdrawals from storage, to the extent that quantities tendered for injection and the quantities requested to be withdrawn are equal and such quantities are redelivered by Pipeline at the same injection/withdrawal point for subsequent transportation, the injection withdrawal charges in Section 5.1 above shall not apply. Instead, there shall be a Usage Charge of $0.01 per dekatherm times the quantity of gas tendered for injection plus $0.01 per dekatherm times the quantity of gas requested for withdrawal. To the extent that such quantities tendered for injection and requested for withdrawal are not equal, the injection/withdrawal charges reflected on the currently effective Tariff Record No. 10.30 shall apply to the net difference.

5.5 Notwithstanding the general provision of Sections 4 and 5.1, above, if Pipeline and Customer mutually agree to negotiated rates for service hereunder, such negotiated rates shall apply in lieu of the otherwise applicable charges identified in Sections 5.1.A through 5.1.E and/or 5.1.G of this Rate Schedule.

6. Minimum Monthly Bill

Unless Pipeline and Customer agree otherwise as provided in Section 5.5, above, the minimum monthly bill shall be the sum of the Storage Demand Charge and the Storage Capacity Charge, and any other applicable charges as set forth in the General Terms and Conditions of Pipeline's Tariff.

7. Injections into Storage

7.1 Receipt Points. The executed Service Agreement shall specify the Receipt Point(s) for quantities tendered by Customer to Pipeline for storage injection. Such Receipt Points will be deemed to be Primary Receipt Points, as defined in the General Terms and Conditions of this Tariff, for quantities tendered up to the Daily Injection Entitlement described in Section 7.4.A. of this Rate Schedule.

7.2 General Procedure. For any Day when Customer desires Pipeline to store gas for its account under this Rate Schedule, it shall nominate to Pipeline in accordance with the General Terms and Conditions of this Tariff, specifying the quantity of gas it desires to have injected into storage on such Day. When Customer's nominations are confirmed and scheduled as required by this Tariff, Pipeline shall inject into storage for Customer's account on such Day, the quantity of gas so nominated, subject to the limitations set forth below in this Section 7.

7.3 Reserved.

7.4 Summer Period Injections.

A. Daily Injection Entitlement. Unless provided otherwise in Customer's Service Agreement, during any Summer Period, the quantity of gas which Customer shall be entitled to tender to Pipeline for injection into storage on any one Day is one- one hundred eightieth (1/180th) of Customer's Storage Capacity whenever Customer's Storage Gas Balance is less than or equal to one half of Customer's Storage Capacity, and one-two hundred fourteenth (1/214th) of Customer's Storage Capacity whenever Customer's Storage Gas Balance is greater than one half of Customer's Storage Capacity. These limitations upon daily injection entitlement are subject to the tolerance levels set forth in Section 35.3.A of the General Terms and Conditions.

B. Additional Injections. Any Customer may nominate to Pipeline under Section 7.2 above quantities for injection that are in addition to Customer's daily injection entitlements, as set forth in Section 7.4.A. Additional storage injections shall include gas injected into storage under Rate Schedule FTNN, to the extent such injections exceed Customer's daily entitlements. Pipeline shall endeavor to inject on any one Day, as much of Customer's storage nominations for such Day as operating conditions will permit. If the total of all nominations for storage injection for such Day together with Pipeline's injections into storage under Rate Schedule FTNN exceed the total quantity which Pipeline can inject or cause to be injected into storage on such Day, then the nominations for additional injections on such Day shall be allocated pro rata at each storage injection Receipt Point, based upon Customer's actual confirmed nomination to tender gas for injection at that Receipt Point.

C. Maximum Daily Injection Quantity. The maximum daily injection quantity for Customer shall be the sum of Customer's daily injection entitlement as set forth in Section 7.4.A. above, plus any additional injection quantities that Pipeline has agreed to accept pursuant to Section 7.4.B. above.

7.5 Winter Period Injections.

A. Unless provided otherwise in Customer's Service Agreement, during the Winter Period, Customer may tender to Pipeline quantities up to one two- hundred fourteenth (1/214th) of Customer's Storage Capacity for injection into storage, unless Pipeline has issued an operational flow order in accordance with Section 11B of the General Terms and Conditions, governing Winter Period injections. This limitation upon daily injections is subject to the tolerance levels set forth in Section 35.3.A of the General Terms and Conditions.

B. While such operational flow order is in effect:

1. From time to time, Pipeline may post, on its Electronic Bulletin Board ("EBB"), Receipt Points where Customer may tender quantities for injection and any conditions applicable to injection through such Receipt Points.

2. Pipeline may limit or refuse to accept injections not tendered in accordance with the operational flow order and EBB notice, unless Pipeline has expressly agreed in the executed Service Agreement to accept specific quantities at specified points on a firm basis during the Winter Period.

3. Pipeline will continue to inject gas for balancing purposes under FTNN, but Customer's Storage Gas Balance will not be credited with such quantities for the purposes of establishing Customer's daily entitlement to withdraw gas, as set forth in Section 8 of this Rate Schedule, until March 31 of the Winter Period in which the operational flow order is in effect, unless the gas is received by Pipeline at the Receipt Points specified in the EBB notice.

7.6 Pipeline shall be obligated to inject gas into storage for Customer's account only when Customer's Storage Gas Balance is less than Customer's Storage Capacity.

8. Withdrawals from Storage

8.1 Delivery Points. Each executed Service Agreement shall specify the Delivery Points for all gas withdrawn from storage.

A. If Customer does not require firm transportation by Pipeline from Pipeline's storage pools, or if Pipeline requires that deliveries be made to Customer at points distant from Pipeline's storage pools for operational reasons, the Delivery Point(s) shall be the point(s) of interconnection between Pipeline's facilities and Customer's or Customer's Transporter's facilities, as specified in the Service Agreement.

B. If Customer's Service Agreement specifies a single Receipt Point for injection quantities and Customer requires delivery of all withdrawal quantities at that same point, then the Delivery Point shall be the same as the Receipt Point.

C. If Customer requires transportation by Pipeline from Pipeline's storage pools then the Delivery Point(s) shall be those point(s) specified in the Service Agreement.

D. Such Delivery Point(s) will be deemed to be Primary Delivery Points, within the meaning set forth in the General Terms and Conditions of this Tariff.

8.2 General Procedure. For any Day when Customer desires the delivery of gas stored for Customer's account under this Rate Schedule, Customer shall nominate to Pipeline in accordance with the General Terms and Conditions of this Tariff the quantity of gas under this Rate Schedule during such Day. Upon any necessary confirmation, Pipeline shall thereupon deliver to Customer at the Delivery Points the quantity of gas so nominated, subject to each of the limitations set forth below in this Section 8.

8.3 Reserved.

8.4 Reduction in Customer's Daily Entitlement.

A. To the extent not otherwise provided in Customer's Service Agreement, if at the end of any Day Customer's Storage Gas Balance is less than or equal to 35 percent, but greater than 16 percent of Customer's Storage Capacity, then Pipeline's obligation to make deliveries to Customer shall be reduced by 8 percent of such Customer's Storage Demand. If Customer's Storage Gas Balance at the end of any Day is less than or equal to 16 percent, but greater than 10 percent of Customer's

Storage Capacity, then Pipeline's obligation to make deliveries to Customer shall be reduced by 30 percent of such Customer's Storage Demand. If Customer's Storage Gas Balance at the end of any Day is less than or equal to 10 percent of Customer's Storage Capacity, then Pipeline's obligation to make deliveries to Customer shall be reduced by 37 percent of such Customer's Storage Demand.

B. If Customer's Storage Demand is equal to or less than one-one hundred fortieth (1/140th) of Customer's Storage Capacity, or if the Service Agreement provides that Pipeline has the right to interrupt the storage service, then the reductions in daily entitlement specified in Section 8.4.A. above shall not apply.

C. Transfers of storage inventory in accordance with Section 34 of the General Terms and Conditions shall be treated as a reduction in the Storage Gas Balance of the Transferring Customer, and an increase in the Storage Gas Balance of the Receiving Customer.

8.5 Minimum Storage Gas Balance and Additional Reduction in Customer's Daily Entitlement.

A. Each Customer must maintain a Storage Gas Balance equal to or greater than the following percentages of Storage Capacity on each Day during the following Winter Period months:

December	35%
January	35%
February	15%

B. If Customer does not maintain the required Storage Gas Balance then, commencing on such Day and continuing until Customer's Storage Gas Balance is at the level required under Section 8.5.A., Pipeline's obligation to make deliveries to Customer shall be reduced by 10 percent of the lesser of (1) Customer's Storage Demand or (2) Pipeline's obligation to deliver as established pursuant to Section 8.4 above.

8.6 Limitations on Withdrawals. During any calendar month, Pipeline shall not be obligated to deliver a daily average in excess of the following: (1) more than 70 percent of the Customer's daily entitlement described under Section 8.4, if Customer's Storage Demand is equal to or greater than one-sixtieth (1/60th) of Customer's Storage Capacity, or (2) more than 87.5 percent of the Customer's daily entitlement described under Section 8.4, if Customer's Storage Demand is less than one-sixtieth (1/60th) of Customer's Storage Capacity. Pipeline may issue an operational flow order to limit storage withdrawals, in accordance with Section 11B of the General Terms and Conditions of this Tariff. The limitations under this Section 8.6 shall not apply to transfers of storage inventory in accordance with Section 34 of the General Terms and Conditions.

8.7 Minimum Turnover. By April 15 of any year, Customer's total withdrawals from storage since the beginning of the preceding, just completed, Winter Period must be equal to or greater than the amount by which Customer's Storage Gas Balance as of November 1 of the preceding calendar year exceeds 35 percent of Customer's Storage Capacity. If Customer has failed to withdraw such quantities, then Customer will be subject to the penalties of Section 35.3.D of the General Terms and Conditions.

9. Deliveries of Storage Gas in Excess of Etitlement

9.1 From Customer's Balance. Customer may request Pipeline to deliver gas to Customer on any Day in addition to the quantity that Customer is entitled to withdraw, as established pursuant to Section 8 of this Rate Schedule, and Pipeline will make such delivery if such gas is available from Customer's Storage Gas Balance, unless Pipeline issues an OFO pursuant to Section 11B.3.E. of the General Terms and Conditions because, in Pipeline's sole judgment, such delivery cannot be made without adverse effect upon deliveries to other Customers or to Pipeline's other operations.

9.2 For all quantities of gas delivered under the provisions of this Section, unless Pipeline and Customer agree otherwise, Customer shall pay Pipeline at the rate per Dt set forth at the currently effective Tariff Record No. 10.30 of this Tariff for Excess Deliveries from Customer's Balance.

10. General Terms and Conditions

The General Terms and Conditions of this Tariff, and any revisions thereof that may be proposed and made effective from time to time hereafter, to the extent not inconsistent with the provisions of this Rate Schedule, shall apply to and are made a part of this Rate Schedule.

FORM OF SERVICE AGREEMENT
APPLICABLE TO THE STORAGE OF NATURAL GAS
UNDER RATE SCHEDULE GSS
[*Where applicable* Section 7(c)]

AGREEMENT made as of this _____ _____, by and between Eastern Gas Transmission and Storage, Inc., a Delaware corporation, hereinafter called "Pipeline," and _____, a _____, hereinafter called "Customer."

[WHEREAS, _____]

WITNESSETH: That in consideration of the mutual covenants herein contained, the parties hereto agree that Pipeline will store natural gas for Customer during the term, at the rates and on the terms and conditions hereinafter provided and, with respect to gas delivered by each of the parties to the other, under and subject to Pipeline's Rate Schedule GSS and all of the General Terms and Conditions contained in Pipeline's FERC Gas Tariff and any revisions thereof that may be made effective hereafter:

ARTICLE I
Quantities

During the term of this Agreement, Customer agrees to deliver to Pipeline and Pipeline agrees to receive for storage in Pipeline's underground storage properties, and Pipeline agrees to inject or cause to be injected into storage for Customer's account, store, withdraw from storage, and deliver to Customer and Customer agrees to receive, quantities of natural gas as set forth on Exhibit A, attached hereto.

ARTICLE II
Rate

A. Unless otherwise mutually agreed in a written amendment to this Agreement, during the term of this Agreement, Customer shall pay Pipeline the maximum rates and charges provided under Rate Schedule GSS contained in Pipeline's effective FERC Gas Tariff or any effective superseding rate schedule *[*provided however*, description of any applicable rates and surcharges authorized by the Commission pursuant to a certificate or related proceeding].*

B. Pipeline shall have the right to propose, file and make effective with the FERC or any other body having jurisdiction, revisions to any applicable rate schedule, or to propose, file, and make effective superseding rate schedules for the purpose of changing the rate, charges, and other provisions thereof effective as to Customer; provided, however, that (i) Section 2 of Rate Schedule GSS "Applicability and Character of Service," (ii) term, (iii) quantities, and (iv) points of receipt and points of delivery shall not be subject to unilateral change under this Article. Said rate schedule or superseding rate schedule and any revisions thereof which shall be filed and made effective shall apply to and become a part of this Service Agreement. The filing of such changes and revisions to any applicable rate schedule shall be without prejudice to the right of Customer to contest or oppose such filing and its effectiveness.

C. The Storage Demand Charge and the Storage Capacity Charge provided in the aforesaid rate schedule shall commence on _____.

ARTICLE III
Term of Agreement

Subject to all the terms and conditions herein, this Agreement shall be effective as of _____, and shall continue in effect for a primary term through March 31, _____, and for subsequent annual terms of April 1

through March 31 thereafter, until either party terminates this Agreement by giving written notice to the other at least twenty-four months prior to the start of an annual term.

[For Agreements with terms of two years or less or for Agreements not subject to a right of first refusal as defined in Section 24 of the GT&C, Article III will read:

Subject to all the terms and conditions herein, the Agreement shall be effective as of _____, and shall continue in effect for a primary term through and including _____, and from year to year thereafter, until either party terminates this Agreement by giving written notice to the other at least _____ month(s) *(which shall correspond with the primary term of this Agreement)* prior to the expiration of the Agreement.]

For Agreements with a term entered into pursuant to Section 21.5 of the GT&C, Article III will read:

Subject to all the terms and conditions herein, this Agreement shall be effective as of _____ [or _____ *as agreed to pursuant to Section 21.5(b) of the General Terms and Conditions of Pipeline's FERC Gas Tariff*], and shall continue in effect for a primary term through March 31, _____ and for subsequent annual terms of April 1 through March 31 thereafter, until either party terminates this Agreement by giving written notice to the other at least twenty-four months prior to the start of an annual term [;provided however, *description of Negotiated Term pursuant to Section 21.5(a) or 21.5(c) of the General Terms and Conditions of Pipeline's FERC Gas Tariff, or any applicable term provision authorized by the Commission pursuant to a certificate or related proceeding*].

ARTICLE IV
Points of Receipt and Delivery

The Points of Receipt for Customer's tender of storage injection quantities, and the Point(s) of Delivery for withdrawals from storage shall be specified on Exhibit A, attached hereto.

ARTICLE V
Regulatory Approval

Performance under this Agreement by Pipeline and Customer shall be contingent upon Pipeline and Customer receiving all necessary regulatory or other governmental approvals upon terms satisfactory to each. Should Pipeline and Customer be denied such approvals to provide the service contemplated herein to construct and operate any necessary facilities therefor upon the terms and conditions requested in the application therefor, then Pipeline's and Customer's obligations hereunder shall terminate.

ARTICLE VI
Incorporation By Reference of Tariff Provisions

To the extent not inconsistent with the terms and conditions of this Agreement, the following provisions of Pipeline's effective FERC Gas Tariff, and any revisions thereof that may be made effective hereafter are hereby made applicable to and a part hereof by reference:

1. All of the provisions of Rate Schedule GSS or any effective superseding rate schedule or otherwise applicable rate schedule; and

2. All of the provisions of the General Terms and Conditions, as they may be revised or superseded from time to time.

ARTICLE VII
Miscellaneous

A. No change, modification or alteration of this Agreement shall be or become effective until executed in writing by the parties hereto; provided, however, that the parties do not intend that this Article VII.A. requires a further written agreement either prior to the making of any request or filing permitted under Article II hereof or prior to the effectiveness of such request or filing after Commission approval, provided further, however, that nothing in this Agreement shall be deemed to prejudice any position the parties may take as to whether the request, filing or revision permitted under Article II must be made under Section 7 or Section 4 of the Natural Gas Act.

B. Any notice, request or demand provided for in this Agreement, or any notice which either party may desire to give the other, shall be in writing and delivered in person, by postal mail or by email (followed by postal mail) sent to the following addresses:

Pipeline: Eastern Gas Transmission and Storage, Inc.
6603 West Broad Street
Richmond, Virginia 23230

Attention:_____
Officer / Title

Email: _____

Customer: _____

_____

_____

Attention: _____

Email: _____

or at such other address as either party shall designate by formal written notice.

C. No presumption shall operate in favor of or against either party hereto as a result of any responsibility either party may have had for drafting this Agreement.

D. The subject headings of the provisions of this Agreement are inserted for the purpose of convenient reference and are not intended to become a part of or to be considered in any interpretation of such provisions.

E. This Agreement may be executed in one or more counterparts, all of which shall constitute one and the same instrument and each of which shall be deemed to be an original. Execution and delivery of this Agreement may be obtained from the relevant party or parties by delivery in person, by postal mail or by pdf electronic copy (followed by postal mail delivery); provided, however, that any failure by a party to so deliver the original signed signature page shall not affect the validity or enforceability of this Agreement by or against that party.

[*Where applicable:*

ARTICLE VIII
Prior Contracts

This Agreement shall supersede and cancel, as of the effective date, the following agreements between Customer and Pipeline: *list of applicable agreements.]*

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed by their duly authorized officials as of the day and year first above written.

Eastern Gas Transmission and Storage, Inc.
(Pipeline)

By: _____
Its: _____
(Title)

_____
(Customer)

By:_____
Its: _____
(Title)

FORM OF SERVICE AGREEMENT
APPLICABLE TO THE STORAGE OF NATURAL GAS
UNDER RATE SCHEDULE GSS
[*Where applicable* Section 7(c)]

EXHIBIT A
To The Storage Service Agreement
Between Eastern Gas Transmission and Storage, Inc. and
_____

A. Quantities

The quantities of natural gas storage service which Customer may utilize under this Agreement, as well as Customer's applicable Billing Determinants, are as follows:

1. Storage Capacity of _____ Dekatherms (Dt), and

2. Storage Demand of _____ Dt per day.

B. Points of Receipt and Delivery

1. The Point(s) of Receipt for Customer's tender of storage injection quantities, the maximum quantities and pressures (if applicable)[*description of receipt* pressures *entered into pursuant to Section 5A of the General Terms and Conditions of Pipeline's Tariff]* for each point[s]) shall be as follows:

2. The Point(s) of Delivery for withdrawals from storage, the maximum quantities and pressures (if applicable)[*description of delivery pressures entered into pursuant to Section 5 of the General Terms and Conditions of Pipeline's Tariff]* for each point[s] shall be as follows:

[Pursuant to Section 8.1.C. and D. of Rate Schedule GSS, if Customer requires transportation by Pipeline from Pipeline's storage pools, then the Point of Delivery may be as follows:

The Point for Delivery for subsequent transportation to Customer for storage withdrawal quantities shall be the points of withdrawal from Pipeline's storage pools, which shall be primary only to the extent that a corresponding nomination for transportation from the points of withdrawal from Pipeline's storage pools is provided under the "Service Agreement Applicable to the Transportation of Natural Gas Under Rate Schedule [FT, FT-GSS, FTNN and/or FTNN-GSS"] between Pipeline and Customer dated _____, (Contract No. _____).*]*

[C. Miscellaneous

1. Description of Contractual ROFR pursuant to Section 24 of the General Terms and Conditions of Pipeline's FERC Gas Tariff.

2. Description of credit provisions related to a new or expansion project authorized by the Commission pursuant to a certificate or related proceeding or pursuant to Section 37.6 under the General Terms and Conditions of Pipeline's Tariff, which may include the following language: "The credit requirements applicable to this Agreement are set forth in that certain Precedent Agreement dated _____ between Pipeline and Customer."*]*

[Where Applicable: For Agreements Under Rate Schedule GSS Section 7(c), the following language may be used to include previously approved certificate provisions pursuant to the underlying Section 7(c) certificate order(s) issued by FERC:

3. Other Certificate Provisions*]*

Docket No. R-2023-XXXXXXX
Item 53.64(c)(3)

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:

(3) A complete listing of sources of gas supply transportation or storage and their costs, including shut-in and curtailed sources of supply, both inside and outside this Commonwealth considered by or offered to the utility but not chosen for use during the past 12 months, which 12-month period shall end 2 months prior to the date of the tariff filing, and the reasons why the gas supply, transportation or storage was not selected for use as a part of the utility's supply mix. A similar listing of gas sources, transportation or storage and associated projected costs offered or considered but not chosen to meet supply for the next 20 months, along with reasons for nonselection.

Response:

See the attached Schedule for a listing of PGW's current spot supply contracts that were chosen by the Company. As reflected in the attached schedule, there were no sources of supply offered to the utility and not chosen for use during the past 12 months.

All historic sources of supply, transportation and storage volumes and costs are identified in the response to 53.64(c)(1), Schedule 1.

All forecasted sources of supply, transportation and storage volumes and costs were identified in 53.64(c)(1), Schedule 3 as part of PGW's March 1, 2023 filing.

January 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$3.7150	PGW GATE	24,505	01/01/22	01/01/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$3.7150	PGW GATE	19,604	01/01/22	01/01/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$3.7150	PGW GATE	24,505	01/02/22	01/02/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$3.7150	PGW GATE	19,604	01/02/22	01/02/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$3.7150	PGW GATE	24,505	01/03/22	01/03/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$3.7150	PGW GATE	19,604	01/03/22	01/03/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$3.6850	PGW GATE	24,505	01/04/22	01/04/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$3.6850	PGW GATE	19,604	01/04/22	01/04/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$3.7700	PGW GATE	24,505	01/05/22	01/05/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$3.7700	PGW GATE	19,604	01/05/22	01/05/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$3.8800	PGW GATE	24,505	01/06/22	01/06/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$3.8800	PGW GATE	19,604	01/06/22	01/06/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$3.9300	PGW GATE	24,505	01/07/22	01/07/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$3.9300	PGW GATE	19,604	01/07/22	01/07/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$3.8800	PGW GATE	24,505	01/08/22	01/08/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$3.8800	PGW GATE	19,604	01/08/22	01/08/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$3.8800	PGW GATE	24,505	01/09/22	01/09/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$3.8800	PGW GATE	19,604	01/09/22	01/09/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$3.8800	PGW GATE	24,505	01/10/22	01/10/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$3.8800	PGW GATE	19,604	01/10/22	01/10/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.1750	PGW GATE	24,505	01/11/22	01/11/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.1750	PGW GATE	19,604	01/11/22	01/11/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.0950	PGW GATE	24,505	01/12/22	01/12/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.0950	PGW GATE	19,604	01/12/22	01/12/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.7250	PGW GATE	24,505	01/13/22	01/13/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.7250	PGW GATE	19,604	01/13/22	01/13/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.7850	PGW GATE	24,505	01/14/22	01/14/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.7850	PGW GATE	19,604	01/14/22	01/14/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.4650	PGW GATE	24,505	01/15/22	01/15/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.4650	PGW GATE	19,604	01/15/22	01/15/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.4650	PGW GATE	24,505	01/16/22	01/16/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.4650	PGW GATE	19,604	01/16/22	01/16/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.4650	PGW GATE	24,505	01/17/22	01/17/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.4650	PGW GATE	19,604	01/17/22	01/17/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.4650	PGW GATE	24,505	01/18/22	01/18/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.4650	PGW GATE	19,604	01/18/22	01/18/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.4750	PGW GATE	24,505	01/19/22	01/19/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.4750	PGW GATE	19,604	01/19/22	01/19/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.8200	PGW GATE	24,505	01/20/22	01/20/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.8200	PGW GATE	19,604	01/20/22	01/20/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.1700	PGW GATE	24,505	01/21/22	01/21/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.1700	PGW GATE	19,604	01/21/22	01/21/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.0450	PGW GATE	24,505	01/22/22	01/22/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.0450	PGW GATE	19,604	01/22/22	01/22/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.0450	PGW GATE	24,505	01/23/22	01/23/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.0450	PGW GATE	19,604	01/23/22	01/23/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.0450	PGW GATE	24,505	01/24/22	01/24/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.0450	PGW GATE	19,604	01/24/22	01/24/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.0950	PGW GATE	24,505	01/25/22	01/25/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.0950	PGW GATE	19,604	01/25/22	01/25/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.1550	PGW GATE	24,505	01/26/22	01/26/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.1550	PGW GATE	19,604	01/26/22	01/26/22

January 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.4150	PGW GATE	24,505	01/27/22	01/27/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.4150	PGW GATE	19,604	01/27/22	01/27/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.5500	PGW GATE	24,505	01/28/22	01/28/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.5500	PGW GATE	19,604	01/28/22	01/28/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.7450	PGW GATE	24,505	01/29/22	01/29/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.7450	PGW GATE	19,604	01/29/22	01/29/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.7450	PGW GATE	24,505	01/30/22	01/30/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.7450	PGW GATE	19,604	01/30/22	01/30/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.7450	PGW GATE	24,505	01/31/22	01/31/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.7450	PGW GATE	19,604	01/31/22	01/31/22
Firm	TGPL-1003691	STA 30 Freedom Energy	Accepted	STA 30	5,000	$4.0370	PGW GATE	4,966	01/01/22	01/31/22
Firm	TGPL-1003691	STA 45 Freedom Energy	Accepted	STA 45	5,000	$4.0745	PGW GATE	4,978	01/01/22	01/31/22
Firm	TGPL-1003691	STA 85 MGAG - Macquarie	Accepted	STA 85	3,500	$3.8350	PGW GATE	3,431	01/01/22	01/31/22
Firm	TGPL-1003691	STA 85 MGAG - RBC	Accepted	STA 85	8,000	$3.7250	PGW GATE	7,842	01/01/22	01/31/22
Firm	TGPL-1003691	STA 85 MGAG	Accepted	STA 85	10,000	$4.0500	PGW GATE	9,802	01/01/22	01/31/22
Firm	TGPL-1003691	STA 85 PEAK - MS	Accepted	STA 85	7,835	$3.8000	PGW GATE	7,680	01/01/22	01/31/22
Firm	TGPL-1003691	STA 85 MGAG - Citibank	Accepted	STA 85	3,500	$3.8000	PGW GATE	3,431	01/01/22	01/31/22
Firm	TGPL-1003691	STA 85 Macquarie	Accepted	STA 85	14,500	$4.0900	PGW GATE	14,213	01/01/22	01/31/22
Firm	TGPL-1003691	STA 85 PEAK - SEA	Accepted	STA 85	9,252	$3.7800	PGW GATE	9,069	01/01/22	01/31/22
No Spot purchases for Transco										
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$2.7300	PGW GATE	24,508	01/01/22	01/01/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$2.7250	PGW GATE	9,803	01/01/22	01/01/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$2.7300	PGW GATE	24,508	01/02/22	01/02/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$2.7250	PGW GATE	9,803	01/02/22	01/02/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$2.7300	PGW GATE	24,508	01/03/22	01/03/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$2.7250	PGW GATE	9,803	01/03/22	01/03/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.0800	PGW GATE	24,508	01/04/22	01/04/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.0750	PGW GATE	9,803	01/04/22	01/04/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.2250	PGW GATE	24,508	01/05/22	01/05/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.2200	PGW GATE	9,803	01/05/22	01/05/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.5200	PGW GATE	24,508	01/06/22	01/06/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.5150	PGW GATE	9,803	01/06/22	01/06/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.5850	PGW GATE	24,507	01/07/22	01/07/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.5800	PGW GATE	9,803	01/07/22	01/07/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	9,680	$3.5950	PGW GATE	9,489	01/08/22	01/08/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.5900	PGW GATE	9,803	01/08/22	01/08/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.5950	PGW GATE	24,508	01/09/22	01/09/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.5900	PGW GATE	9,803	01/09/22	01/09/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.5950	PGW GATE	24,508	01/10/22	01/10/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.5900	PGW GATE	9,803	01/10/22	01/10/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.7050	PGW GATE	24,507	01/11/22	01/11/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.7000	PGW GATE	9,803	01/11/22	01/11/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.6750	PGW GATE	24,508	01/12/22	01/12/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.6700	PGW GATE	9,803	01/12/22	01/12/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.2800	PGW GATE	24,508	01/13/22	01/13/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.2750	PGW GATE	9,803	01/13/22	01/13/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.2700	PGW GATE	24,508	01/14/22	01/14/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.2650	PGW GATE	9,803	01/14/22	01/14/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.0150	PGW GATE	24,507	01/15/22	01/15/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.0100	PGW GATE	9,803	01/15/22	01/15/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.0150	PGW GATE	24,508	01/16/22	01/16/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.0100	PGW GATE	9,803	01/16/22	01/16/22

January 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.0150	PGW GATE	24,508	01/17/22	01/17/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.0100	PGW GATE	9,803	01/17/22	01/17/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.0150	PGW GATE	24,508	01/18/22	01/18/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.0100	PGW GATE	9,803	01/18/22	01/18/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.3300	PGW GATE	24,508	01/19/22	01/19/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.3250	PGW GATE	9,803	01/19/22	01/19/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.3850	PGW GATE	24,508	01/20/22	01/20/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.3800	PGW GATE	9,803	01/20/22	01/20/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.9250	PGW GATE	24,507	01/21/22	01/21/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.9200	PGW GATE	9,803	01/21/22	01/21/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.7250	PGW GATE	24,508	01/22/22	01/22/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.7200	PGW GATE	9,803	01/22/22	01/22/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.7250	PGW GATE	24,508	01/23/22	01/23/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.7200	PGW GATE	9,803	01/23/22	01/23/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.7250	PGW GATE	24,508	01/24/22	01/24/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.7200	PGW GATE	9,803	01/24/22	01/24/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.9750	PGW GATE	24,508	01/25/22	01/25/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.9700	PGW GATE	9,803	01/25/22	01/25/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.8700	PGW GATE	24,507	01/26/22	01/26/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.8650	PGW GATE	9,803	01/26/22	01/26/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.1050	PGW GATE	24,508	01/27/22	01/27/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.1000	PGW GATE	9,803	01/27/22	01/27/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.2850	PGW GATE	24,508	01/28/22	01/28/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.2800	PGW GATE	9,803	01/28/22	01/28/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.1600	PGW GATE	24,507	01/29/22	01/29/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$5.1550	PGW GATE	9,803	01/29/22	01/29/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.1600	PGW GATE	24,508	01/30/22	01/30/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$5.1550	PGW GATE	9,803	01/30/22	01/30/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.1600	PGW GATE	24,508	01/31/22	01/31/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$5.1550	PGW GATE	9,803	01/31/22	01/31/22
Firm	Tetco-800514	M2 30" Macquarie	Accepted	M2 30"	861	$3.1650	PGW GATE	844	01/01/22	01/31/22
Firm	Tetco-800514	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$2.7500	PGW GATE	4,902	01/01/22	01/31/22
Firm	Tetco-800514	M2 30" Hartree Partners	Accepted	M2 30"	12,500	$3.1650	PGW GATE	12,254	01/01/22	01/31/22
Firm	Tetco-800515	M2 30" Macquarie	Accepted	M2 30"	11,639	$3.1650	PGW GATE	11,410	01/01/22	01/31/22
Firm	Tetco-800515	M2 30" Twin Eagle	Accepted	M2 30"	5,444	$3.1700	PGW GATE	5,337	01/01/22	01/31/22
Firm	Tetco-800515	M2 30" MGAG - TD Bank	Accepted	M2 30"	1,278	$2.8625	PGW GATE	1,253	01/01/22	01/31/22
Firm	Tetco-330791	M2 30" EQT	Accepted	M2 30" Crayne	5,000	$3.2200	PGW GATE	5,000	01/01/22	01/31/22
Firm	Tetco-800232	M2 30" MGAG - TD Bank	Accepted	M2 30"	1,722	$2.8625	PGW GATE	1,688	01/01/22	01/31/22
Firm	Tetco-800232	M2 30" PEAK - Morgan Stanley	Accepted	M2 30"	12,086	$2.8700	PGW GATE	11,848	01/01/22	01/31/22
No Spot purchases for Tetco										

Tetco- Texas Eastern Pipeline
Receipt Points
STX-South Texas
ETX-East Texas
WLA-West Louisiana
ELA -East Louisiana
M1 30" M1 24" - Market Area 1 on 30" Pipeline and 24" Pipeline
M2 and M3 - Market Areas
PGW City Gate is in M3

Transco
Station 30 - Zone 1
Station 45 - Zone 2
Station 65 - Zone 3
Station 85 - Zone 4
Zone 5
Zone 6 - PGW City Gate

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Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.7850	PGW GATE	24,505	02/01/22	02/01/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.7850	PGW GATE	19,604	02/01/22	02/01/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.5000	PGW GATE	24,505	02/02/22	02/02/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.5000	PGW GATE	19,604	02/02/22	02/02/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$6.4100	PGW GATE	24,505	02/03/22	02/03/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.4100	PGW GATE	0	02/03/22	02/03/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.8100	PGW GATE	24,505	02/04/22	02/04/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.8100	PGW GATE	19,604	02/04/22	02/04/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.3200	PGW GATE	24,505	02/05/22	02/05/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.3200	PGW GATE	19,604	02/05/22	02/05/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.3200	PGW GATE	24,505	02/06/22	02/06/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.3200	PGW GATE	19,604	02/06/22	02/06/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.3200	PGW GATE	24,505	02/07/22	02/07/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.3200	PGW GATE	19,604	02/07/22	02/07/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.3900	PGW GATE	24,505	02/08/22	02/08/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.3900	PGW GATE	19,604	02/08/22	02/08/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.4050	PGW GATE	24,505	02/09/22	02/09/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.4050	PGW GATE	19,604	02/09/22	02/09/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.1350	PGW GATE	24,505	02/10/22	02/10/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.1350	PGW GATE	19,604	02/10/22	02/10/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$3.8700	PGW GATE	0	02/11/22	02/11/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$3.8700	PGW GATE	0	02/11/22	02/11/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.0050	PGW GATE	24,505	02/12/22	02/12/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.0050	PGW GATE	0	02/12/22	02/12/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.0050	PGW GATE	24,505	02/13/22	02/13/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.0050	PGW GATE	0	02/13/22	02/13/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.0050	PGW GATE	24,505	02/14/22	02/14/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.0050	PGW GATE	0	02/14/22	02/14/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.1150	PGW GATE	24,505	02/15/22	02/15/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.1150	PGW GATE	19,604	02/15/22	02/15/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.2400	PGW GATE	24,505	02/16/22	02/16/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.2400	PGW GATE	19,604	02/16/22	02/16/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.3500	PGW GATE	0	02/17/22	02/17/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.3500	PGW GATE	0	02/17/22	02/17/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.6450	PGW GATE	24,505	02/18/22	02/18/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.6450	PGW GATE	19,604	02/18/22	02/18/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.5700	PGW GATE	24,505	02/19/22	02/19/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.5700	PGW GATE	19,604	02/19/22	02/19/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.5700	PGW GATE	24,505	02/20/22	02/20/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.5700	PGW GATE	19,604	02/20/22	02/20/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.5700	PGW GATE	24,505	02/21/22	02/21/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.5700	PGW GATE	19,604	02/21/22	02/21/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.5700	PGW GATE	24,505	02/22/22	02/22/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.5700	PGW GATE	19,604	02/22/22	02/22/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.4500	PGW GATE	0	02/23/22	02/23/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.4500	PGW GATE	0	02/23/22	02/23/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.6200	PGW GATE	24,505	02/24/22	02/24/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.6200	PGW GATE	19,604	02/24/22	02/24/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.7750	PGW GATE	24,505	02/25/22	02/25/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.7750	PGW GATE	19,604	02/25/22	02/25/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.5700	PGW GATE	24,505	02/26/22	02/26/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.5700	PGW GATE	19,604	02/26/22	02/26/22

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Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.5700	PGW GATE	24,505	02/27/22	02/27/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.5700	PGW GATE	19,604	02/27/22	02/27/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.5700	PGW GATE	24,505	02/28/22	02/28/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	18,193	$4.5700	PGW GATE	17,833	02/28/22	02/28/22
Firm	TGPL-1003691	STA 30 Freedom Energy	Accepted	STA 30	5,000	$6.2870	PGW GATE	4,966	02/01/22	02/12/22
Firm	TGPL-1003691	STA 30 Freedom Energy	Accepted	STA 30	1,721	$6.2870	PGW GATE	1,709	02/13/22	02/13/22
Firm	TGPL-1003691	STA 30 Freedom Energy	Accepted	STA 30	5,000	$6.2870	PGW GATE	4,966	02/14/22	02/15/22
Firm	TGPL-1003691	STA 30 Freedom Energy	Accepted	STA 30	8,279	$6.2870	PGW GATE	8,223	02/16/22	02/16/22
Firm	TGPL-1003691	STA 30 Freedom Energy	Accepted	STA 30	5,000	$6.2870	PGW GATE	4,966	02/17/22	02/28/22
Firm	TGPL-1003691	STA 45 Freedom Energy	Accepted	STA 45	5,000	$6.3745	PGW GATE	4,978	02/01/22	02/28/22
Firm	TGPL-1003691	STA 85 MGAG - Macquarie	Accepted	STA 85	3,500	$6.1150	PGW GATE	3,431	02/01/22	02/28/22
Firm	TGPL-1003691	STA 85 MGAG - RBC	Accepted	STA 85	8,000	$6.0050	PGW GATE	7,842	02/01/22	02/28/22
Firm	TGPL-1003691	STA 85 MGAG	Accepted	STA 85	10,000	$6.3300	PGW GATE	9,802	02/01/22	02/28/22
Firm	TGPL-1003691	STA 85 PEAK - MS	Accepted	STA 85	7,835	$6.0800	PGW GATE	7,680	02/01/22	02/28/22
Firm	TGPL-1003691	STA 85 MGAG - Citibank	Accepted	STA 85	3,500	$6.0800	PGW GATE	3,431	02/01/22	02/28/22
Firm	TGPL-1003691	STA 85 Macquarie	Accepted	STA 85	14,500	$6.3700	PGW GATE	14,213	02/01/22	02/28/22
Firm	TGPL-1003691	STA 85 PEAK - SEA	Accepted	STA 85	9,252	$6.0600	PGW GATE	9,069	02/01/22	02/28/22
Spot	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.0250	PGW GATE	19,604	02/12/22	02/12/22
Spot	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	18,030	$4.0250	PGW GATE	17,673	02/13/22	02/13/22
Spot	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.0250	PGW GATE	19,604	02/14/22	02/14/22
Spot	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	1,970	$4.0250	PGW GATE	1,931	02/16/22	02/16/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.9850	PGW GATE	24,508	02/01/22	02/01/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.9800	PGW GATE	9,803	02/01/22	02/01/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.0750	PGW GATE	24,508	02/02/22	02/02/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$5.0700	PGW GATE	9,803	02/02/22	02/02/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.8450	PGW GATE	24,508	02/03/22	02/03/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.8400	PGW GATE	0	02/03/22	02/03/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.3950	PGW GATE	24,508	02/04/22	02/04/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$5.3900	PGW GATE	9,803	02/04/22	02/04/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.0000	PGW GATE	24,507	02/05/22	02/05/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.9950	PGW GATE	9,803	02/05/22	02/05/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.0000	PGW GATE	24,508	02/06/22	02/06/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.9950	PGW GATE	9,803	02/06/22	02/06/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.0000	PGW GATE	24,508	02/07/22	02/07/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.9950	PGW GATE	9,803	02/07/22	02/07/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.9800	PGW GATE	24,508	02/08/22	02/08/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.9750	PGW GATE	9,803	02/08/22	02/08/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.8800	PGW GATE	24,508	02/09/22	02/09/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.8750	PGW GATE	9,803	02/09/22	02/09/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.6850	PGW GATE	24,508	02/10/22	02/10/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.6800	PGW GATE	9,803	02/10/22	02/10/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.3350	PGW GATE	0	02/11/22	02/11/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.3300	PGW GATE	0	02/11/22	02/11/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.5900	PGW GATE	24,508	02/12/22	02/12/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.5850	PGW GATE	9,803	02/12/22	02/12/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.5900	PGW GATE	24,508	02/13/22	02/13/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.5850	PGW GATE	9,803	02/13/22	02/13/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.5900	PGW GATE	24,507	02/14/22	02/14/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.5850	PGW GATE	9,803	02/14/22	02/14/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.8350	PGW GATE	24,508	02/15/22	02/15/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.8300	PGW GATE	9,803	02/15/22	02/15/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.6350	PGW GATE	24,508	02/16/22	02/16/22

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Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$3.6300	PGW GATE	9,803	02/16/22	02/16/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.6650	PGW GATE	0	02/17/22	02/17/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.6600	PGW GATE	0	02/17/22	02/17/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.1950	PGW GATE	0	02/18/22	02/18/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.1900	PGW GATE	0	02/18/22	02/18/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.1200	PGW GATE	24,508	02/19/22	02/19/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.1150	PGW GATE	9,803	02/19/22	02/19/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.1200	PGW GATE	24,508	02/20/22	02/20/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.1150	PGW GATE	9,803	02/20/22	02/20/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.1200	PGW GATE	24,508	02/21/22	02/21/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.1150	PGW GATE	9,803	02/21/22	02/21/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.1200	PGW GATE	24,508	02/22/22	02/22/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.1150	PGW GATE	9,803	02/22/22	02/22/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.8650	PGW GATE	0	02/23/22	02/23/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.8600	PGW GATE	0	02/23/22	02/23/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.2700	PGW GATE	24,508	02/24/22	02/24/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.2650	PGW GATE	0	02/24/22	02/24/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.5200	PGW GATE	24,508	02/25/22	02/25/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.5150	PGW GATE	9,803	02/25/22	02/25/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.2150	PGW GATE	24,508	02/26/22	02/26/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.2100	PGW GATE	9,803	02/26/22	02/26/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.2150	PGW GATE	24,508	02/27/22	02/27/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.2100	PGW GATE	9,803	02/27/22	02/27/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.2150	PGW GATE	24,508	02/28/22	02/28/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.2100	PGW GATE	9,803	02/28/22	02/28/22
Firm	Tetco-800514	M2 30" Macquarie	Accepted	M2 30"	861	$5.7250	PGW GATE	844	02/01/22	02/28/22
Firm	Tetco-800514	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$5.3100	PGW GATE	4,902	02/01/22	02/28/22
Firm	Tetco-800514	M2 30" Hartree Partners	Accepted	M2 30"	12,500	$5.7250	PGW GATE	12,254	02/01/22	02/28/22
Firm	Tetco-800515	M2 30" Macquarie	Accepted	M2 30"	11,639	$5.7250	PGW GATE	11,410	02/01/22	02/28/22
Firm	Tetco-800515	M2 30" Twin Eagle	Accepted	M2 30"	2,364	$5.7300	PGW GATE	2,317	02/01/22	02/01/22
Firm	Tetco-800515	M2 30" Twin Eagle	Accepted	M2 30"	5,444	$5.7300	PGW GATE	5,337	02/02/22	02/28/22
Firm	Tetco-800515	M2 30" MGAG - TD Bank	Accepted	M2 30"	1,278	$5.4225	PGW GATE	1,253	02/01/22	02/28/22
Firm	Tetco-330791	M2 30" EQT	Accepted	M2 30" Crayne	5,000	$5.7800	PGW GATE	5,000	02/01/22	02/28/22
Firm	Tetco-800232	M2 30" MGAG - TD Bank	Accepted	M2 30"	1,722	$5.4225	PGW GATE	1,688	02/01/22	02/28/22
Firm	Tetco-800232	M2 30" PEAK - Morgan Stanley	Accepted	M2 30"	12,086	$5.4300	PGW GATE	11,848	02/01/22	02/28/22
No Spot purchases for Tetco										

Tetco- Texas Eastern Pipeline
Receipt Points
STX-South Texas
ETX-East Texas
WLA-West Louisiana
ELA -East Louisiana
M1 30" M1 24" - Market Area 1 on 30" Pipeline and 24" Pipeline
M2 and M3 - Market Areas
PGW City Gate is in M3

Transco
Station 30 - Zone 1
Station 45 - Zone 2
Station 65 - Zone 3
Station 85 - Zone 4
Zone 5
Zone 6 - PGW City Gate

March 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.2700	PGW GATE	0	03/01/22	03/01/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.2700	PGW GATE	0	03/01/22	03/01/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.2800	PGW GATE	0	03/02/22	03/02/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.2800	PGW GATE	0	03/02/22	03/02/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.6300	PGW GATE	24,505	03/03/22	03/03/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.6300	PGW GATE	19,604	03/03/22	03/03/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.5800	PGW GATE	24,505	03/04/22	03/04/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.5800	PGW GATE	19,604	03/04/22	03/04/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.7050	PGW GATE	0	03/05/22	03/05/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.7050	PGW GATE	0	03/05/22	03/05/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.7050	PGW GATE	0	03/06/22	03/06/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.7050	PGW GATE	0	03/06/22	03/06/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.7050	PGW GATE	0	03/07/22	03/07/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.7050	PGW GATE	0	03/07/22	03/07/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.8300	PGW GATE	0	03/08/22	03/08/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.8300	PGW GATE	0	03/08/22	03/08/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	15,000	$4.6250	PGW GATE	14,703	03/09/22	03/09/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.6250	PGW GATE	0	03/09/22	03/09/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	15,000	$4.5450	PGW GATE	14,703	03/10/22	03/10/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.5450	PGW GATE	0	03/10/22	03/10/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.5700	PGW GATE	0	03/11/22	03/11/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.5700	PGW GATE	0	03/11/22	03/11/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.7600	PGW GATE	24,505	03/12/22	03/12/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.7600	PGW GATE	19,604	03/12/22	03/12/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.7600	PGW GATE	24,505	03/13/22	03/13/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.7600	PGW GATE	19,604	03/13/22	03/13/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.7600	PGW GATE	24,505	03/14/22	03/14/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$4.7600	PGW GATE	19,604	03/14/22	03/14/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.5650	PGW GATE	0	03/15/22	03/15/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.5650	PGW GATE	0	03/15/22	03/15/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.4100	PGW GATE	0	03/16/22	03/16/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.4100	PGW GATE	0	03/16/22	03/16/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.5550	PGW GATE	0	03/17/22	03/17/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.5550	PGW GATE	0	03/17/22	03/17/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.7150	PGW GATE	0	03/18/22	03/18/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.7150	PGW GATE	0	03/18/22	03/18/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.7750	PGW GATE	0	03/19/22	03/19/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.7750	PGW GATE	0	03/19/22	03/19/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.7750	PGW GATE	0	03/20/22	03/20/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.7750	PGW GATE	0	03/20/22	03/20/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.7750	PGW GATE	0	03/21/22	03/21/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.7750	PGW GATE	0	03/21/22	03/21/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.6550	PGW GATE	0	03/22/22	03/22/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.6550	PGW GATE	0	03/22/22	03/22/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.9300	PGW GATE	0	03/23/22	03/23/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.9300	PGW GATE	0	03/23/22	03/23/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$5.1200	PGW GATE	0	03/24/22	03/24/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.1200	PGW GATE	0	03/24/22	03/24/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$5.0350	PGW GATE	0	03/25/22	03/25/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.0350	PGW GATE	0	03/25/22	03/25/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.3850	PGW GATE	24,505	03/26/22	03/26/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.3850	PGW GATE	19,604	03/26/22	03/26/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.3850	PGW GATE	24,505	03/27/22	03/27/22

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Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.3850	PGW GATE	19,604	03/27/22	03/27/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.3850	PGW GATE	24,505	03/28/22	03/28/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.3850	PGW GATE	19,604	03/28/22	03/28/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.3900	PGW GATE	24,505	03/29/22	03/29/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.3900	PGW GATE	19,604	03/29/22	03/29/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	10,000	$5.2700	PGW GATE	9,802	03/30/22	03/30/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.2700	PGW GATE	0	03/30/22	03/30/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$5.3300	PGW GATE	0	03/31/22	03/31/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.3300	PGW GATE	0	03/31/22	03/31/22
Firm	TGPL-1003691	STA 30 Freedom Energy	Accepted	STA 30	5,000	$4.4970	PGW GATE	4,966	03/01/22	03/31/22
Firm	TGPL-1003691	STA 45 Freedom Energy	Accepted	STA 45	5,000	$4.5745	PGW GATE	4,978	03/01/22	03/01/22
Firm	TGPL-1003691	STA 45 Freedom Energy	Accepted	STA 45	4,959	$4.5745	PGW GATE	4,937	03/02/22	03/02/22
Firm	TGPL-1003691	STA 45 Freedom Energy	Accepted	STA 45	5,000	$4.5745	PGW GATE	4,978	03/03/22	03/31/22
Firm	TGPL-1003691	STA 85 MGAG - Macquarie	Accepted	STA 85	3,500	$4.3350	PGW GATE	3,431	03/01/22	03/31/22
Firm	TGPL-1003691	STA 85 MGAG - RBC	Accepted	STA 85	8,000	$4.2250	PGW GATE	7,842	03/01/22	03/31/22
Firm	TGPL-1003691	STA 85 MGAG	Accepted	STA 85	10,000	$4.5500	PGW GATE	9,802	03/01/22	03/31/22
Firm	TGPL-1003691	STA 85 PEAK - MS	Accepted	STA 85	7,835	$4.3000	PGW GATE	7,680	03/01/22	03/31/22
Firm	TGPL-1003691	STA 85 MGAG - Citibank	Accepted	STA 85	3,500	$4.3000	PGW GATE	3,431	03/01/22	03/31/22
Firm	TGPL-1003691	STA 85 Macquarie	Accepted	STA 85	14,500	$4.5900	PGW GATE	14,213	03/01/22	03/31/22
Firm	TGPL-1003691	STA 85 PEAK - SEA	Accepted	STA 85	9,252	$4.2800	PGW GATE	9,069	03/01/22	03/31/22
No Spot purchases for Transco										
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.8450	PGW GATE	0	03/01/22	03/01/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.8400	PGW GATE	0	03/01/22	03/01/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.8600	PGW GATE	0	03/02/22	03/02/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.8550	PGW GATE	0	03/02/22	03/02/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.2600	PGW GATE	0	03/03/22	03/03/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.2550	PGW GATE	0	03/03/22	03/03/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.1750	PGW GATE	24,625	03/04/22	03/04/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.1700	PGW GATE	0	03/04/22	03/04/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.8550	PGW GATE	0	03/05/22	03/05/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.8500	PGW GATE	0	03/05/22	03/05/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.8550	PGW GATE	0	03/06/22	03/06/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.8500	PGW GATE	0	03/06/22	03/06/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.8550	PGW GATE	0	03/07/22	03/07/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.8500	PGW GATE	0	03/07/22	03/07/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.2850	PGW GATE	0	03/08/22	03/08/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.2800	PGW GATE	0	03/08/22	03/08/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.1300	PGW GATE	24,625	03/09/22	03/09/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.1250	PGW GATE	9,850	03/09/22	03/09/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.0950	PGW GATE	24,625	03/10/22	03/10/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.0900	PGW GATE	9,850	03/10/22	03/10/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.0100	PGW GATE	0	03/11/22	03/11/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.0050	PGW GATE	0	03/11/22	03/11/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.4900	PGW GATE	24,625	03/12/22	03/12/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.4850	PGW GATE	9,850	03/12/22	03/12/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.4900	PGW GATE	24,625	03/13/22	03/13/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.4850	PGW GATE	9,850	03/13/22	03/13/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.4900	PGW GATE	24,625	03/14/22	03/14/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.4850	PGW GATE	9,850	03/14/22	03/14/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.8700	PGW GATE	0	03/15/22	03/15/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.8650	PGW GATE	0	03/15/22	03/15/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.6750	PGW GATE	0	03/16/22	03/16/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.6700	PGW GATE	0	03/16/22	03/16/22

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Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.7550	PGW GATE	0	03/17/22	03/17/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.7500	PGW GATE	0	03/17/22	03/17/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.7750	PGW GATE	0	03/18/22	03/18/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.7700	PGW GATE	0	03/18/22	03/18/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.7850	PGW GATE	0	03/19/22	03/19/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.7800	PGW GATE	0	03/19/22	03/19/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.7850	PGW GATE	0	03/20/22	03/20/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.7800	PGW GATE	0	03/20/22	03/20/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.7850	PGW GATE	0	03/21/22	03/21/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.7800	PGW GATE	0	03/21/22	03/21/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.8900	PGW GATE	0	03/22/22	03/22/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.8850	PGW GATE	0	03/22/22	03/22/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.0350	PGW GATE	0	03/23/22	03/23/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.0300	PGW GATE	0	03/23/22	03/23/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.3400	PGW GATE	0	03/24/22	03/24/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.3350	PGW GATE	0	03/24/22	03/24/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.3150	PGW GATE	0	03/25/22	03/25/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.3100	PGW GATE	0	03/25/22	03/25/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	10,000	$5.0850	PGW GATE	9,850	03/26/22	03/26/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$5.0800	PGW GATE	9,850	03/26/22	03/26/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	10,000	$5.0850	PGW GATE	9,850	03/27/22	03/27/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$5.0800	PGW GATE	9,850	03/27/22	03/27/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	10,000	$5.0850	PGW GATE	9,850	03/28/22	03/28/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$5.0800	PGW GATE	9,850	03/28/22	03/28/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	10,000	$5.0900	PGW GATE	9,850	03/29/22	03/29/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$5.0850	PGW GATE	9,850	03/29/22	03/29/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.7100	PGW GATE	0	03/30/22	03/30/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.7050	PGW GATE	0	03/30/22	03/30/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.5900	PGW GATE	0	03/31/22	03/31/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.5850	PGW GATE	0	03/31/22	03/31/22
Firm	Tetco-800514	M2 30" Macquarie	Accepted	M2 30"	774	$3.7850	PGW GATE	762	03/01/22	03/31/22
Firm	Tetco-800514	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$3.3700	PGW GATE	4,925	03/01/22	03/31/22
Firm	Tetco-800514	M2 30" Hartree Partners	Accepted	M2 30"	12,500	$3.7850	PGW GATE	12,313	03/01/22	03/31/22
Firm	Tetco-800515	M2 30" Macquarie	Accepted	M2 30"	11,726	$3.7850	PGW GATE	11,550	03/01/22	03/31/22
Firm	Tetco-800515	M2 30" Twin Eagle	Accepted	M2 30"	5,444	$3.7900	PGW GATE	5,362	03/01/22	03/31/22
Firm	Tetco-800515	M2 30" MGAG - TD Bank	Accepted	M2 30"	1,105	$3.4825	PGW GATE	1,088	03/01/22	03/31/22
Firm	Tetco-330791	M2 30" EQT	Accepted	M2 30" Crayne	5,000	$3.8400	PGW GATE	5,000	03/01/22	03/31/22
Firm	Tetco-800232	M2 30" MGAG - TD Bank	Accepted	M2 30"	1,895	$3.4825	PGW GATE	1,867	03/01/22	03/31/22
Firm	Tetco-800232	M2 30" PEAK - Morgan Stanley	Accepted	M2 30"	12,086	$3.4900	PGW GATE	11,905	03/01/22	03/31/22
No Spot purchases for Tetco										

Tetco- Texas Eastern Pipeline
Receipt Points
STX-South Texas
ETX-East Texas
WLA-West Louisiana
ELA -East Louisiana
M1 30" M1 24" - Market Area 1 on 30" Pipeline and 24" Pipeline
M2 and M3 - Market Areas
PGW City Gate is in M3

Transco
Station 30 - Zone 1
Station 45 - Zone 2
Station 65 - Zone 3
Station 85 - Zone 4
Zone 5
Zone 6 - PGW City Gate

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Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.3200	PGW GATE	0	04/01/22	04/01/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.5350	PGW GATE	0	04/01/22	04/01/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$5.2350	PGW GATE	24,837	04/02/22	04/02/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.5000	PGW GATE	19,498	04/02/22	04/02/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$5.2350	PGW GATE	24,837	04/03/22	04/03/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.5000	PGW GATE	19,498	04/03/22	04/03/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$5.2350	PGW GATE	24,837	04/04/22	04/04/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.5000	PGW GATE	19,498	04/04/22	04/04/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$5.3600	PGW GATE	24,837	04/05/22	04/05/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.6100	PGW GATE	19,498	04/05/22	04/05/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$5.6750	PGW GATE	24,838	04/06/22	04/06/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.9350	PGW GATE	19,498	04/06/22	04/06/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$6.1550	PGW GATE	24,838	04/07/22	04/07/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$6.2200	PGW GATE	19,498	04/07/22	04/07/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$5.7550	PGW GATE	24,838	04/08/22	04/08/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.9700	PGW GATE	19,498	04/08/22	04/08/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$5.9250	PGW GATE	24,838	04/09/22	04/09/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$6.2000	PGW GATE	19,498	04/09/22	04/09/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$5.9250	PGW GATE	24,838	04/10/22	04/10/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$6.2000	PGW GATE	19,498	04/10/22	04/10/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$5.9250	PGW GATE	24,838	04/11/22	04/11/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$6.2000	PGW GATE	19,498	04/11/22	04/11/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.9100	PGW GATE	0	04/12/22	04/12/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.3750	PGW GATE	0	04/12/22	04/12/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.0200	PGW GATE	0	04/13/22	04/13/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.5550	PGW GATE	0	04/13/22	04/13/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.1050	PGW GATE	0	04/14/22	04/14/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.7150	PGW GATE	0	04/14/22	04/14/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	15,000	$6.7400	PGW GATE	14,903	04/15/22	04/15/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.8800	PGW GATE	0	04/15/22	04/15/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	15,000	$6.7400	PGW GATE	14,903	04/16/22	04/16/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.8800	PGW GATE	0	04/16/22	04/16/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	15,000	$6.7400	PGW GATE	14,903	04/17/22	04/17/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.8800	PGW GATE	0	04/17/22	04/17/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	15,000	$6.7400	PGW GATE	14,903	04/18/22	04/18/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.8800	PGW GATE	0	04/18/22	04/18/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	15,000	$7.4750	PGW GATE	14,903	04/19/22	04/19/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.6550	PGW GATE	0	04/19/22	04/19/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.7100	PGW GATE	0	04/20/22	04/20/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.1050	PGW GATE	0	04/20/22	04/20/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.3750	PGW GATE	0	04/21/22	04/21/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.8750	PGW GATE	0	04/21/22	04/21/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.1700	PGW GATE	0	04/22/22	04/22/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.7750	PGW GATE	0	04/22/22	04/22/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.6700	PGW GATE	0	04/23/22	04/23/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.4600	PGW GATE	0	04/23/22	04/23/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.6700	PGW GATE	0	04/24/22	04/24/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.4600	PGW GATE	0	04/24/22	04/24/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.6700	PGW GATE	0	04/25/22	04/25/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.4600	PGW GATE	0	04/25/22	04/25/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.8750	PGW GATE	0	04/26/22	04/26/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.4350	PGW GATE	0	04/26/22	04/26/22

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Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$6.7050	PGW GATE	24,838	04/27/22	04/27/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$6.7900	PGW GATE	19,498	04/27/22	04/27/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$6.5600	PGW GATE	24,838	04/28/22	04/28/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$6.9800	PGW GATE	19,498	04/28/22	04/28/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$6.0350	PGW GATE	24,838	04/29/22	04/29/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$6.7450	PGW GATE	19,498	04/29/22	04/29/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$6.0350	PGW GATE	24,838	04/30/22	04/30/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$6.7450	PGW GATE	19,498	04/30/22	04/30/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$5.2650	PGW GATE	4,863	04/01/22	04/03/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	4,209	$5.2650	PGW GATE	4,094	04/04/22	04/04/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$5.2650	PGW GATE	4,863	04/05/22	04/05/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$5.2650	PGW GATE	4,989	04/06/22	04/30/22
Firm	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	9,000	$4.4500	PGW GATE	8,942	04/01/22	04/30/22
Firm	TGPL-1003691	STA 195 MGAG - RBC	Accepted	STA 195	3,736	$4.0525	PGW GATE	3,712	04/01/22	04/30/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank	Accepted	STA 195	3,500	$4.1625	PGW GATE	3,477	04/01/22	04/30/22
Firm	TGPL-1003691	STA 195 PEAK - MS	Accepted	STA 195	3,000	$4.1700	PGW GATE	2,981	04/01/22	04/30/22
Firm	TGPL-1003691	STA 195 PEAK - SEA	Accepted	STA 195	2,000	$4.1500	PGW GATE	1,987	04/01/22	04/30/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank 2	Accepted	STA 195	4,500	$4.1225	PGW GATE	4,471	04/01/22	04/30/22
Firm	TGPL-1003691	River Road MGAG - Macquarie	Accepted	River Road	3,500	$4.1850	PGW GATE	3,477	04/01/22	04/30/22
No Spot purchases for Transco										

Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.1500	PGW GATE	0	04/01/22	04/01/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.1500	PGW GATE	0	04/01/22	04/01/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.0900	PGW GATE	0	04/02/22	04/02/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.0900	PGW GATE	0	04/02/22	04/02/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.0900	PGW GATE	0	04/03/22	04/03/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.0900	PGW GATE	0	04/03/22	04/03/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.0900	PGW GATE	0	04/04/22	04/04/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.0900	PGW GATE	0	04/04/22	04/04/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.1750	PGW GATE	0	04/05/22	04/05/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.1750	PGW GATE	0	04/05/22	04/05/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.5100	PGW GATE	0	04/06/22	04/06/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.5100	PGW GATE	0	04/06/22	04/06/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.9500	PGW GATE	0	04/07/22	04/07/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.9500	PGW GATE	0	04/07/22	04/07/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.6050	PGW GATE	0	04/08/22	04/08/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.6050	PGW GATE	0	04/08/22	04/08/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.7150	PGW GATE	0	04/09/22	04/09/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.7150	PGW GATE	0	04/09/22	04/09/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.7150	PGW GATE	0	04/10/22	04/10/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.7150	PGW GATE	0	04/10/22	04/10/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.7150	PGW GATE	0	04/11/22	04/11/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.7150	PGW GATE	0	04/11/22	04/11/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.7350	PGW GATE	0	04/12/22	04/12/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.7350	PGW GATE	0	04/12/22	04/12/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.8950	PGW GATE	0	04/13/22	04/13/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.8950	PGW GATE	0	04/13/22	04/13/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.0200	PGW GATE	0	04/14/22	04/14/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.0200	PGW GATE	0	04/14/22	04/14/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.5650	PGW GATE	0	04/15/22	04/15/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.5650	PGW GATE	0	04/15/22	04/15/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.5650	PGW GATE	0	04/16/22	04/16/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.5650	PGW GATE	0	04/16/22	04/16/22

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Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.5650	PGW GATE	0	04/17/22	04/17/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.5650	PGW GATE	0	04/17/22	04/17/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.5650	PGW GATE	0	04/18/22	04/18/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.5650	PGW GATE	0	04/18/22	04/18/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.2000	PGW GATE	0	04/19/22	04/19/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.2000	PGW GATE	0	04/19/22	04/19/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.5500	PGW GATE	0	04/20/22	04/20/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.5500	PGW GATE	0	04/20/22	04/20/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.1600	PGW GATE	0	04/21/22	04/21/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.1600	PGW GATE	0	04/21/22	04/21/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.9650	PGW GATE	0	04/22/22	04/22/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.9650	PGW GATE	0	04/22/22	04/22/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.5800	PGW GATE	0	04/23/22	04/23/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.5800	PGW GATE	0	04/23/22	04/23/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.5800	PGW GATE	0	04/24/22	04/24/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.5800	PGW GATE	0	04/24/22	04/24/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.5800	PGW GATE	0	04/25/22	04/25/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.5800	PGW GATE	0	04/25/22	04/25/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.6950	PGW GATE	0	04/26/22	04/26/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.6950	PGW GATE	0	04/26/22	04/26/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	15,000	$6.3850	PGW GATE	14,867	04/27/22	04/27/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$6.3850	PGW GATE	9,911	04/27/22	04/27/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	20,597	$6.3800	PGW GATE	20,414	04/28/22	04/28/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$6.3800	PGW GATE	9,911	04/28/22	04/28/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.9750	PGW GATE	0	04/29/22	04/29/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.9750	PGW GATE	0	04/29/22	04/29/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.9750	PGW GATE	0	04/30/22	04/30/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.9750	PGW GATE	0	04/30/22	04/30/22
Firm	Tetco-330791	M2 30" EQT	Accepted	M2 30" Crayne	5,000	$4.4300	PGW GATE	5,000	04/01/22	04/30/22
Firm	Tetco-800232	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$3.9800	PGW GATE	4,956	04/01/22	04/30/22
Firm	Tetco-800232	M2 30" Shell	Accepted	M2 30"	15,000	$4.3825	PGW GATE	14,867	04/01/22	04/30/22
Firm	Tetco-800232	M2 30" Macquarie	Accepted	M2 30"	3,000	$4.3900	PGW GATE	2,973	04/01/22	04/30/22
Firm	Tetco-800232	M2 30" EQT	Accepted	M2 30"	3,000	$4.3850	PGW GATE	2,973	04/01/22	04/30/22
Firm	Tetco-800232	M2 30" MGAG - TD Bank	Accepted	M2 30"	3,000	$4.0900	PGW GATE	2,973	04/01/22	04/30/22
No Spot purchases for Tetco										

Tetco- Texas Eastern Pipeline
Receipt Points
STX-South Texas
ETX-East Texas
WLA-West Louisiana
ELA -East Louisiana
M1 30" M1 24" - Market Area 1 on 30" Pipeline and 24" Pipeline
M2 and M3 - Market Areas
PGW City Gate is in M3

Transco
Station 30 - Zone 1
Station 45 - Zone 2
Station 65 - Zone 3
Station 85 - Zone 4
Zone 5
Zone 6 - PGW City Gate
Station 195 - Zone 6
Edna - Zone 3
River Road - Zone 6

May 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$6.0050	PGW GATE	24,838	05/01/22	05/01/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$6.7900	PGW GATE	19,498	05/01/22	05/01/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$6.0050	PGW GATE	24,838	05/02/22	05/02/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$6.7900	PGW GATE	19,498	05/02/22	05/02/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$6.9000	PGW GATE	24,838	05/03/22	05/03/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	15,000	$7.3600	PGW GATE	14,624	05/03/22	05/03/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.5150	PGW GATE	0	05/04/22	05/04/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.9700	PGW GATE	0	05/04/22	05/04/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.5800	PGW GATE	0	05/05/22	05/05/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.3300	PGW GATE	0	05/05/22	05/05/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4750	PGW GATE	0	05/06/22	05/06/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.3350	PGW GATE	0	05/06/22	05/06/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$7.6900	PGW GATE	24,838	05/07/22	05/07/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.3250	PGW GATE	0	05/07/22	05/07/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$7.6900	PGW GATE	24,838	05/08/22	05/08/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.3250	PGW GATE	0	05/08/22	05/08/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$7.6900	PGW GATE	24,838	05/09/22	05/09/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.3250	PGW GATE	0	05/09/22	05/09/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	15,000	$6.7650	PGW GATE	14,903	05/10/22	05/10/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.4200	PGW GATE	0	05/10/22	05/10/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	15,000	$6.2250	PGW GATE	14,903	05/11/22	05/11/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.5500	PGW GATE	0	05/11/22	05/11/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.6550	PGW GATE	0	05/12/22	05/12/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.4450	PGW GATE	0	05/12/22	05/12/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.6600	PGW GATE	0	05/13/22	05/13/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.3100	PGW GATE	0	05/13/22	05/13/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.8100	PGW GATE	0	05/14/22	05/14/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.6050	PGW GATE	0	05/14/22	05/14/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.8100	PGW GATE	0	05/15/22	05/15/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.6050	PGW GATE	0	05/15/22	05/15/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.8100	PGW GATE	0	05/16/22	05/16/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.6050	PGW GATE	0	05/16/22	05/16/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.5950	PGW GATE	0	05/17/22	05/17/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.0400	PGW GATE	0	05/17/22	05/17/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4750	PGW GATE	0	05/18/22	05/18/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.2750	PGW GATE	0	05/18/22	05/18/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.7500	PGW GATE	0	05/19/22	05/19/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.5400	PGW GATE	0	05/19/22	05/19/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.8200	PGW GATE	0	05/20/22	05/20/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.2450	PGW GATE	0	05/20/22	05/20/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.6750	PGW GATE	0	05/21/22	05/21/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.1500	PGW GATE	0	05/21/22	05/21/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.6750	PGW GATE	0	05/22/22	05/22/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.1500	PGW GATE	0	05/22/22	05/22/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.6750	PGW GATE	0	05/23/22	05/23/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.1500	PGW GATE	0	05/23/22	05/23/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.2800	PGW GATE	0	05/24/22	05/24/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.2850	PGW GATE	0	05/24/22	05/24/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.7450	PGW GATE	0	05/25/22	05/25/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.8150	PGW GATE	0	05/25/22	05/25/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.1950	PGW GATE	0	05/26/22	05/26/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.3400	PGW GATE	0	05/26/22	05/26/22

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Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.1300	PGW GATE	0	05/27/22	05/27/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.0400	PGW GATE	0	05/27/22	05/27/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.7000	PGW GATE	0	05/28/22	05/28/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.2850	PGW GATE	0	05/28/22	05/28/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.7000	PGW GATE	0	05/29/22	05/29/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.2850	PGW GATE	0	05/29/22	05/29/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.7000	PGW GATE	0	05/30/22	05/30/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.2850	PGW GATE	0	05/30/22	05/30/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.7000	PGW GATE	0	05/31/22	05/31/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.2850	PGW GATE	0	05/31/22	05/31/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$7.2150	PGW GATE	4,989	05/01/22	05/31/22
Firm	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	9,000	$6.4800	PGW GATE	8,942	05/01/22	05/31/22
Firm	TGPL-1003691	STA 195 MGAG - RBC	Accepted	STA 195	3,736	$6.0825	PGW GATE	3,712	05/01/22	05/31/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank	Accepted	STA 195	3,500	$6.1925	PGW GATE	3,477	05/01/22	05/31/22
Firm	TGPL-1003691	STA 195 PEAK - MS	Accepted	STA 195	3,000	$6.2000	PGW GATE	2,981	05/01/22	05/31/22
Firm	TGPL-1003691	STA 195 PEAK - SEA	Accepted	STA 195	2,000	$6.1800	PGW GATE	1,987	05/01/22	05/31/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank 2	Accepted	STA 195	4,500	$6.1525	PGW GATE	4,471	05/01/22	05/31/22
Firm	TGPL-1003691	STA 195 Pacific Summit 2	Accepted	STA 195	10,000	$6.2300	PGW GATE	9,935	05/01/22	05/31/22
Firm	TGPL-1003691	River Road MGAG - Macquarie	Accepted	River Road	3,500	$6.2150	PGW GATE	3,477	05/01/22	05/31/22
No Spot purchases for Transco										
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.9000	PGW GATE	0	05/01/22	05/01/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.9000	PGW GATE	0	05/01/22	05/01/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.9000	PGW GATE	0	05/02/22	05/02/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.9000	PGW GATE	0	05/02/22	05/02/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.6700	PGW GATE	0	05/03/22	05/03/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.6700	PGW GATE	0	05/03/22	05/03/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.3700	PGW GATE	0	05/04/22	05/04/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.3700	PGW GATE	0	05/04/22	05/04/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.4850	PGW GATE	0	05/05/22	05/05/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4850	PGW GATE	0	05/05/22	05/05/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.3300	PGW GATE	0	05/06/22	05/06/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.3300	PGW GATE	0	05/06/22	05/06/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	20,000	$7.4600	PGW GATE	19,822	05/07/22	05/07/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$7.4600	PGW GATE	9,911	05/07/22	05/07/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	20,000	$7.4600	PGW GATE	19,822	05/08/22	05/08/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$7.4600	PGW GATE	9,911	05/08/22	05/08/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	20,000	$7.4600	PGW GATE	19,822	05/09/22	05/09/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$7.4600	PGW GATE	9,911	05/09/22	05/09/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	20,000	$6.7700	PGW GATE	19,822	05/10/22	05/10/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$6.7700	PGW GATE	9,911	05/10/22	05/10/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	20,000	$6.0850	PGW GATE	19,822	05/11/22	05/11/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.0850	PGW GATE	0	05/11/22	05/11/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.6150	PGW GATE	0	05/12/22	05/12/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.6150	PGW GATE	0	05/12/22	05/12/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.6000	PGW GATE	0	05/13/22	05/13/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.6000	PGW GATE	0	05/13/22	05/13/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.7150	PGW GATE	0	05/14/22	05/14/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.7150	PGW GATE	0	05/14/22	05/14/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.7150	PGW GATE	0	05/15/22	05/15/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.7150	PGW GATE	0	05/15/22	05/15/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.7150	PGW GATE	0	05/16/22	05/16/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.7150	PGW GATE	0	05/16/22	05/16/22

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Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.3950	PGW GATE	0	05/17/22	05/17/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.3950	PGW GATE	0	05/17/22	05/17/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.4350	PGW GATE	0	05/18/22	05/18/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4350	PGW GATE	0	05/18/22	05/18/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.5550	PGW GATE	0	05/19/22	05/19/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.5550	PGW GATE	0	05/19/22	05/19/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.6050	PGW GATE	0	05/20/22	05/20/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.6050	PGW GATE	0	05/20/22	05/20/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.4650	PGW GATE	0	05/21/22	05/21/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4650	PGW GATE	0	05/21/22	05/21/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.4650	PGW GATE	0	05/22/22	05/22/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4650	PGW GATE	0	05/22/22	05/22/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.4650	PGW GATE	0	05/23/22	05/23/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4650	PGW GATE	0	05/23/22	05/23/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.2550	PGW GATE	0	05/24/22	05/24/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.2550	PGW GATE	0	05/24/22	05/24/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.6100	PGW GATE	0	05/25/22	05/25/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.6100	PGW GATE	0	05/25/22	05/25/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$8.0550	PGW GATE	0	05/26/22	05/26/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.0550	PGW GATE	0	05/26/22	05/26/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.9300	PGW GATE	0	05/27/22	05/27/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.9300	PGW GATE	0	05/27/22	05/27/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.4150	PGW GATE	0	05/28/22	05/28/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4150	PGW GATE	0	05/28/22	05/28/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.4150	PGW GATE	0	05/29/22	05/29/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4150	PGW GATE	0	05/29/22	05/29/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.4150	PGW GATE	0	05/30/22	05/30/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4150	PGW GATE	0	05/30/22	05/30/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.4150	PGW GATE	0	05/31/22	05/31/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4150	PGW GATE	0	05/31/22	05/31/22
Firm	Tetco-330791	M2 30" EQT	Accepted	M2 30" Crayne	5,000	$6.3500	PGW GATE	5,000	05/01/22	05/31/22
Firm	Tetco-800232	M2 30" Shell	Accepted	M2 30"	15,000	$6.3025	PGW GATE	14,867	05/01/22	05/31/22
Firm	Tetco-800232	M2 30" Macquarie	Accepted	M2 30"	3,000	$6.3100	PGW GATE	2,973	05/01/22	05/31/22
Firm	Tetco-800232	M2 30" EQT	Accepted	M2 30"	3,000	$6.3050	PGW GATE	2,973	05/01/22	05/31/22
Firm	Tetco-800232	M2 30" MGAG - TD Bank	Accepted	M2 30"	3,000	$6.0100	PGW GATE	2,973	05/01/22	05/31/22
Firm	Tetco-800232	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$5.9000	PGW GATE	4,956	05/01/22	05/31/22
No Spot purchases for Tetco										

Tetco- Texas Eastern Pipeline
Receipt Points
STX-South Texas
ETX-East Texas
WLA-West Louisiana
ELA -East Louisiana
M1 30" M1 24" - Market Area 1 on 30" Pipeline and 24" Pipeline
M2 and M3 - Market Areas
PGW City Gate is in M3

Transco
Station 30 - Zone 1
Station 45 - Zone 2
Station 65 - Zone 3
Station 85 - Zone 4
Zone 5
Zone 6 - PGW City Gate
Station 195 - Zone 6
Edna - Zone 3
River Road - Zone 6

June 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.7450	PGW GATE	0	06/01/22	06/01/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.6000	PGW GATE	0	06/01/22	06/01/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.7700	PGW GATE	0	06/02/22	06/02/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.5900	PGW GATE	0	06/02/22	06/02/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4250	PGW GATE	0	06/03/22	06/03/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.8650	PGW GATE	0	06/03/22	06/03/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.2000	PGW GATE	0	06/04/22	06/04/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.3800	PGW GATE	0	06/04/22	06/04/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.2000	PGW GATE	0	06/05/22	06/05/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.3800	PGW GATE	0	06/05/22	06/05/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.2000	PGW GATE	0	06/06/22	06/06/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.3800	PGW GATE	0	06/06/22	06/06/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.9450	PGW GATE	0	06/07/22	06/07/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.1700	PGW GATE	0	06/07/22	06/07/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.2000	PGW GATE	0	06/08/22	06/08/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.3400	PGW GATE	0	06/08/22	06/08/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.3950	PGW GATE	0	06/09/22	06/09/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.5400	PGW GATE	0	06/09/22	06/09/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.3000	PGW GATE	0	06/10/22	06/10/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.2700	PGW GATE	0	06/10/22	06/10/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4500	PGW GATE	0	06/11/22	06/11/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.8650	PGW GATE	0	06/11/22	06/11/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4500	PGW GATE	0	06/12/22	06/12/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.8650	PGW GATE	0	06/12/22	06/12/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4500	PGW GATE	0	06/13/22	06/13/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.8650	PGW GATE	0	06/13/22	06/13/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.9800	PGW GATE	0	06/14/22	06/14/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.3400	PGW GATE	0	06/14/22	06/14/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.8300	PGW GATE	0	06/15/22	06/15/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.3450	PGW GATE	0	06/15/22	06/15/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.3400	PGW GATE	0	06/16/22	06/16/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.2400	PGW GATE	0	06/16/22	06/16/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4300	PGW GATE	0	06/17/22	06/17/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.6950	PGW GATE	0	06/17/22	06/17/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.2900	PGW GATE	0	06/18/22	06/18/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.8000	PGW GATE	0	06/18/22	06/18/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.2900	PGW GATE	0	06/19/22	06/19/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.8000	PGW GATE	0	06/19/22	06/19/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.2900	PGW GATE	0	06/20/22	06/20/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.8000	PGW GATE	0	06/20/22	06/20/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.2900	PGW GATE	0	06/21/22	06/21/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.8000	PGW GATE	0	06/21/22	06/21/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.7450	PGW GATE	0	06/22/22	06/22/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.4250	PGW GATE	0	06/22/22	06/22/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.8500	PGW GATE	0	06/23/22	06/23/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.3250	PGW GATE	0	06/23/22	06/23/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.6000	PGW GATE	0	06/24/22	06/24/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.2100	PGW GATE	0	06/24/22	06/24/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.7350	PGW GATE	0	06/25/22	06/25/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.8650	PGW GATE	0	06/25/22	06/25/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.7350	PGW GATE	0	06/26/22	06/26/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.8650	PGW GATE	0	06/26/22	06/26/22

Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.7350	PGW GATE	0	06/27/22	06/27/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.8650	PGW GATE	0	06/27/22	06/27/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.6000	PGW GATE	0	06/28/22	06/28/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.8800	PGW GATE	0	06/28/22	06/28/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.0300	PGW GATE	0	06/29/22	06/29/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.2900	PGW GATE	0	06/29/22	06/29/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.4850	PGW GATE	0	06/30/22	06/30/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.4950	PGW GATE	0	06/30/22	06/30/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$8.9550	PGW GATE	4,989	06/01/22	06/20/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	3,895	$8.9550	PGW GATE	3,886	06/21/22	06/21/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$8.9550	PGW GATE	4,989	06/22/22	06/22/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	6,105	$8.9550	PGW GATE	6,091	06/23/22	06/23/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$8.9550	PGW GATE	4,989	06/24/22	06/30/22
Firm	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	9,000	$7.9500	PGW GATE	8,942	06/01/22	06/30/22
Firm	TGPL-1003691	STA 195 MGAG - RBC	Accepted	STA 195	3,736	$7.5525	PGW GATE	3,712	06/01/22	06/30/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank	Accepted	STA 195	3,500	$7.6625	PGW GATE	3,477	06/01/22	06/30/22
Firm	TGPL-1003691	STA 195 PEAK - MS	Accepted	STA 195	3,000	$7.6700	PGW GATE	2,981	06/01/22	06/30/22
Firm	TGPL-1003691	STA 195 PEAK - SEA	Accepted	STA 195	2,000	$7.6500	PGW GATE	1,987	06/01/22	06/30/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank 2	Accepted	STA 195	4,500	$7.6225	PGW GATE	4,471	06/01/22	06/30/22
Firm	TGPL-1003691	River Road MGAG - Macquarie	Accepted	River Road	3,500	$7.6850	PGW GATE	3,477	06/01/22	06/30/22
No Spot purchases for Transco										

Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.5700	PGW GATE	0	06/01/22	06/01/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.5700	PGW GATE	0	06/01/22	06/01/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.5450	PGW GATE	0	06/02/22	06/02/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.5450	PGW GATE	0	06/02/22	06/02/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.4400	PGW GATE	0	06/03/22	06/03/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4400	PGW GATE	0	06/03/22	06/03/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.1150	PGW GATE	0	06/04/22	06/04/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.1150	PGW GATE	0	06/04/22	06/04/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.1150	PGW GATE	0	06/05/22	06/05/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.1150	PGW GATE	0	06/05/22	06/05/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.1150	PGW GATE	0	06/06/22	06/06/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.1150	PGW GATE	0	06/06/22	06/06/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.7850	PGW GATE	0	06/07/22	06/07/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.7850	PGW GATE	0	06/07/22	06/07/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$8.0450	PGW GATE	0	06/08/22	06/08/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.0450	PGW GATE	0	06/08/22	06/08/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$8.2150	PGW GATE	0	06/09/22	06/09/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.2150	PGW GATE	0	06/09/22	06/09/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.1850	PGW GATE	0	06/10/22	06/10/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.1850	PGW GATE	0	06/10/22	06/10/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.4200	PGW GATE	0	06/11/22	06/11/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4200	PGW GATE	0	06/11/22	06/11/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.4200	PGW GATE	0	06/12/22	06/12/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4200	PGW GATE	0	06/12/22	06/12/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.4200	PGW GATE	0	06/13/22	06/13/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4200	PGW GATE	0	06/13/22	06/13/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.7250	PGW GATE	0	06/14/22	06/14/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.7250	PGW GATE	0	06/14/22	06/14/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.5900	PGW GATE	0	06/15/22	06/15/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.5900	PGW GATE	0	06/15/22	06/15/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.0600	PGW GATE	0	06/16/22	06/16/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.0600	PGW GATE	0	06/16/22	06/16/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.2800	PGW GATE	0	06/17/22	06/17/22

Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.2800	PGW GATE	0	06/17/22	06/17/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.2900	PGW GATE	0	06/18/22	06/18/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.2900	PGW GATE	0	06/18/22	06/18/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.2900	PGW GATE	0	06/19/22	06/19/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.2900	PGW GATE	0	06/19/22	06/19/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.2900	PGW GATE	0	06/20/22	06/20/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.2900	PGW GATE	0	06/20/22	06/20/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.2900	PGW GATE	0	06/21/22	06/21/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.2900	PGW GATE	0	06/21/22	06/21/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.6900	PGW GATE	0	06/22/22	06/22/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.6900	PGW GATE	0	06/22/22	06/22/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	3,000	$5.7200	PGW GATE	2,973	06/23/22	06/23/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.7200	PGW GATE	0	06/23/22	06/23/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	3,000	$5.5850	PGW GATE	2,973	06/24/22	06/24/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.5850	PGW GATE	0	06/24/22	06/24/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	3,000	$5.4950	PGW GATE	2,973	06/25/22	06/25/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.4950	PGW GATE	0	06/25/22	06/25/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	3,000	$5.4950	PGW GATE	2,973	06/26/22	06/26/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.4950	PGW GATE	0	06/26/22	06/26/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	3,000	$5.4950	PGW GATE	2,973	06/27/22	06/27/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.4950	PGW GATE	0	06/27/22	06/27/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	3,000	$5.4350	PGW GATE	2,973	06/28/22	06/28/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.4350	PGW GATE	0	06/28/22	06/28/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	3,000	$5.9100	PGW GATE	2,973	06/29/22	06/29/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.9100	PGW GATE	0	06/29/22	06/29/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	3,000	$6.1950	PGW GATE	2,973	06/30/22	06/30/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.1950	PGW GATE	0	06/30/22	06/30/22
Firm	Tetco-330791	M2 30" EQT	Accepted	M2 30" Crayne	5,000	$7.8900	PGW GATE	5,000	06/01/22	06/30/22
Firm	Tetco-800232	M2 30" Shell	Accepted	M2 30"	15,000	$7.8425	PGW GATE	14,867	06/01/22	06/30/22
Firm	Tetco-800232	M2 30" Macquarie	Accepted	M2 30"	3,000	$7.8500	PGW GATE	2,973	06/01/22	06/30/22
Firm	Tetco-800232	M2 30" EQT	Accepted	M2 30"	3,000	$7.8450	PGW GATE	2,973	06/01/22	06/30/22
Firm	Tetco-800232	M2 30" MGAG - TD Bank	Accepted	M2 30"	3,000	$7.5500	PGW GATE	2,973	06/01/22	06/30/22
Firm	Tetco-800232	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$7.4400	PGW GATE	4,956	06/01/22	06/30/22
No Spot purchases for Tetco										

Tetco- Texas Eastern Pipeline
Receipt Points
STX-South Texas
ETX-East Texas
WLA-West Louisiana
ELA -East Louisiana
M1 30" M1 24" - Market Area 1 on 30" Pipeline and 24" Pipeline
M2 and M3 - Market Areas
PGW City Gate is in M3

Transco
Station 30 - Zone 1
Station 45 - Zone 2
Station 65 - Zone 3
Station 85 - Zone 4
Zone 5
Zone 6 - PGW City Gate
Station 195 - Zone 6
Edna - Zone 3
River Road - Zone 6

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.8400	PGW GATE	0	07/01/22	07/01/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.4800	PGW GATE	0	07/01/22	07/01/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.0900	PGW GATE	0	07/02/22	07/02/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.9600	PGW GATE	0	07/02/22	07/02/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.0900	PGW GATE	0	07/03/22	07/03/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.9600	PGW GATE	0	07/03/22	07/03/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.0900	PGW GATE	0	07/04/22	07/04/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.9600	PGW GATE	0	07/04/22	07/04/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.0900	PGW GATE	0	07/05/22	07/05/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.9600	PGW GATE	0	07/05/22	07/05/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.2650	PGW GATE	0	07/06/22	07/06/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.3550	PGW GATE	0	07/06/22	07/06/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.0850	PGW GATE	0	07/07/22	07/07/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.1150	PGW GATE	0	07/07/22	07/07/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.4550	PGW GATE	0	07/08/22	07/08/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.7050	PGW GATE	0	07/08/22	07/08/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.1700	PGW GATE	0	07/09/22	07/09/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.9200	PGW GATE	0	07/09/22	07/09/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.1700	PGW GATE	0	07/10/22	07/10/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.9200	PGW GATE	0	07/10/22	07/10/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.1700	PGW GATE	0	07/11/22	07/11/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.9200	PGW GATE	0	07/11/22	07/11/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.1950	PGW GATE	0	07/12/22	07/12/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$11.4100	PGW GATE	0	07/12/22	07/12/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.0400	PGW GATE	0	07/13/22	07/13/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$12.2700	PGW GATE	0	07/13/22	07/13/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.9500	PGW GATE	0	07/14/22	07/14/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.8700	PGW GATE	0	07/14/22	07/14/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.9850	PGW GATE	0	07/15/22	07/15/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.2500	PGW GATE	0	07/15/22	07/15/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.0600	PGW GATE	0	07/16/22	07/16/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.2000	PGW GATE	0	07/16/22	07/16/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.0600	PGW GATE	0	07/17/22	07/17/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.2000	PGW GATE	0	07/17/22	07/17/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.0600	PGW GATE	0	07/18/22	07/18/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.2000	PGW GATE	0	07/18/22	07/18/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.5950	PGW GATE	0	07/19/22	07/19/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$11.7250	PGW GATE	0	07/19/22	07/19/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.8150	PGW GATE	0	07/20/22	07/20/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$11.6200	PGW GATE	0	07/20/22	07/20/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.7200	PGW GATE	0	07/21/22	07/21/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$12.5800	PGW GATE	0	07/21/22	07/21/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.9450	PGW GATE	0	07/22/22	07/22/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$11.9200	PGW GATE	0	07/22/22	07/22/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.3850	PGW GATE	0	07/23/22	07/23/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$11.4250	PGW GATE	0	07/23/22	07/23/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.3850	PGW GATE	0	07/24/22	07/24/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$11.4250	PGW GATE	0	07/24/22	07/24/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.3850	PGW GATE	0	07/25/22	07/25/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$11.4250	PGW GATE	0	07/25/22	07/25/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.8700	PGW GATE	0	07/26/22	07/26/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$13.3750	PGW GATE	0	07/26/22	07/26/22

Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.3450	PGW GATE	0	07/27/22	07/27/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$14.3650	PGW GATE	0	07/27/22	07/27/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.0500	PGW GATE	0	07/28/22	07/28/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$11.8950	PGW GATE	0	07/28/22	07/28/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.5700	PGW GATE	0	07/29/22	07/29/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.3600	PGW GATE	0	07/29/22	07/29/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.5700	PGW GATE	0	07/30/22	07/30/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.3600	PGW GATE	0	07/30/22	07/30/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.5700	PGW GATE	0	07/31/22	07/31/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.3600	PGW GATE	0	07/31/22	07/31/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$7.1450	PGW GATE	4,989	07/01/22	07/31/22
Firm	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	9,000	$7.3500	PGW GATE	8,942	07/01/22	07/31/22
Firm	TGPL-1003691	STA 195 MGAG - RBC	Accepted	STA 195	3,736	$7.3825	PGW GATE	3,712	07/01/22	07/31/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank	Accepted	STA 195	3,500	$6.2725	PGW GATE	3,477	07/01/22	07/31/22
Firm	TGPL-1003691	STA 195 PEAK - MS	Accepted	STA 195	3,000	$5.4800	PGW GATE	2,981	07/01/22	07/31/22
Firm	TGPL-1003691	STA 195 PEAK - SEA	Accepted	STA 195	2,000	$5.4600	PGW GATE	1,987	07/01/22	07/31/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank 2	Accepted	STA 195	4,500	$6.2325	PGW GATE	4,471	07/01/22	07/31/22
Firm	TGPL-1003691	River Road MGAG - Macquarie	Accepted	River Road	3,500	$6.2950	PGW GATE	3,477	07/01/22	07/31/22
No Spot purchases for Transco										

Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	15,000	$5.5950	PGW GATE	14,867	07/01/22	07/01/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$5.5950	PGW GATE	9,911	07/01/22	07/01/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	15,000	$4.9300	PGW GATE	14,867	07/02/22	07/02/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.9300	PGW GATE	9,911	07/02/22	07/02/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	15,000	$4.9300	PGW GATE	14,867	07/03/22	07/03/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.9300	PGW GATE	9,911	07/03/22	07/03/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	15,000	$4.9300	PGW GATE	14,867	07/04/22	07/04/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.9300	PGW GATE	9,911	07/04/22	07/04/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	15,000	$4.9300	PGW GATE	14,867	07/05/22	07/05/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	10,000	$4.9300	PGW GATE	9,911	07/05/22	07/05/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	15,000	$5.0500	PGW GATE	14,867	07/06/22	07/06/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.0500	PGW GATE	0	07/06/22	07/06/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	15,000	$4.9850	PGW GATE	14,867	07/07/22	07/07/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.9850	PGW GATE	0	07/07/22	07/07/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	15,000	$5.3200	PGW GATE	14,867	07/08/22	07/08/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.3200	PGW GATE	0	07/08/22	07/08/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$5.0650	PGW GATE	17,840	07/09/22	07/09/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.0650	PGW GATE	0	07/09/22	07/09/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$5.0650	PGW GATE	17,840	07/10/22	07/10/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.0650	PGW GATE	0	07/10/22	07/10/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$5.0650	PGW GATE	17,840	07/11/22	07/11/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.0650	PGW GATE	0	07/11/22	07/11/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$5.8450	PGW GATE	17,840	07/12/22	07/12/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.8450	PGW GATE	0	07/12/22	07/12/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$5.8200	PGW GATE	17,840	07/13/22	07/13/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.8200	PGW GATE	0	07/13/22	07/13/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$5.7400	PGW GATE	17,840	07/14/22	07/14/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.7400	PGW GATE	0	07/14/22	07/14/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$5.8100	PGW GATE	17,840	07/15/22	07/15/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.8100	PGW GATE	0	07/15/22	07/15/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$5.8450	PGW GATE	17,840	07/16/22	07/16/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.8450	PGW GATE	0	07/16/22	07/16/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$5.8450	PGW GATE	17,840	07/17/22	07/17/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.8450	PGW GATE	0	07/17/22	07/17/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$5.8450	PGW GATE	17,840	07/18/22	07/18/22

Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.8450	PGW GATE	0	07/18/22	07/18/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$6.9650	PGW GATE	17,840	07/19/22	07/19/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.9650	PGW GATE	0	07/19/22	07/19/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$6.8900	PGW GATE	17,840	07/20/22	07/20/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.8900	PGW GATE	0	07/20/22	07/20/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$6.7850	PGW GATE	17,840	07/21/22	07/21/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.7850	PGW GATE	0	07/21/22	07/21/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	15,000	$7.5450	PGW GATE	14,867	07/22/22	07/22/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.5450	PGW GATE	0	07/22/22	07/22/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	15,000	$7.7150	PGW GATE	14,867	07/23/22	07/23/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.7150	PGW GATE	0	07/23/22	07/23/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	15,000	$7.7150	PGW GATE	14,867	07/24/22	07/24/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.7150	PGW GATE	0	07/24/22	07/24/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	15,000	$7.7150	PGW GATE	14,867	07/25/22	07/25/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.7150	PGW GATE	0	07/25/22	07/25/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$7.6550	PGW GATE	17,840	07/26/22	07/26/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.6550	PGW GATE	0	07/26/22	07/26/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$8.1350	PGW GATE	17,840	07/27/22	07/27/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.1350	PGW GATE	0	07/27/22	07/27/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$7.8250	PGW GATE	17,840	07/28/22	07/28/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.8250	PGW GATE	0	07/28/22	07/28/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$7.3650	PGW GATE	17,840	07/29/22	07/29/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.3650	PGW GATE	0	07/29/22	07/29/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$7.3650	PGW GATE	17,840	07/30/22	07/30/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.3650	PGW GATE	0	07/30/22	07/30/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	18,000	$7.3650	PGW GATE	17,840	07/31/22	07/31/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.3650	PGW GATE	0	07/31/22	07/31/22
Firm	Tetco-330791	M2 30" EQT	Accepted	M2 30" Crayne	5,000	$6.0700	PGW GATE	5,000	07/01/22	07/31/22
Firm	Tetco-800232	M2 30" Shell	Accepted	M2 30"	15,000	$7.6700	PGW GATE	14,867	07/01/22	07/31/22
Firm	Tetco-800232	M2 30" Macquarie	Accepted	M2 30"	3,000	$6.0300	PGW GATE	2,973	07/01/22	07/31/22
Firm	Tetco-800232	M2 30" EQT	Accepted	M2 30"	3,000	$6.0300	PGW GATE	2,973	07/01/22	07/31/22
Firm	Tetco-800232	M2 30" MGAG - TD Bank	Accepted	M2 30"	3,000	$7.3550	PGW GATE	2,973	07/01/22	07/31/22
Firm	Tetco-800232	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$5.1500	PGW GATE	4,956	07/01/22	07/31/22
No Spot purchases for Tetco										

Tetco- Texas Eastern Pipeline
Receipt Points
STX-South Texas
ETX-East Texas
WLA-West Louisiana
ELA -East Louisiana
M1 30" M1 24" - Market Area 1 on 30" Pipeline and 24" Pipeline
M2 and M3 - Market Areas
PGW City Gate is in M3

Transco
Station 30 - Zone 1
Station 45 - Zone 2
Station 65 - Zone 3
Station 85 - Zone 4
Zone 5
Zone 6 - PGW City Gate
Station 195 - Zone 6
Edna - Zone 3
River Road - Zone 6

August 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.8050	PGW GATE	0	08/01/22	08/01/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$11.8000	PGW GATE	0	08/01/22	08/01/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4450	PGW GATE	0	08/02/22	08/02/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$12.0850	PGW GATE	0	08/02/22	08/02/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4150	PGW GATE	0	08/03/22	08/03/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.3100	PGW GATE	0	08/03/22	08/03/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.9400	PGW GATE	0	08/04/22	08/04/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.9750	PGW GATE	0	08/04/22	08/04/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.8000	PGW GATE	0	08/05/22	08/05/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.5250	PGW GATE	0	08/05/22	08/05/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.8250	PGW GATE	0	08/06/22	08/06/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.2550	PGW GATE	0	08/06/22	08/06/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.8250	PGW GATE	0	08/07/22	08/07/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.2550	PGW GATE	0	08/07/22	08/07/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.8250	PGW GATE	0	08/08/22	08/08/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.2550	PGW GATE	0	08/08/22	08/08/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.6500	PGW GATE	0	08/09/22	08/09/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.8150	PGW GATE	0	08/09/22	08/09/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4800	PGW GATE	0	08/10/22	08/10/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.1500	PGW GATE	0	08/10/22	08/10/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.3900	PGW GATE	0	08/11/22	08/11/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.7750	PGW GATE	0	08/11/22	08/11/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4600	PGW GATE	0	08/12/22	08/12/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.9600	PGW GATE	0	08/12/22	08/12/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4150	PGW GATE	0	08/13/22	08/13/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.0200	PGW GATE	0	08/13/22	08/13/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4150	PGW GATE	0	08/14/22	08/14/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.0200	PGW GATE	0	08/14/22	08/14/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4150	PGW GATE	0	08/15/22	08/15/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.0200	PGW GATE	0	08/15/22	08/15/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.6050	PGW GATE	0	08/16/22	08/16/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.8200	PGW GATE	0	08/16/22	08/16/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.2800	PGW GATE	0	08/17/22	08/17/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.7000	PGW GATE	0	08/17/22	08/17/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.4350	PGW GATE	0	08/18/22	08/18/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.8350	PGW GATE	0	08/18/22	08/18/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.4850	PGW GATE	0	08/19/22	08/19/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.5750	PGW GATE	0	08/19/22	08/19/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.0750	PGW GATE	0	08/20/22	08/20/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.2050	PGW GATE	0	08/20/22	08/20/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.0750	PGW GATE	0	08/21/22	08/21/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.2050	PGW GATE	0	08/21/22	08/21/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.0750	PGW GATE	0	08/22/22	08/22/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.2050	PGW GATE	0	08/22/22	08/22/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.8900	PGW GATE	0	08/23/22	08/23/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.1850	PGW GATE	0	08/23/22	08/23/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$9.3200	PGW GATE	0	08/24/22	08/24/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.2650	PGW GATE	0	08/24/22	08/24/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.7500	PGW GATE	0	08/25/22	08/25/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.8500	PGW GATE	0	08/25/22	08/25/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.6500	PGW GATE	0	08/26/22	08/26/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.1400	PGW GATE	0	08/26/22	08/26/22

Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.7250	PGW GATE	0	08/27/22	08/27/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.1700	PGW GATE	0	08/27/22	08/27/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.7250	PGW GATE	0	08/28/22	08/28/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.1700	PGW GATE	0	08/28/22	08/28/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.7250	PGW GATE	0	08/29/22	08/29/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.1700	PGW GATE	0	08/29/22	08/29/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.9100	PGW GATE	0	08/30/22	08/30/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.2050	PGW GATE	0	08/30/22	08/30/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.4850	PGW GATE	0	08/31/22	08/31/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$10.2050	PGW GATE	0	08/31/22	08/31/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$13.9950	PGW GATE	4,989	08/01/22	08/31/22
Firm	TGPL-1003691	EDNA Shell 2	Accepted	EDNA	7,000	$14.0000	PGW GATE	6,984	08/01/22	08/31/22
Firm	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	9,000	$7.3500	PGW GATE	8,942	08/01/22	08/31/22
Firm	TGPL-1003691	STA 195 MGAG - RBC	Accepted	STA 195	3,736	$6.9925	PGW GATE	3,712	08/01/22	08/31/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank	Accepted	STA 195	3,500	$6.2725	PGW GATE	3,477	08/01/22	08/31/22
Firm	TGPL-1003691	STA 195 PEAK - MS	Accepted	STA 195	3,000	$7.9500	PGW GATE	2,981	08/01/22	08/31/22
Firm	TGPL-1003691	STA 195 PEAK - SEA	Accepted	STA 195	2,000	$7.9300	PGW GATE	1,987	08/01/22	08/31/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank 2	Accepted	STA 195	4,500	$6.2325	PGW GATE	4,471	08/01/22	08/31/22
Firm	TGPL-1003691	River Road MGAG - Macquarie	Accepted	River Road	3,500	$6.2950	PGW GATE	3,477	08/01/22	08/31/22
No Spot purchases for Transco										

Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	10,000	$7.4500	PGW GATE	9,911	08/01/22	08/01/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4500	PGW GATE	0	08/01/22	08/01/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	10,000	$7.1450	PGW GATE	9,911	08/02/22	08/02/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.1450	PGW GATE	0	08/02/22	08/02/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	10,000	$7.1450	PGW GATE	9,911	08/03/22	08/03/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.1450	PGW GATE	0	08/03/22	08/03/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	10,000	$7.0900	PGW GATE	9,911	08/04/22	08/04/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.0900	PGW GATE	0	08/04/22	08/04/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	12,000	$7.4700	PGW GATE	11,893	08/05/22	08/05/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4700	PGW GATE	0	08/05/22	08/05/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	14,000	$7.4500	PGW GATE	13,875	08/06/22	08/06/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4500	PGW GATE	0	08/06/22	08/06/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	14,000	$7.4500	PGW GATE	13,875	08/07/22	08/07/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4500	PGW GATE	0	08/07/22	08/07/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	14,000	$7.4500	PGW GATE	13,875	08/08/22	08/08/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.4500	PGW GATE	0	08/08/22	08/08/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	14,000	$7.1350	PGW GATE	13,875	08/09/22	08/09/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.1350	PGW GATE	0	08/09/22	08/09/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	14,000	$7.2700	PGW GATE	13,875	08/10/22	08/10/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.2700	PGW GATE	0	08/10/22	08/10/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	14,000	$7.2150	PGW GATE	13,875	08/11/22	08/11/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.2150	PGW GATE	0	08/11/22	08/11/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	14,000	$7.3650	PGW GATE	13,875	08/12/22	08/12/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.3650	PGW GATE	0	08/12/22	08/12/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	14,000	$7.2950	PGW GATE	13,875	08/13/22	08/13/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.2950	PGW GATE	0	08/13/22	08/13/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	14,000	$7.2950	PGW GATE	13,875	08/14/22	08/14/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.2950	PGW GATE	0	08/14/22	08/14/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	14,000	$7.2950	PGW GATE	13,875	08/15/22	08/15/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.2950	PGW GATE	0	08/15/22	08/15/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$7.3850	PGW GATE	6,938	08/16/22	08/16/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.3850	PGW GATE	0	08/16/22	08/16/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.1650	PGW GATE	6,938	08/17/22	08/17/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.1650	PGW GATE	0	08/17/22	08/17/22

Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.1800	PGW GATE	6,938	08/18/22	08/18/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.1800	PGW GATE	0	08/18/22	08/18/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.2950	PGW GATE	6,938	08/19/22	08/19/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.2950	PGW GATE	0	08/19/22	08/19/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$7.9550	PGW GATE	6,938	08/20/22	08/20/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.9550	PGW GATE	0	08/20/22	08/20/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$7.9550	PGW GATE	6,938	08/21/22	08/21/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.9550	PGW GATE	0	08/21/22	08/21/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$7.9550	PGW GATE	6,938	08/22/22	08/22/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.9550	PGW GATE	0	08/22/22	08/22/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.6250	PGW GATE	6,938	08/23/22	08/23/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.6250	PGW GATE	0	08/23/22	08/23/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.9900	PGW GATE	6,938	08/24/22	08/24/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.9900	PGW GATE	0	08/24/22	08/24/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.4400	PGW GATE	6,938	08/25/22	08/25/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.4400	PGW GATE	0	08/25/22	08/25/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.3900	PGW GATE	6,938	08/26/22	08/26/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.3900	PGW GATE	0	08/26/22	08/26/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.4950	PGW GATE	6,938	08/27/22	08/27/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.4950	PGW GATE	0	08/27/22	08/27/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.4950	PGW GATE	6,938	08/28/22	08/28/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.4950	PGW GATE	0	08/28/22	08/28/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.4950	PGW GATE	6,938	08/29/22	08/29/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.4950	PGW GATE	0	08/29/22	08/29/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.6050	PGW GATE	6,938	08/30/22	08/30/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.6050	PGW GATE	0	08/30/22	08/30/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.2100	PGW GATE	6,938	08/31/22	08/31/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.2100	PGW GATE	0	08/31/22	08/31/22
Firm	Tetco-330791	M2 30" EQT	Accepted	M2 30" Crayne	5,000	$6.0700	PGW GATE	5,000	08/01/22	08/31/22
Firm	Tetco-800232	M2 30" Shell	Accepted	M2 30"	15,000	$7.1900	PGW GATE	14,867	08/01/22	08/31/22
Firm	Tetco-800232	M2 30" Macquarie	Accepted	M2 30"	3,000	$6.0300	PGW GATE	2,973	08/01/22	08/31/22
Firm	Tetco-800232	M2 30" EQT	Accepted	M2 30"	3,000	$6.0300	PGW GATE	2,973	08/01/22	08/31/22
Firm	Tetco-800232	M2 30" MGAG - TD Bank	Accepted	M2 30"	3,000	$6.8900	PGW GATE	2,973	08/01/22	08/31/22
Firm	Tetco-800232	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$7.2800	PGW GATE	4,956	08/01/22	08/31/22
No Spot purchases for Tetco										

Tetco- Texas Eastern Pipeline
Receipt Points
STX-South Texas
ETX-East Texas
WLA-West Louisiana
ELA -East Louisiana
M1 30" M1 24" - Market Area 1 on 30" Pipeline and 24" Pipeline
M2 and M3 - Market Areas
PGW City Gate is in M3

Transco
Station 30 - Zone 1
Station 45 - Zone 2
Station 65 - Zone 3
Station 85 - Zone 4
Zone 5
Zone 6 - PGW City Gate
Station 195 - Zone 6
Edna - Zone 3
River Road - Zone 6

September 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.3700	PGW GATE	0	09/01/22	09/01/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.9950	PGW GATE	0	09/01/22	09/01/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$8.2400	PGW GATE	0	09/02/22	09/02/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.8950	PGW GATE	0	09/02/22	09/02/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.8150	PGW GATE	0	09/03/22	09/03/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.3100	PGW GATE	0	09/03/22	09/03/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.8150	PGW GATE	0	09/04/22	09/04/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.3100	PGW GATE	0	09/04/22	09/04/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.8150	PGW GATE	0	09/05/22	09/05/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.3100	PGW GATE	0	09/05/22	09/05/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.8150	PGW GATE	0	09/06/22	09/06/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.3100	PGW GATE	0	09/06/22	09/06/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.8250	PGW GATE	0	09/07/22	09/07/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.1600	PGW GATE	0	09/07/22	09/07/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4700	PGW GATE	0	09/08/22	09/08/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.8500	PGW GATE	0	09/08/22	09/08/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.3050	PGW GATE	0	09/09/22	09/09/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.6000	PGW GATE	0	09/09/22	09/09/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.0600	PGW GATE	0	09/10/22	09/10/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.4900	PGW GATE	0	09/10/22	09/10/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.0600	PGW GATE	0	09/11/22	09/11/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.4900	PGW GATE	0	09/11/22	09/11/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.0600	PGW GATE	0	09/12/22	09/12/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.4900	PGW GATE	0	09/12/22	09/12/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.4350	PGW GATE	0	09/13/22	09/13/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.7450	PGW GATE	0	09/13/22	09/13/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.7200	PGW GATE	0	09/14/22	09/14/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.0950	PGW GATE	0	09/14/22	09/14/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.7450	PGW GATE	0	09/15/22	09/15/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$9.3550	PGW GATE	0	09/15/22	09/15/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.2650	PGW GATE	0	09/16/22	09/16/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.7100	PGW GATE	0	09/16/22	09/16/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.8150	PGW GATE	0	09/17/22	09/17/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.3450	PGW GATE	0	09/17/22	09/17/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.8150	PGW GATE	0	09/18/22	09/18/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.3450	PGW GATE	0	09/18/22	09/18/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.8150	PGW GATE	0	09/19/22	09/19/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.3450	PGW GATE	0	09/19/22	09/19/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$7.0350	PGW GATE	0	09/20/22	09/20/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.2000	PGW GATE	0	09/20/22	09/20/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$6.8650	PGW GATE	0	09/21/22	09/21/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.4650	PGW GATE	0	09/21/22	09/21/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.9800	PGW GATE	0	09/22/22	09/22/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$8.3500	PGW GATE	0	09/22/22	09/22/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	5,000	$5.4500	PGW GATE	4,968	09/23/22	09/23/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$7.8600	PGW GATE	0	09/23/22	09/23/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$3.6800	PGW GATE	0	09/24/22	09/24/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.8050	PGW GATE	0	09/24/22	09/24/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$3.6800	PGW GATE	0	09/25/22	09/25/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.8050	PGW GATE	0	09/25/22	09/25/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$3.6800	PGW GATE	0	09/26/22	09/26/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.8050	PGW GATE	0	09/26/22	09/26/22

Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$4.1550	PGW GATE	0	09/27/22	09/27/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.6500	PGW GATE	0	09/27/22	09/27/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$4.9000	PGW GATE	0	09/28/22	09/28/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.6250	PGW GATE	0	09/28/22	09/28/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$4.7450	PGW GATE	0	09/29/22	09/29/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.2400	PGW GATE	0	09/29/22	09/29/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$4.5150	PGW GATE	0	09/30/22	09/30/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.2550	PGW GATE	0	09/30/22	09/30/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$9.9950	PGW GATE	4,989	09/01/22	09/30/22
Firm	TGPL-1003691	EDNA Shell 2	Accepted	EDNA	7,000	$10.0000	PGW GATE	6,984	09/01/22	09/30/22
Firm	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	9,000	$6.0000	PGW GATE	8,942	09/01/22	09/30/22
Firm	TGPL-1003691	STA 195 MGAG - RBC	Accepted	STA 195	3,736	$5.5225	PGW GATE	3,712	09/01/22	09/30/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank	Accepted	STA 195	3,500	$5.6325	PGW GATE	3,477	09/01/22	09/30/22
Firm	TGPL-1003691	STA 195 PEAK - MS	Accepted	STA 195	3,000	$7.7400	PGW GATE	2,981	09/01/22	09/30/22
Firm	TGPL-1003691	STA 195 PEAK - SEA	Accepted	STA 195	2,000	$7.7200	PGW GATE	1,987	09/01/22	09/30/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank 2	Accepted	STA 195	4,500	$5.5925	PGW GATE	4,471	09/01/22	09/30/22
Firm	TGPL-1003691	River Road MGAG - Macquarie	Accepted	River Road	3,500	$5.6550	PGW GATE	3,477	09/01/22	09/30/22
No Spot purchases for Transco										

Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.1550	PGW GATE	6,938	09/01/22	09/01/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.1550	PGW GATE	0	09/01/22	09/01/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$8.0700	PGW GATE	6,938	09/02/22	09/02/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$8.0700	PGW GATE	0	09/02/22	09/02/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$7.6650	PGW GATE	6,938	09/03/22	09/03/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.6650	PGW GATE	0	09/03/22	09/03/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$7.6650	PGW GATE	6,938	09/04/22	09/04/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.6650	PGW GATE	0	09/04/22	09/04/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$7.6650	PGW GATE	6,938	09/05/22	09/05/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.6650	PGW GATE	0	09/05/22	09/05/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$7.6650	PGW GATE	6,938	09/06/22	09/06/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.6650	PGW GATE	0	09/06/22	09/06/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	4,000	$7.6100	PGW GATE	3,964	09/07/22	09/07/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.6100	PGW GATE	0	09/07/22	09/07/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	4,000	$7.2550	PGW GATE	3,964	09/08/22	09/08/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.2550	PGW GATE	0	09/08/22	09/08/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.1250	PGW GATE	0	09/09/22	09/09/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.1250	PGW GATE	0	09/09/22	09/09/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.9700	PGW GATE	0	09/10/22	09/10/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.9700	PGW GATE	0	09/10/22	09/10/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.9700	PGW GATE	0	09/11/22	09/11/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.9700	PGW GATE	0	09/11/22	09/11/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$6.9700	PGW GATE	0	09/12/22	09/12/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.9700	PGW GATE	0	09/12/22	09/12/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.2300	PGW GATE	0	09/13/22	09/13/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.2300	PGW GATE	0	09/13/22	09/13/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.5200	PGW GATE	0	09/14/22	09/14/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.5200	PGW GATE	0	09/14/22	09/14/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$7.6700	PGW GATE	0	09/15/22	09/15/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.6700	PGW GATE	0	09/15/22	09/15/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	5,000	$7.2700	PGW GATE	4,956	09/16/22	09/16/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$7.2700	PGW GATE	0	09/16/22	09/16/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$6.7150	PGW GATE	6,938	09/17/22	09/17/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.7150	PGW GATE	0	09/17/22	09/17/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$6.7150	PGW GATE	6,938	09/18/22	09/18/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.7150	PGW GATE	0	09/18/22	09/18/22

Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$6.7150	PGW GATE	6,938	09/19/22	09/19/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.7150	PGW GATE	0	09/19/22	09/19/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$6.8350	PGW GATE	6,938	09/20/22	09/20/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.8350	PGW GATE	0	09/20/22	09/20/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$6.6800	PGW GATE	6,938	09/21/22	09/21/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$6.6800	PGW GATE	0	09/21/22	09/21/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	7,000	$5.9650	PGW GATE	6,938	09/22/22	09/22/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.9650	PGW GATE	0	09/22/22	09/22/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.4300	PGW GATE	24,778	09/23/22	09/23/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$5.4300	PGW GATE	4,956	09/23/22	09/23/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	8,000	$3.6200	PGW GATE	7,929	09/24/22	09/24/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.6200	PGW GATE	0	09/24/22	09/24/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	8,000	$3.6200	PGW GATE	7,929	09/25/22	09/25/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.6200	PGW GATE	0	09/25/22	09/25/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	8,000	$3.6200	PGW GATE	7,929	09/26/22	09/26/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.6200	PGW GATE	0	09/26/22	09/26/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	8,000	$4.0200	PGW GATE	7,929	09/27/22	09/27/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.0200	PGW GATE	0	09/27/22	09/27/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.8100	PGW GATE	24,778	09/28/22	09/28/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.8100	PGW GATE	0	09/28/22	09/28/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	8,000	$4.6500	PGW GATE	7,929	09/29/22	09/29/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.6500	PGW GATE	0	09/29/22	09/29/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	8,000	$4.3950	PGW GATE	7,929	09/30/22	09/30/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.3950	PGW GATE	0	09/30/22	09/30/22
Firm	Tetco-330791	M2 30" EQT	Accepted	M2 30" Crayne	5,000	$6.0700	PGW GATE	5,000	09/01/22	09/30/22
Firm	Tetco-800232	M2 30" Shell	Accepted	M2 30"	15,000	$6.6750	PGW GATE	14,867	09/01/22	09/30/22
Firm	Tetco-800232	M2 30" Macquarie	Accepted	M2 30"	3,000	$6.0300	PGW GATE	2,973	09/01/22	09/30/22
Firm	Tetco-800232	M2 30" EQT	Accepted	M2 30"	3,000	$6.0300	PGW GATE	2,973	09/01/22	09/30/22
Firm	Tetco-800232	M2 30" MGAG - TD Bank	Accepted	M2 30"	3,000	$5.5500	PGW GATE	2,973	09/01/22	09/30/22
Firm	Tetco-800232	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$7.3650	PGW GATE	4,956	09/01/22	09/30/22
No Spot purchases for Tetco										

Tetco- Texas Eastern Pipeline
Receipt Points
STX-South Texas
ETX-East Texas
WLA-West Louisiana
ELA -East Louisiana
M1 30" M1 24" - Market Area 1 on 30" Pipeline and 24" Pipeline
M2 and M3 - Market Areas
PGW City Gate is in M3

Transco
Station 30 - Zone 1
Station 45 - Zone 2
Station 65 - Zone 3
Station 85 - Zone 4
Zone 5
Zone 6 - PGW City Gate
Station 195 - Zone 6
Edna - Zone 3
River Road - Zone 6

October 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	10,000	$4.0000	PGW GATE	9,935	10/01/22	10/01/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.5850	PGW GATE	0	10/01/22	10/01/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	10,000	$4.0000	PGW GATE	9,935	10/02/22	10/02/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.5850	PGW GATE	0	10/02/22	10/02/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	10,000	$4.0000	PGW GATE	9,935	10/03/22	10/03/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.5850	PGW GATE	0	10/03/22	10/03/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	15,000	$4.8150	PGW GATE	14,903	10/04/22	10/04/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.4200	PGW GATE	0	10/04/22	10/04/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	15,000	$5.2050	PGW GATE	14,903	10/05/22	10/05/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.2800	PGW GATE	0	10/05/22	10/05/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.8550	PGW GATE	0	10/06/22	10/06/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.1700	PGW GATE	0	10/06/22	10/06/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.9450	PGW GATE	0	10/07/22	10/07/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.8000	PGW GATE	0	10/07/22	10/07/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	15,000	$5.3200	PGW GATE	14,903	10/08/22	10/08/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.1800	PGW GATE	0	10/08/22	10/08/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	15,000	$5.3200	PGW GATE	14,903	10/09/22	10/09/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.1800	PGW GATE	0	10/09/22	10/09/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	15,000	$5.3200	PGW GATE	14,903	10/10/22	10/10/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.1800	PGW GATE	0	10/10/22	10/10/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	5,000	$5.2600	PGW GATE	4,968	10/11/22	10/11/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.4000	PGW GATE	0	10/11/22	10/11/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.0250	PGW GATE	0	10/12/22	10/12/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.4350	PGW GATE	0	10/12/22	10/12/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.3400	PGW GATE	0	10/13/22	10/13/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.6350	PGW GATE	0	10/13/22	10/13/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.2850	PGW GATE	0	10/14/22	10/14/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.3850	PGW GATE	0	10/14/22	10/14/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.0700	PGW GATE	0	10/15/22	10/15/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.9450	PGW GATE	0	10/15/22	10/15/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.0700	PGW GATE	0	10/16/22	10/16/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.9450	PGW GATE	0	10/16/22	10/16/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$5.0700	PGW GATE	0	10/17/22	10/17/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.9450	PGW GATE	0	10/17/22	10/17/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	15,000	$5.5750	PGW GATE	14,903	10/18/22	10/18/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$6.2950	PGW GATE	0	10/18/22	10/18/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$5.6950	PGW GATE	24,838	10/19/22	10/19/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$6.0150	PGW GATE	19,498	10/19/22	10/19/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$5.0450	PGW GATE	24,838	10/20/22	10/20/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	20,000	$5.4350	PGW GATE	19,498	10/20/22	10/20/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	25,000	$4.3450	PGW GATE	24,838	10/21/22	10/21/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	10,000	$4.9200	PGW GATE	9,749	10/21/22	10/21/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$3.2500	PGW GATE	0	10/22/22	10/22/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.0500	PGW GATE	0	10/22/22	10/22/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$3.2500	PGW GATE	0	10/23/22	10/23/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.0500	PGW GATE	0	10/23/22	10/23/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$3.2500	PGW GATE	0	10/24/22	10/24/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.0500	PGW GATE	0	10/24/22	10/24/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$3.8650	PGW GATE	0	10/25/22	10/25/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.8100	PGW GATE	0	10/25/22	10/25/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$4.1750	PGW GATE	0	10/26/22	10/26/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.0250	PGW GATE	0	10/26/22	10/26/22

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Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$4.4200	PGW GATE	0	10/27/22	10/27/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.2250	PGW GATE	0	10/27/22	10/27/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$4.4900	PGW GATE	0	10/28/22	10/28/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$5.1600	PGW GATE	0	10/28/22	10/28/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$3.2100	PGW GATE	0	10/29/22	10/29/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.7500	PGW GATE	0	10/29/22	10/29/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$3.2100	PGW GATE	0	10/30/22	10/30/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.7500	PGW GATE	0	10/30/22	10/30/22
Firm-Swing	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	0	$3.2100	PGW GATE	0	10/31/22	10/31/22
Firm-Swing	TGPL-1003691	STA 85 United Energy	Accepted	STA 85	0	$4.7500	PGW GATE	0	10/31/22	10/31/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$6.8850	PGW GATE	4,989	10/01/22	10/12/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$6.8850	PGW GATE	4,988	10/13/22	10/13/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$6.8850	PGW GATE	4,989	10/14/22	10/24/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$6.8850	PGW GATE	4,863	10/25/22	10/31/22
Firm	TGPL-1003691	EDNA Shell 2	Accepted	EDNA	7,000	$6.9900	PGW GATE	6,984	10/01/22	10/24/22
Firm	TGPL-1003691	EDNA Shell 2	Accepted	EDNA	7,000	$6.9900	PGW GATE	6,808	10/25/22	10/31/22
Firm	TGPL-1003691	STA 195 Pacific Summit	Accepted	STA 195	9,000	$6.0000	PGW GATE	8,942	10/01/22	10/31/22
Firm	TGPL-1003691	STA 195 MGAG - RBC	Accepted	STA 195	3,736	$5.5225	PGW GATE	3,712	10/01/22	10/31/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank	Accepted	STA 195	3,500	$5.6325	PGW GATE	3,477	10/01/22	10/31/22
Firm	TGPL-1003691	STA 195 PEAK - MS	Accepted	STA 195	3,000	$4.1500	PGW GATE	2,981	10/01/22	10/31/22
Firm	TGPL-1003691	STA 195 PEAK - SEA	Accepted	STA 195	2,000	$4.1300	PGW GATE	1,987	10/01/22	10/31/22
Firm	TGPL-1003691	STA 195 MGAG - Citibank 2	Accepted	STA 195	4,500	$5.5925	PGW GATE	4,471	10/01/22	10/31/22
Firm	TGPL-1003691	River Road MGAG - Macquarie	Accepted	River Road	3,500	$5.6550	PGW GATE	3,477	10/01/22	10/31/22
No Spot purchases for Transco										

Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	20,000	$3.9300	PGW GATE	19,822	10/01/22	10/01/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.9300	PGW GATE	0	10/01/22	10/01/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	20,000	$3.9300	PGW GATE	19,822	10/02/22	10/02/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.9300	PGW GATE	0	10/02/22	10/02/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	20,000	$3.9300	PGW GATE	19,822	10/03/22	10/03/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.9300	PGW GATE	0	10/03/22	10/03/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.6750	PGW GATE	24,778	10/04/22	10/04/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.6750	PGW GATE	0	10/04/22	10/04/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.9700	PGW GATE	24,778	10/05/22	10/05/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$4.9700	PGW GATE	4,956	10/05/22	10/05/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.6150	PGW GATE	0	10/06/22	10/06/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.6150	PGW GATE	0	10/06/22	10/06/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.8950	PGW GATE	0	10/07/22	10/07/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.8950	PGW GATE	0	10/07/22	10/07/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.2000	PGW GATE	24,778	10/08/22	10/08/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$5.2000	PGW GATE	4,956	10/08/22	10/08/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.2000	PGW GATE	24,778	10/09/22	10/09/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$5.2000	PGW GATE	4,956	10/09/22	10/09/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.2000	PGW GATE	24,778	10/10/22	10/10/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$5.2000	PGW GATE	4,956	10/10/22	10/10/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.1850	PGW GATE	24,778	10/11/22	10/11/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.1850	PGW GATE	0	10/11/22	10/11/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.8750	PGW GATE	0	10/12/22	10/12/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.8750	PGW GATE	0	10/12/22	10/12/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.2250	PGW GATE	0	10/13/22	10/13/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.2250	PGW GATE	0	10/13/22	10/13/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$5.1250	PGW GATE	0	10/14/22	10/14/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$5.1250	PGW GATE	0	10/14/22	10/14/22

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Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.9750	PGW GATE	0	10/15/22	10/15/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.9750	PGW GATE	0	10/15/22	10/15/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.9750	PGW GATE	0	10/16/22	10/16/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.9750	PGW GATE	0	10/16/22	10/16/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.9750	PGW GATE	0	10/17/22	10/17/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.9750	PGW GATE	0	10/17/22	10/17/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.3400	PGW GATE	24,778	10/18/22	10/18/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$5.3400	PGW GATE	4,956	10/18/22	10/18/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$5.4650	PGW GATE	24,778	10/19/22	10/19/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$5.4650	PGW GATE	4,956	10/19/22	10/19/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.8850	PGW GATE	24,778	10/20/22	10/20/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$4.8850	PGW GATE	4,956	10/20/22	10/20/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.2900	PGW GATE	24,778	10/21/22	10/21/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$4.2900	PGW GATE	4,956	10/21/22	10/21/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.4800	PGW GATE	24,778	10/22/22	10/22/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$3.4800	PGW GATE	4,956	10/22/22	10/22/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.4800	PGW GATE	24,778	10/23/22	10/23/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$3.4800	PGW GATE	4,956	10/23/22	10/23/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.4800	PGW GATE	24,778	10/24/22	10/24/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$3.4800	PGW GATE	4,956	10/24/22	10/24/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$3.7800	PGW GATE	0	10/25/22	10/25/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$3.7800	PGW GATE	0	10/25/22	10/25/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	0	$4.0700	PGW GATE	0	10/26/22	10/26/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	0	$4.0700	PGW GATE	0	10/26/22	10/26/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.2600	PGW GATE	24,778	10/27/22	10/27/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$4.2600	PGW GATE	4,956	10/27/22	10/27/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$4.2750	PGW GATE	24,778	10/28/22	10/28/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$4.2750	PGW GATE	4,956	10/28/22	10/28/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.0900	PGW GATE	24,778	10/29/22	10/29/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$3.0900	PGW GATE	4,956	10/29/22	10/29/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.0900	PGW GATE	24,778	10/30/22	10/30/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$3.0900	PGW GATE	4,956	10/30/22	10/30/22
Firm-Swing	Tetco-800232	M2 30" Sequent	Accepted	M2 30"	25,000	$3.0900	PGW GATE	24,778	10/31/22	10/31/22
Firm-Swing	Tetco-800232	M2 30" Twin Eagle	Accepted	M2 30"	5,000	$3.0900	PGW GATE	4,956	10/31/22	10/31/22
Firm	Tetco-330791	M2 30" EQT	Accepted	M2 30" Crayne	5,000	$6.0700	PGW GATE	5,000	10/01/22	10/31/22
Firm	Tetco-800232	M2 30" Shell	Accepted	M2 30"	15,000	$5.4900	PGW GATE	14,867	10/01/22	10/31/22
Firm	Tetco-800232	M2 30" Macquarie	Accepted	M2 30"	3,000	$6.0300	PGW GATE	2,973	10/01/22	10/31/22
Firm	Tetco-800232	M2 30" EQT	Accepted	M2 30"	3,000	$6.0300	PGW GATE	2,973	10/01/22	10/31/22
Firm	Tetco-800232	M2 30" MGAG - TD Bank	Accepted	M2 30"	3,000	$5.5500	PGW GATE	2,973	10/01/22	10/31/22
Firm	Tetco-800232	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$7.3650	PGW GATE	4,956	10/01/22	10/01/22
Firm	Tetco-800232	M2 30" PEAK - BP	Accepted	M2 30"	4,999	$7.3650	PGW GATE	4,955	10/02/22	10/02/22
Firm	Tetco-800232	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$7.3650	PGW GATE	4,956	10/03/22	10/06/22
Firm	Tetco-800232	M2 30" PEAK - BP	Accepted	M2 30"	5,001	$7.3650	PGW GATE	4,956	10/07/22	10/07/22
Firm	Tetco-800232	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$7.3650	PGW GATE	4,956	10/08/22	10/31/22
No Spot purchases for Tetco										

Tetco- Texas Eastern Pipeline
Receipt Points
STX-South Texas
ETX-East Texas
WLA-West Louisiana
ELA -East Louisiana
M1 30" M1 24" - Market Area 1 on 30" Pipeline and 24" Pipeline

Transco
Station 30 - Zone 1
Station 45 - Zone 2
Station 65 - Zone 3
Station 85 - Zone 4
Zone 5
Zone 6 - PGW City Gate

October 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
M2 and M3 - Market Areas			Station 195 - Zone 6							
PGW City Gate is in M3			Edna - Zone 3							
			River Road - Zone 6							

November 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$5.2050	PGW GATE	0	11/01/22	11/01/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$5.2150	PGW GATE	0	11/01/22	11/01/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$5.2150	PGW GATE	0	11/01/22	11/01/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.4150	PGW GATE	0	11/02/22	11/02/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$4.4250	PGW GATE	0	11/02/22	11/02/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$4.4250	PGW GATE	0	11/02/22	11/02/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.5300	PGW GATE	0	11/03/22	11/03/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$4.5400	PGW GATE	0	11/03/22	11/03/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$4.5400	PGW GATE	0	11/03/22	11/03/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.5450	PGW GATE	0	11/04/22	11/04/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$4.5550	PGW GATE	0	11/04/22	11/04/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$4.5550	PGW GATE	0	11/04/22	11/04/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$3.6050	PGW GATE	0	11/05/22	11/05/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$3.6150	PGW GATE	0	11/05/22	11/05/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$3.6150	PGW GATE	0	11/05/22	11/05/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$3.6050	PGW GATE	0	11/06/22	11/06/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$3.6150	PGW GATE	0	11/06/22	11/06/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$3.6150	PGW GATE	0	11/06/22	11/06/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$3.6050	PGW GATE	0	11/07/22	11/07/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$3.6150	PGW GATE	0	11/07/22	11/07/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$3.6150	PGW GATE	0	11/07/22	11/07/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.1500	PGW GATE	0	11/08/22	11/08/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$4.1600	PGW GATE	0	11/08/22	11/08/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$4.1600	PGW GATE	0	11/08/22	11/08/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$3.6850	PGW GATE	0	11/09/22	11/09/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$3.6950	PGW GATE	0	11/09/22	11/09/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$3.6950	PGW GATE	0	11/09/22	11/09/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$3.1450	PGW GATE	0	11/10/22	11/10/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$3.1550	PGW GATE	0	11/10/22	11/10/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$3.1550	PGW GATE	0	11/10/22	11/10/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.6100	PGW GATE	0	11/11/22	11/11/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$4.6200	PGW GATE	0	11/11/22	11/11/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$4.6200	PGW GATE	0	11/11/22	11/11/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.6100	PGW GATE	0	11/12/22	11/12/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$4.6200	PGW GATE	0	11/12/22	11/12/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$4.6200	PGW GATE	0	11/12/22	11/12/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.6100	PGW GATE	0	11/13/22	11/13/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$4.6200	PGW GATE	0	11/13/22	11/13/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$4.6200	PGW GATE	0	11/13/22	11/13/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.6100	PGW GATE	0	11/14/22	11/14/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$4.6200	PGW GATE	0	11/14/22	11/14/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$4.6200	PGW GATE	0	11/14/22	11/14/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$6.4100	PGW GATE	0	11/15/22	11/15/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$6.4200	PGW GATE	0	11/15/22	11/15/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$6.4200	PGW GATE	0	11/15/22	11/15/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$6.0300	PGW GATE	0	11/16/22	11/16/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$6.0400	PGW GATE	0	11/16/22	11/16/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$6.0400	PGW GATE	0	11/16/22	11/16/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	15,000	$5.9900	PGW GATE	14,624	11/17/22	11/17/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$6.0000	PGW GATE	0	11/17/22	11/17/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$6.0000	PGW GATE	0	11/17/22	11/17/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$6.4050	PGW GATE	24,373	11/18/22	11/18/22

November 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$6.4150	PGW GATE	0	11/18/22	11/18/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$6.4150	PGW GATE	0	11/18/22	11/18/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$6.2450	PGW GATE	24,373	11/19/22	11/19/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$6.2550	PGW GATE	4,875	11/19/22	11/19/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$6.2550	PGW GATE	14,624	11/19/22	11/19/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$6.2450	PGW GATE	24,373	11/20/22	11/20/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$6.2550	PGW GATE	4,875	11/20/22	11/20/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$6.2550	PGW GATE	14,624	11/20/22	11/20/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$6.2450	PGW GATE	24,373	11/21/22	11/21/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$6.2550	PGW GATE	4,875	11/21/22	11/21/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$6.2550	PGW GATE	14,624	11/21/22	11/21/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$6.3100	PGW GATE	24,373	11/22/22	11/22/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$6.3200	PGW GATE	0	11/22/22	11/22/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$6.3200	PGW GATE	14,624	11/22/22	11/22/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.9650	PGW GATE	24,373	11/23/22	11/23/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$5.9750	PGW GATE	0	11/23/22	11/23/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$5.9750	PGW GATE	0	11/23/22	11/23/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$6.2600	PGW GATE	0	11/24/22	11/24/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$6.2700	PGW GATE	0	11/24/22	11/24/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$6.2700	PGW GATE	0	11/24/22	11/24/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$6.2600	PGW GATE	0	11/25/22	11/25/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$6.2700	PGW GATE	0	11/25/22	11/25/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$6.2700	PGW GATE	0	11/25/22	11/25/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$6.2600	PGW GATE	0	11/26/22	11/26/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$6.2700	PGW GATE	0	11/26/22	11/26/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$6.2700	PGW GATE	0	11/26/22	11/26/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$6.2600	PGW GATE	0	11/27/22	11/27/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$6.2700	PGW GATE	0	11/27/22	11/27/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$6.2700	PGW GATE	0	11/27/22	11/27/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$6.2600	PGW GATE	0	11/28/22	11/28/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$6.2700	PGW GATE	0	11/28/22	11/28/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$6.2700	PGW GATE	0	11/28/22	11/28/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$5.6550	PGW GATE	0	11/29/22	11/29/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$5.6650	PGW GATE	0	11/29/22	11/29/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$5.6650	PGW GATE	0	11/29/22	11/29/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$6.2050	PGW GATE	0	11/30/22	11/30/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$6.2150	PGW GATE	0	11/30/22	11/30/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$6.2150	PGW GATE	0	11/30/22	11/30/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$5.2900	PGW GATE	4,989	11/01/22	11/10/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	4,660	$5.2900	PGW GATE	4,649	11/11/22	11/11/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$5.2900	PGW GATE	4,989	11/12/22	11/30/22
Firm	TGPL-1003691	STA 85 MGAG - Macquarie	Accepted	STA 85	3,500	$5.1800	PGW GATE	3,412	11/01/22	11/30/22
Firm	TGPL-1003691	STA 85 MGAG - RBC	Accepted	STA 85	8,000	$5.0500	PGW GATE	7,799	11/01/22	11/30/22
Firm	TGPL-1003691	STA 85 MGAG - Citibank	Accepted	STA 85	3,500	$5.0400	PGW GATE	3,412	11/01/22	11/30/22
Firm	TGPL-1003691	STA 85 PEAK - SEA	Accepted	STA 85	9,252	$5.0200	PGW GATE	9,020	11/01/22	11/30/22
Firm	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	10,000	$5.4700	PGW GATE	9,749	11/01/22	11/30/22
Firm	TGPL-1003691	STA 85 MGAG	Accepted	STA 85	10,000	$5.4100	PGW GATE	9,749	11/01/22	11/30/22
Firm	TGPL-1003691	STA 85 PEAK - MS	Accepted	STA 85	7,835	$5.0400	PGW GATE	7,638	11/01/22	11/30/22
Firm	TGPL-1003691	STA 85 MGAG - Citibank 2	Accepted	STA 85	4,500	$5.0000	PGW GATE	4,387	11/01/22	11/30/22
No Spot purchases for Transco										
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$2.7100	PGW GATE	0	11/01/22	11/01/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$2.7100	PGW GATE	0	11/01/22	11/01/22

November 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$2.6750	PGW GATE	0	11/02/22	11/02/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$2.6750	PGW GATE	0	11/02/22	11/02/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$2.9750	PGW GATE	0	11/03/22	11/03/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$2.9750	PGW GATE	0	11/03/22	11/03/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$1.3900	PGW GATE	0	11/04/22	11/04/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$1.3900	PGW GATE	0	11/04/22	11/04/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$0.5100	PGW GATE	0	11/05/22	11/05/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$0.5100	PGW GATE	0	11/05/22	11/05/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$0.5100	PGW GATE	0	11/06/22	11/06/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$0.5100	PGW GATE	0	11/06/22	11/06/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$0.5100	PGW GATE	0	11/07/22	11/07/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$0.5100	PGW GATE	0	11/07/22	11/07/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$2.8550	PGW GATE	0	11/08/22	11/08/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$2.8550	PGW GATE	0	11/08/22	11/08/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$2.9000	PGW GATE	0	11/09/22	11/09/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$2.9000	PGW GATE	0	11/09/22	11/09/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$1.8900	PGW GATE	0	11/10/22	11/10/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$1.8900	PGW GATE	0	11/10/22	11/10/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$2.6150	PGW GATE	0	11/11/22	11/11/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$2.6150	PGW GATE	0	11/11/22	11/11/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$2.6150	PGW GATE	0	11/12/22	11/12/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$2.6150	PGW GATE	0	11/12/22	11/12/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$2.6150	PGW GATE	0	11/13/22	11/13/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$2.6150	PGW GATE	0	11/13/22	11/13/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$2.6150	PGW GATE	0	11/14/22	11/14/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$2.6150	PGW GATE	0	11/14/22	11/14/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$5.5050	PGW GATE	0	11/15/22	11/15/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$5.5050	PGW GATE	0	11/15/22	11/15/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	10,000	$5.3750	PGW GATE	9,911	11/16/22	11/16/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.3750	PGW GATE	14,867	11/16/22	11/16/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.3000	PGW GATE	19,822	11/17/22	11/17/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.3000	PGW GATE	14,867	11/17/22	11/17/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.8950	PGW GATE	19,822	11/18/22	11/18/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.8950	PGW GATE	14,867	11/18/22	11/18/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.8150	PGW GATE	19,822	11/19/22	11/19/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.8150	PGW GATE	14,867	11/19/22	11/19/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.8150	PGW GATE	19,822	11/20/22	11/20/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.8150	PGW GATE	14,867	11/20/22	11/20/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.8150	PGW GATE	19,822	11/21/22	11/21/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.8150	PGW GATE	14,867	11/21/22	11/21/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$6.0150	PGW GATE	19,822	11/22/22	11/22/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$6.0150	PGW GATE	14,867	11/22/22	11/22/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.6850	PGW GATE	19,822	11/23/22	11/23/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.6850	PGW GATE	14,867	11/23/22	11/23/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$5.8050	PGW GATE	0	11/24/22	11/24/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$5.8050	PGW GATE	0	11/24/22	11/24/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$5.8050	PGW GATE	0	11/25/22	11/25/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$5.8050	PGW GATE	0	11/25/22	11/25/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$5.8050	PGW GATE	0	11/26/22	11/26/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$5.8050	PGW GATE	0	11/26/22	11/26/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$5.8050	PGW GATE	0	11/27/22	11/27/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$5.8050	PGW GATE	0	11/27/22	11/27/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$5.8050	PGW GATE	0	11/28/22	11/28/22

November 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$5.8050	PGW GATE	0	11/28/22	11/28/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$5.1600	PGW GATE	0	11/29/22	11/29/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$5.1600	PGW GATE	0	11/29/22	11/29/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$5.9200	PGW GATE	0	11/30/22	11/30/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$5.9200	PGW GATE	0	11/30/22	11/30/22
Firm	Tetco-800514	M2 30" EQT	Accepted	M2 30"	18,162	$3.6900	PGW GATE	18,000	11/01/22	11/30/22
Firm	Tetco-800515	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$3.2800	PGW GATE	4,955	11/01/22	11/30/22
Firm	Tetco-800515	M2 30" PEAK - Morgan Stanley	Accepted	M2 30"	11,324	$3.4000	PGW GATE	11,223	11/01/22	11/30/22
Firm	Tetco-800515	M2 30" EQT	Accepted	M2 30"	1,838	$3.6900	PGW GATE	1,822	11/01/22	11/30/22
Firm	Tetco-330791	M2 30" EQT	Accepted	M2 30" Crayne	5,000	$5.4200	PGW GATE	5,000	11/01/22	11/30/22
Firm	Tetco-800232	M2 30" NEXTERA	Accepted	M2 30"	9,400	$3.6975	PGW GATE	9,316	11/01/22	11/30/22
Firm	Tetco-800232	M2 30" MGAG - TD Bank	Accepted	M2 30"	3,000	$3.7350	PGW GATE	2,973	11/01/22	11/30/22
Firm	Tetco-800232	M2 30" PEAK - Morgan Stanley	Accepted	M2 30"	762	$3.4000	PGW GATE	755	11/01/22	11/30/22
No Spot purchases for Tetco										

Tetco- Texas Eastern Pipeline
Receipt Points
STX-South Texas
ETX-East Texas
WLA-West Louisiana
ELA -East Louisiana
M1 30" M1 24" - Market Area 1 on 30" Pipeline and 24" Pipeline
M2 and M3 - Market Areas
PGW City Gate is in M3

Transco
Station 30 - Zone 1
Station 45 - Zone 2
Station 65 - Zone 3
Station 85 - Zone 4
Zone 5
Zone 6 - PGW City Gate
Station 195 - Zone 6
Edna - Zone 3
River Road - Zone 6

December 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$7.0200	PGW GATE	24,373	12/01/22	12/01/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$7.0300	PGW GATE	4,875	12/01/22	12/01/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$7.0300	PGW GATE	14,624	12/01/22	12/01/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$6.3200	PGW GATE	24,373	12/02/22	12/02/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$6.3300	PGW GATE	4,875	12/02/22	12/02/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$6.3300	PGW GATE	14,624	12/02/22	12/02/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.7800	PGW GATE	24,373	12/03/22	12/03/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$4.7900	PGW GATE	4,875	12/03/22	12/03/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$4.7900	PGW GATE	14,624	12/03/22	12/03/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.7800	PGW GATE	24,373	12/04/22	12/04/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$4.7900	PGW GATE	4,875	12/04/22	12/04/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$4.7900	PGW GATE	14,624	12/04/22	12/04/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.7800	PGW GATE	24,373	12/05/22	12/05/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$4.7900	PGW GATE	4,875	12/05/22	12/05/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$4.7900	PGW GATE	14,624	12/05/22	12/05/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.0900	PGW GATE	0	12/06/22	12/06/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$4.1000	PGW GATE	0	12/06/22	12/06/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$4.1000	PGW GATE	0	12/06/22	12/06/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$4.3650	PGW GATE	0	12/07/22	12/07/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$4.3750	PGW GATE	0	12/07/22	12/07/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$4.3750	PGW GATE	0	12/07/22	12/07/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	10,000	$4.5700	PGW GATE	9,749	12/08/22	12/08/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$4.5800	PGW GATE	0	12/08/22	12/08/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$4.5800	PGW GATE	0	12/08/22	12/08/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$4.8550	PGW GATE	24,373	12/09/22	12/09/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$4.8650	PGW GATE	4,875	12/09/22	12/09/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	5,000	$4.8650	PGW GATE	4,875	12/09/22	12/09/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.0900	PGW GATE	24,373	12/10/22	12/10/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$5.1000	PGW GATE	4,875	12/10/22	12/10/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$5.1000	PGW GATE	14,624	12/10/22	12/10/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	24,981	$5.0900	PGW GATE	24,354	12/11/22	12/11/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$5.1000	PGW GATE	4,875	12/11/22	12/11/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$5.1000	PGW GATE	14,624	12/11/22	12/11/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.0900	PGW GATE	24,373	12/12/22	12/12/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$5.1000	PGW GATE	4,875	12/12/22	12/12/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$5.1000	PGW GATE	14,624	12/12/22	12/12/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,019	$7.1700	PGW GATE	24,391	12/13/22	12/13/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$7.1800	PGW GATE	4,875	12/13/22	12/13/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$7.1800	PGW GATE	14,624	12/13/22	12/13/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$7.3650	PGW GATE	24,373	12/14/22	12/14/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$7.3750	PGW GATE	4,875	12/14/22	12/14/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$7.3750	PGW GATE	14,624	12/14/22	12/14/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$7.0100	PGW GATE	24,373	12/15/22	12/15/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$7.0200	PGW GATE	4,875	12/15/22	12/15/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$7.0200	PGW GATE	14,624	12/15/22	12/15/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$7.2050	PGW GATE	24,373	12/16/22	12/16/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$7.2150	PGW GATE	4,875	12/16/22	12/16/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$7.2150	PGW GATE	14,624	12/16/22	12/16/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$7.0650	PGW GATE	24,373	12/17/22	12/17/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$7.0750	PGW GATE	4,875	12/17/22	12/17/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$7.0750	PGW GATE	14,624	12/17/22	12/17/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$7.0650	PGW GATE	24,373	12/18/22	12/18/22

December 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$7.0750	PGW GATE	4,875	12/18/22	12/18/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$7.0750	PGW GATE	14,624	12/18/22	12/18/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$7.0650	PGW GATE	24,373	12/19/22	12/19/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$7.0750	PGW GATE	4,875	12/19/22	12/19/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$7.0750	PGW GATE	14,624	12/19/22	12/19/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$6.4150	PGW GATE	24,373	12/20/22	12/20/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$6.4250	PGW GATE	4,875	12/20/22	12/20/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$6.4250	PGW GATE	14,624	12/20/22	12/20/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.3550	PGW GATE	24,373	12/21/22	12/21/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$5.3650	PGW GATE	4,875	12/21/22	12/21/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$5.3650	PGW GATE	14,624	12/21/22	12/21/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$6.6150	PGW GATE	0	12/22/22	12/22/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$6.6250	PGW GATE	0	12/22/22	12/22/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$6.6250	PGW GATE	0	12/22/22	12/22/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$8.2100	PGW GATE	24,373	12/23/22	12/23/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$8.2200	PGW GATE	4,875	12/23/22	12/23/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$8.2200	PGW GATE	14,624	12/23/22	12/23/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$8.3250	PGW GATE	24,373	12/24/22	12/24/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$8.3350	PGW GATE	4,875	12/24/22	12/24/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$8.3350	PGW GATE	14,624	12/24/22	12/24/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$8.3250	PGW GATE	24,373	12/25/22	12/25/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$8.3350	PGW GATE	4,875	12/25/22	12/25/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$8.3350	PGW GATE	14,624	12/25/22	12/25/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$8.3250	PGW GATE	24,373	12/26/22	12/26/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$8.3350	PGW GATE	4,875	12/26/22	12/26/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$8.3350	PGW GATE	14,624	12/26/22	12/26/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$8.3250	PGW GATE	24,373	12/27/22	12/27/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$8.3350	PGW GATE	4,875	12/27/22	12/27/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$8.3350	PGW GATE	14,624	12/27/22	12/27/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.6750	PGW GATE	24,373	12/28/22	12/28/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$5.6850	PGW GATE	4,875	12/28/22	12/28/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$5.6850	PGW GATE	14,624	12/28/22	12/28/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	25,000	$5.1650	PGW GATE	24,373	12/29/22	12/29/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	5,000	$5.1750	PGW GATE	4,875	12/29/22	12/29/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	15,000	$5.1750	PGW GATE	14,624	12/29/22	12/29/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$3.5850	PGW GATE	0	12/30/22	12/30/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$3.5950	PGW GATE	0	12/30/22	12/30/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$3.5950	PGW GATE	0	12/30/22	12/30/22
Firm-Swing	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	0	$3.5850	PGW GATE	0	12/31/22	12/31/22
Firm-Swing	TGPL-1003691	STA 85 Spire	Accepted	STA 85	0	$3.5950	PGW GATE	0	12/31/22	12/31/22
Firm-Swing	TGPL-1003691	STA 85 Hartree Partners	Accepted	STA 85	0	$3.5950	PGW GATE	0	12/31/22	12/31/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$7.1800	PGW GATE	4,989	12/01/22	12/07/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$7.1800	PGW GATE	4,934	12/08/22	12/08/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$7.1800	PGW GATE	4,989	12/09/22	12/17/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$7.1800	PGW GATE	4,864	12/18/22	12/20/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$7.1800	PGW GATE	4,989	12/21/22	12/22/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$7.1800	PGW GATE	4,864	12/23/22	12/23/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	3,831	$7.1800	PGW GATE	3,726	12/24/22	12/24/22
Firm	TGPL-1003691	EDNA Shell	Accepted	EDNA	5,000	$7.1800	PGW GATE	4,864	12/25/22	12/31/22
Firm	TGPL-1003691	STA 85 MGAG - Macquarie	Accepted	STA 85	3,500	$7.0500	PGW GATE	3,412	12/01/22	12/31/22
Firm	TGPL-1003691	STA 85 MGAG - RBC	Accepted	STA 85	8,000	$6.9200	PGW GATE	7,799	12/01/22	12/31/22
Firm	TGPL-1003691	STA 85 MGAG - Citibank	Accepted	STA 85	3,500	$6.9100	PGW GATE	3,412	12/01/22	12/31/22
Firm	TGPL-1003691	STA 85 PEAK - SEA	Accepted	STA 85	9,252	$6.8900	PGW GATE	9,020	12/01/22	12/31/22

December 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	10,000	$7.3400	PGW GATE	9,749	12/01/22	12/10/22
Firm	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	9,992	$7.3400	PGW GATE	9,741	12/11/22	12/11/22
Firm	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	10,000	$7.3400	PGW GATE	9,749	12/12/22	12/12/22
Firm	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	10,008	$7.3400	PGW GATE	9,757	12/13/22	12/13/22
Firm	TGPL-1003691	STA 85 Pacific Summit	Accepted	STA 85	10,000	$7.3400	PGW GATE	9,749	12/14/22	12/31/22
Firm	TGPL-1003691	STA 85 MGAG	Accepted	STA 85	10,000	$7.2800	PGW GATE	9,749	12/01/22	12/31/22
Firm	TGPL-1003691	STA 85 PEAK - MS	Accepted	STA 85	7,835	$6.9100	PGW GATE	7,638	12/01/22	12/31/22
Firm	TGPL-1003691	STA 85 MGAG - Citibank 2	Accepted	STA 85	4,500	$6.8700	PGW GATE	4,387	12/01/22	12/31/22
No Spot purchases for Transco										
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.8400	PGW GATE	19,796	12/01/22	12/01/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.8400	PGW GATE	14,847	12/01/22	12/01/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.3450	PGW GATE	19,796	12/02/22	12/02/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.3450	PGW GATE	14,847	12/02/22	12/02/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$4.6600	PGW GATE	19,796	12/03/22	12/03/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$4.6600	PGW GATE	14,847	12/03/22	12/03/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$4.6600	PGW GATE	19,796	12/04/22	12/04/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$4.6600	PGW GATE	14,847	12/04/22	12/04/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$4.6600	PGW GATE	19,796	12/05/22	12/05/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$4.6600	PGW GATE	14,847	12/05/22	12/05/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$3.7000	PGW GATE	0	12/06/22	12/06/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$3.7000	PGW GATE	0	12/06/22	12/06/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$3.7550	PGW GATE	0	12/07/22	12/07/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$3.7550	PGW GATE	0	12/07/22	12/07/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$4.0600	PGW GATE	19,796	12/08/22	12/08/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$4.0600	PGW GATE	14,847	12/08/22	12/08/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$4.4650	PGW GATE	19,796	12/09/22	12/09/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$4.4650	PGW GATE	14,847	12/09/22	12/09/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$4.7100	PGW GATE	19,796	12/10/22	12/10/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$4.7100	PGW GATE	14,847	12/10/22	12/10/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$4.7100	PGW GATE	19,796	12/11/22	12/11/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$4.7100	PGW GATE	14,847	12/11/22	12/11/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$4.7100	PGW GATE	19,796	12/12/22	12/12/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$4.7100	PGW GATE	14,847	12/12/22	12/12/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.6900	PGW GATE	19,796	12/13/22	12/13/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.6900	PGW GATE	14,847	12/13/22	12/13/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.9050	PGW GATE	19,796	12/14/22	12/14/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.9050	PGW GATE	14,847	12/14/22	12/14/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.5400	PGW GATE	19,796	12/15/22	12/15/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.5400	PGW GATE	14,847	12/15/22	12/15/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$6.0050	PGW GATE	19,796	12/16/22	12/16/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$6.0050	PGW GATE	14,847	12/16/22	12/16/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.9200	PGW GATE	19,796	12/17/22	12/17/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.9200	PGW GATE	14,847	12/17/22	12/17/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.9200	PGW GATE	19,796	12/18/22	12/18/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.9200	PGW GATE	14,847	12/18/22	12/18/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.9200	PGW GATE	19,796	12/19/22	12/19/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.9200	PGW GATE	14,847	12/19/22	12/19/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.2950	PGW GATE	19,796	12/20/22	12/20/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.2950	PGW GATE	14,847	12/20/22	12/20/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$5.0200	PGW GATE	19,796	12/21/22	12/21/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$5.0200	PGW GATE	14,847	12/21/22	12/21/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$5.0050	PGW GATE	0	12/22/22	12/22/22

December 2022

Contract Type	Transportation Contract#	Purchase Point	Status	Receipt PT.	Receipt Quantity	Price	Delivery PT.	Delivery Quantity	Start Date	End Date
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	0	$5.0050	PGW GATE	0	12/22/22	12/22/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$7.6000	PGW GATE	19,796	12/23/22	12/23/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$7.6000	PGW GATE	14,847	12/23/22	12/23/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	17,544	$6.0450	PGW GATE	17,365	12/24/22	12/24/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$6.0450	PGW GATE	14,847	12/24/22	12/24/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	1,756	$6.0450	PGW GATE	1,738	12/25/22	12/25/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$6.0450	PGW GATE	14,847	12/25/22	12/25/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	0	$6.0450	PGW GATE	0	12/26/22	12/26/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$6.0450	PGW GATE	14,847	12/26/22	12/26/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$6.0450	PGW GATE	19,796	12/27/22	12/27/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$6.0450	PGW GATE	14,847	12/27/22	12/27/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$4.9600	PGW GATE	19,796	12/28/22	12/28/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$4.9600	PGW GATE	14,847	12/28/22	12/28/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$3.8100	PGW GATE	19,796	12/29/22	12/29/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$3.8100	PGW GATE	14,847	12/29/22	12/29/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$3.0350	PGW GATE	19,796	12/30/22	12/30/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$3.0350	PGW GATE	14,847	12/30/22	12/30/22
Firm-Swing	Tetco-800232	M2 30" EQT	Accepted	M2 30"	20,000	$3.0350	PGW GATE	19,796	12/31/22	12/31/22
Firm-Swing	Tetco-800232	M2 30" MEMS	Accepted	M2 30"	15,000	$3.0350	PGW GATE	14,847	12/31/22	12/31/22
Firm	Tetco-800514	M2 30" EQT	Accepted	M2 30"	18,185	$5.8900	PGW GATE	18,000	12/01/22	12/31/22
Firm	Tetco-800515	M2 30" PEAK - BP	Accepted	M2 30"	5,000	$5.4800	PGW GATE	4,949	12/01/22	12/31/22
Firm	Tetco-800515	M2 30" PEAK - Morgan Stanley	Accepted	M2 30"	11,371	$5.6000	PGW GATE	11,255	12/01/22	12/31/22
Firm	Tetco-800515	M2 30" EQT	Accepted	M2 30"	1,815	$5.8900	PGW GATE	1,796	12/01/22	12/31/22
Firm	Tetco-330791	M2 30" EQT	Accepted	M2 30" Crayne	5,000	$5.9300	PGW GATE	5,000	12/01/22	12/31/22
Firm	Tetco-800232	M2 30" NEXTERA	Accepted	M2 30"	12,400	$5.8975	PGW GATE	12,274	12/01/22	12/31/22
Firm	Tetco-800232	M2 30" MGAG - TD Bank	Accepted	M2 30"	3,000	$5.6000	PGW GATE	2,969	12/01/22	12/31/22
Firm	Tetco-800232	M2 30" PEAK - Morgan Stanley	Accepted	M2 30"	715	$5.6000	PGW GATE	708	12/01/22	12/31/22
No Spot purchases for Tetco										

Tetco- Texas Eastern Pipeline
Receipt Points
STX-South Texas
ETX-East Texas
WLA-West Louisiana
ELA -East Louisiana
M1 30" M1 24" - Market Area 1 on 30" Pipeline and 24" Pipeline
M2 and M3 - Market Areas
PGW City Gate is in M3

Transco
Station 30 - Zone 1
Station 45 - Zone 2
Station 65 - Zone 3
Station 85 - Zone 4
Zone 5
Zone 6 - PGW City Gate
Station 195 - Zone 6
Edna - Zone 3
River Road - Zone 6

Docket No. R-2023-XXXXXXX
Item 53.64(c)(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:

(4) An annotated listing of Federal Energy Regulatory Commission or other relevant non-Commission proceedings, including legal action necessary to relieve the utility from existing contract terms which are or may be adverse to the interest of its ratepayers, which affect the cost of the utility's gas supply, transportation or storage or which might have an impact on the utility's efforts to provide its customers with reasonable gas service at the lowest price possible. This list shall include docket numbers and shall summarize what has transpired in the cases, and the degree of participation, if any, which the utility has had in the cases. The initial list filed under this paragraph shall include cases for the past 3 years. Subsequent lists need only update prior lists and add new cases.

Response:

Please see PGW's FERC Book attached for a synopsis of all cases pending before the Federal Energy Regulatory Commission.

PHILADELPHIA GAS WORKS

FERC BOOK

2022

Revised 1/31/2023

Prepared and maintained by the Federal Regulatory Affairs Department of the Philadelphia Gas Works.

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Docket No.RP22-466

Texas Eastern Transmission, LP ("TETCO")

Electric Power Cost Adjustment

DATE FILED: **12/31/2021**

BACKGROUND:

On **12/31/2021**, TETCO submitted tariff records, pursuant to Section 15.1 of the General Terms and Conditions of its Tariff, Electric Power Cost ("EPC") Adjustment, setting forth revised rates for each applicable zone, rate schedule, and incremental service, based upon the projected annual EPC required for the operation of transmission compressor stations with electric motor prime movers. The proposed effective date is February 12, 2022.

ACTIVITIES:

2/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-467

Texas Eastern Transmission, LP ("TETCO")

Electric Power Cost Adjustment

DATE FILED: **1/3/2022**

BACKGROUND:

On **1/3/2022**, TETCO submitted tariff records, pursuant to Section 15.1 of the General Terms and Conditions of its Tariff, Electric Power Cost ("EPC") Adjustment, setting forth revised rates for each applicable zone, rate schedule, and incremental service, based upon the projected annual EPC required for the operation of transmission compressor stations with electric motor prime movers. The proposed effective date is February 12, 2022.

ACTIVITIES:

1/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-477

Transcontinental Gas Pipe Line Company, LLC("Transco")

Nonconforming Service Agreement - Rate Schedule FTTN

DATE FILED: **1/7/2022**

BACKGROUND:

On **1/7/2022**, Transco refunded the amount it received for penalty disbursement for storage service purchased under Texas Eastern' s Rate Schedule X-28, with interest, to Transco's Rate Schedule S-2 customers.

ACTIVITIES:

1/11/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-490

Transcontinental Gas Pipe Line Company, LLC("Transco")

Nonconforming Service Agreement - Rate Schedule FTTN

DATE FILED: **1/24/2022**

BACKGROUND:

On **1/14/2022**, Transco filed revised tariff records to remove negotiated rate service agreements that have terminated from the Tariff summaries, update the shipper lists in Rate Schedule WSS-OA and Section 15 of the General Terms and Conditions, update the List of Non-Conforming Service Agreements, and make miscellaneous housekeeping changes. The proposed effective date is February 14, 2022.

ACTIVITIES:

1/24/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-502

Eastern Gas Transmission and Storage("EGTS")

Update Tariff Records -Web links

DATE FILED: **1/14/2022**

BACKGROUND:

On **1/14/2022**, Transco filed revised tariff records to remove negotiated rate service agreements that have terminated from the Tariff summaries, update the shipper lists in Rate Schedule WSS-OA and Section 15 of the General Terms and Conditions, update the List of Non-Conforming Service Agreements, and make miscellaneous housekeeping changes. The proposed effective date is February 14, 2022.

ACTIVITIES:

1/24/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-515

Transcontinental Gas Pipe Line Company, LLC("Transco")

Nonconforming Service Agreement – Rate Schedule FT - 1

DATE FILED: **1/31/2022**

BACKGROUND:

On **1/31/2022**, Transco submitted tariff revisions to summarize the essential elements of service agreements under Rate Schedule FT that contain negotiated commodity rates between Transco and replacement shippers who acquired released capacity from Atlanta Gas Light Company through a service agreement under Transco's Cherokee Expansion. The proposed effective date is February 1, 2022.

ACTIVITIES:

2/7/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-536

Transcontinental Gas Pipe Line Company, LLC("Transco")

Revised Tariff

DATE FILED: **1/3/2022**

BACKGROUND:

On **1/3/2022**, Transco submitted tariff revisions to track rate changes attributable to storage service purchased from Texas Eastern Transmission, LP, under its Rate Schedule X-28, the costs of which are included in the rates and charges payable under Transco's Rate Schedule S-2. The proposed effective dates are February 1, 2022, and February 14, 2022.

ACTIVITIES:

2/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-539

Texas Eastern Transmission, LP ("TETCO")

Revised Tariff

DATE FILED: **2/4/2022**

BACKGROUND:

On **2/4/2022**, TETCO submitted a revised tariff record in compliance with the Order issued by the Commission on January 20, 2022, in Docket Nos. RP21-1001-000, -001. The proposed effective dates are September 1, 2021, and September 28, 2021.

ACTIVITIES:

2/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-540

Texas Eastern Transmission, LP ("TETCO")

Revised Tariff

DATE FILED: **2/7/2022**

BACKGROUND:

On **2/7/2022**, TETCO submitted a tariff filing reflecting changes in Applicable Shrinkage Adjustment Percentages for system customers. The proposed effective date is March 1, 2022.

ACTIVITIES:

2/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-602

Eastern Gas Transmission and Storage("EGTS")

Revised Tariff

DATE FILED: **2/28/2022**

BACKGROUND:

On **2/28/2022**, EGTS submitted revised tariff records to update several nonconforming service agreements that were previously approved by the Commission. The proposed effective date is April 1, 2022.

ACTIVITIES:

3/10/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-656

Transcontinental Gas Pipe Line Company, LLC("Transco")

Negotiated Service Agreement

DATE FILED: **3/1/2022**

BACKGROUND:

On **3/1/2022**, Transco filed a tariff record summarizing the essential elements of negotiated service agreements between Transco and several replacement shippers that acquired capacity temporarily released by Atlanta Gas Light Company under Transco's Cherokee Expansion. The proposed effective date is March 1, 2022.

ACTIVITIES:

3/11/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-663

Transcontinental Gas Pipe Line Company, LLC("Transco")

General Terms & Conditions

DATE FILED: **3/1/2022**

BACKGROUND:

On **3/1/2022**, Transco submitted revisions to Section 38 – Fuel Retention Adjustment of the General Terms and Conditions of its Gas Tariff. The proposed effective date is April 1, 2022.

ACTIVITIES:

3/11/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-669

Transcontinental Gas Pipe Line Company, LLC("Transco")

General Terms & Conditions

DATE FILED: **3/1/2022**

BACKGROUND:

On **3/1/2022**, Transco submitted revisions to Section 41 of the General Terms and Conditions of its Gas Tariff. The proposed effective date is April 1, 2022.

ACTIVITIES:

3/11/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-674

Texas Eastern Transmission, LP ("TETCO")

General Terms & Conditions

DATE FILED: **3/2/2022**

BACKGROUND:

On **3/2/2022**, TETCO submitted revisions to Section 5 of the General Terms and Conditions of its Gas Tariff. The proposed effective date is April 1, 2022.

ACTIVITIES:

3/11/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-689

Texas Eastern Transmission, LP ("TETCO")

Temporary Waiver

DATE FILED: **3/10/2022**

BACKGROUND:

On **3/10/2022**, Enbridge Pipelines, including TETCO, requested a temporary waiver of certain NAESB Standards, the Commission's regulations, and the Pipelines' FERC Gas Tariff to accommodate an outage caused by upcoming system maintenance on their Electronic Bulletin Board system. Enbridge Pipelines requests that the Commission issue an order granting the requested waivers on or before April 15, 2022.

ACTIVITIES:

3/21/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-693

Transcontinental Gas Pipe Line Company, LLC("Transco")

Track Rate Changes – Schedule X-28

DATE FILED: **3/10/2022**

BACKGROUND:

On **3/10/2022**, Transco submitted revised tariff records track rate changes attributable to storage service purchased from Texas Eastern Transmission, LP under its Rate Schedule X-28, the costs of which are included in the rates and charges payable under Transco's Rate Schedule S-2. The proposed effective dates are February 1, 2022, and February 14, 2022.

ACTIVITIES:

3/21/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-441

Transcontinental Gas Pipe Line Company, LLC("Transco")

General Terms & Conditions

DATE FILED: **12/30/2021**

BACKGROUND:

On **12/30/2021**, On December 30, 2021, Transco submitted revisions to Section 15 of the General Terms and Conditions of its Tariff, setting forth procedures under which Transco will calculate a True-Up Surcharge. The proposed effective date is February 1, 2022.

ACTIVITIES:

1/11/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-461

Transcontinental Gas Pipe Line Company, LLC("Transco")

Negotiated Commodity Rates - Rate Schedule FT

DATE FILED: **12/30/2021**

BACKGROUND:

On **12/30/2021**, Transco submitted a tariff record summarizing the essential elements of service agreements, containing negotiated commodity rates under Rate Schedule FT, between Transco and replacement shippers that acquired capacity temporarily released by Atlanta Gas Light Company for firm transportation service under Transco's Cherokee Expansion. The proposed effective date is January 1, 2022.

ACTIVITIES:

1/11/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-433

Texas Eastern Transmission, LP ("TETCO")

Violation of Firm Service Agreement

DATE FILED: **12/21/2021**

BACKGROUND:

On **12/21/2021**, Range Resources – Appalachia, LLC (“Range”) and Columbia Gulf Transmission, LLC (“Columbia Gulf”) filed a joint complaint against TETCO, alleging they failed to deliver gas to a point of interconnection at the minimum pressure necessary for delivery into the Columbia Gulf system in violation of the firm service agreement between Range and TETCO.

ACTIVITIES:

1/10/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-435

Texas Eastern Transmission, LP ("TETCO")

Violation of Firm Service Agreement

DATE FILED: **12/21/2021**

BACKGROUND:

On **12/21/2021**, Range Resources – Appalachia, LLC submitted a complaint against TETCO alleging that TETCO failed to meet its firm service obligations for volumes flowing through the Adair Interconnect, in violation of, inter alia, the Natural Gas Act, the firm transportation service agreement between the parties, and TETCO's tariff.

ACTIVITIES:

1/10/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.CP22-043

Texas Eastern Transmission, LP ("TETCO")

Prior Notice of Blanket Certificate Activities

DATE FILED: **1/27/2022**

BACKGROUND:

On **1/27/2022**, TETCO submitted a Prior Notice of Blanket Certificate Activity notifying FERC of its intent to construct, own, operate, and maintain interconnection facilities between TETCO and Venture Global Gator Express, LLC in Plaquemines Parish, Louisiana. The proposed in-service date is on or about May 1, 2023.

ACTIVITIES:

4/7/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-728

Transcontinental Gas Pipe Line Company, LLC("Transco")

Revised Tariff

DATE FILED: **3/29/2022**

BACKGROUND:

On **3/29/2022**, Transco submitted a revised tariff filing to track the fuel retention percentage and rate change attributable to storage service purchased from National Fuel Gas Supply Corporation under its Rate Schedule SS-1 which Transco uses to render service to its customers under its Rate Schedules LSS and SS-2. The proposed effective date is April 1, 2022.

ACTIVITIES:

4/8/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-766

Eastern Gas Transmission and Storage("EGTS")

Revised Tariff

DATE FILED: **3/31/2022**

BACKGROUND:

On **3/31/2022**, EGTS made a revision to Tariff Record No. 40.46.6 to remove references to a negotiated rate agreement which no longer contains negotiated rates. The proposed effective date is May 1, 2022.

ACTIVITIES:

4/8/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-798

Transcontinental Gas Pipe Line Company, LLC("Transco")

Negotiated Rate Agreement -Rate Schedule FT

DATE FILED: **4/1/2022**

BACKGROUND:

On **4/1/2022**, Transco submitted tariff records summarizing negotiated rate agreements under Rate Schedule FT with replacement shippers that acquired temporary capacity released by Atlanta Gas Light Company from a negotiated service agreement under Rate Schedule FT for Transco's Cherokee Expansion. The proposed effective date is April 1, 2022.

ACTIVITIES:

4/8/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-781

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Agreement -Rate Schedule FT -l

DATE FILED: **3/31/2022**

BACKGROUND:

On **3/31/2022**, TETCO submitted a tariff filing to reflect negotiated rate transactions that it has entered into with various customers for firm transportation service under its Rate Schedule FT-1. The proposed effective date is April 1, 2022.

ACTIVITIES:

4/8/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-811

Transcontinental Gas Pipe Line Company, LLC("Transco")

Track Rate Changes – Schedule X-28

DATE FILED: **4/5/2022**

BACKGROUND:

On **4/5/2022**, Transco revised Section 7.5 of its Gas Tariff to track a fuel percentage change attributable to storage service purchased from Texas Eastern Transmission, LP under its Rate Schedule X-28 the costs of which are included in the rates and charges payable under Transco's Rate Schedule S-2. The proposed effective date is March 1, 2022.

ACTIVITIES:

4/13/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-816

Transcontinental Gas Pipe Line Company, LLC("Transco")

Revised Tariff

DATE FILED: **4/8/2022**

BACKGROUND:

On **4/8/2022**, Transco filed tariff revisions regarding the terms of a capacity lease agreement with National Fuel Gas Supply Corporation (“NFGS”). Transco proposes to add a footnote to the transportation fuel percentages set forth in Part II, Section 12.1 of its Tariff stating that gas quantities scheduled at the Clermont Receipt Point will be assessed the NFGS Fuel/LAUF retention percentages in addition to the percentage to be retained by Transco for transportation fuel. The proposed effective date for all but one of the tariff records is December 1, 2021. The revision to Tariff Part II, Section 12.1 is proposed to be retroactively effective on April 1, 2022.

ACTIVITIES:

4/15/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-843

Transcontinental Gas Pipe Line Company, LLC("Transco")

Revised Tariff

DATE FILED: **4/27/2022**

BACKGROUND:

On **4/27/2022**, Transco filed a revision to Part II, Section 7.5 of its Tariff to track rate changes attributable to storage service purchased from Texas Eastern Transmission, LP under its Rate Schedule X-28, the costs of which are included in the rates and charges payable under Transco's Rate Schedule S-2. The proposed effective date is April 1, 2022.

ACTIVITIES:

5/9/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-845

Transcontinental Gas Pipe Line Company, LLC("Transco")

Revised Tariff

DATE FILED: **4/27/2022**

BACKGROUND:

On **4/27/2022**, Transco submitted revisions to Part II, Sections 7.1 and 7.2 of its Tariff to track rate changes attributable to storage service purchased from Eastern Gas Transmission and Storage, Inc. under its Rate Schedule GSS, the costs of which are included in the rates and charges payable under Transco's Rate Schedules GSS and LSS. The proposed effective date is April 1, 2022.

ACTIVITIES:

5/9/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-861

Transcontinental Gas Pipe Line Company, LLC("Transco")

Revised Tariff

DATE FILED: **4/29/2022**

BACKGROUND:

On **4/29/2022**, Transco submitted a revision to Part II, Section 13.22 of its Tariff to summarize the essential elements of negotiated rate agreements, under Rate Schedule FT, between Transco and replacement shippers that acquired capacity temporarily released by Atlanta Gas Light Company from a negotiated rate service agreement under Rate Schedule FT for firm transportation service under Transco's Cherokee Expansion. The proposed effective date is May 1, 2022.

ACTIVITIES:

5/10/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-868

Eastern Gas Transmission and Storage("EGTS")

Revised Tariff

DATE FILED: **4/29/2022**

BACKGROUND:

On **4/29/2022**, EGTS submitted a revised tariff filing reflecting the essential elements of negotiated rate agreements it has entered into with ConocoPhillips Company, Tenaska Gas Storage, LLC, Koch Energy Services, LLC, and BP Energy Company for Market Center Services transactions. The proposed effective date is May 1, 2022.

ACTIVITIES:

5/10/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-881

Texas Eastern Transmission, LP ("TETCO")

General Terms & Conditions

DATE FILED: **4/29/2022**

BACKGROUND:

On **4/29/2022**, TETCO submitted its penalty disbursement report pursuant to Section 4.3(A)(7) of the General Terms and Conditions of its FERC Gas Tariff. TETCO respectfully requests that FERC accept its filing and approve the penalty disbursement report.

ACTIVITIES:

5/10/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-889

Transcontinental Gas Pipe Line Company, LLC("Transco")

Nonconforming Service Agreement - Rate Schedule IT

DATE FILED: **4/29/2022**

BACKGROUND:

On **4/29/2022**, Transco submitted a revision to Part II, Section 13.47 of its Tariff to summarize the essential elements of a negotiated rate service agreement dated April 29, 2022, under Rate Schedule IT between Transco and Seneca Resources Company, LLC (Contract No. 9259365). The proposed effective date is May 1, 2022.

ACTIVITIES:

5/10/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-904

Texas Eastern Transmission, LP ("TETCO")

Revised Tariff

DATE FILED: **5/2/2022**

BACKGROUND:

On **5/2/2022**, TETCO made a revised tariff filing to reflect negotiated rate transactions that it has entered into with various customers for firm transportation service under TETCO's Rate Schedule FT-1. The proposed effective date is May 1, 2022.

ACTIVITIES:

5/16/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-908

Texas Eastern Transmission, LP ("TETCO")

Revised Tariff

DATE FILED: **5/4/2022**

BACKGROUND:

On **5/4/2022**, TETCO submitted a revised tariff filing in order to reflect a negotiated rate transaction that it has entered into with Sunsea Energy, LLC for firm transportation service under Rate Schedule FT-1. The proposed effective date is May 4, 2022.

ACTIVITIES:

5/17/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-944

Transcontinental Gas Pipe Line Company, LLC("Transco")

Revised Tariff

DATE FILED: **5/27/2022**

BACKGROUND:

On **5/27/2022**, Transco submitted a revision to Part II, Section 13.48 of its Gas Tariff to reflect a summary of a negotiated rate agreement, under Rate Schedule FTP, between Transco and LLOG Exploration Offshore, L.L.C. The proposed effective date is June 1, 2022.

ACTIVITIES:

6/7/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-948

Texas Eastern Transmission, LP ("TETCO")

General Terms & Conditions

DATE FILED: **5/31/2022**

BACKGROUND:

On **5/31/2022**, TETCO submitted a filing, pursuant to Section 29 of the General Terms and Conditions of its Tariff, to reflect negotiated rate transactions that it has entered into with various customers for firm transportation service under its Rate Schedule FT-1. The proposed effective date is June 1, 2022.

ACTIVITIES:

6/10/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-947

Transcontinental Gas Pipe Line Company, LLC("Transco")

Negotiated Rate Agreement -Rate Schedule FT

DATE FILED: **5/31/2022**

BACKGROUND:

On **5/31/2022**, Transco submitted a revised tariff filing summarizing the essential elements of negotiated rate agreements, under Rate Schedule FT, between Transco and replacement shippers who acquired capacity temporarily released by Atlanta Gas Light Company under Rate Schedule FT for firm transportation service under Transco's Cherokee Expansion. The proposed effective date is June 1, 2022.

ACTIVITIES:

6/10/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-971

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Agreement -Rate Schedule FT -l

DATE FILED: **6/2/2022**

BACKGROUND:

On **6/2/2022**, TETCO submitted a revised tariff filing under its Rate Schedule FT-1 to reflect amended negotiated rate agreements with Total Gas & Power North America, Inc. (“Total”), consisting of one-page letter agreements and new Statements of Negotiated Rates for Total’s Contract Nos. 911051 and 911252. The proposed effective date is June 1, 2022.

ACTIVITIES:

6/13/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.CP22-461

Transcontinental Gas Pipe Line Company, LLC("Transco")

Capacity Lease & Operating Agreement Changes

DATE FILED: **5/23/2022**

BACKGROUND:

On **5/23/2022**, Transco submitted an abbreviated application for a certificate of public convenience and necessity for authorization to construct, install, modify, operate, and maintain its Southside Reliability Enhancement Project in order to provide an additional 423,400 dekatherms per day of firm transportation service beginning with the 2024/2025 winter heating season. Transco respectfully requests that the Commission issue a final order granting the authorizations by April 1, 2023.

ACTIVITIES:

6/27/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.RP22-1000

Transcontinental Gas Pipe Line Company, LLC("Transco")

Penalty Disbursements

DATE FILED: **6/30/2022**

BACKGROUND:

On **6/30/2022**, Transco refunded the amount received from Texas Eastern Transmission, LP (“TETCO”) on June 10, 2022, for penalty disbursement for storage service purchased under TETCO’s Rate Schedule X-28, with interest, to Transco’s Rate Schedule S-2 customers.

ACTIVITIES:

7/11/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

Docket No.CP22-201

Texas Eastern Transmission, LP ("TETCO")

Prior Notice of Blanket Certificate Activity

DATE FILED: **4/22/2022**

BACKGROUND:

On **4/22/2022**, TETCO filed a Prior Notice of Blanket Certificate Activity to notify the Commission of its intent to offset and replace a segment of its Line 12 pipeline in Westmoreland County and Indiana County, Pennsylvania, at a crossing of the Conemaugh River.

ACTIVITIES:

7/1/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.CP22-470

Texas Eastern Transmission, LP ("TETCO")

Capacity Lease & Operating Agreement Changes

DATE FILED: **6/2/2022**

BACKGROUND:

On **6/2/2022**, TETCO submitted an abbreviated application for approval to abandon in place approximately 2.8 miles of 24-inch diameter auxiliary pipeline, designated as Line 11-Aux-1, located in Polk and San Jacinto Counties, Texas. TETCO respectfully requests that the Commission issue an order approving its application by August 31, 2022.

ACTIVITIES:

7/1/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-994

Eastern Gas Transmission and Storage("EGTS")

Revised Tariff

DATE FILED: **5/30/2022**

BACKGROUND:

On **6/28/2022**, EGTS submitted a revision to Volume No. 1, Tariff Record No. 3 in order to update the uniform resource location link to the internet location of EGTS' system map. The proposed effective date is August 1, 2022.

ACTIVITIES:

7/8/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1001

Eastern Gas Transmission and Storage("EGTS")

General Terms & Conditions

DATE FILED: **5/30/2022**

BACKGROUND:

On **6/30/2022**, EGTS filed its annual report of operational sales of gas, as required by Section 42.D of the General Terms and Conditions of its Tariff, for the period of April 1, 2021, through March 31, 2022.

ACTIVITIES:

7/11/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1016

Texas Eastern Transmission, LP ("TETCO")

Electric Power Cost Adjustment

DATE FILED: **6/30/2022**

BACKGROUND:

On **6/30/2022**, TETCO submitted a tariff filing, pursuant to Section 15.1 of the General Terms and Conditions of its Tariff, Electric Power Cost (“EPC”) Adjustment, describing revised Current Unit EPC Changes and one revised EPC Surcharge. The proposed effective date is August 1, 2022.

ACTIVITIES:

7/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1018

Transcontinental Gas Pipe Line Company, LLC("Transco")

Negotiated Rate Agreement -Rate Schedule FT

DATE FILED: **6/30/2022**

BACKGROUND:

On **6/30/2022**, Transco submitted revisions to Part II, Sections 13.21 and 13.22 of its Tariff to summarize the essential elements of negotiated rate agreements under Rate Schedule FT, between Transco and the Replacement Shippers who acquired temporarily released capacity from Atlanta Gas Light Company for firm transportation service under Transco's Cherokee Expansion. The proposed effective date is July 1, 2022.

ACTIVITIES:

7/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1022

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Agreement -Rate Schedule FT -l

DATE FILED: **6/1/2022**

BACKGROUND:

On **6/30/2022**, TETCO submitted a filing pursuant to Section 29 of the General Terms and Conditions of its Tariff to reflect a negotiated rate transaction that it has entered into with DTE Energy Trading, Inc., resulting from a temporary release of capacity from UGI Energy Services, LLC, for firm transportation service under Rate Schedule FT-1. The proposed effective date is July 1, 2022.

ACTIVITIES:

7/13/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1026

Eastern Gas Transmission and Storage("EGTS")

Penalty Disbursements

DATE FILED: **7/1/2022**

BACKGROUND:

On **7/1/2022**, filed its annual report of overrun/penalty revenue distributions pursuant to Section 41.C of the General Terms and Conditions of its Tariff.

ACTIVITIES:

7/13/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1044

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Transaction - Rate Schedule FT - I

DATE FILED: **7/5/2022**

BACKGROUND:

On **7/5/2022**, TETCO submitted a filing reflecting a negotiated rate transaction with DTE Energy Trading Inc. for firm transportation service under Rate Schedule FT-1. The proposed effective date is July 2, 2022..

ACTIVITIES:

7/15/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1060

Transcontinental Gas Pipe Line Company, LLC("Transco")

General Terms & Conditions

DATE FILED: **8/7/2022**

BACKGROUND:

On **7/20/2022**, Transco submitted a refund report of the amount received from EGTS for service rendered under Rate Schedule GSS, with interest, per the provisions of Section 4.1 (d) of Rate Schedule GSS and Section 4.1 (d) of Rate Schedule LSS.

ACTIVITIES:

7/29/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.CP22-486

Texas Eastern Transmission, LP ("TETCO")

Capacity Lease & Operating Agreement Changes

DATE FILED:**7/7/2022**

BACKGROUND:

On **7/7/2022**, TETCO filed an application requesting authorization to abandon certain facilities and to construct, install, own, operate, and maintain the proposed Appalachia to Market II Project, and the proposed Armagh and Entriken Compressor Station Horsepower Replacement Projects located in Lebanon, Indiana, and Huntingdon counties in Pennsylvania.

ACTIVITIES:

8/8/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.CP22-469

Transcontinental Gas Pipe Line Company, LLC("Transco")

Capacity Lease & Operating Agreement Changes

DATE FILED: **5/31/2022**

BACKGROUND:

On **5/31/2022**, Transco filed an application to abandon the existing Point Au Fer Lateral and its Smythe Point Au Fer Lateral, and appurtenant metering facilities, all located in Terrebonne Parish, Louisiana.

ACTIVITIES:

8/8/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1079

Transcontinental Gas Pipe Line Company, LLC("Transco")

Revised Tariff

DATE FILED: **7/29/2022**

BACKGROUND:

On **7/29/2022**, Transco filed a revision to Part II, Section 7.5 of its Tariff to track rate changes attributable to storage service purchased from Texas Eastern Transmission, LP under its Rate Schedule X-28, the costs of which are included in the rates and charges payable under Transco's Rate Schedule S-2. The proposed effective date is August 1, 2022.

ACTIVITIES:

8/10/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1078

Eastern Gas Transmission and Storage("EGTS")

Revised Tariff

DATE FILED: **7/9/2022**

BACKGROUND:

On **7/29/2022**, EGTS submitted a revised tariff filing to report recent revisions to a previously reported and accepted nonconforming service agreement with Doswell Limited Partnership under Rate Schedule FTNN and a negotiated rate agreement. The proposed effective date is September 1, 2022.

ACTIVITIES:

8/10/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1115

Transcontinental Gas Pipe Line Company, LLC("Transco")

Nonconforming Rate Agreement - Rate Schedule FT

DATE FILED: **8/9/2022**

BACKGROUND:

On **8/9/2022**, Transco filed a non-conforming, negotiated rate agreement under Rate Schedule FT with Chesapeake Energy Marketing, L.L.C. providing for firm transportation service under Transco's Atlantic Sunrise Project. The proposed effective date is September 1, 2022.

ACTIVITIES:

8/18/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1116

Transcontinental Gas Pipe Line Company, LLC("Transco")

Nonconforming Rate Agreement

DATE FILED: **8/9/2022**

BACKGROUND:

On **8/9/2022**, Transco filed revisions to Part II, Section 13.42 and Part IV, Section 1 of its Gas Tariff to reflect a non-conforming, negotiated rate agreement with Chesapeake Energy Marketing, L.L.C. filed in Docket No. RP22-1115. The proposed effective date is September 1, 2022.

ACTIVITIES:

8/18/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1144

Texas Eastern Transmission, LP ("TETCO")

General Terms & Conditions

DATE FILED: **8/24/2022**

BACKGROUND:

On **8/24/2022**, TETCO submitted its penalty disbursement report pursuant to Section 4.3(A)(7) of the General Terms and Conditions of its FERC Gas Tariff.

ACTIVITIES:

9/6/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.CP22-483

Texas Eastern Transmission, LP ("TETCO")

General Terms & Conditions

DATE FILED: **7/1/2022**

BACKGROUND:

On **7/1/2022**, TETCO submitted a Prior Notice of Blanket Certificate Activity notifying the Commission of its intent to: (i) reconfigure and replace a segment of 30-inch diameter pipeline at a crossing underneath the Neches River in Jefferson and Orange Counties, Texas to accommodate the deepening of the Sabine-Neches Waterway, and (ii) discontinue use of a total of approximately 2,723 feet of existing 30-inch diameter pipeline and related facilities.

ACTIVITIES:

9/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1147

Transcontinental Gas Pipe Line Company, LLC("Transco")

General Terms & Conditions

DATE FILED: **8/25/2022**

BACKGROUND:

On **8/25/2022**, Transco submitted revised tariff records, pursuant to its Rate Schedules LSS, SS-2, GSS, and Section 26 of the General Terms and Conditions of its Tariff, in order to track rate changes resulting from an increase in the Annual Charge Adjustment rate from $0.0012 to $0.0015. The proposed effective date is October 1, 2022.

ACTIVITIES:

9/6/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1148

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Transaction - Rate Schedule FT - I

DATE FILED: **8/25/2022**

BACKGROUND:

On **8/25/2022**, TETCO submitted a tariff filing in order to reflect a negotiated rate transaction that it has entered into with UGI Energy Services, LLC for firm transportation service under Rate Schedule FT-1. The proposed effective date is October 1, 2022.

ACTIVITIES:

9/6/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1153

Transcontinental Gas Pipe Line Company, LLC("Transco")

Negotiated Rate Agreement

DATE FILED: **8/26/2022**

BACKGROUND:

On **8/26/2022**, Transco submitted a summary of its service agreement, filed under Docket No. RP22-1115, with Chesapeake Energy Marketing, L.L.C to the Summary of Negotiated Rate Agreements section of Transco's Tariff. The proposed effective date is September 26, 2022.

ACTIVITIES:

9/7/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1156

Texas Eastern Transmission, LP ("TETCO")

Capacity Lease & Operating Agreement Changes

DATE FILED: **8/29/2022**

BACKGROUND:

On **8/29/2022**, TETCO submitted its report of recalculated Operational Segment Capacity Entitlements for 2022. The proposed effective date is November 1, 2022.

ACTIVITIES:

9/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.CP22-495

Transcontinental Gas Pipe Line Company, LLC("Transco")

Capacity Lease & Operating Agreement Changes

DATE FILED: **8/9/2022**

BACKGROUND:

On **8/9/2022**, Transco submitted an abbreviated application for (i) a certificate of public convenience and necessity authorizing Transco to construct, install, modify, operate, and maintain its Texas to Louisiana Energy Pathway Project ("Project"), and (ii) an order authorizing the conversion of 130,000 dekatherms per day of capacity currently subject to Transco's "IT Feeder system" to firm transportation capacity under the Project. Transco requests that the Commission issue a final order granting the requested authorizations by the first quarter of 2024.

ACTIVITIES:

9/13/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.CP22-501

Transcontinental Gas Pipe Line Company, LLC("Transco")

Capacity Lease & Operating Agreement Changes

DATE FILED: **8/22/2022**

BACKGROUND:

On **8/22/2022**, Transco submitted an abbreviated certificate of public convenience and necessity authorizing Transco to construct, install, modify, operate, and maintain its Southeast Energy Connector Project. Transco requests that the Commission issue a final order granting the requested authorizations by October 30, 2023.

ACTIVITIES:

9/20/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1159

Eastern Gas Transmission and Storage("EGTS")

Revised Tariff

DATE FILED: **8/20/2022**

BACKGROUND:

On **8/20/2022**, EGTS filed a revision to Tariff Record No. 40.46.3, Version 2.0.0 to provide the required information needed to change the receipt point entitlements of a negotiated rate agreement with Tenaska Marketing Ventures for FT Contract No. 200745. The proposed effective date is September 1, 2022.

ACTIVITIES:

9/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1164

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Transaction - Rate Schedule FT - I

DATE FILED: **8/30/2022**

BACKGROUND:

On **8/30/2022**, TETCO submitted a tariff filing in order to reflect a negotiated rate transaction that it has entered into with Direct Energy Business Marketing, LLC for firm transportation service under Rate Schedule FT-1. The proposed effective date is September 1, 2022.

ACTIVITIES:

9/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1167

Eastern Gas Transmission and Storage("EGTS")

Negotiated Rate Agreement

DATE FILED: **8/31/2022**

BACKGROUND:

On **8/31/2022**, EGTS submitted revised tariff records in order to remove references to negotiated rate agreements which have terminated. The proposed effective date is October 1, 2022.

ACTIVITIES:

9/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1207

Eastern Gas Transmission and Storage("EGTS")

Revised Tariff – Rate Schedule FT Service Agreement

DATE FILED: **9/9/2022**

BACKGROUND:

On **9/9/2022**, EGTS submitted revised tariff records to report a Rate Schedule FT Service Agreement with Virginia Power Services Energy Corporation, Inc. as a non-conforming agreement. The proposed effective date is October 11, 2022.

ACTIVITIES:

9/20/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.CP22-502

Transcontinental Gas Pipe Line Company, LLC("Transco")

Capacity Lease & Operating Agreement Changes

DATE FILED: **8/24/2022**

BACKGROUND:

On **8/24/2022**, Transco submitted an abbreviated application for a Certificate of Public Convenience and Necessity requesting authorization to construct, operate, and maintain its Commonwealth Energy Connector Project located in various counties in Virginia.

ACTIVITIES:

9/29/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1257

Transcontinental Gas Pipe Line Company, LLC("Transco")

Negotiated Rate Agreement -Rate Schedule FT

DATE FILED: **9/28/2022**

BACKGROUND:

On **9/28/2022**, Transco filed a negotiated rate agreement with Virginia Natural Gas, Inc., under Rate Schedule FT, that contains non-conforming language and a negotiated facility surcharge. The proposed effective date is November 1, 2022.

ACTIVITIES:

10/11/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1263

Transcontinental Gas Pipe Line Company, LLC("Transco")

Nonconforming Service Agreement - Rate Schedule FT

DATE FILED: **9/29/2022**

BACKGROUND:

On **9/29/2022**, Transco filed a negotiated rate agreement with Virginia Natural Gas, Inc., under Rate Schedule FT, that contains non-conforming language and a negotiated facility surcharge. The proposed effective date is November 1, 2022.

ACTIVITIES:

10/11/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1267

Transcontinental Gas Pipe Line Company, LLC("Transco")

General Terms & Conditions

DATE FILED: **9/29/2022**

BACKGROUND:

On **9/29/2022**, Transco submitted its cash-out report for the annual billing period of August 1, 2021, through July 31, 2022.

ACTIVITIES:

10/11/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1275

Transcontinental Gas Pipe Line Company, LLC("Transco")

Revised Tariff

DATE FILED: **9/30/2022**

BACKGROUND:

On **9/30/2022**, Transco submitted a revised tariff record to revise the Original Under-Recovery Balance Base Surcharge to be applied to the (i) quantities delivered under firm and interruptible transportation rate schedules subject to cash-out (ii) quantities delivered under bundled storage rate schedules GSS, LSS, and SS-2; and (iii) measured quantities that are subject to cash-out. The proposed effective date is November 1, 2022.

ACTIVITIES:

10/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1282

Eastern Gas Transmission and Storage("EGTS")

Electric Power Cost Adjustment

DATE FILED: **9/30/2022**

BACKGROUND:

On **9/30/2022**, EGTS submitted a revised tariff filing to update the effective Electric Power Cost Adjustment through the mechanism described in Section 17 of the General Terms and Conditions of its Tariff. The proposed effective date is November 1, 2022.

ACTIVITIES:

10/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1283

Eastern Gas Transmission and Storage("EGTS")

Transportation Cost Rate Adjustment

DATE FILED: **9/30/2022**

BACKGROUND:

On **9/30/2022**, EGTS submitted a revised tariff filing to update its effective Transportation Cost Rate Adjustment through the mechanism described in Section 15 of the General Terms and Conditions of its Tariff. The proposed effective date is November 1, 2022.

ACTIVITIES:

10/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP22-1287

Transcontinental Gas Pipe Line Company, LLC("Transco")

General Terms & Conditions

DATE FILED: **9/30/2022**

BACKGROUND:

On **9/30/2022**, Transco filed tariff records summarizing the essential elements of service agreements that contain negotiated commodity rates under Rate Schedule FT between Transco and the replacement shippers who acquired temporarily released capacity from Atlanta Gas Light Company under Transco's Cherokee Expansion. The proposed effective date is October 1, 2022.

ACTIVITIES:

10/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-005

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Agreement -Rate Schedule FT -l

DATE FILED: **10/3/2022**

BACKGROUND:

On **10/3/2022**, TETCO submitted a filing to reflect negotiated rate transactions that it has entered into with various customers for firm transportation service under its Rate Schedule FT-1. The proposed effective date is October 1, 2022.

ACTIVITIES:

10/17/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-025

Texas Eastern Transmission, LP ("TETCO")

Penalty Disbursements

DATE FILED: **10/14/2022**

BACKGROUND:

On **10/14/2022**, TETCO submitted its penalty disbursement report pursuant to Section 4.3(A)(7) of the General Terms and Conditions of its FERC Gas Tariff.

ACTIVITIES:

10/26/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.CP22-505

Transcontinental Gas Pipe Line Company, LLC("Transco")

Capacity Lease & Operating Agreement Changes

DATE FILED: **8/30/2022**

BACKGROUND:

On **8/30/2022**, Transco filed an application for authorization under its blanket certificate authority to abandon its Compressor Station 61 and appurtenant facilities located in East Feliciana Parish, Louisiana.

ACTIVITIES:

11/4/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-079

Transcontinental Gas Pipe Line Company, LLC("Transco")

Penalty Disbursements

DATE FILED: **10/27/2022**

BACKGROUND:

On **10/27/2022**, Transco distributed penalty sharing amounts to all affected shippers pursuant to Section 54 of the General Terms and Conditions of its Tariff.

ACTIVITIES:

11/7/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-087

Transcontinental Gas Pipe Line Company, LLC("Transco")

Revised Tariff

DATE FILED: **10/28/2022**

BACKGROUND:

On **10/28/2022**, Transco submitted a tariff filing to track rate changes attributable to storage services purchased from Eastern Gas Transmission and Storage, Inc. under its Rate Schedule GSS and rate changes attributable to storage services purchased from National Fuel Gas Supply Corporation under its Rate Schedule SS-1. The proposed effective date is November 1, 2022.

ACTIVITIES:

11/9/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-099

Transcontinental Gas Pipe Line Company, LLC("Transco")

Nonconforming Service Agreement

DATE FILED: **10/28/2022**

BACKGROUND:

On **10/28/2022**, Transco submitted a tariff record to add the agreements filed under Docket No. RP23-98 to the Tariff List of Nonconforming Service Agreements. The proposed effective date is December 1, 2022.

ACTIVITIES:

11/9/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-098

Transcontinental Gas Pipe Line Company, LLC("Transco")

Nonconforming Service Agreement - Rate Schedule FT

DATE FILED: **10/28/2022**

BACKGROUND:

On **10/28/2022**, Transco filed three nonconforming service agreements under Rate Schedule FT. The buyers under the agreements are Direct Energy Business Marketing, LLC (Contract No. 9265492), Mercuria Energy America, LLC (Contract No. 9265492), and Marcus Hook Energy LP (Contract No. 9265717). The proposed effective date is December 1, 2022.

ACTIVITIES:

11/9/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-100

Texas Eastern Transmission, LP ("TETCO")

General Terms & Conditions

DATE FILED: **10/28/2022**

BACKGROUND:

On **10/28/2022**, TETCO submitted a filing to reflect its estimate of the Year 6 Eligible PCB-Related Costs of $10,821,009, of which $6,222,080 is recoverable by TETCO, pursuant to the Settlement established in Docket Nos. RP88-67, et al. The proposed effective date is December 1, 2022.

ACTIVITIES:

11/9/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-119

Texas Eastern Transmission, LP ("TETCO")

General Terms & Conditions

DATE FILED: **10/31/2022**

BACKGROUND:

On **10/31/2022**, TETCO filed changes to its Applicable Shrinkage Adjustment (“ASA”) Percentages and ASA Surcharge rates for system customers along with the Annual Interruptible Revenue Reconciliation Report. The proposed effective date is December 1, 2022.

ACTIVITIES:

11/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-115

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Agreement -Rate Schedule FT -l

DATE FILED: **10/31/2022**

BACKGROUND:

On **10/31/2022**, TETCO made a tariff filing in order to reflect a negotiated rate transaction that it has entered into with JPMorgan Chase Bank, N.A. for firm transportation service under Rate Schedule FT-1. The proposed effective date is November 1, 2022.

ACTIVITIES:

11/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-120

Transcontinental Gas Pipe Line Company, LLC("Transco")

Negotiated Rate Agreement -Rate Schedule FT

DATE FILED: **10/31/2022**

BACKGROUND:

On **10/31/2022**, Transco submitted a tariff filing summarizing the essential elements of negotiated rate agreements under Rate Schedule FT between Transco and the replacement shippers who acquired temporarily released capacity from Atlanta Gas Light Company under Transco's Cherokee Expansion. The proposed effective date is November 1, 2022.

ACTIVITIES:

11/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-121

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Agreement -Rate Schedule MLS - I

DATE FILED: **10/31/2022**

BACKGROUND:

On **10/31/2022**, TETCO submitted a tariff record to reflect an amended negotiated rate agreement under Rate Schedule MLS-1 with New Jersey Natural Gas Company. The proposed effective date is November 1, 2022.

ACTIVITIES:

11/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-125

Texas Eastern Transmission, LP ("TETCO")

General Terms & Conditions

DATE FILED: **11/1/2022**

BACKGROUND:

On **11/1/2022**, TETCO submitted a filing, pursuant to Section 29 of the General Terms and Conditions of its Tariff, to reflect negotiated rate transactions that it has entered into with various customers for firm transportation service under its Rate Schedule FT-1. The proposed effective dates are November 1, 2022 or April 1, 2023.

ACTIVITIES:

11/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-127

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Transaction - Rate Schedule FT - I

DATE FILED: **11/1/2022**

BACKGROUND:

On **11/1/2022**, TETCO submitted a tariff filing in order to reflect a negotiated rate transaction that it has entered into with Nextera Energy Marketing, LLC for firm transportation service under Rate Schedule FT-1. The proposed effective date is November 1, 2022.

ACTIVITIES:

11/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-137

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Transaction - Rate Schedule FT - I

DATE FILED: **11/1/2022**

BACKGROUND:

On **11/1/2022**, TETCO submitted a tariff filing in order to reflect negotiated rate transactions that it has entered into with various customers, who acquired capacity released by Keyspan Gas East Corporate D/B/A National Grid under its FT-1 NJ-NY Project, for firm transportation service under Rate Schedule FT-1. The proposed effective date is November 1, 2022.

ACTIVITIES:

11/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-139

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Transaction - Rate Schedule FT - I

DATE FILED: **11/1/2022**

BACKGROUND:

On **11/1/2022**, TETCO submitted a tariff filing in order to reflect negotiated rate transactions that it has entered into with various customers, who acquired capacity released from Consolidated Edison Company of New York, Inc. under its FT-1 NJ-NY Project, for firm transportation service under Rate Schedule FT-1. The proposed effective date is November 1, 2022.

ACTIVITIES:

11/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-140

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Transaction - Rate Schedule FT - I

DATE FILED: **11/1/2022**

BACKGROUND:

On **11/1/2022**, TETCO submitted a tariff filing in order to reflect negotiated rate transactions that it has entered into with various customers, who acquired capacity released from Consolidated Edison Company of New York, Inc. under its FT-1 NJ-NY Project, for firm transportation service under Rate Schedule FT-1. The proposed effective date is November 1, 2022.

ACTIVITIES:

11/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-153

Texas Eastern Transmission, LP ("TETCO")

Nonconforming Service Agreement - Rate Schedule FT - I

DATE FILED: **11/1/2022**

BACKGROUND:

On **11/1/2022**, TETCO submitted a tariff record reflecting a nonconforming service agreement, under Rate Schedule FT-1, with NextEra Energy Marketing, LLC (“NextEra”) and JPMorgan Chase Bank, N.A. (“JPMorgan”) resulting from a partial permanent release of NextEra’s Contract No. 911730 to JPMorgan’s newly executed service agreement, Contract No. 911866. The proposed effective date is November 1, 2022.

ACTIVITIES:

11/14/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-175

Transcontinental Gas Pipe Line Company, LLC("Transco")

General Terms & Conditions

DATE FILED: **11/8/2022**

BACKGROUND:

On **11/8/2022**, Transco submitted a filing to reflect that, pursuant to Section 26.2(b) of its General Terms and Conditions, it had refunded the amount received from Texas Eastern ("TETCO") for penalty disbursement for storage service purchased under TETCO's Rate Schedule X-28 to its Rate Schedule S-2 customers.

ACTIVITIES:

11/21/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-195

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Transaction - Rate Schedule FT - I

DATE FILED: **11/17/2022**

BACKGROUND:

On **11/17/2022**, TETCO submitted a tariff filing in order to reflect negotiated rate transactions that it has entered into with various customers for firm transportation service under its Rate Schedule FT-1. The proposed effective date is November 17, 2022.

ACTIVITIES:

11/28/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-200

Texas Eastern Transmission, LP ("TETCO")

Statement of Negotiated Rates

DATE FILED: **11/18/2022**

BACKGROUND:

On **11/18/2022**, TETCO submitted a revision to its Statements of Negotiated Rates in order to delete the contents of negotiated rate agreements that have expired by their own terms and identify such agreements as reserved for future use. The proposed effective date is December 18, 2022.

ACTIVITIES:

11/28/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-227

Transcontinental Gas Pipe Line Company, LLC("Transco")

Negotiated Rate Agreement -Rate Schedule FT

DATE FILED: **11/30/2022**

BACKGROUND:

On **11/30/2022**, Transco submitted a tariff filing summarizing the essential elements of service agreements, that contain negotiated commodity rates under Rate Schedule FT, with replacement shippers who acquired temporarily released capacity from Atlanta Gas Light Company for firm transportation service under Transco's Cherokee Expansion. The proposed effective date is December 1, 2022.

ACTIVITIES:

12/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-245

Texas Eastern Transmission, LP ("TETCO")

Negotiated Rate Transaction - Rate Schedule FT - I

DATE FILED: **12/1/2022**

BACKGROUND:

On **12/1/2022**, TETCO submitted a tariff filing in order to reflect negotiated rate transactions that it has entered into with various customers for firm transportation service under its Rate Schedule FT-1. The proposed effective date is December 1, 2022.

ACTIVITIES:

12/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-248

Eastern Gas Transmission and Storage("EGTS")

Negotiated Service Agreement -Rate Schedule FT

DATE FILED: **12/1/2022**

BACKGROUND:

On **12/1/2022**, EGTS submitted a tariff filing to provide FERC with notice that Volunteer Energy Services, Inc. has cancelled Service Agreements Applicable to Transportation of Natural Gas Under Rate Schedule FT, FT Contract Nos. 200630 and 200677.

ACTIVITIES:

12/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP23-253

Transcontinental Gas Pipe Line Company, LLC("Transco")

Revised Tariff -Rate Change

DATE FILED: **12/1/2022**

BACKGROUND:

On **12/1/2022**, On December 1, 2022, Transco submitted a revision to Part II, Section 7.5 of its Tariff in order to track rate changes attributable to storage service purchased from Texas Eastern Transmission, LP under its Rate Schedule X-28 the costs of which are included in the rates and charges payable under Transco's Rate Schedule S-2. The proposed effective date is December 1, 2022.

ACTIVITIES:

12/12/2022 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case

Docket No.RP21-1187-009

Eastern Gas Transmission and Storage("EGTS")

Section 4 Rate Case Filing

DATE FILED: **9/30/2021**

BACKGROUND:

On **9/30/2021**, pursuant to Section 4 of the NGA and Part 154 of the Commission's Regulations, EGTS filed revised tariffs and supporting documents to effectuate substantial changes in its rates and other rate-related tariff provisions applicable to EGTS's FERC-jurisdictional services. EGTS derived its cost levels using a Base Period consisting of the twelve months ended May 31, 2021, and an Adjustment Period ending February 28, 2021. EGTS supports its filing based in part on the growth in system rate base through capital expenditures and increases in the overall cost of providing storage and transportation services. EGTS proposes an effective date of November 1, 2021,but recognizes that the Commission may suspend the proposed rate changes for the maximum five-month period until April 1, 2022.As a threshold matter, almost a quarter century has passed since EGTS filed its last general Section 4 rate case in Docket No. RP97-406-000, et al., which resulted in a Stipulation and Agreement approved by the Commission by order issued November 24, 1998. A preliminary review of the General Rate Filing indicates that EGTS has proposed to raise its jurisdictional rates significantly from the rates last approved by the Commission in the 1998 Settlement. To that end, EGTS proposes to triple its annual cost of service from $356,390,596 to $1,119,909,797. The proposed rate increases may result in the collection of unjust and unreasonable rates. Notably, EGTS proposes to increase the Storage Demand component of its GSS Rate Schedule by 76.0 percent, its Storage Capacity component by 121.4 percent, its Injection Charge by 30.8 percent, and its Withdrawal Charge by 64.1 percent. As a Local Distribution Company ("LDC"), these extraordinary cost increases for GSS service would, if accepted, be passed on directly to PGW's customers. The magnitude of the proposed cost increases requires that the Commission scrutinize through evidentiary hearing the elements of EGTS's proposed cost of service, including operations and maintenance expenses, depreciation, and revenues to ensure that they result in just and reasonable rates. Other material issues of fact raised by the General Rate Filing, include but are not limited to the following: • EGTS's rate base has tripled since its last rate case. EGTS states that it now has a rate base of $962,992,011 and $2,914,370,575 for its Storage and Transmission functions (totaling $3.9 billion) as compared with a rate base filed in its last rate case of $336,601,579 and $747,981,320, respectively (totaling $1.08 billion). This extraordinary passage of time without a rate review requires that the Commission scrutinize all aspects of the proposed rate base to ensure they are just and reasonable, and that all facilities are properly categorized.• EGTS proposes to update its depreciation and amortization rates to account for changes in its assets' physical and economic lives, using a 29-year economic life. The appropriateness of a 29-year economic life should be investigated particularly given its impact on EGTS's proposed rate increases.•EGTS has for the first time proposed negative salvage rates associated with its jurisdictional facilities. EGTS Witness Crowley recommends a cost recovery rate for negative salvage associated with both interim retirements and terminal decommissioning of the system at the end of its useful life. Given Witness Crowley's own admission issues," an evidentiary record should be compiled on the basis of which the Commission can determine

whether EGTS's negative salvage proposals are appropriate.• While EGTS maintains that it does not propose to modify its fundamental cost allocation and rate design methodologies, EGTS has, as required by Article XIII.A of the 1998 Settlement, included a study in its General Rate Filing "demonstrating an approach to and the effect of separately stating and charging the transportation portion of the storage service." • The study discusses establishment of a surcharge to the GSS general system demand rate to recover certain transportation costs, through use of imputed transportation determinants, from those legacy storage customers, such as PGW, holding so-called "Stand-Alone Storage" contracts under Rate Schedule GSS. As indicated in the study, these contracts include stated physical receipt and delivery points, and thus have not been required to utilize separate transportation service to move the gas that is withdrawn from storage to a physical delivery point. Notably, Article XIII.A states that the provision of this study does not prejudge the issue of whether there is a transportation portion associated with any or all of EGTS's (as successor to CNG) storage service; nor does it preclude any party from taking the position in any future proceeding that EGTS's storage service does not include transportation. that the Commission's guidance on terminal decommissioning derivation is "far from clear – it is outdated, and conflated with irrelevant

ACTIVITIES:

10/12/2021 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case. PGW actively participated as a member of the Eastern Customer Group to challenge the EGTS filing.

10/29/2021 - The Commission issued a Suspension Order accepting the filed tariff records to be effective, after suspension for five months. Subject to refund, and subject to the outcome of a hearing to explore the issues raised in protests to the EGTS filing.

11/16/2021 - Subject to refund, and subject to the outcome of a hearing to explore the issues raised in protests to the EGTS filing. A prehearing conference to establish hearing procedures.

12/20/2021 - The A L J issued a procedural schedule — setting evidentiary hearings to start September 20, 2022 and an initial decision date of February 14, 2023. In addition to designating a Presiding Judge, the Chief Judge designated a Settlement Judge for this proceeding to oversee settlement negotiations among the participants. Settlement conferences were held from March 10, 2022 through August, 2022.

11/30/2022 - The Commission issued an order approving the Uncontested Settlement in Docket No. RP21-1187-009.

12/15/2022 - Eastern Gas Transmission and Storage filed tariff records to comply with the Commission's order in R21-1187-009. The Settlement Effective Date is December 31,2022. If not issued before February 28, 2023, refund deadline is the first billing cycle thereafter, via either electronic means or credit booked to PGW account, at PGW's election. Refund Period covers April 1, 2022 thru December 30, 2022.

Docket No.RP21-1188-004

Texas Eastern Transmission, LP ("TETCO")

Section 4 Rate Case Filing

DATE FILED: **9/30/2021**

BACKGROUND:

On **9/30/2021**, TETCO pursuant to Section 4 of the Natural Gas Act ("NGA") and Part 154 of the Commission's Regulations, TETCO filed revised tariff records to effectuate substantial changes in its rates ("Rate Filing") in FERC Docket No. RP-21-1001. TETCO proposes an effective date of September 1, 2021. On August 31,2021, the Commission rejected TETCO's filing as an NGA section 4 rate case. Subsequently, on October 29, 2021, in RP21-1188-000, the Commission accepted and suspended revised tariff records comprising a new NGA section 4 rate case filed by Texas Eastern. On January 20, 2022, the Commission, on rehearing, modified its decision in RP21-1001-001 by accepting the previously rejected tariff records, subject to refund and the outcome of hearing procedures. Both dockets were consolidated on February 14, 2022.On September 30, 2021, pursuant to Section 4 of the Natural Gas Act ("NGA") and Part 154 of the Commission's Regulations, TETCO filed revised tariff records to effectuate substantial changes in its rates ("Rate Filing"). TETCO proposes an effective date of November 1, 2021 but recognizes that the Commission may suspend the proposed rate changes for the maximum five-month period until April 1, 2022.PGW holds multiple firm contracts on the TETCO system. Specifically, PGW holds firm contracts under Rate Schedules FT-1 and CDS with aggregate deliverability of 13,822 dth per day. PGW also holds three FTS transportation legs with TETCO pursuant to Rate Schedules FTS-2, FTS-7 and FTS-8 totaling approximately 31,000 dth per day. PGW contracts for 64,965 dth per day of Rate Schedule SS-1 Storage Service on TETCO's system. A preliminary review of the Rate Filing indicates that TETCO's proposed rate increases may result in the collection of unjust and unreasonable rates. As a Local Distribution Company ("LDC"), these extraordinary cost increases would be passed on directly to our customers. August 11, 2021 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case.

ACTIVITIES:

10/7/2021 - Philadelphia Gas Works ("PGW") filed a motion to intervene to protect its interest in this case. PGW is actively participating in the Northeast LDC Customer Group, an *ad hoc* group of similarly situated firm transportation and storage contract shippers, to challenge TETCO's Rate Filing; and to that end has joined in preparing and filing the "Protest and Request for Evidentiary hearing and Additional Relief of the Northeast LDC Customer Group." **10/29/2021** - The Commission issued a Suspension Order accepting the filed tariff records to be effective, after suspension for five months. Subject to refund, and subject to the outcome of a hearing to explore the issues raised in protests to the EGTS filing.

10/29/2021 - the Commission issued a Suspension Order accepting the filed tariff records to be effective, after suspension for five months, on April 1, 2022, subject to refund, and subject to the outcome of a hearing to explore the issues raised in protests to TETCO's filing. A prehearing conference to establish hearing procedures was held on November 29, 2021. On December 29, 2021, the ALJ issued a procedural schedule — setting evidentiary hearings to start October 18, 2022, and an initial decision date of March 14, 2023. In addition to designating a Presiding Judge, the Chief Judge designated a Settlement Judge for this proceeding to oversee settlement negotiations among the participants. A series of settlement negotiations were held from December 5, 2021, through August,2022.

9/15/2022 - Texas Eastern Transmission, LP (Texas Eastern) filed a stipulation and agreement (Settlement) pursuant to Rule 602 of the Commission's Rules of Practice and Procedure. Texas Eastern states that the Settlement resolves the issues set for hearing in the consolidated dockets. On October 20, 2022, the Settlement Judge certified the Settlement to the Commission as an uncontested settlement.

11/30/2022 - the Commission approved the Settlement and directed Texas Eastern to file actual tariff records consistent with the terms of the Settlement. The Settlement Effective Date is January 1,2023. If not issued before March 1, 2023, refund deadline is the first billing cycle thereafter, via either electronic means or credit booked to PGW account, at PGW's election. Refund Period covers February 1, 2022 thru December 30, 2022.

Docket R-2023-XXXXXXX

Volume 2

Philadelphia Gas Works

Before The

Pennsylvania Public Utility Commission

Computation of Annual Purchased Gas Costs
For Twelve Months Ending August 31, 2024

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, 2023

Philadelphia Gas Works 1307(f) - 2023 Prefiling

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Docket No. R-2023-XXXXXXX
Item 53.64(c)(5)

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, 2023, and an updated Annual Resource Planning Report is not available at this time.

ANNUAL RESOURCE PLANNING REPORT

Philadelphia Gas Works

Philadelphia, Pennsylvania

March 2022

Forms 1 & 2

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Philadelphia Gas Works
800 West Montgomery Avenue
Philadelphia, Pennsylvania 19122

ANNUAL RESOURCE PLANNING REPORT
MARCH 2022

Forms 1 & 2

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

PHILADELPHIA GAS WORKS

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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

Philadelphia Gas Works
Exhibit 1
Sheet 1 of 2

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. Florian Teme Vice President, Marketing & Gas Planning at 215-684-6463. The following individual is available to answer questions concerning Forms 1 and 2: Mrs. Meriola Gjergo, Manager – Gas Planning & Rates at (215) 684-6484.

Philadelphia Gas Works
Exhibit 2
Sheet 1 of 1

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.

Philadelphia Gas Works
Exhibit 3
Sheet 1 of 1

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.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

PHILADELPHIA GAS WORKS
800 WEST MONTGOMERY AVENUE
PHILADELPHIA, PENNSYLVANIA

Annual Resource Planning Summary Report

Filed: March 2022

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

PHILADELPHIA GAS WORKS

2022 Annual Resource Planning Summary Report

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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:

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

Section 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.

Section 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 PGW's 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.

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 37% 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 (the 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 27% 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 WSS storage field in a manner similar to third party supply. Specifically, this storage contract does not contain transportation to the PGW city gate. Therefore, these storages must flow within PGW's contractual upstream capacity rights on TGPL.

Delivery from these fields utilizes approximately 8% 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 17% of its supply using day purchases as needed and releases eleven percent (11%) of its capacity to its choice suppliers.

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.

Section 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 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

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 20-year period. This pattern reflects 3,893 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 Fahrenheit, there would be 25 degree days. The annual 3,893 degree days, which are 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.

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 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.

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.

Section 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 Fahrenheit day and from this data, the load for a -5 degrees Fahrenheit 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.

Section 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 Gas 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.

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.

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.

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

	Historical Data		Current Year	Three Year Forecast		
Index Year	-2	-1	0	1	2	3
Actual Year	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Firm Requirements:						
Retail Residential	31,576	32,148	33,521	35,330	35,274	35,254
Retail Commercial	7,012	7,696	8,288	8,170	8,123	8,080
Retail Industrial	399	447	423	414	409	403
Electric Power Generation	-	-	-		-	-
Exchanges with Other Utilities	-	-	-	-	-	-
Unaccounted For Gas	740	978	1,409	2,325	2,314	2,329
Company Use	209	296	173	254	254	254
Other - Prior Period Adjustment	-	-	-	-	-	-
Subtotal Firm	39,937	41,564	43,814	46,493	46,372	46,319
Interruptible Requirements:						
Retail	588	492	471	257	257	257
Electric Power Generation	-	-	-	-	-	-
Company's Own Plant	57	51	97	129	129	129
Unaccounted For Gas	20	14	14	6	6	6
Subtotal Interruptible	664	557	581	392	392	392
SUBTOTAL FIRM AND INTERRUPTIBLE	40,601	42,121	44,396	46,885	46,765	46,711
Transportation:						
Firm Residential	1,504	1,535	1,939	2,204	2,344	2,484
Firm Commercial	4,300	4,012	4,210	4,351	4,402	4,454
Firm Industrial	351	376	417	450	455	461
Interruptible Residential	-	-	-	-	-	-
Interruptible Commercial	7,502	6,881	6,637	6,594	6,594	6,594
Interruptible Industrial	5,549	5,065	5,034	4,897	4,897	4,897
Other - Non-Utility Power Producers	12,721	13,239	13,242	13,655	13,655	13,655
Subtotal Transportation	31,927	31,109	31,479	32,151	32,348	32,545
TOTAL GAS REQUIREMENTS	72,528	73,230	75,875	79,036	79,112	79,256
Increase (Decrease)	(5,834)	702	2,645	3,161	76	143
Percent Change (%)	-7.44%	0.97%	3.61%	4.17%	0.10%	0.18%

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

	Historical Data		Current Year [2]	Three Year Forecast [1]		
Index Year	-2	-1	0	1	2	3
Actual Year	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Firm Requirements:						
Retail Residential	279	303	441	464	463	463
Retail Commercial	62	72	109	107	107	106
Retail Industrial	4	4	6	5	5	5
Electric Power Generation	-	-	-	-	-	-
Exchanges with Other Utilities	-	-	-	-	-	-
Unaccounted For Gas	7	9	19	31	30	31
Company Use	2	3	2	3	3	3
Other	-	-	-	-	-	-
Subtotal Firm	353	391	576	611	609	608
Interruptible Requirements:						
Retail	0.0	0.0	1.1	0.7	0.7	0.7
Electric Power Generation	-	-	-	-	-	-
Company's Own Plant	0.3	0.3	0.6	0.6	0.6	0.6
Unaccounted For Gas	0.0	0.0	-	0.0	0.0	0.0
Subtotal Interruptible	0.4	0.4	1.7	1.3	1.3	1.3
SUBTOTAL FIRM AND INTERRUPTIBLE	353	392	578	612	611	610
Transportation:						
Firm Residential	12	14	28	31	33	35
Firm Commercial	27	29	47	50	50	51
Firm Industrial	2	2	4	4	4	4
Interruptible Residential	-	-	-	-	-	-
Interruptible Commercial	41	42	-	-	-	-
Interruptible Industrial	17	18	-	-	-	-
Other - Non-Utility Power Producers	51	55	-	-	-	-
Subtotal Transportation	151	161	79	85	88	90
TOTAL GAS REQUIREMENTS	505	552	657	698	698	700
Increase (Decrease)	(163)	48	104	41	1	2
Percent Change (%)	-24.4%	9.5%	18.9%	6.3%	0.1%	0.2%

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

	Historical Data				Current Year (2)		Three Year Forecast (1)					
Index Year	-2		-1		0		1		2		3	
Actual Year	2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025	
	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak
Gas Supply for Sales Service												
Spot Purchases	42,454	152	42,913	153	45,293	281	48,326	261	47,923	256	47,900	255
Storage Withdrawals	9,109	166	10,521	165	13,612	162	14,891	185	14,949	190	15,103	190
LNG Withdrawal	1,141	36	1,293	74	1,966	207	2,600	249	2,591	250	2,601	251
LNG Purchases	-	-	-	-	-	-	-	-	-	-	-	-
Exchanges with other LDCs	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Total Gas Supply	52,704	353	54,726	392	60,871	650	65,817	695	65,463	696	65,604	696
Total Transportation Services	31,927	151	31,109	161	31,479	18	32,151	15	32,348	15	32,545	16
TOTAL GAS SUPPLY AND TRANSPORTATION SERVICE	84,631	505	85,835	552	92,350	667	97,969	710	97,811	711	98,149	712
Deductions												
Pipeline: TRANS FUEL	986	-	805	-	683	6	870	6	864	6	866	6
Storage: INJ, INJ FUEL, WITHDRAW FUEL, TRANS FUEL	9,384	-	10,608	-	14,274	1	15,334	2	15,366	2	15,571	1
LNG: LIQUE, INJ FUEL, TRANS FUEL	1,733	-	1,192	-	1,517	4	2,729	4	2,468	4	2,457	5
Sales to other LDC's	-	-	-	-	-	-	-	-	-	-	-	-
Total Deductions	12,103	-	12,605	-	16,475	11	18,933	12	18,699	12	18,893	12
NET GAS SUPPLY	72,528	505	73,230	552	75,875	657	79,036	698	79,112	698	79,256	700
BTU	1.034		1.031		1.031		1.031		1.031		1.031	

(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)

	Historical Data				Current Year		Three Year Forecast					
Index Year	-2		-1		0		1		2		3	
Actual year	2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025	
	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak
City Gate Transportation Contracts:												
Transcontinental Transmission Corp.	3,988	60	4,000	60	4,000	60	4,000	60	4,000	60	4,000	60
Texas Eastern Transmission Corp.	2,242	43	2,250	43	2,250	43	2,250	43	2,250	43	2,250	43
Texas Eastern Transmission Corp.	443	20	445	20	445	20	445	20	445	20	445	20
Transcontinental Transmission Corp.	443	5	445	5	445	5	445	5	445	5	445	5
Total	7,116	127	7,139	128	7,139	128	7,139	128	7,139	128	7,139	128
Upstream Transportation Contracts:												
Transcontinental Transmission Corp.	58,479	160	58,489	160	58,489	160	58,489	160	58,649	160	58,489	160
Texas Eastern Transmission Corp.	26,547	73	26,552	73	26,552	73	26,552	73	26,625	73	26,552	73
Texas Eastern Transmission Corp.	8,432	23	8,434	23	8,434	23	8,434	23	8,457	23	8,434	23
Texas Eastern Transmission Corp.	2,576	17	2,584	17	2,584	17	2,584	17	2,584	17	2,584	17
Texas Eastern Transmission Corp.	2,576	17	2,584	17	2,584	17	2,584	17	2,584	17	2,584	17
Transcontinental Transmission Corp.	171	2	172	2	172	2	172	2	172	2	172	2
Texas Eastern Transmission Corp.	1,770	5	1,770	5	1,775	5	1,770	5	1,775	5	1,770	5
Total	100,553	297	100,584	298	100,589	298	100,584	298	100,845	298	100,584	298
Storage-Related Transportation Contracts:												
Dominion Transmission Inc.	9,100	25	9,102	25	9,102	25	9,102	25	9,127	25	9,102	25
Dominion Transmission Inc.	2,757	8	2,757	8	2,757	8	2,757	8	2,765	8	2,757	8
Total	11,857	32	11,859	32	11,859	32	11,859	32	11,891	32	11,859	32

Conversions at 1031 Btu

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

	Historical Data				Current Year		Three Year Forecast					
Index Year	-2		-1		0		1		2		3	
Actual year	2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025	
	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak
Transcontinental Transmission Corp.	3,988	60	4,000	60	4,000	60	4,000	60	4,000	60	4,000	60
Dominion Transmission Inc.	3,655	32	3,685	32	3,685	32	3,685	32	3,685	32	3,685	32
Transcontinental Transmission Corp.	3,150	33	3,165	33	3,165	33	3,165	33	3,165	33	3,165	33
Texas Eastern Transmission Corp.	2,410	43	2,419	43	2,419	43	2,419	43	2,419	43	2,419	43
Texas Eastern Transmission Corp.	2,242	20	2,250	20	2,250	20	2,250	20	2,250	20	2,250	20
Transcontinental Transmission Corp.	443	5	445	5	445	5	445	5	445	5	445	5
Total	15,888	193	15,965	194	15,965	193	15,965	194	15,965	194	15,965	194

Forecasted Dth to Mcf Conversions at 1031 BTU.

	Contract Expiration Date [(1)]
Transcontinental Transmission Corp.	3/31/2025
Dominion Transmission Inc.	3/31/2026
Transcontinental Transmission Corp.	9/30/2022
Texas Eastern Transmission Corp.	4/30/2027
Texas Eastern Transmission Corp.	4/30/2027
Transcontinental Transmission Corp.	4/15/2023

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

Docket No. R-2023-XXXXXX
Item 53.64(c)(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) 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:

(6) Each Section l307(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 gas 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 a portfolio approach. The Company's supply portfolio is split into four categories. First, the Company enters baseload supply contracts, which account for approximately thirty-seven percent (37%) of PGW's daily firm transportation entitlements on both Enbridge’s Texas Eastern and Williams’ Transco Gas Pipelines.

The Enbridge and Williams' pipelines are 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 are moved to the city gates within PGW's firm interstate pipeline capacity. This service represents eight percent (8 %) of supply at a fixed price. The Company will again attempt to release capacity for year periods totaling 33,000 dekatherms as it did last year. If this proves less economic for the ratepayer, the Company will release these capacities for the winter and summer season separately. These capacity releases have twenty-four-hour recall rights. If the need arises, PGW can recall this capacity and use its unbundled storage to fill the TGPL portion 10,000 dekatherms and depend on market-based prices to fill the TETCO portion 23,000 dekatherms. The Company also releases firm capacity to its firm choice suppliers on a monthly basis based upon the suppliers' 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 met, the company may utilize bundled storage and LNG inventories to displace higher priced supply based on the current market conditions. PGW 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 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 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.

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 always an adequate supply of natural gas available to meet the requirements of PGW's over 490,000 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 a six-year history working in the Gas Supply area and a five-year history in Gas Processing for PGW. This individual also has a background working in the Oil and Petrochemical industries. This individual has a BS in Chemical Engineer and MBA 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 provide 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.

Manager, Gas Supply: This person has more than ten years' experience in the utility industry. At PGW, she has over seven years' experience in gas supply, tariff rates and federal regulatory areas. She has held leadership position representing LDC groups in pipeline rate case and other FERC proceedings. She holds a B.S. from the Wharton School of the University of Pennsylvania and a PhD in economics. She has completed course work in rates and management. The administrators of Gas Supply and Retail Operations report directly to the manager of gas supply.

Administrator, Gas Supply: Administrator, Gas Supply & Acquisition: this person has nineteen years of natural gas experience :seventeen of which was spent in the gas supply area. This person also has experience in the Customer Service, IS, Retail Operations areas as well. This individual has an MBA in International Business and BBA with a concentration in Management Information Systems, in addition to having an extensive background in the area of gas purchasing. Reporting to this individual are the natural gas accountants, natural gas transportation coordinators and natural gas analysts.

Administrator, Retail Operations: This individual has seventeen years of experience in the Natural Gas Industry with knowledge in Marketing, Gas Planning, Budget/Strategic Development, and Gas Supply. This person has a Master's Degree in Business Administration and a Bachelor's Degree in Marketing. She has experience with regulatory filings, budget preparation, program management, and natural gas purchasing. Reporting to this individual is the Retail Operations Analyst

Manager, Gas Control: This person has over ten years in the oil & gas area, is responsible for the day-to-day management of the city distribution grid and daily confirmation of each day's gas volumes. He manages the gas control department on a 24/7 basis. The manager has completed the course work for a BS degree and has extensive experience in the Distribution Department's Pressure Control and Network Analysis area.

Docket No. R-2023-XXXXXXX
Item 53.64(c)(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:

(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, 2022 to December 31, 2022.

Schedule 1 – reflects all off-system sales margins for the period January 1, 2022 to December 31, 2022.

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

Schedule 3 – illustrates all capacity release deals.

Schedule 4 – reflects individual capacity release transactions that 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, 2022

Off-System Sales			
MONTH	Total Revenue	Ratepayer Margin	Total Credit
Jan-22	$41,360	$9,643	$38,146
Feb-22	$0	$0	$0
Mar-22	$0	$0	$0
Apr-22	$0	$0	$0
May-22	$0	$0	$0
Jun-22	$0	$0	$0
Jul-22	$0	$0	$0
Aug-22	$0	$0	$0
Sep-22	$0	$0	$0
Oct-22	$0	$0	$0
Nov-22	$164,387	$0	$164,387
Dec-22	$1,738,614	$730,797	$1,495,015

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Off-System Sales (loss)			
MONTH	Total Revenue	Total Cost of Gas	Total Loss
Jan-22	$0	$0	$0
Feb-22	$0	$0	$0
Mar-22	$0	$0	$0
Apr-22	$0	$0	$0
May-22	$0	$0	$0
Jun-22	$0	$0	$0
Jul-22	$0	$0	$0
Aug-22	$0	$0	$0
Sep-22	$0	$0	$0
Oct-22	$0	$0	$0
Nov-22	$164,387	$267,191	-$102,804
Dec-22	$0	$0	$0

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	Capacity Release		
	Total	Total	
	TGPL	TETCO	Total
MONTH	Credits	Credits	Credits
Jan-22	$ 804,742	$ 1,255,604	$ 2,060,347
Feb-22	$ 744,932	$ 1,137,669	$ 1,882,601
Mar-22	$ 814,724	$ 1,260,518	$ 2,075,242
Apr-22	$ 417,928	$ 560,202	$ 978,130
May-22	$ 413,356	$ 936,526	$ 1,349,883
Jun-22	$ 1,315,361	$ 911,191	$ 2,226,552
Jul-22	$ 1,372,108	$ 936,886	$ 2,308,994
Aug-22	$ 941,008	$ 1,049,949	$ 1,990,957
Sep-22	$ 616,542	$ 1,054,805	$ 1,671,347
Oct-22	$ 412,641	$ 536,123	$ 948,764
Nov-22	$ 1,855,620	$ 2,309,278	$ 4,164,898
Dec-22	$ 1,926,852	$ 2,401,687	$ 4,328,540
TOTAL	$ 11,635,816	$ 14,350,440	$ 25,986,256

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M / YR	PIPELINE	PATH	RECALL STATUS	MONTHLY VOLUME DTH	TOTAL MONTHLY CREDIT	CREDIT DTH	TOTAL CREDIT	REPLACEMENT SHIPPER
January-22	TETCO	STX - M3	N	18,321	$ 10,241.64	$ 0.5590	$ 10,241.64	Sprague
	TETCO	STX - M3	N	15,066	$ 8,424.47	$ 0.5592	$ 8,424.47	Vista Energy
	TETCO	STX - M3	N	42,873	$ 23,970.84	$ 0.5591	$ 23,970.84	SFE Energy
	TETCO	STX - M3	N	4,092	$ 2,290.02	$ 0.5596	$ 2,290.02	Statewise
	TETCO	STX - M3	N	2,635	$ 1,475.95	$ 0.5601	$ 1,475.95	Josco Energy
	TETCO	STX - M3	N	279	$ 157.62	$ 0.5649	$ 157.62	Carbonbetter
	TETCO	STX - M3	N	4,495	$ 2,515.87	$ 0.5597	$ 2,515.87	American Power
	TETCO	STX - M3	N	7,471	$ 4,175.42	$ 0.5589	$ 4,175.42	Atlantic Energy
	TETCO	STX - M3	N	1,364	$ 761.52	$ 0.5583	$ 761.52	Greenlight
	TETCO	STX - M3	N	279	$ 157.62	$ 0.5649	$ 157.62	New Wave Energy
	TETCO	STX - M3	N	4,991	$ 2,788.85	$ 0.5588	$ 2,788.85	Residents
	TETCO	STX - M3	N	2,015	$ 1,129.28	$ 0.5604	$ 1,129.28	Eligo Energy
	TETCO	STX - M3	N	310	$ 173.33	$ 0.5591	$ 173.33	Median Energy
	TETCO	STX - M3	N	1,116	$ 625.04	$ 0.5601	$ 625.04	Direct Energy
	TETCO	STX - M3	N	38,440	$ 21,491.81	$ 0.5591	$ 21,491.81	Direct Energy
	TETCO	STX - M3	N	84,351	$ 47,159.02	$ 0.5591	$ 47,159.02	Direct Energy
	TETCO	STX - M3	N	3,317	$ 1,853.99	$ 0.5589	$ 1,853.99	Shipley
	TETCO	STX - M3	N	94,612	$ 52,899.74	$ 0.5591	$ 52,899.74	Exelon
	TETCO	STX - M3	N	2,201	$ 1,228.95	$ 0.5584	$ 1,228.95	Nordic Energy
	TETCO	STX - M3	N	15,190	$ 8,492.73	$ 0.5591	$ 8,492.73	WGL Energy
	TETCO	STX - M3	N	4,309	$ 2,410.79	$ 0.5595	$ 2,410.79	Marathon Power
	TETCO	STX - M3	N	109,740	$ 61,355.63	$ 0.5591	$ 61,355.63	UGI Energy
	TETCO	STX - M3	N	713	$ 399.17	$ 0.5598	$ 399.17	Alpha Gas
	TETCO	STX - M3	N	310	$ 173.33	$ 0.5591	$ 173.33	South Bay
	TETCO	STX - M3	N	3,379	$ 1,890.84	$ 0.5596	$ 1,890.84	Park Power
	TETCO	STX - M3	N	9,579	$ 5,357.25	$ 0.5593	$ 5,357.25	Palmco
	TETCO	STX - M3	N	2,449	$ 1,370.87	$ 0.5598	$ 1,370.87	EDF Trading
	TETCO	STX - M3	N	2,480	$ 1,386.57	$ 0.5591	$ 1,386.57	CIMA Energy
	TETCO	STX - M3	N	5,301	$ 2,962.15	$ 0.5588	$ 2,962.15	MPower
	TETCO	STX - M3	N	186	$ 105.08	$ 0.5649	$ 105.08	Spring
	TETCO	STX - M3	N	93,000	$ 162,750.00	$ 1.7500	$ 162,750.00	Castleton Commodities
	TETCO	STX - M3	N	486,948	$ 823,429.07	$ 1.6910	$ 823,429.07	Castleton Commodities
	TETCO	M2 - M3	N	20,000	$ -	$ -	$ -	Tioga LNG LLC
	TETCO	M2 - M3	N	5,100	$ -	$ -	$ -	Tioga LNG LLC
	TETCO	M2 - M3	N	20,000	$ -	$ -	$ -	Tioga LNG LLC
	TETCO	M2 - M3	N	20,000	$ -	$ -	$ -	Tioga LNG LLC
	TETCO	M2 - M3	N	20,000	$ -	$ -	$ -	Tioga LNG LLC
	TETCO	M2 - M3	N	20,000	$ -	$ -	$ -	Tioga LNG LLC
	TETCO	M2 - M3	N	20,000	$ -	$ -	$ -	Tioga LNG LLC
				1,186,912			$ 1,255,604.46	
	TRANSCO	2-6	N	31	$ 17.05	$ 0.55000	$ 17.05	Clearview Electric
	TRANSCO	2-6	N	186	$ 101.68	$ 0.54667	$ 101.68	Spring
	TRANSCO	2-6	N	279	$ 152.21	$ 0.54556	$ 152.21	Carbonbetter
	TRANSCO	2-6	N	279	$ 152.21	$ 0.54556	$ 152.21	New Wave Energy
	TRANSCO	2-6	N	310	$ 169.26	$ 0.54600	$ 169.26	Median Energy
	TRANSCO	2-6	N	341	$ 186.00	$ 0.54545	$ 186.00	South Bay
	TRANSCO	2-6	N	713	$ 389.05	$ 0.54565	$ 389.05	Alpha Gas
	TRANSCO	2-6	N	1,116	$ 609.15	$ 0.54583	$ 609.15	Direct Energy
	TRANSCO	2-6	N	1,395	$ 761.36	$ 0.54578	$ 761.36	Greenlight
	TRANSCO	2-6	N	2,046	$ 1,117.24	$ 0.54606	$ 1,117.24	Eligo Energy
	TRANSCO	2-6	N	2,232	$ 1,218.61	$ 0.54597	$ 1,218.61	Nordic Energy
	TRANSCO	2-6	N	2,480	$ 1,354.08	$ 0.54600	$ 1,354.08	CIMA Energy
	TRANSCO	2-6	N	2,480	$ 1,354.08	$ 0.54600	$ 1,354.08	EDF Trading
	TRANSCO	2-6	N	2,666	$ 1,455.45	$ 0.54593	$ 1,455.45	Josco Energy
	TRANSCO	2-6	N	3,317	$ 1,810.71	$ 0.54589	$ 1,810.71	Shipley
	TRANSCO	2-6	N	3,410	$ 1,861.55	$ 0.54591	$ 1,861.55	Park Power
	TRANSCO	2-6	N	4,092	$ 2,233.86	$ 0.54591	$ 2,233.86	Statewise
	TRANSCO	2-6	N	4,340	$ 2,369.64	$ 0.54600	$ 2,369.64	Marathon Power
	TRANSCO	2-6	N	4,495	$ 2,454.27	$ 0.54600	$ 2,454.27	American Power
	TRANSCO	2-6	N	5,022	$ 2,741.95	$ 0.54599	$ 2,741.95	Residents
	TRANSCO	2-6	N	5,332	$ 2,910.90	$ 0.54593	$ 2,910.90	MPower
	TRANSCO	2-6	N	7,502	$ 4,095.72	$ 0.54595	$ 4,095.72	Atlantic Energy
	TRANSCO	2-6	N	9,579	$ 5,229.39	$ 0.54592	$ 5,229.39	Palmco
	TRANSCO	2-6	N	15,066	$ 8,225.23	$ 0.54595	$ 8,225.23	Vista Energy
	TRANSCO	2-6	N	15,221	$ 8,309.86	$ 0.54595	$ 8,309.86	WGL Energy
	TRANSCO	2-6	N	18,321	$ 10,002.46	$ 0.54596	$ 10,002.46	Sprague
	TRANSCO	2-6	N	38,440	$ 20,986.38	$ 0.54595	$ 20,986.38	Direct Energy
	TRANSCO	2-6	N	42,873	$ 23,406.55	$ 0.54595	$ 23,406.55	SFE Energy
	TRANSCO	2-6	N	84,382	$ 46,068.48	$ 0.54595	$ 46,068.48	Direct Energy
	TRANSCO	2-6	N	94,612	$ 51,653.44	$ 0.54595	$ 51,653.44	Exelon
	TRANSCO	2-6	N	109,771	$ 59,929.51	$ 0.54595	$ 59,929.51	UGI Energy
	TRANSCO	1-3	N	155,000	$ 5,657.50	$ 0.03650	$ 5,657.50	Nextera Energy
	TRANSCO	2-3	N	155,000	$ 5,657.50	$ 0.03650	$ 5,657.50	Nextera Energy
	TRANSCO	3-6	N	310,000	$ 530,100.00	$ 1.71000	$ 530,100.00	Vitol
	TRANSCO	3-6	N	2,325,000	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	3-6	N	775,000	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	3-6	N	49,000	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	3-6	N	7,000	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	3-6	N	72,000	$ -	$ -	$ -	Tioga LNG LLC
				4,330,329			$ 804,742.33	

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February-22	TETCO	STX - M3	N	2,240	$ 1,272.99	$ 0.5683	$ 1,272.99	Nordic Energy
	TETCO	STX - M3	N	252	$ 144.68	$ 0.5741	$ 144.68	Carbonbetter
	TETCO	STX - M3	N	39,564	$ 22,484.69	$ 0.5683	$ 22,484.69	SFE Energy
	TETCO	STX - M3	N	3,836	$ 2,179.53	$ 0.5682	$ 2,179.53	American Power
	TETCO	STX - M3	N	6,748	$ 3,833.42	$ 0.5681	$ 3,833.42	Atlantic Energy
	TETCO	STX - M3	N	980	$ 559.38	$ 0.5708	$ 559.38	Direct Energy
	TETCO	STX - M3	N	420	$ 241.15	$ 0.5742	$ 241.15	Direct Energy
	TETCO	STX - M3	N	35,980	$ 20,449.88	$ 0.5684	$ 20,449.88	Direct Energy
	TETCO	STX - M3	N	70,728	$ 40,195.71	$ 0.5683	$ 40,195.71	Direct Energy
	TETCO	STX - M3	N	2,968	$ 1,687.69	$ 0.5686	$ 1,687.69	Shipley
	TETCO	STX - M3	N	13,384	$ 7,604.17	$ 0.5682	$ 7,604.17	Vista Energy
	TETCO	STX - M3	N	15,848	$ 9,007.40	$ 0.5684	$ 9,007.40	Sprague
	TETCO	STX - M3	N	952	$ 540.04	$ 0.5673	$ 540.04	New Wave Energy
	TETCO	STX - M3	N	5,208	$ 2,960.68	$ 0.5685	$ 2,960.68	Marathon Power
	TETCO	STX - M3	N	616	$ 352.03	$ 0.5715	$ 352.03	Alpha Gas
	TETCO	STX - M3	N	82,684	$ 46,989.81	$ 0.5683	$ 46,989.81	Exelon
	TETCO	STX - M3	N	1,260	$ 718.51	$ 0.5702	$ 718.51	Greenlight
	TETCO	STX - M3	N	2,352	$ 1,335.66	$ 0.5679	$ 1,335.66	Josco Energy
	TETCO	STX - M3	N	252	$ 144.68	$ 0.5741	$ 144.68	Median Energy
	TETCO	STX - M3	N	1,680	$ 954.74	$ 0.5683	$ 954.74	Eligo Energy
	TETCO	STX - M3	N	308	$ 173.57	$ 0.5635	$ 173.57	Spring
	TETCO	STX - M3	N	5,404	$ 3,071.59	$ 0.5684	$ 3,071.59	Residents
	TETCO	STX - M3	N	99,764	$ 56,696.36	$ 0.5683	$ 56,696.36	UGI Energy
	TETCO	STX - M3	N	13,720	$ 7,797.08	$ 0.5683	$ 7,797.08	WGL Energy
	TETCO	STX - M3	N	3,556	$ 2,020.37	$ 0.5682	$ 2,020.37	Statewise
	TETCO	STX - M3	N	5,432	$ 3,086.03	$ 0.5681	$ 3,086.03	MPower
	TETCO	STX - M3	N	308	$ 173.57	$ 0.5635	$ 173.57	South Bay
	TETCO	STX - M3	N	2,212	$ 1,258.55	$ 0.5690	$ 1,258.55	EDF Trading
	TETCO	STX - M3	N	2,128	$ 1,210.34	$ 0.5688	$ 1,210.34	Spark Energy
	TETCO	STX - M3	N	8,596	$ 4,884.61	$ 0.5682	$ 4,884.61	Palmco
	TETCO	STX - M3	N	2,968	$ 1,687.69	$ 0.5686	$ 1,687.69	Park Power
	TETCO	STX - M3	N	2,128	$ 1,210.34	$ 0.5688	$ 1,210.34	CIMA Energy
	TETCO	STX - M3	N	84,000	$ 147,000.00	$ 1.7500	$ 147,000.00	Castleton Commodities
	TETCO	STX - M3	N	439,824	$ 743,742.38	$ 1.6910	$ 743,742.38	Castleton Commodities
	TETCO	M2 - M3	N	20,000	$ -	$ -	$ -	Tioga LNG LLC
	TETCO	M2 - M3	N	20,000	$ -	$ -	$ -	Tioga LNG LLC
				998,300			$ 1,137,669.32	
	TRANSCO	2-6	N	28	$ 15.40	$ 0.55000	$ 15.40	Clearview Electric
	TRANSCO	2-6	N	280	$ 152.88	$ 0.54600	$ 152.88	Median Energy
	TRANSCO	2-6	N	280	$ 152.88	$ 0.54600	$ 152.88	Carbonbetter
	TRANSCO	2-6	N	308	$ 168.00	$ 0.54545	$ 168.00	South Bay
	TRANSCO	2-6	N	308	$ 168.00	$ 0.54545	$ 168.00	Spring
	TRANSCO	2-6	N	420	$ 229.32	$ 0.54600	$ 229.32	Direct Energy
	TRANSCO	2-6	N	616	$ 336.28	$ 0.54591	$ 336.28	Alpha Gas
	TRANSCO	2-6	N	952	$ 519.68	$ 0.54588	$ 519.68	New Wave Energy
	TRANSCO	2-6	N	980	$ 534.80	$ 0.54571	$ 534.80	Direct Energy
	TRANSCO	2-6	N	1,288	$ 703.36	$ 0.54609	$ 703.36	Greenlight
	TRANSCO	2-6	N	1,708	$ 932.68	$ 0.54607	$ 932.68	Eligo Energy
	TRANSCO	2-6	N	2,128	$ 1,161.72	$ 0.54592	$ 1,161.72	Spark Energy
	TRANSCO	2-6	N	2,156	$ 1,177.12	$ 0.54597	$ 1,177.12	CIMA Energy
	TRANSCO	2-6	N	2,240	$ 1,223.04	$ 0.54600	$ 1,223.04	EDF Trading
	TRANSCO	2-6	N	2,268	$ 1,238.16	$ 0.54593	$ 1,238.16	Nordic Energy
	TRANSCO	2-6	N	2,380	$ 1,299.48	$ 0.54600	$ 1,299.48	Josco Energy
	TRANSCO	2-6	N	2,968	$ 1,620.36	$ 0.54594	$ 1,620.36	Shipley
	TRANSCO	2-6	N	2,968	$ 1,620.36	$ 0.54594	$ 1,620.36	Park Power
	TRANSCO	2-6	N	3,584	$ 1,956.64	$ 0.54594	$ 1,956.64	Statewise
	TRANSCO	2-6	N	3,836	$ 2,094.40	$ 0.54599	$ 2,094.40	American Power
	TRANSCO	2-6	N	5,208	$ 2,843.40	$ 0.54597	$ 2,843.40	Marathon Power
	TRANSCO	2-6	N	5,404	$ 2,950.36	$ 0.54596	$ 2,950.36	Residents
	TRANSCO	2-6	N	5,460	$ 2,980.88	$ 0.54595	$ 2,980.88	MPower
	TRANSCO	2-6	N	6,776	$ 3,699.36	$ 0.54595	$ 3,699.36	Atlantic Energy
	TRANSCO	2-6	N	8,596	$ 4,692.80	$ 0.54593	$ 4,692.80	Palmco
	TRANSCO	2-6	N	13,384	$ 7,306.88	$ 0.54594	$ 7,306.88	Vista Energy
	TRANSCO	2-6	N	13,748	$ 7,505.68	$ 0.54595	$ 7,505.68	WGL Energy
	TRANSCO	2-6	N	15,848	$ 8,652.28	$ 0.54595	$ 8,652.28	Sprague
	TRANSCO	2-6	N	36,008	$ 19,658.52	$ 0.54595	$ 19,658.52	Direct Energy
	TRANSCO	2-6	N	39,564	$ 21,600.04	$ 0.54595	$ 21,600.04	SFE Energy
	TRANSCO	2-6	N	70,756	$ 38,629.36	$ 0.54595	$ 38,629.36	Direct Energy
	TRANSCO	2-6	N	82,684	$ 45,141.32	$ 0.54595	$ 45,141.32	Exelon
	TRANSCO	2-6	N	99,764	$ 54,466.16	$ 0.54595	$ 54,466.16	UGI Energy
	TRANSCO	1-3	N	140,000	$ 5,110.00	$ 0.03650	$ 5,110.00	Nextera Energy
	TRANSCO	2-3	N	140,000	$ 5,110.00	$ 0.03650	$ 5,110.00	Nextera Energy
	TRANSCO	2-3	N	280,000	$ 18,480.00	$ 0.06600	$ 18,480.00	United Energy
	TRANSCO	3-6	N	280,000	$ 478,800.00	$ 1.71000	$ 478,800.00	Vitol
	TRANSCO	3-6	N	2,100,000	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	3-6	N	700,000	$ -	$ -	$ -	Tioga LNG LLC
				4,074,896			$ 744,931.60	

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M / YR	PIPELINE	PATH	RECALL STATUS	MONTHLY VOLUME DTH	TOTAL MONTHLY CREDIT	CREDIT DTH	TOTAL CREDIT	REPLACEMENT SHIPPER
March-22	TETCO	STX - M3	N	1,054	$ 597.89	$ 0.5673	$ 597.89	New Wave Energy
	TETCO	STX - M3	N	930	$ 528.52	$ 0.5683	$ 528.52	Direct Energy
	TETCO	STX - M3	N	2,852	$ 1,622.95	$ 0.5691	$ 1,622.95	Nordic Energy
	TETCO	STX - M3	N	1,116	$ 635.31	$ 0.5693	$ 635.31	Direct Energy
	TETCO	STX - M3	N	5,766	$ 3,277.90	$ 0.5685	$ 3,277.90	Marathon Power
	TETCO	STX - M3	N	14,539	$ 8,264.14	$ 0.5684	$ 8,264.14	Vista Energy
	TETCO	STX - M3	N	341	$ 192.16	$ 0.5635	$ 192.16	South Bay
	TETCO	STX - M3	N	682	$ 389.74	$ 0.5715	$ 389.74	Alpha Gas
	TETCO	STX - M3	N	2,573	$ 1,462.78	$ 0.5685	$ 1,462.78	Josco Energy
	TETCO	STX - M3	N	3,162	$ 1,799.14	$ 0.5690	$ 1,799.14	Park Power
	TETCO	STX - M3	N	9,362	$ 5,322.59	$ 0.5685	$ 5,322.59	Palmco
	TETCO	STX - M3	N	279	$ 160.20	$ 0.5742	$ 160.20	Median Energy
	TETCO	STX - M3	N	1,767	$ 1,003.64	$ 0.5680	$ 1,003.64	Eligo Energy
	TETCO	STX - M3	N	6,696	$ 3,806.42	$ 0.5685	$ 3,806.42	Residents
	TETCO	STX - M3	N	496	$ 282.95	$ 0.5705	$ 282.95	Spring
	TETCO	STX - M3	N	40,734	$ 23,148.05	$ 0.5683	$ 23,148.05	Direct Energy
	TETCO	STX - M3	N	78,213	$ 44,448.98	$ 0.5683	$ 44,448.98	Direct Energy
	TETCO	STX - M3	N	465	$ 266.97	$ 0.5741	$ 266.97	Carbonbetter
	TETCO	STX - M3	N	3,224	$ 1,831.12	$ 0.5680	$ 1,831.12	Shipley
	TETCO	STX - M3	N	4,216	$ 2,397.04	$ 0.5686	$ 2,397.04	American Power
	TETCO	STX - M3	N	7,502	$ 4,265.56	$ 0.5686	$ 4,265.56	Atlantic Energy
	TETCO	STX - M3	N	1,488	$ 843.45	$ 0.5668	$ 843.45	Greenlight
	TETCO	STX - M3	N	109,213	$ 62,066.28	$ 0.5683	$ 62,066.28	UGI Energy
	TETCO	STX - M3	N	91,233	$ 51,848.26	$ 0.5683	$ 51,848.26	Constellation
	TETCO	STX - M3	N	45,353	$ 25,774.65	$ 0.5683	$ 25,774.65	SFE Energy
	TETCO	STX - M3	N	3,968	$ 2,252.84	$ 0.5678	$ 2,252.84	Statewise
	TETCO	STX - M3	N	17,670	$ 10,041.86	$ 0.5683	$ 10,041.86	Sprague
	TETCO	STX - M3	N	15,810	$ 8,984.82	$ 0.5683	$ 8,984.82	WGL Energy
	TETCO	STX - M3	N	2,542	$ 1,446.80	$ 0.5692	$ 1,446.80	Spark Energy
	TETCO	STX - M3	N	7,006	$ 3,982.59	$ 0.5685	$ 3,982.59	MPower
	TETCO	STX - M3	N	2,449	$ 1,393.40	$ 0.5690	$ 1,393.40	EDF Trading
	TETCO	STX - M3	N	93,000	$ 162,750.00	$ 1.7500	$ 162,750.00	Castleton Commodities
	TETCO	STX - M3	N	486,948	$ 823,429.07	$ 1.6910	$ 823,429.07	Castleton Commodities
				1,062,649			$ 1,260,518.07	
	TRANSCO	2-6	N	31	$ 17.05	$ 0.55000	$ 17.05	Clearview Electric
	TRANSCO	2-6	N	279	$ 152.21	$ 0.54556	$ 152.21	Median Energy
	TRANSCO	2-6	N	341	$ 186.00	$ 0.54545	$ 186.00	South Bay
	TRANSCO	2-6	N	465	$ 253.89	$ 0.54600	$ 253.89	Carbonbetter
	TRANSCO	2-6	N	496	$ 270.63	$ 0.54563	$ 270.63	Spring
	TRANSCO	2-6	N	682	$ 372.31	$ 0.54591	$ 372.31	Alpha Gas
	TRANSCO	2-6	N	961	$ 524.52	$ 0.54581	$ 524.52	Direct Energy
	TRANSCO	2-6	N	1,054	$ 575.36	$ 0.54588	$ 575.36	New Wave Energy
	TRANSCO	2-6	N	1,116	$ 609.15	$ 0.54583	$ 609.15	Direct Energy
	TRANSCO	2-6	N	1,519	$ 829.56	$ 0.54612	$ 829.56	Greenlight
	TRANSCO	2-6	N	1,798	$ 981.77	$ 0.54603	$ 981.77	Eligo Energy
	TRANSCO	2-6	N	2,449	$ 1,337.03	$ 0.54595	$ 1,337.03	EDF Trading
	TRANSCO	2-6	N	2,573	$ 1,404.61	$ 0.54590	$ 1,404.61	Spark Energy
	TRANSCO	2-6	N	2,573	$ 1,404.61	$ 0.54590	$ 1,404.61	Josco Energy
	TRANSCO	2-6	N	2,852	$ 1,557.13	$ 0.54598	$ 1,557.13	Nordic Energy
	TRANSCO	2-6	N	3,162	$ 1,726.39	$ 0.54598	$ 1,726.39	Park Power
	TRANSCO	2-6	N	3,224	$ 1,760.18	$ 0.54596	$ 1,760.18	Shipley
	TRANSCO	2-6	N	3,968	$ 2,166.28	$ 0.54594	$ 2,166.28	Statewise
	TRANSCO	2-6	N	4,216	$ 2,301.44	$ 0.54588	$ 2,301.44	American Power
	TRANSCO	2-6	N	5,766	$ 3,148.05	$ 0.54597	$ 3,148.05	Marathon Power
	TRANSCO	2-6	N	6,727	$ 3,672.57	$ 0.54594	$ 3,672.57	Residents
	TRANSCO	2-6	N	7,006	$ 3,824.78	$ 0.54593	$ 3,824.78	MPower
	TRANSCO	2-6	N	7,502	$ 4,095.72	$ 0.54595	$ 4,095.72	Atlantic Energy
	TRANSCO	2-6	N	9,362	$ 5,110.97	$ 0.54593	$ 5,110.97	Palmco
	TRANSCO	2-6	N	14,539	$ 7,937.55	$ 0.54595	$ 7,937.55	Vista Energy
	TRANSCO	2-6	N	15,810	$ 8,631.64	$ 0.54596	$ 8,631.64	WGL Energy
	TRANSCO	2-6	N	17,701	$ 9,663.63	$ 0.54594	$ 9,663.63	Sprague
	TRANSCO	2-6	N	40,765	$ 22,255.52	$ 0.54595	$ 22,255.52	Direct Energy
	TRANSCO	2-6	N	45,353	$ 24,760.32	$ 0.54595	$ 24,760.32	SFE Energy
	TRANSCO	2-6	N	78,244	$ 42,717.38	$ 0.54595	$ 42,717.38	Direct Energy
	TRANSCO	2-6	N	91,233	$ 49,808.63	$ 0.54595	$ 49,808.63	Constellation
	TRANSCO	2-6	N	109,244	$ 59,641.83	$ 0.54595	$ 59,641.83	UGI Energy
	TRANSCO	1-3	N	155,000	$ 5,657.50	$ 0.03650	$ 5,657.50	Nextera Energy
	TRANSCO	2-3	N	155,000	$ 5,657.50	$ 0.03650	$ 5,657.50	Nextera Energy
	TRANSCO	2-3	N	310,000	$ 9,610.00	$ 0.03100	$ 9,610.00	Macquarie
	TRANSCO	3-6	N	310,000	$ 530,100.00	$ 1.71000	$ 530,100.00	Vitol
	TRANSCO	3-6	N	2,325,000	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	3-6	N	775,000	$ -	$ -	$ -	Tioga LNG LLC
				4,513,011			$ 814,723.71	

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April-22	TETCO	STX - M3	N	86,160	$ 78,254.54	$ 0.9082	$ 78,254.54	Constellation
	TETCO	STX - M3	N	3,960	$ 3,599.68	$ 0.9090	$ 3,599.68	Statewise
	TETCO	STX - M3	N	3,030	$ 2,749.50	$ 0.9074	$ 2,749.50	Shipley
	TETCO	STX - M3	N	17,280	$ 15,695.45	$ 0.9083	$ 15,695.45	Sprague
	TETCO	STX - M3	N	14,220	$ 12,913.16	$ 0.9081	$ 12,913.16	Vista Energy
	TETCO	STX - M3	N	1,140	$ 1,032.19	$ 0.9054	$ 1,032.19	Direct Energy
	TETCO	STX - M3	N	40,170	$ 36,485.17	$ 0.9083	$ 36,485.17	Direct Energy
	TETCO	STX - M3	N	75,330	$ 68,413.08	$ 0.9082	$ 68,413.08	Direct Energy
	TETCO	STX - M3	N	44,910	$ 40,786.92	$ 0.9082	$ 40,786.92	SFE Energy
	TETCO	STX - M3	N	2,580	$ 2,344.76	$ 0.9088	$ 2,344.76	Nordic Energy
	TETCO	STX - M3	N	1,020	$ 924.79	$ 0.9067	$ 924.79	New Wave Energy
	TETCO	STX - M3	N	15,570	$ 14,143.20	$ 0.9084	$ 14,143.20	WGL Energy
	TETCO	STX - M3	N	2,430	$ 2,204.58	$ 0.9072	$ 2,204.58	Spark Energy
	TETCO	STX - M3	N	510	$ 462.40	$ 0.9067	$ 462.40	Carbonbetter
	TETCO	STX - M3	N	7,200	$ 6,539.11	$ 0.9082	$ 6,539.11	Atlantic Energy
	TETCO	STX - M3	N	1,500	$ 1,362.32	$ 0.9082	$ 1,362.32	Greenlight
	TETCO	STX - M3	N	4,320	$ 3,921.88	$ 0.9078	$ 3,921.88	American Power
	TETCO	STX - M3	N	480	$ 437.53	$ 0.9115	$ 437.53	Spring
	TETCO	STX - M3	N	1,200	$ 1,089.85	$ 0.9082	$ 1,089.85	Direct Energy
	TETCO	STX - M3	N	1,590	$ 1,444.84	$ 0.9087	$ 1,444.84	Eligo Energy
	TETCO	STX - M3	N	240	$ 214.80	$ 0.8950	$ 214.80	Median Energy
	TETCO	STX - M3	N	2,490	$ 2,262.24	$ 0.9085	$ 2,262.24	Josco Energy
	TETCO	STX - M3	N	7,290	$ 6,621.64	$ 0.9083	$ 6,621.64	Residents
	TETCO	STX - M3	N	360	$ 330.13	$ 0.9170	$ 330.13	UET
	TETCO	STX - M3	N	60	$ 57.66	$ 0.9610	$ 57.66	Clearview Electric
	TETCO	STX - M3	N	5,760	$ 5,234.46	$ 0.9088	$ 5,234.46	Marathon Power
	TETCO	STX - M3	N	111,690	$ 101,438.77	$ 0.9082	$ 101,438.77	UGI Energy
	TETCO	STX - M3	N	8,580	$ 7,794.02	$ 0.9084	$ 7,794.02	MPower
	TETCO	STX - M3	N	330	$ 297.33	$ 0.9010	$ 297.33	South Bay
	TETCO	STX - M3	N	660	$ 602.59	$ 0.9130	$ 602.59	Alpha Gas
	TETCO	STX - M3	N	2,970	$ 2,699.76	$ 0.9090	$ 2,699.76	Park Power
	TETCO	STX - M3	N	2,460	$ 2,237.37	$ 0.9095	$ 2,237.37	EDF Trading
	TETCO	STX - M3	N	10,500	$ 9,536.21	$ 0.9082	$ 9,536.21	Palmco
	TETCO	STX - M3	N	90,000	$ 11,250.00	$ 0.1250	$ 11,250.00	Tenaska
	TETCO	STX - M3	N	471,240	$ 49,480.20	$ 0.1050	$ 49,480.20	Tenaska
	TETCO	WLA - M3	N	540,000	$ 32,940.00	$ 0.0610	$ 32,940.00	Twin Eagle
	TETCO	WLA - M3	N	540,000	$ 32,400.00	$ 0.0600	$ 32,400.00	Vitol
				2,119,230			$ 560,202.13	
	TRANSCO	2-6	N	60	$ 32.70	$ 0.54500	$ 32.70	Clearview Electric
	TRANSCO	2-6	N	270	$ 147.60	$ 0.54667	$ 147.60	Median Energy
	TRANSCO	2-6	N	360	$ 196.80	$ 0.54667	$ 196.80	South Bay
	TRANSCO	2-6	N	390	$ 213.30	$ 0.54692	$ 213.30	UET
	TRANSCO	2-6	N	480	$ 262.50	$ 0.54688	$ 262.50	Spring
	TRANSCO	2-6	N	510	$ 279.00	$ 0.54706	$ 279.00	Carbonbetter
	TRANSCO	2-6	N	660	$ 361.20	$ 0.54727	$ 361.20	Alpha Gas
	TRANSCO	2-6	N	1,020	$ 558.00	$ 0.54706	$ 558.00	New Wave Energy
	TRANSCO	2-6	N	1,140	$ 623.70	$ 0.54711	$ 623.70	Direct Energy
	TRANSCO	2-6	N	1,230	$ 672.90	$ 0.54707	$ 672.90	Direct Energy
	TRANSCO	2-6	N	1,530	$ 837.30	$ 0.54725	$ 837.30	Greenlight
	TRANSCO	2-6	N	1,620	$ 886.50	$ 0.54722	$ 886.50	Eligo Energy
	TRANSCO	2-6	N	2,430	$ 1,329.60	$ 0.54716	$ 1,329.60	Spark Energy
	TRANSCO	2-6	N	2,460	$ 1,346.10	$ 0.54720	$ 1,346.10	EDF Trading
	TRANSCO	2-6	N	2,490	$ 1,362.60	$ 0.54723	$ 1,362.60	Josco Energy
	TRANSCO	2-6	N	2,610	$ 1,428.30	$ 0.54724	$ 1,428.30	Nordic Energy
	TRANSCO	2-6	N	3,000	$ 1,641.60	$ 0.54720	$ 1,641.60	Park Power
	TRANSCO	2-6	N	3,030	$ 1,657.80	$ 0.54713	$ 1,657.80	Shipley
	TRANSCO	2-6	N	3,960	$ 2,166.60	$ 0.54712	$ 2,166.60	Statewise
	TRANSCO	2-6	N	4,320	$ 2,364.00	$ 0.54722	$ 2,364.00	American Power
	TRANSCO	2-6	N	5,790	$ 3,168.00	$ 0.54715	$ 3,168.00	Marathon Power
	TRANSCO	2-6	N	7,230	$ 3,956.10	$ 0.54718	$ 3,956.10	Atlantic Energy
	TRANSCO	2-6	N	7,320	$ 4,005.60	$ 0.54721	$ 4,005.60	Residents
	TRANSCO	2-6	N	8,580	$ 4,694.70	$ 0.54717	$ 4,694.70	MPower
	TRANSCO	2-6	N	10,500	$ 5,745.30	$ 0.54717	$ 5,745.30	Palmco
	TRANSCO	2-6	N	14,250	$ 7,797.30	$ 0.54718	$ 7,797.30	Vista Energy
	TRANSCO	2-6	N	15,570	$ 8,519.70	$ 0.54719	$ 8,519.70	WGL Energy
	TRANSCO	2-6	N	17,280	$ 9,455.10	$ 0.54717	$ 9,455.10	Sprague
	TRANSCO	2-6	N	40,200	$ 21,996.60	$ 0.54718	$ 21,996.60	Direct Energy
	TRANSCO	2-6	N	44,940	$ 24,590.10	$ 0.54718	$ 24,590.10	SFE Energy
	TRANSCO	2-6	N	75,330	$ 41,219.10	$ 0.54718	$ 41,219.10	Direct Energy
	TRANSCO	2-6	N	86,190	$ 47,161.50	$ 0.54718	$ 47,161.50	Constellation
	TRANSCO	2-6	N	111,720	$ 61,131.00	$ 0.54718	$ 61,131.00	UGI Energy
	TRANSCO	1-3	N	300,000	$ 31,500.00	$ 0.10500	$ 31,500.00	Vitol
	TRANSCO	1-3	N	300,000	$ 31,500.00	$ 0.10500	$ 31,500.00	Vitol
	TRANSCO	2-3	N	150,000	$ 9,000.00	$ 0.06000	$ 9,000.00	NJR Energy
	TRANSCO	2-3	N	300,000	$ 18,000.00	$ 0.06000	$ 18,000.00	NJR Energy
	TRANSCO	3-6	N	600,000	$ 33,060.00	$ 0.05510	$ 33,060.00	Twin Eagle
	TRANSCO	3-6	N	600,000	$ 33,060.00	$ 0.05510	$ 33,060.00	Twin Eagle
				2,728,470			$ 417,928.20	

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May-22	TETCO	STX - M3	N	1,054	$ 955.61	$ 0.9067	$ 955.61	New Wave Energy
	TETCO	STX - M3	N	1,426	$ 1,296.76	$ 0.9094	$ 1,296.76	Direct Energy
	TETCO	STX - M3	N	527	$ 477.81	$ 0.9067	$ 477.81	Carbonbetter
	TETCO	STX - M3	N	5,983	$ 5,434.63	$ 0.9083	$ 5,434.63	Marathon Power
	TETCO	STX - M3	N	17,701	$ 16,073.77	$ 0.9081	$ 16,073.77	Sprague
	TETCO	STX - M3	N	3,007	$ 2,730.17	$ 0.9079	$ 2,730.17	Shipley
	TETCO	STX - M3	N	2,480	$ 2,252.36	$ 0.9082	$ 2,252.36	Josco Energy
	TETCO	STX - M3	N	248	$ 221.95	$ 0.8950	$ 221.95	Median Energy
	TETCO	STX - M3	N	1,519	$ 1,382.03	$ 0.9098	$ 1,382.03	Eligo Energy
	TETCO	STX - M3	N	10,912	$ 9,913.67	$ 0.9085	$ 9,913.67	Residents
	TETCO	STX - M3	N	620	$ 563.09	$ 0.9082	$ 563.09	Spring
	TETCO	STX - M3	N	2,790	$ 2,533.91	$ 0.9082	$ 2,533.91	Park Power
	TETCO	STX - M3	N	651	$ 588.79	$ 0.9044	$ 588.79	Alpha Gas
	TETCO	STX - M3	N	341	$ 307.25	$ 0.9010	$ 307.25	South Bay
	TETCO	STX - M3	N	77,686	$ 70,556.84	$ 0.9082	$ 70,556.84	UGI Energy
	TETCO	STX - M3	N	14,384	$ 13,062.06	$ 0.9081	$ 13,062.06	Vista Energy
	TETCO	STX - M3	N	310	$ 281.55	$ 0.9082	$ 281.55	Clearview Electric
	TETCO	STX - M3	N	3,038	$ 2,755.86	$ 0.9071	$ 2,755.86	Nordic Energy
	TETCO	STX - M3	N	15,159	$ 13,770.00	$ 0.9084	$ 13,770.00	WGL Energy
	TETCO	STX - M3	N	4,650	$ 4,223.19	$ 0.9082	$ 4,223.19	American Power
	TETCO	STX - M3	N	7,378	$ 6,697.49	$ 0.9078	$ 6,697.49	Atlantic Energy
	TETCO	STX - M3	N	90,365	$ 82,066.29	$ 0.9082	$ 82,066.29	Constellation
	TETCO	STX - M3	N	2,418	$ 2,192.78	$ 0.9069	$ 2,192.78	Spark Energy
	TETCO	STX - M3	N	47,833	$ 43,443.22	$ 0.9082	$ 43,443.22	SFE Energy
	TETCO	STX - M3	N	4,309	$ 3,915.94	$ 0.9088	$ 3,915.94	Statewise
	TETCO	STX - M3	N	1,581	$ 1,433.42	$ 0.9067	$ 1,433.42	Greenlight
	TETCO	STX - M3	N	10,695	$ 9,709.22	$ 0.9078	$ 9,709.22	Palmco
	TETCO	STX - M3	N	1,178	$ 1,066.59	$ 0.9054	$ 1,066.59	Direct Energy
	TETCO	STX - M3	N	77,748	$ 70,608.23	$ 0.9082	$ 70,608.23	Direct Energy
	TETCO	STX - M3	N	38,502	$ 34,971.18	$ 0.9083	$ 34,971.18	Direct Energy
	TETCO	STX - M3	N	372	$ 341.13	$ 0.9170	$ 341.13	UET
	TETCO	STX - M3	N	2,604	$ 2,363.34	$ 0.9076	$ 2,363.34	EDF Trading
	TETCO	STX - M3	N	11,532	$ 10,476.76	$ 0.9085	$ 10,476.76	MPower
	TETCO	STX - M3	N	93,000	$ 11,625.00	$ 0.1250	$ 11,625.00	Tenaska
	TETCO	STX - M3	N	486,948	$ 51,129.54	$ 0.1050	$ 51,129.54	Tenaska
	TETCO	WLA - M3	N	558,000	$ 227,552.40	$ 0.4078	$ 227,552.40	Grays Ferry
	TETCO	WLA - M3	N	558,000	$ 227,552.40	$ 0.4078	$ 227,552.40	Grays Ferry
				2,156,949			$ 936,526.23	
	TRANSCO	2-6	N	248	$ 135.78	$ 0.54750	$ 135.78	Median Energy
	TRANSCO	2-6	N	341	$ 186.62	$ 0.54727	$ 186.62	Clearview Electric
	TRANSCO	2-6	N	372	$ 203.36	$ 0.54667	$ 203.36	South Bay
	TRANSCO	2-6	N	403	$ 220.41	$ 0.54692	$ 220.41	UET
	TRANSCO	2-6	N	558	$ 305.35	$ 0.54722	$ 305.35	Carbonbetter
	TRANSCO	2-6	N	651	$ 356.19	$ 0.54714	$ 356.19	Spring
	TRANSCO	2-6	N	682	$ 373.24	$ 0.54727	$ 373.24	Alpha Gas
	TRANSCO	2-6	N	1,085	$ 593.65	$ 0.54714	$ 593.65	New Wave Energy
	TRANSCO	2-6	N	1,209	$ 661.54	$ 0.54718	$ 661.54	Direct Energy
	TRANSCO	2-6	N	1,426	$ 780.58	$ 0.54739	$ 780.58	Direct Energy
	TRANSCO	2-6	N	1,519	$ 831.42	$ 0.54735	$ 831.42	Eligo Energy
	TRANSCO	2-6	N	1,581	$ 865.21	$ 0.54725	$ 865.21	Greenlight
	TRANSCO	2-6	N	2,449	$ 1,340.13	$ 0.54722	$ 1,340.13	Spark Energy
	TRANSCO	2-6	N	2,511	$ 1,373.92	$ 0.54716	$ 1,373.92	Josco Energy
	TRANSCO	2-6	N	2,604	$ 1,424.76	$ 0.54714	$ 1,424.76	EDF Trading
	TRANSCO	2-6	N	2,821	$ 1,543.49	$ 0.54714	$ 1,543.49	Park Power
	TRANSCO	2-6	N	3,007	$ 1,645.48	$ 0.54722	$ 1,645.48	Shipley
	TRANSCO	2-6	N	3,038	$ 1,662.22	$ 0.54714	$ 1,662.22	Nordic Energy
	TRANSCO	2-6	N	4,309	$ 2,357.86	$ 0.54719	$ 2,357.86	Statewise
	TRANSCO	2-6	N	4,650	$ 2,544.48	$ 0.54720	$ 2,544.48	American Power
	TRANSCO	2-6	N	6,014	$ 3,290.65	$ 0.54716	$ 3,290.65	Marathon Power
	TRANSCO	2-6	N	7,378	$ 4,037.13	$ 0.54718	$ 4,037.13	Atlantic Energy
	TRANSCO	2-6	N	10,726	$ 5,869.23	$ 0.54720	$ 5,869.23	Palmco
	TRANSCO	2-6	N	10,912	$ 5,970.91	$ 0.54719	$ 5,970.91	Residents
	TRANSCO	2-6	N	11,563	$ 6,327.10	$ 0.54718	$ 6,327.10	MPower
	TRANSCO	2-6	N	15,159	$ 8,294.67	$ 0.54718	$ 8,294.67	WGL Energy
	TRANSCO	2-6	N	17,701	$ 9,685.64	$ 0.54718	$ 9,685.64	Sprague
	TRANSCO	2-6	N	38,533	$ 21,084.65	$ 0.54718	$ 21,084.65	Direct Energy
	TRANSCO	2-6	N	47,833	$ 26,173.30	$ 0.54718	$ 26,173.30	SFE Energy
	TRANSCO	2-6	N	77,686	$ 42,508.44	$ 0.54718	$ 42,508.44	UGI Energy
	TRANSCO	2-6	N	77,779	$ 42,559.28	$ 0.54718	$ 42,559.28	Direct Energy
	TRANSCO	2-6	N	90,396	$ 49,462.98	$ 0.54718	$ 49,462.98	Constellation
	TRANSCO	2-6	N	13,456	$ 7,362.81	$ 0.54718	$ 7,362.81	Vista Energy
	TRANSCO	1-3	N	310,000	$ 32,550.00	$ 0.10500	$ 32,550.00	Vitol
	TRANSCO	1-3	N	310,000	$ 32,550.00	$ 0.10500	$ 32,550.00	Vitol
	TRANSCO	2-3	N	155,000	$ 9,300.00	$ 0.06000	$ 9,300.00	NJR Energy
	TRANSCO	2-3	N	310,000	$ 18,600.00	$ 0.06000	$ 18,600.00	NJR Energy
	TRANSCO	3-6	N	620,000	$ 34,162.00	$ 0.05510	$ 34,162.00	Twin Eagle
	TRANSCO	3-6	N	620,000	$ 34,162.00	$ 0.05510	$ 34,162.00	Twin Eagle
				2,785,600			$ 413,356.48	

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M / YR	PIPELINE	PATH	RECALL STATUS	MONTHLY VOLUME DTH	TOTAL MONTHLY CREDIT	CREDIT DTH	TOTAL CREDIT	REPLACEMENT SHIPPER
June-22	TETCO	STX - M3	N	74,220	$ 68,132.32	$ 0.9180	$ 68,132.32	Direct Energy
	TETCO	STX - M3	N	660	$ 609.17	$ 0.9230	$ 609.17	RPA Energy
	TETCO	STX - M3	N	36,600	$ 33,598.80	$ 0.9180	$ 33,598.80	Direct Energy
	TETCO	STX - M3	N	75,810	$ 69,592.77	$ 0.9180	$ 69,592.77	UGI Energy
	TETCO	STX - M3	N	2,790	$ 2,562.05	$ 0.9183	$ 2,562.05	Shipley
	TETCO	STX - M3	N	14,760	$ 13,552.97	$ 0.9182	$ 13,552.97	WGL Energy
	TETCO	STX - M3	N	1,230	$ 1,126.68	$ 0.9160	$ 1,126.68	Direct Energy
	TETCO	STX - M3	N	930	$ 851.28	$ 0.9154	$ 851.28	UET
	TETCO	STX - M3	N	13,350	$ 12,251.20	$ 0.9177	$ 12,251.20	Vista Energy
	TETCO	STX - M3	N	46,110	$ 42,328.16	$ 0.9180	$ 42,328.16	SFE Energy
	TETCO	STX - M3	N	4,500	$ 4,131.01	$ 0.9180	$ 4,131.01	Statewise
	TETCO	STX - M3	N	2,490	$ 2,286.65	$ 0.9183	$ 2,286.65	EDF Trading
	TETCO	STX - M3	N	86,280	$ 79,206.69	$ 0.9180	$ 79,206.69	Constellation
	TETCO	STX - M3	N	7,950	$ 7,294.00	$ 0.9175	$ 7,294.00	Nordic Energy
	TETCO	STX - M3	N	5,670	$ 5,207.53	$ 0.9184	$ 5,207.53	Marathon Power
	TETCO	STX - M3	N	1,020	$ 934.72	$ 0.9164	$ 934.72	New Wave Energy
	TETCO	STX - M3	N	780	$ 717.68	$ 0.9201	$ 717.68	South Bay
	TETCO	STX - M3	N	4,350	$ 3,989.20	$ 0.9171	$ 3,989.20	American Power
	TETCO	STX - M3	N	6,750	$ 6,192.39	$ 0.9174	$ 6,192.39	Atlantic Energy
	TETCO	STX - M3	N	9,990	$ 9,171.65	$ 0.9181	$ 9,171.65	Palmco
	TETCO	STX - M3	N	1,470	$ 1,351.94	$ 0.9197	$ 1,351.94	Greenlight
	TETCO	STX - M3	N	390	$ 358.85	$ 0.9201	$ 358.85	Clearview Electric
	TETCO	STX - M3	N	660	$ 609.17	$ 0.9230	$ 609.17	Spring
	TETCO	STX - M3	N	12,300	$ 11,291.41	$ 0.9180	$ 11,291.41	Residents
	TETCO	STX - M3	N	1,350	$ 1,235.20	$ 0.9150	$ 1,235.20	Eligo Energy
	TETCO	STX - M3	N	210	$ 191.97	$ 0.9141	$ 191.97	Median Energy
	TETCO	STX - M3	N	2,220	$ 2,036.32	$ 0.9173	$ 2,036.32	Josco Energy
	TETCO	STX - M3	N	16,530	$ 15,172.08	$ 0.9179	$ 15,172.08	Sprague
	TETCO	STX - M3	N	1,440	$ 1,318.63	$ 0.9157	$ 1,318.63	Direct Energy
	TETCO	STX - M3	N	1,800	$ 1,652.40	$ 0.9180	$ 1,652.40	Spark Energy
	TETCO	STX - M3	N	540	$ 492.44	$ 0.9119	$ 492.44	Carbonbetter
	TETCO	STX - M3	N	600	$ 550.80	$ 0.9180	$ 550.80	Alpha Gas
	TETCO	STX - M3	N	12,330	$ 11,316.48	$ 0.9178	$ 11,316.48	MPower
	TETCO	STX - M3	N	2,490	$ 2,286.65	$ 0.9183	$ 2,286.65	Park Power
	TETCO	STX - M3	N	90,000	$ 11,250.00	$ 0.1250	$ 11,250.00	Tenaska
	TETCO	STX - M3	N	471,240	$ 49,480.20	$ 0.1050	$ 49,480.20	Tenaska
	TETCO	WLA - M3	N	540,000	$ 218,429.98	$ 0.4045	$ 218,429.98	Grays Ferry
	TETCO	WLA - M3	N	540,000	$ 218,429.98	$ 0.4045	$ 218,429.98	Grays Ferry
				2,091,810			$ 911,191.42	
	TRANSCO	2-6	N	210	$ 114.90	$ 0.54714	$ 114.90	Median Energy
	TRANSCO	2-6	N	390	$ 213.30	$ 0.54692	$ 213.30	Clearview Electric
	TRANSCO	2-6	N	570	$ 311.70	$ 0.54684	$ 311.70	Carbonbetter
	TRANSCO	2-6	N	600	$ 328.20	$ 0.54700	$ 328.20	Alpha Gas
	TRANSCO	2-6	N	660	$ 361.20	$ 0.54727	$ 361.20	Spring
	TRANSCO	2-6	N	690	$ 377.40	$ 0.54696	$ 377.40	RPA Energy
	TRANSCO	2-6	N	780	$ 426.60	$ 0.54692	$ 426.60	South Bay
	TRANSCO	2-6	N	960	$ 525.30	$ 0.54719	$ 525.30	UET
	TRANSCO	2-6	N	1,020	$ 558.00	$ 0.54706	$ 558.00	New Wave Energy
	TRANSCO	2-6	N	1,230	$ 672.90	$ 0.54707	$ 672.90	Direct Energy
	TRANSCO	2-6	N	1,350	$ 738.60	$ 0.54711	$ 738.60	Eligo Energy
	TRANSCO	2-6	N	1,440	$ 788.10	$ 0.54729	$ 788.10	Direct Energy
	TRANSCO	2-6	N	1,500	$ 820.80	$ 0.54720	$ 820.80	Greenlight
	TRANSCO	2-6	N	1,800	$ 984.90	$ 0.54717	$ 984.90	Spark Energy
	TRANSCO	2-6	N	2,220	$ 1,214.70	$ 0.54716	$ 1,214.70	Josco Energy
	TRANSCO	2-6	N	2,490	$ 1,362.60	$ 0.54723	$ 1,362.60	EDF Trading
	TRANSCO	2-6	N	2,490	$ 1,362.60	$ 0.54723	$ 1,362.60	Park Power
	TRANSCO	2-6	N	2,820	$ 1,542.90	$ 0.54713	$ 1,542.90	Shipley
	TRANSCO	2-6	N	4,380	$ 2,396.70	$ 0.54719	$ 2,396.70	American Power
	TRANSCO	2-6	N	4,500	$ 2,462.40	$ 0.54720	$ 2,462.40	Statewise
	TRANSCO	2-6	N	5,700	$ 3,118.80	$ 0.54716	$ 3,118.80	Marathon Power
	TRANSCO	2-6	N	6,780	$ 3,709.80	$ 0.54717	$ 3,709.80	Atlantic Energy
	TRANSCO	2-6	N	7,950	$ 4,350.00	$ 0.54717	$ 4,350.00	Nordic Energy
	TRANSCO	2-6	N	9,990	$ 5,466.30	$ 0.54718	$ 5,466.30	Palmco
	TRANSCO	2-6	N	12,330	$ 6,747.00	$ 0.54720	$ 6,747.00	MPower
	TRANSCO	2-6	N	12,330	$ 6,747.00	$ 0.54720	$ 6,747.00	Residents
	TRANSCO	2-6	N	14,790	$ 8,092.80	$ 0.54718	$ 8,092.80	WGL Energy
	TRANSCO	2-6	N	16,530	$ 9,045.00	$ 0.54719	$ 9,045.00	Sprague
	TRANSCO	2-6	N	36,630	$ 20,043.00	$ 0.54717	$ 20,043.00	Direct Energy
	TRANSCO	2-6	N	46,140	$ 25,246.80	$ 0.54718	$ 25,246.80	SFE Energy
	TRANSCO	2-6	N	74,250	$ 40,628.10	$ 0.54718	$ 40,628.10	Direct Energy
	TRANSCO	2-6	N	75,840	$ 41,498.10	$ 0.54718	$ 41,498.10	UGI Energy
	TRANSCO	2-6	N	86,310	$ 47,227.20	$ 0.54718	$ 47,227.20	Constellation
	TRANSCO	2-6	N	12,934	$ 7,077.16	$ 0.54717	$ 7,077.16	Vista Energy
	TRANSCO	1-3	N	300,000	$ 31,500.00	$ 0.10500	$ 31,500.00	Vitol
	TRANSCO	1-3	N	300,000	$ 31,500.00	$ 0.10500	$ 31,500.00	Vitol
	TRANSCO	2-3	N	150,000	$ 9,000.00	$ 0.06000	$ 9,000.00	NJR Energy
	TRANSCO	2-3	N	300,000	$ 18,000.00	$ 0.06000	$ 18,000.00	NJR Energy
	TRANSCO	3-6	N	600,000	$ 33,060.00	$ 0.05510	$ 33,060.00	Twin Eagle
	TRANSCO	3-6	N	600,000	$ 33,060.00	$ 0.05510	$ 33,060.00	Twin Eagle
	TRANSCO	3-6	N	600,000	$ 141,000.00	$ 0.23500	$ 141,000.00	Citadel
	TRANSCO	3-6	N	455,000	$ 771,680.00	$ 1.69600	$ 771,680.00	Citadel
	TRANSCO	4-5	N	39,583	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	4-5	N	105,000	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	4-5	N	150,000	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	4-5	N	650,000	$ -	$ -	$ -	Tioga LNG LLC
				4,700,187			$ 1,315,360.86	

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July-22	TETCO	STX - M3	N	8,122	$ 7,459.38	$ 0.9184	$ 7,459.38	Nordic Energy
	TETCO	STX - M3	N	558	$ 508.85	$ 0.9119	$ 508.85	Carbonbetter
	TETCO	STX - M3	N	1,488	$ 1,362.58	$ 0.9157	$ 1,362.58	Direct Energy
	TETCO	STX - M3	N	1,395	$ 1,276.37	$ 0.9150	$ 1,276.37	Direct Energy
	TETCO	STX - M3	N	2,387	$ 2,190.41	$ 0.9176	$ 2,190.41	Park Power
	TETCO	STX - M3	N	558	$ 508.85	$ 0.9119	$ 508.85	Alpha Gas
	TETCO	STX - M3	N	1,023	$ 939.95	$ 0.9188	$ 939.95	South Bay
	TETCO	STX - M3	N	1,457	$ 1,336.67	$ 0.9174	$ 1,336.67	Greenlight
	TETCO	STX - M3	N	4,836	$ 4,441.15	$ 0.9184	$ 4,441.15	American Power
	TETCO	STX - M3	N	48,143	$ 44,196.12	$ 0.9180	$ 44,196.12	SFE Energy
	TETCO	STX - M3	N	2,790	$ 2,561.22	$ 0.9180	$ 2,561.22	Shipley
	TETCO	STX - M3	N	14,880	$ 13,659.84	$ 0.9180	$ 13,659.84	WGL Energy
	TETCO	STX - M3	N	4,805	$ 4,406.74	$ 0.9171	$ 4,406.74	Statewise
	TETCO	STX - M3	N	6,448	$ 5,915.86	$ 0.9175	$ 5,915.86	Atlantic Energy
	TETCO	STX - M3	N	2,108	$ 1,931.74	$ 0.9164	$ 1,931.74	Josco Energy
	TETCO	STX - M3	N	186	$ 172.45	$ 0.9272	$ 172.45	Median Energy
	TETCO	STX - M3	N	1,271	$ 1,164.24	$ 0.9160	$ 1,164.24	Eligo Energy
	TETCO	STX - M3	N	15,004	$ 13,771.97	$ 0.9179	$ 13,771.97	Residents
	TETCO	STX - M3	N	9,889	$ 9,080.65	$ 0.9183	$ 9,080.65	Palmco
	TETCO	STX - M3	N	775	$ 707.21	$ 0.9125	$ 707.21	Spring
	TETCO	STX - M3	N	13,423	$ 12,323.15	$ 0.9181	$ 12,323.15	Vista Energy
	TETCO	STX - M3	N	77,438	$ 71,084.69	$ 0.9180	$ 71,084.69	UGI Energy
	TETCO	STX - M3	N	87,451	$ 80,277.46	$ 0.9180	$ 80,277.46	Constellation
	TETCO	STX - M3	N	868	$ 801.92	$ 0.9239	$ 801.92	RPA Energy
	TETCO	STX - M3	N	16,275	$ 14,936.21	$ 0.9177	$ 14,936.21	Sprague
	TETCO	STX - M3	N	2,542	$ 2,336.96	$ 0.9193	$ 2,336.96	EDF Trading
	TETCO	STX - M3	N	5,642	$ 5,182.76	$ 0.9186	$ 5,182.76	Marathon Power
	TETCO	STX - M3	N	75,392	$ 69,213.25	$ 0.9180	$ 69,213.25	Direct Energy
	TETCO	STX - M3	N	35,123	$ 32,243.75	$ 0.9180	$ 32,243.75	Direct Energy
	TETCO	STX - M3	N	1,023	$ 939.95	$ 0.9188	$ 939.95	New Wave Energy
	TETCO	STX - M3	N	992	$ 914.05	$ 0.9214	$ 914.05	UET
	TETCO	STX - M3	N	310	$ 284.59	$ 0.9180	$ 284.59	Clearview Electric
	TETCO	STX - M3	N	13,113	$ 12,038.58	$ 0.9181	$ 12,038.58	MPower
	TETCO	STX - M3	N	1,798	$ 1,647.17	$ 0.9161	$ 1,647.17	Spark Energy
	TETCO	STX - M3	N	93,000	$ 11,625.00	$ 0.1250	$ 11,625.00	Tenaska
	TETCO	STX - M3	N	486,948	$ 51,129.54	$ 0.1050	$ 51,129.54	Tenaska
	TETCO	WLA - M3	N	558,000	$ 226,157.42	$ 0.4053	$ 226,157.42	Grays Ferry
	TETCO	WLA - M3	N	558,000	$ 226,157.42	$ 0.4053	$ 226,157.42	Grays Ferry
				2,155,461			$ 936,886.12	
	TRANSCO	2-6	N	217	$ 118.73	$ 0.54714	$ 118.73	Median Energy
	TRANSCO	2-6	N	341	$ 186.62	$ 0.54727	$ 186.62	Clearview Electric
	TRANSCO	2-6	N	558	$ 305.35	$ 0.54722	$ 305.35	Carbonbetter
	TRANSCO	2-6	N	589	$ 322.09	$ 0.54684	$ 322.09	Alpha Gas
	TRANSCO	2-6	N	806	$ 440.82	$ 0.54692	$ 440.82	Spring
	TRANSCO	2-6	N	868	$ 474.92	$ 0.54714	$ 474.92	RPA Energy
	TRANSCO	2-6	N	1,023	$ 559.55	$ 0.54697	$ 559.55	South Bay
	TRANSCO	2-6	N	1,023	$ 559.55	$ 0.54697	$ 559.55	UET
	TRANSCO	2-6	N	1,054	$ 576.60	$ 0.54706	$ 576.60	New Wave Energy
	TRANSCO	2-6	N	1,271	$ 695.33	$ 0.54707	$ 695.33	Eligo Energy
	TRANSCO	2-6	N	1,426	$ 780.58	$ 0.54739	$ 780.58	Direct Energy
	TRANSCO	2-6	N	1,457	$ 797.32	$ 0.54723	$ 797.32	Greenlight
	TRANSCO	2-6	N	1,488	$ 814.37	$ 0.54729	$ 814.37	Direct Energy
	TRANSCO	2-6	N	1,829	$ 1,000.99	$ 0.54729	$ 1,000.99	Spark Energy
	TRANSCO	2-6	N	2,139	$ 1,170.56	$ 0.54725	$ 1,170.56	Josco Energy
	TRANSCO	2-6	N	2,387	$ 1,306.03	$ 0.54714	$ 1,306.03	Park Power
	TRANSCO	2-6	N	2,573	$ 1,408.02	$ 0.54723	$ 1,408.02	EDF Trading
	TRANSCO	2-6	N	2,790	$ 1,526.75	$ 0.54722	$ 1,526.75	Shipley
	TRANSCO	2-6	N	4,805	$ 2,629.42	$ 0.54723	$ 2,629.42	Statewise
	TRANSCO	2-6	N	4,867	$ 2,663.21	$ 0.54720	$ 2,663.21	American Power
	TRANSCO	2-6	N	5,642	$ 3,087.29	$ 0.54720	$ 3,087.29	Marathon Power
	TRANSCO	2-6	N	6,479	$ 3,545.16	$ 0.54718	$ 3,545.16	Atlantic Energy
	TRANSCO	2-6	N	8,153	$ 4,461.21	$ 0.54719	$ 4,461.21	Nordic Energy
	TRANSCO	2-6	N	9,920	$ 5,428.10	$ 0.54719	$ 5,428.10	Palmco
	TRANSCO	2-6	N	13,144	$ 7,192.31	$ 0.54719	$ 7,192.31	MPower
	TRANSCO	2-6	N	13,454	$ 7,361.88	$ 0.54719	$ 7,361.88	Vista Energy
	TRANSCO	2-6	N	14,911	$ 8,158.89	$ 0.54717	$ 8,158.89	WGL Energy
	TRANSCO	2-6	N	15,035	$ 8,226.78	$ 0.54718	$ 8,226.78	Residents
	TRANSCO	2-6	N	16,275	$ 8,905.37	$ 0.54718	$ 8,905.37	Sprague
	TRANSCO	2-6	N	35,123	$ 19,218.45	$ 0.54718	$ 19,218.45	Direct Energy
	TRANSCO	2-6	N	48,143	$ 26,342.87	$ 0.54718	$ 26,342.87	SFE Energy
	TRANSCO	2-6	N	75,392	$ 40,845.60	$ 0.54178	$ 40,845.60	Direct Energy
	TRANSCO	2-6	N	77,438	$ 42,372.35	$ 0.54718	$ 42,372.35	UGI Energy
	TRANSCO	2-6	N	87,451	$ 47,851.29	$ 0.54718	$ 47,851.29	Constellation
	TRANSCO	1-3	N	310,000	$ 32,550.00	$ 0.10500	$ 32,550.00	Vitol
	TRANSCO	1-3	N	310,000	$ 32,550.00	$ 0.10500	$ 32,550.00	Vitol
	TRANSCO	2-3	N	155,000	$ 9,300.00	$ 0.06000	$ 9,300.00	NJR Energy
	TRANSCO	2-3	N	310,000	$ 18,600.00	$ 0.06000	$ 18,600.00	NJR Energy
	TRANSCO	3-6	N	620,000	$ 34,162.00	$ 0.05510	$ 34,162.00	Twin Eagle
	TRANSCO	3-6	N	620,000	$ 34,162.00	$ 0.05510	$ 34,162.00	Twin Eagle
	TRANSCO	3-6	N	620,000	$ 145,700.00	$ 0.23500	$ 145,700.00	Citadel
	TRANSCO	3-6	N	1,085,000	$ 813,750.00	$ 0.75000	$ 813,750.00	Vitol
	TRANSCO	3-4	N	12,500	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	4-5	N	31,250	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	3-4	N	180,000	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	4-5	N	450,000	$ -	$ -	$ -	Tioga LNG LLC
				5,163,821			$ 1,372,108.36	

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August-22	TETCO	STX - M3	N	87,730	$ 80,536.14	$ 0.9180	$ 80,536.14	Constellation
	TETCO	STX - M3	N	74,679	$ 68,557.86	$ 0.9180	$ 68,557.86	Direct Energy
	TETCO	STX - M3	N	40,238	$ 36,498.18	$ 0.9071	$ 36,498.18	Direct Energy
	TETCO	STX - M3	N	14,849	$ 13,633.95	$ 0.9182	$ 13,633.95	Sprague
	TETCO	STX - M3	N	13,268	$ 12,176.63	$ 0.9177	$ 12,176.63	Vista Energy
	TETCO	STX - M3	N	2,728	$ 2,500.90	$ 0.9168	$ 2,500.90	Shipley
	TETCO	STX - M3	N	1,643	$ 1,509.12	$ 0.9185	$ 1,509.12	Direct Energy
	TETCO	STX - M3	N	5,208	$ 4,777.55	$ 0.9173	$ 4,777.55	American Power
	TETCO	STX - M3	N	2,201	$ 2,017.98	$ 0.9168	$ 2,017.98	Park Power
	TETCO	STX - M3	N	48,081	$ 44,135.81	$ 0.9179	$ 44,135.81	SFE Energy
	TETCO	STX - M3	N	4,712	$ 4,329.01	$ 0.9187	$ 4,329.01	Statewise
	TETCO	STX - M3	N	992	$ 914.05	$ 0.9214	$ 914.05	South Bay
	TETCO	STX - M3	N	527	$ 482.96	$ 0.9164	$ 482.96	Alpha Gas
	TETCO	STX - M3	N	961	$ 879.66	$ 0.9154	$ 879.66	New Wave Energy
	TETCO	STX - M3	N	9,331	$ 8,563.31	$ 0.9177	$ 8,563.31	Palmco
	TETCO	STX - M3	N	8,277	$ 7,597.45	$ 0.9179	$ 7,597.45	Nordic Energy
	TETCO	STX - M3	N	992	$ 914.05	$ 0.9214	$ 914.05	UET
	TETCO	STX - M3	N	76,725	$ 70,429.30	$ 0.9179	$ 70,429.30	UGI Energy
	TETCO	STX - M3	N	2,542	$ 2,336.96	$ 0.9193	$ 2,336.96	EDF Trading
	TETCO	STX - M3	N	1,736	$ 1,595.34	$ 0.9190	$ 1,595.34	Spark Energy
	TETCO	STX - M3	N	496	$ 457.03	$ 0.9214	$ 457.03	Carbonbetter
	TETCO	STX - M3	N	1,457	$ 1,336.67	$ 0.9174	$ 1,336.67	Direct Energy
	TETCO	STX - M3	N	5,642	$ 5,182.76	$ 0.9186	$ 5,182.76	Marathon Power
	TETCO	STX - M3	N	14,446	$ 13,263.13	$ 0.9181	$ 13,263.13	WGL Energy
	TETCO	STX - M3	N	248	$ 224.26	$ 0.9043	$ 224.26	Clearview Electric
	TETCO	STX - M3	N	2,015	$ 1,845.52	$ 0.9159	$ 1,845.52	Josco Energy
	TETCO	STX - M3	N	6,107	$ 5,605.39	$ 0.9179	$ 5,605.39	Atlantic Energy
	TETCO	STX - M3	N	1,488	$ 1,371.08	$ 0.9214	$ 1,371.08	RPA Energy
	TETCO	STX - M3	N	775	$ 707.21	$ 0.9125	$ 707.21	Spring
	TETCO	STX - M3	N	16,461	$ 15,108.66	$ 0.9178	$ 15,108.66	Residents
	TETCO	STX - M3	N	1,147	$ 1,052.10	$ 0.9173	$ 1,052.10	Eligo Energy
	TETCO	STX - M3	N	186	$ 172.45	$ 0.9272	$ 172.45	Median Energy
	TETCO	STX - M3	N	14,818	$ 13,599.53	$ 0.9178	$ 13,599.53	MPower
	TETCO	STX - M3	N	1,550	$ 1,422.91	$ 0.9180	$ 1,422.91	Greenlight
	TETCO	STX - M3	N	93,000	$ 11,625.00	$ 0.1250	$ 11,625.00	Tenaska
	TETCO	STX - M3	N	486,948	$ 51,129.54	$ 0.1050	$ 51,129.54	Tenaska
	TETCO	WLA - M3	N	558,000	$ 280,729.78	$ 0.5031	$ 280,729.78	Grays Ferry
	TETCO	WLA - M3	N	558,000	$ 280,729.78	$ 0.5031	$ 280,729.78	Grays Ferry
				2,160,204			$ 1,049,949.01	
	TRANSCO	2-6	N	186	$ 101.68	$ 0.54667	$ 101.68	Median Energy
	TRANSCO	2-6	N	279	$ 152.52	$ 0.54667	$ 152.52	Clearview Electric
	TRANSCO	2-6	N	527	$ 288.30	$ 0.54706	$ 288.30	Carbonbetter
	TRANSCO	2-6	N	527	$ 288.30	$ 0.54706	$ 288.30	Alpha Gas
	TRANSCO	2-6	N	806	$ 440.82	$ 0.54692	$ 440.82	Spring
	TRANSCO	2-6	N	961	$ 525.76	$ 0.54710	$ 525.76	New Wave Energy
	TRANSCO	2-6	N	992	$ 542.81	$ 0.54719	$ 542.81	South Bay
	TRANSCO	2-6	N	1,023	$ 559.55	$ 0.54697	$ 559.55	UET
	TRANSCO	2-6	N	1,178	$ 644.49	$ 0.54711	$ 644.49	Eligo Energy
	TRANSCO	2-6	N	1,457	$ 797.32	$ 0.54723	$ 797.32	Direct Energy
	TRANSCO	2-6	N	1,519	$ 831.42	$ 0.54735	$ 831.42	RPA Energy
	TRANSCO	2-6	N	1,550	$ 848.16	$ 0.54720	$ 848.16	Greenlight
	TRANSCO	2-6	N	1,643	$ 899.00	$ 0.54717	$ 899.00	Direct Energy
	TRANSCO	2-6	N	1,736	$ 950.15	$ 0.54732	$ 950.15	Spark Energy
	TRANSCO	2-6	N	2,046	$ 1,119.72	$ 0.54727	$ 1,119.72	Josco Energy
	TRANSCO	2-6	N	2,232	$ 1,221.40	$ 0.54722	$ 1,221.40	Park Power
	TRANSCO	2-6	N	2,542	$ 1,390.97	$ 0.54720	$ 1,390.97	EDF Trading
	TRANSCO	2-6	N	2,728	$ 1,492.65	$ 0.54716	$ 1,492.65	Shipley
	TRANSCO	2-6	N	4,712	$ 2,578.27	$ 0.54717	$ 2,578.27	Statewise
	TRANSCO	2-6	N	5,239	$ 2,866.57	$ 0.54716	$ 2,866.57	American Power
	TRANSCO	2-6	N	5,642	$ 3,087.29	$ 0.54720	$ 3,087.29	Marathon Power
	TRANSCO	2-6	N	6,107	$ 3,341.49	$ 0.54716	$ 3,341.49	Atlantic Energy
	TRANSCO	2-6	N	8,277	$ 4,529.10	$ 0.54719	$ 4,529.10	Nordic Energy
	TRANSCO	2-6	N	9,331	$ 5,105.70	$ 0.54718	$ 5,105.70	Palmco
	TRANSCO	2-6	N	13,299	$ 7,276.94	$ 0.54718	$ 7,276.94	Vista Energy
	TRANSCO	2-6	N	14,446	$ 7,904.38	$ 0.54717	$ 7,904.38	WGL Energy
	TRANSCO	2-6	N	14,849	$ 8,125.10	$ 0.54718	$ 8,125.10	MPower
	TRANSCO	2-6	N	14,880	$ 8,141.84	$ 0.54717	$ 8,141.84	Sprague
	TRANSCO	2-6	N	16,461	$ 9,007.05	$ 0.54718	$ 9,007.05	Residents
	TRANSCO	2-6	N	40,238	$ 22,017.44	$ 0.54718	$ 22,017.44	Direct Energy
	TRANSCO	2-6	N	48,081	$ 26,309.08	$ 0.54718	$ 26,309.08	SFE Energy
	TRANSCO	2-6	N	74,679	$ 40,862.65	$ 0.54718	$ 40,862.65	Direct Energy
	TRANSCO	2-6	N	76,725	$ 41,982.37	$ 0.54718	$ 41,982.37	UGI Energy
	TRANSCO	2-6	N	87,730	$ 48,004.12	$ 0.54718	$ 48,004.12	Constellation
	TRANSCO	1-3	N	310,000	$ 32,550.00	$ 0.10500	$ 32,550.00	Vitol
	TRANSCO	1-3	N	310,000	$ 32,550.00	$ 0.10500	$ 32,550.00	Vitol
	TRANSCO	2-3	N	155,000	$ 9,300.00	$ 0.06000	$ 9,300.00	NJR Energy
	TRANSCO	2-3	N	310,000	$ 18,600.00	$ 0.06000	$ 18,600.00	NJR Energy
	TRANSCO	3-6	N	620,000	$ 34,162.00	$ 0.05510	$ 34,162.00	Twin Eagle
	TRANSCO	3-6	N	620,000	$ 34,162.00	$ 0.05510	$ 34,162.00	Twin Eagle
	TRANSCO	3-6	N	620,000	$ 145,700.00	$ 0.23500	$ 145,700.00	Citadel
	TRANSCO	3-6	N	1,085,000	$ 379,750.00	$ 0.35000	$ 379,750.00	Koch Energy
	TRANSCO	2-5	N	290,000	$ -	$ -	$ -	Tioga LNG LLC
				4,784,628			$ 941,008.41	

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M / YR	PIPELINE	PATH	RECALL STATUS	MONTHLY VOLUME DTH	TOTAL MONTHLY CREDIT	CREDIT DTH	TOTAL CREDIT	REPLACEMENT SHIPPER
September-22	TETCO	STX - M3	N	12,960	$ 11,918.86	$ 0.9197	$ 11,918.86	Sprague
	TETCO	STX - M3	N	2,580	$ 2,373.73	$ 0.9201	$ 2,373.73	Shipley
	TETCO	STX - M3	N	12,630	$ 11,609.68	$ 0.9192	$ 11,609.68	Vista Energy
	TETCO	STX - M3	N	38,610	$ 35,497.60	$ 0.9194	$ 35,497.60	Direct Energy
	TETCO	STX - M3	N	69,750	$ 64,132.99	$ 0.9195	$ 64,132.99	Direct Energy
	TETCO	STX - M3	N	960	$ 885.94	$ 0.9229	$ 885.94	UET
	TETCO	STX - M3	N	6,270	$ 5,767.18	$ 0.9198	$ 5,767.18	Atlantic Energy
	TETCO	STX - M3	N	111,330	$ 102,355.44	$ 0.9194	$ 102,355.44	UGI Energy
	TETCO	STX - M3	N	46,830	$ 43,053.49	$ 0.9194	$ 43,053.49	SFE Energy
	TETCO	STX - M3	N	4,470	$ 4,112.25	$ 0.9200	$ 4,112.25	Statewise
	TETCO	STX - M3	N	13,200	$ 12,136.22	$ 0.9194	$ 12,136.22	WGL Energy
	TETCO	STX - M3	N	4,290	$ 3,945.10	$ 0.9196	$ 3,945.10	Nordic Energy
	TETCO	STX - M3	N	75,780	$ 69,674.54	$ 0.9194	$ 69,674.54	Constellation
	TETCO	STX - M3	N	5,430	$ 4,989.92	$ 0.9190	$ 4,989.92	American Power
	TETCO	STX - M3	N	690	$ 635.23	$ 0.9206	$ 635.23	Spring
	TETCO	STX - M3	N	16,800	$ 15,446.08	$ 0.9194	$ 15,446.08	Residents
	TETCO	STX - M3	N	1,140	$ 1,044.82	$ 0.9165	$ 1,044.82	Eligo Energy
	TETCO	STX - M3	N	150	$ 142.06	$ 0.9471	$ 142.06	Median Energy
	TETCO	STX - M3	N	30	$ 33.38	$ 1.1127	$ 33.38	Santanna
	TETCO	STX - M3	N	5,160	$ 4,747.47	$ 0.9201	$ 4,747.47	Marathon Power
	TETCO	STX - M3	N	300	$ 275.82	$ 0.9194	$ 275.82	Clearview Electric
	TETCO	STX - M3	N	1,260	$ 1,161.76	$ 0.9220	$ 1,161.76	South Bay
	TETCO	STX - M3	N	480	$ 442.97	$ 0.9229	$ 442.97	Alpha Gas
	TETCO	STX - M3	N	1,470	$ 1,354.02	$ 0.9211	$ 1,354.02	Greenlight
	TETCO	STX - M3	N	1,980	$ 1,822.08	$ 0.9202	$ 1,822.08	Park Power
	TETCO	STX - M3	N	1,380	$ 1,270.43	$ 0.9206	$ 1,270.43	Direct Energy
	TETCO	STX - M3	N	810	$ 743.89	$ 0.9184	$ 743.89	New Wave Energy
	TETCO	STX - M3	N	1,590	$ 1,462.70	$ 0.9199	$ 1,462.70	Direct Energy
	TETCO	STX - M3	N	450	$ 417.88	$ 0.9286	$ 417.88	Carbonbetter
	TETCO	STX - M3	N	1,680	$ 1,546.26	$ 0.9204	$ 1,546.26	Spark Energy
	TETCO	STX - M3	N	2,430	$ 2,231.69	$ 0.9184	$ 2,231.69	EDF Trading
	TETCO	STX - M3	N	8,610	$ 7,915.30	$ 0.9193	$ 7,915.30	Palmco
	TETCO	STX - M3	N	1,530	$ 1,412.50	$ 0.9232	$ 1,412.50	RPA Energy
	TETCO	STX - M3	N	15,630	$ 14,367.91	$ 0.9193	$ 14,367.91	MPower
	TETCO	STX - M3	N	1,920	$ 1,763.62	$ 0.9186	$ 1,763.62	Josco Energy
	TETCO	STX - M3	N	90,000	$ 11,250.00	$ 0.1250	$ 11,250.00	Tenaska
	TETCO	STX - M3	N	471,240	$ 49,480.20	$ 0.1050	$ 49,480.20	Tenaska
	TETCO	WLA - M3	N	540,000	$ 280,692.01	$ 0.5198	$ 280,692.01	Grays Ferry
	TETCO	WLA - M3	N	540,000	$ 280,692.01	$ 0.5198	$ 280,692.01	Grays Ferry
				2,111,820			$ 1,054,805.03	
	TRANSCO	2-6	N	30	$ 16.50	$ 0.55000	$ 16.50	Santanna
	TRANSCO	2-6	N	150	$ 82.20	$ 0.54800	$ 82.20	Median Energy
	TRANSCO	2-6	N	300	$ 164.10	$ 0.54700	$ 164.10	Clearview Electric
	TRANSCO	2-6	N	480	$ 262.50	$ 0.54688	$ 262.50	Alpha Gas
	TRANSCO	2-6	N	480	$ 262.50	$ 0.54688	$ 262.50	Carbonbetter
	TRANSCO	2-6	N	720	$ 393.90	$ 0.54708	$ 393.90	Spring
	TRANSCO	2-6	N	810	$ 443.10	$ 0.54704	$ 443.10	New Wave Energy
	TRANSCO	2-6	N	990	$ 541.50	$ 0.54697	$ 541.50	UET
	TRANSCO	2-6	N	1,140	$ 623.70	$ 0.54711	$ 623.70	Eligo Energy
	TRANSCO	2-6	N	1,290	$ 705.60	$ 0.54698	$ 705.60	South Bay
	TRANSCO	2-6	N	1,380	$ 755.40	$ 0.54739	$ 755.40	Direct Energy
	TRANSCO	2-6	N	1,470	$ 804.60	$ 0.54735	$ 804.60	Greenlight
	TRANSCO	2-6	N	1,560	$ 853.80	$ 0.54731	$ 853.80	RPA Energy
	TRANSCO	2-6	N	1,590	$ 870.00	$ 0.54717	$ 870.00	Direct Energy
	TRANSCO	2-6	N	1,710	$ 935.70	$ 0.54719	$ 935.70	Spark Energy
	TRANSCO	2-6	N	1,920	$ 1,050.60	$ 0.54719	$ 1,050.60	Josco Energy
	TRANSCO	2-6	N	1,980	$ 1,083.60	$ 0.54727	$ 1,083.60	Park Power
	TRANSCO	2-6	N	2,460	$ 1,346.10	$ 0.54720	$ 1,346.10	EDF Trading
	TRANSCO	2-6	N	2,610	$ 1,428.30	$ 0.54724	$ 1,428.30	Shipley
	TRANSCO	2-6	N	4,320	$ 2,364.00	$ 0.54722	$ 2,364.00	Nordic Energy
	TRANSCO	2-6	N	4,500	$ 2,462.40	$ 0.54720	$ 2,462.40	Statewise
	TRANSCO	2-6	N	5,190	$ 2,839.80	$ 0.54717	$ 2,839.80	Marathon Power
	TRANSCO	2-6	N	5,460	$ 2,987.70	$ 0.54720	$ 2,987.70	American Power
	TRANSCO	2-6	N	6,270	$ 3,430.80	$ 0.54718	$ 3,430.80	Atlantic Energy
	TRANSCO	2-6	N	8,610	$ 4,711.20	$ 0.54718	$ 4,711.20	Palmco
	TRANSCO	2-6	N	12,630	$ 6,911.10	$ 0.54720	$ 6,911.10	Vista Energy
	TRANSCO	2-6	N	12,990	$ 7,107.90	$ 0.54718	$ 7,107.90	Sprague
	TRANSCO	2-6	N	13,230	$ 7,239.30	$ 0.54719	$ 7,239.30	WGL Energy
	TRANSCO	2-6	N	15,630	$ 8,552.40	$ 0.54718	$ 8,552.40	MPower
	TRANSCO	2-6	N	16,830	$ 9,209.10	$ 0.54718	$ 9,209.10	Residents
	TRANSCO	2-6	N	38,640	$ 21,143.10	$ 0.54718	$ 21,143.10	Direct Energy
	TRANSCO	2-6	N	46,860	$ 25,640.70	$ 0.54718	$ 25,640.70	SFE Energy
	TRANSCO	2-6	N	69,750	$ 38,166.00	$ 0.54718	$ 38,166.00	Direct Energy
	TRANSCO	2-6	N	75,780	$ 41,465.40	$ 0.54718	$ 41,465.40	Constellation
	TRANSCO	2-6	N	111,330	$ 60,917.70	$ 0.54718	$ 60,917.70	UGI Energy
	TRANSCO	3-6	N	525,000	$ 71,400.00	$ 0.13600	$ 71,400.00	BP
	TRANSCO	1-3	N	300,000	$ 31,500.00	$ 0.10500	$ 31,500.00	Vitol
	TRANSCO	1-3	N	300,000	$ 31,500.00	$ 0.10500	$ 31,500.00	Vitol
	TRANSCO	2-3	N	150,000	$ 9,000.00	$ 0.06000	$ 9,000.00	NJR Energy
	TRANSCO	2-3	N	300,000	$ 18,000.00	$ 0.06000	$ 18,000.00	NJR Energy
	TRANSCO	3-6	N	600,000	$ 33,060.00	$ 0.05510	$ 33,060.00	Twin Eagle
	TRANSCO	3-6	N	600,000	$ 33,060.00	$ 0.05510	$ 33,060.00	Twin Eagle
	TRANSCO	3-6	N	525,000	$ 131,250.00	$ 0.25000	$ 131,250.00	Vitol
	TRANSCO	2-5	N	300,000	$ -	$ -	$ -	Tioga LNG LLC
				4,071,090			$ 616,542.30	

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October-22	TETCO	STX - M3	N	1,302	$ 1,200.49	$ 0.9220	$ 1,200.49	Direct Energy
	TETCO	STX - M3	N	589	$ 544.09	$ 0.9238	$ 544.09	New Wave Energy
	TETCO	STX - M3	N	1,519	$ 1,399.16	$ 0.9211	$ 1,399.16	RPA Energy
	TETCO	STX - M3	N	4,371	$ 4,016.18	$ 0.9188	$ 4,016.18	Nordic Energy
	TETCO	STX - M3	N	5,549	$ 5,104.37	$ 0.9199	$ 5,104.37	American Power
	TETCO	STX - M3	N	403	$ 371.37	$ 0.9215	$ 371.37	Clearview Electric
	TETCO	STX - M3	N	279	$ 259.08	$ 0.9286	$ 259.08	Santanna
	TETCO	STX - M3	N	2,511	$ 2,306.09	$ 0.9184	$ 2,306.09	EDF Trading
	TETCO	STX - M3	N	651	$ 595.96	$ 0.9155	$ 595.96	Spring
	TETCO	STX - M3	N	17,081	$ 15,701.88	$ 0.9193	$ 15,701.88	Residents
	TETCO	STX - M3	N	124	$ 112.30	$ 0.9056	$ 112.30	Median Energy
	TETCO	STX - M3	N	1,085	$ 993.30	$ 0.9155	$ 993.30	Eligo Energy
	TETCO	STX - M3	N	12,462	$ 11,461.11	$ 0.9197	$ 11,461.11	Vista Energy
	TETCO	STX - M3	N	3,751	$ 3,446.14	$ 0.9187	$ 3,446.14	Marathon Power
	TETCO	STX - M3	N	47,027	$ 43,236.24	$ 0.9194	$ 43,236.24	SFE Energy
	TETCO	STX - M3	N	4,247	$ 3,903.88	$ 0.9192	$ 3,903.88	Statewise
	TETCO	STX - M3	N	6,045	$ 5,562.10	$ 0.9201	$ 5,562.10	Atlantic Energy
	TETCO	STX - M3	N	1,860	$ 1,710.10	$ 0.9194	$ 1,710.10	Josco Energy
	TETCO	STX - M3	N	1,767	$ 1,623.74	$ 0.9189	$ 1,623.74	Park Power
	TETCO	STX - M3	N	465	$ 431.80	$ 0.9286	$ 431.80	Alpha Gas
	TETCO	STX - M3	N	16,182	$ 14,881.32	$ 0.9196	$ 14,881.32	MPower
	TETCO	STX - M3	N	1,271	$ 1,166.01	$ 0.9174	$ 1,166.01	South Bay
	TETCO	STX - M3	N	7,440	$ 6,840.41	$ 0.9194	$ 6,840.41	Palmco
	TETCO	STX - M3	N	2,728	$ 2,504.73	$ 0.9182	$ 2,504.73	UET
	TETCO	STX - M3	N	9,827	$ 9,034.20	$ 0.9193	$ 9,034.20	Sprague
	TETCO	STX - M3	N	11,656	$ 10,718.35	$ 0.9196	$ 10,718.35	WGL Energy
	TETCO	STX - M3	N	2,604	$ 2,392.45	$ 0.9188	$ 2,392.45	Shipley
	TETCO	STX - M3	N	70,308	$ 64,638.46	$ 0.9194	$ 64,638.46	Direct Energy
	TETCO	STX - M3	N	38,502	$ 35,402.54	$ 0.9195	$ 35,402.54	Direct Energy
	TETCO	STX - M3	N	1,612	$ 1,485.51	$ 0.9215	$ 1,485.51	Direct Energy
	TETCO	STX - M3	N	113,584	$ 104,428.55	$ 0.9194	$ 104,428.55	UGI Energy
	TETCO	STX - M3	N	1,333	$ 1,226.44	$ 0.9201	$ 1,226.44	Greenlight
	TETCO	STX - M3	N	67,022	$ 61,624.12	$ 0.9195	$ 61,624.12	Constellation
	TETCO	STX - M3	N	1,426	$ 1,312.78	$ 0.9206	$ 1,312.78	Spark Energy
	TETCO	STX - M3	N	434	$ 397.31	$ 0.9155	$ 397.31	Carbonbetter
	TETCO	STX - M3	N	93,000	$ 11,625.00	$ 0.1250	$ 11,625.00	Tenaska
	TETCO	STX - M3	N	486,948	$ 51,129.54	$ 0.1050	$ 51,129.54	Tenaska
	TETCO	WLA - M3	N	558,000	$ 25,668.00	$ 0.0460	$ 25,668.00	Twin Eagle
	TETCO	WLA - M3	N	558,000	$ 25,668.00	$ 0.0460	$ 25,668.00	Twin Eagle
				2,154,965			$ 536,123.10	
	TRANSCO	2-6	N	31	$ 17.05	$ 0.55000	$ 17.05	Santanna
	TRANSCO	2-6	N	124	$ 67.89	$ 0.54750	$ 67.89	Median Energy
	TRANSCO	2-6	N	403	$ 220.41	$ 0.54692	$ 220.41	Clearview Electric
	TRANSCO	2-6	N	465	$ 254.51	$ 0.54733	$ 254.51	Carbonbetter
	TRANSCO	2-6	N	496	$ 271.25	$ 0.54688	$ 271.25	Alpha Gas
	TRANSCO	2-6	N	589	$ 322.09	$ 0.54684	$ 322.09	New Wave Energy
	TRANSCO	2-6	N	651	$ 356.19	$ 0.54714	$ 356.19	Spring
	TRANSCO	2-6	N	1,085	$ 593.65	$ 0.54714	$ 593.65	Eligo Energy
	TRANSCO	2-6	N	1,302	$ 712.38	$ 0.54714	$ 712.38	South Bay
	TRANSCO	2-6	N	1,333	$ 729.12	$ 0.54698	$ 729.12	Direct Energy
	TRANSCO	2-6	N	1,333	$ 729.12	$ 0.54698	$ 729.12	Greenlight
	TRANSCO	2-6	N	1,426	$ 780.58	$ 0.54739	$ 780.58	Spark Energy
	TRANSCO	2-6	N	1,519	$ 831.42	$ 0.54735	$ 831.42	RPA Energy
	TRANSCO	2-6	N	1,643	$ 899.00	$ 0.54717	$ 899.00	Direct Energy
	TRANSCO	2-6	N	1,767	$ 966.89	$ 0.54719	$ 966.89	Park Power
	TRANSCO	2-6	N	1,860	$ 1,017.73	$ 0.54717	$ 1,017.73	Josco Energy
	TRANSCO	2-6	N	2,542	$ 1,390.97	$ 0.54720	$ 1,390.97	EDF Trading
	TRANSCO	2-6	N	2,635	$ 1,441.81	$ 0.54718	$ 1,441.81	Shipley
	TRANSCO	2-6	N	2,759	$ 1,509.70	$ 0.54719	$ 1,509.70	UET
	TRANSCO	2-6	N	3,782	$ 2,069.25	$ 0.54713	$ 2,069.25	Marathon Power
	TRANSCO	2-6	N	4,247	$ 2,324.07	$ 0.54723	$ 2,324.07	Statewise
	TRANSCO	2-6	N	4,402	$ 2,408.70	$ 0.54718	$ 2,408.70	Nordic Energy
	TRANSCO	2-6	N	5,580	$ 3,053.19	$ 0.54717	$ 3,053.19	American Power
	TRANSCO	2-6	N	6,076	$ 3,324.75	$ 0.54719	$ 3,324.75	Atlantic Energy
	TRANSCO	2-6	N	7,440	$ 4,071.23	$ 0.54721	$ 4,071.23	Palmco
	TRANSCO	2-6	N	9,827	$ 5,376.95	$ 0.54716	$ 5,376.95	Sprague
	TRANSCO	2-6	N	11,687	$ 6,394.99	$ 0.54719	$ 6,394.99	WGL Energy
	TRANSCO	2-6	N	12,462	$ 6,818.76	$ 0.54716	$ 6,818.76	Vista Energy
	TRANSCO	2-6	N	16,213	$ 8,871.58	$ 0.54719	$ 8,871.58	MPower
	TRANSCO	2-6	N	17,081	$ 9,346.50	$ 0.54719	$ 9,346.50	Residents
	TRANSCO	2-6	N	38,533	$ 21,084.65	$ 0.54718	$ 21,084.65	Direct Energy
	TRANSCO	2-6	N	47,058	$ 25,749.22	$ 0.54718	$ 25,749.22	SFE Energy
	TRANSCO	2-6	N	67,053	$ 36,690.05	$ 0.54718	$ 36,690.05	Constellation
	TRANSCO	2-6	N	70,308	$ 38,471.00	$ 0.54718	$ 38,471.00	Direct Energy
	TRANSCO	2-6	N	113,584	$ 62,150.66	$ 0.54718	$ 62,150.66	UGI Energy
	TRANSCO	1-3	N	310,000	$ 32,550.00	$ 0.10500	$ 32,550.00	Vitol
	TRANSCO	1-3	N	310,000	$ 32,550.00	$ 0.10500	$ 32,550.00	Vitol
	TRANSCO	2-3	N	155,000	$ 9,300.00	$ 0.06000	$ 9,300.00	NJR Energy
	TRANSCO	2-3	N	310,000	$ 18,600.00	$ 0.06000	$ 18,600.00	NJR Energy
	TRANSCO	3-6	N	620,000	$ 34,162.00	$ 0.05510	$ 34,162.00	Twin Eagle
	TRANSCO	3-6	N	620,000	$ 34,162.00	$ 0.05510	$ 34,162.00	Twin Eagle
				2,784,296			$ 412,641.31	

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M / YR	PIPELINE	PATH	RECALL STATUS	MONTHLY VOLUME DTH	TOTAL MONTHLY CREDIT	CREDIT DTH	TOTAL CREDIT	REPLACEMENT SHIPPER
November-22	TETCO	STX - M3	N	16,440	$ 15,111.79	$ 0.9192	$ 15,111.79	Sprague
	TETCO	STX - M3	N	2,340	$ 2,148.11	$ 0.9180	$ 2,148.11	Shipley
	TETCO	STX - M3	N	11,310	$ 10,397.70	$ 0.9193	$ 10,397.70	Vista Energy
	TETCO	STX - M3	N	7,980	$ 7,338.54	$ 0.9196	$ 7,338.54	Palmco
	TETCO	STX - M3	N	1,170	$ 1,078.20	$ 0.9215	$ 1,078.20	South Bay
	TETCO	STX - M3	N	420	$ 384.50	$ 0.9155	$ 384.50	Alpha Gas
	TETCO	STX - M3	N	1,260	$ 1,161.76	$ 0.9220	$ 1,161.76	Greenlight
	TETCO	STX - M3	N	1,740	$ 1,596.47	$ 0.9175	$ 1,596.47	Park Power
	TETCO	STX - M3	N	48,600	$ 44,683.33	$ 0.9194	$ 44,683.33	SFE Energy
	TETCO	STX - M3	N	3,960	$ 3,644.17	$ 0.9202	$ 3,644.17	Statewise
	TETCO	STX - M3	N	3,690	$ 3,393.46	$ 0.9196	$ 3,393.46	Nordic Energy
	TETCO	STX - M3	N	80,190	$ 73,728.33	$ 0.9194	$ 73,728.33	Constellation
	TETCO	STX - M3	N	1,080	$ 994.62	$ 0.9209	$ 994.62	New Wave Energy
	TETCO	STX - M3	N	1,590	$ 1,462.70	$ 0.9199	$ 1,462.70	RPA Energy
	TETCO	STX - M3	N	5,940	$ 5,457.98	$ 0.9189	$ 5,457.98	American Power
	TETCO	STX - M3	N	4,800	$ 4,413.16	$ 0.9194	$ 4,413.16	Marathon Power
	TETCO	STX - M3	N	450	$ 417.88	$ 0.9286	$ 417.88	Clearview Electric
	TETCO	STX - M3	N	15,630	$ 14,367.91	$ 0.9193	$ 14,367.91	WGL Energy
	TETCO	STX - M3	N	105,540	$ 97,031.22	$ 0.9194	$ 97,031.22	UGI Energy
	TETCO	STX - M3	N	1,680	$ 1,546.26	$ 0.9204	$ 1,546.26	Spark Energy
	TETCO	STX - M3	N	660	$ 610.13	$ 0.9244	$ 610.13	Spring
	TETCO	STX - M3	N	1,020	$ 936.15	$ 0.9178	$ 936.15	Eligo Energy
	TETCO	STX - M3	N	150	$ 142.06	$ 0.9471	$ 142.06	Median Energy
	TETCO	STX - M3	N	1,650	$ 1,512.90	$ 0.9169	$ 1,512.90	Josco Energy
	TETCO	STX - M3	N	5,640	$ 5,182.16	$ 0.9188	$ 5,182.16	Atlantic Energy
	TETCO	STX - M3	N	1,530	$ 1,404.22	$ 0.9178	$ 1,404.22	Direct Energy
	TETCO	STX - M3	N	1,530	$ 1,404.22	$ 0.9178	$ 1,404.22	Direct Energy
	TETCO	STX - M3	N	37,710	$ 34,670.13	$ 0.9194	$ 34,670.13	Direct Energy
	TETCO	STX - M3	N	69,750	$ 64,132.99	$ 0.9195	$ 64,132.99	Direct Energy
	TETCO	STX - M3	N	2,220	$ 2,039.44	$ 0.9187	$ 2,039.44	EDF Trading
	TETCO	STX - M3	N	360	$ 334.30	$ 0.9286	$ 334.30	Santanna
	TETCO	STX - M3	N	2,670	$ 2,457.31	$ 0.9203	$ 2,457.31	UET
	TETCO	STX - M3	N	17,760	$ 16,332.03	$ 0.9196	$ 16,332.03	MPower
	TETCO	STX - M3	N	18,060	$ 16,607.86	$ 0.9196	$ 16,607.86	Residents
	TETCO	M3 - M3	N	471,240	$ 47,124.00	$ 0.1000	$ 47,124.00	Paulsboro
	TETCO	STX - M3	N	471,240	$ 1,531,530.00	$ 3.2500	$ 1,531,530.00	Vitol
	TETCO	STX - M3	N	90,000	$ 292,500.00	$ 3.2500	$ 292,500.00	Vitol
				1,509,000			$ 2,309,277.99	
	TRANSCO	2-6	N	150	$ 82.20	$ 0.54800	$ 82.20	Median Energy
	TRANSCO	2-6	N	390	$ 213.30	$ 0.54692	$ 213.30	Santanna
	TRANSCO	2-6	N	450	$ 246.30	$ 0.54733	$ 246.30	Alpha Gas
	TRANSCO	2-6	N	480	$ 262.50	$ 0.54688	$ 262.50	Clearview Electric
	TRANSCO	2-6	N	690	$ 377.40	$ 0.54696	$ 377.40	Spring
	TRANSCO	2-6	N	1,020	$ 558.00	$ 0.54706	$ 558.00	Eligo Energy
	TRANSCO	2-6	N	1,110	$ 607.20	$ 0.54703	$ 607.20	New Wave Energy
	TRANSCO	2-6	N	1,200	$ 656.40	$ 0.54700	$ 656.40	South Bay
	TRANSCO	2-6	N	1,290	$ 705.60	$ 0.54698	$ 705.60	Greenlight
	TRANSCO	2-6	N	1,530	$ 837.30	$ 0.54725	$ 837.30	Direct Energy
	TRANSCO	2-6	N	1,560	$ 853.80	$ 0.54731	$ 853.80	Direct Energy
	TRANSCO	2-6	N	1,590	$ 870.00	$ 0.54717	$ 870.00	RPA Energy
	TRANSCO	2-6	N	1,680	$ 919.50	$ 0.54732	$ 919.50	Josco Energy
	TRANSCO	2-6	N	1,710	$ 935.70	$ 0.54719	$ 935.70	Spark Energy
	TRANSCO	2-6	N	1,740	$ 952.20	$ 0.54724	$ 952.20	Park Power
	TRANSCO	2-6	N	2,250	$ 1,231.20	$ 0.54720	$ 1,231.20	EDF Trading
	TRANSCO	2-6	N	2,370	$ 1,296.90	$ 0.54722	$ 1,296.90	Shipley
	TRANSCO	2-6	N	2,700	$ 1,477.50	$ 0.54722	$ 1,477.50	UET
	TRANSCO	2-6	N	3,690	$ 2,019.00	$ 0.54715	$ 2,019.00	Nordic Energy
	TRANSCO	2-6	N	3,960	$ 2,166.60	$ 0.54712	$ 2,166.60	Statewise
	TRANSCO	2-6	N	4,830	$ 2,643.00	$ 0.54720	$ 2,643.00	Marathon Power
	TRANSCO	2-6	N	5,670	$ 3,102.60	$ 0.54720	$ 3,102.60	Atlantic Energy
	TRANSCO	2-6	N	5,970	$ 3,266.70	$ 0.54719	$ 3,266.70	American Power
	TRANSCO	2-6	N	7,980	$ 4,366.50	$ 0.54718	$ 4,366.50	Palmco
	TRANSCO	2-6	N	11,340	$ 6,204.90	$ 0.54717	$ 6,204.90	Vista Energy
	TRANSCO	2-6	N	15,660	$ 8,568.90	$ 0.54718	$ 8,568.90	WGL Energy
	TRANSCO	2-6	N	16,470	$ 9,012.00	$ 0.54718	$ 9,012.00	Sprague
	TRANSCO	2-6	N	17,790	$ 9,734.40	$ 0.54718	$ 9,734.40	MPower
	TRANSCO	2-6	N	18,090	$ 9,898.50	$ 0.54718	$ 9,898.50	Residents
	TRANSCO	2-6	N	37,710	$ 20,634.30	$ 0.54718	$ 20,634.30	Direct Energy
	TRANSCO	2-6	N	48,600	$ 26,592.90	$ 0.54718	$ 26,592.90	SFE Energy
	TRANSCO	2-6	N	69,750	$ 38,166.00	$ 0.54718	$ 38,166.00	Direct Energy
	TRANSCO	2-6	N	80,220	$ 43,894.80	$ 0.54718	$ 43,894.80	Constellation
	TRANSCO	2-6	N	105,570	$ 57,765.90	$ 0.54718	$ 57,765.90	UGI Energy
	TRANSCO	1-3	N	150,000	$ 120,000.00	$ 0.80000	$ 120,000.00	Tenaska
	TRANSCO	2-3	N	150,000	$ 67,500.00	$ 0.45000	$ 67,500.00	Tenaska
	TRANSCO	3-6	N	300,000	$ 1,407,000.00	$ 4.69000	$ 1,407,000.00	Pacific Summit
	TRANSCO	3-6	N	2,250,000	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	3-6	N	750,000	$ -	$ -	$ -	Tioga LNG LLC
				4,077,210			$ 1,855,620.00	

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M / YR	PIPELINE	PATH	RECALL STATUS	MONTHLY VOLUME DTH	TOTAL MONTHLY CREDIT	CREDIT DTH	TOTAL CREDIT	REPLACEMENT SHIPPER
December-22	TETCO	STX - M3	N	1,302	$ 1,199.54	$ 0.9213	$ 1,199.54	Spark Energy
	TETCO	STX - M3	N	1,116	$ 1,026.96	$ 0.9202	$ 1,026.96	New Wave Energy
	TETCO	STX - M3	N	107,756	$ 98,994.99	$ 0.9187	$ 98,994.99	UGI Energy
	TETCO	STX - M3	N	11,563	$ 10,623.56	$ 0.9188	$ 10,623.56	Vista Energy
	TETCO	STX - M3	N	6,572	$ 6,040.97	$ 0.9192	$ 6,040.97	American Power
	TETCO	STX - M3	N	19,127	$ 17,570.73	$ 0.9186	$ 17,570.73	Sprague
	TETCO	STX - M3	N	74,121	$ 68,090.92	$ 0.9186	$ 68,090.92	Direct Energy
	TETCO	STX - M3	N	39,618	$ 36,392.85	$ 0.9186	$ 36,392.85	Direct Energy
	TETCO	STX - M3	N	4,712	$ 4,332.25	$ 0.9194	$ 4,332.25	Marathon Power
	TETCO	STX - M3	N	1,612	$ 1,484.34	$ 0.9208	$ 1,484.34	Direct Energy
	TETCO	STX - M3	N	1,612	$ 1,484.34	$ 0.9208	$ 1,484.34	Direct Energy
	TETCO	STX - M3	N	50,685	$ 46,559.03	$ 0.9186	$ 46,559.03	SFE Energy
	TETCO	STX - M3	N	3,937	$ 3,615.98	$ 0.9185	$ 3,615.98	Statewise
	TETCO	STX - M3	N	16,771	$ 15,404.62	$ 0.9185	$ 15,404.62	WGL Energy
	TETCO	STX - M3	N	5,549	$ 5,100.32	$ 0.9191	$ 5,100.32	Atlantic Energy
	TETCO	STX - M3	N	1,674	$ 1,536.16	$ 0.9177	$ 1,536.16	Josco Energy
	TETCO	STX - M3	N	651	$ 595.49	$ 0.9147	$ 595.49	Median Energy
	TETCO	STX - M3	N	19,871	$ 18,252.53	$ 0.9186	$ 18,252.53	Residents
	TETCO	STX - M3	N	651	$ 595.49	$ 0.9147	$ 595.49	Spring
	TETCO	STX - M3	N	82,987	$ 76,237.64	$ 0.9187	$ 76,237.64	Constellation
	TETCO	STX - M3	N	7,998	$ 7,344.18	$ 0.9183	$ 7,344.18	Palmco
	TETCO	STX - M3	N	1,705	$ 1,570.63	$ 0.9212	$ 1,570.63	Park Power
	TETCO	STX - M3	N	1,302	$ 1,199.54	$ 0.9213	$ 1,199.54	Greenlight
	TETCO	STX - M3	N	434	$ 397.01	$ 0.9148	$ 397.01	Alpha Gas
	TETCO	STX - M3	N	1,209	$ 1,113.25	$ 0.9208	$ 1,113.25	South Bay
	TETCO	STX - M3	N	3,906	$ 3,590.08	$ 0.9191	$ 3,590.08	Inspire
	TETCO	STX - M3	N	31	$ 34.46	$ 1.1116	$ 34.46	City Power
	TETCO	STX - M3	N	2,387	$ 2,192.04	$ 0.9183	$ 2,192.04	Shipley
	TETCO	STX - M3	N	2,263	$ 2,079.84	$ 0.9191	$ 2,079.84	EDF Trading
	TETCO	STX - M3	N	992	$ 914.75	$ 0.9221	$ 914.75	Eligo Energy
	TETCO	STX - M3	N	3,906	$ 3,590.08	$ 0.9191	$ 3,590.08	Nordic Energy
	TETCO	STX - M3	N	19,468	$ 17,881.45	$ 0.9185	$ 17,881.45	MPower
	TETCO	STX - M3	N	465	$ 431.46	$ 0.9279	$ 431.46	Santanna
	TETCO	STX - M3	N	1,519	$ 1,398.05	$ 0.9204	$ 1,398.05	RPA Energy
	TETCO	STX - M3	N	589	$ 543.66	$ 0.9230	$ 543.66	Clearview Electric
	TETCO	STX - M3	N	9,517	$ 8,742.22	$ 0.9186	$ 8,742.22	UET
	TETCO	M3 - M3	N	486,948	$ 48,694.80	$ 0.1000	$ 48,694.80	Paulsboro
	TETCO	STX - M3	N	486,948	$ 1,582,581.00	$ 3.2500	$ 1,582,581.00	Vitol
	TETCO	STX - M3	N	93,000	$ 302,250.00	$ 3.2500	$ 302,250.00	Vitol
	TETCO	WLA - M3	N	52,916	$ -	$ -	$ -	Tioga LNG LLC
				1,629,390			$ 2,401,687.21	
	TRANSCO	2-6	N	31	$ 17.05	$ 0.55000	$ 17.05	City Power
	TRANSCO	2-6	N	434	$ 237.46	$ 0.54714	$ 237.46	Alpha Gas
	TRANSCO	2-6	N	496	$ 271.25	$ 0.54688	$ 271.25	Santanna
	TRANSCO	2-6	N	589	$ 322.09	$ 0.54684	$ 322.09	Clearview Electric
	TRANSCO	2-6	N	651	$ 356.19	$ 0.54714	$ 356.19	Median Energy
	TRANSCO	2-6	N	682	$ 373.24	$ 0.54727	$ 373.24	Spring
	TRANSCO	2-6	N	1,023	$ 559.55	$ 0.54697	$ 559.55	Eligo Energy
	TRANSCO	2-6	N	1,116	$ 610.39	$ 0.54694	$ 610.39	New Wave Energy
	TRANSCO	2-6	N	1,240	$ 678.28	$ 0.54700	$ 678.28	South Bay
	TRANSCO	2-6	N	1,302	$ 712.38	$ 0.54714	$ 712.38	Greenlight
	TRANSCO	2-6	N	1,333	$ 729.12	$ 0.54698	$ 729.12	Spark Energy
	TRANSCO	2-6	N	1,550	$ 848.16	$ 0.54720	$ 848.16	RPA Energy
	TRANSCO	2-6	N	1,643	$ 899.00	$ 0.54717	$ 899.00	Direct Energy
	TRANSCO	2-6	N	1,643	$ 899.00	$ 0.54717	$ 899.00	Direct Energy
	TRANSCO	2-6	N	1,674	$ 916.05	$ 0.54722	$ 916.05	Josco Energy
	TRANSCO	2-6	N	1,736	$ 950.15	$ 0.54732	$ 950.15	Park Power
	TRANSCO	2-6	N	2,294	$ 1,255.19	$ 0.54716	$ 1,255.19	EDF Trading
	TRANSCO	2-6	N	2,418	$ 1,323.08	$ 0.54718	$ 1,323.08	Shipley
	TRANSCO	2-6	N	3,937	$ 2,154.19	$ 0.54717	$ 2,154.19	Nordic Energy
	TRANSCO	2-6	N	3,937	$ 2,154.19	$ 0.54717	$ 2,154.19	Inspire
	TRANSCO	2-6	N	3,968	$ 2,170.93	$ 0.54711	$ 2,170.93	Statewise
	TRANSCO	2-6	N	4,743	$ 2,595.32	$ 0.54719	$ 2,595.32	Marathon Power
	TRANSCO	2-6	N	5,549	$ 3,036.45	$ 0.54721	$ 3,036.45	Atlantic Energy
	TRANSCO	2-6	N	6,603	$ 3,613.05	$ 0.54718	$ 3,613.05	American Power
	TRANSCO	2-6	N	8,029	$ 4,393.32	$ 0.54718	$ 4,393.32	Palmco
	TRANSCO	2-6	N	9,517	$ 5,207.38	$ 0.54717	$ 5,207.38	UET
	TRANSCO	2-6	N	11,594	$ 6,343.84	$ 0.54717	$ 6,343.84	Vista Energy
	TRANSCO	2-6	N	16,771	$ 9,176.62	$ 0.54717	$ 9,176.62	WGL Energy
	TRANSCO	2-6	N	19,158	$ 10,482.96	$ 0.54718	$ 10,482.96	Sprague
	TRANSCO	2-6	N	19,499	$ 10,669.58	$ 0.54719	$ 10,669.58	MPower
	TRANSCO	2-6	N	19,902	$ 10,889.99	$ 0.54718	$ 10,889.99	Residents
	TRANSCO	2-6	N	39,618	$ 21,678.30	$ 0.54718	$ 21,678.30	Direct Energy
	TRANSCO	2-6	N	50,685	$ 27,733.84	$ 0.54718	$ 27,733.84	SFE Energy
	TRANSCO	2-6	N	74,121	$ 40,557.30	$ 0.54718	$ 40,557.30	Direct Energy
	TRANSCO	2-6	N	83,018	$ 45,425.54	$ 0.54718	$ 45,425.54	Constellation
	TRANSCO	2-6	N	107,756	$ 58,962.00	$ 0.54718	$ 58,962.00	UGI Energy
	TRANSCO	1-3	N	155,000	$ 124,000.00	$ 0.80000	$ 124,000.00	Tenaska
	TRANSCO	2-3	N	155,000	$ 69,750.00	$ 0.45000	$ 69,750.00	Tenaska
	TRANSCO	3-6	N	310,000	$ 1,453,900.00	$ 4.69000	$ 1,453,900.00	Pacific Summit
	TRANSCO	3-6	N	2,325,000	$ -	$ -	$ -	Tioga LNG LLC
	TRANSCO	3-6	N	775,000	$ -	$ -	$ -	Tioga LNG LLC
				4,230,260			$ 1,926,852.43	

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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.

Calendar 2022

MTR NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total CCF	MDQ (DTH)	MDQ (MCF)
1594769	-	-	-	-	-	-	-	-	207	-	-	-	207	3,300	3,188
1611015	-	-	-	44,554	62,299	68,770	51,992	30,473	34,283	33,273	18,907	9,545	354,096	750	725
1611016	1,320,668	1,062,552	1,254,056	1,224,469	1,173,299	916,732	1,134,447	1,026,166	429,431	1,103,158	1,189,357	1,152,948	12,987,283	17,957	17,367
1621317	464,722	361,537	334,152	274,177	280,599	300,047	326,382	323,884	309,460	244,269	295,687	385,535	3,900,450	1,300	1,256
1658878	64,434	45,346	33,891	16,384	1,044	-	-	-	-	9,795	27,268	56,610	254,774	733	708
1658879	13,374	9,719	7,354	4,955	1,413	650	486	599	681	2,563	5,599	10,609	58,003	269	260
1658883	56,381	37,567	22,773	5,262	-	-	-	-	-	4,113	18,884	40,422	185,402	521	504
1658884	85,182	78,628	77,159	54,514	9,279	-	-	-	1,757	32,976	60,634	99,544	499,673	1,400	1,354
1658885	208	-	2,068	1,241	516	12,281	40,953	30,499	7,847	516	1,965	44,351	142,446	1,311	1,268
1658886	-	-	-	-	-	-	-	-	-	-	-	-	-	1,311	1,268
1685273	23,826	18,008	14,327	10,196	3,369	1,327	1,107	1,134	1,327	4,596	12,014	20,760	111,992	559	540
1685277	43,908	22,880	12,083	3,353	-	-	-	-	-	-	9,071	26,199	117,495	417	403
1685278	43,478	26,653	20,423	13,692	4,219	2,206	2,252	3,034	2,591	7,684	15,565	32,657	174,455	703	680
1685280	59,253	51,536	58,966	49,918	50,284	52,364	51,011	50,853	54,110	57,174	57,425	-	592,892	605	585
1722906	20,041	20,839	20,518	12,273	811	-	-	-	-	7,569	10,821	16,628	109,500	341	330
1723873	6,344	3,473	2,527	1,651	269	-	-	-	57	551	1,829	3,847	20,548	120	116
1723876	-	-	-	3,605	727	-	-	-	1	3,540	5,601	9,276	22,750	241	233
1723898	55,914	44,760	32,115	13,864	-	-	-	-	-	6,410	28,992	-	182,056	601	581
1723901	54,314	45,194	44,834	16,230	1,404	-	-	-	-	12,563	24,819	46,478	245,835	355	343
1724001	20,248	15,075	9,962	7,520	1,350	-	-	-	52	5,482	9,785	-	69,473	503	486
1724008	41,530	38,111	37,997	33,039	25,678	25,878	27,433	23,215	22,202	27,567	32,560	40,651	375,862	418	404
1724010	22,054	17,791	20,640	18,688	18,059	18,417	16,788	18,497	18,582	19,707	20,208	23,082	232,516	495	478
1724011	12,451	5,866	3,450	1,303	21	-	-	-	-	548	5,829	-	29,467	469	454
1724230	13,325	9,395	7,229	4,781	3,173	2,248	2,112	2,127	2,095	-	-	-	46,485	346	335
1724240	14,244	9,565	6,564	3,369	662	-	-	-	-	2,063	6,126	13,536	56,130	231	223
1724851	94,927	76,148	71,448	62,361	50,427	40,790	40,106	40,191	43,785	55,921	65,155	80,515	721,775	731	706
1724852	112,357	90,342	84,702	74,254	59,913	47,813	47,032	47,011	51,634	66,671	77,566	95,683	854,977	731	706
1724853	55,065	40,947	29,540	12,158	-	-	-	-	110	3,424	25,436	38,165	204,844	541	523
1724854	76,447	53,560	59,323	57,597	49,601	41,099	37,522	27,483	32,736	52,198	69,602	-	557,168	1,046	1,012
1724856	32,680	21,554	15,437	830	-	-	-	-	-	5,788	14,287	24,832	115,408	927	897
1756663	79,237	52,436	39,653	23,482	4,337	-	-	-	42	21,125	33,806	63,592	317,709	316	306
1756664	41,550	26,806	16,587	8,260	1,611	-	-	-	-	5,252	15,862	33,053	148,982	101	98
1771898	-	-	4,033	41,040	51,774	65,493	83,113	77,579	82,301	63,549	25,814	29,675	524,371	750	725
1786008	368,695	307,888	303,291	243,658	199,229	169,145	158,771	164,693	171,529	223,372	268,997	353,455	2,932,722	2,318	2,242
1786009	342,345	285,822	281,546	226,181	184,689	156,753	147,504	152,708	159,033	208,385	250,484	329,247	2,724,695	2,317	2,241
1806076	71,809	48,601	39,254	28,137	16,914	12,185	11,577	12,502	14,767	17,988	39,321	60,065	373,120	1,692	1,635
1806077	-	-	-	-	-	1,652	1,551	1,446	1,549	38,663	51,088	70,345	166,294	151	146
1806079	19,283	13,527	12,105	8,740	6,200	-	-	-	1,328	10,035	10,318	15,677	97,213	605	585
1806080	16,207	11,471	8,659	6,972	4,476	-	-	-	-	6,441	8,947	12,456	75,629	277	268
1806092	40,989	37,404	41,792	31,463	27,405	30,355	23,853	27,350	24,055	28,682	27,280	24,215	364,843	63	60
1826616	8,592	6,461	5,526	3,904	1,028	-	-	-	-	3,780	4,941	8,080	42,313	87	84
1826674	23,957	20,796	23,036	21,457	19,520	18,197	15,759	15,295	15,865	17,060	18,384	19,061	228,386	114	110
1884506	11,111	6,826	3,635	1,513	321	-	-	-	-	752	3,649	7,476	35,283	245	237
1884510	34,823	25,570	20,295	11,274	6,966	4,800	3,756	3,711	3,786	11,738	17,085	27,900	171,705	676	654

MTR NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total CCF	MDQ (DTH)	MDQ (MCF)
1884573	35,995	25,696	17,200	7,767	-	-	-	-	103	3,412	16,673	26,594	133,440	368	356
1884576	35,582	24,558	21,688	17,022	9,439	-	-	-	-	11,769	18,427	28,279	166,763	301	291
1884577	43,253	23,057	16,940	11,302	1,716	-	-	-	-	3,012	14,224	28,758	142,262	240	232
1884579	8,776	3,213	1,648	197	-	-	-	-	-	31	901	2,661	17,427	202	195
1906625	2,010	1,543	1,628	607	-	-	-	-	-	-	-	-	5,788	30	29
1906628	12,758	7,845	5,055	2,211	577	-	-	-	-	1,301	4,415	7,685	41,847	222	214
1906630	10,717	6,552	3,583	1,142	36	-	-	-	-	913	3,015	4,917	30,876	215	208
1909300	216,083	186,825	53,176	53,743	83,215	15,679	11,470	27,501	101,349	156,743	88,927	188,417	1,183,128	-	-
1909301	1,318,431	1,143,877	1,315,139	1,124,601	845,638	1,010,121	1,109,781	1,116,073	993,959	1,004,511	1,187,758	1,276,229	13,446,118	-	-
1909334	6,362	4,876	4,457	3,776	2,399	900	824	1,009	1,045	2,943	3,665	5,216	37,472	130	126
1909351	7,914	5,583	4,507	2,622	455	2	4	2	2	2,053	3,897	6,548	33,588	110	106
1921575	16,503	9,852	7,779	3,420	321	-	-	-	-	2,572	8,602	15,361	64,410	160	155
1921578	9,995	5,646	4,567	2,544	1,845	1,701	1,042	3,144	2,031	-	2,199	7,404	42,117	183	177
1921700	45,382	34,713	28,078	25,009	1,555	-	-	34	-	8,466	21,373	37,371	201,981	831	804
1921701	34,301	25,027	24,031	18,821	15,473	13,323	12,022	11,751	10,091	12,332	18,062	22,772	218,005	504	487
1921703	38,072	30,573	26,441	20,205	4,517	-	-	-	-	11,507	22,337	33,550	187,202	354	342
1954681	62,139	45,069	39,766	29,479	22,687	18,690	17,366	18,288	18,691	28,116	37,765	51,942	389,998	907	877
1954683	48,967	42,062	32,208	22,133	15,159	13,114	15,505	16,945	14,147	16,951	28,862	46,644	312,698	728	704
1954684	75,996	50,367	38,425	22,449	3,180	-	-	-	-	9,966	38,809	58,304	297,496	1,565	1,514
1986382	31,195	27,881	21,868	10,711	4,341	6	2	1	2	7	20,838	42,269	159,121	547	529
1986388	7,951	5,322	4,200	2,096	214	-	-	-	6	1,740	3,397	6,519	31,444	400	387
1987272	11,573	8,895	8,809	3,403	-	-	-	-	43	2,200	9,291	14,210	58,424	123	118
1987495	14,548	13,090	14,824	12,056	11,342	10,286	5,139	11,913	12,246	12,589	11,617	8,880	138,530	313	303
1987496	18,735	14,295	12,664	8,949	2,053	-	10	-	-	2,244	8,634	15,027	82,612	263	254
1987500	58,779	49,254	22,358	7,359	-	-	-	-	-	341	15,330	44,974	198,395	432	418
1987633	4,835	3,566	2,643	976	-	-	-	-	-	594	2,175	3,606	18,395	348	337
1987683	1,978	1,517	894	468	34	-	-	-	-	391	988	1,786	8,055	348	337
1987743	1,928	1,663	1,323	815	328	52	-	5	3	689	1,089	1,846	9,741	414	400
1987777	9,151	8,834	9,565	8,245	7,594	6,954	6,232	6,857	6,780	7,675	8,308	8,649	94,843	202	195
1987786	10,913	5,837	3,619	1,206	-	-	-	-	-	1,383	3,439	7,202	33,600	212	205
1987797	14,484	11,829	11,903	8,963	7,895	7,755	6,385	7,133	7,359	8,812	10,095	13,644	116,256	281	272
1987801	30,765	22,888	19,015	14,747	5,867	17,849	24,427	23,697	8,059	11,879	16,199	-	195,392	1,774	1,716
1987803	68,365	53,052	49,270	38,675	48,526	61,923	81,832	82,398	60,994	53,302	57,018	62,275	717,631	456	441
1987805	17,574	11,754	8,590	5,593	1,544	168	164	173	281	3,992	7,032	12,571	69,436	237	229
1987812	17,368	12,911	11,127	3,477	-	10	-	-	-	-	6,946	10,109	61,949	272	263
1987812	17,368	12,911	11,127	3,477	-	10	-	-	-	-	6,946	10,109	61,949	279	263
1987814	506,052	476,163	527,630	504,868	489,572	524,680	442,943	499,718	475,617	466,017	292,232	351,161	5,556,654	3,432	3,319
1987815	81,382	69,219	64,885	51,238	29,962	22,537	24,083	23,104	26,134	44,155	59,280	-	495,978	2,169	2,098
1989421	26,802	24,464	10,908	2,039	-	-	-	-	-	1,017	10,210	17,067	92,507	251	243
1989426	30,841	23,294	18,595	11,601	2,943	2,621	2,380	2,336	2,514	10,481	16,640	27,147	151,393	320	309
1989428	81,546	59,551	51,739	42,515	31,858	24,854	20,513	20,717	22,429	33,973	49,702	72,499	511,897	720	696
2012845	-	-	6,651	7,092	7,033	5,631	5,636	5,114	4,965	8,637	10,693	14,915	76,367	804	778
2012851	3,036	2,723	2,581	2,116	811	103	84	441	723	1,320	2,096	3,135	19,170	49	47
2012853	3,980	3,785	2,983	2,202	589	-	36	160	333	1,578	2,057	3,181	20,884	39	38
2012857	3,212	2,739	2,097	1,698	623	144	139	227	378	1,478	1,906	3,014	17,656	39	38
2012880	14,074	11,232	11,762	10,727	7,878	7,963	7,591	6,936	7,418	9,958	11,152	13,882	120,572	104	101

MTR NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total CCF	MDQ (DTH)	MDQ (MCF)
2023812	15,076	10,683	8,946	6,408	2,657	1,917	1,889	1,803	1,987	3,745	6,595	11,327	73,032	131	127
2023825	10,344	5,952	3,098	1,459	137	115	117	115	130	642	2,713	6,223	31,045	76	74
2023831	3,630	2,598	1,765	1,815	1,887	1,758	1,424	1,676	1,429	1,860	1,813	1,637	23,292	132	128
2023840	6,642	5,426	5,012	3,814	1,236	576	536	541	575	2,945	3,761	5,964	37,029	112	108
2023947	9,935	7,827	6,870	5,428	3,596	2,663	2,689	2,641	2,475	4,768	6,485	8,451	63,827	325	314
2023948	21,452	17,205	15,848	13,011	4,922	2,128	1,998	1,986	2,073	10,544	13,243	18,322	122,731	360	348
2023952	30,386	28,298	9,247	6,777	5,104	5,463	4,548	5,083	5,143	5,261	13,665	35,673	154,647	549	531
2023953	88,731	66,338	62,130	59,189	42,303	30,605	25,938	24,788	29,857	48,697	55,483	74,117	608,178	576	557
2023955	42,166	33,118	26,116	17,688	772	-	-	-	-	4,004	18,067	31,802	173,734	958	925
2023958	30,704	27,469	15,538	5,405	-	-	-	-	1,935	7,890	18,572	25,724	133,237	843	814
2023960	33,747	28,846	29,941	22,982	20,711	17,008	14,532	18,538	16,450	16,885	16,605	23,084	259,329	1,362	1,317
2024285	7,200	5,484	4,440	3,779	1,434	489	405	387	463	3,196	4,439	6,996	38,713	83	80
2024290	10,274	7,843	6,233	4,206	1,351	508	241	296	422	3,067	4,900	8,337	47,677	83	80
2024299	7,260	5,388	4,016	2,830	1,111	479	452	438	671	2,239	3,515	5,875	34,272	83	80
2024307	15,062	11,574	7,940	3,378	652	-	-	-	-	4,506	6,441	12,863	62,416	111	107
2024367	-	-	125,818	1,323	31	-	-	-	-	548	3,080	6,083	136,883	888	859
2024389	5,856	4,574	4,077	-	3,585	13	-	-	30	1,279	2,909	4,126	26,450	341	330
2024604	6,565	5,661	6,350	6,494	7,983	7,464	6,254	6,953	8,155	9,301	7,322	6,637	85,139	78	75
2024644	8,186	6,401	5,485	3,828	1,207	985	866	872	933	3,628	5,080	6,900	44,371	480	464
2024645	12,268	11,417	11,085	7,494	3,429	1,620	1,462	1,503	1,714	4,353	350	7,305	63,999	289	279
2024648	29,600	23,951	23,860	20,628	18,750	16,391	14,066	14,759	-	28,484	18,561	22,801	231,852	394	381
2024675	721	-	-	-	-	-	-	-	-	-	5,878	-	6,599	140	135
2024683	27,561	22,655	20,051	13,830	2,578	1,857	1,643	1,610	1,721	11,220	15,778	23,375	143,878	291	281
2024684	10,258	5,376	5,741	2,120	142	-	-	-	-	1,892	4,704	10,011	40,245	211	204
2024694	18,319	13,578	9,617	4,938	337	-	-	-	-	2,267	8,122	15,363	72,541	245	237
2024698	8,825	7,352	5,958	4,661	1,499	-	-	-	151	2,062	3,286	7,033	40,827	272	263
2024702	27,716	20,342	21,965	15,113	275	-	-	-	46	1,848	11,165	18,434	116,906	573	554
2024703	21,553	18,837	12,906	8,455	-	-	-	-	-	5,307	12,607	19,128	98,793	1,252	1,211
2024704	14,861	9,961	6,513	3,617	587	-	-	-	225	2,865	4,928	11,973	55,529	257	249
2024705	19,805	15,108	10,898	6,921	3,131	3,167	2,768	3,294	3,146	5,385	9,849	15,336	98,808	278	269
2024706	11,035	7,904	5,347	2,385	176	-	-	-	29	1,152	5,198	8,026	41,251	240	232
2024712	16,619	11,088	6,548	5,189	920	-	1	1	14	1,818	7,281	12,276	61,755	235	227
2024714	11,329	8,525	6,809	2,687	25	1	-	16	49	470	3,835	8,287	42,035	167	162
2024715	42,824	31,205	23,775	3,989	-	-	-	-	-	3,865	14,946	34,649	155,253	410	397
2024719	9,817	7,420	5,397	2,743	2,213	1,884	2,084	3,147	1,436	1,433	4,342	9,029	50,944	170	164
2024851	16,632	11,188	7,998	5,120	759	-	-	-	71	4,469	10,338	16,183	72,758	100	97
2024992	1,814	1,238	940	544	98	-	-	-	-	274	684	1,450	7,042	400	387
2025049	5,971	3,753	2,503	1,304	474	291	267	-	-	-	-	-	14,563	65	63
2025099	7,720	4,530	2,616	899	173	-	-	-	-	298	2,124	5,281	23,641	400	387
2025107	12,257	8,607	7,248	2,278	-	-	-	-	-	-	4,578	10,467	45,436	209	202
2025146	7,366	6,167	4,454	1,286	1	-	-	-	-	809	2,405	4,882	27,369	270	261
2025149	3,988	3,404	1,349	946	1,028	825	1,121	979	1,630	2,201	2,725	4,537	24,733	336	325
2025150	8,989	7,188	5,290	2,650	717	-	-	-	1	2,527	4,666	7,744	39,772	115	111
2025156	7,758	6,219	5,099	1,879	-	-	-	-	-	3	3,216	6,068	30,242	120	116
2025158	17,911	14,119	6,976	4,362	-	-	1	-	-	2,859	8,756	13,528	68,511	171	165
2025166	5,396	3,733	2,736	1,017	-	-	-	-	4	-	3,787	4,704	21,377	254	246

MTR NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total CCF	MDQ (DTH)	MDQ (MCF)
2025172	6,634	5,479	4,114	1,245	-	-	-	-	-	710	2,065	4,374	24,620	208	201
2025178	17,991	14,349	12,875	11,087	6,513	5,902	5,956	6,005	6,039	9,772	11,673	15,630	123,793	296	286
2026737	10,027	7,891	5,279	2,885	578	-	-	-	-	2,367	4,517	8,790	42,334	235	227
2026784	9,247	6,745	6,663	4,560	2,798	571	525	540	691	3,908	5,318	6,969	48,534	72	70
2026819	19,233	15,628	19,589	20,897	5,198	-	-	-	-	2	-	1,574	82,122	67	65
2026820	19,625	17,472	18,554	17,061	17,139	15,561	13,706	15,795	16,030	17,340	18,616	20,360	207,258	60	58
2026838	18,520	13,399	11,565	2,404	-	-	-	-	-	4,482	9,954	16,321	76,647	72	70
2026849	6,843	5,232	4,278	2,471	421	1	-	-	21	1,774	3,918	6,351	31,310	341	330
2026874	5,205	3,925	3,002	2,037	43	-	-	-	67	1,319	2,809	4,925	23,333	54	52
2027243	17,565	14,605	13,409	17,152	12,898	11,214	3,909	7,347	9,011	15,375	16,896	17,335	156,715	69	67
2027375	24,788	19,228	16,678	12,776	6,532	3,634	3,082	2,949	3,702	9,467	13,716	20,135	136,686	189	183
2027381	5,211	4,345	4,155	3,114	1,801	878	805	911	879	1,269	3,059	4,762	31,189	402	389
2027383	11,908	8,967	6,203	3,501	598	-	-	-	-	1,284	4,063	8,860	45,384	54	52
2027386	10,590	9,370	10,328	10,096	8,507	8,245	8,375	3,261	3,316	2,697	2,031	6,107	82,922	141	136
2027387	19,257	14,424	10,832	8,536	7,305	5,953	-	6,087	11,998	8,789	12,001	17,724	122,907	224	217
2027387	19,257	14,424	10,832	8,536	7,305	5,953	-	6,087	11,998	8,789	12,001	17,724	122,907	224	216
2027392	9,068	7,895	8,257	6,279	3,861	3,409	2,538	3,287	2,726	4,108	5,716	8,471	65,616	576	557
2027401	9,513	7,107	5,363	4,246	2,824	2,331	2,124	2,668	2,789	3,511	4,809	8,567	55,849	50	48
2027402	11,329	8,430	6,399	4,983	3,352	2,864	1,899	3,292	3,485	4,242	5,761	10,194	66,229	50	48
2027403	25,558	18,697	14,731	10,312	5,578	3,394	3,210	3,289	4,233	8,621	12,604	20,044	130,271	250	242
2027406	41,199	33,729	36,731	30,645	26,355	20,944	17,507	19,825	20,844	25,859	27,108	32,023	332,768	600	580
2027423	6,360	4,597	3,802	2,479	632	-	-	-	-	1,941	2,988	4,592	27,392	86	83
2027430	5,229	4,341	4,157	3,111	1,799	877	810	908	875	1,270	3,058	4,769	31,205	402	389
2027433	9,390	6,416	4,338	2,108	-	-	-	-	-	641	3,275	-	26,167	144	139
2027434	8,546	6,009	4,476	1,999	-	-	-	-	1	570	3,096	-	24,697	144	139
2027443	26,218	19,150	15,040	8,237	3,526	3,132	2,978	3,027	3,845	7,010	12,925	21,697	126,784	180	174
2027454	-	-	-	1	-	-	-	-	-	2,326	5,256	7,578	15,161	187	181
2027464	14,150	11,489	6,868	3,399	441	-	-	1	-	3,121	7,183	13,580	60,232	200	193
2027476	12,564	10,597	9,781	7,545	6,840	5,907	4,308	4,107	4,507	6,242	6,717	8,501	87,616	144	139
2027483	17,268	13,322	9,395	6,631	571	1	1	-	118	3,616	7,454	13,656	72,034	192	186
2027484	12,121	9,182	7,144	2,918	112	-	-	-	-	2,371	5,115	9,167	48,131	232	224
2027485	43,669	37,482	28,580	18,606	4,946	3,767	2,686	3,132	4,063	11,527	25,651	39,400	223,508	392	379
2027494	23,811	19,161	11,813	11,792	2,625	-	-	-	-	5,243	12,625	20,243	107,313	100	97
2027498	24,563	36,808	37,769	37,707	35,491	35,322	34,936	34,935	25,519	27,706	30,385	31,495	392,636	168	162
2027510	11,378	9,013	9,989	8,822	8,542	9,184	8,501	9,767	8,820	8,594	8,069	7,995	108,675	235	227
2027520	16,261	12,762	10,278	3,899	-	-	-	-	7	4,182	9,304	14,006	70,699	927	897
2027524	33,128	24,609	20,699	16,127	7,341	19,852	26,608	25,795	9,089	13,390	17,933	-	214,571	1,774	1,716
2027527	14,261	7,586	9,601	2,586	784	1,966	3,129	484	442	5,259	10,472	-	56,570	240	232
2027529	65,903	47,180	36,339	23,966	9,582	6,794	6,037	3,712	6,634	16,064	27,858	47,922	297,990	706	683
2027531	-	17,611	-	-	-	-	-	-	-	-	-	-	17,611	80	77
2027533	16,493	12,862	10,351	6,983	92	2	3	2	2	3,307	7,682	13,062	70,843	185	179
2027536	8,281	5,922	4,158	2,251	289	-	-	5	-	1,106	3,181	6,874	32,067	83	80
2027544	35,388	28,733	31,335	26,252	22,507	17,870	14,943	16,932	17,783	22,276	23,239	27,556	284,814	600	580
2027560	4,667	4,394	3,790	2,642	1,002	456	442	499	552	2,233	3,025	3,566	27,269	8	8
2027563	7,526	5,246	3,543	1,601	189	-	-	-	-	946	2,979	6,196	28,226	75	73
2027581	17,895	11,466	7,706	4,340	480	-	-	-	4	2,435	7,631	13,639	65,597	202	195

MTR NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total CCF	MDQ (DTH)	MDQ (MCF)
2027583	32,863	29,082	31,849	30,108	29,332	26,722	27,564	27,309	26,372	27,182	25,389	25,124	338,898	725	701
2027589	13,900	9,709	6,453	3,891	378	-	-	-	145	2,686	3,757	7,557	48,475	130	126
2027599	9,789	7,053	8,578	7,696	4,016	3,097	2,383	2,508	2,891	5,325	5,840	6,602	65,778	228	221
2027605	4,853	3,789	3,285	1,788	401	-	-	-	-	654	2,386	3,848	21,005	259	250
2027612	4,113	3,240	2,825	1,550	334	-	-	-	-	554	2,117	3,319	18,053	259	250
2027620	18,715	14,296	12,596	7,269	1,319	-	-	3	35	4,127	8,826	15,537	82,723	235	227
2027635	6,932	5,120	4,975	4,282	6,296	5,603	5,223	5,403	5,447	5,276	5,314	6,163	66,036	154	149
2027641	18,943	12,626	10,485	4,789	219	-	-	-	52	4,942	7,212	-	59,267	186	180
2035356	2,663	2,103	1,747	1,079	186	-	-	-	64	781	1,479	2,379	12,481	41	40
2035554	4,942	3,717	3,100	2,285	902	424	386	368	424	1,801	2,753	4,306	25,407	48	46
2035694	1,945	1,715	1,120	602	110	-	-	-	2	277	804	1,806	8,382	348	337
2035839	7,650	5,276	4,331	3,061	1,746	1,501	1,391	1,433	1,422	2,293	3,243	6,003	39,348	156	151
2035943	7,200	6,002	4,110	2,823	2,499	3,001	3,189	3,221	2,823	2,786	3,815	5,692	47,162	72	70
2035967	5,651	5,336	6,700	6,913	7,982	7,289	6,210	7,046	7,208	9,390	9,327	9,257	88,310	168	162
2035975	11,294	9,706	9,914	8,842	8,332	8,032	7,309	7,333	7,363	9,119	9,807	11,034	108,085	174	168
2035986	3,806	3,265	3,701	2,579	2,670	2,452	1,916	1,969	2,041	2,460	1,799	1,213	29,868	126	122
2036046	4,537	3,316	2,743	1,625	-	-	-	-	1	1,467	2,031	3,899	19,619	414	400
2036145	11,178	9,994	8,496	6,938	206	-	-	2,373	1,709	5,662	7,683	10,817	65,055	163	158
2036147	7,019	5,113	3,337	1,928	662	143	30	45	234	1,524	2,887	5,902	28,823	223	216
2036151	11,243	8,323	6,307	3,859	27	-	-	-	-	759	5,159	8,932	44,609	72	70
2036167	-	33,739	-	15,861	823	-	-	-	10	4,967	8,434	14,124	77,958	626	605
2036180	44,146	45,084	42,047	25,544	18,880	18,953	13,933	16,407	20,436	24,789	30,551	35,925	336,694	748	723
2036185	24,620	17,760	16,130	8,473	505	-	-	-	5,235	6,855	14,442	25,789	119,808	341	330
2036186	127,366	88,105	62,368	37,756	6,350	-	-	-	21	11,134	44,956	89,382	467,438	2,087	2,018
2036189	21,128	15,818	11,358	3,276	206	-	-	-	-	2,229	11,536	18,338	83,890	397	384
2036191	75,520	79,878	54,834	113,772	111,869	58,666	183,191	216,194	25,926	1,174	17,638	66,424	1,005,086	2,203	2,131
2036192	69,459	43,982	43,114	40,565	40,594	35,121	34,602	31,819	31,940	33,217	35,996	44,516	484,925	2,317	2,241
2036193	29,882	20,726	14,298	6,004	-	-	-	-	-	1,551	13,361	22,754	108,577	598	578
2036194	339,590	344,958	409,870	416,320	379,913	328,866	353,209	411,363	336,401	366,575	304,602	314,898	4,306,564	2,365	2,287
2036195	42,126	27,777	21,238	5,379	722	-	-	-	-	2,999	20,717	39,393	160,351	701	678
2064820	3,871	2,182	1,176	544	73	-	-	-	119	785	1,829	2,815	13,394	58	56
2064880	4,683	4,094	3,976	3,683	3,470	3,156	3,144	3,130	2,989	2,881	3,208	3,792	42,206	90	87
2064920	18,439	20,540	6,505	7,009	6,980	5,656	5,544	5,507	5,885	7,330	7,585	4,088	101,070	804	778
2064954	12,143	11,838	15,226	12,132	10,542	9,691	8,559	9,546	8,986	10,103	12,280	13,803	134,848	750	725
2064957	6,510	6,293	8,170	6,359	5,745	5,655	5,029	5,534	5,229	5,995	7,337	8,056	75,911	750	725
2064973	193,455	147,289	137,459	114,767	100,532	94,083	85,908	85,673	89,307	111,447	126,340	165,714	1,451,972	8,479	8,192
2064974	37,186	20,588	12,910	4,937	134	-	-	-	-	1,044	11,432	24,918	113,149	417	403
2064975	20,002	21,188	23,180	20,999	22,376	22,749	19,184	19,507	22,004	25,147	24,813	26,167	267,315	250	242
2064976	20,353	15,840	14,414	10,469	3,330	10	-	-	-	7,557	11,831	17,570	101,373	377	365
2064977	12,231	9,988	7,241	5,307	1,206	-	-	-	-	2,782	7,246	11,480	57,480	229	221
2064978	19,701	-	45,522	94,177	65,888	92,727	73,286	73,370	63,607	87,740	82,343	49,583	747,942	2,400	2,321
2064979	34,308	7,633	-	19,928	15,456	4,430	-	-	10,788	16,750	13,982	16,806	140,080	1,400	1,354
2064980	94,279	71,703	50,232	22,542	3,745	-	-	-	-	13,695	39,367	77,121	372,683	1,269	1,227
2064981	-	-	-	-	-	-	-	-	310	-	-	-	310	2,317	2,241
2064982	898,474	696,955	592,643	481,938	359,785	280,259	262,757	293,013	313,108	437,854	526,775	736,479	5,880,041	2,317	2,241
2070242	2,859	2,119	1,591	786	-	-	-	-	-	1,100	1,853	3,171	13,480	64	62

MTR NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total CCF	MDQ (DTH)	MDQ (MCF)
2070249	3,325	2,467	2,010	1,023	70	-	-	-	11	677	1,308	2,633	13,525	64	62
2070260	3,146	2,212	1,778	1,253	78	-	-	-	61	887	1,397	2,424	13,236	64	62
2070271	3,817	3,213	2,721	1,826	160	-	-	-	116	1,535	1,931	3,110	18,427	64	62
2090400	459,303	331,131	307,147	251,620	215,750	241,074	254,895	325,575	261,975	192,667	249,383	343,634	3,434,154	3,300	3,188
2115136	10,722	7,140	5,037	2,694	-	-	-	1	-	-	-	-	25,594	202	195
2115137	20,866	12,224	9,816	4,407	-	-	25	-	33	10,291	10,640	16,268	84,569	452	437
2115141	10,674	6,471	4,053	1,495	202	-	-	-	-	1,162	3,248	5,886	33,192	212	205
2115143	14,829	12,075	6,671	2,271	35	-	-	13	-	383	5,403	11,923	53,603	797	771
2115434	963	679	484	270	62	-	-	-	-	182	419	764	3,821	348	337
2115543	5,604	4,276	3,219	2,210	669	51	-	-	153	1,753	3,305	5,597	26,837	98	95
2115588	10,867	7,302	5,423	2,669	1,750	1,424	1,511	1,577	1,580	2,827	4,480	8,198	49,608	385	372
2115589	9,765	6,576	5,024	2,550	1,614	1,301	1,375	1,448	1,466	2,622	4,162	7,341	45,244	385	372
2115593	16,920	13,214	11,693	7,492	6,286	5,354	4,412	5,739	4,999	8,332	8,854	12,602	105,898	388	375
2115831	35,751	30,280	25,510	2,124	-	-	-	-	-	152	17,892	33,432	145,140	2,203	2,131
2115832	20,839	15,918	10,030	2,442	743	-	2,140	930	52	1,096	4,380	11,842	70,412	69	67
2115837	25,411	21,559	19,975	17,676	13,700	10,793	10,566	10,244	11,787	18,065	19,848	26,383	206,006	240	232
2115838	94,659	85,125	101,254	83,639	75,167	77,393	71,422	80,213	74,764	87,998	82,828	86,736	1,001,199	437	422
2115841	50,438	37,911	34,076	36,603	39,042	41,099	38,727	40,207	36,637	42,444	45,894	53,792	496,870	1,851	1,790
2115842	12,395	8,791	4,368	1,504	383	-	-	-	13	1,006	3,960	9,240	41,661	278	269
2115844	60,122	46,648	44,311	48,199	51,439	52,752	50,800	51,721	46,616	52,246	55,452	63,036	623,344	1,851	1,790
2115901	772	527	415	265	70	-	-	-	-	175	332	630	3,185	348	337
2116004	6,197	3,866	2,997	1,686	453	-	-	-	65	564	3,032	5,778	24,638	38	37
2116016	4,659	3,423	2,721	1,765	354	-	-	-	-	807	2,373	4,023	20,126	43	42
2116023	3,438	2,127	1,662	1,478	1,838	1,602	1,337	393	1,470	1,358	2,148	2,519	21,370	414	400
2116148	11,329	8,744	7,922	6,227	1,103	991	909	899	1,053	5,747	6,290	-	51,215	523	506
2116149	10,225	6,808	3,854	1,086	31	-	10	-	-	476	4,513	9,029	36,033	242	234
2116150	15,655	12,224	7,872	2,299	-	10	-	-	10	2,935	7,845	-	48,851	302	292
2116151	22,261	15,173	10,996	7,181	2,489	99	-	-	243	3,698	8,389	14,990	85,519	396	383
2116152	12,637	10,251	4,269	1,531	-	-	-	-	41	558	4,838	9,712	43,838	161	156
2116153	31,011	23,477	20,307	15,710	12,282	10,295	9,861	8,142	10,027	14,626	18,578	27,794	202,110	628	607
2116156	20,907	15,678	13,092	8,906	4,363	2,503	1,730	2,116	3,111	9,232	11,701	9,577	102,916	883	854
2116157	48,777	40,336	41,806	37,982	28,645	24,288	23,609	23,495	24,547	31,104	36,623	42,918	404,128	432	418
2116158	68,581	57,387	48,434	36,024	2,982	-	-	-	-	36,629	40,022	79,051	369,111	424	410
2116159	25,462	10,567	8,678	3,443	-	-	-	-	-	941	6,863	19,590	75,546	424	410
2116161	174,170	162,312	168,553	50,948	-	-	-	-	-	-	39,893	151,380	747,256	1,225	1,185
2116162	178,450	141,517	139,884	129,057	109,614	105,639	106,055	99,706	107,500	126,932	134,635	169,046	1,548,036	2,549	2,465
2116171	39,432	28,085	20,943	14,291	1,568	-	-	-	-	4,807	16,656	30,204	155,986	626	605
2116174	70,544	51,073	38,220	26,388	2,786	-	103	-	103	8,994	30,951	55,379	284,541	626	605
2123295	5,146	4,677	5,432	5,063	5,289	4,004	5,391	5,062	5,073	5,197	5,158	5,414	60,906	22	21
2123460	8,233	4,408	2,141	946	188	-	-	-	-	239	2,310	5,128	23,593	135	131
2123463	6,408	4,229	3,096	2,383	2,178	1,564	1,239	1,335	1,584	1,886	2,451	4,595	32,949	119	115
2123467	7,915	6,082	4,862	2,966	727	538	505	498	559	2,311	3,964	6,188	37,116	80	77
2123484	6,022	3,940	2,849	2,157	1,968	1,392	1,090	1,167	1,417	1,712	2,265	4,229	30,208	119	115
2123489	17,214	11,367	7,043	3,541	200	1	1	1	3	869	4,010	8,541	52,792	225	218
2123490	9,659	6,420	4,375	904	730	3,956	5,239	6,894	2,306	1,065	3,585	-	45,132	400	387
2123495	16,184	11,303	9,927	8,259	5,036	3,379	3,065	3,162	3,618	6,055	7,640	11,818	89,446	139	134

MTR NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total CCF	MDQ (DTH)	MDQ (MCF)
2123504	30,468	21,118	16,780	9,796	2,632	1,362	1,137	1,070	1,291	4,848	13,401	22,482	126,387	322	311
2123509	29,493	22,021	13,481	1,932	-	-	-	1	-	194	8,739	-	75,861	252	244
2123510	10,307	6,685	4,676	2,448	338	-	-	1	-	1,303	4,567	7,433	37,759	173	167
2123512	22,862	19,374	14,468	11,555	5,827	4,327	3,680	2,810	3,160	8,694	13,131	17,932	127,818	414	400
2123513	28,028	18,911	10,794	8,046	701	-	-	-	21	3,783	10,673	22,397	103,354	374	362
2123514	21,000	37,748	10,602	1,127	59	59	23	35	47	1,938	7,057	19,825	99,519	804	778
2123515	50,796	20,700	10,039	235	141	352	294	516	762	1,562	5,751	12,517	103,666	804	778
2123516	23,221	17,313	14,477	11,098	5,124	1,311	1,044	992	1,260	7,009	12,621	20,097	115,565	360	348
2123517	27,924	24,415	20,150	16,734	5,578	1,208	1,902	1,674	2,210	8,085	18,165	25,722	153,766	180	174
2123519	-	-	-	28	-	-	-	14	7,152	-	-	-	7,193	240	232
2123520	30,713	23,184	12,790	3,135	11	22	-	-	-	4,244	10,105	-	84,204	322	311
2123521	26,696	19,971	14,040	8,130	1,695	7,250	8,786	6,421	9,651	6,799	11,280	16,252	136,972	351	339
2123523	11,361	9,645	7,118	3,091	175	-	-	-	-	2,512	5,500	12,778	52,180	782	756
2123525	31,057	25,555	24,311	14,743	10	-	-	-	-	-	15,448	24,985	136,110	81	78
2123527	19,508	16,021	11,519	6,188	682	-	-	-	-	2,181	10,693	18,882	85,674	454	439
2123528	27,966	22,916	20,527	18,357	5,104	-	-	-	2,211	16,177	20,615	24,266	158,138	336	325
2132737	60,838	48,995	39,614	31,631	20,808	18,559	14,339	11,510	16,187	29,466	35,701	52,234	379,883	697	674
2132738	62,040	46,932	45,042	37,437	32,792	49,787	75,160	61,878	81,581	38,452	41,572	54,236	626,909	1,011	976
2132941	2,005	1,427	6,857	6,664	6,300	5,835	5,658	5,711	5,820	6,531	6,646	5,490	64,944	750	725
2132966	6,913	5,256	4,327	3,101	1,321	731	658	650	681	1,856	3,414	5,512	34,421	43	42
2133065	12,227	8,857	7,140	2,711	308	-	-	-	-	2,527	6,301	12,272	52,342	131	127
2133071	25,711	19,147	15,288	10,865	6,423	4,275	3,532	3,332	3,927	8,336	12,447	20,098	133,381	250	242
2133093	35,870	27,011	22,611	11,942	838	112	1	1	48	4,860	15,359	30,991	149,645	150	145
2155650	9,278	6,857	5,779	3,911	1,815	147	-	-	46	978	1,350	6,016	36,176	113	109
2157680	64,321	51,188	48,386	44,034	34,380	30,696	29,619	30,989	33,186	41,520	43,058	55,512	506,889	267	258
2157683	47,598	43,969	49,470	43,108	43,476	44,032	38,712	41,650	41,747	38,569	45,666	38,806	516,802	1,465	1,417
2157685	40,071	32,784	24,340	12,371	5,045	2,788	2,574	2,345	909	12,365	16,826	28,535	180,952	496	480
2157686	17,109	10,105	7,439	2,763	-	-	-	-	21	796	5,468	12,791	56,491	314	304
2157687	38,491	28,785	23,407	17,699	6,203	-	-	-	-	16,505	22,271	34,294	187,655	240	232
2157690	19,930	15,321	13,001	5,133	1,013	-	-	-	21	-	11,035	12,687	78,140	494	478
2157693	14,388	10,165	3,874	2,288	206	-	-	-	-	1,251	4,877	11,213	48,263	172	166
2157694	15,388	12,784	9,825	10,165	2,009	-	-	-	-	2,873	8,165	-	61,210	110	106
2157695	33,150	24,866	22,650	14,739	845	-	-	-	-	6,705	18,504	31,667	153,126	31	30
2157696	55,540	40,739	37,860	26,717	16,377	13,218	11,990	11,644	12,382	23,280	30,540	-	280,286	417	403
2157697	39,018	31,502	26,470	20,573	12,714	6,433	5,757	5,445	5,927	16,023	22,447	32,457	224,767	720	696
2157699	73,351	40,102	22,898	4,294	415	-	-	-	-	-	-	-	141,060	1,269	1,227
2157700	83,701	78,000	71,443	61,737	51,045	41,926	38,142	38,641	40,172	56,748	63,400	76,758	701,712	803	777
2157702	46,542	36,073	30,920	27,973	-	25,404	18,612	40,438	20,219	-	60,316	39,924	346,421	43	42
2157702	46,542	36,073	30,920	27,973	-	25,404	18,612	40,438	20,219	-	60,316	39,924	346,421	43	42
2171219	109,460	78,126	64,310	41,483	15,570	12,598	9,303	-	207	36,595	59,475	89,872	516,999	1,424	1,377
2171220	66,956	50,211	44,368	31,016	28,858	28,897	24,359	28,914	28,343	35,846	48,186	58,962	474,916	407	394
2171221	28,006	23,563	22,932	20,850	22,621	19,432	17,122	17,324	18,915	21,405	22,355	23,922	258,448	150	145
2171222	17,015	10,469	6,412	3,383	371	-	-	-	10	2,161	5,123	11,795	56,739	157	152
2171227	17,795	9,453	3,616	2,089	134	-	-	-	-	951	5,450	13,908	53,396	92	89
2171228	64,317	53,252	46,809	38,370	30,935	28,088	26,565	19,528	32,529	41,554	47,879	60,458	490,285	400	387
2171229	34,819	22,673	16,237	7,834	1,409	-	-	-	-	4,568	13,071	19,987	120,598	888	859

MTR NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total CCF	MDQ (DTH)	MDQ (MCF)
2171230	57,046	51,393	33,668	-	7,965	-	-	-	-	6,202	25,047	55,803	237,124	614	594
2171231	63,281	46,516	43,488	35,575	24,955	19,725	19,330	19,321	21,170	-	80,035	59,533	432,929	994	961
2171232	39,315	30,877	21,233	8,589	1,340	-	-	-	-	8,169	19,568	33,565	162,657	255	247
2171234	97,798	80,597	69,460	62,446	56,475	57,107	58,546	62,393	57,798	58,269	69,376	81,657	811,922	1,308	1,264
2171235	40,660	37,195	21,965	-	7,241	-	-	-	-	8,893	21,953	36,880	174,786	412	398
2188211	17,906	12,237	9,019	4,922	821	-	663	-	-	-	-	-	45,568	162	157
2188212	20,579	18,324	15,764	13,385	82	-	-	-	-	-	-	-	68,134	302	292
2188213	9,193	5,430	3,149	1,852	52	-	-	-	-	744	3,147	5,714	29,281	223	216
2188214	27,433	20,707	20,036	15,429	7,648	3,096	1,494	1,169	4,079	11,437	13,587	25,712	151,829	172	166
2188215	33,249	25,235	16,355	9,400	-	-	-	-	-	2,079	9,553	23,668	119,539	346	335
2188218	17,037	11,472	10,141	5,997	527	-	-	-	-	4,008	8,142	16,208	73,533	264	255
2188219	55,052	43,450	35,484	26,259	14,292	13,631	12,455	12,522	12,444	30,050	37,169	50,451	343,259	419	405
2188222	41,796	34,850	31,250	20,711	1,123	857	703	630	1,652	7,486	20,420	31,425	192,902	611	591
2188223	52,083	39,982	31,717	23,074	10,467	-	-	-	4,205	21,039	25,799	44,387	252,754	725	701
2188225	19,120	15,311	15,697	11,543	4,176	2,860	3,401	3,378	2,902	5,665	12,227	16,592	112,872	419	405
2188227	21,602	14,771	12,224	6,847	1,119	-	-	-	-	8,909	10,826	19,567	95,865	336	325
2198739	15,343	10,178	5,525	1,356	287	-	-	-	10	80	1,708	8,557	43,046	240	232
2198741	-	2	-	-	-	21	-	-	-	-	-	-	23	254	246
2198752	10,992	8,400	6,843	3,490	516	1	-	-	-	2,995	5,683	9,074	47,993	232	224
2198753	6,760	5,813	3,992	2,185	292	-	-	-	-	641	3,163	5,188	28,033	197	191
2198756	9,618	8,595	7,480	2,684	98	-	21	-	-	3,602	5,429	10,573	48,100	234	226
2211319	13,263	15,048	7,048	14,510	15,893	10,239	4,535	19,759	19,072	6,935	596	-	126,898	34	33
2211334	22,953	18,003	20,863	18,225	13,283	9,287	1,997	3,465	1,680	5,609	10,962	12,955	139,282	449	434
2211338	83,817	72,992	75,154	65,542	65,544	60,887	61,132	60,385	50,669	68,342	73,406	77,559	815,430	1,268	1,226
2211341	14,790	11,381	9,801	5,077	762	-	-	-	35	5,909	7,280	12,736	67,771	956	925
2227843	52,577	40,677	27,540	45,076	47,503	42,183	45,106	41,116	14,116	46,122	47,951	48,203	498,171	17,957	17,367
2227846	47,811	37,200	24,973	40,468	43,135	38,275	40,926	37,345	12,779	40,630	42,284	41,898	447,723	17,957	17,367
2227850	31,725	23,951	20,238	10,859	1,665	-	-	-	82	12,253	15,712	27,551	144,037	956	925
2239836	12,091	8,945	5,169	1,852	-	-	-	-	31	1,334	5,333	12,172	46,926	340	329
2239838	19,838	15,438	12,616	8,202	5,167	3,996	3,514	3,761	4,740	8,093	13,162	20,520	119,048	313	303
2239839	23,165	19,196	16,675	12,577	360	-	-	-	-	8,015	12,194	19,078	111,260	120	116
2239840	131,914	98,403	80,953	61,207	18,073	-	-	-	-	20,136	69,379	111,935	592,001	2,191	2,119
2239841	66,686	53,249	53,031	45,461	37,032	30,917	30,103	28,845	31,264	41,550	48,521	62,684	529,344	1,043	1,009
2239845	45,372	44,396	45,399	39,079	38,566	31,873	33,790	35,037	33,717	36,404	34,654	32,789	451,076	517	500
2245126	62,090	55,067	41,602	36,596	6,091	-	-	-	-	14,184	33,569	57,103	306,300	859	831
2245129	15,582	10,984	6,952	2,166	-	-	-	-	-	2,553	4,792	9,031	52,060	377	365
2245170	12,679	9,232	5,863	-	1,262	-	-	-	-	890	3,687	8,794	42,406	304	294
2245376	14,021	10,794	10,039	7,330	3,603	1,747	1,266	1,269	1,798	5,434	8,466	10,873	76,638	204	197
2250841	66,749	51,585	33,315	16,546	3,733	1,853	1,799	1,600	1,709	10,323	20,161	56,537	265,909	490	474
2250842	28,282	22,307	19,483	12,925	2,333	-	-	-	31	5,770	13,448	22,611	127,190	209	202
2250843	15,602	12,534	12,290	10,992	4,999	878	682	1,023	1,621	7,856	11,033	13,765	93,276	266	257
2250845	17,015	11,789	7,630	2,847	96	-	-	-	-	845	8,836	10,970	60,027	281	272
2250846	8,361	6,351	4,082	1,636	21	-	-	-	-	300	3,923	7,159	31,833	213	206
2250849	31,474	29,086	26,461	9,799	-	-	-	14	-	2,546	9,984	23,900	133,264	522	505
2250851	11,856	6,529	4,185	1,034	237	-	-	-	-	341	3,925	10,529	38,637	152	147
2250854	101,132	75,038	60,282	41,810	1,116	-	-	-	-	17,860	52,776	91,907	441,919	784	758

MTR NBR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total CCF	MDQ (DTH)	MDQ (MCF)
2250855	35,158	21,871	15,572	4,220	-	-	21	-	10	2,563	11,224	-	90,640	843	815
2250857	63,517	45,900	40,479	30,873	9,986	4,753	4,394	4,403	4,599	23,329	33,408	51,041	316,682	479	463
2250858	15,355	11,595	9,093	6,734	154	-	-	-	-	2,656	6,417	11,638	63,642	272	263
2250859	22,333	15,261	10,841	7,932	5,978	5,258	4,589	-	-	-	-	-	72,190	346	335
2250860	-	16,021	-	-	-	-	-	-	-	-	-	-	16,021	375	363
2250862	52,840	44,490	41,828	26,273	900	-	-	-	141	34,824	38,239	54,851	294,386	663	641
2250863	82,233	57,814	44,716	30,164	13,563	7,517	7,057	6,815	7,540	22,739	36,598	63,166	379,923	173	167
2250864	20,911	13,634	8,453	6,145	5,100	-	-	-	-	1,735	7,244	15,089	78,311	591	572
2250865	102,190	81,017	76,416	67,119	52,796	45,850	42,484	46,699	52,151	59,642	67,010	88,215	781,587	1,325	1,281
2253387	96,440	37,452	19,103	61,223	48,541	78,858	100,686	110,349	650	3,986	97	4,571	561,954	1,752	1,693
2253388	75,230	29,234	15,593	49,523	39,797	62,951	81,072	88,531	512	3,169	83	3,442	449,137	1,752	1,693
2269417	17,759	15,592	17,614	16,594	14,339	13,564	12,516	-	-	-	51,546	13,717	173,242	178	172
2269419	23,482	20,370	23,349	21,843	18,912	17,891	16,610	16,539	14,247	18,352	19,364	18,253	229,213	178	172
2269422	24,627	19,805	17,765	14,031	9,371	8,416	8,803	9,419	9,488	11,853	16,858	19,573	170,007	1,325	1,281
2269427	7,998	5,775	3,413	1,119	-	-	-	-	-	297	2,391	6,254	27,247	269	260
2282358	11,601	9,360	8,491	4,240	950	1,332	1,422	1,306	1,476	7,621	8,267	10,132	66,198	96	93
2282382	13,244	8,718	6,399	3,598	474	-	-	-	-	2,966	6,091	10,019	51,509	163	158
2284988	1,542,573	1,245,276	1,451,219	1,426,131	1,366,535	1,097,948	1,320,893	1,204,968	515,504	1,295,276	1,380,261	1,349,508	15,196,093	17,957	17,367
2290189	9,547	14,729	11,223	6,696	297	1	2	-	1	112	5,428	11,804	59,842	309	299
2290191	42,418	32,836	31,338	22,993	20,752	19,174	16,820	17,851	18,730	26,391	35,320	45,928	330,552	254	245
2290193	14,584	10,869	6,901	3,484	30	4	4	5	3	2,200	6,138	11,387	55,608	383	370
2290197	95,600	87,577	57,600	89,958	81,421	83,666	76,914	76,132	84,602	82,364	86,161	91,735	993,727	1,151	1,113
2290202	46,700	51,563	49,644	48,729	44,838	39,283	22,798	33,065	38,620	45,216	46,991	41,525	508,973	503	486
2290203	-	-	-	-	-	-	1,354	9,516	11,256	2,822	-	-	24,947	1,424	1,377
2290204	28,349	25,691	17,433	7,794	-	-	-	-	10	2,295	11,201	24,233	117,008	461	446
2290205	31,329	27,599	21,980	15,511	-	-	-	-	174	6,864	15,921	30,629	150,007	573	554
2290206	18,007	11,644	6,989	4,644	1,567	-	-	-	-	3,071	5,229	12,283	63,435	280	271
2290210	12,410	16,320	-	-	45,680	18,610	16,910	18,070	16,710	17,380	14,580	14,550	191,220	-	-
2290211	50,697	38,113	-	-	-	-	-	-	-	-	-	-	88,810	1,046	1,012
2290212	30,651	20,680	14,024	3,169	139	-	-	-	-	1,988	12,868	23,175	106,695	384	371
2290213	59,059	37,904	28,042	9,910	1,112	-	-	-	552	5,797	22,066	44,759	209,199	472	456
2290214	19,919	18,288	20,063	17,360	17,572	15,510	13,303	15,427	14,858	18,574	17,696	17,516	206,084	626	605
2290218	34,252	21,736	22,984	16,139	7,487	5,617	5,974	6,127	5,762	11,206	19,485	29,447	186,217	565	545
2290220	66,088	50,337	39,139	33,088	19,354	16,264	12,590	13,235	13,497	26,248	32,552	54,492	376,884	400	386
2291727	8,013	5,443	6,106	5,354	1,490	-	-	-	7	-	-	-	26,414	130	126
2294826	27,477	21,360	14,272	5,303	661	-	-	-	-	2,318	13,259	25,406	110,056	524	507
2297254	4,752	3,886	5,517	5,529	5,979	5,541	5,436	5,973	5,695	5,431	5,453	5,335	64,527	132	128
2297258	33,660	22,516	16,024	8,969	7,248	6,113	4,863	4,610	4,939	-	21,101	25,860	155,903	215	208
2311892	4,539	3,689	3,365	2,641	2,048	759	595	619	871	1,273	2,034	3,127	25,561	73	71
2311911	9,189	6,806	5,486	3,855	1,378	735	647	619	931	2,678	4,340	7,549	44,214	31	30
2311918	13,465	11,673	8,605	1,576	-	-	-	-	-	2,628	4,798	9,985	52,729	251	243
2322195	-	-	-	28,642	21,484	13,730	12,885	12,908	12,514	18,468	36,646	57,653	214,929	980	947

Docket No. R-2023-XXXXXXX
Item 53.64(c)(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:

(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 schedule attached to the response to 53.64(c)(8), Tab #7, which also provides the monthly end-user transportation through-put by customer.

Docket No. R-2023-XXXXXXX
Item 53.64(c)(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:

(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 access to this information at a PGW facility of the Company's choosing, upon written request, to parties to this proceeding that have legitimate business reasons to view this information.

Docket No. R-2023-XXXXXXX
Item 53.64(c)(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:

(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 1307(f) March 1, 2023 filing.

Docket No. R-2023-XXXXXXX
Item 53.64(c)(12)

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 the most recent 5-years covering Winters 2017-2018 through 2021-2022.

Schedule 2 – Identifies a listing of gas interruptions for the most recent 5-years covering Winters 2017-2018 through 2021-2022, their duration and the high, low and average temperatures for each day that the interruption was in effect.

53.64 (c) 12
Schedule 1

3 DAY PEAK ANALYSIS

Winter Peak Season	Date	Average Temp.	Hi Temp.	Low Temp.	Total Sendout (mcfs)	Firm Sendout	Cogen Sendout	IT Sendout
2017- 2018	Jan 5	15	19	10	625,642	547,239	44	78,359
2017 - 2018	Jan 6	13	16	8	639,043	565,130	44	73,869
2017- 2018	Jan 7	20	27	9	582,222	516,455	44	65,723
2018 - 2019	Jan 30	16	37	7	584,172	500,209	43	83,920
2018 - 2019	Jan 31	17	20	11	609,241	522,948	43	86,250
2018 - 2019	Feb 1	18	25	15	586,904	503,748	43	83,113
2019- 2020	Dec 18	31	42	23	435,785	374,997	45	60,743
2019- 2020	Dec 19	30	33	25	461,382	398,876	45	62,461
2019- 2020	Dec 20	33	37	29	417,993	362,084	45	55,864
2020- 2021	Jan 28	29	36	25	455,995	397,133	45	58,817
2020- 2021	Jan 29	26	31	22	495,584	435,311	45	60,228
2020- 2021	Jan 30	32	36	27	426,177	372,796	45	53,336
2021- 2022	Jan 29	16	24	11	531,582	474,039	42	57,501
2021- 2022	Jan 30	23	27	17	490,112	434,209	42	55,861
2021- 2022	Jan 31	27	34	23	454,674	397,965	42	56,667

53.64 (c)(12)
Schedule 2

GAS INTERRUPTIONS

Winter Peak Season	Date	Average Temp.	Hi Temp.	Low Temp.	Total Sendout (mcfs)	Firm Sendout	Cogen Sendout	LBS Sendout	BPS Sendout	GTS Sendout	IT Sendout	GRAYS FERRY Sendout (mcfs)

No interruptions occurred between September 1, 2017 and January 1, 2023

Docket No. R-2023-XXXXXXX
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 to Item 53.64(c)(14) is *Siemans Peak Day Regression Model Review* dated January 14, 2019, 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 17-18 through FY 21-22 which would reflect the most current consumption behaviors of its customers. This period yielded 46 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 67.3 % 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 35,151 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 65 data points and there were 63 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 685,131 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 18-22 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	12/13/2017	31	34	1,156	39,304	356,549	10,487	353,389	354,435	354,496
Thursday	12/14/2017	31	34	1,156	39,304	354,093	10,415	353,389	354,435	354,496
Friday	12/15/2017	28	37	1,369	50,653	375,049	10,136	385,493	382,701	383,129
Tuesday	12/26/2017	29	36	1,296	46,656	373,407	10,372	374,792	372,985	373,420
Wednesday	12/27/2017	23	42	1,764	74,088	436,899	10,402	439,000	435,684	435,199
Thursday	12/28/2017	19	46	2,116	97,336	475,927	10,346	481,805	483,356	482,685
Friday	12/29/2017	22	43	1,849	79,507	451,955	10,511	449,701	447,161	446,505
Tuesday	1/2/2018	23	42	1,764	74,088	481,485	11,464	439,000	435,684	435,199
Wednesday	1/3/2018	28	37	1,369	50,653	412,195	11,140	385,493	382,701	383,129
Thursday	1/4/2018	21	44	1,936	85,184	490,882	11,156	460,402	458,932	458,170
Friday	1/5/2018	15	50	2,500	125,000	544,956	10,899	524,610	535,726	537,200
Monday	1/15/2018	31	34	1,156	39,304	394,810	11,612	353,389	354,435	354,496
Wednesday	1/17/2018	26	39	1,521	59,319	411,626	10,555	406,896	403,013	403,171
Thursday	1/18/2018	32	33	1,089	35,937	379,044	11,486	342,687	345,600	345,226
Tuesday	1/30/2018	30	35	1,225	42,875	383,370	10,953	364,090	363,563	363,885
Wednesday	1/31/2018	32	33	1,089	35,937	358,262	10,856	342,687	345,600	345,226
Friday	2/2/2018	25	40	1,600	64,000	418,656	10,466	417,597	413,610	413,559
Monday	2/5/2018	32	33	1,089	35,937	344,431	10,437	342,687	345,600	345,226
Thursday	2/8/2018	31	34	1,156	39,304	354,509	10,427	353,389	354,435	354,496
Thursday	12/20/2018	32	33	1,089	35,937	201,788	6,115	342,687	345,600	345,226
Friday	1/11/2019	30	35	1,225	42,875	373,059	10,659	364,090	363,563	363,885
Monday	1/14/2019	32	33	1,089	35,937	359,888	10,906	342,687	345,600	345,226
Tuesday	1/22/2019	32	33	1,089	35,937	411,860	12,481	342,687	345,600	345,226
Monday	1/28/2019	31	34	1,156	39,304	359,583	10,576	353,389	354,435	354,496
Wednesday	1/30/2019	16	49	2,401	117,649	500,210	10,208	513,909	522,193	522,819
Thursday	1/31/2019	17	48	2,304	110,592	522,949	10,895	503,208	508,954	508,958
Friday	2/1/2019	18	47	2,209	103,823	503,750	10,718	492,506	496,008	495,588
Monday	3/4/2019	32	33	1,089	35,937	344,300	10,433	342,687	345,600	345,226
Tuesday	3/5/2019	28	37	1,369	50,653	374,021	10,109	385,493	382,701	383,129
Wednesday	3/6/2019	26	39	1,521	59,319	424,011	10,872	406,896	403,013	403,171
Wednesday	12/18/2019	31	34	1,156	39,304	374,998	11,029	353,389	354,435	354,496
Thursday	12/19/2019	30	35	1,225	42,875	398,878	11,397	364,090	363,563	363,885
Friday	1/17/2020	30	35	1,225	42,875	376,010	10,743	364,090	363,563	363,885
Monday	1/20/2020	30	35	1,225	42,875	392,770	11,222	364,090	363,563	363,885
Tuesday	1/21/2020	30	35	1,225	42,875	368,945	10,541	364,090	363,563	363,885
Friday	2/14/2020	28	37	1,369	50,653	379,882	10,267	385,493	382,701	383,129
Wednesday	12/16/2020	32	33	1,089	35,937	350,544	10,623	342,687	345,600	345,226
Thursday	12/17/2020	32	33	1,089	35,937	340,535	10,319	342,687	345,600	345,226
Friday	12/18/2020	31	34	1,156	39,304	351,024	10,324	353,389	354,435	354,496
Thursday	1/28/2021	29	36	1,296	46,656	397,132	11,031	374,792	372,985	373,420
Friday	1/29/2021	26	39	1,521	59,319	435,311	11,162	406,896	403,013	403,171
Monday	2/8/2021	31	34	1,156	39,304	369,099	10,856	353,389	354,435	354,496
Thursday	2/11/2021	31	34	1,156	39,304	372,372	10,952	353,389	354,435	354,496
Friday	2/12/2021	32	33	1,089	35,937	382,510	11,591	342,687	345,600	345,226
Wednesday	2/17/2021	32	33	1,089	35,937	361,205	10,946	342,687	345,600	345,226
Thursday	2/18/2021	31	34	1,156	39,304	378,931	11,145	353,389	354,435	354,496
Friday	11/19/2021	30	35	1,225	42,875	216,017	6,172	364,090	363,563	363,885
Monday	12/20/2021	32	33	1,089	35,937	306,660	9,293	342,687	345,600	345,226

Monday	1/3/2022	26	39	1,521	59,319	365,358	9,368	406,896	403,013	403,171
Tuesday	1/4/2022	30	35	1,225	42,875	339,526	9,701	364,090	363,563	363,885
Friday	1/7/2022	26	39	1,521	59,319	382,125	9,798	406,896	403,013	403,171
Monday	1/10/2022	25	40	1,600	64,000	395,917	9,898	417,597	413,610	413,559
Tuesday	1/11/2022	22	43	1,849	79,507	430,736	10,017	449,701	447,161	446,505
Friday	1/14/2022	30	35	1,225	42,875	347,603	9,932	364,090	363,563	363,885
Thursday	1/20/2022	26	39	1,521	59,319	401,778	10,302	406,896	403,013	403,171
Friday	1/21/2022	20	45	2,025	91,125	452,113	10,047	471,104	470,997	470,221
Tuesday	1/25/2022	32	33	1,089	35,937	335,127	10,155	342,687	345,600	345,226
Wednesday	1/26/2022	23	42	1,764	74,088	408,142	9,718	439,000	435,684	435,199
Thursday	1/27/2022	29	36	1,296	46,656	370,394	10,289	374,792	372,985	373,420
Friday	1/28/2022	29	36	1,296	46,656	358,284	9,952	374,792	372,985	373,420
Monday	1/31/2022	27	38	1,444	54,872	397,965	10,473	396,194	392,710	393,037
Monday	2/14/2022	23	42	1,764	74,088	415,935	9,903	439,000	435,684	435,199
Tuesday	2/15/2022	29	36	1,296	46,656	376,714	10,464	374,792	372,985	373,420
Thursday	2/24/2022	32	33	1,089	35,937	306,964	9,302	342,687	345,600	345,226
Monday	3/28/2022	29	36	1,296	46,656	363,722	10,103	374,792	372,985	373,420
			65	4,225	274,625	387,304	10,417	685,131	773,959	833,309
			Count	**65**						

Firm Sendout Projection Based Data From 18-22
Data for Daily Temperatures <= 32 Degrees Fahrenheit

SDS 5
2of 6

R Squared	Change	Student's T	Degrees of Freedom	Critical Value	@ 97.5% Significant
0.673398	0.673398	11.397174	63	2.01	Yes
0.676192	0.002794	0.731370	62	2.01	No
0.676243	0.000051	0.097933	61	2.01	No

Degrees of Freedom	**63**	**62**	**61**
97.5% Significance Level	**2.01**	**2.01**	**2.01**
95.0% Significance Level	**1.68**	**1.68**	**1.68**

LinearProjection at Zero Degrees Fahrenheit	685,131	Mcf
Linear Projection at 15 Degrees Fahrenheit	524,610	Mcf

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

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

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

*tant + (X * X Coeff) + (X1u2 * X1u2 Coeff) + (X1u3 * X1u3 Coeff)*

Linear Regression Confidence Level Table

Count	Degree Days X	Firm Sendout (Mcf) Y	Projected Linear Firm Sendout (Mcf) Ydc	Difference Actual Versus Projected Y - Yc	Actual Versus Projected Squared (Y - Yc)²	(Degree Days - Xm) X - Xm	(Degree Days - Xm) Squared (X - Xm)²	sdyc	t*sdyc	Lower Acc Lower	Upper Acc Ydc∓ t*sdydc	"- 1 SD" Lower	"+ 1 SD" Ydc∓ sdydc	"- 2 SD" Lower	SDS 5 3 of 6 "+ 2 SD" Ydc∓ 2sdydc
1	33	379,044	342,687	36,356	1,321,793,972	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
2	33	358,262	342,687	15,575	242,567,247	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
3	33	344,431	342,687	1,744	3,040,185	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
4	33	201,788	342,687	(140,900)	19,852,739,718	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
5	33	359,888	342,687	17,201	295,870,940	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
6	33	411,860	342,687	69,173	4,784,890,012	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
7	33	344,300	342,687	1,612	2,600,090	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
8	33	350,544	342,687	7,857	61,728,292	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
9	33	340,535	342,687	(2,153)	4,634,101	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
10	33	382,510	342,687	39,823	1,585,833,892	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
11	33	361,205	342,687	18,518	342,906,597	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
12	33	306,660	342,687	(36,028)	1,298,005,279	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
13	33	335,127	342,687	(7,561)	57,161,928	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
14	33	306,964	342,687	(35,724)	1,276,176,412	(4)	17	5,737	11,550	331,138	354,237	309,395	375,980	276,102	409,273
15	34	356,549	353,389	3,160	9,986,700	(3)	10	5,143	10,353	343,036	363,741	320,096	386,681	286,804	419,974
16	34	354,093	353,389	704	495,974	(3)	10	5,143	10,353	343,036	363,741	320,096	386,681	286,804	419,974
17	34	394,810	353,389	41,421	1,715,737,792	(3)	10	5,143	10,353	343,036	363,741	320,096	386,681	286,804	419,974
18	34	354,509	353,389	1,120	1,254,670	(3)	10	5,143	10,353	343,036	363,741	320,096	386,681	286,804	419,974
19	34	359,583	353,389	6,195	38,372,404	(3)	10	5,143	10,353	343,036	363,741	320,096	386,681	286,804	419,974
20	34	374,998	353,389	21,609	466,966,534	(3)	10	5,143	10,353	343,036	363,741	320,096	386,681	286,804	419,974
21	34	351,024	353,389	(2,365)	5,593,392	(3)	10	5,143	10,353	343,036	363,741	320,096	386,681	286,804	419,974
22	34	369,099	353,389	15,710	246,817,178	(3)	10	5,143	10,353	343,036	363,741	320,096	386,681	286,804	419,974
23	34	372,372	353,389	18,983	360,370,594	(3)	10	5,143	10,353	343,036	363,741	320,096	386,681	286,804	419,974
24	34	378,931	353,389	25,542	652,397,484	(3)	10	5,143	10,353	343,036	363,741	320,096	386,681	286,804	419,974
25	35	383,370	364,090	19,280	371,721,669	(2)	5	4,663	9,386	354,704	373,476	330,798	397,383	297,505	430,675
26	35	373,059	364,090	8,969	80,446,428	(2)	5	4,663	9,386	354,704	373,476	330,798	397,383	297,505	430,675
27	35	398,878	364,090	34,788	1,210,183,172	(2)	5	4,663	9,386	354,704	373,476	330,798	397,383	297,505	430,675
28	35	376,010	364,090	11,920	142,077,840	(2)	5	4,663	9,386	354,704	373,476	330,798	397,383	297,505	430,675
29	35	392,770	364,090	28,680	822,516,799	(2)	5	4,663	9,386	354,704	373,476	330,798	397,383	297,505	430,675
30	35	368,945	364,090	4,855	23,572,432	(2)	5	4,663	9,386	354,704	373,476	330,798	397,383	297,505	430,675
31	35	216,017	364,090	(148,073)	21,925,664,745	(2)	5	4,663	9,386	354,704	373,476	330,798	397,383	297,505	430,675
32	35	339,526	364,090	(24,564)	603,403,219	(2)	5	4,663	9,386	354,704	373,476	330,798	397,383	297,505	430,675
33	35	347,603	364,090	(16,487)	271,817,584	(2)	5	4,663	9,386	354,704	373,476	330,798	397,383	297,505	430,675
34	36	373,407	374,792	(1,384)	1,916,578	(1)	1	4,336	8,728	366,064	383,519	341,499	408,084	308,206	441,377
35	36	397,132	374,792	22,341	499,118,043	(1)	1	4,336	8,728	366,064	383,519	341,499	408,084	308,206	441,377
36	36	370,394	374,792	(4,397)	19,337,817	(1)	1	4,336	8,728	366,064	383,519	341,499	408,084	308,206	441,377
37	36	358,284	374,792	(16,508)	272,508,328	(1)	1	4,336	8,728	366,064	383,519	341,499	408,084	308,206	441,377
38	36	376,714	374,792	1,922	3,694,572	(1)	1	4,336	8,728	366,064	383,519	341,499	408,084	308,206	441,377
39	36	363,722	374,792	(11,070)	122,545,196	(1)	1	4,336	8,728	366,064	383,519	341,499	408,084	308,206	441,377
40	37	375,049	385,493	(10,444)	109,081,867	(0)	0	4,197	8,450	377,043	393,942	352,200	418,786	318,908	452,078
41	37	412,195	385,493	26,702	713,011,310	(0)	0	4,197	8,450	377,043	393,942	352,200	418,786	318,908	452,078
42	37	374,021	385,493	(11,472)	131,605,243	(0)	0	4,197	8,450	377,043	393,942	352,200	418,786	318,908	452,078
43	37	379,882	385,493	(5,611)	31,479,067	(0)	0	4,197	8,450	377,043	393,942	352,200	418,786	318,908	452,078
44	38	397,965	396,194	1,771	3,135,852	1	1	4,266	8,588	387,606	404,782	362,902	429,487	329,609	462,780
45	39	411,626	406,896	4,730	22,375,369	2	3	4,533	9,125	397,771	416,021	373,603	440,188	340,310	473,481
46	39	424,011	406,896	17,115	292,935,583	2	3	4,533	9,125	397,771	416,021	373,603	440,188	340,310	473,481
47	39	435,311	406,896	28,415	807,408,564	2	3	4,533	9,125	397,771	416,021	373,603	440,188	340,310	473,481
48	39	365,358	406,896	(41,537)	1,725,329,953	2	3	4,533	9,125	397,771	416,021	373,603	440,188	340,310	473,481
49	39	382,125	406,896	(24,771)	613,605,063	2	3	4,533	9,125	397,771	416,021	373,603	440,188	340,310	473,481
50	39	401,778	406,896	(5,117)	26,188,707	2	3	4,533	9,125	397,771	416,021	373,603	440,188	340,310	473,481
51	40	418,656	417,597	1,059	1,122,380	3	8	4,966	9,996	407,601	427,593	384,304	450,890	351,012	484,182
52	40	395,917	417,597	(21,680)	470,004,657	3	8	4,966	9,996	407,601	427,593	384,304	450,890	351,012	484,182
53	42	436,899	439,000	(2,100)	4,411,145	5	23	6,178	12,436	426,563	451,436	405,707	472,292	372,414	505,585
54	42	481,485	439,000	42,485	1,804,986,050	5	23	6,178	12,436	426,563	451,436	405,707	472,292	372,414	505,585
55	42	408,142	439,000	(30,858)	952,199,071	5	23	6,178	12,436	426,563	451,436	405,707	472,292	372,414	505,585
56	42	415,935	439,000	(23,065)	531,986,154	5	23	6,178	12,436	426,563	451,436	405,707	472,292	372,414	505,585
57	43	451,955	449,701	2,254	5,078,919	6	34	6,897	13,883	435,818	463,584	416,408	482,994	383,116	516,286
58	43	430,736	449,701	(18,965)	359,657,637	6	34	6,897	13,883	435,818	463,584	416,408	482,994	383,116	516,286
59	44	490,882	460,402	30,480	929,023,394	7	47	7,664	15,427	444,976	475,829	427,110	493,695	393,817	526,988
60	45	452,113	471,104	(18,991)	360,645,175	8	61	8,465	17,040	454,064	488,144	437,811	504,396	404,518	537,689
61	46	475,927	481,805	(5,878)	34,545,843	9	78	9,292	18,705	463,100	500,510	448,512	515,098	415,220	548,390
62	47	503,750	492,506	11,243	126,411,042	10	97	10,139	20,410	472,097	512,916	459,214	525,799	425,921	559,092
63	48	522,949	503,208	19,742	389,730,907	11	117	11,001	22,144	481,064	525,352	469,915	536,500	436,622	569,793
64	49	500,210	513,909	(13,699)	187,655,741	12	140	11,874	23,902	490,007	537,811	480,616	547,202	447,324	580,494
65	50	544,956	524,610	20,345	413,925,391	13	165	12,757	25,679	498,931	550,290	491,318	557,903	458,025	591,196
	65		685,131	(685,131)	469,404,170,113	28	775	26,466	53,276	631,854	738,407	651,838	718,423	618,545	751,716
Tot/Avg	**37**	**387,304**	**387,304**		**72,046,005,895**		**1,297**								

t = 2.01

Xm = 37

Population Variance= **1,108,400,091**

		Upper Range	Lower Range
Population Standard Deviation of Regression = 33,293	**1s**	420,597	354,011
	2s	453,889	320,719

Standard error of sendout projection **33,817**

T-factor **2.01**

(T factor) * (Std error of projection) 68,074

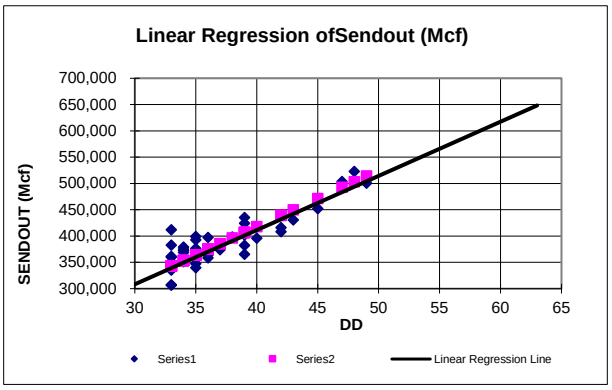
Regression Results

Winter 18-22

Based On Data for Daily Temperatures <= 32 Degrees Fahrenheit

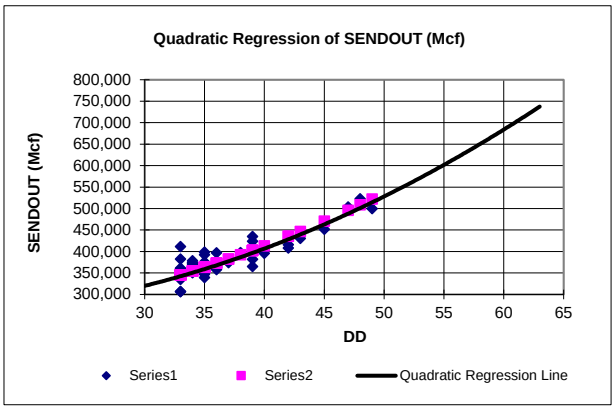
Regression Output:			**Quadratic**			**Cubic**			
Regression Output:			Regression Output:			Regression Output:			
Constant		(10,457)	Constant		218,789	Constant		(67,697)	
Std Err of Y Est		35,151	Std Err of Y Est		315,427	Std Err of Y Est		2,942,548	
R Squared		0.6734	R Squared		1	R Squared		1	
No. of Observations		65	No. of Observations		65	No. of Observations		65	
Degrees of Freedom		63	Degrees of Freedom		62	Degrees of Freedom		61	
				X	X^2		X	X^2	X^3
X Coefficient(s)	10,701		X Coefficient(s)	-1002.3958	147	X Coefficient(s)	20,639	(393)	4
Std Err of Coef.	939		Std Err of Coef.	16030.2247	201	Std Err of Coef.	221,574	5,513	45
Zero Degree Temp Sendout		685,131			773,959			833,309	
DD	65								

Regression Chart Analysis
Based Upon Data For Temperatures Of <=32 Degrees F.
Winters 19-22



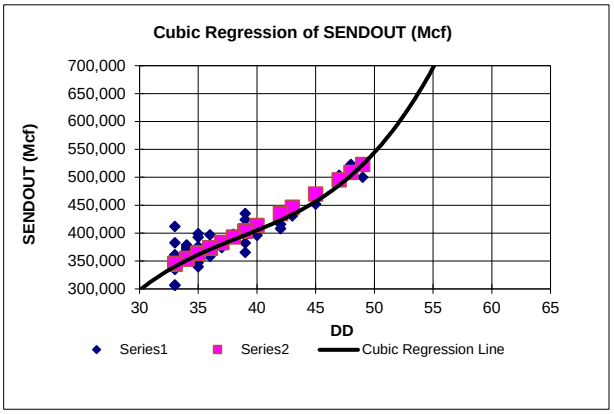
Linear Regression Output

Constant		(10,457)
Std. Error of Y Estimate		35,151
R Squared		0.673
Number of Observations		65
Degrees of Freedom		63
	X	
X Coefficient	10701	
Std. Err. Of Coefficeint	939	



Quadratic Regression Output

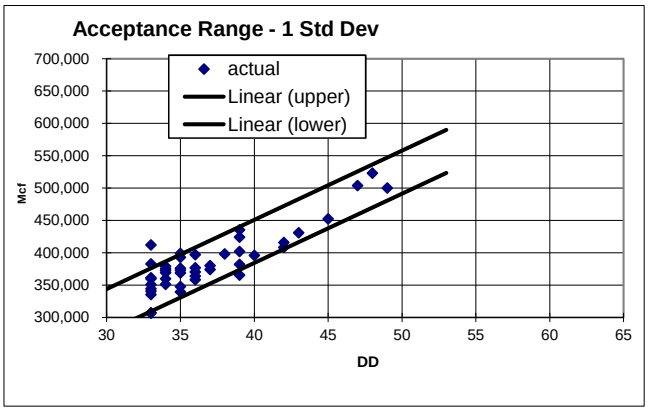
Constant		218,789
Std. Error of Y Estimate		315,427
R Squared		0.676
Number of Observations		65
Degrees of Freedom		62
	X	**X ^ 2**
X Coefficient	(1,002)	147
Std. Err. Of Coefficeint	16,030	201



Cubic Regression Output

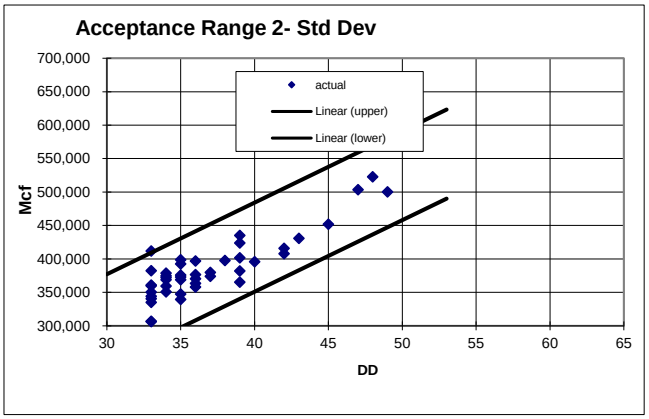
Constant		(67,697)	
Std. Error of Y Estimate		2,942,548	
R Squared		0.676	
Number of Observations		65	
Degrees of Freedom		61	
	X	**X ^ 2**	**X ^ 3**
X Coefficient	20639	(393)	4
Std. Err. Of Coefficeint	221574	5513	45

Regression Chart Analysis
Based Upon Data For Temperatures Of <=32 Degrees F.
Winters 19-22



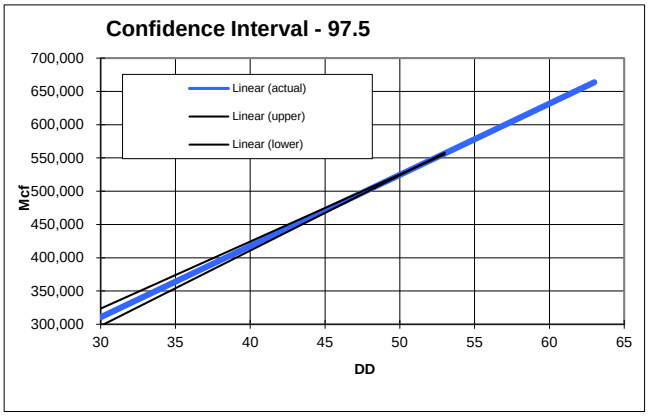
Acceptance Range @ 1 Standard Deviation

Regression Squared	1,108,400,091
Regression	33,293
Upper Range 1sd	420,597
Lower Range 1sd	354,011



Acceptance Range @ 2 Standard Deviation

Regression Squared	1,108,400,091
Regression	33,293
Upper Range 2sd	453,889
Lower Range 2sd	320,719



Confidence Interval: 97.5%

Regression Squared	1,108,400,091
Standard error of sendout projection	33,817
X Mean	37
T Distribution	2.01

Docket No. R-2023-XXXXXX
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 *Siemans Peak Day Regression Model Review* dated January 14, 2019.

SIEMENS
Ingenuity for life

MEMO TO: **PHILADELPHIA GAS WORK (PGW)**

FROM: Holt Bradshaw, Amit Gohil

DATE: 1/14/2019

SUBJECT: PGW'S PEAK DAY REGRESSION MODEL REVIEW

This memorandum describes Siemens' assessment of the PGWs peak day regression analysis, and an evaluation of the regression models developed by PGW.

Executive Summary

We carried out the evaluation of the three regression models provided by PGW in two steps – the first step was the preliminary (or intuitive) evaluation; and the second step was the more rigorous evaluation to test the statistical validity of the regression parameters and the overall model. We also carried out an independent regression analysis using MS Excel based on the weather and send out data provided by PGW and verified the completeness and accuracy of the regression parameters and the associated statistical results for each of the three regression models developed by PGW.

We also believe that the selection of the zero degree day condition for planning purposes is prudent given that the probability of the actual system send out exceeding the capacity as predicted by the zero degree day condition is extremely low (once in 80 years).

In our preliminary evaluation, we concluded that the Linear model confirms the intuitive positive relationship between severity of weather, as measured by HDDs, and natural gas demand. It also explains over 75% of the historical variability observed in peak send outs. Adding polynomials of higher orders to the liner model does not improve the "goodness of fit" as measured by Adjusted R^2. So, we conclude that the Linear model is preferred based on our preliminary evaluation.

Next, we conducted tests for statistical significance of the regression coefficients and the overall regression model. The Linear, Quadratic, and Cubic regression models that PGW developed are progressively nested. While comparing nested models, where an additional independent variable is added to the regression model, the t-test performs better than the overall F-test. The t-tests indicated that the regression coefficients of independent variables such as HDD^2 and HDD^3 (see Table 1) in the Quadratic and Cubic models cannot be statistically claimed to be different from zero.

A good, parsimonious regression model is preferred over complicated models with multiple independent variables, especially when these variables do not add to the explanatory or predictive value of the model. In the light of the statistical tests, we recommend that PGW use the Linear regression model specified in Table 1.

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In summary, after our evaluation of PGW's regression models, we conclude that the Linear Model developed by PGW is fit for the purpose it is required to serve, which is to reliably predict the peak requirements that PGW's system should be prepared to serve during a design winter scenario.

PGW's Peak Day Analysis

PGW performs a peak day analysis on an annual basis to determine its projected send out requirements during peak conditions. Essentially this process is completed by collecting send out 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 send out to arrive at firm send out on a daily basis.

For this analysis, PGW utilized data from the period winter of FY 15-16 through FY 18-19 which would reflect the most current consumption behaviors of its customers. This period yielded 51 data points where the average temperature was at or below 32 degrees Fahrenheit. A standard linear regression was performed on the data using the calculated Heating Degree-Days (HDDs) and the actual firm daily send out 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. The resulting models are presented in the following table.

Table 1: PGW's Regression Models

Linear	$y = -20{,}428.25 + 11{,}020.93\,x$	where y = actual firm send out in Mcf; $x = HDD$; $x^2 = HDD^2$; and $x^3 = HDD^3$
Quadratic	$y = -17{,}841.06 + 10{,}889.99\,x + 1.63\,x^2$	
Cubic	$y = -302{,}369.81 + 32{,}332.30\,x - 531.69\,x^2 + 4.38\,x^3$	

Source: PGW

PGW performs its capacity planning using the "Design Day" methodology, which assumes that peak demand for planning purposes occurs on the day(s) when the average daily temperature is 0 degree Fahrenheit - this is equivalent to a winter day with 65 heating degree days (HDDs). As can be seen from Exhibit 1, the probability of meeting design day conditions remains approximately once in 80 years based on the data from National Oceanic and Atmospheric Administration (NOAA). This probability may even be lower given the historical data only consider data from the past 80 years. Selection of such a low probability event, to determine the largest amount of gas that PGW must deliver to meet system requirements and maintain system integrity, is prudent in our opinion.

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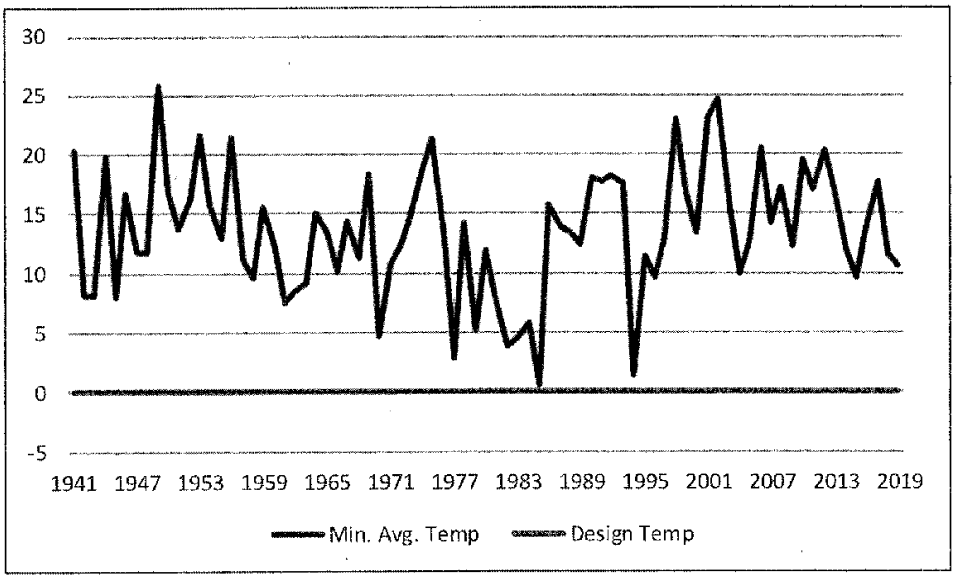
Exhibit 1: Coldest Days in Philadelphia By Year



Source: National Climatic Data Center (NCDC), National Oceanic and Atmospheric Administration (NOAA)

In the following sections, we review the underlying methodology of PGW's Linear, Quadratic, and Cubic models, evaluate their relative statistical significance and present our observations and recommendations.

We carry out the evaluation of the regression model in two steps – the first step is the preliminary (or sometimes referred to as intuitive) evaluation; and the second step is the more rigorous evaluation to test the statistical validity of the regression parameters and the overall model.

Preliminary Evaluation

In our preliminary evaluation, we are testing if the dependent variable can be intuitively explained by the independent variable(s) considered in the regression model(s). In the Peak Day Analysis, PGW's actual firm send out on the peak day is the explained (or dependent) variable, whereas the HDDs representing the number of degrees that a day's average temperature is below 65° Fahrenheit, which is the temperature below which buildings need to be heated, is the independent variable. The scatter plot presented in Exhibit 2 provides reasonable visual evidence of a linear relationship between the 2 variables. In addition to the linear relationship, PGW has considered a quadratic and cubic relationship between the firm send out and HDDs.

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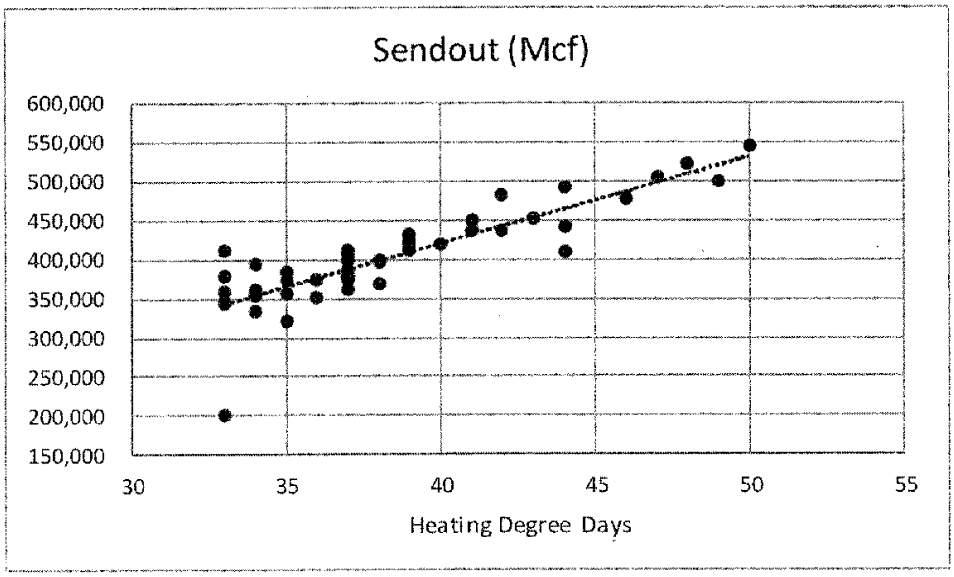
Exhibit 2: Scatter Plot



Source: PGW

In our preliminary evaluation, we also examine the Coefficient of Determination or commonly known as the R^2. For the Quadratic and Cubic models, we use the R^2 adjusted for the number of terms in the model. The R^2 or the Adjusted R^2 measures the percentage of variation in the dependent variable that can be explained by the variation in the independent variables in the regression model. We also examine the magnitude and sign of each regression coefficient and the results are presented in the table below.

Table 2: Preliminary Evaluation Results

Regression Model	% Variation Explained	Effect on Explained Variable
Linear	75.44 % of variation in send out explained by *HDDs*	Send out positively affected by *HDD*
Quadratic	74.41 % of variation in send out explained by a combination of *HDD*, and HDD^2 variables	Send out positively affected by *HDD* and HDD^2 variables
Cubic	73.88 % of variation in send out explained by a combination of *HDD*, HDD^2, and HDD^3 variables	Send out positively affected by *HDD*, negatively affected by HDD^2, and positively affected by HDD^3 variables

Source: PGW

As can be seen from Table 2, adding polynomials of higher orders to the regression equation does not improve the "goodness of fit" as measured by Adjusted R^2. The Linear model confirms the intuitive positive relationship between severity of weather, as measured by HDDs, and

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natural gas load. It also explains a large portion of the historical variability observed in peak send outs, so it is the preferred model based on our preliminary evaluation.

Next, we perform a more rigorous statistical evaluation of the 3 models.

Statistical Evaluation

Testing for Statistical Significance of Slope Coefficients

The second step in our evaluation is to test for statistical significance of the coefficients of the independent variables in the regression models. It should be noted that the regression analysis only provides point estimates of these regression coefficients, so it becomes important to statistically test how representative are these of the true coefficients. This is achieved by computing confidence intervals for the regression coefficients and conducting hypothesis testing using p-values.

Confidence Intervals

To determine whether the independent variable(s) truly have an effect on the explained variable, we find a confidence interval around the point estimates of each of the coefficients of the independent variables in the regression. If the confidence interval contains 0, then we have significant statistical evidence to believe that the independent variable in question has no effect on the dependent variable. The 97.5% confidence intervals displayed in Table 3 are calculated using:

$$(point\ estimate) \pm (t - critical\ value) \times (standard\ error)$$

with n-k degrees of freedom, where k is the number of parameters that are being estimated (number of regression coefficients in this case).

Table 3: Confidence Intervals Surrounding the Regression Coefficients

Model	HDD		HDD^2		HDD^3	
	Lower Endpoint	Upper Endpoint	Lower Endpoint	Upper Endpoint	Lower Endpoint	Upper Endpoint
Linear	8,943.68	13,098.19	N/A	N/A	N/A	N/A
Quadratic	-23,964.40	45,744.39	-431.44	434.70	N/A	N/A
Cubic	-455,118.95	519,783.54	-12,631.93	11,568.55	-94.86	103.61

Source: PGW

As can be clearly seen from Table 3, with 97.5% confidence, we cannot rule out that the coefficients of the independent variables in the Quadratic and Cubic models will not assume a value of 0. In this instance, only the Linear model has a statistically significant coefficient which is not zero. We can be 97.5% confident, that using the Linear model a unit increase in HDD will lead to an increase in send out ranging between 8,944 and13,098 Mcf.

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Hypothesis Testing

In addition to the confidence intervals, we also use Hypothesis Testing to determine whether the independent variable(s) truly have an effect on the explained variable. If there is no relationship between these variables, the coefficients of the independent variables will be 0 and vice versa. In order to statistically test the relationship, we construct a hypothesis as follows:

Determine if there is overwhelming evidence at the 0.05 significance level ($\alpha = 0.05$) of a linear relationship between the peak day send out and the HDDs observed on that day (or HDD^2 or HDD^3).

$$H_0: \beta_i = 0$$
$$H_\alpha: \beta_i \neq 0$$
$$\alpha = 0.05$$

We will use a *t*-test with n-k degrees of freedom, where k is the number of parameters that are being estimated (number of regression coefficients in this case). Our sample test statistic is given in the "t Stat" column in Table 4. We will use the p-value method to test the above hypothesis. The P-value is the probability of observing a test statistic more extreme than what was observed during the regression analysis assuming that the null hypothesis is true. Thus, at a 0.05 significance level, if the p-value is less than 0.05, we reject the null hypothesis H_0 that $\beta_i = 0$.

Table 4: Hypothesis Testing Results

	HDD		HDD^2		HDD^3	
Model	**t Stat**	**P-value**	**t Stat**	**P-value**	**t Stat**	**P-value**
Linear	12.27	1.4915E-16	N/A	N/A	N/A	N/A
Quadratic	0.72	0.47	0.01	0.99	N/A	N/A
Cubic	0.15	0.88	-0.10	0.92	0.10	0.92

Source: PGW

From the p-values in Table 4, it is evident that at 0.05 significance level we cannot reject the null hypothesis that the coefficient of HDD^2 and HDD^3 in the Quadratic and Cubic models is zero. Only the HDD coefficient in the Linear model can be concluded to be non-zero at the 0.05 significance level.

Overall Test of Significance of the Regression Model

The F-test of overall significance indicates whether the given linear regression model provides a better fit to the data than a model that contains no independent variables (i.e. an "intercept-only" model). The p-values for all the three models are significantly lower than the 0.05 significance level and indicate that all the three models are statistically significant.

It should be noted that the Linear, Quadratic, and Cubic models that PGW has considered are progressively nested – the Linear model is nested within Quadratic and Cubic; the Quadratic model is nested within the Cubic model. While comparing nested models, where an additional independent variable is added to the regression model to test if the more complex model has a better fit of the given data, the t-test performs better than the overall F-test. As we discussed

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earlier, the F-test assesses the overall significance of all the regression coefficients jointly, whereas the t-test examines each coefficient individually.

As we saw in the previous section, the t-tests have indicated that the regression coefficients of independent variables such as HDD^2 and HDD^3 cannot be statistically claimed to different from zero. It is always recommended that a good, parsimonious regression model is preferred over complicated models with multiple independent variables, especially when these variables do not add to the explanatory or predictive value of the model. In the light of the t-tests, we recommend that PGW use the Linear model specified in Table 1.

Summary

As noted above, our preliminary evaluation concluded that the Linear model explains over 75% of the historical variability observed in peak send outs. Further, we noted that adding polynomials of higher orders to the liner model does not improve the "goodness of fit" as measured by Adjusted R^2.

In our second analysis, we tested the statistical significance of the regression coefficients and model using the t-tests. The t-tests revealed that the regression coefficients of independent variables in the Quadratic and Cubic models cannot be statistically claimed to be different from zero. Since the analysis indicates that adding variable would not improve the statistical results, we recommend that PGW continue to use the Linear regression model specified in Table 1.

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Docket No. R-2023-XXXXXXX
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 schedules. Additionally, please refer to Item 53.64(c)(6) for a detailed discussion regarding the Company's least cost fuel procurement policy.

CALENDAR YEAR 2022
PHILADELPHIA GAS WORKS
C-FACTOR RECONCILIATION

MONTH		NET COST OF FUEL 1 ($)	TOTAL GCR REVENUE BILLED 2 ($)	C FACTOR % of GCR 3	C FACTOR REVENUE BILLED 4 = (2 * 3) ($)	LOAD BALANCING REVENUE 5 ($)	LNG SALES GCR BILLED REVENUE 6 ($)	TOTAL C FACTOR REVENUE BILLED 7 = (4 + 5 + 6) ($)	NATURAL GAS REFUNDS 8 ($)	OVER/ (UNDER) RECOVERY 9 = (7 + 8 - 1) ($)
JANUARY	**2022**	40,605,254	45,391,847	106.3%	48,229,404	205,700	0	48,435,104	244	7,830,094
FEBRUARY		37,800,462	47,376,566	106.3%	50,338,192	208,528	0	50,546,720	0	12,746,258
MARCH		30,767,726	32,056,069	104.8%	33,591,256	208,725	0	33,799,981	0	3,032,254
APRIL		16,537,542	21,393,379	103.2%	22,082,947	221,239	0	22,304,187	0	5,766,645
MAY		16,333,422	11,286,047	103.2%	11,649,828	218,826	0	11,868,654	0	(4,464,769)
JUNE		13,474,984	8,040,028	102.3%	8,227,416	196,649	0	8,424,066	1,971	(5,048,948)
JULY		12,663,812	7,763,620	101.8%	7,901,380	212,239	0	8,113,618	130,858	(4,419,336)
AUGUST		12,227,979	6,967,453	101.8%	7,091,086	213,544	0	7,304,630	(6,382)	(4,929,731)
SEPTEMBER		12,033,418	7,201,117	100.2%	7,214,709	147,057	0	7,361,766	0	(4,671,652)
OCTOBER		18,542,581	12,613,579	98.5%	12,428,839	72,928	0	12,501,767	3,358	(6,037,456)
NOVEMBER		24,273,210	21,520,311	98.5%	21,205,122	527,633	0	21,732,755	666	(2,539,790)
DECEMBER		55,268,925	44,447,241	98.5%	43,772,315	232,289	0	44,004,603	0	(11,264,322)
Total		290,529,317	266,057,258		273,732,494	2,665,356	0	276,397,850	130,714	(14,000,753)

STATEMENT OF RECONCILIATION
UNIVERSAL SERVICES & ENERGY CONSERVATION SURCHARGE
CALENDAR YEAR 2022

Month		USC Applicable Volumes	USC Charge	USC Revenue Billed	USC Expenses	Monthly Over/(Under) Recovery	Cumulative Over/(Under) Recovery
December 2021							$4,706,388
January 2022	Actual	8,562,357	$ 1.7523	$ 15,003,818	$ 16,251,389	$ (1,247,572)	$3,458,816
February	Actual	8,857,977	$ 1.7523	$ 15,521,834	$ 16,791,630	$ (1,269,796)	$2,189,020
March	Actual	6,339,815	$ 1.6927	$ 10,731,404	$ 13,086,071	$ (2,354,666)	($165,647)
April	Actual	4,332,091	$ 1.6331	$ 7,074,737	$ 8,395,863	$ (1,321,125)	($1,486,772)
May	Actual	2,305,027	$ 1.6331	$ 3,764,339	$ 4,018,718	$ (254,379)	($1,741,151)
June	Actual	1,258,304	$ 1.8608	$ 2,341,388	$ 2,476,963	$ (135,574)	($1,876,726)
July	Actual	1,030,520	$ 2.0884	$ 2,152,137	$ (363,696)	$ 2,515,833	$639,108
August	Actual	939,896	$ 2.0884	$ 1,962,878	$ 1,264,474	$ 698,404	$1,337,511
September	Actual	992,962	$ 1.9902	$ 1,976,193	$ 270,353	$ 1,705,840	$3,043,351
October	Actual	1,754,046	$ 1.8920	$ 3,318,655	$ 2,075,986	$ 1,242,669	$4,286,020
November	Actual	2,942,220	$ 1.8920	$ 5,566,680	$ 6,578,422	$ (1,011,742)	$3,274,278
December	Actual	6,189,652	$ 1.8137	$ 11,226,172	$ 11,704,149	$ (477,977)	$2,796,301

USC Expenses	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Total
ELIRP Expense	$ 542,041	$ 640,824	$ 823,371	$ 688,018	$ 660,772	$ 1,553	$ 1,175,931	$ 1,158,273	$ 51,119	$ 2,032	$ 1,230,378	$ 3,507	$ 6,977,819
ELIRP Labor	$ 7,008	$ 5,836	$ 4,158	$ 5,225	$ 4,269	$ 5,573	$ 8,595	$ 8,000	$ 7,477	$ 6,882	$ 6,882	$ 8,596	$ 78,501
Concervation Incentive Credit	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CRP Discount	$ 14,374,148	$ 14,937,519	$ 10,869,039	$ 6,467,487	$ 2,084,060	$ 1,347,274	$ (2,553,943)	$ (945,850)	$ (824,439)	$ 1,018,285	$ 4,314,039	$ 10,578,706	$ 61,666,324
CRP Forgiveness	$ 875,311	$ 755,712	$ 1,054,080	$ 1,011,942	$ 1,149,466	$ 1,033,110	$ 945,918	$ 988,655	$ 979,140	$ 947,472	$ 849,797	$ 796,716	$ 11,387,318
Senior Citizen Discount	$ 452,881	$ 451,739	$ 335,423	$ 223,192	$ 120,150	$ 89,452	$ 59,802	$ 55,397	$ 57,055	$ 101,316	$ 177,326	$ 316,625	$ 2,440,359
Bad Debt Expense Offset*	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total	$ 16,251,389	$ 16,791,630	$ 13,086,071	$ 8,395,863	$ 4,018,718	$ 2,476,963	$ (363,696)	$ 1,264,474	$ 270,353	$ 2,075,986	$ 6,578,422	$ 11,704,149	$ 82,550,321
CRP Participation													
Rate Case Participation Rate	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	
Actual Participation Rate*	52,631	53,135	53,535	53,940	53,671	52,342	53,849	51,019	50,723	50,981	50,598	50,412	
CRP Under(Over) Participation	27,369	26,865	26,465	26,060	26,329	27,658	26,151	28,981	29,277	29,019	29,402	29,588	
Average Shortfall Per CRP Participant													
CRP Discount	$ 14,374,148	$ 14,937,519	$ 10,869,039	$ 6,467,487	$ 2,084,060	$ 1,347,274	$ (2,553,943)	$ (945,850)	$ (824,439)	$ 1,018,285	$ 4,314,039	$ 10,578,706	
Actual Participation Rate	52,631	53,135	53,535	53,940	53,671	52,342	53,849	51,019	50,723	50,981	50,598	50,412	
Average Shorfall per CRP Participant	$ 273	$ 281	$ 203	$ 120	$ 39	$ 26	$ (47)	$ (19)	$ (16)	$ 20	$ 85	$ 210	
Shortfall*	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Bad Debt Expense Offset* 5.75%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	

*Bad Debt Expense Offset Applicable When Actual CRP Participation Exceeds 80,000

Docket No. R-2023-XXXXXXX
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.

Docket No. R-2023-XXXXXXX
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.

Docket No. R-2023-XXXXXXX
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.

Docket No. R-2023-XXXXXXX
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.

Docket No. R-2023-XXXXXXX
Item 53.65(5)

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, 18.63 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 1,104,677 Mcf of LNG to meet city sendout requirements during fiscal year 2022.

Docket No. R-2023-XXXXXXX
Item 1317(a)(1)

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

Item 1317(a)

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.

Docket No. R-2023-XXXXXXX
Item 1317(a)(2)

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

Item 1317(a)

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.

Docket No. R-2023-XXXXXXX
Item 1317(a)(3)

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

Item 1317(a)

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.

Docket No. R-2023-XXXXXXX
Item 1317(a)(4)

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

Item 1317(a)

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.

Docket No. R-2023-XXXXXXX
Item 1317(b)(1)

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

Item 1317(b)

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.

Docket No. R-2023-XXXXXXX
Item 1317(b)(2)

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

Item 1317(b)

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.

Docket No. R-2023-XXXXXXX
Item 1317(b)(3)

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

Item 1317(b)

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.

Docket No. R-2023-XXXXXXX
Item 1317(c)(1)

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

Item 1317(c)

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.

Docket No. R-2023-XXXXXXX
Item 1317(c)(2)

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

Item 1317(c)

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).

Docket No. R-2023-XXXXXXX
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.

Docket No. R-2023-XXXXXXX
Item 1318(a)(1)

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

Item 1318(a)

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.

Docket No. R-2023-XXXXXXX
Item 1318(a)(2)

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

Item 1318(a)

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.

Docket No. R-2023-XXXXXXX
Item 1318(a)(3)

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

Item 1318(a)

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.

Docket No. R-2023-XXXXXXX
Item 1318(a)(4)

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

Item 1318(a)

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.

Docket No. R-2023-XXXXXXX
Item 1318(b)(1)

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

Item 1318(b)

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.

Docket No. R-2023-XXXXXXX
Item 1318(b)(2)

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

Item 1318(b)

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.

Docket No. R-2023-XXXXXXX
Item 1318(b)(3)

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

Item 1318(b)

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.

Docket No. R-2023-XXXXXXX
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.

PHILADELPHIA GAS WORKS
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E-mail: craig.berry@pgworks.com

February 28, 2023

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

Re: Philadelphia Gas Works ("PGW") 2023-2024 Gas Cost Rate Filing
Docket No. R-2023-3038069

Dear Secretary Chiavetta:

On February 1st, Philadelphia Gas Works' filed the Pre-Filing of the Company's Section 1307(f) Gas Cost Rate Filing. Enclosed please find Revised Schedule 53.64(c)7, Schedule 1. Please replace the original Schedule with this revised Schedule.

Please do not hesitate to contact me if you have any questions.

Respectfully,

/s/ Craig W. Berry
Craig W. Berry, Esquire

Enclosure
cc: Cert. of Service w/enc.

CERTIFICATE OF SERVICE

I hereby certify that this day I served a copy of PGW's Updated Schedule for the February 1, 2023 Pre-filing of its Annual GCR Filing upon the persons listed below in the manner indicated in accordance with the requirements of 52 Pa. Code Section 1.54.

Via Email

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Dated: February 28, 2023

/s/ Craig W. Berry
Craig W. Berry, Esq.

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, 2022

Off-System Sales			
MONTH	Total Revenue	Ratepayer Margin	Total Credit
Jan-22	$41,360	$9,643	$38,146
Feb-22	$0	$0	$0
Mar-22	$0	$0	$0
Apr-22	$0	$0	$0
May-22	$0	$0	$0
Jun-22	$0	$0	$0
Jul-22	$0	$0	$0
Aug-22	$0	$0	$0
Sep-22	$0	$0	$0
Oct-22	$0	$0	$0
Nov-22	$164,387	$0	$164,387
Dec-22	$2,166,024	$1,082,670	$1,805,134

Craig Berry, Senior Attorney
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March 1, 2023

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

Re: Philadelphia Gas Works ("PGW") 2023-2024 Gas Cost Rate Filing
Docket No. R-2023-3038069

Dear Secretary Chiavetta:

On behalf of Philadelphia Gas Works ("PGW"), enclosed for filing is the original of PGW's March 1, 2023 Section 1307 (f) Gas Cost Rate Filing This filing contains:

- Supplement No. 160 to PGW's Gas Service Tariff – Pa P.U.C. No. 2;
- Supplement No. 106 to PGW's Gas Supplier Tariff – Pa P.U.C. No. 1;
- Supporting information regarding the computation of annual purchased gas costs for the twelve months ending August 31, 2024;
- Testimony of Florian Teme (PGW St. 1); and
- Testimony of Ryan E. Reeves (PGW St. 2).

Please do not hesitate to contact me if you have any questions.

Respectfully,

/s/ Craig W. Berry
Craig W. Berry, Esquire

Enclosure
cc: Cert. of Service w/enc.

CERTIFICATE OF SERVICE

I hereby certify that this day I served a copy of PGW's Annual 1307 (f) GCR Filing upon the persons listed below in the manner indicated in accordance with the requirements of 52 Pa. Code Section 1.54.

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Dated: March 1, 2023

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/s/ Craig W. Berry
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Docket R-2023-3038069

Philadelphia Gas Works

Before The

Pennsylvania Public Utility Commission

Computation of Annual Purchased Gas Costs
For Twelve Months Ending August 31, 2024

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.

March 1, 2023

Philadelphia Gas Works
1307(f) - 2023 Prefiling

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Tab #1

Docket No. R-2023-3038069
Item 53.64(a)

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

Item 53.64(a)

A Section 1307(f) gas utility may only voluntarily file a tariff reflecting an increase or decrease in natural gas costs once a year in accordance with the schedule established by the Commission, as published in the Pennsylvania Bulletin prior to the first day of September of each preceding year. If no new tariff is filed at that time, gas utilities under 66 Pa.C.S. § 1307(f) shall nevertheless file for the reconciliation of amounts collected and expended during prior periods as set forth in subsection (i). The tariff may reflect either an annual levelized rate, or a seasonal levelized rate pursuant to which a levelized 6-month "summer" rate period and a levelized 6-month "winter" rate period would apply. Upon good cause shown, the tariff may reflect other summer/winter rate periods as may be justified by operational considerations.

Response:

Please see the attached Supporting Schedules.

PGW
Gas Service Tariff
Pa. P.U.C. No. 2

Supplement No. 160

PHILADELPHIA GAS WORKS

GAS SERVICE TARIFF

Issued by: Seth Shapiro
President and CEO

PHILADELPHIA GAS WORKS
800 West Montgomery Avenue
Philadelphia, PA 19122

List of Changes Made by this Tariff Supplement

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Updated to reflect revised page numbers for each of the changes listed below on this page

GAS COST RATE (GCR) – SECTION 1307f, II DEFINITIONS (PAGE No. 67)
In the definition of "GAC," the GAC value effective September 1, 2023, decreases from $0.00463 per Ccf to $(0.06857) per Ccf.

GAS COST RATE (GCR) – SECTION 1307f, II DEFINITIONS (PAGE No. 67A)
In the definition of "IRC," the IRC value effective September 1, 2023 is $0.00117 per Ccf. In the definition of "SSC," the SSC value effective September 1, 2023, increases from $0.49402 per Ccf to $0.57550 per Ccf.

GAS COST RATE (GCR) – SECTION 1307f, III COMPUTATION OF GCR (PAGE No. 68)
The Gas Cost Rate (GCR) effective September 1, 2023, increases from $0.49740 per Ccf to $0.50576 per Ccf.

PRICE TO COMPARE (PAGE No. 78)
The Prices to Compare effective September 1, 2023 are: (a) $0.52924 per Ccf for Residential (GS-RES); (b) $0.52924 per Ccf for Public Housing Customers (GS-PH); (c) $0.51553 per Ccf for Commercial (GS-COM); (d) $0.51305 per Ccf for Industrial (GS-IND); (e) $0.51093 per Ccf for Municipal Service (MS); (f) $0.51093 per Ccf for Philadelphia Housing Authority (PHA); and (g) $0.51093 per Ccf for Natural Gas Vehicle Service (NGVS).

EFFICIENCY COST RECOVERY SURCHARGE (PAGE No. 80)
The Efficiency Cost Recovery Surcharge rates effective September 1, 2023 are: (a) $0.00171 per Ccf for Residential and Public Housing Customers on Rate GS; (b) $0.00269 per Ccf for Commercial Customers on Rate GS; (c) $0.00000 per Ccf for Industrial Customers on Rate GS; and, (d) $0.00269 per Ccf for The Philadelphia Housing Authority on Rate PHA.

UNIVERSAL SERVICE AND ENERGY CONSERVATION SURCHARGE (PAGE No. 81)
The Universal Service and Energy Conservation Surcharge effective September 1, 2023, decreases from $0.15461 per Ccf to $0.14690 per Ccf.

OTHER POST EMPLOYMENT BENEFIT ("OPEB") SURCHARGE (PAGE No. 82)
The Other Post Employment Benefit Surcharge effective September 1, 2023, decreases from $0.03789 per Ccf to $0.03385 per Ccf.

GENERAL SERVICE – RATE GS (PAGE No. 83); MUNICIPAL SERVICE – RATE MS (PAGE No. 87); PHILADELPHIA HOUSING AUTHORITY SERVICE – RATE PHA (PAGE No. 90); and, DEVELOPMENTAL NATURAL GAS VEHICLE SVC - RATE NGVS FIRM SERVICE (Page No. 135)
The Gas Cost Rate (GCR) effective September 1, 2023, increases from $0.49740 per Ccf to $0.50576 per Ccf.

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GAS COST RATE (GCR) -- SECTION 1307(f)

I. PROVISION FOR ADJUSTMENT

The Gas Cost Rate shall be applied to each Mcf (1,000 cubic feet) for Firm Retail Sales Service Gas supplied under Rates Schedules GS, MS, PHA, and NGVS-Firm, except for Gas usage under the Special Provisions – Air Conditioning of those rates calculated in a manner set forth below, pursuant to 66 Pa.C.S. §1307(f). Such rates for Firm Sales Service Gas may be increased or decreased from time to time under the procedures set forth in Section II.B. below to reflect changes in the level of Gas costs incurred or projected to be incurred by PGW related to Sales Service.

II. DEFINITIONS

C - The current cost of Natural Gas and other raw materials determined as follows: (a) for all types of Gas, project the cost for each purchase (adjusted for net current Gas stored) for the computation year plus (b) the of (1) the projected book value of non-current Gas at the beginning of the computation year minus (2) the projected book value of non-current Gas at the end of the computation year. In addition to any cost authorized by the Commission, the cost of Natural Gas may include any item included in the definition of Natural Gas costs set forth in 66 Pa.C.S. § 1307(h) ("Definition"). The Factor "C" includes two components -- Commodity Costs and Demand Costs which are defined as follows: Commodity Costs - the actual cost of natural gas and purchased electric for firm customers that does not include the fixed costs associated with the transportation and storage of natural gas; and Demand Costs - the fixed costs associated with the transportation and storage of natural gas for firm customers.

Effective 9/1/08, 75% of off system sales margin and capacity release credits will be allocated to the Factor “C” and 25% to the Company. Effective 9/1/09, 75% of storage asset management fees will be allocated to the Factor “C” and 25% to the Company.

Computation Year - The 12-month forecast period as identified in the Company’s annual 1307(f) filing and each quarterly GCR filing.

E - Experienced net over billing (or under billing) of the cost of Natural Gas and other raw materials applicable to the GCR reported in the most recent Section 1307(f) proceeding. Such over billings (or under billings) will be made with interest at the rate and method set forth by the Pennsylvania Public Utility Commission. Additionally, supplier refunds received prior to the end of the August billing period will be included in the Factor “E.” The Factor "E" includes two components -- Commodity Costs and Demand Costs which are defined above in the Factor "C" definition. Credit or recovery of the factor “E” is completed over the Company’s Fiscal Year.

Firm Sales Service - The service provided to Customers who receive firm supply service from PGW. The term does not include the service provided to Customers who receive interruptible supply service from PGW.

(Gas Adjustment Charge) - The "E" factor component of the GCR, representing the net overcollection or undercollection of Natural Gas and other raw materials costs. The currently effective GAC is $(0.04087) per Ccf for Commodity Costs and $(0.02770) per Ccf for Demand Costs, for service on or after September 1, 2023. The total GAC is $(0.06857) per Ccf. **(D)**

GCR - Gas Cost Rate determined to the nearest one-hundredth cent ($0.0001) to be applied to each Mcf of Gas supplied under Rates GS, MS, PHA, and NGVS-Firm, except for Gas usage under the Special Provisions – Air Conditioning of those rates and is equal to the SSC plus the GAC minus the IRC.

(D) – Decrease

IRC - Interruptible Revenue Credit - The credit defined in Subsection VI below. The currently effective IRC is $0.00117 per Ccf for service on or after September 1, 2023. **(D)**

Natural Gas or Gas - The volumes of gas purchased or manufactured by the Company that is delivered to the Company's Customers, plus such portion of the Company-used and unaccounted-for gas as the Commission permits, including, but not limited to, natural gas, liquefied natural gas, synthetic gas, liquefied propane and naphtha.

S - Projected applicable Mcf of Gas to be billed to Customers during the computation year.

SSC - Sales Service Charge - The purchased Gas costs determined to the nearest $^{1}/_{100}$ of a cent ($0.0001). The currently effective SSC is $0.39221 per Ccf for Commodity Costs and $0.18329 per Ccf for Demand Costs, for service on or after September 1, 2023. The total SSC is $0.57550 per Ccf. **(I)**

(I) – Increase, (D) – Decrease

III. COMPUTATION OF GAS COST RATE

A. The GCR shall be computed to the nearest one-thousandth cent ($0.00001) in accordance with the formula set forth below as the terms are defined in Section II:

SSC = C/S
GAC=E/S
GCR=SSC+GAC- IRC

B. Each Gas Cost Rate so computed shall be applied to Customers' bills for twelve monthly billing periods commencing with September.

The currently effective Gas Cost Rate is $0.50576 per Ccf, for service on or after September 1, 2023. **(I)**

IV. REPORTING REQUIREMENTS

A. The Company's rates are subject to quarterly adjustments for recovery of the Gas Cost Rate under procedures set forth in Section 1307(f) of the Public Utility Code.

B. The filing of the Company's annual Section 1307(f) filing, annual Gas Cost Rate, effective during the billing period of September through August, shall be submitted to the Commission by March 1 of each year, with a February 1 pre-filing date.

C. The application of the Gas Cost Rate shall be subject to review and audit by the Commission at such intervals as the Commission shall determine.

D. If it shall be determined, from audit by the Commission, or by final order entered after notice and hearing, that the application of this clause has resulted in the overcollection or undercollection of revenues, then the Company shall apply such over/undercollection as a credit or debit against future Gas Cost Rates.

V. PROVISION FOR INCLUSION OF SPECIFIC NON-GAS EXPENSES

The computation of the Gas Cost Rate may include such Non-Gas expenses as may be authorized by this tariff and annually authorized by the Commission.

VI. INTERRUPTIBLE REVENUE CREDIT (IRC)

A. The GCR rate shall be credited with an Interruptible Revenue Credit (IRC) equal to the margin realized from interruptible sales under PGW's Interruptible Sales Tariff Rates: BPS, LBS; and CG (Total Margin Revenue).

B. The IRC shall be set each year in the Company's 1307(f) proceeding to reflect the Total Margin Revenue. The rate per Mcf shall be calculated by dividing the Total Margin Revenue by total applicable firm sales. For the period September 1, 2003 through August 31, 2004 the IRC shall be initially set to reflect the Total Margin Revenue authorized by the Commission in its final order at M-00021612 (entered March 31, 2003).

(I) – Increase

MERCHANT FUNCTION CHARGE ("MFC")

The MFC is a volumetric charge, applied to firm sales service customers, which will be included in the Price to Compare. The MFC is based on Gas Cost Rate multiplied by a fixed uncollectible percentage established in the Company's last general base rate proceeding. The MFC will not be reconciled to reflect actual results. The MFC is intended to make the Company's Price to Compare more comparable to the gas supply services price offers of other Natural Gas Suppliers that presumably reflect anticipated uncollectible expenses. The following percentages will be applied to the quarterly Gas Cost Rate in order to calculate the quarterly MFC: 3.62% - GS Residential ("GS RES"); 3.62% - GS Public Housing ("GS PHA"); 0.91% - GS Commercial ("GS COM"); and 0.42% - GS Industrial ("GS IND"). The current MFC is set forth below in the Price to Compare table.

GAS PROCUREMENT CHARGE ("GPC")

The GPC is a volumetric charge, applied to firm sales service customers, which will be included in the Price to Compare. The GPC will remain in effect until reviewed and updated in the Company's next general base rate proceeding.

Current Gas Procurement Charge = $0.00400/Ccf

PRICE TO COMPARE ("PTC")

The PTC is composed of the Sales Service Charge ("SSC"), Gas Adjustment Charge ("GAC"), the Merchant Function Charge and the Gas Procurement Charge. The PTC will change whenever any of the components of the PTC change. The current PTC is (per Ccf):

	GS-RES	GS-PH	GS-COM	GS-IND	MS	PHA	NGVS	
SSC	**$0.57550**	**$0.57550**	**$0.57550**	**$0.57550**	**$0.57550**	**$0.57550**	**$0.57550**	**(C)**
GAC	**$(0.06857)**	**$(0.06857)**	**$(0.06857)**	**$(0.06857)**	**$(0.06857)**	**$(0.06857)**	**$(0.06857)**	**(C)**
MFC	**$0.01831**	**$0.01831**	**$0.00460**	**$0.00212**	**$0.00000**	**$0.00000**	**$0.00000**	**(C)**
GPC	**$0.00400**	**$0.00400**	**$0.00400**	**$0.00400**	**$0.00400**	**$0.00400**	**$0.00400**	**(C)**
PTC	**$0.52924**	**$0.52924**	**$0.51553**	**$0.51305**	**$0.51093**	**$0.51093**	**$0.51093**	**(C)**

(C) – Change

EFFICIENCY COST RECOVERY SURCHARGE

The cost of the energy efficiency programs (i.e. the demand side management programs) for the firm customer rate classes listed below will be recovered by an Efficiency Cost Recovery Surcharge applicable to all volumes of Gas delivered.

1) The Surcharge will recover the program costs and the administrative costs of the energy efficiency program.

2) Computation of the Efficiency Cost Recovery Surcharge factors will be in accordance with the automatic adjustment procedures utilized under Section 1307(f) of the Public Utility Code and will be filed and approved in conjunction with the Company's annual Section 1307(f)-GCR filing**.**

3) Once the surcharge is in place, it will be automatically adjusted effective March 1, June 1, September 1, and December 1 of each year in accordance with Section 1307(f) quarterly adjustment procedures. No interest will be included in such surcharge computations. The basic component of the surcharge will be determined by dividing the total energy efficiency program costs approved for annual recovery plus (or minus) any over (or under) recovery from the prior period by the estimated applicable throughput in Mcfs. The costs related to customers other than low income residential customers are tracked and will be recovered separately from each of the following firm customer rate classes if the customer class is served by the energy efficiency program:

   a) Residential and Public Housing Customers on Rate GS;
   b) Commercial Customers on Rate GS;
   c) Industrial Customers on Rate GS;
   d) Municipal Customers on Rate MS; and
   e) The Philadelphia Housing Authority on Rate PHA.

   The surcharge shall be a cents per Ccf charge calculated to the nearest one-thousandth of a cent (0.00001) which shall be added to the distribution rates for billing purposes for all customers in each of the above rate classes. The rate shall be calculated separately for each rate class as follows:

   a) $0.00171 per Ccf for Residential and Public Housing Customers on Rate GS; **(I)**
   b) $0.00269 per Ccf for Commercial Customers on Rate GS; **(D)**
   c) $0.00000 per Ccf for Industrial Customers on Rate GS; **(I)**
   d) $0.00000 per Ccf for Municipal Customers on Rate MS; and **(NC)**
   e) $0.00269 per Ccf for The Philadelphia Housing Authority on Rate PHA. **(D)**

   The Enhanced Low Income Retrofit Program costs shall be recovered through the Universal Services Surcharge beginning on September 1, 2010.

(D) – Decrease; (I) – Increase; (NC) – No Change

UNIVERSAL SERVICE AND ENERGY CONSERVATION SURCHARGE

Universal service and energy conservation program and related costs will be recovered by a Universal Service and Energy Conservation Surcharge applicable to all volumes of Gas delivered.

1. The Surcharge will recover: 1) the discounts provided to Customers pursuant to the Customer Responsibility Program (CRP); 2) the discounts provided to Customers pursuant to the Senior Citizen Discount; 3) the costs of PGW's Low Income Usage Reduction Program (LIRUP), known as the Home Comfort Program (previously known as the Conservation Works Program (CWP), the Enhanced Low Income Retrofit Program (ELIRP) and the CRP Home Comfort Program); 4) the costs of the pilot Conservation Incentive Credit program; and, 5) for Customers entering the CRP program on or after September 1, 2003, past due arrearages forgiven pursuant to paragraph A (6) of the CRP/CAP Program Design Stipulation approved by the Commission by its order at M-00021612 (entered March 31, 2003).

2. Computation of the Universal Service and Energy Conservation Surcharge factors will be in accordance with the automatic adjustment procedures utilized under Section 1307(f) of the Public Utility Code and will be filed and approved in conjunction with the Company's annual Section 1307(f)-GCR filing**.**

3. Once the surcharge is in place it will be automatically adjusted effective March 1, June 1, September 1, and December 1 of each year in accordance with Section 1307(f) quarterly adjustment procedures. No interest will be included in such surcharge computations. The basic component of the surcharge will be determined by dividing the total universal service and energy conservation program costs approved for annual recovery by the estimated applicable throughput in Mcfs.

4. The Universal Service and Energy Conservation Surcharge shall take effect upon the effective date of this Tariff.

Current Universal Service and Energy Conservation Surcharge = $0.14690/Ccf. **(D)**

(D) – Decrease

OTHER POST EMPLOYMENT BENEFIT ("OPEB") SURCHARGE

The amounts necessary to fund PGW's Other Post Employment Benefit obligations will be recovered by an Other Post Employment Benefit Surcharge applicable to all volumes of Gas delivered.

1. Computation of the Other Post Employment Benefit Rider Surcharge factors will be in accordance with the automatic adjustment procedures utilized under Section 1307(f) of the Public Utility Code and will be filed and approved in conjunction with the Company's annual Section 1307(f)-GCR filing**.**

2. Once the surcharge is in place it will be automatically adjusted effective September 1 of each year to account for over (under) recoveries in accordance with Section 1307(f) adjustment procedures. No interest will be included in such surcharge computations. The basic component of the surcharge will be determined plus (or minus) any over (or under) recovery from the prior period by dividing the total OPEB funding amounts approved for annual recovery by the estimated applicable throughput in Mcfs.

3. The Other Post Employment Benefit Rider Surcharge shall take effect upon the effective date of this Tariff.

Current Other Post Employment Benefit Rider Surcharge = $0.03385/Ccf **(D)**

(D) - Decrease

GENERAL SERVICE - RATE GS

Rate: Applicable to all Retail Sales Service or Transportation Service rendered pursuant to this Rate Schedule on or after September 1, 2023. **(C)**

AVAILABILITY

Available for any purpose where the Company's distribution mains adjacent to the proposed Gas Service location are, or can economically be made, suitable to supply the quantities of Gas or Transportation Services required. Not available for back-up service, refer to Rate BUS.

RATES

CUSTOMER CHARGE (per Meter (except parallel meters)):

$ 14.90	per month for Residential and Public Housing Authority Customers.
$ 25.35	per month for Commercial Customers
$ 75.90	per month for Industrial Customers

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to GS Customers who transport gas through a qualified NGS):

$0.50576	per Ccf for Residential and Public Housing	**(I)**
$0.50576	per Ccf for Commercial Customers	**(I)**
$0.50576	per Ccf for Industrial Customers	**(I)**

Plus,

DISTRIBUTION CHARGE (consisting of items (A) and (B), below):

(A) Delivery Charge:

$0.72955	per Ccf for Residential
$0.65393	per Ccf for Public Housing
$0.51908	per Ccf for Commercial Customers
$0.51668	per Ccf for Industrial Customers

(B) Surcharges:

Universal Service and Energy Conservation Surcharge; Restructuring and Consumer Education Surcharge; Efficiency Cost Recovery Surcharge; Other Post Employment Benefit Surcharge; and Distribution System Improvement Charge.

(I) – Increase; (C) - Change

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

MUNICIPAL SERVICE - RATE MS

Rate: Applicable to all Retail Sales Service or Transportation Service rendered pursuant to this Rate Schedule on or after September 1, 2023. **(C)**

AVAILABILITY

Available to properties owned or occupied by the City of Philadelphia or the Board of Education, or any of their respective agencies or instrumentalities, for any type of Gas Service, unless purchased for resale to others, and where the Company's distribution mains adjacent to the proposed Gas Service locations are, or can economically be made, suitable to supply the quantities of Gas required; provided, however, that the rate shall not be available to Commercial Tenants of any such property.

RATES

CUSTOMER CHARGE (per Meter (except parallel meters):

$ 25.35 per month

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to MS Customers who transport Gas through a qualified NGS):

$0.50576 per Ccf **(I)**

Plus,

DISTRIBUTION CHARGE (consisting of items (A) and (B), below):

(A) Delivery Charge:

$0.47765 per Ccf

(B) Surcharges:

Universal Service and Energy Conservation Surcharge; and The Restructuring and Consumer Education Surcharge; the Efficiency Cost Recovery Surcharge; Other Post Employment Benefit Surcharge; and Distribution System Improvement Charge.

(I) – Increase, (C) – Change

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

PHILADELPHIA HOUSING AUTHORITY SERVICE - RATE PHA

Rate: Applicable to all Retail Sales Service or Transportation Services rendered pursuant to this Rate Schedule on or after September 1, 2023. **(C)**

AVAILABILITY

Available for all Gas usage in multiple dwelling Residential buildings containing 10 or more dwelling units, owned and operated by the Philadelphia Housing Authority, where cooking shall be performed exclusively with Gas and where Gas Service shall be supplied through one or more single point metering arrangements at locations where the Company's distribution mains adjacent to the proposed Gas Service locations are, or can economically be made, suitable to supply the quantities of Gas required.

This rate is also available for all Gas usage in single and multiple dwelling Residential buildings, containing less than 10 dwelling units, provided, and only so long as, Gas is used exclusively for cooking, water heating and space heating for all such Residential buildings owned and operated by the Philadelphia Housing Authority, except (a) buildings operated by the Philadelphia Housing Authority, prior to the original effective date of this rate (January 1, 1969), and (b) buildings for which, in the judgment of the Company, such Gas Service cannot be provided economically.

RATES

CUSTOMER CHARGE (per Meter (except parallel meters);

$25.35 per month

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to PHA customers who transport gas through a qualified NGS):

$0.50576 per Ccf **(I)**

Plus

DISTRIBUTION CHARGE (consisting of item (A) and (B), below):

(A) Delivery Charge:

$0.54534 per Ccf

(B) Surcharges:

Universal Service and Energy Conservation Surcharge; and The Restructuring and Consumer Education Surcharge; the Efficiency Cost Recovery Surcharge; Other Post Employment Benefit Surcharge; and Distribution System Improvement Charge.

(I) – Increase, (C) – Change

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

DEVELOPMENTAL NATURAL GAS VEHICLE SERVICE - RATE NGVS
FIRM SERVICE

Rate: Applicable to all Retail Sales Service rendered pursuant to this Rate Schedule on or after September 1, 2023. **(C)**

AVAILABILITY

This service is available to provide uncompressed Natural Gas to any Customer for the exclusive purpose of compressing such Gas for use as fuel for motor vehicles. The compression of the Natural Gas to the pressure required for use as a motor vehicle fuel will be conducted by the Customer, at the Customer's designated premises. Service shall only be available where the Company's distribution system is, or can economically be made available to supply the service. Each Customer will be required to execute a service agreement which will specify terms and conditions of service.

CHARACTER OF SERVICE

Service under this rate schedule is firm and shall only be interrupted in the case of operating emergencies experienced by the Company.

MONTHLY RATE

CUSTOMER CHARGE:

$35.00 per month

Surcharge: Distribution System Improvement Charge.

Plus,

GCR (not applicable to NGVS customers who transport gas through a qualified NGS):

$0.50576 per Ccf **(I)**

Plus

DISTRIBUTION CHARGE (consisting of item (A) and (B), below):

(A) Delivery Charge (Updated in Supplement No. 65 – Issued: July 10, 2013; Effective: October 1, 2013):

$0.12833 per Ccf

(B) Surcharges:

Universal Service and Energy Conversation Surcharge; The Restructuring and Consumer Education Surcharge; Other Post Employment Benefit Surcharge; and Distribution System Improvement Charge.

(D) – Decrease, (C) - Change

Note: The Commodity Charge includes the Sales Service Charge, the Merchant Function Charge and the Gas Procurement Charge.

PGW
Gas Supplier Tariff
Pa. P.U.C. No. 1

Supplement No. 106

PHILADELPHIA GAS WORKS

GAS SUPPLIER TARIFF

Issued by: Seth Shapiro
President and CEO

PHILADELPHIA GAS WORKS
800 West Montgomery Avenue
Philadelphia, PA 19122

List of Changes Made by this Tariff

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9.14. LOAD BALANCING CHARGE, 9.14.A. (Page No. 39)
The load balancing charge effective September 1, 2023, is $62.9290 per design day Mcf.

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9.14. LOAD BALANCING CHARGE.

9.14.A.Suppliers for all gas delivered under Firm Transportation Rates, of this Suppliers Tariff shall be charged at $62.9290 per design day Mcf that is fulfilled by PGW storage and peaking assets, for recovery of those costs for Balancing Service, calculated in the manner set forth in the Commission's Order at M-00021612 (entered March 31, 2003) and as set forth below. Such rate for Balancing Service shall be increased or decreased, from time to time, in accordance with applicable law and procedures. **(I)**

9.14.B.Computation of Balancing Service Costs per Dth.

9.14.B.1.Formula. Balancing Service Costs, per design day Mcf, that is fulfilled by PGW storage and peaking assets, shall be computed to the nearest one-hundredth cent ($0.0001) in accordance with the formula set forth below:

$$BSC = (C / S_1) - (E / S_2)$$

Projected Balancing Service Costs, so computed, shall be charged to Suppliers of Firm Transportation Rates per Customer per design day Mcf that is fulfilled by PGW storage and peaking assets,for an enrollment month. The amount of those costs, per Mcf, will vary, if appropriate, based upon annual filings by the Company pursuant to Section 1307(f) of the Public Utility Code and such supplemental filings as may be required or be appropriate under Section 1307(f) or the PUC's regulations adopted pursuant thereto.

9.14.B.2. Definitions. In computing the Balancing Service Costs, per Dth, pursuant to the formula above, the following definitions shall apply:

“BSC” - Balancing Service Costs determined to the nearest one-hundredth cent ($0.0001) to be charged to each design day Mcf that is fulfilled by PGW storage and peaking assets, under Rate Schedule Firm.

"C" - Cost in dollars: for all types of storage and related services, the fixed and variable costs for the projected period when rates will be in effect.

"E" - the net overcollection or undercollection of Balancing Service Costs.
The net overcollection or undercollection shall be determined for the most recent period permitted under law, which shall begin with the month following the last month which was included in the previous overcollection or undercollection calculation reflected in rates. The annual filing date shall be the date specified by the PUC for the Company's Section 1307(f) Tariff filing.

Each overcollection or undercollection statement shall also provide for refund or recovery of amounts necessary to adjust for overrecovery or underrecovery of "E" factor amounts under the previous Balancing Service Costs Rate. Interest shall be computed monthly at the rate as provided for in Section 1307(f) of the Public Utility Code from the month that the overcollection or undercollection occurs to the effective month such overcollection is refunded or undercollection is recouped. Such over billings (or under billings) will be made with interest at the statutory rate**.**

"S_1" – projected Mcf of storage gas/LNG to be delivered to Customers to meet design day needs during the projected period when rates will be in effect.
"S_2" – forecasted Mcf of load balancing volumes during the projected period when rates will be in effect.
(I) – Increase

Tab #2

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GCR FILING

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Schedule 1

Philadelphia Gas Works

Levelized Gas Cost Rate

September 1, 2023

Formula:
GCR = SSC + GAC - IRC
where:

		Demand		Commodity		Total	
S = Firm Sales (Mcf)						**40,639,813**	Schedule 2
Net Natural Gas Expense	**$**	**75,308,492**	**$**	**160,681,969**	**$**	**235,990,461**	
Purchased Electric & Misc Expenses	**$**	**-**	**$**	**462,481**	**$**	**462,481**	
C = Total Applicable GCR Expense	**$**	**75,308,492**	**$**	**161,144,450**	**$**	**236,452,942**	Schedule 3
	$		**$**		**$**		
SSC = C / S	**$**	**1.8531**	**$**	**3.9652**	**$**	**5.8183**	
Adjustment For:							
E-Factor Volumes (Mcf)						**40,639,813**	Schedule 2
Interest	**$**	**(5,483,824)**	**$**	**3,437,481**	**$**	**(2,046,343)**	Schedule 5(a),5(c)
E-Factor Reconciliation	**$**	**(5,646,553)**	**$**	**(19,861,877)**	**$**	**(25,508,431)**	Schedule 4(b),4(c),4(e)
	$	**(11,130,378)**	**$**	**(16,424,396)**	**$**	**(27,554,774)**	
E = E-Factor	**$**	**(0.2739)**	**$**	**(0.4041)**	**$**	**(0.6780)**	
Interruptible Revenue Credit					**$**	**476,372**	Schedule 10(a)
IRC = Interruptible Revenue Credit / S					**$**	**0.0117**	
Net Applicable GCR Expenses = C + E - Interruptible Revenue Credit					**$**	**208,421,796**	
GCR = SSC + GAC - IRC					**$**	**5.1286**	
SSC in effect 9/01/23	**$**	**1.8329**	**$**	**3.9221**	**$**	**5.7550**	
GAC in effect 9/01/23	**$**	**(0.2770)**	**$**	**(0.4087)**	**$**	**(0.6857)**	
IRC in effect 9/01/23					**$**	**(0.0117)**	
GCR in effect 9/01/23					**$**	**5.0576**	Schedule 7
Recovery Test on:							
Firm Sales (Mcf)						**40,639,813**	
= GCR Projected Recovery					**$**	**205,504,440**	
= Load Balancing Revenue					**$**	**2,879,314**	
= LNG Sales Demand Revenue					**$**	**37,062**	
= Total Projected Recovery					**$**	**208,420,816**	Schedule 7
Compared To							
Net Applicable GCR Expenses					**$**	**208,421,796**	
= Net Over/(Under) Recovery					**$**	**(980)**	
Degree Days						**3,923**	

Item 53.64(a)
Schedule 1(a)

Philadelphia Gas Works

Price To Compare ($ / MCF)

September 1, 2023

	GCR	GCA	SSC	MFC	MFC Charge	GPC Charge	GAC	Price to Compare
	1	2	3 = (1 - 2)	4	5 = (1* 4)	6	7	8 = (3+ 5 + 6 + 7)
Residential GS	$5.0576	($0.6974)	$5.7550	3.62%	$0.1831	$0.0400	($0.6857)	$5.2924
Commercial GS	$5.0576	($0.6974)	$5.7550	0.91%	$0.0460	$0.0400	($0.6857)	$5.1553
Industrial GS	$5.0576	($0.6974)	$5.7550	0.42%	$0.0212	$0.0400	($0.6857)	$5.1305
Phila. Housing Authority (PHA)	$5.0576	($0.6974)	$5.7550	0.00%	$0.0000	$0.0400	($0.6857)	$5.1093
Municipal (MS)	$5.0576	($0.6974)	$5.7550	0.00%	$0.0000	$0.0400	($0.6857)	$5.1093
NGV Firm	$5.0576	($0.6974)	$5.7550	0.00%	$0.0000	$0.0400	($0.6857)	$5.1093
Phila. Housing Authority (GS)	$5.0576	($0.6974)	$5.7550	3.62%	$0.1831	$0.0400	($0.6857)	$5.2924

SALES & VOLUMES

SEPTEMBER 2023 THROUGH AUGUST 2024

MONTH		TOTAL VOLUMES	FIRM TRANSPORT VOLUMES	BILLED SALES	INTERRUPTIBLE SALES	LNG SALES	AIR CONDITIONING SALES	GCR FIRM SALES	SENIOR CITIZEN DISCOUNT SALES	APPLICABLE VOLUMES
		1	2	3 = (1 - 2)	4	4A	4B	5 = (3 - 4 - 4A - 4B)	6	7 = (5 - 6 + 2)
SEPTEMBER	2023	1,061,825	178,935	882,890	32,457	1,639	-	848,793	1,540	1,026,188
OCTOBER		1,406,654	246,878	1,159,777	33,539	1,694	-	1,124,544	2,111	1,369,310
NOVEMBER		3,164,126	506,484	2,657,641	32,457	1,639	-	2,623,545	5,930	3,124,099
DECEMBER		5,787,738	882,496	4,905,242	33,539	1,694	-	4,870,009	11,398	5,741,107
JANUARY	2024	10,636,560	1,521,130	9,115,430	33,539	1,694	-	9,080,197	22,039	10,579,287
FEBRUARY		9,071,376	1,293,014	7,778,362	31,375	1,585	-	7,745,402	18,445	9,019,971
MARCH		6,876,464	992,751	5,883,714	33,539	1,694	-	5,848,480	13,481	6,827,750
APRIL		4,589,463	648,859	3,940,604	32,457	1,639	-	3,906,508	8,780	4,546,586
MAY		2,113,913	316,677	1,797,235	33,539	1,694	-	1,762,002	3,500	2,075,179
JUNE		1,302,856	216,864	1,085,992	32,457	1,639	-	1,051,895	1,670	1,267,089
JULY		1,139,124	192,396	946,728	33,539	1,694	-	911,495	1,388	1,102,503
AUGUST		1,086,005	183,828	902,177	33,539	1,694	-	866,943	1,300	1,049,471
TOTAL		48,236,104	7,180,311	41,055,792	395,979	20,000	-	40,639,813	91,583	47,728,542

Item 53.64(a)
Schedule 2

PROJECTED APPLICABLE FUEL EXPENSE
SUMMARY
SEPTEMBER 2023 - AUGUST 2024

	SEPTEMBER 2023	OCTOBER 2023	NOVEMBER 2023	DECEMBER 2023	JANUARY 2024	FEBRUARY 2024	MARCH 2024	APRIL 2024	MAY 2024	JUNE 2024	JULY 2024	AUGUST 2024	TOTAL
NATURAL GAS BILLED													
DEMAND CHARGE	$5,751,195	$5,691,386	$6,782,901	$7,145,047	$7,144,284	$7,171,778	$7,080,925	$5,745,364	$5,685,240	$5,743,570	$5,683,760	$5,683,042	$75,308,492
COMMODITY CHARGE	$7,221,401	$11,502,390	$14,390,824	$17,684,150	$19,959,185	$16,039,102	$15,058,907	$12,846,256	$12,087,092	$9,419,825	$9,876,321	$9,698,415	$155,783,869
TOTAL NATURAL GAS BILLED	$12,972,597	$17,193,775	$21,173,725	$24,829,197	$27,103,470	$23,210,880	$22,139,832	$18,591,620	$17,772,332	$15,163,395	$15,560,080	$15,381,457	$231,092,361
INTERRUPTIBLE AND FIRM A/C CREDIT	$104,120	$114,291	$122,213	$141,324	$147,060	$133,790	$127,724	$113,042	$111,990	$108,132	$114,951	$116,248	$1,454,886
SENDOUT VOLUME IN MCF	33,255	34,364	33,255	34,364	34,364	32,147	34,364	33,255	34,364	33,255	34,364	34,364	405,715
DKT CONVERSION FACTOR	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	
PRICE $/DKT	$3.0280	$3.2166	$3.5541	$3.9774	$4.1388	$4.0250	$3.5946	$3.2875	$3.1518	$3.1446	$3.2351	$3.2716	
GAS USED FOR UTILITY	$24,841	$37,465	$86,731	$183,900	$231,066	$234,254	$129,582	$82,661	$40,474	$24,709	$20,349	$21,775	$1,117,807
NATURAL GAS													
TO STORAGE	($4,605,431)	($4,920,566)	($92,643)	$ -	$ -	$ -	$ -	($3,818,610)	($7,433,945)	($6,793,471)	($7,090,501)	($6,887,336)	($41,642,504)
FROM STORAGE PGW	$ -	$ -	$ 1,170,026	$ 10,711,767	$ 16,124,433	$ 14,285,704	$ 6,471,693	$ 877,909	$ -	$ -	$ -	$ -	$49,641,533
FT FROM STORAGE	$ -	$ -	$ 93,930	$ 993,970	$ 1,613,203	$ 1,157,771	$ 359,391	$ 28,008	$ -	$ -	$ -	$ -	$4,246,273
NET NATURAL GAS STORAGE	($4,605,431)	($4,920,566)	$1,077,383	$10,711,767	$16,124,433	$14,285,704	$6,471,693	($2,940,701)	($7,433,945)	($6,793,471)	($7,090,501)	($6,887,336)	$7,999,028
LNG													
TO STORAGE	($77)	($409,021)	($1,460,235)	($1,336,619)	($957,018)	($1,472,380)	($1,224,491)	($641,480)	($208,203)	$ -	$ -	$ -	($7,709,524)
FROM LNG PGW	$362,743	$373,816	$364,383	$989,133	$1,711,010	$1,135,308	$397,138	$381,898	$392,431	$379,148	$391,786	$391,786	$7,270,580
FT FROM LNG	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
NET LNG STORAGE	$362,666	($35,205)	($1,095,852)	($347,486)	$753,992	($337,072)	($827,353)	($259,582)	$184,228	$379,148	$391,786	$391,786	($438,944)
LNG SALES FROM LNG TANK	$7,176	$7,415	$7,139	$7,362	$7,448	$7,078	$7,763	$7,495	$7,684	$7,413	$7,660	$7,660	$89,291
SENDOUT VOLUMES (MCF)	1,639	1,694	1,639	1,694	1,694	1,585	1,694	1,639	1,694	1,639	1,694	1,694	
@ AVG LNG COMMODITY RATE	$4.3772	$4.3772	$4.3548	$4.3457	$4.3969	$4.4664	$4.5824	$4.5720	$4.5358	$4.5218	$4.5218	$4.5218	
NET NATURAL GAS EXPENSE	$8,593,695	$12,078,833	$20,939,174	$34,860,893	$43,596,320	$36,784,390	$27,519,103	$15,188,138	$10,362,467	$8,608,817	$8,718,405	$8,740,224	$235,990,461
APPLICABLE GCR EXPENSE													
NET NATURAL GAS EXPENSE	$8,593,695	$12,078,833	$20,939,174	$34,860,893	$43,596,320	$36,784,390	$27,519,103	$15,188,138	$10,362,467	$8,608,817	$8,718,405	$8,740,224	$235,990,461
PURCHASED ELECTRIC & MISC	$24,409	$28,784	$26,057	$23,127	$163,786	$35,777	$38,151	$26,065	$21,480	$25,031	$22,864	$26,948	$462,481
TOTAL APPLICABLE EXPENSES	$8,618,104	$12,107,617	$20,965,231	$34,884,020	$43,760,107	$36,820,167	$27,557,254	$15,214,203	$10,383,947	$8,633,849	$8,741,269	$8,767,173	$236,452,942
TOTAL GCR FIRM SALES	848,793	1,124,544	2,623,545	4,870,009	9,080,197	7,745,402	5,848,480	3,906,508	1,762,002	1,051,895	911,495	866,943	40,639,813

Schedule 3

Item 53.64(a)

ACTUAL / ESTIMATED DATA - FISCAL YEAR 2023
PHILADELPHIA GAS WORKS

	7/1/2022	Split Month 9/1/2022	10/1/2022	Split Month 12/1/2022	1/1/2023	Split Month 3/1/2023	4/1/2023
Rate							
SSC in Effect	$ 9.1655	$ 8.8381	$ 8.5106	$ 8.2042	$ 7.8977	$ 6.4190	$ 4.9402
GAC in Effect	$ (0.1505)	$ (0.0070)	$ 0.1366	$ 0.1366	$ 0.1366	$ 0.0915	$ 0.0463
IRC in Effect	$ (0.0093)	$ (0.0097)	$ (0.0101)	$ (0.0101)	$ (0.0101)	$ (0.0113)	$ (0.0125)
Total Effective	$ 9.0057	$ 8.8214	$ 8.6371	$ 8.3307	$ 8.0242	$ 6.4991	$ 4.9740
Percentage of Total							
C-Factor	101.8%	100.2%	98.5%	98.5%	98.4%	98.8%	99.3%
E-Factor	-1.7%	-0.1%	1.6%	1.6%	1.7%	1.4%	0.9%
IRC-Factor	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.2%	-0.3%
Total	100%	100%	100%	100%	100%	100%	100%
C-Factor							
Demand Charge in Effect	$ 1.9504	$ 1.9286	$ 1.9067	$ 2.0053	$ 2.1038	$ 1.7113	$ 1.3188
Commodity in Effect	$ 7.2151	$ 6.9095	$ 6.6039	$ 6.1989	$ 5.7939	$ 4.7077	$ 3.6214
	$ 9.1655	$ 8.8381	$ 8.5106	$ 8.2042	$ 7.8977	$ 6.4190	$ 4.9402
Percentage of Total							
Demand Charge in Effect	21.3%	21.8%	22.4%	24.4%	26.6%	26.7%	26.7%
Commodity in Effect	78.7%	78.2%	77.6%	75.6%	73.4%	73.3%	73.3%
	100%	100%	100%	100%	100%	100%	100%

	C-Factor Over/(Under)	E-Factor Over/(Under)	Interest Over/(Under)	FY 2022 Final E-Factor
Fiscal Year 2022 E-Factor	$ (11,450,832)	$ 5,630,296	$ (415,944)	$ (6,236,480)

Actual

Fiscal Year 2022-2023	Sep-2022 Actual	Oct-2022 Actual	Nov-2022 Actual	Dec-2022 Actual	Jan-2023 Estimated	Feb-2023 Estimated	Mar-2023 Estimated	Apr-2023 Estimated	May-2023 Estimated	Jun-2023 Estimated	Jul-2023 Estimated	Aug-2023 Estimated	FY 2023 Total
GCR Firm Sales	817,159	1,462,604	2,490,685	5,352,924	7,626,255	7,449,770	5,841,069	3,904,598	1,759,361	1,048,562	908,529	864,195	39,525,713
GCR Revenue Billed	$ 7,201,117	$ 12,613,579	21,520,311	44,447,241	$ 61,194,597	$ 59,778,446	$ 37,961,691	$ 19,421,470	$ 8,751,062	$ 5,215,548	$ 4,519,025	$ 4,298,506	$ 286,922,593
Migration Rider Revenue Billed	$ -	$ -		-	$ -	$ -	$ -	$ -	$ -		$ -	$ -	$ -
Load Balancing Billed	$ 147,057	$ 72,928	527,633	232,289	$ 249,588	$ 250,179	$ 234,371	$ 234,752	$ 235,203	$ 235,602	$ 236,001	$ 236,400	$ 2,892,002
LNG Sales Demand Charge Credit	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue Billed	$ 7,348,174	$ 12,686,507	$ 22,047,944	$ 44,679,530	$ 61,444,185	$ 60,028,624	$ 38,196,062	$ 19,656,222	$ 8,986,265	$ 5,451,151	$ 4,755,026	$ 4,534,906	$ 289,814,595
Natural Gas Refunds	$ -	$ 3,358	$ 666	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,023
Demand Charges	$ 6,960,932	$ 7,644,875	$ 5,256,730	$ 5,285,159	$ 4,437,421	$ 4,723,793	$ 4,353,327	$ 6,293,902	$ 6,251,418	$ 6,291,480	$ 6,249,130	$ 6,248,009	$ 69,996,175
Supply Charges	$ 5,072,487	$ 10,897,705	$ 19,016,480	$ 49,983,766	$ 34,554,447	$ 28,873,967	$ 19,357,177	$ 9,627,959	$ 4,266,010	$ 2,710,893	$ 2,898,402	$ 2,926,675	$ 190,185,969
Net Cost of Fuel	$ 12,033,418	$ 18,542,581	$ 24,273,210	$ 55,268,925	$ 38,991,868	$ 33,597,761	$ 23,710,504	$ 15,921,861	$ 10,517,428	$ 9,002,373	$ 9,147,533	$ 9,174,684	$ 260,182,144

Schedule 4(a)

Item 53.64 (a)

FISCAL YEAR 2023
PHILADELPHIA GAS WORKS
C-FACTOR RECONCILIATION

MONTH	NET COST OF FUEL 1 ($)	TOTAL GCR REVENUE BILLED 2 ($)	C FACTOR % of GCR 3	C FACTOR REVENUE BILLED 4 = (2 * 3) ($)	LOAD BALANCING REVENUE 5 ($)	LNG SALES GCR BILLED REVENUE 6 ($)	TOTAL C FACTOR REVENUE BILLED 7 = (4 + 5 + 6) ($)	NATURAL GAS REFUNDS 8 ($)	OVER/ (UNDER) RECOVERY 9 = (7 + 8 - 1) ($)	CUMULATIVE OVER/(UNDER) 10 ($)
SEPTEMBER 2022	12,033,418	7,201,117	100.2%	7,214,709	147,057	0	7,361,766	0	(4,671,652)	(4,671,652)
OCTOBER	18,542,581	12,613,579	98.5%	12,428,839	72,928	0	12,501,767	3,358	(6,037,456)	(10,709,109)
NOVEMBER	24,273,210	21,520,311	98.5%	21,205,122	527,633	0	21,732,755	666	(2,539,790)	(13,248,898)
DECEMBER	55,268,925	44,447,241	98.5%	43,772,315	232,289	0	44,004,603	0	(11,264,322)	(24,513,221)
JANUARY 2023	38,991,868	61,194,597	98.4%	60,229,876	249,588	0	60,479,464	0	21,487,596	(3,025,625)
FEBRUARY	33,597,761	59,778,446	98.4%	58,836,050	250,179	0	59,086,229	0	25,488,468	22,462,843
MARCH	23,710,504	37,961,691	98.8%	37,493,529	234,371	0	37,727,900	0	14,017,396	36,480,240
APRIL	15,921,861	19,421,470	99.3%	19,289,494	234,752	0	19,524,246	0	3,602,386	40,082,625
MAY	10,517,428	8,751,062	99.3%	8,691,596	235,203	0	8,926,799	0	(1,590,629)	38,491,996
JUNE	9,002,373	5,215,548	99.3%	5,180,107	235,602	0	5,415,709	0	(3,586,663)	34,905,333
JULY	9,147,533	4,519,025	99.3%	4,488,317	236,001	0	4,724,318	0	(4,423,215)	30,482,119
AUGUST	9,174,684	4,298,506	99.3%	4,269,296	236,400	0	4,505,696	0	(4,668,988)	25,813,130
Total	260,182,144	286,922,593		283,099,249	2,892,002	0	285,991,251	4,023	25,813,130	

Item 53.64 (b)
Schedule 4(b)

FISCAL YEAR 2023
PHILADELPHIA GAS WORKS
E-FACTOR RECONCILIATION

			GCR SALES 1 (MCF)	TOTAL E-FACTOR VOLUMES 2 (MCF)	TOTAL GCR REVENUE BILLED 3 ($)	E- FACTOR % of GCR 4	E-FACTOR GCR REVENUE BILLED 5=(3 * 4) ($)	OVER/(UNDER) PROJECTED RECOVERY 6 ($)
PRIOR YEAR E-FACTOR								$ (6,236,480)
Adjustment for FY 21 in NCF								$ 1,682,378
								$ (4,554,102)
MONTH								
SEPTEMBER 2022		**Actual**	817,159	817,159	$ 7,201,117	-0.1%	$ (5,673)	$ (4,559,776)
OCTOBER		**Actual**	1,462,604	1,462,604	$ 12,613,579	1.6%	$ 199,490	$ (4,360,286)
NOVEMBER		**Actual**	2,490,685	2,490,685	$ 21,520,311	1.6%	$ 340,354	$ (4,019,931)
DECEMBER		**Actual**	5,352,924	5,352,924	$ 44,447,241	1.6%	$ 728,814	$ (3,291,117)
JANUARY	**2023**	**Estimated**	7,626,255	7,626,255	$ 61,194,597	1.7%	$ 1,041,746	$ (2,249,371)
FEBRUARY		**Estimated**	7,449,770	7,449,770	$ 59,778,446	1.7%	$ 1,017,639	$ (1,231,732)
MARCH		**Estimated**	5,841,069	5,841,069	$ 37,961,691	1.4%	$ 534,166	$ (697,567)
APRIL		**Estimated**	3,904,598	3,904,598	$ 19,421,470	0.9%	$ 180,783	$ (516,784)
MAY		**Estimated**	1,759,361	1,759,361	$ 8,751,062	0.9%	$ 81,458	$ (435,325)
JUNE		**Estimated**	1,048,562	1,048,562	$ 5,215,548	0.9%	$ 48,548	$ (386,777)
JULY		**Estimated**	908,529	908,529	$ 4,519,025	0.9%	$ 42,065	$ (344,712)
AUGUST		**Estimated**	864,195	864,195	$ 4,298,506	0.9%	$ 40,012	$ (304,700)
TOTAL			39,525,713	39,525,713	286,922,593		$ 4,249,402	

Item 53.64 (c)
Schedule 4(c)

FISCAL YEAR 2023
PHILADELPHIA GAS WORKS
IRC FACTOR REVENUE BILLED

MONTH	TOTAL GCR REVENUE BILLED 1	IRC- FACTOR % of GCR 2	IRC-FACTOR REVENUE BILLED 3 = (1 * 2)
	$		$
SEPTEMBER 2022	7,201,117	-0.11%	(7,918)
OCTOBER	12,613,579	-0.12%	(14,750)
NOVEMBER	21,520,311	-0.12%	(25,165)
DECEMBER	44,447,241	-0.12%	(53,887)
JANUARY 2023	61,194,597	-0.13%	(77,025)
FEBRUARY	59,778,446	-0.13%	(75,243)
MARCH	37,961,691	-0.17%	(66,004)
APRIL	19,421,470	-0.25%	(48,807)
MAY	8,751,062	-0.25%	(21,992)
JUNE	5,215,548	-0.25%	(13,107)
JULY	4,519,025	-0.25%	(11,357)
AUGUST	4,298,506	-0.25%	(10,802)
TOTALS	286,922,593		(426,057)

FISCAL YEAR 2023
PHILADELPHIA GAS WORKS
RECONCILIATION OF DEMAND CHARGES

MONTH	DEMAND CHARGES LESS LOAD BALANCING CHARGE REVENUE	DEMAND REVENUE BILLED	MONTHLY DEMAND OVER/(UNDER)	CUMULATIVE DEMAND OVER/(UNDER)
	1	2	3 = (2 - 1)	4
	$	$	$	$
SEPTEMBER 2022	6,813,874	1,575,933	(5,237,942)	(5,237,942)
OCTOBER	7,571,947	2,788,747	(4,783,201)	(10,021,142)
NOVEMBER	4,729,097	4,748,989	19,892	(10,001,250)
DECEMBER	5,052,870	10,733,952	5,681,081	(4,320,168)
JANUARY 2023	4,187,833	16,044,116	11,856,283	7,536,115
FEBRUARY	4,473,614	15,672,826	11,199,212	18,735,327
MARCH	4,118,956	9,995,821	5,876,865	24,612,192
APRIL	6,059,150	5,149,384	(909,766)	23,702,425
MAY	6,016,215	2,320,245	(3,695,970)	20,006,456
JUNE	6,055,877	1,382,844	(4,673,033)	15,333,422
JULY	6,013,129	1,198,169	(4,814,961)	10,518,462
AUGUST	6,011,609	1,139,700	(4,871,908)	5,646,553
TOTALS	67,104,173	72,750,726	5,646,553	

Item 53.64(a)
Schedule 5(a)

FISCAL YEAR 2023
PHILADELPHIA GAS WORKS
INTEREST CALCULATION

MONTH	NET COST OF FUEL [1] 1 ($)	TOTAL C FACTOR REVENUE BILLED [1] 2 ($)	OVER/ (UNDER) RECOVERY 3 = (2 - 1) ($)	INTEREST RATE 4 ($)	TIME FACTOR 5 ($)	INTEREST EXPENSE 6 =(3*4*5) ($)	INTEREST NATURAL GAS REFUNDS [2] 7 ($)	TOTAL INTEREST 8 = (6+7) ($)
SEPTEMBER 22	12,033,418	7,361,766	(4,671,652)	7.50%	18/12	(525,561)	-	(525,561)
OCTOBER	18,542,581	12,501,767	(6,040,814)	7.50%	17/12	(641,837)	285	(641,552)
NOVEMBER	24,273,210	21,732,755	(2,540,456)	7.50%	16/12	(254,046)	53	(253,993)
DECEMBER	55,268,925	44,004,603	(11,264,322)	7.50%	15/12	(1,056,030)	-	(1,056,030)
JANUARY 23	38,991,868	60,479,464	21,487,596	7.50%	14/12	1,880,165	-	1,880,165
FEBRUARY	33,597,761	59,086,229	25,488,468	7.50%	13/12	2,070,938	-	2,070,938
MARCH	23,710,504	37,727,900	14,017,396	7.50%	12/12	1,051,305	-	1,051,305
APRIL	15,921,861	19,524,246	3,602,386	7.50%	11/12	247,664	-	247,664
MAY	10,517,428	8,926,799	(1,590,629)	7.50%	10/12	(99,414)	-	(99,414)
JUNE	9,002,373	5,415,709	(3,586,663)	7.50%	9/12	(201,750)	-	(201,750)
JULY	9,147,533	4,724,318	(4,423,215)	7.50%	8/12	(221,161)	-	(221,161)
AUGUST	9,174,684	4,505,696	(4,668,988)	7.50%	7/12	(204,268)	-	(204,268)
Total	260,182,144	285,991,251	25,809,107			2,046,005	338	2,046,343

(1) See Schedule 4(b)
(2) See Schedule 5(c)

FISCAL YEAR 2023
PHILADELPHIA GAS WORKS
INTEREST ON NATURAL GAS REFUNDS

MONTH	NATURAL GAS REFUNDS [1]	INTEREST RATE	TIME FACTOR	INTEREST ON REFUNDS
	1	2	3	4=(1*2*3)
	($)			($)
SEPTEMBER 22	0	6.00%	18/12	0
OCTOBER	3,358	6.00%	17/12	285
NOVEMBER	666	6.00%	16/12	53
DECEMBER	0	6.00%	15/12	0
JANUARY 23	0	6.00%	14/12	0
FEBRUARY	0	6.00%	13/12	0
MARCH	0	6.00%	12/12	0
APRIL	0	6.00%	11/12	0
MAY	0	6.00%	10/12	0
JUNE	0	6.00%	9/12	0
JULY	0	6.00%	8/12	0
AUGUST	0	6.00%	7/12	0
TOTAL	4,023			338

FISCAL YEAR 2023
PHILADELPHIA GAS WORKS
DEMAND AND COMMODITY INTEREST CALCULATION

MONTH	OVER/(UNDER) RECOVERY (1) 1 ($)	DEMAND CHARGE OVER/(UNDER) RECOVERY (2) 2 ($)	COMMODITY CHARGE OVER/(UNDER) RECOVERY 3=(1-2) ($)	INTEREST RATE 4	TIME FACTOR 5	DEMAND INTEREST EXPENSE 6=(2*4*5) ($)	COMMODITY INTEREST EXPENSE 7=(3*4*5) ($)	TOTAL INTEREST EXPENSE 8=(6+7) ($)	INTEREST ON REFUNDS (3) 9 ($)	TOTAL INTEREST 10=(8+9) ($)
SEPTEMBER 22	(4,671,652)	(5,237,942)	566,289	7.50%	18/12	(589,268)	63,708	(525,561)	0	(525,561)
OCTOBER	(6,040,814)	(10,021,142)	3,980,328	7.50%	17/12	(1,064,746)	422,910	(641,837)	285	(641,552)
NOVEMBER	(2,540,456)	(10,001,250)	7,460,794	7.50%	16/12	(1,000,125)	746,079	(254,046)	53	(253,993)
DECEMBER	(11,264,322)	(4,320,168)	(6,944,154)	7.50%	15/12	(405,016)	(651,014)	(1,056,030)	0	(1,056,030)
JANUARY 23	21,487,596	7,536,115	13,951,481	7.50%	14/12	659,410	1,220,755	1,880,165	0	1,880,165
FEBRUARY	25,488,468	18,735,327	6,753,141	7.50%	13/12	1,522,245	548,693	2,070,938	0	2,070,938
MARCH	14,017,396	24,612,192	(10,594,795)	7.50%	12/12	1,845,914	(794,610)	1,051,305	0	1,051,305
APRIL	3,602,386	23,702,425	(20,100,040)	7.50%	11/12	1,629,542	(1,381,878)	247,664	0	247,664
MAY	(1,590,629)	20,006,456	(21,597,085)	7.50%	10/12	1,250,403	(1,349,818)	(99,414)	0	(99,414)
JUNE	(3,586,663)	15,333,422	(18,920,086)	7.50%	9/12	862,505	(1,064,255)	(201,750)	0	(201,750)
JULY	(4,423,215)	10,518,462	(14,941,676)	7.50%	8/12	525,923	(747,084)	(221,161)	0	(221,161)
AUGUST	(4,668,988)	5,646,553	(10,315,542)	7.50%	7/12	247,037	(451,305)	(204,268)	0	(204,268)
TOTAL FY 2023	25,809,107	96,510,450	(70,701,343)			5,483,824	(3,437,819)	2,046,005	338	2,046,343

Item 53.64(a)
Schedule 5(c)

FISCAL YEAR 2024
PHILADELPHIA GAS WORKS
LOAD BALANCING REVENUE

Month			Load Balancing Revenue Billed ($)
September	2023	Estimated	$ 238,381
October		Estimated	$ 238,633
November		Estimated	$ 239,018
December		Estimated	$ 239,259
January	2024	Estimated	$ 239,518
February		Estimated	$ 239,771
March		Estimated	$ 240,087
April		Estimated	$ 240,340
May		Estimated	$ 240,699
June		Estimated	$ 240,951
July		Estimated	$ 241,203
August		Estimated	$ 241,455
Total			**$ 2,879,314**

CALCULATION OF RECOVERED CHARGES
1307F Filing
September 1, 2023

	50% September	11.5 Months	Total (MCF)	Total ($)
S - Firm Sales (Mcf)	424,397	40,215,417	40,639,813	
C-Factor	$ 4.9402	$ 5.7550		
Projected Recovery	2,096,604	231,439,724		$ 233,536,327
S - Firm Sales (Mcf)	424,397	40,215,417	40,639,813	
IRC-Factor	$ (0.0125)	$ (0.0117)		
Projected Recovery	(5,305)	(470,520)		$ (475,825)
E-Factor Volumes (Mcf)	424,397	40,215,417	40,639,813	
E-Factor	$ 0.0463	$ (0.6857)		
Projected Recovery	19,650	(27,575,711)		$ (27,556,062)
GCR ($ / Mcf)	$ 4.9740	$ 5.0576		
GCR Projected Recovery				$ 205,504,440
Load Balancing Revenue				$ 2,879,314
LNG Sales Demand Revenue				$ 37,062
TOTAL PROJECTED RECOVERY				$ 208,420,816

Item 53.64(a)
Schedule 8

Change In Rates
1307 F Filing
Rates Effective September 1, 2023

Current Rates

	03/01/23 Distribution Charge (1)	03/01/23 GCR (2)	03/01/23 MFC (3)	03/01/23 GPC (4)	03/01/23 Commodity Rate (5)=(1)+(2)+(3)+(4)
Residential GS	$9.2321	$4.9740	$0.1801	$0.0400	$14.4262
Commercial GS	$7.1443	$4.9740	$0.0453	$0.0400	$12.2036
Industrial GS	$7.0895	$4.9740	$0.0209	$0.0400	$12.1244
Phila.Housing Authority (PHA)	$7.4069	$4.9740	$0.0000	$0.0400	$12.4209
Municipal (MS)	$6.7015	$4.9740	$0.0000	$0.0400	$11.7155
Phila.Housing Authority (GS)	$8.4759	$4.9740	$0.1801	$0.0400	$13.6700

September 1, 2023 - Distribution Charge

	Delivery	Surcharges				Total	
	Delivery Charge (6)	Other Post Employment Benefit (7)	Efficiency Cost Recovery (8)	Universal Service & Ener. Cons. (9)	Restructuring & Consumer Education (10)	Total Surcharges (11)=(7)+(8)+(9)+(10)	Distribution Charge / Mcf (12)=(11)+(6)
Residential GS	$7.2955	$0.3385	$0.0171	$1.4690	$0.0000	$1.8246	$9.1201
Commercial GS	$5.1908	$0.3385	$0.0269	$1.4690	$0.0000	$1.8344	$7.0252
Industrial GS	$5.1668	$0.3385	$0.0000	$1.4690	$0.0000	$1.8075	$6.9743
Phila.Housing Authority (PHA)	$5.4534	$0.3385	$0.0269	$1.4690	$0.0000	$1.8344	$7.2878
Municipal (MS)	$4.7765	$0.3385	$0.0000	$1.4690	$0.0000	$1.8075	$6.5840
Phila.Housing Authority (GS)	$6.5393	$0.3385	$0.0171	$1.4690	$0.0000	$1.8246	$8.3639

Proposed Rates

	09/01/23 Distribution Charge (12)	09/01/23 GCR (13)	09/01/23 MFC (14)	09/01/23 GPC (15)	09/01/23 Commodity Rate (16)=(12)+(13)+(14)+(15)	Difference (17)=(16)-(5)
Residential GS	$9.1201	$5.0576	$0.1831	$0.0400	$14.4008	($0.0254)
Commercial GS	$7.0252	$5.0576	$0.0460	$0.0400	$12.1688	($0.0348)
Industrial GS	$6.9743	$5.0576	$0.0212	$0.0400	$12.0931	($0.0313)
Phila.Housing Authority (PHA)	$7.2878	$5.0576	$0.0000	$0.0400	$12.3854	($0.0355)
Municipal (MS)	$6.5840	$5.0576	$0.0000	$0.0400	$11.6816	($0.0339)
Phila.Housing Authority (GS)	$8.3639	$5.0576	$0.1831	$0.0400	$13.6446	($0.0254)

PHILADELPHIA GAS WORKS
SEPTEMBER 1, 2023
UNIVERSAL SERVICE & ENERGY CONSERVATION SURCHARGE

		Expenses in the Surcharge
Enhanced Low Income Retrofit Program (ELIRP)		$ 7,988,818
Customer Responsibility Program (CRP)		$ 59,566,550
Senior Citizen Discount *		$ 1,422,302
February 2023 Under Collection		$ 1,070,068
Total $ to be Recovered		$ 70,047,738
Total Applicable Volumes	Mcf	47,684,587
Universal Service & Energy Conservation Surcharge		**$ 1.4690**

* This is the Senior Citizen Discount based on the Distribution Charge without the Universal Services Surcharge plus the GCR. This is used to calculate the Universal Services Surcharge. The total senior citizen discount is $1,564,969

STATEMENT OF RECONCILIATION
UNIVERSAL SERVICES & ENERGY CONSERVATION SURCHARGE
SEPTEMBER 2022 THROUGH AUGUST 2023

Month		USC Applicable Volumes	USC Charge	USC Revenue Billed	USC Expenses	Monthly Over/(Under) Recovery	Cumulative Over/(Under) Recovery
FY 22 Reconciliation							$ 1,337,511
September 2022	Actual	992,962	$ 1.9902	$ 1,976,193	$ 270,353	$ 1,705,840	$ 3,043,351
October	Actual	1,754,046	$ 1.8920	$ 3,318,655	$ 2,075,986	$ 1,242,669	$ 4,286,020
November	Actual	2,942,220	$ 1.8920	$ 5,566,680	$ 6,578,422	$ (1,011,742)	$ 3,274,278
December	Actual	6,189,652	$ 1.8137	$ 11,226,172	$ 11,704,149	$ (477,977)	$ 2,796,301
January 2023	Estimated	8,854,757	$ 1.7354	$ 15,366,545	$ 17,851,111	$ (2,484,566)	$ 311,735
February	Estimated	8,662,712	$ 1.7354	$ 15,033,271	$ 17,534,033	$ (2,500,762)	$ (2,189,027)
March	Estimated	6,801,100	$ 1.6408	$ 11,158,906	$ 12,310,792	$ (1,151,886)	$ (3,340,913)
April	Estimated	4,531,688	$ 1.5461	$ 7,006,443	$ 7,304,530	$ (298,087)	$ (3,639,000)
May	Estimated	2,065,160	$ 1.5461	$ 3,192,943	$ 2,796,299	$ 396,644	$ (3,242,356)
June	Estimated	1,257,861	$ 1.5461	$ 1,944,778	$ 1,207,151	$ 737,628	$ (2,504,728)
July	Estimated	1,094,354	$ 1.5461	$ 1,691,981	$ 965,429	$ 726,552	$ (1,778,176)
August	Estimated	1,041,851	$ 1.5461	$ 1,610,805	$ 902,697	$ 708,108	$ (1,070,068)

USC Expenses	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	FY 23 TOTAL
ELIRP Expense	$ 51,119	$ 2,032	$ 1,230,378	$ 3,507	$ 820,723	$ 820,723	$ 820,723	$ 820,723	$ 820,723	$ 820,723	$ 820,723	$ 820,723	$ 7,852,817
ELIRP Labor	$ 7,477	$ 6,882	$ 6,882	$ 8,596	$ 13,270	$ 13,270	$ 13,270	$ 13,270	$ 13,270	$ 13,270	$ 13,270	$ 13,270	$ 136,001
Conservation Incentive Credit	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CRP Discount	$ (824,439)	$ 1,018,285	$ 4,314,039	$ 10,578,706	$ 15,670,352	$ 15,365,594	$ 10,247,775	$ 5,338,989	$ 917,962	$ (634,792)	$ (867,903)	$ (926,759)	$ 60,197,809
CRP Forgiveness	$ 979,140	$ 947,472	$ 849,797	$ 796,716	$ 918,744	$ 927,070	$ 939,478	$ 952,141	$ 959,920	$ 956,732	$ 953,416	$ 951,321	$ 11,131,946
Senior Citizen Discount	$ 57,055	$ 101,316	$ 177,326	$ 316,625	$ 428,022	$ 407,375	$ 289,546	$ 179,407	$ 84,423	$ 51,218	$ 45,923	$ 44,142	$ 2,182,379
Bad Debt Expense Offset*	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total	$ 270,353	$ 2,075,986	$ 6,578,422	$ 11,704,149	$ 17,851,111	$ 17,534,033	$ 12,310,792	$ 7,304,530	$ 2,796,299	$ 1,207,151	$ 965,429	$ 902,697	$ 81,500,952

CRP Participation					
Rate Case Participation Rate	80,000	80,000	80,000	80,000	
Actual Participation Rate	50,723	50,981	50,598	50,412	
CRP Under/(Over) Participation	29,277	29,019	29,402	29,588	
Average Shortfall Per CRP Participant					
CRP Discount	$ (824,439)	$ 1,018,285	$ 4,314,039	$ 10,578,706	
Actual Participation Rate	50,723	50,981	50,598	50,412	
Average Shorfall per CRP Participant	$ (16)	$ 20	$ 85	$ 210	
Shortfall*	$ -	$ -	$ -	$ -	
Bad Debt Expense Offset** 5.75%	$ -	$ -	$ -	$ -	

**Bad Debt Expense Offset Applicable When Actual CRP Participation Exceeds 80,000.

Item 53.64 (b)
Schedule 9 (b)

INTERRUPTIBLE REVENUE CREDIT
September 1, 2023

Fiscal Year 2022 Reconciliation (8/31/22)					$	138,896
Margin Adjustment					$	201,059
					$	339,955
MONTH		**IRC CREDIT**		**MARGIN**		
September-22	Actual	$ (7,918)	$	268		
October	Actual	$ (14,750)	$	7,952		
November	Actual	$ (25,165)	$	32,581		
December	Actual	$ (53,887)	$	24,530		
January-23	Estimated	$ (77,025)	$	27,657		
February	Estimated	$ (75,243)	$	22,783		
March	Estimated	$ (66,004)	$	25,225		
April	Estimated	$ (48,807)	$	24,410		
May	Estimated	$ (21,992)	$	25,223		
June	Estimated	$ (13,107)	$	24,412		
July	Estimated	$ (11,357)	$	25,226		
August	Estimated	$ (10,802)	$	25,223		
Act/Est IRC Credit September 2022 to August 2023		$ (426,057)				
Act/Est Margin September 2022 to August 2023			$	265,489	$	265,489
FY 2022 Reconciliation Plus Act/Est Margin September 2022 August 2023					$	605,444
FY 2022 Reconciliation Plus Act/Est Margin September 2022 August 2023					$	605,444
Act/Est IRC Credit September 2022 to August 2023					$	(426,057)
Reconciliation as of August 31, 2023					$	179,387
Margin - September 2023 through August 2024					$	296,985 Schedule 4(b)
September 1, 2023 Interruptible Revenue Credit					$	476,372
GCR Firm Sales						**40,639,813** Schedule 2
September 1, 2023 IRC/Mcf					**$**	**0.0117**

INTERRUPTIBLE REVENUE MARGIN
1307F

MONTH			MARGIN
September-23	Estimated	$	24,343
October	Estimated	$	25,155
November	Estimated	$	24,344
December	Estimated	$	25,153
January-24	Estimated	$	25,153
February	Estimated	$	23,530
March	Estimated	$	25,155
April	Estimated	$	24,343
May	Estimated	$	25,153
June	Estimated	$	24,344
July	Estimated	$	25,156
August	Estimated	$	25,155
Total		$	296,985

INTERRUPTIBLE REVENUE CREDIT
FINALIZED RECONCILIATION FY 2022

Fiscal Year 2021 Reconciliation (8/31/21) $126,169

MONTH		IRC CREDIT	MARGIN	
September-21	Actual	($3,865)	$ 23,451	
October	Actual	($5,658)	$ 15,490	
November	Actual	($16,009)	$ 26,405	
December	Actual	($37,810)	$ 33,788	
January-22	Actual	($58,156)	$ 28,817	
February	Actual	($60,699)	$ 14,406	
March	Actual	($43,855)	$ 36,574	
April	Actual	($31,257)	$ 20,785	
May	Actual	($16,490)	$ 14,820	
June	Actual	($9,625)	$ 18,018	
July	Actual	($8,017)	$ 29,413	
August	Actual	($7,195)	$ 49,396	
Actual IRC Credit September 2021 to August 2022		$ (298,636)		
Actual Margin September 2021 to August 2022			$ 311,363	$ 311,363
FY 2021 Reconciliation Plus Actual Margin September 2021 to August 2022				$ 437,532

FY 2021 Reconciliation Plus Actual Margin September 2021 to August 2022	$ 437,532
Actual IRC Credit September 2021 to August 2022	$ (298,636)
Reconciliation as of August 31, 2022	$ 138,896

OTHER POST EMPLOYMENT BENEFIT (OPEB) SURCHARGE
FISCAL YEAR 2024

FY 2022 Over/(Under) Recovery				($1,695,233)
Month		**OPEB Volumes**	**OPEB Surcharge**	**Revenue Billed**
September 2022	Actual	994,685	$0.3580	$356,097
October	Actual	1,758,344	$0.3789	$666,237
November	Actual	2,949,750	$0.3789	$1,117,660
December	Actual	6,205,535	$0.3789	$2,351,277
January 2023	Estimated	8,877,269	$0.3789	$3,363,597
February	Estimated	8,684,110	$0.3789	$3,290,409
March	Estimated	6,817,447	$0.3789	$2,583,131
April	Estimated	4,542,393	$0.3789	$1,721,113
May	Estimated	2,069,448	$0.3789	$784,114
June	Estimated	1,259,919	$0.3789	$477,383
July	Estimated	1,096,073	$0.3789	$415,302
August	Estimated	1,043,469	$0.3789	$395,370
Total		46,298,443		$17,521,691

FY 2023 Act/Est OPEB & FY 2022 Reconciliation	$15,826,458
FY 2023 Permitted Recovery	$16,000,000
Over/(Under) Recovery	($173,542)

FY 2023 Under Recovery	$173,542
FY 2024 Permitted Recovery	$16,000,000
FY 2024 Recovery	$16,173,542

FY 2024 Volumes	47,776,169

FY 2024 OPEB Surcharge / Mcf	$0.3385

OTHER POST EMPLOYMENT BENEFIT (OPEB) SURCHARGE
FISCAL YEAR 2022 RECONCILIATION

FY 2021 Over/(Under) Recovery ($1,085,287)

Month		OPEB Volumes	OPEB Surcharge	Revenue Billed
September 2021	Actual	1,086,465	$ 0.3422	$ 371,788
October	Actual	1,233,430	$ 0.3371	$ 415,789
November	Actual	3,358,330	$ 0.3371	$ 1,132,093
December	Actual	6,239,766	$ 0.3371	$ 2,103,425
January 2022	Actual	8,588,043	$ 0.3371	$ 2,895,029
February	Actual	8,883,898	$ 0.3371	$ 2,994,762
March	Actual	6,357,825	$ 0.3371	$ 2,143,223
April	Actual	4,344,491	$ 0.3371	$ 1,464,528
May *	Actual	2,311,098	$ 0.3371	$ 779,071
June	Actual	1,260,650	$ 0.3371	$ 424,965
July	Actual	1,032,346	$ 0.3371	$ 348,004
August	Actual	941,489	$ 0.3371	$ 317,376
Total		45,637,832		$15,390,054

FY 2022 Act/Est OPEB & FY 2021 Reconciliation $14,304,767

FY 2022 Permitted Recovery $16,000,000

Over/(Under) Recovery $ (1,695,233)

*** May Volumes Revised**

EFFICIENCY COST RECOVERY (ECR) SURCHARGE

September 1, 2023

Program	Residential & PHA GS	Commercial & PHA	Industrial	Total
Residential Heating Equipment Rebate (RHER)				
Program Expense	$341,117	$23,342	$255	$364,714
Labor Expense	$61,768	$4,227	$46	$66,041
Low Income Thermostate (LITSTAT)				
Program Expense	$75,743	$0	$0	$75,743
Labor Expense	$13,715	$0	$0	$13,715
Commercial & Industrial Equipment Rebate (CIER)				
Program Expense	$2,525	$151,863	$1,496	$155,885
Labor Expense	$457	$27,499	$271	$28,227
High-Efficiency Construction Incentive (HECI)				
Program Expense	$92,860	$0	$0	$92,860
Labor Expense	$16,815	$0	$0	$16,815
EnergySense Smart Thermostat (TSTAT)				
Program Expense	$61,865	$0	$0	$61,865
Labor Expense	$11,202	$0	$0	$11,202
Total Expense	$678,067	$206,930	$2,069	$887,065
Prior Period Reconciliation (8/31/23)	$ (78,647)	$ 83,357	$ (2,032)	$ 2,678
Total	$599,420	$290,286	$37	$889,743
Volumes - Mcf (GCR Firm & Firm Transportation)	34,953,933	10,805,652	823,450	
Efficiency Cost Recovery Surcharge / Mcf	**$0.0171**	**$0.0269**	**$0.0000**	

Item 53.64 (a)
Schedule 12(b)

EFFICIENCY COST RECOVERY (ECR) SURCHARGE
STATEMENT OF RECONCILIATION
FISCAL YEAR 2023

RESIDENTIAL & PHA GS		Actual Sep-22	Actual Oct-22	Actual Nov-22	Actual Dec-22	Estimate Jan-23	Estimate Feb-23	Estimate Mar-23	Estimate Apr-23	Estimate May-23	Estimate Jun-23	Estimate Jul-23	Estimate Aug-23
FY 2022 Over-Collection	**$ 299,342**												
Volume Billed		596,333	1,117,339	1,959,652	4,429,596	6,739,617	6,579,766	5,134,339	3,443,562	1,475,143	801,574	685,425	651,381
ECR Surcharge		$ 0.0119	$ 0.0057	$ 0.0057	$ 0.0091	$ 0.0125	$ 0.0125	$ 0.0121	$ 0.0116	$ 0.0116	$ 0.0116	$ 0.0116	$ 0.0116
Revenue Billed		$ 7,067	$ 6,369	$ 11,170	$ 40,309	$ 84,245	$ 82,247	$ 61,869	$ 39,945	$ 17,112	$ 9,298	$ 7,951	$ 7,556
RHER	**Expense**	$ 961	$ 684	$ 54,204	$ 6,134	$ 26,444	$ 26,444	$ 26,444	$ 26,444	$ 26,444	$ 26,444	$ 26,444	$ 26,444
RHER	**Labor**	$ 3,534	$ 2,318	$ 2,035	$ 4,063	$ 4,698	$ 4,698	$ 4,698	$ 4,698	$ 4,698	$ 4,698	$ 4,698	$ 4,698
HECI	**Expense**	$ 99	$ 297	$ (200)	$ 634	$ 11,504	$ 11,504	$ 11,504	$ 11,504	$ 11,504	$ 11,504	$ 11,504	$ 11,504
HECI	**Labor**	$ 365	$ 1,005	$ (702)	$ 420	$ 1,966	$ 1,966	$ 1,966	$ 1,966	$ 1,966	$ 1,966	$ 1,966	$ 1,966
LITSTAT	**Expense**	$ 71	$ 99	$ 51,562	$ 452	$ 2,945	$ 2,945	$ 2,945	$ 2,945	$ 2,945	$ 2,945	$ 2,945	$ 2,945
LITSTAT	**Labor**	$ 261	$ 336	$ 7,624	$ 300	$ 649	$ 649	$ 649	$ 649	$ 649	$ 649	$ 649	$ 649
CIER	**Expense**	$ 10	$ 8	$ (20)	$ 62	$ 334	$ 334	$ 334	$ 334	$ 334	$ 334	$ 334	$ 334
CIER	**Labor**	$ 36	$ 26	$ (69)	$ 41	$ 58	$ 58	$ 58	$ 58	$ 58	$ 58	$ 58	$ 58
TSTAT	**Expense**	$ 23	$ 280	$ 15,435	$ 150	$ 5,466	$ 5,466	$ 5,466	$ 5,466	$ 5,466	$ 5,466	$ 5,466	$ 5,466
TSTAT	**Labor**	$ 89	$ 948	$ 2,356	$ 99	$ 913	$ 913	$ 913	$ 913	$ 913	$ 913	$ 913	$ 913
Total		$ 5,450	$ 6,000	$ 132,225	$ 12,355	$ 54,975	$ 54,975	$ 54,975	$ 54,975	$ 54,975	$ 54,975	$ 54,975	$ 54,975
Monthly Over/(Under)		$ 1,617	$ 369	$ (121,055)	$ 27,954	$ 29,270	$ 27,272	$ 6,893	$ (15,030)	$ (37,864)	$ (45,677)	$ (47,024)	$ (47,419)
Cumulative Over/(Under)		$ 300,958	$ 301,327	$ 180,273	$ 208,227	$ 237,496	$ 264,768	$ 271,662	$ 256,631	$ 218,768	$ 173,091	$ 126,066	**$ 78,647**
COMMERCIAL & PHA													
FY 2022 Under-Collection	**$ (131,379)**												
Volume Billed		355,022	559,947	841,058	1,484,849	1,765,155	1,746,453	1,411,633	923,441	513,417	402,099	359,704	343,447
ECR Surcharge		$ 0.0168	$ 0.0153	$ 0.0153	$ 0.0282	$ 0.0410	$ 0.0410	$ 0.0348	$ 0.0285	$ 0.0285	$ 0.0285	$ 0.0285	$ 0.0285
Revenue Billed		$ 5,964	$ 8,567	$ 12,868	$ 41,799	$ 72,371	$ 71,605	$ 49,054	$ 26,318	$ 14,632	$ 11,460	$ 10,252	$ 9,788
RHER	**Expense**	$ 320	$ 228	$ (645)	2,045	11,154	11,154	11,154	11,154	11,154	11,154	11,154	11,154
RHER	**Labor**	$ 1,178	$ 773	$ (2,262)	1,354	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933
CIER	**Expense**	$ 541	$ 421	$ 10,194	$ 3,458	$ 17,114	$ 17,114	$ 17,114	$ 17,114	$ 17,114	$ 17,114	$ 17,114	$ 17,114
CIER	**Labor**	$ 1,992	$ 1,426	$ (2,052)	$ 2,290	$ 2,973	$ 2,973	$ 2,973	$ 2,973	$ 2,973	$ 2,973	$ 2,973	$ 2,973
TSTAT	**Expense**	-	-	-	-	-	-	-	-	-	-	-	-
TSTAT	**Labor**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total		$ 4,032	$ 2,847	$ 5,235	$ 9,147	$ 33,174	$ 33,174	$ 33,174	$ 33,174	$ 33,174	$ 33,174	$ 33,174	$ 33,174
Monthly Over/(Under)		$ 1,932	$ 5,720	$ 7,634	$ 32,652	$ 39,197	$ 38,430	$ 15,880	$ (6,856)	$ (18,542)	$ (21,715)	$ (22,923)	$ (23,386)
Cumulative Over/(Under)		$ (129,447)	$ (123,727)	$ (116,093)	$ (83,441)	$ (44,244)	$ (5,814)	$ 10,066	$ 3,209	$ (15,333)	$ (37,048)	$ (59,970)	**$ (83,357)**
INDUSTRIAL													
FY 2022 Over-Collection	**$ 7,620**												
Volume Billed		25,989	45,088	71,261	124,138	125,620	125,945	103,106	65,284	39,787	34,045	30,732	29,343
ECR Surcharge		$ (0.0053)	$ (0.0051)	$ (0.0051)	$ (0.0054)	$ (0.0056)	$ (0.0056)	$ (0.0040)	$ (0.0023)	$ (0.0023)	$ (0.0023)	$ (0.0023)	$ (0.0023)
Revenue Billed		$ (138)	$ (230)	$ (363)	$ (664)	$ (703)	$ (705)	$ (407)	$ (150)	$ (92)	$ (78)	$ (71)	$ (67)
RHER	**Expense**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
RHER	**Labor**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CIER	**Expense**	$ 6	$ 5	$ (12)	$ 37	$ 199	$ 199	$ 199	$ 199	$ 199	$ 199	$ 199	$ 199
CIER	**Labor**	$ 21	$ 15	$ (41)	$ 25	$ 34	$ 34	$ 34	$ 34	$ 34	$ 34	$ 34	$ 34
Total		$ 27	$ 20	$ (53)	$ 62	$ 233	$ 233	$ 233	$ 233	$ 233	$ 233	$ 233	$ 233
Monthly Over/(Under)		$ (165)	$ (250)	$ (311)	$ (726)	$ (936)	$ (938)	$ (640)	$ (383)	$ (324)	$ (311)	$ (303)	$ (300)
Cumulative Over/(Under)		$ 7,455	$ 7,205	$ 6,894	$ 6,169	$ 5,232	$ 4,294	$ 3,654	$ 3,271	$ 2,947	$ 2,636	$ 2,332	**$ 2,032**

PHILADELPHIA GAS WORKS
LOAD BALANCING CHARGE RECONCILIATION
CALENDAR YEAR 2022

			2022
Actual Storage and Peaking Cost		**$**	**22,280,668**
WSS Volumes MDQ DTH	**17,558**		
Daily Demand Charge	**0.45932**		
Total Storage and Peaking Cost *			**2,943,546.48**
Prior Year Carryover		**$**	**(72,830)**
		$	**25,151,384**
Design Day Requirements	**Annual Mcf**		**685,131**
Fulfilled from FT Capacity	**Annual Mcf**		**(297,287)**
WSS Storage Withdrawal Volumes MCF *			**16,981**
Fulfilled from Storage and Peaking Assets	**Annual Mcf**		**404,824**
Annual Load Balancing Cost per Excess Mcf	**Annual $ / Mcf**	**$**	**62.1292**
BTU Conversion			**1.034**
	Annual $ / Dth	**$**	**60.0863**
Monthly Charge /Dth		**$**	**5.0072**
Over/(Under) Recovery		**$**	**(56,691)**
Interest		**$**	**(5,280)**
Carryover		**$**	**(61,971)**

LOAD BALANCING CHARGE

2022 EXPENSE

	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Total
Transco	$ 448,951	$ 431,551	$ 440,857	$ 509,750	$ 528,229	$ 522,552	$ 538,508	$ 537,426	$ 524,000	$ 521,781	$ 514,072	$ 539,205	$ 6,056,882
Tetco	$ 890,239	$ 1,137,503	$ 1,153,955	$ 1,134,648	$ 1,148,657	$ 1,101,300	$ 1,136,700	$ 1,117,078	$ 1,126,991	$ 1,129,917	$ 1,191,969	$ 1,143,871	$ 13,412,828
Eastern	$ 140,168	$ 133,434	$ 133,688	$ 243,846	$ 249,809	$ 247,393	$ 249,495	$ 249,495	$ 245,902	$ 243,183	$ 258,042	$ 258,330	$ 2,652,784
WSS /Transportation	$ 3,159	$ 984	$ 301	$ 490	$ 226	$ 12	$ -	$ -	$ -	$ -	$ 543	$ 2,153	$ 7,868
Purchased Electric	$ 19,932	$ 20,223	$ 14,578	$ 12,351	$ 10,344	$ 10,541	$ 10,541	$ 13,808	$ 11,210	$ 11,176	$ 26,897	$ (11,295)	$ 150,306
Total	$ 1,502,449	$ 1,723,695	$ 1,743,379	$ 1,901,086	$ 1,937,265	$ 1,881,798	$ 1,935,244	$ 1,917,806	$ 1,908,103	$ 1,906,056	$ 1,991,523	$ 1,932,264	$ 22,280,668

2022 INTEREST CALCULATION

MONTH *	LOAD BALANCING VOLUME (1) (DTH)	RATE* (2) ($)	LOAD BALANCING CHARGE (3)=(1)*(2) ($)	CHARGES BILLED (4) ($)	OVER/(UNDER) RECOVERY (5)=(4)-(3) ($)	TIME FACTOR (6)	INTEREST RATE (7)	INTEREST EXPENSE (8)=(5)*(6)*(7) ($)
Jan-22	46,537	5.0072	233,020	$ 208,528	(24,492)	18/12	4.25%	(1,561)
Feb-22	46,581	5.0072	233,240	$ 208,725	(24,516)	17/12	4.25%	(1,476)
Mar-22	46,842	5.0072	234,547	$ 221,239	(13,308)	16/12	4.50%	(798)
Apr-22	46,330	5.0072	231,984	$ 218,826	(13,158)	15/12	4.75%	(781)
May-22	41,639	5.0072	208,495	$ 196,649	(11,845)	14/12	4.75%	(656)
Jun-22	42,933	5.0072	214,974	$ 212,239	(2,735)	13/12	5.25%	(156)
Jul-22	43,197	5.0072	216,296	$ 213,544	(2,752)	12/12	5.50%	(151)
Aug-22	44,471	5.0072	222,675	$ 147,057	(75,618)	11/12	5.75%	(3,986)
Sep-22	49,307	5.0072	246,890	$ 72,928	(173,962)	10/12	5.50%	(7,973)
Oct-22	51,968	5.0072	260,214	$ 527,633	267,418	9/12	5.75%	11,532
Nov-22	44,587	5.0072	223,256	$ 232,289	9,033	8/12	6.25%	376
Dec-22	46,156	5.0072	231,112	$ 240,357	9,245	7/12	6.50%	351
Total	550,548		2,756,704	2,700,013	(56,691)			(5,280)

Item 53.64(a)
Schedule 13(b)

PHILADELPHIA GAS WORKS
LOAD BALANCING CHARGE
SEPTEMBER 1, 2023

	Units		
Storage and Peaking Cost	$	**$**	**22,477,868**
WSS Volumes MDQ DTH	**17,557.5**		**2,951,611**
Daily Demand Charge	**$0.45932**		
Total Storage and Peaking Cost			**25,429,479**
Design Day Requirements	Annual mcf		**685,131**
Fulfilled from FT Capacity (Mcf)			**(297,287)**
WSS Storage Withdrawal Volumes MCF			**16,981**
Fulfilled from Storage and Peaking Assets	Annual mcf		**404,824**
Annual Storage and Peaking Cost per Excess	Annual $ / mcf	**$**	**62.8161**
Per Mcf Over / (Under) Adjustment	$	**$**	**(0.1129)**
Load Balancing Charge	$	**$**	**62.9290**

Over / (Under) Recovery	**$**	**(56,691)**
Interest	**$**	**(5,280)**
Total Over/(Under) Recovery	**$**	**(61,971)**
Forecasted SSPC Volumes		**549,059**
Per Mcf Over / (Under) Adjustment	**$**	**(0.1129)**

Natural Gas Prices March 1, 2023 1307f GCR Filing

Basis Differentials

	NYMEX	TRANSCO				TETCO						
	Futures 01/18/23 Close	Sta 45	Sta 65	Sta 85	Zone 6 Non-NY	ELA	WLA	ETX	STX	Average ELA/ETX	M-1	M-2
Jan-23	4.709											
Feb-23	3.586	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Mar-23	3.253	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Apr-23	3.218	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
May-23	3.283	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Jun-23	3.421	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Jul-23	3.551	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Aug-23	3.584	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Sep-23	3.528	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Oct-23	3.597	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Nov-23	3.995	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Dec-23	4.423	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Jan-24	4.670	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Feb-24	4.516	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Mar-24	4.053	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Apr-24	3.616	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
May-24	3.583	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Jun-24	3.694	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Jul-24	3.793	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)
Aug-24	3.825	(0.04)	(0.05)	(0.03)	0.03	(0.13)	(0.08)	(0.14)	(0.08)	(0.13)	(0.13)	(0.69)

Prices Used For Gas Cost Inputs

	TRANSCO				TETCO						
	Sta 45	Sta 65	Sta 85	Zone 6 Non-NY	ELA	WLA	ETX	STX	Average ELA/ETX	M-1	M-2
Jan-23	4.76	5.36	5.39	5.02	4.36	4.36	4.39	4.16	4.38	4.76	3.79
Feb-23	3.55	3.54	3.55	3.62	3.46	3.51	3.45	3.50	3.46	3.46	2.89
Mar-23	3.21	3.21	3.22	3.28	3.13	3.17	3.12	3.17	3.12	3.12	2.56
Apr-23	3.18	3.17	3.18	3.25	3.09	3.14	3.08	3.14	3.09	3.09	2.53
May-23	3.24	3.24	3.25	3.31	3.16	3.20	3.15	3.20	3.15	3.15	2.59
Jun-23	3.38	3.37	3.39	3.45	3.30	3.34	3.29	3.34	3.29	3.29	2.73
Jul-23	3.51	3.50	3.52	3.58	3.43	3.47	3.42	3.47	3.42	3.42	2.86
Aug-23	3.55	3.54	3.55	3.61	3.46	3.50	3.45	3.50	3.45	3.46	2.89
Sep-23	3.49	3.48	3.49	3.56	3.40	3.45	3.39	3.45	3.40	3.40	2.84
Oct-23	3.56	3.55	3.56	3.63	3.47	3.52	3.46	3.51	3.47	3.47	2.90
Nov-23	3.96	3.95	3.96	4.03	3.87	3.92	3.86	3.91	3.86	3.87	3.30
Dec-23	4.38	4.38	4.39	4.45	4.30	4.34	4.29	4.34	4.29	4.29	3.73
Jan-24	4.63	4.62	4.64	4.70	4.55	4.59	4.53	4.59	4.54	4.54	3.98
Feb-24	4.48	4.47	4.48	4.55	4.39	4.44	4.38	4.43	4.39	4.39	3.82
Mar-24	4.01	4.01	4.02	4.08	3.93	3.97	3.92	3.97	3.92	3.92	3.36
Apr-24	3.58	3.57	3.58	3.65	3.49	3.54	3.48	3.53	3.49	3.49	2.92
May-24	3.54	3.54	3.55	3.61	3.46	3.50	3.45	3.50	3.45	3.45	2.89
Jun-24	3.66	3.65	3.66	3.72	3.57	3.61	3.56	3.61	3.56	3.57	3.00
Jul-24	3.75	3.75	3.76	3.82	3.67	3.71	3.66	3.71	3.66	3.66	3.10
Aug-24	3.79	3.78	3.79	3.86	3.70	3.75	3.69	3.74	3.69	3.70	3.13

Item 53.64(a)
Schedule 15

Item 53.64(a)
Schedule 16

Philadelphia Gas Works
Calculation of UFG and Retainage Percentages
Twelve Months Ending August 31,2022

	UFG	RETAINAGE
	Total Distribution System (MCF)	**Firm Sales Sales Only (MCF)**
A. Gas Received For Delivery To Customers		
From Interstate Pipelines directly into the Distribution System	73,065,491	73,065,491
Less gas delivered for Interruptible Customers sendout		26,769,654
From Interstate Pipelines directly into the Distribution System for Firm Customers Only		46,295,837
B. Gas Delivered		
To Customers	71,207,452	
To Customers - Delivered to Firm Customers Only		44,716,968
C. Adjustment		
Adjustment for PUC UFG Report and Retainage		
- Company use	300,196	300,196
- Unbilled Sales		50,812
Adjustment for PUC UFG Report Only		
- Maintenance and Construction	454	
- Gate station bleeds	7,743	
- Correction for 6" w.c.	532,372	
- Third party damage	-	-
Total Adjustments	840,766	351,008
D. Distribution UFG and Retainage Rate		
Total Distribution System Unaccounted for Gas	1,017,273	
Unaccounted For and Accounted For Volumes Applicable to Retainage % Calculation		1,227,861
E. Percent UFG and Retainage		
UFG Percentage	**1.4%**	
Retainage Percentage		**2.7%**

Tab #3

Docket No. R-2023-3038069
Item 53.64(c)(1)

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:

(1) A complete list in schedule format of each spot and each long term source of gas supply, production, transportation and storage, used in the past 12 months, which 12-month period shall end 2 months prior to the date of the tariff filing, separately setting forth on a monthly basis the quantity and price of gas delivered, produced, transported or stored, maximum daily quantity levels, maximum annual quantity levels, a detailed description of warrantee or penalty provisions, including liquidated damages, take or pay provisions or minimum bill or take provisions of the purchases, balancing provisions and copies of Federal tariffs and contract provisions relating to the purchases—including demand and commodity components. With regard to each contemplated future source of supply, production, transportation or storage, during each of the next 20 months for each source, provide the name of the source, the maximum daily quantity, the maximum annual quantity, the minimum take levels, a detailed description of warrantee or penalty provisions, including liquidated damages, take or pay provisions or minimum bill or take provisions of the purchases, balancing provisions and contractual or tariffed terms of the purchases, copies of applicable Federal tariffs, the expiration date of each contract, the date when each contract was most recently negotiated and the details of the negotiation—such as meeting held, offers made, and changes in contractual obligation—and whether current proceedings, negotiations or renegotiations are pending before the Federal Energy Regulatory Commission, and the like, to modify the price, quantity or another condition of purchase, and if so, the details of the proceedings, negotiations or renegotiations. Gas supply sources which individually represent

less than 3% of the total system supply may be shown collectively, such as other local gas purchases.

Response:

The attached schedules described below contain details of the requested information. Information concerning PGW's Transportation and Storage contracts are addressed in section 53.64(c) in the February 1, 2023 Prefiling.

Schedule 1 – Twelve (12) month purchased gas costs expressed in terms of volumes and dollars for the period January 1, 2022 to December 31, 2022. This schedule reflects finalized numbers through the month of December.

Schedule 2 – Actual capacity release credits by pipeline by month for the period January 1, 2022 through December 31, 2022 was provided in the February 1, 2023 Prefiling.

Schedule 3 – Twenty (20) month forecasted summary of total fuel purchased for the period January 1, 2022 through August 31, 2023.

Schedule 4 – Twenty (20) month forecast of capacity release credits by pipeline by month for the period January 1, 2022 through August 31, 2023.

Schedule 5 - Detailed description of warrantee or penalty provisions, including liquidated damages, take or pay provisions or minimum bill or take provisions of the purchases, balancing provisions and copies of Federal tariffs and contract provisions relating to the purchases—including demand and commodity components was provided in the February 1, 2023 Prefiling.

1307F 53.64 (c)(1)-Schedule 1

Philadelphia Gas Works

Summary Of Total Purchased

	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
Williams	$ 2,453,780	$ 2,216,013	$ 2,346,485	$ 2,766,184	$ 2,859,372	$ 1,852,972	$ 1,897,936	$ 2,329,253	$ 2,552,589	$ 2,856,260	$ 1,304,930	$ 1,428,829
Texas Eastern	$ 2,204,686	$ 4,162,651	$ 4,018,623	$ 4,615,747	$ 4,192,828	$ 4,247,992	$ 4,330,161	$ 4,176,341	$ 4,126,970	$ 4,740,460	$ 3,061,208	$ 2,991,939
Eastern Gas	$ 140,168	$ 133,434	$ 133,688	$ 243,846	$ 249,809	$ 247,393	$ 249,495	$ 249,495	$ 245,902	$ 243,183	$ 258,042	$ 258,330
Spot Purchases -Transco	$ 3,484	$ 217,841	$ 74,632	$ 51,655	$ 157,684	$ 126,703	$ 3,818	$ 57,514	$ 398,999	$ 6,850	$ 76,706	$ 399,467
Spot Purchases -Transco												
Spot Purchases -Tetco												
Transco Supply2												
Transco Supply3												
Transco Supply6	$ 1,838,455	$ 2,586,220	$ 2,063,205									
Transco Supply7				$ 785,585	$ 1,118,325	$ 1,343,250	$ 1,107,475	$ 5,207,225	$ 3,599,250	$ 2,584,005	$ 791,701	$ 1,104,507
Transco Supply8												
Transco Supply10												
Transco Supply12												
Transco Supply14												
Transco Supply17												
Transco Supply20												
Transco Supply21												
Transco Supply22												
Transco Supply23												
Transco Supply24												
Transco Supply25												
Transco Supply26												
Transco Supply27												
Transco Supply28												
Transco Supply29												
Transco Supply30	$ 2,681,000	$ 2,246,242	$ 906,900	$ 1,727,900	$ 388,200	$ 6,000	$ 6,200	$ 6,200	$ 6,000	$ 284,400		
Transco Supply31												
Transco Supply32	$ 3,362,875	$ 2,987,375	$ 1,335,500	$ 3,780,775	$ 5,002,945	$ 2,165,250	$ 2,070,025	$ 2,070,025	$ 1,666,000	$ 2,690,125	$ 2,726,225	$ 6,429,889
Transco Supply33												
Transco Supply34	$ 1,257,283	$ 1,772,610	$ 1,405,895									
Transco Supply35												
Transco Supply36												
Transco Supply37	$ 3,007,698	$ 4,312,630	$ 3,395,198	$ 1,887,229	$ 2,908,938	$ 3,487,009	$ 3,088,019	$ 3,042,851	$ 2,559,137	$ 2,644,441	$ 4,583,100	$ 6,445,985
Transco Supply40	$ 2,007,112	$ 2,903,710	$ 2,255,540	$ 624,300	$ 959,760	$ 1,149,300	$ 848,160	$ 1,231,010	$ 1,159,800	$ 642,010	$ 2,578,003	$ 3,636,219
Transco Supply41											$ 111,075	$ 828,425
Transco Supply42											$ 439,275	$ 2,448,250
Tetco Supply1												
Tetco Supply2												
Tetco Supply3												
Tetco Supply4												
Tetco Supply5												
Tetco Supply7												
Tetco Supply13				$ 1,972,125	$ 2,930,663	$ 3,529,125	$ 3,566,550	$ 3,343,350	$ 3,003,750	$ 2,552,850		
Tetco Supply14												
Tetco Supply16	$ 1,226,438	$ 2,003,750	$ 1,466,688	$ 395,100	$ 586,830	$ 706,500	$ 560,790	$ 560,790	$ 542,700	$ 560,790		
Tetco Supply17												
Tetco Supply18												
Tetco Supply19												
Tetco Supply20												
Tetco Supply21												
Tetco Supply22												
Tetco Supply23												
Tetco Supply24	$ 499,100	$ 809,200	$ 595,200	$ 1,059,150	$ 1,570,615	$ 1,889,550	$ 1,501,640	$ 1,501,640	$ 1,453,200	$ 1,501,640	$ 3,893,550	$ 7,244,219
Tetco Supply25												
Tetco Supply26	$ 2,942,550	$ 2,600,000	$ 850,200	$ 227,184	$ 704,700	$ 135,990	$ 3,271,710	$ 2,331,465	$ 1,148,780	$ 2,202,175		
Tetco Supply27												
Tetco Supply28											$ 1,042,695	$ 2,266,999
Tetco Supply29												
Tetco Supply30												
Tetco Supply31												
Tetco Supply32												
Tetco Supply33	$ 1,501,541	$ 2,580,955	$ 1,793,435	$ 597,000	$ 914,500	$ 1,116,000	$ 798,250	$ 1,128,400	$ 1,104,750	$ 1,141,575	$ 1,724,772	$ 2,947,530
Tetco Supply34	$ 266,213	$ 455,490	$ 323,873	$ 368,100	$ 558,930	$ 679,500	$ 684,015	$ 640,770	$ 499,500	$ 516,150	$ 336,150	$ 520,800
Tetco Supply35	$ 1,734,807	$ 1,798,655	$ 1,061,891	$ 129,900	$ 293,825	$ 2,250	$ 255,475	$ 2,325	$ 29,400	$ 346,300		
Tetco Supply36												
Tetco Supply37	$ 1,226,438	$ 2,003,750	$ 1,466,688									
Tetco Supply38											$ 695,850	$ 2,195,288
TOTAL COSTS	**$ 28,353,626**	**$ 35,790,528**	**$ 25,493,638**	**$ 21,231,780**	**$ 25,397,924**	**$ 22,684,785**	**$ 24,239,718**	**$ 27,878,654**	**$ 24,096,727**	**$ 25,513,213**	**$ 23,623,282**	**$ 41,146,674**
Storage Injection	$ 17,210	$ 16,286	$ 16,452	$ 9,708	$ 90,693	$ 52,457	$ 90,737	$ 72,081	$ 77,223	$ 57,225	$ 87,801	$ 9,060
Storage Withdrawal	$ 174,325	$ 95,894	$ 98,837	$ 56,350	$ 3,858	$ 2,158	$ -	$ -	$ -	$ 5,544	$ 51,279	$ 96,160

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

	1/1/2023: Jan	2/1/2023: Feb	3/1/2023: Mar	4/1/2023: Apr	5/1/2023: May	6/1/2023: Jun	7/1/2023: Jul	8/1/2023: Aug	9/1/2023: Sep	10/1/2023: Oct
Williams	$ 1,916,320	$ 2,007,765	$ 1,785,804	$ 2,270,482	$ 2,251,177	$ 2,253,847	$ 2,233,748	$ 2,233,362	$ 2,024,422	$ 2,025,251
Texas Eastern	$ 2,790,834	$ 3,002,428	$ 2,747,798	$ 4,033,937	$ 4,038,671	$ 3,996,773	$ 3,932,821	$ 3,931,781	$ 3,643,996	$ 3,670,626
Dominion	$ 211,218	$ 207,780	$ 206,490	$ 215,210	$ 219,028	$ 215,001	$ 209,487	$ 209,487	$ 208,932	$ 209,487
Spot Purchases - Transco	$ -	$ 611,006	$ 141,593	$ 791,037	$ 764,988	$ 309,314	$ 331,941	$ 335,068	$ 319,125	$ 924,634
Spot Purchases - Tecto	$ 2,195,511	$ 2,254,306	$ 2,026,821	$ 4,233,170	$ 4,134,020	$ 2,510,001	$ 1,844,874	$ 1,959,742	$ 1,679,430	$ 3,560,313
Transco Supply 7	$ 833,900	$ 498,190	$ 499,953	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 32	$ 4,337,903	$ 1,709,974	$ 1,264,028	$ 1,357,522	$ 516,301	$ 45,000	$ 46,500	$ 46,500	$ 45,000	$ 1,274,281
Transco Supply 33	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 34	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 35	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 36	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 37	$ 5,100,972	$ 2,809,593	$ 2,806,092	$ 1,353,302	$ 1,429,113	$ 1,446,090	$ 1,555,694	$ 1,571,280	$ 1,494,997	$ 1,577,420
Transco Supply 38	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 39	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 40	$ 2,695,719	$ 1,553,269	$ 1,543,302	$ 442,020	$ 466,829	$ 472,470	$ 508,369	$ 513,484	$ 488,520	$ 515,499
Transco Supply 41	$ 17,825	$ 122,684	$ 17,825	$ 17,250	$ 17,825	$ 17,250	$ 17,825	$ 17,825	$ 17,250	$ 134,699
Transco Supply 42	$ 346,997	$ 398,083	$ 65,100	$ 63,000	$ 65,100	$ 63,000	$ 65,100	$ 65,100	$ 63,000	$ 497,939
Tetco Supply 24	$ 3,161,914	$ 2,145,020	$ 2,189,441	$ 557,538	$ 1,099,006	$ 1,283,248	$ 1,320,880	$ 1,278,240	$ 1,366,800	$ 1,205,156
Tetco Supply 25	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 26	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 27	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 28	$ 1,455,915	$ 841,714	$ 537,694	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 29	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 30	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 31	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 32	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 33	$ 2,057,784	$ 1,223,712	$ 1,178,445	$ 315,750	$ 336,350	$ 346,200	$ 377,890	$ 383,005	$ 362,250	$ 385,020
Tetco Supply 34	$ 465,000	$ 217,812	$ 210,180	$ 200,250	$ 212,970	$ 218,520	$ 237,894	$ 240,963	$ 228,150	$ 242,172
Tetco Supply 35	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 36	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 37	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 38	$ 1,414,003	$ 1,224,510	$ 1,034,829	$ 199,500	$ 709,763	$ 951,285	$ 996,472	$ 964,492	$ 1,030,725	$ 971,279
FT PAYBACK ADJUSTMENT	$ -	$ -	$ -	$ -	$ 785,910	$ 785,910	$ 785,910	$ 785,910	$ -	$ -
Total Costs	$ 29,001,814	$ 20,827,846	$ 18,255,394	$ 16,049,968	$ 15,475,230	$ 13,342,089	$ 12,893,585	$ 12,964,418	$ 12,972,597	$ 17,193,775

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

	11/1/2023: Nov	12/1/2023: Dec	1/1/2024: Jan	2/1/2024: Feb	3/1/2024: Mar	4/1/2024: Apr	5/1/2024: May	6/1/2024: Jun	7/1/2024: Jul	8/1/2024: Aug
Williams	$ 2,707,125	$ 2,837,746	$ 2,892,535	$ 2,870,309	$ 2,700,887	$ 2,057,271	$ 2,037,096	$ 2,035,240	$ 2,009,375	$ 2,007,426
Texas Eastern	$ 4,105,607	$ 4,539,376	$ 4,592,659	$ 4,542,084	$ 4,548,345	$ 3,714,775	$ 3,712,441	$ 3,727,355	$ 3,692,177	$ 3,681,373
Dominion	$ 202,511	$ 213,066	$ 219,954	$ 216,841	$ 205,646	$ 205,586	$ 219,028	$ 218,166	$ 216,562	$ 214,781
Spot Purchases - Transco	$ 692,797	$ 543,312	$ 801,014	$ 678,517	$ 242,099	$ 1,378,554	$ 1,730,996	$ 1,092,043	$ 1,159,080	$ 1,168,983
Spot Purchases - Tecto	$ 4,055,493	$ 6,521,456	$ 6,940,456	$ 5,750,688	$ 5,789,407	$ 4,428,654	$ 4,020,858	$ 3,297,323	$ 3,924,918	$ 4,197,468
Transco Supply 7	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 32	$ 1,302,412	$ 873,954	$ 1,116,310	$ 847,627	$ 355,678	$ 1,975,353	$ 1,447,563	$ 45,000	$ 46,500	$ 46,500
Transco Supply 33	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 34	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 35	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 36	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 37	$ 2,159,703	$ 2,490,419	$ 2,639,731	$ 2,382,338	$ 2,266,754	$ 1,535,220	$ 1,570,808	$ 1,570,872	$ 1,669,994	$ 1,685,108
Transco Supply 38	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 39	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transco Supply 40	$ 1,873,875	$ 2,163,047	$ 2,293,882	$ 2,069,580	$ 1,967,060	$ 501,720	$ 513,329	$ 513,420	$ 545,879	$ 550,839
Transco Supply 41	$ 155,913	$ 105,621	$ 180,113	$ 151,159	$ 58,023	$ 201,607	$ 71,072	$ 17,250	$ 17,825	$ 17,825
Transco Supply 42	$ 556,484	$ 328,488	$ 614,431	$ 476,153	$ 185,694	$ 655,267	$ 268,227	$ 63,000	$ 65,100	$ 65,100
Tetco Supply 24	$ 1,174,472	$ 1,949,701	$ 2,153,780	$ 999,780	$ 1,619,000	$ 759,446	$ 1,524,550	$ 1,744,510	$ 1,564,975	$ 1,214,949
Tetco Supply 25	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 26	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 27	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 28	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 29	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 30	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 31	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 32	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 33	$ 1,520,765	$ 1,798,154	$ 1,928,982	$ 1,728,225	$ 1,602,178	$ 375,450	$ 382,850	$ 387,150	$ 415,400	$ 420,360
Tetco Supply 34	$ 270,180	$ 318,990	$ 341,961	$ 306,501	$ 284,580	$ 236,070	$ 240,870	$ 243,090	$ 260,400	$ 263,376
Tetco Supply 35	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 36	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 37	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tetco Supply 38	$ 396,389	$ 145,867	$ 387,662	$ 191,076	$ 314,481	$ 566,647	$ 1,094,213	$ 1,270,545	$ 1,033,463	$ 908,936
FT PAYBACK ADJUSTMENT	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,061,568	$ 1,061,568	$ 1,061,568	$ 1,061,568
Total Costs	$ 21,173,725	$ 24,829,197	$ 27,103,470	$ 23,210,881	$ 22,139,832	$ 18,591,620	$ 17,772,332	$ 15,163,395	$ 15,560,080	$ 15,381,457

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

Volumes (Dth)

	1/1/2023: Jan	2/1/2023: Feb	3/1/2023: Mar	4/1/2023: Apr	5/1/2023: May	6/1/2023: Jun	7/1/2023: Jul	8/1/2023: Aug	9/1/2023: Sep	10/1/2023: Oct
Spot Purchases - Transco	-	172,674	44,172	249,499	236,436	91,689	94,746	94,746	91,689	260,497
Spot Purchases - Tetco	579,290	779,228	791,727	1,676,503	1,596,147	920,088	645,512	677,877	592,391	1,226,003
Transco Supply 7	155,000	140,000	155,000	-	-	-	-	-	-	-
Transco Supply 32	786,134	455,000	360,000	405,249	142,200	-	-	-	-	339,372
Transco Supply 33	-	-	-	-	-	-	-	-	-	-
Transco Supply 34	-	-	-	-	-	-	-	-	-	-
Transco Supply 35	-	-	-	-	-	-	-	-	-	-
Transco Supply 36	-	-	-	-	-	-	-	-	-	-
Transco Supply 37	914,500	826,000	914,500	457,080	472,316	457,080	472,316	472,316	457,080	472,316
Transco Supply 38	-	-	-	-	-	-	-	-	-	-
Transco Supply 39	-	-	-	-	-	-	-	-	-	-
Transco Supply 40	529,697	478,436	529,697	150,000	155,000	150,000	155,000	155,000	150,000	155,000
Transco Supply 41	-	30,000	-	-	-	-	-	-	-	32,795
Transco Supply 42	52,300	95,497	-	-	-	-	-	-	-	121,454
Tetco Supply 24	833,051	740,000	853,434	218,431	421,933	468,200	460,000	440,000	480,000	412,864
Tetco Supply 25	-	-	-	-	-	-	-	-	-	-
Tetco Supply 26	-	-	-	-	-	-	-	-	-	-
Tetco Supply 27	-	-	-	-	-	-	-	-	-	-
Tetco Supply 28	384,400	291,200	210,242	-	-	-	-	-	-	-
Tetco Supply 29	-	-	-	-	-	-	-	-	-	-
Tetco Supply 30	-	-	-	-	-	-	-	-	-	-
Tetco Supply 31	-	-	-	-	-	-	-	-	-	-
Tetco Supply 32	-	-	-	-	-	-	-	-	-	-
Tetco Supply 33	529,666	478,408	529,666	150,000	155,000	150,000	155,000	155,000	150,000	155,000
Tetco Supply 34	93,000	84,000	93,000	90,000	93,000	90,000	93,000	93,000	90,000	93,000
Tetco Supply 35	-	-	-	-	-	-	-	-	-	-
Tetco Supply 36	-	-	-	-	-	-	-	-	-	-
Tetco Supply 37	-	-	-	-	-	-	-	-	-	-
Tetco Supply 38	370,327	420,000	400,143	75,000	270,000	345,000	345,000	330,000	360,000	330,860
Total Volumes	5,227,366	4,990,443	4,881,581	3,471,762	3,542,031	2,672,057	2,420,574	2,417,938	2,371,161	3,599,161

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

Volumes (Dth)

	11/1/2023: Nov	12/1/2023: Dec	1/1/2024: Jan	2/1/2024: Feb	3/1/2024: Mar	4/1/2024: Apr	5/1/2024: May	6/1/2024: Jun	7/1/2024: Jul	8/1/2024: Aug
Spot Purchases - Transco	175,503	124,171	173,286	151,845	60,442	386,312	489,604	299,477	309,459	309,459
Spot Purchases - Tetco	1,228,193	1,748,380	1,745,148	1,504,234	1,723,038	1,515,106	1,391,301	1,098,741	1,266,103	1,340,188
Transco Supply 7	-	-	-	-	-	-	-	-	-	-
Transco Supply 32	314,391	185,386	227,870	176,540	73,240	530,783	388,774	-	-	-
Transco Supply 33	-	-	-	-	-	-	-	-	-	-
Transco Supply 34	-	-	-	-	-	-	-	-	-	-
Transco Supply 35	-	-	-	-	-	-	-	-	-	-
Transco Supply 36	-	-	-	-	-	-	-	-	-	-
Transco Supply 37	585,000	604,500	604,500	565,500	604,500	457,080	472,316	457,080	472,316	472,316
Transco Supply 38	-	-	-	-	-	-	-	-	-	-
Transco Supply 39	-	-	-	-	-	-	-	-	-	-
Transco Supply 40	512,610	529,697	529,697	495,523	529,697	150,000	155,000	150,000	155,000	155,000
Transco Supply 41	35,000	20,000	35,000	30,000	10,000	51,456	15,000	-	-	-
Transco Supply 42	124,561	60,000	118,472	92,633	30,000	165,308	57,222	-	-	-
Tetco Supply 24	353,868	521,046	540,000	260,000	480,000	257,765	525,381	579,310	502,831	385,935
Tetco Supply 25	-	-	-	-	-	-	-	-	-	-
Tetco Supply 26	-	-	-	-	-	-	-	-	-	-
Tetco Supply 27	-	-	-	-	-	-	-	-	-	-
Tetco Supply 28	-	-	-	-	-	-	-	-	-	-
Tetco Supply 29	-	-	-	-	-	-	-	-	-	-
Tetco Supply 30	-	-	-	-	-	-	-	-	-	-
Tetco Supply 31	-	-	-	-	-	-	-	-	-	-
Tetco Supply 32	-	-	-	-	-	-	-	-	-	-
Tetco Supply 33	512,580	529,666	529,666	495,494	529,666	150,000	155,000	150,000	155,000	155,000
Tetco Supply 34	90,000	93,000	93,000	87,000	93,000	90,000	93,000	90,000	93,000	93,000
Tetco Supply 35	-	-	-	-	-	-	-	-	-	-
Tetco Supply 36	-	-	-	-	-	-	-	-	-	-
Tetco Supply 37	-	-	-	-	-	-	-	-	-	-
Tetco Supply 38	116,979	36,302	94,845	47,421	90,482	190,394	375,000	420,000	330,000	286,869
Total Volumes	4,048,684	4,452,147	4,691,485	3,906,189	4,224,064	3,944,204	4,117,597	3,244,608	3,283,709	3,197,768

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

Cost of Natural Gas

Suppliers	**1/1/2023: Jan**	**2/1/2023: Feb**	**3/1/2023: Mar**	**4/1/2023: Apr**	**5/1/2023: May**	**6/1/2023: Jun**	**7/1/2023: Jul**	**8/1/2023: Aug**	**9/1/2023: Sep**	**10/1/2023: Oct**
TR Spot	$ -	$ 611,006	$ 141,593	$ 791,037	$ 764,988	$ 309,314	$ 331,941	$ 335,068	$ 319,125	$ 924,634
Supplier 7	$ 833,900	$ 498,190	$ 499,953	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 32	$ 4,337,903	$ 1,709,974	$ 1,264,028	$ 1,357,522	$ 516,301	$ 45,000	$ 46,500	$ 46,500	$ 45,000	$ 1,274,281
Supplier 33	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 34	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 35	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 36	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 37	$ 5,100,972	$ 2,809,593	$ 2,806,092	$ 1,353,302	$ 1,429,113	$ 1,446,090	$ 1,555,694	$ 1,571,280	$ 1,494,997	$ 1,577,420
Supplier 38	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 39	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 40	$ 2,695,719	$ 1,553,269	$ 1,543,302	$ 442,020	$ 466,829	$ 472,470	$ 508,369	$ 513,484	$ 488,520	$ 515,499
Supplier 41	$ 17,825	$ 122,684	$ 17,825	$ 17,250	$ 17,825	$ 17,250	$ 17,825	$ 17,825	$ 17,250	$ 134,699
Supplier 42	$ 346,997	$ 398,083	$ 65,100	$ 63,000	$ 65,100	$ 63,000	$ 65,100	$ 65,100	$ 63,000	$ 497,939
Total Suppliers	$ 13,333,316	$ 7,702,799	$ 6,337,892	$ 4,024,132	$ 3,260,156	$ 2,353,123	$ 2,525,429	$ 2,549,257	$ 2,427,892	$ 4,924,472
Transportation Costs										
Tr Spot	$ 163,460	$ 139,363	$ 126,534	$ 27,586	$ 23,839	$ 11,298	$ 11,675	$ 11,675	$ 11,298	$ 38,543
Williams Total	$ 163,460	$ 139,363	$ 126,534	$ 27,586	$ 23,839	$ 11,298	$ 11,675	$ 11,675	$ 11,298	$ 38,543
Total Costs	$ 13,496,776	$ 7,842,162	$ 6,464,426	$ 4,051,718	$ 3,283,995	$ 2,364,422	$ 2,537,104	$ 2,560,932	$ 2,439,190	$ 4,963,015

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

Cost of Natural Gas

Suppliers	**11/1/2023: Nov**	**12/1/2023: Dec**	**1/1/2024: Jan**	**2/1/2024: Feb**	**3/1/2024: Mar**	**4/1/2024: Apr**	**5/1/2024: May**	**6/1/2024: Jun**	**7/1/2024: Jul**	**8/1/2024: Aug**
TR Spot	$ 692,797	$ 543,312	$ 801,014	$ 678,517	$ 242,099	$ 1,378,554	$ 1,730,996	$ 1,092,043	$ 1,159,080	$ 1,168,983
Supplier 7	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 32	$ 1,302,412	$ 873,954	$ 1,116,310	$ 847,627	$ 355,678	$ 1,975,353	$ 1,447,563	$ 45,000	$ 46,500	$ 46,500
Supplier 33	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 34	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 35	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 36	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 37	$ 2,159,703	$ 2,490,419	$ 2,639,731	$ 2,382,338	$ 2,266,754	$ 1,535,220	$ 1,570,808	$ 1,570,872	$ 1,669,994	$ 1,685,108
Supplier 38	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 39	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 40	$ 1,873,875	$ 2,163,047	$ 2,293,882	$ 2,069,580	$ 1,967,060	$ 501,720	$ 513,329	$ 513,420	$ 545,879	$ 550,839
Supplier 41	$ 155,913	$ 105,621	$ 180,113	$ 151,159	$ 58,023	$ 201,607	$ 71,072	$ 17,250	$ 17,825	$ 17,825
Supplier 42	$ 556,484	$ 328,488	$ 614,431	$ 476,153	$ 185,694	$ 655,267	$ 268,227	$ 63,000	$ 65,100	$ 65,100
Total Suppliers	$ 6,741,184	$ 6,504,842	$ 7,645,481	$ 6,605,375	$ 5,075,308	$ 6,247,721	$ 5,601,994	$ 3,301,585	$ 3,504,379	$ 3,534,355
Transportation Costs										
Tr Spot	$ 110,357	$ 121,926	$ 153,599	$ 140,838	$ 89,354	$ 50,753	$ 32,181	$ 13,148	$ 13,586	$ 13,586
Williams Total	$ 110,357	$ 121,926	$ 153,599	$ 140,838	$ 89,354	$ 50,753	$ 32,181	$ 13,148	$ 13,586	$ 13,586
Total Costs	$ 6,851,540	$ 6,626,768	$ 7,799,080	$ 6,746,213	$ 5,164,662	$ 6,298,474	$ 5,634,175	$ 3,314,733	$ 3,517,964	$ 3,547,941

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

Volumes (Dth)

Suppliers	**1/1/2023: Jan**	**2/1/2023: Feb**	**3/1/2023: Mar**	**4/1/2023: Apr**	**5/1/2023: May**	**6/1/2023: Jun**	**7/1/2023: Jul**	**8/1/2023: Aug**	**9/1/2023: Sep**	**10/1/2023: Oct**
TR Spot	-	172,674	44,172	249,499	236,436	91,689	94,746	94,746	91,689	260,497
Supplier 7	155,000	140,000	155,000	-	-	-	-	-	-	-
Supplier 32	786,134	455,000	360,000	405,249	142,200	-	-	-	-	339,372
Supplier 33	-	-	-	-	-	-	-	-	-	-
Supplier 34	-	-	-	-	-	-	-	-	-	-
Supplier 35	-	-	-	-	-	-	-	-	-	-
Supplier 36	-	-	-	-	-	-	-	-	-	-
Supplier 37	914,500	826,000	914,500	457,080	472,316	457,080	472,316	472,316	457,080	472,316
Supplier 38	-	-	-	-	-	-	-	-	-	-
Supplier 39	-	-	-	-	-	-	-	-	-	-
Supplier 40	529,697	478,436	529,697	150,000	155,000	150,000	155,000	155,000	150,000	155,000
Supplier 41	-	30,000	-	-	-	-	-	-	-	32,795
Supplier 42	52,300	95,497	-	-	-	-	-	-	-	121,454
Total Volumes	2,437,631	2,197,607	2,003,369	1,261,829	1,005,952	698,769	722,062	722,062	698,769	1,381,434

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

Volumes (Dth)

Suppliers	**11/1/2023: Nov**	**12/1/2023: Dec**	**1/1/2024: Jan**	**2/1/2024: Feb**	**3/1/2024: Mar**	**4/1/2024: Apr**	**5/1/2024: May**	**6/1/2024: Jun**	**7/1/2024: Jul**	**8/1/2024: Aug**
TR Spot	175,503	124,171	173,286	151,845	60,442	386,312	489,604	299,477	309,459	309,459
Supplier 7	-	-	-	-	-	-	-	-	-	-
Supplier 32	314,391	185,386	227,870	176,540	73,240	530,783	388,774	-	-	-
Supplier 33	-	-	-	-	-	-	-	-	-	-
Supplier 34	-	-	-	-	-	-	-	-	-	-
Supplier 35	-	-	-	-	-	-	-	-	-	-
Supplier 36	-	-	-	-	-	-	-	-	-	-
Supplier 37	585,000	604,500	604,500	565,500	604,500	457,080	472,316	457,080	472,316	472,316
Supplier 38	-	-	-	-	-	-	-	-	-	-
Supplier 39	-	-	-	-	-	-	-	-	-	-
Supplier 40	512,610	529,697	529,697	495,523	529,697	150,000	155,000	150,000	155,000	155,000
Supplier 41	35,000	20,000	35,000	30,000	10,000	51,456	15,000	-	-	-
Supplier 42	124,561	60,000	118,472	92,633	30,000	165,308	57,222	-	-	-
Total Volumes	1,747,065	1,523,755	1,688,825	1,512,040	1,307,879	1,740,940	1,577,916	906,557	936,775	936,775

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

	1/1/2023: Jan	2/1/2023: Feb	3/1/2023: Mar	4/1/2023: Apr	5/1/2023: May	6/1/2023: Jun	7/1/2023: Jul	8/1/2023: Aug	9/1/2023: Sep	10/1/2023: Oct
WSS										
Injection	$ -	$ -	$ -	$ 506	$ 409	$ 396	$ 409	$ 409	$ 396	$ 409
Withdrawal	$ 704	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Demand Charges	$ 66,625	$ 66,625	$ 66,625	$ 66,625	$ 66,625	$ 66,625	$ 66,625	$ 66,625	$ 66,625	$ 66,625
Total Charges	$ 67,329	$ 66,625	$ 66,625	$ 67,131	$ 67,034	$ 67,021	$ 67,034	$ 67,034	$ 67,021	$ 67,034
S2										
Injection	$ -	$ -	$ -	$ 1,267	$ 3,114	$ 4,004	$ 2,619	$ 2,619	$ 2,535	$ 2,619
Withdrawal	$ 5,916	$ 9,983	$ 7,355	$ 4,265	$ -	$ -	$ -	$ -	$ -	$ -
Demand Charges	$ 65,739	$ 65,739	$ 65,739	$ 65,739	$ 65,739	$ 65,739	$ 65,739	$ 65,739	$ 65,739	$ 65,739
Total Charges	$ 71,655	$ 75,722	$ 73,094	$ 71,271	$ 68,852	$ 69,742	$ 68,358	$ 68,358	$ 68,274	$ 68,358
GSS										
Injection	$ 644	$ -	$ -	$ 18,327	$ 25,117	$ 20,453	$ 21,135	$ 21,135	$ 20,453	$ 21,135
Withdrawal	$ 45,649	$ 46,296	$ 14,489	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Demand Charges	$ 368,579	$ 368,579	$ 368,579	$ 368,579	$ 368,579	$ 368,579	$ 368,579	$ 368,579	$ 368,579	$ 368,579
Total Charges	$ 414,872	$ 414,876	$ 383,069	$ 386,906	$ 393,696	$ 389,032	$ 389,714	$ 389,714	$ 389,032	$ 389,714
Total Injection Charges	$ 644	$ -	$ -	$ 20,101	$ 28,640	$ 24,853	$ 24,163	$ 24,163	$ 23,384	$ 24,163
Total Withdrawal Charges	$ 52,269	$ 56,280	$ 21,844	$ 4,265	$ -	$ -	$ -	$ -	$ -	$ -
Total Demand Charges	$ 500,943	$ 500,943	$ 500,943	$ 500,943	$ 500,943	$ 500,943	$ 500,943	$ 500,943	$ 500,943	$ 500,943
Total Storage	$ 553,856	$ 557,222	$ 522,787	$ 525,308	$ 529,582	$ 525,795	$ 525,106	$ 525,106	$ 524,327	$ 525,106

Forecasted Summary of Firm Transportation

Demand Charges	$ 2,361,999	$ 2,361,628	$ 2,299,479	$ 2,299,108	$ 2,298,660	$ 2,298,273	$ 2,297,871	$ 2,297,484	$ 2,297,237	$ 2,296,990
Capacity Release Credit	$ (1,162,996)	$ (1,050,448)	$ (1,162,996)	$ (581,520)	$ (600,904)	$ (581,520)	$ (600,904)	$ (600,904)	$ (808,440)	$ (835,388)
Net Demand Charge	$ 1,199,003	$ 1,311,180	$ 1,136,484	$ 1,717,588	$ 1,697,756	$ 1,716,753	$ 1,696,967	$ 1,696,580	$ 1,488,797	$ 1,461,602

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

	11/1/2023: Nov	12/1/2023: Dec	1/1/2024: Jan	2/1/2024: Feb	3/1/2024: Mar	4/1/2024: Apr	5/1/2024: May	6/1/2024: Jun	7/1/2024: Jul	8/1/2024: Aug
WSS										
Injection	$ -	$ -	$ -	$ -	$ -	$ 647	$ 1,698	$ 1,294	$ 1,337	$ 1,337
Withdrawal	$ -	$ 1,818	$ 3,298	$ 3,187	$ 504	$ -	$ -	$ -	$ -	$ -
Demand Charges	$ 66,625	$ 66,625	$ 66,625	$ 66,625	$ 66,625	$ 66,625	$ 66,625	$ 66,625	$ 66,625	$ 66,625
Total Charges	$ 66,625	$ 68,442	$ 69,923	$ 69,812	$ 67,128	$ 67,271	$ 68,322	$ 67,918	$ 67,961	$ 67,961
S2										
Injection	$ -	$ -	$ -	$ -	$ -	$ 1,394	$ 2,882	$ 2,789	$ 3,621	$ 3,917
Withdrawal	$ -	$ 8,448	$ 11,286	$ 7,864	$ 5,176	$ -	$ -	$ -	$ -	$ -
Demand Charges	$ 65,739	$ 65,739	$ 65,739	$ 65,739	$ 65,739	$ 65,739	$ 65,739	$ 65,739	$ 65,739	$ 65,739
Total Charges	$ 65,739	$ 74,186	$ 77,025	$ 73,603	$ 70,914	$ 67,133	$ 68,620	$ 68,527	$ 69,360	$ 69,655
GSS										
Injection	$ 1,364	$ -	$ -	$ -	$ -	$ 16,748	$ 39,910	$ 30,899	$ 30,916	$ 28,920
Withdrawal	$ -	$ 55,435	$ 74,495	$ 55,352	$ 18,268	$ -	$ -	$ -	$ -	$ -
Demand Charges	$ 368,579	$ 368,579	$ 368,579	$ 368,579	$ 368,579	$ 368,579	$ 368,579	$ 368,579	$ 368,579	$ 368,579
Total Charges	$ 369,943	$ 424,014	$ 443,075	$ 423,931	$ 386,848	$ 385,327	$ 408,490	$ 399,479	$ 399,496	$ 397,499
Total Injection Charges	$ 1,364	$ -	$ -	$ -	$ -	$ 18,789	$ 44,490	$ 34,982	$ 35,874	$ 34,173
Total Withdrawal Charges	$ -	$ 65,700	$ 89,079	$ 66,404	$ 23,948	$ -	$ -	$ -	$ -	$ -
Total Demand Charges	$ 500,943	$ 500,943	$ 500,943	$ 500,943	$ 500,943	$ 500,943	$ 500,943	$ 500,943	$ 500,943	$ 500,943
Total Storage	$ 502,306	$ 566,642	$ 590,022	$ 567,346	$ 524,890	$ 519,732	$ 545,432	$ 535,924	$ 536,817	$ 535,116

Forecasted Summary of Firm Transportation

Demand Charges	$ 2,296,572	$ 2,358,025	$ 2,357,762	$ 2,357,499	$ 2,295,489	$ 2,295,226	$ 2,294,871	$ 2,294,608	$ 2,294,360	$ 2,294,113
Capacity Release Credit	$ (202,110)	$ (208,847)	$ (208,847)	$ (195,373)	$ (208,847)	$ (808,440)	$ (835,388)	$ (808,440)	$ (835,388)	$ (835,388)
Net Demand Charge	$ 2,094,462	$ 2,149,178	$ 2,148,915	$ 2,162,126	$ 2,086,642	$ 1,486,786	$ 1,459,483	$ 1,486,168	$ 1,458,972	$ 1,458,725

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

Cost of Natural Gas

Suppliers	**1/1/2023: Jan**	**2/1/2023: Feb**	**3/1/2023: Mar**	**4/1/2023: Apr**	**5/1/2023: May**	**6/1/2023: Jun**	**7/1/2023: Jul**	**8/1/2023: Aug**	**9/1/2023: Sep**	**10/1/2023: Oct**
TE Spot	$ 2,195,511	$ 2,254,306	$ 2,026,821	$ 4,233,170	$ 4,134,020	$ 2,510,001	$ 1,844,874	$ 1,959,742	$ 1,679,430	$ 3,560,313
Supplier 24	$ 3,161,914	$ 2,145,020	$ 2,189,441	$ 557,538	$ 1,099,006	$ 1,283,248	$ 1,320,880	$ 1,278,240	$ 1,366,800	$ 1,205,156
Supplier 25	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 26	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 27	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 28	$ 1,455,915	$ 841,714	$ 537,694	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 29	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 30	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 31	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 32	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 33	$ 2,057,784	$ 1,223,712	$ 1,178,445	$ 315,750	$ 336,350	$ 346,200	$ 377,890	$ 383,005	$ 362,250	$ 385,020
Supplier 34	$ 465,000	$ 217,812	$ 210,180	$ 200,250	$ 212,970	$ 218,520	$ 237,894	$ 240,963	$ 228,150	$ 242,172
Supplier 35	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 36	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 37	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 38	$ 1,414,003	$ 1,224,510	$ 1,034,829	$ 199,500	$ 709,763	$ 951,285	$ 996,472	$ 964,492	$ 1,030,725	$ 971,279
Sub Total	$ 10,750,127	$ 7,907,073	$ 7,177,409	$ 5,506,208	$ 6,492,108	$ 5,309,254	$ 4,778,010	$ 4,826,442	$ 4,667,355	$ 6,363,940
Transportation Costs										
TE Spot	$ 326,383	$ 322,876	$ 332,746	$ 256,159	$ 293,963	$ 228,728	$ 196,878	$ 196,573	$ 193,851	$ 257,062
Total TE	$ 326,383	$ 322,876	$ 332,746	$ 256,159	$ 293,963	$ 228,728	$ 196,878	$ 196,573	$ 193,851	$ 257,062
Total Costs	$ 11,076,510	$ 8,229,949	$ 7,510,155	$ 5,762,366	$ 6,786,071	$ 5,537,982	$ 4,974,889	$ 5,023,015	$ 4,861,206	$ 6,621,002

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

Cost of Natural Gas

Suppliers	**11/1/2023: Nov**	**12/1/2023: Dec**	**1/1/2024: Jan**	**2/1/2024: Feb**	**3/1/2024: Mar**	**4/1/2024: Apr**	**5/1/2024: May**	**6/1/2024: Jun**	**7/1/2024: Jul**	**8/1/2024: Aug**
TE Spot	$ 4,055,493	$ 6,521,456	$ 6,940,456	$ 5,750,688	$ 5,789,407	$ 4,428,654	$ 4,020,858	$ 3,297,323	$ 3,924,918	$ 4,197,468
Supplier 24	$ 1,174,472	$ 1,949,701	$ 2,153,780	$ 999,780	$ 1,619,000	$ 759,446	$ 1,524,550	$ 1,744,510	$ 1,564,975	$ 1,214,949
Supplier 25	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 26	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 27	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 28	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 29	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 30	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 31	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 32	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 33	$ 1,520,765	$ 1,798,154	$ 1,928,982	$ 1,728,225	$ 1,602,178	$ 375,450	$ 382,850	$ 387,150	$ 415,400	$ 420,360
Supplier 34	$ 270,180	$ 318,990	$ 341,961	$ 306,501	$ 284,580	$ 236,070	$ 240,870	$ 243,090	$ 260,400	$ 263,376
Supplier 35	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 36	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 37	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplier 38	$ 396,389	$ 145,867	$ 387,662	$ 191,076	$ 314,481	$ 566,647	$ 1,094,213	$ 1,270,545	$ 1,033,463	$ 908,936
Sub Total	$ 7,417,299	$ 10,734,168	$ 11,752,840	$ 8,976,271	$ 9,609,646	$ 6,366,268	$ 7,263,341	$ 6,942,617	$ 7,199,156	$ 7,005,089
Transportation Costs										
TE Spot	$ 266,786	$ 338,548	$ 347,133	$ 276,784	$ 337,136	$ 255,386	$ 294,380	$ 271,009	$ 272,039	$ 262,077
Total TE	$ 266,786	$ 338,548	$ 347,133	$ 276,784	$ 337,136	$ 255,386	$ 294,380	$ 271,009	$ 272,039	$ 262,077
Total Costs	$ 7,684,085	$ 11,072,715	$ 12,099,974	$ 9,253,055	$ 9,946,782	$ 6,621,653	$ 7,557,721	$ 7,213,626	$ 7,471,195	$ 7,267,166

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

Volumes

Suppliers	**1/1/2023: Jan**	**2/1/2023: Feb**	**3/1/2023: Mar**	**4/1/2023: Apr**	**5/1/2023: May**	**6/1/2023: Jun**	**7/1/2023: Jul**	**8/1/2023: Aug**	**9/1/2023: Sep**	**10/1/2023: Oct**
TE Spot	579,290	779,228	791,727	1,676,503	1,596,147	920,088	645,512	677,877	592,391	1,226,003
Supplier 24	833,051	740,000	853,434	218,431	421,933	468,200	460,000	440,000	480,000	412,864
Supplier 25	-	-	-	-	-	-	-	-	-	-
Supplier 26	-	-	-	-	-	-	-	-	-	-
Supplier 27	-	-	-	-	-	-	-	-	-	-
Supplier 28	384,400	291,200	210,242	-	-	-	-	-	-	-
Supplier 29	-	-	-	-	-	-	-	-	-	-
Supplier 30	-	-	-	-	-	-	-	-	-	-
Supplier 31	-	-	-	-	-	-	-	-	-	-
Supplier 32	-	-	-	-	-	-	-	-	-	-
Supplier 33	529,666	478,408	529,666	150,000	155,000	150,000	155,000	155,000	150,000	155,000
Supplier 34	93,000	84,000	93,000	90,000	93,000	90,000	93,000	93,000	90,000	93,000
Supplier 35	-	-	-	-	-	-	-	-	-	-
Supplier 36	-	-	-	-	-	-	-	-	-	-
Supplier 37	-	-	-	-	-	-	-	-	-	-
Supplier 38	370,327	420,000	400,143	75,000	270,000	345,000	345,000	330,000	360,000	330,860
Total	2,789,735	2,792,836	2,878,212	2,209,934	2,536,079	1,973,288	1,698,512	1,695,877	1,672,391	2,217,726

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

Volumes

Suppliers	**11/1/2023: Nov**	**12/1/2023: Dec**	**1/1/2024: Jan**	**2/1/2024: Feb**	**3/1/2024: Mar**	**4/1/2024: Apr**	**5/1/2024: May**	**6/1/2024: Jun**	**7/1/2024: Jul**	**8/1/2024: Aug**
TE Spot	1,228,193	1,748,380	1,745,148	1,504,234	1,723,038	1,515,106	1,391,301	1,098,741	1,266,103	1,340,188
Supplier 24	353,868	521,046	540,000	260,000	480,000	257,765	525,381	579,310	502,831	385,935
Supplier 25	-	-	-	-	-	-	-	-	-	-
Supplier 26	-	-	-	-	-	-	-	-	-	-
Supplier 27	-	-	-	-	-	-	-	-	-	-
Supplier 28	-	-	-	-	-	-	-	-	-	-
Supplier 29	-	-	-	-	-	-	-	-	-	-
Supplier 30	-	-	-	-	-	-	-	-	-	-
Supplier 31	-	-	-	-	-	-	-	-	-	-
Supplier 32	-	-	-	-	-	-	-	-	-	-
Supplier 33	512,580	529,666	529,666	495,494	529,666	150,000	155,000	150,000	155,000	155,000
Supplier 34	90,000	93,000	93,000	87,000	93,000	90,000	93,000	90,000	93,000	93,000
Supplier 35	-	-	-	-	-	-	-	-	-	-
Supplier 36	-	-	-	-	-	-	-	-	-	-
Supplier 37	-	-	-	-	-	-	-	-	-	-
Supplier 38	116,979	36,302	94,845	47,421	90,482	190,394	375,000	420,000	330,000	286,869
Total	2,301,620	2,928,393	3,002,660	2,394,149	2,916,186	2,203,265	2,539,681	2,338,051	2,346,934	2,260,992

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

Storages

	1/1/2023: Jan	2/1/2023: Feb	3/1/2023: Mar	4/1/2023: Apr	5/1/2023: May	6/1/2023: Jun	7/1/2023: Jul	8/1/2023: Aug	9/1/2023: Sep	10/1/2023: Oct
SS1A										
Injections	$ 878	$ -	$ 1,739	$ 7,184	$ 15,614	$ 14,942	$ 11,886	$ 11,886	$ 11,502	$ 11,886
Withdrawal	$ 36,019	$ 65,128	$ 25,649	$ 6,457	$ -	$ -	$ -	$ -	$ -	$ -
Capacity	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449
Demand	$ 371,039	$ 369,137	$ 369,137	$ 369,137	$ 369,137	$ 369,137	$ 369,137	$ 369,137	$ 369,137	$ 369,137
Total Charges	$ 509,386	$ 535,714	$ 497,974	$ 484,226	$ 486,200	$ 485,528	$ 482,472	$ 482,472	$ 482,088	$ 482,472
SS1B										
Injections	$ -	$ -	$ 1,617	$ 6,671	$ 14,763	$ 12,995	$ 11,225	$ 11,225	$ 10,863	$ 11,225
Withdrawal	$ 43,967	$ 41,005	$ 24,034	$ 15,772	$ -	$ -	$ -	$ -	$ -	$ -
Capacity	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361
Demand	$ 175,370	$ 174,470	$ 174,470	$ 174,470	$ 174,470	$ 174,470	$ 174,470	$ 174,470	$ 174,470	$ 174,470
Total Charges	$ 313,698	$ 309,836	$ 294,482	$ 291,274	$ 283,595	$ 281,826	$ 280,056	$ 280,056	$ 279,694	$ 280,056
GSSTE										
Injections	$ 1,181	$ -	$ 2,587	$ 12,933	$ 26,727	$ 22,700	$ 17,186	$ 17,186	$ 16,631	$ 17,186
Injections/Retention Fuel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Withdrawal	$ 17,736	$ 15,479	$ 11,603	$ 9,976	$ -	$ -	$ -	$ -	$ -	$ -
Capacity	$ 101,109	$ 101,109	$ 101,109	$ 101,109	$ 101,109	$ 101,109	$ 101,109	$ 101,109	$ 101,109	$ 101,109
Demand	$ 91,191	$ 91,191	$ 91,191	$ 91,191	$ 91,191	$ 91,191	$ 91,191	$ 91,191	$ 91,191	$ 91,191
Total Charges	$ 211,218	$ 207,780	$ 206,490	$ 215,210	$ 219,028	$ 215,001	$ 209,487	$ 209,487	$ 208,932	$ 209,487
Total Injection Charges	$ 2,059	$ -	$ 5,943	$ 26,787	$ 57,104	$ 50,637	$ 40,296	$ 40,296	$ 38,996	$ 40,296
Total Injections/Retention Fu	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Withdrawal Charges	$ 97,722	$ 121,612	$ 61,285	$ 32,205	$ -	$ -	$ -	$ -	$ -	$ -
Total Capacity Charges	$ 296,920	$ 296,920	$ 296,920	$ 296,920	$ 296,920	$ 296,920	$ 296,920	$ 296,920	$ 296,920	$ 296,920
Total Demand Charges	$ 637,601	$ 634,799	$ 634,799	$ 634,799	$ 634,799	$ 634,799	$ 634,799	$ 634,799	$ 634,799	$ 634,799
	$ 1,034,302	$ 1,053,330	$ 998,946	$ 990,710	$ 988,822	$ 982,356	$ 972,015	$ 972,015	$ 970,715	$ 972,015

Forecasted Summary of Firm Transportation

Texas Eastern Demand	$ 3,817,100	$ 3,799,180	$ 3,798,328	$ 3,797,623	$ 3,796,770	$ 3,796,035	$ 3,795,271	$ 3,794,536	$ 3,794,066	$ 3,793,596
Capacity Release Credits	$ (2,175,733)	$ (1,965,178)	$ (2,175,733)	$ (795,345)	$ (821,856)	$ (795,345)	$ (821,856)	$ (821,856)	$ (1,105,703)	$ (1,142,560)
Net Total	$ 1,641,367	$ 1,834,002	$ 1,622,595	$ 3,002,278	$ 2,974,914	$ 3,000,691	$ 2,973,415	$ 2,972,680	$ 2,688,363	$ 2,651,036
Total Demand Charges	$ 1,641,367	$ 1,834,002	$ 1,622,595	$ 3,002,278	$ 2,974,914	$ 3,000,691	$ 2,973,415	$ 2,972,680	$ 2,688,363	$ 2,651,036

Philadelphia Gas Works
Forecasted Summary of Total Fuel Purchased
January 2023-August 2024

Storages

	11/1/2023: Nov	12/1/2023: Dec	1/1/2024: Jan	2/1/2024: Feb	3/1/2024: Mar	4/1/2024: Apr	5/1/2024: May	6/1/2024: Jun	7/1/2024: Jul	8/1/2024: Aug
SS1A										
Injections	$ -	$ -	$ -	$ -	$ -	$ 7,738	$ 16,534	$ 17,388	$ 17,968	$ 17,968
Withdrawal	$ -	$ 30,708	$ 54,666	$ 52,051	$ 39,565	$ 11,946	$ -	$ -	$ -	$ -
Capacity	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449
Demand	$ 369,137	$ 369,137	$ 369,137	$ 369,137	$ 369,137	$ 369,137	$ 369,137	$ 369,137	$ 369,137	$ 369,137
Total Charges	$ 470,586	$ 501,294	$ 525,252	$ 522,637	$ 510,151	$ 490,270	$ 487,120	$ 487,974	$ 488,554	$ 488,554
SS1B										
Injections	$ -	$ -	$ -	$ -	$ -	$ 7,006	$ 15,100	$ 16,174	$ 16,714	$ 16,342
Withdrawal	$ -	$ 29,082	$ 50,321	$ 48,002	$ 32,192	$ 8,740	$ -	$ -	$ -	$ -
Capacity	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361
Demand	$ 174,470	$ 174,470	$ 174,470	$ 174,470	$ 174,470	$ 174,470	$ 174,470	$ 174,470	$ 174,470	$ 174,470
Total Charges	$ 268,831	$ 297,914	$ 319,152	$ 316,834	$ 301,023	$ 284,577	$ 283,931	$ 285,006	$ 285,545	$ 285,173
GSSTE										
Injections	$ -	$ -	$ -	$ -	$ -	$ 12,933	$ 26,727	$ 25,865	$ 24,261	$ 22,480
Injections/Retention Fuel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Withdrawal	$ 10,210	$ 20,765	$ 27,653	$ 24,540	$ 13,345	$ 353	$ -	$ -	$ -	$ -
Capacity	$ 101,109	$ 101,109	$ 101,109	$ 101,109	$ 101,109	$ 101,109	$ 101,109	$ 101,109	$ 101,109	$ 101,109
Demand	$ 91,191	$ 91,191	$ 91,191	$ 91,191	$ 91,191	$ 91,191	$ 91,191	$ 91,191	$ 91,191	$ 91,191
Total Charges	$ 202,511	$ 213,066	$ 219,954	$ 216,841	$ 205,646	$ 205,586	$ 219,028	$ 218,166	$ 216,562	$ 214,781
Total Injection Charges	$ -	$ -	$ -	$ -	$ -	$ 27,677	$ 58,361	$ 59,428	$ 58,943	$ 56,790
Total Injections/Retention Fu	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Withdrawal Charges	$ 10,210	$ 80,555	$ 132,640	$ 124,593	$ 85,103	$ 21,038	$ -	$ -	$ -	$ -
Total Capacity Charges	$ 296,920	$ 296,920	$ 296,920	$ 296,920	$ 296,920	$ 296,920	$ 296,920	$ 296,920	$ 296,920	$ 296,920
Total Demand Charges	$ 634,799	$ 634,799	$ 634,799	$ 634,799	$ 634,799	$ 634,799	$ 634,799	$ 634,799	$ 634,799	$ 634,799
	$ 941,929	$ 1,012,273	$ 1,064,358	$ 1,056,312	$ 1,016,821	$ 980,433	$ 990,079	$ 991,146	$ 990,661	$ 988,509

Forecasted Summary of Firm Transportation

Texas Eastern Demand	$ 3,792,802	$ 3,792,332	$ 3,791,832	$ 3,791,333	$ 3,790,745	$ 3,790,245	$ 3,789,569	$ 3,789,070	$ 3,788,599	$ 3,788,129
Capacity Release Credits	$ (693,399)	$ (390,711)	$ (390,711)	$ (365,504)	$ (390,711)	$ (1,105,703)	$ (1,142,560)	$ (1,105,703)	$ (1,142,560)	$ (1,142,560)
Net Total	$ 3,099,403	$ 3,401,621	$ 3,401,121	$ 3,425,829	$ 3,400,034	$ 2,684,542	$ 2,647,009	$ 2,683,366	$ 2,646,039	$ 2,645,569
Total Demand Charges	$ 3,099,403	$ 3,401,621	$ 3,401,121	$ 3,425,829	$ 3,400,034	$ 2,684,542	$ 2,647,009	$ 2,683,366	$ 2,646,039	$ 2,645,569

PGW Exh. 2

Philadelphia Gas Works
Volumes Purchased

Volume	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
Spot Purchases -Transco	357	55,998	21,090	9,088	23,447	21,907	735	7,119	112,091	1,474	30,667	43,009
Spot Dem-Transco												
Spot Purchases -Tetco												
Spot for Resale												
Firm Contracts												
Transco Supply2 - Dem Commodity												
Transco Supply3 - Dem Commodity												
Transco Supply6 - Dem Commodity	449,500	406,000	449,500									
Transco Supply7 - Dem Commodity				149,209	155,000	150,000	155,000	155,000	150,000	155,000	149,660	153,831
Transco Supply7 - Dem Commodity								217,000	210,000	217,000		
Transco Supply6 - Dem Commodity												
Transco Supply10 - Dem Commodity												
Transco Supply14 - Dem Commodity												
Transco Supply22 - Dem Commodity												
Transco Supply23 - Dem Commodity												
Transco Supply25 - Dem Commodity												
Transco Supply26 - Dem Commodity												
Transco Supply29 - Dem Commodity												
Transco Supply30 - Dem Commodity												
Transco Supply30 - Dem Commodity	620,000	560,000	620,000	600,000	620,000	600,000	620,000	620,000	600,000	620,000		
Transco Supply30 - Dem Commodity	620,000	418,193	180,000	280,000	55,000					50,000		
Transco Supply30 - Dem Commodity		60,000										
Transco Supply31 - Dem Commodity												
Transco Supply32 - Dem Commodity	775,000	700,000	775,000	750,000	775,000	750,000	775,000	775,000	750,000	775,000	750,000	775,000
Transco Supply32 - Dem Commodity	775,000	625,000	265,000	425,000	180,000				5,000	200,000	165,000	635,000
Transco Supply32 - Dem Commodity				270,000	279,000	270,000	279,000	279,000	270,000	279,000	300,000	310,000
Transco Supply32 - Dem Commodity					310,000							
Transco Supply33 - Dem Commodity												
Transco Supply34 - Dem Commodity	155,000	140,000	155,000									
Transco Supply34 - Dem Commodity	155,000	140,000	154,959									
Transco Supply35 - Dem Commodity												
Transco Supply36 - Dem Commodity												
Transco Supply37 - Dem Commodity	108,500	98,000	108,500	105,000	108,500	105,000	108,500	108,500	105,000	108,500	105,000	108,500
Transco Supply37 - Dem Commodity												
Transco Supply37 - Dem Commodity	108,500	98,000	108,500	105,000	108,500	105,000	108,500	108,500	105,000	108,500	105,000	108,500
Transco Supply37 - Dem Commodity												
Transco Supply37 - Dem Commodity	248,000	224,000	248,000	112,080	115,816	112,080	115,816	115,816	112,080	115,816	240,000	248,000
Transco Supply37 - Dem Commodity	310,000	280,000	310,000								300,000	310,000
Transco Supply37 - Dem Commodity				135,000	139,500	135,000	139,500	139,500	135,000	139,500	135,000	139,500
Transco Supply40 - Dem Commodity	242,885	219,380	242,885	90,000	93,000	90,000	93,000	93,000	90,000	93,000	235,050	242,885
Transco Supply40 - Dem Commodity												
Transco Supply40 - Dem Commodity	286,812	259,056	286,812	60,000	62,000	60,000	62,000	62,000	60,000	62,000	277,560	286,812
Transco Supply41 - Dem Commodity											150,000	155,000
Transco Supply42 - Dem Commodity											15,000	125,000
											450,000	465,000
											60,000	365,000
Tetco Supply1 - Dem Commodity												
Tetco Supply3 - Dem Commodity												
Tetco Supply5 - Dem Commodity												
Tetco Supply13 - Dem Commodity				450,000	465,000	450,000	465,000	465,000	450,000	465,000		
Tetco Supply16 - Dem Commodity	387,500	350,000	387,500	90,000	93,000	90,000	93,000	93,000	90,000	93,000		
Tetco Supply16 - Dem Commodity												
Tetco Supply19 - Dem Commodity												
Tetco Supply24 - Dem Commodity	155,000	140,000	155,000	150,000	155,000	150,000	155,000	155,000	150,000	155,000	150,000	155,000
Tetco Supply24 - Dem Commodity				90,000	93,000	90,000	93,000	93,000	90,000	93,000	600,000	620,000
Tetco Supply24 - Dem Commodity											600,000	620,000
											150,000	519,300
Tetco Supply25 - Dem Commodity												
Tetco Supply26 - Dem Commodity	759,680	600,000	190,000	35,597	100,000	24,000	522,000	304,000	195,000	510,000		
Tetco Supply26 - Dem Commodity												
Tetco Supply28 - Dem Commodity											282,000	384,400
Tetco Supply29 - Dem Commodity												
Tetco Supply30 - Dem Commodity												
Tetco Supply31 - Dem Commodity												
Tetco Supply32 - Dem Commodity												
Tetco Supply33 - Dem Commodity	374,666	338,408	374,666								362,580	374,666
Tetco Supply33 - Dem Commodity												
Tetco Supply33 - Dem Commodity	155,000	140,000	155,000	150,000	155,000	150,000	155,000	155,000	150,000	155,000	150,000	155,000
Tetco Supply33 - Dem Commodity												
Tetco Supply34 - Dem Commodity	93,000	84,000	93,000	90,000	93,000	90,000	93,000	93,000	90,000	93,000	90,000	93,000
Tetco Supply34 - Dem Commodity												
Tetco Supply35 - Dem Commodity	168,764	149,352	168,764									
Tetco Supply35 - Dem Commodity	310,000	280,000	310,000	300,000	310,000	300,000	310,000	310,000	300,000	310,000		
Tetco Supply35 - Dem Commodity	310,000	220,000	90,000	20,000	40,000		50,000		5,000	80,000		
Tetco Supply36 - Dem Commodity												
Tetco Supply37 - Dem Commodity	387,500	350,000	387,500									
Tetco Supply38 - Dem Commodity											450,000	465,000
Tetco Supply38 - Dem Commodity											120,000	420,000

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Philadelphia Gas Works

Cost Of Fuels Purchased

Rate - $	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
Spot Purchases -Transco	$ 9.7600	$ 3.8902	$ 3.5387	$ 5.6839	$ 6.7251	$ 5.7637	$ 5.1947	$ 8.0790	$ 3.5596	$ 4.6470	$ 2.5012	$ 9.2880
Spot Dem-Transco												
Spot Purchases -Tetco												
Spot for Resale												
Firm Contracts												
Transco Supply2 - Dem Commodity												
Transco Supply3 - Dem Commodity												
Transco Supply6 - Dem Commodity	$ 4.0900	$ 6.3700	$ 4.5900									
Transco Supply7 - Dem Commodity				$ 5.2650	$ 7.2150	$ 8.9550	$ 7.1450	$ 13.9950	$ 9.9950	$ 6.8850	$ 5.2900	$ 7.1800
Transco Supply7 - Dem Commodity								$ 14.0000	$ 10.0000	$ 6.9900		
Transco Supply8 - Dem Commodity												
Transco Supply10 - Dem Commodity												
Transco Supply14 - Dem Commodity												
Transco Supply22 - Dem Commodity												
Transco Supply23 - Dem Commodity												
Transco Supply25 - Dem Commodity												
Transco Supply26 - Dem Commodity												
Transco Supply29 - Dem Commodity												
Transco Supply30 - Dem Commodity												
Transco Supply30 - Dem Commodity	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100	$ 0.0100		
Commodity	$ 4.3142	$ 4.7804	$ 5.0039	$ 6.1496	$ 6.9455					$ 5.5640		
Transco Supply30 - Dem Commodity		$ 4.0250										
Transco Supply31 - Dem Commodity												
Transco Supply32 - Dem	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0250	$ 0.0800	$ 0.0800
Commodity	$ 4.3142	$ 4.7518	$ 4.9665	$ 6.0248	$ 6.9131				$ 5.4500	$ 4.9838	$ 6.2135	$ 6.4449
Transco Supply32 - Dem Commodity				$ 4.4500	$ 6.4800	$ 7.9500	$ 7.3500	$ 7.3500	$ 6.0000	$ 6.0000	$ 5.4700	$ 7.3400
Transco Supply32 - Dem Commodity					$ 6.2300							
Transco Supply33 - Dem Commodity												
Transco Supply34 - Dem Commodity	$ 4.0370	$ 6.2870	$ 4.4970									
Transco Supply34 - Dem Commodity	$ 4.0745	$ 6.3745	$ 4.5745									
Transco Supply35 - Dem Commodity												
Transco Supply36 - Dem Commodity												
Transco Supply37 - Dem Commodity	$ 3.8000	$ 6.0800	$ 4.3000	$ 4.1625	$ 6.1925	$ 7.6625	$ 6.2725	$ 6.2725	$ 5.6325	$ 5.6325	$ 5.0400	$ 6.9100
Transco Supply37 - Dem Commodity												
Transco Supply37 - Dem Commodity	$ 3.8350	$ 6.1150	$ 4.3350	$ 4.1850	$ 6.2150	$ 7.6850	$ 6.2950	$ 6.2950	$ 5.6550	$ 5.6550	$ 5.1800	$ 7.0500
Transco Supply37 - Dem Commodity												
Transco Supply37 - Dem Commodity	$ 3.7250	$ 6.0050	$ 4.2250	$ 4.0525	$ 6.0825	$ 7.5525	$ 7.3825	$ 6.9925	$ 5.5225	$ 5.5225	$ 5.0500	$ 6.9200
Transco Supply37 - Dem Commodity	$ 4.0500	$ 6.3300	$ 4.5500								$ 5.4100	$ 7.2800
Transco Supply37 - Dem Commodity				$ 4.1225	$ 6.1525	$ 7.6225	$ 6.2325	$ 6.2325	$ 5.5925	$ 5.5925	$ 5.0000	$ 6.8700
Transco Supply40 - Dem Commodity	$ 3.8000	$ 6.0800	$ 4.3000	$ 4.1700	$ 6.2000	$ 7.6700	$ 5.4800	$ 7.9500	$ 7.7400	$ 4.1500	$ 5.0400	$ 6.9100
Transco Supply40 - Dem Commodity												
Transco Supply40 - Dem Commodity	$ 3.7800	$ 6.0600	$ 4.2800	$ 4.1500	$ 6.1800	$ 7.6500	$ 5.4600	$ 7.9300	$ 7.7200	$ 4.1300	$ 5.0200	$ 6.8900
Transco Supply41 - Dem Commodity											$ 0.1150	$ 0.1150
Transco Supply42 - Dem Commodity											$ 6.2550	$ 6.4848
Tetco Supply1 - Dem Commodity											$ 0.1400	$ 0.1400
Tetco Supply3 - Dem Commodity											$ 6.2713	$ 6.5292
Tetco Supply5 - Dem Commodity												
Tetco Supply13 - Dem Commodity				$ 4.3825	$ 6.3025	$ 7.8425	$ 7.6700	$ 7.1900	$ 6.6750	$ 5.4900		
Tetco Supply16 - Dem Commodity	$ 3.1650	$ 5.7250	$ 3.7850	$ 4.3900	$ 6.3100	$ 7.8500	$ 6.0300	$ 6.0300	$ 6.0300	$ 6.0300		
Tetco Supply16 - Dem Commodity												
Tetco Supply19 - Dem Commodity												
Tetco Supply24 - Dem Commodity	$ 3.2200	$ 5.7800	$ 3.8400	$ 4.4300	$ 6.3500	$ 7.8900	$ 6.0700	$ 6.0700	$ 6.0700	$ 6.0700	$ 5.4200	$ 5.9300
Tetco Supply24 - Dem Commodity				$ 4.3850	$ 6.3050	$ 7.8450	$ 6.0300	$ 6.0300	$ 6.0300	$ 6.0300	$ 3.6900	$ 5.8900
Tetco Supply24 - Dem Commodity											$ 0.0100	$ 0.0100
Tetco Supply25 - Dem Commodity											$ 5.7370	$ 5.1359
Tetco Supply26 - Dem Commodity	$ 3.8734	$ 4.3333	$ 4.4747	$ 6.3821	$ 7.0470	$ 5.6663	$ 6.2676	$ 7.6693	$ 5.8912	$ 4.3180		
Tetco Supply26 - Dem Commodity												
Tetco Supply28 - Dem Commodity											$ 3.6975	$ 5.8975
Tetco Supply29 - Dem Commodity												
Tetco Supply30 - Dem Commodity												
Tetco Supply31 - Dem Commodity												
Tetco Supply32 - Dem Commodity												
Tetco Supply33 - Dem Commodity	$ 2.8700	$ 5.4300	$ 3.4900								$ 3.4000	$ 5.6000
Tetco Supply33 - Dem Commodity												
Tetco Supply33 - Dem Commodity	$ 2.7500	$ 5.3100	$ 3.3700	$ 3.9800	$ 5.9000	$ 7.4400	$ 5.1500	$ 7.2800	$ 7.3650	$ 7.3650	$ 3.2800	$ 5.4800
Tetco Supply33 - Dem Commodity												
Tetco Supply34 - Dem Commodity	$ 2.8625	$ 5.4225	$ 3.4825	$ 4.0900	$ 6.0100	$ 7.5500	$ 7.3550	$ 6.8900	$ 5.5500	$ 5.5500	$ 3.7350	$ 5.6000
Tetco Supply34 - Dem Commodity												
Tetco Supply35 - Dem Commodity	$ 3.1700	$ 5.7300	$ 3.7900									
Tetco Supply35 - Dem	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075	$ 0.0075		
Commodity	$ 3.8629	$ 4.2625	$ 4.6661	$ 6.3825	$ 7.2875		$ 5.0630		$ 5.4300	$ 4.2997		
Tetco Supply35 - Dem Commodity												
Tetco Supply36 - Dem Commodity												
Tetco Supply37 - Dem Commodity	$ 3.1650	$ 5.7250	$ 3.7850									
Tetco Supply38 - Dem Commodity											$ 0.0225	$ 0.0225
Tetco Supply38 - Dem Commodity											$ 5.7144	$ 5.2020

Philadelphia Gas Works
Cost Of Fuels Purchased

Amounts - $	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
Spot Purchases -Transco	$ 3,484	$ 217,841	$ 74,632	$ 51,655	$ 157,684	$ 126,703	$ 3,818	$ 57,514	$ 398,999	$ 6,850	$ 76,706	$ 399,467
Spot -Transco												
Spot Purchases -Tetco												
Spot for Resale												
Firm Contracts												
Transco Supply2 - Dem												
Commodity												
Transco Supply3 - Dem												
Commodity												
Transco Supply6 - Dem												
Commodity	$ 1,838,455	$ 2,586,220	$ 2,063,205									
Transco Supply7 - Dem												
Commodity				$ 785,585	$ 1,118,325	$ 1,343,250	$ 1,107,475	$ 2,169,225	$ 1,499,250	$ 1,067,175	$ 791,701	$ 1,104,507
Transco Supply7 - Dem												
Commodity								$ 3,038,000	$ 2,100,000	$ 1,516,830		
Transco Supply8 - Dem												
Commodity												
Transco Supply10 - Dem												
Commodity												
Transco Supply14 - Dem												
Commodity												
Transco Supply22 - Dem												
Commodity												
Transco Supply23 - Dem												
Commodity												
Transco Supply25 - Dem												
Commodity												
Transco Supply26 - Dem												
Commodity												
Transco Supply29 - Dem												
Commodity												
Transco Supply30 - Dem												
Commodity												
Transco Supply30 - Dem	$ 6,200	$ 5,600	$ 6,200	$ 6,000	$ 6,200	$ 6,000	$ 6,200	$ 6,200	$ 6,000	$ 6,200		
Commodity	$ 2,674,800	$ 1,999,142	$ 900,700	$ 1,721,900	$ 382,000					$ 278,200		
Transco Supply30 - Dem												
Commodity		$ 241,500										
Transco Supply31 - Dem												
Commodity												
Transco Supply32 - Dem	$ 19,375	$ 17,500	$ 19,375	$ 18,750	$ 19,375	$ 18,750	$ 19,375	$ 19,375	$ 18,750	$ 19,375	$ 60,000	$ 62,000
Commodity	$ 3,343,500	$ 2,969,875	$ 1,316,125	$ 2,560,525	$ 1,244,350				$ 27,250	$ 996,750	$ 1,025,225	$ 4,092,489
Transco Supply32 - Dem												
Commodity				$ 1,201,500	$ 1,807,920	$ 2,146,500	$ 2,050,650	$ 2,050,650	$ 1,620,000	$ 1,674,000	$ 1,641,000	$ 2,275,400
Transco Supply32 - Dem												
Commodity					$ 1,931,300							
Transco Supply33 - Dem												
Commodity												
Transco Supply34 - Dem												
Commodity	$ 625,735	$ 880,180	$ 697,035									
Transco Supply34 - Dem												
Commodity	$ 631,548	$ 892,430	$ 708,860									
Transco Supply35 - Dem												
Commodity												
Transco Supply36 - Dem												
Commodity												
Transco Supply37 - Dem												
Commodity	$ 412,300	$ 595,840	$ 466,550	$ 437,063	$ 671,886	$ 804,563	$ 680,566	$ 680,566	$ 591,413	$ 611,126	$ 529,200	$ 749,735
Transco Supply37 - Dem												
Commodity												
Transco Supply37 - Dem												
Commodity	$ 416,098	$ 599,270	$ 470,348	$ 439,425	$ 674,328	$ 806,925	$ 683,008	$ 683,008	$ 593,775	$ 613,568	$ 543,900	$ 764,925
Transco Supply37 - Dem												
Commodity												
Transco Supply37 - Dem												
Commodity	$ 923,800	$ 1,345,120	$ 1,047,800	$ 454,204	$ 704,451	$ 846,484	$ 855,012	$ 809,843	$ 618,962	$ 639,594	$ 1,212,000	$ 1,716,160
Transco Supply37 - Dem												
Commodity	$ 1,255,500	$ 1,772,400	$ 1,410,500								$ 1,623,000	$ 2,256,800
Transco Supply37 - Dem												
Commodity				$ 556,538	$ 858,274	$ 1,029,038	$ 869,434	$ 869,434	$ 754,988	$ 780,154	$ 675,000	$ 958,365
Transco Supply40 - Dem												
Commodity	$ 922,963	$ 1,333,830	$ 1,044,406	$ 375,300	$ 576,600	$ 690,300	$ 509,640	$ 739,350	$ 696,600	$ 385,950	$ 1,184,652	$ 1,678,335
Transco Supply40 - Dem												
Commodity**			$ (16,421)									$ (18,251)
Transco Supply40 - Dem												
Commodity	$ 1,084,149	$ 1,569,879	$ 1,227,555	$ 249,000	$ 383,160	$ 459,000	$ 338,520	$ 491,660	$ 463,200	$ 256,060	$ 1,393,351	$ 1,976,135
Transco Supply41 - Dem											$ 17,250	$ 17,825
Commodity											$ 93,825	$ 810,800
Transco Supply42 - Dem											$ 63,000	$ 65,100
Commodity											$ 376,275	$ 2,383,150
Tetco Supply1 - Dem												
Commodity												
Tetco Supply3 - Dem												
Commodity												
Tetco Supply5 - Dem												
Commodity												
Tetco Supply13 - Dem												
Commodity				$ 1,972,125	$ 2,930,663	$ 3,529,125	$ 3,566,550	$ 3,343,350	$ 3,003,750	$ 2,552,850		
Tetco Supply16 - Dem												
Commodity	$ 1,226,438	$ 2,003,750	$ 1,466,688	$ 395,100	$ 586,830	$ 706,500	$ 560,790	$ 560,790	$ 542,700	$ 560,790		
Tetco Supply16 - Dem												
Commodity												
Tetco Supply19 - Dem												
Commodity												
Tetco Supply24 - Dem												
Commodity	$ 499,100	$ 809,200	$ 595,200	$ 664,500	$ 984,250	$ 1,183,500	$ 940,850	$ 940,850	$ 910,500	$ 940,850	$ 813,000	$ 919,150
Tetco Supply24 - Dem												
Commodity				$ 394,650	$ 586,365	$ 706,050	$ 560,790	$ 560,790	$ 542,700	$ 560,790	$ 2,214,000	$ 3,651,800
Tetco Supply24 - Dem											$ 6,000	$ 6,200
Commodity											$ 860,550	$ 2,667,069
Tetco Supply25 - Dem												
Commodity												
Tetco Supply26 - Dem												
Commodity	$ 2,942,550	$ 2,600,000	$ 850,200	$ 227,184	$ 704,700	$ 135,990	$ 3,271,710	$ 2,331,465	$ 1,148,780	$ 2,202,175		
Tetco Supply26 - Dem												
Commodity												
Tetco Supply28 - Dem												
Commodity											$ 1,042,695	$ 2,266,999
Tetco Supply29 - Dem												
Commodity												
Tetco Supply30 - Dem												
Commodity												
Tetco Supply31 - Dem												
Commodity												
Tetco Supply32 - Dem												
Commodity												
Tetco Supply33 - Dem												
Commodity	$ 1,075,291	$ 1,837,555	$ 1,307,584								$ 1,232,772	$ 2,098,130
Tetco Supply33 - Dem												
Commodity**			$ (36,500)									
Tetco Supply33 - Dem												
Commodity	$ 426,250	$ 743,400	$ 522,350	$ 597,000	$ 914,500	$ 1,116,000	$ 798,250	$ 1,128,400	$ 1,104,750	$ 1,141,575	$ 492,000	$ 849,400
Tetco Supply33 - Dem												
Commodity												
Tetco Supply34 - Dem												
Commodity	$ 266,213	$ 455,490	$ 323,873	$ 368,100	$ 558,930	$ 679,500	$ 684,015	$ 640,770	$ 499,500	$ 516,150	$ 336,150	$ 520,800
Tetco Supply34 - Dem												
Commodity												
Tetco Supply35 - Dem												
Commodity	$ 534,982	$ 855,787	$ 639,616									
Tetco Supply35 - Dem	$ 2,325	$ 2,100	$ 2,325	$ 2,250	$ 2,325	$ 2,250	$ 2,325	$ 2,325	$ 2,250	$ 2,325		
Commodity	$ 1,197,500	$ 937,750	$ 419,950	$ 127,650	$ 291,500		$ 253,150		$ 27,150	$ 343,975		
Tetco Supply35 - Dem												
Commodity*		$ 3,018										
Tetco Supply36 - Dem												
Commodity												
Tetco Supply37 - Dem												
Commodity	$ 1,226,438	$ 2,003,750	$ 1,466,688									
Tetco Supply38 - Dem											$ 10,125	$ 10,463
Commodity											$ 685,725	$ 2,184,825
Tetco Supply38 - Dem												
Commodity												

*Supplier purchased gas back from PGW at a discounted price.
**Annual return

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Philadelphia Gas Works
Volumes Purchased
Williams Pipeline Company

Volumes-DTH	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
S-2 Storage Capacity	1,088,612	1,205,249	1,166,370	1,205,249	1,166,370	1,205,249	1,205,249	1,166,370	1,205,249	1,166,370	1,205,249	1,205,249
S-2 Demand	145,348	160,921	155,730	160,921	155,730	160,921	160,921	155,730	160,921	155,730	160,921	160,921
Handling fr Stg.	124,887	77,167	6,182	(30)							20,720	58,945
Handling to Stg.				10,461	56,398	54,000	55,800	55,800	54,000	23,250	14,162	
GSS Demand	1,908,577	1,723,876	1,908,577	1,847,010	1,908,577	1,847,010	1,908,577	1,908,577	1,847,010	1,908,577	1,847,010	1,908,577
Stg. Cap.Vol. Chg.	127,835,723	115,464,524	127,835,723	123,711,990	127,835,723	123,711,990	127,835,723	127,835,723	123,711,990	127,835,723	123,711,990	127,835,723
Handling fr Stg.	1,202,333	741,673	572,089	259,240	7,125						208,605	471,401
Storage Injection	5,652	19,421	37,193	39,859	403,056	532,724	557,746	559,548	540,125	320,778	155,963	34,064
WSS Demand	1,088,565	983,220	1,088,565	1,053,450	1,088,565	1,053,450	1,088,565	1,088,565	1,053,450	1,088,565	1,053,450	1,088,565
Stg. Cap Vol Chg.	103,413,179	93,405,452	103,413,179	100,077,270	103,413,179	100,077,270	103,413,179	103,413,179	100,077,270	103,413,179	100,077,270	103,413,179
Handling fr Stg.	564,048	175,673	53,704	87,521	40,425	2,198					92,050	364,968
Handling to Stg.	19,483	73,547	217,778	80,749	121,984	59,822	98,074	316,116	300,121	197,887	23,664	873
FT Demand/.3691	5,121,572	4,625,936	5,145,349	4,979,370	5,145,349	4,979,370	5,145,349	5,145,349	4,979,370	5,145,349	4,979,370	5,121,572
FT Commodity/.3691	1,214,682	905,336	548,747	1,841,812	1,670,581	1,109,864	1,108,727	1,320,277	1,288,400	1,601,035	481,193	838,995
PSFT Demand/5001	84,754	76,552										84,754
PSFT Commodity/5001												
Eminence Cust.Dem.												
Eminence Cust. Cap.												
Eminence Storage Dem.												
Eminence Storage Cap.												
Handling fr Stg.												
Handling to Stg.												
Capacity Rel. Dem.Credit #3691*	(3,848,000)	(3,640,000)	(4,030,000)	(2,250,000)	(2,325,000)	(4,249,583)	(4,703,750)	(4,320,000)	(3,600,000)	(2,325,000)	(3,600,000)	(3,720,000)
Capacity Rel.Dem. Credit #5001	(482,329)	(434,896)	(483,011)	(478,470)	(460,600)	(450,604)	(460,071)	(464,628)	(471,090)	(459,296)	(477,210)	(510,260)
S2 Credit												
Eminence #2 Demand												
Eminence #2 Capacity												
Handling to Stg.												
Handling fr. Stg.												
Eminence #2 adj.												
Cashout / Cashout Majority Sell			998									
S 2 Adj. (02/1/16 - 02/29/16)												
WSS Capacity Release												
Eminence Capacity Release												
Unathorized Overrun 02/2016												
Eminence Capacity Release												
Cashout / Cashout 03/31/16												

* While the amount charged for the release is zero, the money will be recovered in the Sales Service Charge to make the GCR whole.

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Philadelphia Gas Works

Cost Of Fuel Purchased

Williams Pipeline Company

Rate - $	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
S-2 Capacity	0.01086	0.01710	0.01414	0.01564	0.01490	0.01490	0.01490	0.01490	0.01490	0.01490	0.01490	0.01490
Storage Demand	0.20365	0.38356	0.30539	0.30862	0.30468	0.30468	0.30468	0.30497	0.30482	0.30482	0.30482	0.30468
Handling fr Stg.	0.07787	0.07647	0.18162	0.08500	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.08637	0.07397
Handling to Stg.	0.00000	0.00000	0.00000	0.04635	0.04635	0.04635	0.04635	0.04635	0.04635	0.04665	0.04665	0.00000
GSS Demand	0.10537	0.10537	0.10537	0.13161	0.13161	0.13161	0.13161	0.13161	0.13161	0.13161	0.13186	0.13186
Stg. Cap.Vol. Chg.	0.00063	0.00063	0.00063	0.00097	0.00097	0.00097	0.00097	0.00097	0.00097	0.00097	0.00097	0.00097
Handling fr Stg.	0.04304	0.04306	0.04306	0.05615	0.05615	0.00000	0.00000	0.00000	0.00000	0.00000	0.05720	0.05720
Storage Injection	0.04619	0.04621	0.04621	0.05688	0.05688	0.05688	0.05688	0.05688	0.05688	0.05688	0.05928	0.05928
WSS Demand	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102	0.03102
Stg. Cap Vol Chg.	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033
Handling fr Stg.	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00000	0.00000	0.00000	0.00000	0.00440	0.00440
Handling to Stg.	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440
FT Demand/.3691	0.52781	0.52781	0.52584	0.52699	0.52699	0.52699	0.52699	0.52699	0.52699	0.52699	0.52699	0.52896
FT Commodity/.3691	0.03595	0.03442	0.02679	0.02731	0.01973	0.01956	0.01804	0.01613	0.01635	0.02222	0.04657	0.05305
PSFT Demand/.5001	0.73977	0.73977	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.74195
PSFT Commodity/.5001												
Eminence Cust.Dem.												
Eminence Cust. Cap.												
Eminence Storage Dem.												
Eminence Storage Cap.												
Handling fr Stg.												
Handling to Stg.												
Capacity Rel. Dem.Credit #3691*	0.14070	0.13942	0.13673	0.06939	0.06939	0.25151	0.23827	0.15898	0.09966	0.06939	0.44292	0.44292
Capacity Rel. Dem Credit #5001	0.54595	0.54595	0.54595	0.54718	0.54718	0.54718	0.54629	0.54718	0.54718	0.54718	0.54718	0.54718
S2 Credit												
Eminence #2 Demand												
Eminence #2 Capacity												
Handling to Stg.												
Handling fr Stg.												
WSS Capacity Release												
Eminenec Capacity Release												
S 2 Adj. (02/1/15 - 02/29/16)												
Cashout / Cashout Majority Sell			4.66690									
Unathorized Overrun 02/2016												
Cashout / Cashout 03/31/16												

* While the amount charged for the release is zero, the money will be recovered in the Sales Service Charge to make the GCR whole.

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Philadelphia Gas Works
Cost of Fuel Purchased
Williams Pipeline Company

Amount - $	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
S-2 Capacity	$ 11,822	$ 20,613	$ 16,493	$ 18,845	$ 17,379	$ 17,958	$ 17,958	$ 17,379	$ 17,958	$ 17,379	$ 17,958	$ 17,958
Storage Demand	$ 29,600	$ 61,723	$ 47,558	$ 49,663	$ 47,448	$ 49,029	$ 49,029	$ 47,492	$ 49,052	$ 47,470	$ 49,052	$ 49,029
Handling fr Stg.	$ 9,725	$ 5,901	$ 1,123	$ (3)							$ 1,790	$ 4,360
Handling to Stg.				$ 485	$ 2,614	$ 2,503	$ 2,586	$ 2,586	$ 2,503	$ 1,085	$ 661	
GSS Demand	$ 201,107	$ 181,645	$ 201,107	$ 243,085	$ 251,188	$ 243,085	$ 251,188	$ 251,188	$ 243,085	$ 251,188	$ 243,547	$ 251,665
Stg. Cap.Vol. Chg.	$ 80,536	$ 72,743	$ 80,536	$ 120,001	$ 124,001	$ 120,001	$ 124,001	$ 124,001	$ 120,001	$ 124,001	$ 120,001	$ 124,001
Handling fr Stg.	$ 51,748	$ 31,936	$ 24,634	$ 14,556	$ 400						$ 11,932	$ 26,964
Storage Injection	$ 261	$ 897	$ 1,719	$ 2,267	$ 22,926	$ 30,301	$ 31,725	$ 31,827	$ 30,722	$ 18,246	$ 9,246	$ 2,019
WSS Demand	$ 33,767	$ 30,499	$ 33,767	$ 32,678	$ 33,767	$ 32,678	$ 33,767	$ 33,767	$ 32,678	$ 33,767	$ 32,678	$ 33,767
Stg. Cap Vol Chg.	$ 34,126	$ 30,824	$ 34,126	$ 33,026	$ 34,126	$ 33,026	$ 34,126	$ 34,126	$ 33,026	$ 34,126	$ 33,026	$ 34,126
Handling fr Stg.	$ 2,482	$ 773	$ 236	$ 385	$ 178	$ 10					$ 405	$ 1,606
Handling to Stg.	$ 86	$ 324	$ 958	$ 355	$ 537	$ 263	$ 432	$ 1,391	$ 1,321	$ 871	$ 104	$ 4
FT Demand/.3691	$ 2,703,200	$ 2,441,600	$ 2,705,653	$ 2,624,071	$ 2,711,540	$ 2,624,071	$ 2,711,540	$ 2,711,540	$ 2,624,071	$ 2,711,540	$ 2,624,071	$ 2,709,084
FT Commodity/.3691	$ 43,673	$ 31,162	$ 14,699	$ 50,291	$ 32,960	$ 21,710	$ 19,996	$ 21,295	$ 21,060	$ 35,581	$ 22,407	$ 44,510
PSFT Demand/5001	$ 62,698	$ 56,631										$ 62,883
PSFT Commodity												
Eminence Cust.Dem.												
Eminence Cust. Cap.												
Eminence Storage Dem.												
Eminence Storage Cap.												
Handling fr Stg.												
Handling to Stg.												
Capacity Rel. Dem.Credit #3691*	$ (541,415)	$ (507,500)	$ (551,025)	$ (156,120)	$ (161,324)	$ (1,068,800)	$ (1,120,774)	$ (686,774)	$ (358,770)	$ (161,324)	$ (1,594,500)	$ (1,647,650)
Capacity Rel. Dem.Credit #5001	$ (263,327)	$ (237,432)	$ (263,699)	$ (261,808)	$ (252,032)	$ (246,561)	$ (251,334)	$ (254,234)	$ (257,772)	$ (251,317)	$ (261,120)	$ (279,202)
S2 Credit	$ (6,310)	$ (6,327)	$ (6,057)	$ (5,593)	$ (6,335)	$ (6,302)	$ (6,304)	$ (6,332)	$ (6,345)	$ (6,351)	$ (6,326)	$ (6,295)
Eminence #2 Demand												
Eminence #2 Capacity												
Handling to Stg.												
Handling fr Stg.												
Eminence #2 ajd.												
Cashout / Cashout 02/29/2016												
S2 Adj. (02/1/15 - 02/28/15)												
WSS Capacity Release												
Eminence Capacity Release												
FT-Demand Charges Paid by VA Power												
Cashout / Cashout 03/31/16												
S2 Adj. (02/1/16 - 02/29/16)												
Cashout / Cashout Majority Sell			$ 4,658									
Unathorized Overrun 02/2016												
TOTAL	$ 2,453,780	$ 2,216,013	$ 2,346,485	$ 2,766,184	$ 2,859,372	$ 1,852,972	$ 1,897,936	$ 2,329,253	$ 2,552,589	$ 2,856,260	$ 1,304,930	$ 1,428,829

* While the amount charged for the release is zero, the money will be recovered in the Sales Service Charge to make the GCR whole.

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Philadelphia Gas Works
Volumes Purchased
Texas Eastern

Volumes - Dth	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
CDS Market Area Demand	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
CDS Access Area Demand	97,573	97,573	97,573	97,573	97,573	97,573	97,573	97,573	97,573	97,573	97,573	97,573
CDS Commodity	1,343,232	1,142,864	702,732	917,363	1,029,756	886,044	1,457,921	1,192,297	1,060,486	1,475,767	658,921	1,405,097
CDS ACA Charge	1,343,232	1,142,864	702,732	917,363	1,029,756	886,044	1,457,921	1,192,297	1,060,486	1,475,767	658,921	1,405,097
CDS PCB True-up Settlement												
FT1 Market Area Demand	23,822	23,822	23,822	23,822	23,822	23,822	23,822	23,822	23,822	23,822	23,822	23,822
FT1 Access Area Demand	54,878	54,878	54,878	54,878	54,878	54,878	54,878	54,878	54,878	54,878	54,878	54,878
FT1 Commodity												
FT1 ACA Charge												
FT1 PCB True-up Settlement												
SS1 Demand 400121	44,118	44,118	44,118	44,118	44,118	44,118	44,118	44,118	44,118	44,118	44,118	44,118
Space Charge	220,590	220,590	220,590	220,590	220,590	220,590	220,590	220,590	220,590	220,590	220,590	220,590
Handling fr Storage	632,472	218,729	348,907	143,768	9,006	23,483				13,871	101,989	266,713
Excess Withdrawal												
Storage Injection	30,093	31,800	27,212	17,879	100,911		421,786	88,474	365,171	97,004	65,698	28,088
Excess Injection		22,605	6,462		72,800					23,276		5,184
Storage Surcharge Credit												
PCB True-up Settlement 400121												
SS1 Demand 400209	20,847	20,847	20,847	20,847	20,847	20,847	20,847	20,847	20,847	20,847	20,847	20,847
Space Charge	205,177	205,177	205,177	205,177	205,177	205,177	205,177	205,177	205,176	205,176	205,176	205,176
Handling fr Storage	467,940	275,754	392,941	232,183	26,839					46,065	178,345	242,345
Excess Withdrawal												
Storage Injection	16,907	46,576	40,243	92,884	183,019	86,033	269,618	384,315	81,316	128,059	118,501	75,990
Excess Injection	35,473						18,630		22,154	13,621	120,904	
Storage Surcharge Credit												
PCB True-up Settlement 400209												
FTS-2 Demand	5,394	5,394	5,394	5,394	5,394	5,394	5,394	5,394	5,394	5,394	5,394	5,394
FTS-7 Demand	7,788	7,788	7,788	7,788	7,788	7,788	7,788	7,788	7,788	7,788	7,788	7,788
FTS-8 Demand	25,709	25,709	25,709	25,709	25,709	25,709	25,709	25,709	25,709	25,709	25,709	25,709
FTS-2 PCB True-up Settlement												
FT-1 Market Demand 800514	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
FT-1 Access Area Demand 800514	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474
FT Commodity	558,000	504,000	558,000								540,000	558,000
FT-1 ACA Charge	558,000	504,000	558,000								540,000	558,000
FT3-3 Cap.Rel. dem.credit 800514				(540,000)	(558,000)	(540,000)	(558,000)	(558,000)	(540,000)	(558,000)		
FT3-3 Cap.Rel. dem.credit 800514												
PCB True-up Settlement 800514												
FT-1 Market Demand 800515	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
FT-1 Access Area Demand 800515	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474
FT Commodity	558,000	500,980	558,000								540,000	558,000
FT-1 ACA Charge	558,000	500,980	558,000								540,000	558,000
FT1-3 Cap.Rel. dem. credit 800515				(540,000)	(558,000)	(540,000)	(558,000)	(558,000)	(540,000)	(558,000)		
FT1-3 Cap.Rel. dem. credit 800515												
PCB True-up Settlement 800515												
CDS 800232 M1-M1 Cap. Rel.	(481,864)	(434,476)	(482,701)	(477,990)	(461,001)	(450,570)	(459,513)	(464,256)	(470,580)	(459,017)	(476,520)	(509,578)
FT1-800233 M3-M3 Cap. Rel.	(579,948)	(523,824)	(579,948)	(561,240)	(579,948)	(561,240)	(579,948)	(579,948)	(561,240)	(579,948)	(1,032,480)	(1,066,896)
CDS-800232 M2-M3 Cap. Rel.*	(125,100)	(40,000)										(52,916)
FTS-2,7,8 ACA	1,062,212	731,828	429,284	414,377	155,000	150,000	155,000	155,000	150,000	155,000	560,421	976,544
FTS-2,7,8 Commodity												
CSHOUT UNDER 5% DS												

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Philadelphia Gas Works
Cost Of Fuel Purchased
Texas Eastern

Volumes - Dth	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
CDS Market Area Demand	12.5140	21.4680	21.4680	21.7240	21.7240	21.7240	21.7240	21.7410	21.7410	21.7410	21.7410	21.7260
CDS Access Area Demand	4.1013	5.8936	5.8936	5.9708	5.9708	5.9708	5.9708	6.0039	6.0039	6.0039	6.0039	6.0039
CDS Commodity	0.0777	0.1223	0.1223	0.1255	0.1255	0.1255	0.1255	0.1292	0.1292	0.1292	0.1292	0.1167
CDS ACA Charge	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0015	0.0015	0.0015
CDS PCB True-up Settlement	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FT1 Market Area Demand	12.2910	21.2450	21.2450	21.5010	21.5010	21.5010	21.5010	21.5180	21.5180	21.5180	21.5180	21.5030
FT1 Access Area Demand	4.2994	6.4168	6.4168	6.5363	6.5363	6.5363	6.5363	6.5754	6.5754	6.5754	6.5754	6.5754
FT1 Commodity	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FT1 ACA Charge	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FT1 PCB True-up Settlement	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SS1 Demand 400121	6.5700	9.5100	9.5100	9.6340	9.6340	9.6340	9.6340	9.6380	9.6380	9.6380	9.6380	9.6360
Space Charge	0.3371	0.4368	0.4368	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599
Handling fr Storage	0.0827	0.0903	0.0903	0.0915	0.0915	0.0915	0.0000	0.0000	0.0000	0.0925	0.0925	0.0801
Excess Withdrawal	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Storage Injection	0.0537	0.0468	0.0468	0.0470	0.0470	0.0000	0.0470	0.0470	0.0470	0.0470	0.0470	0.0426
Excess Injection	0.0000	0.4837	0.4837	0.0000	0.5069	0.0000	0.0000	0.0000	0.0000	0.5069	0.0000	0.5021
Storage Surcharge Credit	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PCB True-up Settlement 400121	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SS1 Demand 400209	6.5700	9.5100	9.5100	9.6340	9.6340	9.6340	9.6340	9.6380	9.6380	9.6380	9.6380	9.6360
Space Charge	0.3371	0.4368	0.4368	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599	0.4599
Handling fr Storage	0.0827	0.0903	0.0903	0.0915	0.0915	0.0000	0.0000	0.0000	0.0000	0.0925	0.0925	0.0801
Excess Withdrawal	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Storage Injection	0.0537	0.0468	0.0468	0.0470	0.0470	0.0470	0.0470	0.0470	0.0470	0.0470	0.0470	0.0426
Excess Injection	0.3912	0.0000	0.0000	0.0000	0.0000	0.0000	0.5069	0.0000	0.5069	0.5069	0.5069	0.0000
Storage Surcharge Credit	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PCB True-up Settlement 400209	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FTS-2 Demand	8.4670	10.1930	10.1930	10.2410	10.2410	10.2410	10.2410	10.2410	10.2410	10.2410	10.2410	10.2400
FTS-7 Demand	7.4250	9.1510	9.1510	9.1990	9.1990	9.1990	9.1990	9.1990	9.1990	9.1990	9.1990	9.1990
FTS-8 Demand	7.2810	8.6900	8.6900	8.7730	8.7730	8.7730	8.7730	8.7730	8.7730	8.7730	8.7730	8.7730
FTS-2 PCB True-up Settlement	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FT-1 Market Demand 800514	12.2910	21.2450	21.2450	21.5010	21.5010	21.5010	21.5010	21.5180	21.5180	21.5180	21.5180	21.5030
FT-1 Access Area Demand 800514	2.8711	3.8859	3.8859	3.8618	3.8618	3.8618	3.8618	3.8809	3.8809	3.8809	3.8809	3.8809
FT Commodity	0.0777	0.1223	0.1223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1292	0.1167
FT-1 ACA Charge	0.0012	0.0012	0.0012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
FT3-3 Cap.Rel. demand credit 800514	0.0000	0.0000	0.0000	0.0610	0.4078	0.4045	0.4053	0.5031	0.5198	0.0460	0.0000	0.0000
FT3-3 Cap.Rel. demand credit 800514	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PCB True-up Settlement 800514	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FT-1 Market Demand 800515	12.2910	21.2450	21.2450	21.5010	21.5010	21.5010	21.5010	21.5180	21.5180	21.5180	21.5180	21.5030
FT-1 Access Area Demand 800515	2.8711	3.8859	3.8859	3.8618	3.8618	3.8618	3.8618	3.8809	3.8809	3.8809	3.8809	3.8809
FT Commodity	0.0777	0.1223	0.1223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1292	0.1167
FT-1 ACA Charge	0.0012	0.0012	0.0012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015
FT1-3 Cap.Rel. demand credit 800515	0.0000	0.0000	0.0000	0.0600	0.4078	0.4045	0.4053	0.5031	0.5198	0.0460	0.0000	0.0000
FT1-3 Cap.Rel. demand credit 800515	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PCB True-up Settlement 800515	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CDS 800232 M1-M1 Cap. Rel.	0.5591	0.5683	0.5683	0.9082	0.9082	0.9180	0.9180	0.9170	0.9195	0.9194	0.9194	0.9187
FT1-800233 M3-M3 Cap. Rel.	1.7005	1.7005	1.7005	0.1082	0.1082	0.1082	0.1082	0.1082	0.1082	0.1082	1.8123	1.8123
CDS-800232 M2-M3 Cap. Rel.*	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
FTS-2,7,8 ACA	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0015	0.0015	0.0015
FTS-2,7,8 Commodity	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CSHOUT UNDER 5%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

1307F 53.64 C1-Schedule 1

Philadelphia Gas Works
Cost Of Fuel Purchased
Texas Eastern

Amount - $	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
CDS Market Area Demand	$ 938,550	$ 1,610,100	$ 1,610,100	$ 1,629,300	$ 1,629,300	$ 1,629,300	$ 1,629,300	$ 1,630,575	$ 1,630,575	$ 1,630,575	$ 1,630,575	$ 1,629,450
CDS Access Area Demand	$ 400,177	$ 575,053	$ 575,053	$ 582,586	$ 582,586	$ 582,586	$ 582,586	$ 585,822	$ 585,822	$ 585,822	$ 585,822	$ 585,822
CDS Commodity	$ 104,369	$ 139,772	$ 85,944	$ 115,129	$ 129,234	$ 111,199	$ 182,969	$ 154,045	$ 137,015	$ 190,669	$ 85,133	$ 163,975
CDS ACA Charge	$ 1,612	$ 1,371	$ 843	$ 1,101	$ 1,236	$ 1,063	$ 1,750	$ 1,431	$ 1,273	$ 2,214	$ 988	$ 2,108
CDS PCB True-up Settlement												
FT1 Market Area Demand	$ 292,796	$ 506,098	$ 506,098	$ 512,197	$ 512,197	$ 512,197	$ 512,197	$ 512,602	$ 512,602	$ 512,602	$ 512,602	$ 512,244
FT1 Access Area Demand	$ 235,945	$ 352,140	$ 352,140	$ 358,702	$ 358,702	$ 358,702	$ 358,702	$ 360,845	$ 360,845	$ 360,845	$ 360,845	$ 360,845
FT1 Commodity												
FT1 ACA Charge												
FT1 PCB True-up Settlement												
SS1 Demand 400121	$ 289,855	$ 419,562	$ 419,562	$ 425,033	$ 425,033	$ 425,033	$ 425,033	$ 425,209	$ 425,209	$ 425,209	$ 425,209	$ 425,121
Space Charge	$ 74,361	$ 96,354	$ 96,354	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449	$ 101,449
Handling fr Storage	$ 52,305	$ 19,751	$ 31,506	$ 13,155	$ 824	$ 2,149				$ 1,283	$ 9,434	$ 21,364
Excess Withdrawal												
Storage Injection	$ 1,616	$ 1,488	$ 1,274	$ 840	$ 4,743		$ 19,824	$ 4,158	$ 17,163	$ 4,559	$ 3,088	$ 1,197
Excess Injection		$ 10,934	$ 3,126		$ 36,902					$ 11,799		$ 2,603
Storage Surcharge Credit	$ (53,872)	$ (51,578)	$ (49,669)	$ (53,940)	$ (53,665)	$ (53,680)	$ (53,915)	$ (54,027)	$ (54,081)	$ (53,867)	$ (53,604)	$ (53,955)
PCB True-up Settlement 400121												
SS1 Demand 400209	$ 136,965	$ 198,255	$ 198,255	$ 200,840	$ 200,840	$ 200,840	$ 200,840	$ 200,923	$ 200,923	$ 200,923	$ 200,923	$ 200,882
Space Charge	$ 69,165	$ 89,621	$ 89,621	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,361	$ 94,360	$ 94,360	$ 94,360	$ 94,360
Handling fr Storage	$ 38,699	$ 24,901	$ 35,483	$ 21,245	$ 2,456					$ 4,261	$ 16,497	$ 19,412
Excess Withdrawal												
Storage Injection	$ 908	$ 2,180	$ 1,883	$ 4,366	$ 8,602	$ 4,044	$ 12,672	$ 18,063	$ 3,822	$ 6,019	$ 5,570	$ 3,237
Excess Injection	$ 13,877						$ 9,444		$ 11,230	$ 6,904	$ 61,286	
Storage Surcharge Credit	$ (25,412)	$ (24,330)	$ (23,429)	$ (25,444)	$ (25,314)	$ (25,322)	$ (25,434)	$ (25,486)	$ (25,512)	$ (25,411)	$ (25,287)	$ (25,452)
PCB True-up Settlement 400209												
FTS-2 Demand	$ 45,671	$ 54,981	$ 54,981	$ 55,240	$ 55,240	$ 55,240	$ 55,240	$ 55,240	$ 55,240	$ 55,240	$ 55,240	$ 55,235
FTS-7 Demand	$ 57,826	$ 71,268	$ 71,268	$ 71,642	$ 71,642	$ 71,642	$ 71,642	$ 71,642	$ 71,642	$ 71,642	$ 71,642	$ 71,642
FTS-8 Demand	$ 187,187	$ 223,411	$ 223,411	$ 225,545	$ 225,545	$ 225,545	$ 225,545	$ 225,545	$ 225,545	$ 225,545	$ 225,545	$ 225,545
FTS-2 PCB True-up Settlement												
FT-1 Market Demand 800514	$ 221,238	$ 382,410	$ 382,410	$ 387,018	$ 387,018	$ 387,018	$ 387,018	$ 387,324	$ 387,324	$ 387,324	$ 387,324	$ 387,054
FT-1 Access Area Demand 800514	$ 32,943	$ 44,587	$ 44,587	$ 44,311	$ 44,311	$ 44,311	$ 44,311	$ 44,529	$ 44,529	$ 44,529	$ 44,529	$ 44,529
FT Commodity	$ 43,357	$ 61,639	$ 68,243								$ 69,768	$ 65,119
FT-1 ACA Charge	$ 670	$ 605	$ 670								$ 810	$ 837
FT3-3 Cap.Rel. dem. credit 800514				$ (32,940)	$ (227,552)	$ (218,430)	$ (226,157)	$ (280,730)	$ (280,692)	$ (25,668)		
FT3-3 Cap.Rel. dem. credit 800514												
PCB True-up Settlement 800514												
FT-1 Market Demand 800515	$ 221,238	$ 382,410	$ 382,410	$ 387,018	$ 387,018	$ 387,018	$ 387,018	$ 387,324	$ 387,324	$ 387,324	$ 387,324	$ 387,054
FT-1 Access Area Demand 800515	$ 32,943	$ 44,587	$ 44,587	$ 44,311	$ 44,311	$ 44,311	$ 44,311	$ 44,529	$ 44,529	$ 44,529	$ 44,529	$ 44,529
FT Commodity	$ 43,357	$ 61,270	$ 68,243								$ 69,768	$ 65,119
FT-1 ACA Charge	$ 670	$ 601	$ 670								$ 810	$ 837
FT1-3 Cap.Rel. dem. credit 800515				$ (32,400)	$ (227,552)	$ (218,430)	$ (226,157)	$ (280,730)	$ (280,692)	$ (25,668)		
FT1-3 Cap.Rel. dem. credit 800515												
PCB True-up Settlement 800515												
CDS 800232 M1-M1 Cap. Rel.	$ (269,425)	$ (246,927)	$ (274,339)	$ (434,132)	$ (418,667)	$ (413,601)	$ (421,817)	$ (425,735)	$ (432,691)	$ (422,033)	$ (438,124)	$ (468,161)
FT1-800233 M3 - M3 Cap. Rel.	$ (986,179)	$ (890,742)	$ (986,179)	$ (60,730)	$ (62,755)	$ (60,730)	$ (62,755)	$ (62,755)	$ (60,730)	$ (62,755)	$ (1,871,154)	$ (1,933,526)
CDS-800232 M2-M3 Cap. Rel.*												
FTS-2,7,8 ACA	$ 1,275	$ 878	$ 515	$ 497	$ 186	$ 180	$ 186	$ 186	$ 180	$ 233	$ 841	$ 1,465
FTS-2,7,8 Commodity												
CSHOUT UNDER 5% DS												
PRIOR ADJUSTMENTS			$ 3,001	$ (20,551)							$ (117)	
O.F.O CREDITS					$ (95,401)				$ (37,234)		$ (2,419)	
EPC Refund												
ASA Refund												
PCB Refund												
Interest on Past Due Balance												
TOTAL	$ 2,204,686	$ 4,162,651	$ 4,018,623	$ 4,615,747	$ 4,192,828	$ 4,247,992	$ 4,330,161	$ 4,176,341	$ 4,126,970	$ 4,740,460	$ 3,061,208	$ 2,991,939

1307F 53.64 C1-Schedule 1

Philadelphia Gas Works
Volumes, Rates, and Total Amounts
Eastern Gas

Volumes	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
GSS Storage Demand	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047	34,047
GSS Storage Capacity	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971	3,918,971
GSS Storage Injection	16,940	16,940	274,466	39,080	402,498	429,850	393,700	393,700	293,070	216,892	198,153	-
GSS Handling from Storage	922,167	601,533	278,827	268,648	-	-	-	-	-	-	417,160	834,750
GSS-TE Surcharge	922,167	601,533	278,827	268,648	-	-	-	-	-	-	417,160	834,750
GSS-TE Excess Injection	-	-	-	-	-	-	-	-	-	-	-	-
Unathorized Overrun Charges	-	-	-	-	-	-	-	-	-	-	3,459	-
Rates - $												
GSS Storage Demand	$ 1.8655	$ 1.8655	$ 1.8655	$ 3.2548	$ 3.2548	$ 3.2548	$ 3.2548	$ 3.2548	$ 3.2548	$ 3.2548	$ 3.2676	$ 3.2676
GSS Storage Capacity	$ 0.0145	$ 0.0145	$ 0.0145	$ 0.0318	$ 0.0318	$ 0.0318	$ 0.0318	$ 0.0318	$ 0.0318	$ 0.0318	$ 0.0318	$ 0.0318
GSS Storage Injection	$ 0.0273	$ 0.0273	$ 0.0273	$ 0.0357	$ 0.0357	$ 0.0357	$ 0.0357	$ 0.0357	$ 0.0357	$ 0.0357	$ 0.0396	$ 0.0396
GSS Handling from Storage	$ 0.0165	$ 0.0165	$ 0.0165	$ 0.0263	$ 0.0263	$ 0.0263	$ 0.0263	$ 0.0263	$ 0.0263	$ 0.0266	$ 0.0277	$ 0.0277
GSS-TE Surcharge	$ 0.0045	$ 0.0045	$ 0.0045	$ (0.0002)	$ (0.0002)	$ (0.0002)	$ (0.0002)	$ (0.0002)	$ (0.0002)	$ (0.0002)	$ (0.0008)	$ (0.0008)
GSS-TE Excess Injection	$ 0.2364	$ 0.2364	$ 0.2364	$ 0.5305	$ 0.5305	$ 0.5305	$ 0.5305	$ 0.5305	$ 0.5305	$ 0.5305	$ 0.5344	$ 0.5344
Unathorized Overrun Charges	$ 0.6303	$ 0.6303	$ 0.6303	$ 0.8899	$ 0.8899	$ 0.8899	$ 0.8899	$ 0.8899	$ 0.8899	$ 0.8899	$ 0.8956	$ 0.8956
Total Amount - $												
GSS Storage Demand	$ 63,515	$ 63,515	$ 63,515	$ 110,816	$ 110,816	$ 110,816	$ 110,816	$ 110,816	$ 110,816	$ 110,816	$ 111,252	$ 111,252
GSS Storage Capacity	$ 56,825	$ 56,825	$ 56,825	$ 124,623	$ 124,623	$ 124,623	$ 124,623	$ 124,623	$ 124,623	$ 124,623	$ 124,623	$ 124,623
GSS Storage Injection	$ 462	$ 462	$ 7,493	$ 1,395	$ 14,369	$ 15,346	$ 14,055	$ 14,055	$ 10,463	$ 7,743	$ 7,847	$ -
GSS Handling from Storage	$ 15,216	$ 9,925	$ 4,601	$ 7,065	$ -	$ -	$ -	$ -	$ -	$ -	$ 11,555	$ 23,122.57
GSS-TE Surcharge	$ 4,150	$ 2,707	$ 1,255	$ (54)	$ -	$ -	$ -	$ -	$ -	$ -	$ (334)	$ (668)
GSS-TE Excess Injection	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
*Overrun/Penalty Distribution	$ -	$ -	$ -	$ -	$ -	$ (3,392)	$ -	$ -	$ -	$ -	$ -	$ -
Unathorized Overrun Charges	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,098	$ -
TOTAL	**$ 140,168**	**$ 133,434**	**$ 133,688**	**$ 243,846**	**$ 249,809**	**$ 247,393**	**$ 249,495**	**$ 249,495**	**$ 245,902**	**$ 243,183**	**$ 258,042**	**$ 258,330**

Philadelphia Gas Works
Forecast of Capacity Release Credits by Pipeline by Month
January 2023-August 2024

CAPACITY RELEASE (Dth)

	TRANSCO Contract 3691		TETCO Contract 800232		TETCO Contract 800515-514 Paid		TOTAL DOLLARS		TOTAL VOLUMES	
	VOLUMES	DOLLARS	VOLUMES	DOLLARS	VOLUMES	DOLLARS	TRANSCO	TETCO	TRANSCO	TETCO
Sep-22	-	$ -	-	$ -	-	$ -	$ -	$ -	-	-
Oct-22	-	$ -	-	$ -	-	$ -	$ -	$ -	-	-
Nov-22	-	$ -	-	$ -	-	$ -	$ -	$ -	-	-
Dec-22	-	$ -	-	$ -	-	$ -	$ -	$ -	-	-
Jan-23	310,000	$ 1,162,996	579,948	$ 2,175,733	-	$ -	$ 1,162,996	$ 2,175,733	310,000	579,948
Feb-23	280,000	$ 1,050,448	523,824	$ 1,965,178	-	$ -	$ 1,050,448	$ 1,965,178	280,000	523,824
Mar-23	310,000	$ 1,162,996	579,948	$ 2,175,733	-	$ -	$ 1,162,996	$ 2,175,733	310,000	579,948
Apr-23	1,200,000	$ 581,520	561,240	$ 271,977	1,080,000	$ 523,368	$ 581,520	$ 795,345	1,200,000	1,641,240
May-23	1,240,000	$ 600,904	579,948	$ 281,043	1,116,000	$ 540,814	$ 600,904	$ 821,856	1,240,000	1,695,948
Jun-23	1,200,000	$ 581,520	561,240	$ 271,977	1,080,000	$ 523,368	$ 581,520	$ 795,345	1,200,000	1,641,240
Jul-23	1,240,000	$ 600,904	579,948	$ 281,043	1,116,000	$ 540,814	$ 600,904	$ 821,856	1,240,000	1,695,948
Aug-23	1,240,000	$ 600,903	579,948	$ 281,043	1,116,000	$ 540,814	$ 600,903	$ 821,856	1,240,000	1,695,948
TOTAL Sept 22 - Aug 23	7,020,000	$ 6,342,191	4,546,044	$ 7,703,726	5,508,000	$ 2,669,177	$ 6,342,191	$ 10,372,903	7,020,000	10,054,044

Philadelphia Gas Works
Forecast of Capacity Release Credits by Pipeline by Month
January 2023-August 2024

CAPACITY RELEASE (Dth)

	TRANSCO Contract 3691		TETCO Contract 800232		TETCO Contract 800515-514 Paid		TOTAL DOLLARS		TOTAL VOLUMES	
	VOLUMES	DOLLARS	VOLUMES	DOLLARS	VOLUMES	DOLLARS	TRANSCO	TETCO	TRANSCO	TETCO
Sep-23	1,200,000	$ 808,440	561,240	$ 378,107	1,080,000	$ 727,596	$ 808,440	$ 1,105,703	1,200,000	1,641,240
Oct-23	1,240,000	$ 835,388	579,948	$ 390,711	1,116,000	$ 751,849	$ 835,388	$ 1,142,560	1,240,000	1,695,948
Nov-23	300,000	$ 202,110	561,240	$ 378,107	468,000	$ 315,292	$ 202,110	$ 693,399	300,000	1,029,240
Dec-23	310,000	$ 208,847	579,948	$ 390,711	-	$ -	$ 208,847	$ 390,711	310,000	579,948
Jan-24	310,000	$ 208,847	579,948	$ 390,711	-	$ -	$ 208,847	$ 390,711	310,000	579,948
Feb-24	290,000	$ 195,373	542,532	$ 365,504	-	$ -	$ 195,373	$ 365,504	290,000	542,532
Mar-24	310,000	$ 208,847	579,948	$ 390,711	-	$ -	$ 208,847	$ 390,711	310,000	579,948
Apr-24	1,200,000	$ 808,440	561,240	$ 378,107	1,080,000	$ 727,596	$ 808,440	$ 1,105,703	1,200,000	1,641,240
May-24	1,240,000	$ 835,388	579,948	$ 390,711	1,116,000	$ 751,849	$ 835,388	$ 1,142,560	1,240,000	1,695,948
Jun-24	1,200,000	$ 808,440	561,240	$ 378,107	1,080,000	$ 727,596	$ 808,440	$ 1,105,703	1,200,000	1,641,240
Jul-24	1,240,000	$ 835,388	579,948	$ 390,711	1,116,000	$ 751,849	$ 835,388	$ 1,142,560	1,240,000	1,695,948
Aug-24	1,240,000	$ 835,388	579,948	$ 390,711	1,116,000	$ 751,849	$ 835,388	$ 1,142,560	1,240,000	1,695,948
TOTAL Sept 23 - Aug 24	10,080,000	$ 6,790,896	6,847,128	$ 4,612,910	8,172,000	$ 5,505,476	$ 6,790,896	$ 10,118,386	10,080,000	15,019,128

Tab #4

Tab #5

Docket No. R-2023-3038069
Item 53.64(c)(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:

(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:

Please see attached Testimony – Florian Teme (PGW St. 1) and Testimony – Ryan Reeves (PGW St. 2).

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

Florian Teme

ON BEHALF OF
PHILADELPHIA GAS WORKS

Docket No. R-2023-3038069

Philadelphia Gas Works
Proposed 2023-2024 Annual Gas Cost Rate Adjustment

March 1, 2023

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I. INTRODUCTION

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

A. My name is Florian Teme. My position is Vice President, Marketing, Sales and Energy Planning at the Philadelphia Gas Works.

Q. HOW LONG HAVE YOU HELD THIS POSITION?

A. I assumed my present position in December 2020. Prior to this position, I was Vice President, Marketing and Sales.

Q. AS IT PERTAINS TO ENERGY PLANNING AND RATEMAKING, WHAT ARE YOUR JOB RESPONSIBILITIES?

A. In my present position, I am responsible for the short and long term planning of gas demand, gas supply, raw material expense and revenue; overseeing the preparation of sales, sendout, revenue and fuel expense projections; developing peak day/hour load projections; overseeing the development of the various filings before the Pennsylvania Public Utility Commission ("PUC") and Philadelphia Gas Commission ("PGC"), including the quarterly and annual Gas Cost Rate ("GCR") filings; preparing the Integrated Resource Planning Report; and providing supporting documentation for gas costs related to PGW's Operating Budget before the PGC.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. I have been employed with PGW since August 2003. I became PGW's Vice President, Marketing, Sales and Energy Planning in December 2020. Prior to that, I had various positions with PGW: Vice President, Marketing and Sales (September 2016 – December 2020), Director, Marketing and Sales (April 2013 – September 2016), Manager, Residential and Commercial Sales, Marketing

(March 2012 – April 2013); Manager, Controls and Analytics, Supply Chain (January 2010 – March 2012); Project Manager, Information Services (January 2007 – January 2010); Supply Analyst, Gas Planning (April 2005 – January 2007); and Technical Project Administrator, Marketing (August 2003 – March 2005).

I received my Bachelor of Business Administration (Management Information Systems) from Temple University - Fox School of Business and Management in 2003 and my Master of Business Administration (Business Intelligence, Six Sigma) from Saint Joseph's University - Erivan K. Haub School of Business in 2011.

Q. HAVE YOU EVER PROVIDED TESTIMONY BEFORE THIS COMMISSION?

A. Yes, I have provided testimony in PGW's last three base rate cases (Docket Nos. R-2023-3037933, R-2020-3017206, and R-2017-2586783), in PGW's 2019-2020 GCR proceeding (Docket No. R-2019-3007636), in PGW's 2021-2022 GCR proceeding (Docket No. R-2021-3023970); and in PGW's 2022-2023 GCR proceeding (Docket No. R-2022-3030686).

Q. HOW IS YOUR TESTIMONY STRUCTURED?

A. First, I describe PGW's rate design and GCR calculation methodology. Second, I describe the level of heating degree-days utilized in this filing. Third, I identify the methodology for determining the number of customers and calculating firm sales. Fourth, I discuss the calculation for the Unaccounted for Adjustment Factor ("UAF"). Fifth, I discuss Off System Sales and Capacity Release credits. Lastly, I will discuss the reasonableness of PGW's gas costs.

II. RATE IMPACTS AND SUPPORTING DOCUMENTS

Q. PLEASE DESCRIBE THE IMPACT OF THE PROPOSED CHANGE IN PGW'S GCR IN THIS PROCEEDING.

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Interruptible Revenue Margin for FY 2024. Schedule 10(c) is the reconciliation of the Interruptible Revenue Credit for FY 2023.

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- Schedule 15 identifies the natural gas prices that were used in the preparation of this filing.
- Schedule 16 is the annual reconciliation of the retainage rate and lost and unaccounted for rate.

Q. WHAT IS THE TIME PERIOD FOR FORECASTING PGW'S FUTURE GAS COSTS?

A. PGW's forecast period is a twenty (20) month period that commences on January 1, 2023 (two months before this filing) and eight months before the effective date of the tariff on September 1, 2023. The 2023-2024 GCR year is from September 1, 2023 to August 31, 2024, however, since the required forecast covers 20

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III. RATE DESIGN AND GCR CALCUATION METHODOLOGY

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A. The volumetric rates charged to PGW's customers are the distribution charge and the Gas Cost Rate plus the Merchant Function Charge ("MFC") and Gas Procurement Charge ("GPC"). The distribution charge consists of the Delivery Charge; the Universal Service and Energy Conservation Surcharge; the Other Post Retirement Benefit Surcharge; the Efficiency Cost Recovery Surcharge; and Restructuring and Consumer Education Surcharge. The Universal Service and Energy Conservation Surcharge provides for the recovery of Customer Responsibility Program ("CRP") discounts; Senior Citizen Discounts; the costs of the Enhanced Low Income Retrofit Program ("ELIRP"); CRP arrearage forgiveness and the Conservation Incentive Credit. The Other Post Retirement Benefit Surcharge recovers the amount to fund these obligations. The Efficiency Cost Recovery Surcharge recovers the cost of the energy efficiency programs.

The second element of the rate is the Gas Cost Rate or GCR factor. This charge is a mechanism used to flow through the costs of natural gas costs and other raw materials in a timely and equitable manner. The specific elements of PGW's GCR are set forth in PGW's Tariff.

Generally, the cost of gas purchased to serve the requirements of PGW's customers constitutes the largest single item in the delivered price of gas. In the past, all natural gas costs were recovered through base rates (distribution charge).

However, in the early 1970's, the price of gas lost its stability and underwent rapid escalation during and after a worldwide oil crisis. To combat this instability and prevent the economic harm to all parties caused by regulatory lag in reflecting these price fluctuations in base rates, the concept of a fuel adjustment surcharge mechanism was introduced by PGW. This mechanism provides the flexibility to rapidly reflect current conditions without the time delay inherent in a full-scale base rate alteration. The intent is to achieve an annual balance of the costs incurred for fuel and its pass-through to customers. The costs for pipeline transportation, storage capacity and related fuel prices charged by the interstate pipeline suppliers are largely outside of distributor control. The PUC oversees the pass-through of these charges and the balancing activity. The Gas Cost Rate Section in PGW's Tariff identifies the appropriate formula for such a balance and the charges that may be recovered through this mechanism. Charges for natural gas and other raw materials are included in the GCR. In addition, the interest expense for the over or under recovery of gas costs and natural gas refunds are also included in the GCR. No labor or profit component is added by PGW. The GCR represents the direct pass-through of actual costs incurred.

Only costs related to meeting customer sendout requirements, including associated plant fuel, may be included as a fuel expense for GCR purposes. Purchases diverted into storage and/or LNG become an expense only when withdrawn for customer delivery. Costs associated with purchases made to supply interruptible customers are excluded from the Total Applicable GCR Expenses used to calculate the GCR. Also, demand costs for pipeline transportation for the

firm transportation customers are excluded from the GCR.

Various adjustments are then made to the total applicable expenses eligible for the GCR. Natural gas refunds and interest on the refunds are credited in the calculation of the GCR in the fiscal year received. An adjustment is made to correct for any over or under recovery during the previous period resulting from differences between rates used to project the prior GCR and those actually experienced. The interest expense or credit on the over or under recovery is applied to calculate the total adjustment. An additional adjustment is made for the Interruptible Revenue Credit which is a credit that firm sales customers receive for the interruptible sales margin.

To determine the unit level of the GCR, the remaining total expenses must be divided by the sum of the volumes over which they can be effectively distributed.

Q. WHAT IS THE BASIS FOR THE PRICES USED IN DETERMINING THE GAS COSTS USED IN THIS FILING?

A. The pricing methodology utilized by the Company is consistent with that used in the recent quarterly filings with the inclusion of the additional months in the 20-month forecast. Specifically, the company utilized actual prices for January 2023 and the NYMEX Futures close data (as of January 18, 2023) for the 19 forecast months of February 2023 through August 2024.

Q. HOW DOES THE GCR FOR THE FORECAST PERIOD COMPARE WITH THE GCR FORECASTED IN THE COMPANY'S LAST ANNUAL GCR FILING?

A. The GCR forecasted for 2023-2024 is $0.5472/Mcf smaller than the level PGW had forecasted for the 2022-2023 GCR ($5.6048; R-2021-3023970, Jt. Pet. For

Settlement, App. A). The level of costs in the 2023-2024 period are being influenced by the decrease in natural gas costs compared to the prior year.

IV. LEVEL OF HEATING DEGREE DAYS

Q. DESCRIBE THE LEVEL OF HEATING DEGREE-DAYS THAT WERE USED IN YOUR ANALYSIS.

A. The Company utilizes the temperatures recorded at the PGW Richmond Plant to calculate the average temperature for a given day. The Company subtracts the average temperature from 65 degrees to calculate the number of degree-days for the day. The degree-days for all of the days in the year are aggregated to arrive at the total number of degree-days for the year. Next, the Company calculates the average heating degree-days for the past 20 years to arrive at the forecasted heating degree-days in a normal year, and in this filing PGW is using the 20 year average of 3923 degree days.

V. METHODOLOGY FOR DETERMINING NUMBER OF CUSTOMERS AND CALCULATING FIRM SALES

Q. HOW HAS THE COMPANY CALCULATED THE NUMBER OF CUSTOMERS IN EACH RATE CLASS?

A. PGW determined the actual number of customer billings on December 31, 2022 using the PGW Gas Sales and Revenue Reports. Next, the Marketing Department load forecast was used to factor in the addition and loss of customers. Finally, the customer numbers were adjusted for the loss of customers due to non-payment terminations.

Q. WHAT IS THE METHOLOGY FOR CALCULATING THE WEATHER NORMALIZED BILLED SALES?

A. PGW used a two-step process to arrive at the appropriate level of usage per customer. First, a trial domestic factor is developed by class of customers from

sales reported for the previous year's summer months. 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 domestic 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 cold 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.

Utilizing these domestic and heating factors, billed sales are then forecasted using 3923 degree days and the number of customers.

VI. CALCULATION OF UNACCOUNTED FOR ADJUSTMENT FACTOR

Q. WHAT IS THE UNACCOUNTED FOR GAS PERCENTAGE USED IN THIS FILING?

A. The level of unaccounted for gas and retainage rate used in this filing is 2.4% and is based on a 3-year average.

VII. OFF SYSTEM SALES AND CAPACITY RELEASE CREDITS

Q. WHAT IS THE TOTAL AMOUNT OF OFF SYSTEM SALES, CAPACITY RELEASE CREDITS, AND ASSET MANAGEMENT CREDITS THAT ARE INCORPORATED INTO THE GCR?

A. PGW has projected the amount of off system sales, capacity release credits, and asset management credits within the GCR period of 2023-2024. This amount is based on a 3-year average. Of that amount, $16,909,282 was credited to the GCR.

IX RATE BUS

Q. AS PART OF THE SETTLEMENT IN PGW'S MOST RECENTLY ADJUDICATED BASE RATE CASE (R-2020-3017206, ¶ 32), PGW AGREED TO PROVIDE DATA AS PART OF ITS ANNUAL GCR FILINGS ON THE NUMBER OF CUSTOMERS, SALES LEVELS, REVENUES, AND THE COSTS INCURRED TO PROVIDE SERVICE UNDER RATE BUS. CAN YOU PROVIDE THOSE DATA?

A. Yes. The information pertaining to the number of customers, sales levels, revenues, and the costs incurred to provide service under Rate BUS is provided below:

Tariff Rate	Total Customer Count	Total Annual Sales Volume (MCF)	Total Annual Revenue	Total Customer Capital Cost
Back-Up Service – Rate BUS	54	1,890	$209,116	$1,368,160

VIII. REASONABLENESS OF GAS COSTS

Q. BASED UPON THE ABOVE SUPPORTING DATA, DO YOU BELIEVE THAT PGW'S GAS COSTS ARE REASONABLE?

A. Yes, PGW's GCR only contains the direct pass-through of actual costs incurred and projections of the same (for both gas costs and certain non-gas costs that were

previously approved by the PUC). As stated by Mr. Reeves in his testimony, PGW follows a least cost gas procurement strategy.

IX. CONCLUSION

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

VERIFICATION

I, Florian Teme, hereby state that: (1) I am the Vice President, Marketing, Sales and Energy Planning for Philadelphia Gas Works ("PGW"); (2) the facts set forth in my testimony are true and correct (or are true and correct to the best of my knowledge, information and belief); and, (3) I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: 3/1/2023

Florian Teme
Vice President, Marketing, Sales and
Energy Planning
Philadelphia Gas Works

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

Florian Teme

ON BEHALF OF
PHILADELPHIA GAS WORKS

Docket No. R-2023-3038069

Philadelphia Gas Works
Proposed 2023-2024 Annual Gas Cost Rate Adjustment

March 1, 2023

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I. INTRODUCTION

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

A. My name is Florian Teme. My position is Vice President, Marketing, Sales and Energy Planning at the Philadelphia Gas Works.

Q. HOW LONG HAVE YOU HELD THIS POSITION?

A. I assumed my present position in December 2020. Prior to this position, I was Vice President, Marketing and Sales.

Q. AS IT PERTAINS TO ENERGY PLANNING AND RATEMAKING, WHAT ARE YOUR JOB RESPONSIBILITIES?

A. In my present position, I am responsible for the short and long term planning of gas demand, gas supply, raw material expense and revenue; overseeing the preparation of sales, sendout, revenue and fuel expense projections; developing peak day/hour load projections; overseeing the development of the various filings before the Pennsylvania Public Utility Commission ("PUC") and Philadelphia Gas Commission ("PGC"), including the quarterly and annual Gas Cost Rate ("GCR") filings; preparing the Integrated Resource Planning Report; and providing supporting documentation for gas costs related to PGW's Operating Budget before the PGC.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. I have been employed with PGW since August 2003. I became PGW's Vice President, Marketing, Sales and Energy Planning in December 2020. Prior to that, I had various positions with PGW: Vice President, Marketing and Sales (September 2016 – December 2020), Director, Marketing and Sales (April 2013 – September 2016), Manager, Residential and Commercial Sales, Marketing

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V. METHODOLOGY FOR DETERMINING NUMBER OF CUSTOMERS AND CALCULATING FIRM SALES

Q. HOW HAS THE COMPANY CALCULATED THE NUMBER OF CUSTOMERS IN EACH RATE CLASS?

A. PGW determined the actual number of customer billings on December 31, 2022 using the PGW Gas Sales and Revenue Reports. Next, the Marketing Department load forecast was used to factor in the addition and loss of customers. Finally, the customer numbers were adjusted for the loss of customers due to non-payment terminations.

Q. WHAT IS THE METHOLOGY FOR CALCULATING THE WEATHER NORMALIZED BILLED SALES?

A. PGW used a two-step process to arrive at the appropriate level of usage per customer. First, a trial domestic factor is developed by class of customers from sales reported for the previous year's summer months. 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 domestic 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 cold 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.

Utilizing these domestic and heating factors, billed sales are then forecasted using 3923 degree days and the number of customers.

VI. CALCULATION OF UNACCOUNTED FOR ADJUSTMENT FACTOR

Q. WHAT IS THE UNACCOUNTED FOR GAS PERCENTAGE USED IN THIS FILING?

A. The level of unaccounted for gas and retainage rate used in this filing is 2.4% and is based on a 3-year average.

VII. OFF SYSTEM SALES AND CAPACITY RELEASE CREDITS

Q. WHAT IS THE TOTAL AMOUNT OF OFF SYSTEM SALES, CAPACITY RELEASE CREDITS, AND ASSET MANAGEMENT CREDITS THAT ARE INCORPORATED INTO THE GCR?

A. PGW has projected the amount of off system sales, capacity release credits, and asset management credits within the GCR period of 2023-2024. This amount is based on a 3-year average. Of that amount, $16,909,282 was credited to the GCR.

IX RATE BUS

Q. AS PART OF THE SETTLEMENT IN PGW'S MOST RECENT BASE RATE CASE (R-2020-3017206, ¶ 32), PGW AGREED TO PROVIDE DATA AS PART OF ITS ANNUAL GCR FILINGS ON THE NUMBER OF CUSTOMERS, SALES LEVELS, REVENUES, AND THE COSTS INCURRED TO PROVIDE SERVICE UNDER RATE BUS. CAN YOU PROVIDE THOSE DATA?

A. Yes. The information pertaining to the number of customers, sales levels, revenues, and the costs incurred to provide service under Rate BUS is provided below:

Tariff Rate	Total Customer Count	Total Annual Sales Volume (MCF)	Total Annual Revenue	Total Customer Capital Cost
Back-Up Service – Rate BUS	54	1,890	$209,116	$1,368,160

VIII. REASONABLENESS OF GAS COSTS

Q. BASED UPON THE ABOVE SUPPORTING DATA, DO YOU BELIEVE THAT PGW'S GAS COSTS ARE REASONABLE?

A. Yes, PGW's GCR only contains the direct pass-through of actual costs incurred and projections of the same (for both gas costs and certain non-gas costs that were

previously approved by the PUC). As stated by Mr. Reeves in his testimony, PGW follows a least cost gas procurement strategy.

IX. CONCLUSION

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

Tab #6

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

Ryan E. Reeves

ON BEHALF OF
PHILADELPHIA GAS WORKS

Docket No. R-2023-3038069

Philadelphia Gas Works
Proposed 2023-2024 Annual Gas Cost Rate Adjustment

March 1, 2023

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RR-1	PGW's Gas Purchasing Strategy for the 2022-2023 Heating Season

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND CURRENT POSITION WITH PGW.

A. My name is Ryan E. Reeves. My position with Philadelphia Gas Works ("PGW" or "Company") is Director of Gas Supply, Transportation and Control.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. I received a Bachelor of Science degree in Chemical Engineering from Drexel University in 2009 and a Master's degree in Business Administration from Villanova University in 2016. I have held the following positions at PGW: Staff Engineer and Operations Engineer at PGW's Richmond LNG Plant, and Manager of Special Projects.

Q. PLEASE DESCRIBE YOUR DUTIES IN YOUR PRESENT POSITION.

A. I develop and monitor PGW's long-term Gas Supply Strategic Plan that ensures PGW has the financial resources and assets to execute its business strategy. I advance policies, procedures and practices that ensure safe, reliable, competitively priced gas supplies and other energy resources to meet current and future demands on PGW's systems, and I analyze the overall long-term capital and operating budget plans for Gas Supply.

Q. HAVE YOU EVER PROVIDED TESTIMONY BEFORE THIS COMMISSION?

A. Yes. Among other proceedings, I provided testimony in PGW's 2021-2022 Gas Cost Rate proceeding (Docket No. R-2021-3023970) and in PGW's 2022-2023 GCR proceeding (Docket No. R-2022-3030686).

Q. WHAT IS THE FOCUS OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My testimony discusses:

- PGW's gas purchasing policies and strategies applicable to FY 2024 (September 1, 2023 through August 31, 2024) and those utilized in FY 2023 (September 1, 2022 through August 31, 2023); and

- Price analysis and buying advisory service.

Q. PLEASE PROVIDE A GENERAL DESCRIPTION OF PGW'S GAS DISTRIBUTION SYSTEM.

A. PGW's gas distribution system is located in Southeastern Pennsylvania in the County and City of Philadelphia. Since this is not a gas-producing area, PGW and its natural gas customers are dependent upon the interstate gas pipeline system to deliver natural gas into the PGW gas distribution system. PGW relies on the interstate pipeline for all natural gas supply, storage, and transportation services, except for PGW's own on-system peak shaving facilities. PGW owns and operates two LNG facilities that are used primarily both to meet intraday, daily and seasonal supply needs as well as to meet peak day requirement.

Q. PLEASE IDENTIFY PGW'S CURRENT INTERSTATE SUPPLIERS.

A. Enbridge's Texas Eastern Transmission pipeline and Williams' Transco Gas Pipeline are the two interstate natural gas pipelines that deliver gas to PGW's city gates. In addition, PGW uses off-system natural gas storage services to meet winter peak requirements.

II. GAS PURCHASING POLICIES AND SUPPLY STRATEGY

Q. DOES PGW UTILIZE A LEAST-COST PROCUREMENT POLICY IN ITS GAS PURCHASING POLICIES AND SUPPLY STRATEGY?

A. Yes. PGW pursues a least cost gas procurement policy in a manner consistent with PGW's obligation to provide safe, adequate and reliable service to its customers.

Q. PLEASE DESCRIBE PGW'S SUPPLY STRATEGY.

A. PGW's supply strategy[1] (which is currently being used during the FY 2023 GCR period and which the Company intends to use for the FY 2024 GCR period) is a portfolio

[1] All natural gas supply strategies are presented to the Company's internal Supply Committee for review and approval. The Supply Committee is comprised of: the CEO, the COO, the CFO, Senior Vice President of Gas

approach in both contract structure and pricing. The portfolio approach of purchasing gas supply allows PGW to remove some of the volatility in purchasing natural gas supplies for its ratepayers. Without the use of the portfolio approach, firm ratepayer would be totally at the mercy of market volatility.

The Company's gas supply portfolio is divided into four distinct categories: (1) daily index price swing contracts; (2) physical forward purchased contracts; (3) storage; and (4) LNG.

(1) The advantage of daily index priced swing contracts is their operational flexibility which allows PGW to increase and decrease the volume in response to changes in sendout requirements. During certain time periods, these types of contracts also provide security of supply.

(2) The Company enters into physical forward purchased contracts for seasonal baseload supplies and long-term baseload supplies, including "pre-paid natural gas" arrangements (discussed below). These contracts permit the Company to make discretionary physical forward purchases on a year-round basis.

(3) The Company utilizes storage fields which act as additional sources of supply. The gas procured under these contracts also acts as a physical fixed price counter to market conditions.

(4) The Company operates its own LNG peak shaving liquefaction, vaporization, and storage facilities.

Management, and Vice President of Gas Supply. (Note: the COO and Vice President of Gas Supply positions are presently vacant.) The Supply Committee meets quarterly, or more often, at the invitation of the Senior Vice President Gas Management.

The Enbridge and Williams Gas Pipelines represent the only interstate pipeline facilities with physical connections to the PGW service territory. As a result, all of PGW's supply contracts utilize these pipelines, and the contracts also recognize pipeline receipt and delivery rights. These contracts contain the ability to "lock up" the price for upcoming months or to have the pricing default to an agreed upon market index if there is no market advantage in fixing a price before the month begins. As a result, PGW not only ensures security of supply from the pipelines but also can take advantage of varying basis differentiated pricing in the market. This differentiated pricing results from the fact that all shippers of natural gas receive their gas at varying locations along the pipeline. PGW uses a city-gate delivered price in comparing the various alternatives available. The city gate delivered price is computed considering the "into the pipe price of gas" plus all incremental charges levied by the transporting pipeline to deliver the gas to the city gate. These prices include, but are not limited to, reservation fees, fuel, transportation charges and FERC Annual Charge Adjustment ("ACA") charges.

Additionally, PGW utilizes storages and LNG to meet operational requirements. Bundled storage contracts give PGW the right to both store and deliver gas via bundled pipeline capacity. Unbundled storage contracts provide storage rights for gas which is transported on PGW's firm pipeline transportation capacity. These storages provide off-system storage, and LNG provides on-system storage. While both types of storages are important to fulfill operational requirements, PGW's on-system LNG storage is vital during peak days when customer demand exceeds the amount of gas that can be physically provided through PGW's city gates.

Once operational requirements are met, these assets are then used in the overall cost saving strategies. For example, once design winter sendout requirements are ensured, the Company may utilize bundled storage and LNG as a substitute for higher priced gas. PGW's summer gas procurement policy uses a similar approach to address system supply and storage refill. The Gas Supply Department also uses forecasted prices as a benchmark to purchase gas volumes for both system supply and storage refill below the projected cost (when possible) on a proportional basis, while leaving a portion of its needs to default to first of the month pricing.

Q. DOES PGW PURCHASE GAS FROM ANY AFFILIATED INTEREST?

A. No. PGW does not have any affiliated gas suppliers or pipelines.

Q. DOES PGW TAKE STEPS TO ENSURE SYSTEM RELIABILITY WHILE SEEKING TO PROCURE GAS AT THE LEAST COST?

A. Yes. PGW physically sources the gas in accordance with its firm pipeline paths. The pipelines give PGW firm entitlements on their systems for the sourcing of gas for which PGW pays a demand charge. By sourcing supply in this way, PGW ensures its sole entitlement to this space on the pipeline and cannot be accused of infringement. Transporting gas from different locations also mitigates the impact of potential regional disruptions because not all of the supply enters the pipe at the same location. As a result, if there is a disruption at one location, not all of PGW's supply will be affected. PGW's Gas Planning Department also runs a supply status model during the winter operating season which recognizes normal and design winter conditions and the latest actual balance of gas in all storage facilities. Gas Management utilizes the output of this model to make recommendations or changes in its supply operating strategy to ensure that peak day needs and design winter conditions can be met from that point forward.

Q. DOES PGW PERIODICALLY REVIEW ITS EXISTING CONTRACTS TO DETERMINE IF THEY ARE APPROPRIATE?

A. Yes. PGW reviews each of its existing contracts on a regular basis to ensure that none of the contracts are adverse to its customers' interests. Whenever appropriate, PGW initiates renegotiations (if the contract permits) to change the terms.

Q. IN PGW'S 2020-2021 GCR, YOU INDICATED THAT PGW HAD BEGUN TO TAKE ADVANTAGE OF A PREPAID GAS PROGRAM MADE POSSIBLE BY PROVISIONS IN THE INTERNAL REVENUE CODE THAT PERMITTED MUNICIPAL GAS COMPANIES TO OBTAIN GAS COST REDUCTIONS, IS THAT CORRECT?

A. Yes. Beginning in FY 2020, PGW has taken advantage of provisions in the Internal Revenue Code that permits municipal gas companies to use tax exempt bond financed prepaid gas purchase arrangements to obtain significant discounts on those purchases, the savings from which are passed on to PGW sales customers.

Q. WHAT IS A PREPAID GAS ARRANGEMENT?

A. A prepaid gas arrangement is an arrangement in which PGW has agreed to purchase gas from a gas supplier for (typically) 25-30 years. (PGW does not pay for the entire 30 years of purchases up front but receives a monthly invoice for gas received by PGW). The natural gas is purchased from a gas supplier, through a government authority. The authority issues a tax-free long-term bond and uses the proceeds to "prepay" for the natural gas it will purchase on behalf of various municipal gas utilities, including PGW. The gas supplier sells the natural gas to the authority (which then, in turn, sells it to PGW) at a discount, in recognition of the fact that the supplier is able to invest the prepayment at taxable rates. In order to share some of this investment income, the supplier provides PGW with natural gas at significant discounts from a market index price. The size of the discount is determined based on the spread between non-taxable

and taxable investments. As noted, the gas is purchased on index, but PGW receives a discount from the current index price due to the investment arbitrage.

Q. HOW MANY SUCH ARRANGEMENTS HAS PGW ENTERED INTO?

A. PGW is currently involved in nine (9) prepaid gas arrangements.

Q. WILL THESE ARRANGEMENTS EXIST IN THE 2023-2024 GCR PERIOD?

A. Yes. PGW will receive gas under nine (9) arrangements in FY 2024. Those contracts will reduce the monthly price of gas paid by PGW compared to the price it would otherwise pay. In FY 2022, PGW will save approximately $4.9 million for gas sales to customers as a result of prepaid gas purchase arrangements. For FY 2023 and FY 2024, PGW forecasts gas sales to customers will save approximately $5.9 million per year from the nine prepaid deals.

Q. IN YOUR OPINION, ARE THE GAS COSTS INCURRED BY PGW REASONABLE?

A. Yes. The gas costs incurred to date during the 2022-2023 period are the result of the least cost gas procurement strategy outlined in my testimony and are therefore reasonable. The gas costs that PGW is projecting for the 2023-2024 period are also the product of a least cost gas procurement strategy, consistent with PGW's obligation to provide safe, adequate and reliable service to its customers, and are therefore also reasonable.

Q. WHAT WAS INCORPORATED INTO PGW'S 2022-2023 GCR PROCEEDING SETTLEMENT AGREEMENT WITH REGARD TO PGW'S HEDGING?

A. PGW agreed to the following:

> 1. Within thirty (30) days after the entry of a PUC Order approving this Settlement, PGW shall submit to the Parties a Report on PGW's Gas Purchasing Strategy for the 2022-2023 Heating Season, which report will discuss PGW's consideration and utilization of hedging. For the 2023-24 Heating Season, PGW shall prepare a Hedging Plan which shall include a review of its timing and layering of purchases as part of a hedging plan that

could benefit customers by distributing cost changes over multiple quarters.

(a) PGW shall consider comments or suggestions for modification or refinement of the Hedging Plan and any Party may raise concerns or proposals for modification in PGW's GCR proceeding.

Q. WHAT IS THE STATUS OF PGW'S REPORT ON PGW'S GAS PURCHASING STRATEGY FOR THE 2022-2023 HEATING SEASON?

A. The Company's Report on PGW's Gas Purchasing Strategy for the 2022-2023 Heating Season, is attached as Exhibit RR-1.

Q. WHEN WILL THE COMPANY PROVIDE PGW'S HEDGING PLAN FOR THE FOR THE 2023-2024 HEATING SEASON?

A. The Company will Provide its Hedging Plan for the 2023-2024 Heating Season to the Partied by September 1, 2023.

III. CAPACITY RELEASE, OFF-SYSTEM SALES MARGIN AND ASSET MANAGEMENT CREDITS/FEES

Q. HAS PGW BEEN RETAINING A PORTION OF NET PROCEEDS FROM CAPACITY RELEASE CREDITS, OFF-SYSTEM SALES MARGIN AND ASSET MANAGEMENT CREDIT/FEES?

A. Yes. During the 2008-2009 GCR proceeding (Docket No. R-2008-2021348), the parties agreed that PGW would be permitted to retain 25% of all off-system sales margins and capacity release credits with the remaining 75% applied as an offset to purchased gas costs for the retention period of September 1, 2008 to August 31, 2011. Likewise, the parties agreed that, for the subsequent GCR period, PGW would retain 25% of all off-system sales margins, capacity release credits and margins or fees arising from asset management arrangements[2] with the remaining 75% applied as an offset to purchased gas

[2] Asset management margins/credits/fees are received when PGW enters into a contract with a third party to manage all or part of a storage contract or firm pipeline transportation contract.

costs. This sharing arrangement was approved by the PUC in all subsequent GCR proceedings.

Q. DOES PGW HAVE A RETENTION PROPOSAL FOR THE PERIODS BEGINNING ON SEPTEMBER 1, 2023?

A. Yes. PGW proposes to continue the retention of 25% of capacity release credits, off system sales margin and asset management margin/credit/fees and apply the remaining 75% to the Gas Cost Rate.

Q. DO OTHER PENNSYLVANIA NATURAL GAS DISTRIBUTION COMPANIES ("NGDCS") HAVE SHARING MECHANISMS FOR CAPACITY OFF SYSTEM SALES CREDITS?

A. Yes. All of the largest NGDCs have sharing mechanisms similar to PGW's and the sharing percentage for all of the NGDCs is 25%.

Q. WHAT WAS INCORPORATED INTO PGW'S 2022-2023 GCR PROCEEDING SETTLEMENT AGREEMENT, WITH REGARD TO THE 2022-2023 PERIOD AND GOING FORWARD FOR THE CALCULATION OF OFF SYSTEM SALES?

A. PGW agreed to the following:

1. For the 2022-23 period and going forward (and unless Section b applies):

(a) PGW will calculate the cost of gas used for an off-system sale ("OSS") as the Weighted Average Cost of Flowing Gas (WACOFG) on the day on which the OSS is made.

(b) Notwithstanding (a), above, if PGW: (1) purchases natural gas specifically for resale as an OSS; or (2) identifies a specific purchase of natural gas that PGW then determines (prior to the sale) should be sold via an OSS for price mitigation purposes, it will utilize that specific cost of that gas (including any associated incremental transmission costs) as the cost of gas to calculate the off system sales margin.

Q. HOW ARE SHARING MECHANISMS BENEFICIAL TO BOTH RATEPAYERS AND UTILITIES?

A. The ratepayers and the utility benefit from the policy because it creates an incentive to maximize efforts to fully utilize gas supply assets by making off-system sales and capacity release transactions, thereby reducing the overall cost of gas supply and the resulting gas cost rate. For PGW, the lesser portion retained by the Company is used to offset the overall cost of service that must be recovered in base rates.

Q. DID PGW ENGAGE IN ANY CAPACITY RELEASE OR OFF-SYSTEM SALES IN FY 2023?

A. Yes. PGW contracted for an off-system sales and several capacity releases. For each of these arrangements, the margin in excess of the incremental costs was split 75-25%, with 75% being credited to the GCR. PGW retained the remaining 25% in base rates and used it to offset other costs of operation.

Q. FOR THE OFF-SYSTEM SALE, DID PGW CALCULATE THE COST OF GAS USED FOR AN OFF-SYSTEM SALE AS THE WEIGHTED AVERAGE COST OF FLOWING GAS (WACOFG) ON THE DAY ON WHICH THE OSS IS MADE?

A. Yes.

Q. DID ANY OF PGW'S OFF-SYSTEM SALES MADE "SPECIFICALLY FOR RESALE" OR MADE FOR "PRICE MITIGATION PURPOSES", AS CONTEMPLATED IN THE 2022-2023 SETTLEMENT AGREEMENT, SUCH THAT THE SPECIFIC COST OF THAT GAS WAS USED AS THE COST OF GAS?

A. No.

Q. DID PGW ENGAGE IN AN ASSET MANAGEMENT ARRANGEMENT IN FY 2023?

A. Yes. PGW entered into an AMA arrangement with a counterparty for the winter season of FY 2023. The revenue from the AMA arrangement will be split 75-25%, with 75% being credited to the GCR. PGW retained the remaining 25% in base rates and used it to offset other costs of operation.

IV. PGW LNG

Q. WHAT WAS INCORPORATED INTO PGW'S 2022-2023 GCR PROCEEDING SETTLEMENT AGREEMENT, WITH REGARD TO PGW'S REPORTING OF LNG SALES?

A. PGW agreed to the following:

> For the next three years, PGW will provide a report to the Parties thirty (30) days after the end of each Winter Heating Season detailing the amount of LNG sales (if any) made and the amount of profit realized. The report will include the cost of gas and other inputs into the profit calculation.

Q. WHEN IS PGW'S FIRST REPORT ON LNG SALES DUE?

A. PGW will provide its first Report on LNG Sales thirty (30) days after the end of the Winter Heating Season, which is May 1, 2023.

Q. WHAT WAS INCORPORATED INTO PGW'S 2022-2023 GCR PROCEEDING SETTLEMENT AGREEMENT, WITH REGARD TO PGW PROVIDING AFFIRMATIVE TESTIMONY REGARING LNG SALESIN THE COMPANY'S NEXT BASE RATE CASE?

A. PGW agreed to the following:

> In its next base rate case, PGW will provide affirmative testimony indicating whether and where it has included a projection of LNG sales and/or profits, their levels and calculation in its revenue requirement calculation.

Q. HAS PGW FULFILLED THIS REQUIREMENT?

A. Yes. PGW witness Joseph F. Golden, Jr. addressed the incorporation of LNG Sales into the Company's base rate case revenues, in PGW's February 27, 2023 Base Rate Case filing in Docket No. R-2023-3037933.

V. PRICE ANALYSIS AND BUYING ADVISORY SERVICE

Q. WHAT DOES PGW CURRENTLY USE FOR A PRICE ANALYSIS AND BUYING ADVISORY SERVICE OR SERVICES AS PART OF ITS EFFORTS TO OBTAIN GAS AT LEAST COST?

A. PGW continues to utilize a firm called Planalytics to provide such services. In addition, PGW has been utilizing a concurrent service to insure that PGW provides value to the ratepayer by striving for a least cost service.

Q. WHAT TYPES OF SERVICES DOES PLANALYTICS PROVIDE TO PGW?

A. Planalytics provides the following services:

- Price feed from Nymex and Globex for natural gas, crude oil, heating oil and RBOB (reformulated gasoline);
- Buying suggestions up to 18 months in the future;
- A charting tool for technical analysis;
- Short and medium range weather forecasts;
- Weather alerts (issued in advance of significant weather events); and
- Planalytics' pre-season hurricane forecast and in-season updates;

Q. WHAT WAS INCORPORATED INTO PGW'S 2022-2023 GCR PROCEEDING SETTLEMENT AGREEMENT WITH REGARD TO PRICE ANALYSIS AND ENERGY BUYING ADVISORY SERVICE?

A. PGW agreed to the following:

> PGW shall continue to be authorized to recover in the GCR the annual fee for subscribing to Planalyics Gas Buying Analysis Service except that PGW shall be authorized to substitute a comparable service, as the same or lower cost, for Planalytics if, in its discretion, another service better meets its need for natural gas purchasing analysis and advice. PGW will report on any such change in its next GCR Proceeding.

Q. WHAT IS THE CURRENT STATUS OF PGW'S USE OF PRICE ANALYSIS AND ENERGY BUYING ADVISORY SERVICES?

A. PGW has been monitoring and comparing the offerings of Planalytics versus PGW's other market information sources. Since the July 2022, PGW has used the Intercontinental Exchange ("ICE") price information service to supplement its pricing analysis.

Presently, PGW does not have sufficient operating experience with ICE to make a determination if ICE is a suitable substitute for Planalytics. Compared with Planalytics' Nymex pricing quotes, ICE offers real time pricing at the natural gas price hubs from which PGW purchases gas.

Q. WHAT IS THE PRICE COMPARISON OF PLANALYTICS AND ICE?

A. Planalytics costs $125,000 per year, while ICE costs approximately $25,000 per year.

Q. WHAT COSTS ARE PGW SEEKING TO RECOVER IN THIS GCR?

A. PGW is only seeking the continued recovery of Planalytics in this GCR. The Company is absorbing the costs of ICE during this testing period.

Q. DOES PGW WISH TO CONTINUE THE PLANALYTICS BUYING ADVISORY SERVICES?

A. Yes. PGW will continue to monitor and compare the pricing features of Planalytics versus ICE over the next several months and make a decision whether to continue with both services or move toward ICE only in the Company's next GCR.

VI. GAS SUPPLY PURCHASES

Q. WHERE DID PGW PURCHASE NATURAL GAS SUPPLY ON THE TEXAS EASTERN TRANSMISSION CORPORATION ("TETCO") PIPELINE IN FY 2023?

A. 100% of all baseload and swing supply purchases on the TETCO pipeline were from Market Zone M-2 in FY 2023.

VII. CONCLUSION

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

Philadelphia Gas Works

Natural Gas Purchasing Strategy

For 2022-2023 Heating Season

I. Introduction

As reasonably anticipated PGW intends on meeting its contractual obligations to supply all 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 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 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. PGW Optimization Standard for Purchasing and Utilizing Gas Supplies

Incorporated into PGW's projections are an implementation plan for developing a cohesive gas supply/demand strategy for the near term and the longer range. 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 there is an opportunity 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.

PGW's supply strategy incorporates maintaining full current winter day deliverability regarding 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. 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.

III. PGW's Current Gas Purchasing Strategy for 2022-2023 Heating Season

PGW's strategy for gas purchasing for the 2022-2023 Heating Season conforms to the requirements of PGW's Optimization Standard for Purchasing and Utilizing Gas Supplies.

PGW's current strategy for meeting the system's supply requirements is a portfolio approach. The Company's supply portfolio is split into four categories. First, the Company enters baseload supply contracts, which account for approximately thirty-seven percent (37%) of PGW's daily firm transportation entitlements on both Enbridge's Texas Eastern and Williams' Transco Gas Pipelines. As part of PGW's baseload supply, PGW has secured long term contracts for approximately 41% of its total baseload gas supply under discounted prepaid agreements with the municipal authorities Public Energy Authority of Kentucky (PEAK) and Municipal Gas Authority of Georgia (MGAG) in FY 2022. Over the past four years, PGW ratepayers have saved approximately $11 Million and are estimated to save approximately another $5.9 Million dollars over the 2022-2023 fiscal year.

The Enbridge and Williams' pipelines are the only interstate pipeline facilities with physical connections to the PGW service territory. These supply contracts also recognize pipeline receipt and delivery rights. These contracts 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 are 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, PGW utilizes bundled storage to allow as another source of supply and transport during the higher demand times of the year.

Fourth, PGW has on-site LNG to meet operational requirements when sendout requirements demand it.

Both the bundled storage and on-site LNG allow PGW to meet its design day requirements and to accomplish other cost saving initiatives. Specifically, once design winter sendout requirements are met, the company may utilize bundled storage and LNG inventories to displace higher priced supply based on the current market conditions. PGW uses a portfolio approach to address system supply and storage refill in the traditional non-peak season. The Gas Supply Department uses the GCR filing as a template 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 follows the directives of the Gas Supply Committee, which meets frequently and includes a review of PGW's gas purchase plans. The principal strategy for mitigating price volatility is to continuously monitor the market, fixing month(s) ahead pricing when an opportunity arises, within the parameters of the market advice we follow. PGW considers the recommendations of Planalytics, ICAP, and supplemented with instantaneous price monitoring data using the ICE platform.

PGW takes steps to both reduce the cost and mitigate the risk of volatility in gas prices when hedging or price locking is possible at a reasonable cost.

This year, PGW has used the tools at its disposal and worked with its gas suppliers to fix prices to reduce volatility to the ratepayer. As stated in "The Purchasing Guidelines FY 23", PGW lock-in pricing for PGW's daily baseload, this gas was locked-in anywhere from the prior month to several month before. When PGW can lock-in a single month or a strip of months at the same time. Any baseload volumes that are locked-in, the pricing will default to the closing index price. For FY 23, the locked-in volumes were as follows: September 85% of the baseload, October 95% of the baseload, November 7% of the baseload, December 0% of the base load, January

20% of the baseload, February 3% of the baseload, and March 7% of the baseload. For the rest of FY 2023, PGW currently has about 12% of the baseload locked-in and is constantly evaluating if more volumes should be locked-in. PGW has also worked with PEAK and MGAG, in accordance to their long-term deals to fix pricing for future season to help mitigate the volatility to the ratepayer.

IV. Discussion of Hedging Strategy and Utilization for 2023-2024 Heating Season

Moving forward, PGW has refined its plan in a few ways. PGW has stayed an active participant in the long-term deals and is watching market conditions to find deals that will maximize the saving to our ratepayers. Secondly, in issuing the RFP for baseload supply, PGW requested a monthly supply sculpted in a way to reflect the monthly usage differentials from each month rather than seasonal approach. Another refinement PGW made to its monitoring activity was to add the ICE platform as a complement to Planalytics. ICE allows PGW to monitor pricing data at specific points where we purchase gas on an instantaneous basis; this has allowed PGW greater insight into the market to make sure PGW is buying gas at its lowest price.

PGW continues to keep a watchful eye on futures prices and has taken advantage of the ability to enter into fixed price agreements with Municipal Authority agents so that, when opportunities arise, PGW can retain the significant prepaid discounts along with dips in NYMEX futures. For all other winter contracts, in the RFP, PGW requires that any supply contracts in which PGW enters must have an option to fix the contract price. PGW has begun to lock-in prices for volumes of future contract for the winter of 2023-2024.

In recent years, PGW has observed the changes to the market volatility and market norms which have had impacts on the rate payers. As the market changes and provides new challenges, PGW understands that it needs to be vigilant in its strategy while not being too hasty as well. PGW needs to be flexible, especially in this market, to move with the market trends as PGW seems fit.

With all of these changes, PGW feels the combination of its physical hedging abilities with storage facilities and its current tools to lock in future pricing on its baseload gas deals is the best approach.

Please see attached Exhibit for month by month details of PGW's hedging activity.

Purchasing Plan Guideline												
	September	October	November	December	January	February	March	April	May	June	July	August
Daily Volume												
Baseload	68,236	68,236	116,073	119,073	119,873	117,073	113,455	68,236	68,236	68,236	68,236	68,236
Swing												
Tetco												
Index pricing (max 35,000 Dth/day)	11,500	37,500	15,000	35,000	35,000	35,000	35,000	35,000	35,000	29,000	27,000	27,000
Transco												
Index pricing (max 45,000 Dth/day)	6,600	26,500	15,000	45,000	45,000	45,000	45,000	37,000	39,000	22,000	19,000	15,000
Total Swing	18,100	64,000	30,000	80,000	80,000	80,000	80,000	72,000	74,000	51,000	46,000	42,000
Daily Total Swing & Baseload	86,336	132,236	146,073	199,073	199,873	197,073	193,455	140,236	142,236	119,236	114,236	110,236
Target Locked in Volume/Hedge Percentage of Daily Baseload Volume	85%	95%	7%	0%	20%	3%	7%	12% to 50%	12% to 50%	12% to 50%	12% to 50%	12% to 50%

Purchasing Plan Guideline for FY 2024												
	September	October	November	December	January	February	March	April	May	June	July	August
Daily Volume												
Baseload	68,236	68,236	116,073	119,073	119,873	117,073	113,455	68,236	68,236	68,236	68,236	68,236
Swing												
Tetco												
Index pricing (max 35,000 Dth/day)	11,500	37,500	15,000	35,000	35,000	35,000	35,000	35,000	35,000	29,000	27,000	27,000
Transco												
Index pricing (max 45,000 Dth/day)	6,600	26,500	15,000	45,000	45,000	45,000	45,000	37,000	39,000	22,000	19,000	15,000
Total Swing	18,100	64,000	30,000	80,000	80,000	80,000	80,000	72,000	74,000	51,000	46,000	42,000
Daily Total Swing & Baseload	86,336	132,236	146,073	199,073	199,873	197,073	193,455	140,236	142,236	119,236	114,236	110,236
Target Locked in Volume/Hedge Percentage of Daily Baseload Volume	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%

VERIFICATION

I, Ryan E. Reeves, hereby state that: (1) I am the Director of Gas Supply, Transportation, and Control for Philadelphia Gas Works ("PGW"); (2) the facts set forth in my testimony are true and correct (or are true and correct to the best of my knowledge, information and belief); and, (3) I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: 3/1/2023

Ryan E. Reeves
Director of Gas Supply, Transportation, and Control
Philadelphia Gas Works

Craig Berry, Senior Attorney
Legal Department
Direct Dial: 215-684-6049
FAX: 215-684-6798
E-mail: craig.berry@pgworks.com

March 13, 2023

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

Re: Philadelphia Gas Works ("PGW") 2023-2024 Gas Cost Rate Filing
Docket No. R-2023-3038069

Dear Secretary Chiavetta:

On February 28, 2023, Philadelphia Gas Works ("PGW") filed a Revised Schedule 53.64(c)7, Schedule 1 to PGW's Pre-Filing of the Company's Section 1307(f) Gas Cost Rate Filing. The schedule attached to that draft was a prior version. Please accepted the attached Errata, with the correct Revised Schedule 53.64(c)7, Schedule 1.

Please do not hesitate to contact me if you have any questions.

Respectfully,

/s/ Craig W. Berry
Craig W. Berry, Esquire

Enclosure
cc: Cert. of Service w/enc.

CERTIFICATE OF SERVICE

I hereby certify that this day I served a copy of PGW's Updated Schedule for the February 1, 2023 Pre-filing of its Annual GCR Filing upon the persons listed below in the manner indicated in accordance with the requirements of 52 Pa. Code Section 1.54.

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Dated: March 13, 2023

/s/ Craig W. Berry
Craig W. Berry, Esq.

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, 2022

Off-System Sales			
MONTH	Total Revenue	Ratepayer Margin	Total Credit
Jan-22	$41,360	$9,643	$38,146
Feb-22	$0	$0	$0
Mar-22	$0	$0	$0
Apr-22	$0	$0	$0
May-22	$0	$0	$0
Jun-22	$0	$0	$0
Jul-22	$0	$0	$0
Aug-22	$0	$0	$0
Sep-22	$0	$0	$0
Oct-22	$0	$0	$0
Nov-22	$164,387	$0	$164,387
Dec-22	$2,166,024	$1,014,892	$1,827,727

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

Florian Teme

ON BEHALF OF
PHILADELPHIA GAS WORKS

Docket No. R-2023-3038069

Philadelphia Gas Works
Proposed 2023-2024 Annual Gas Cost Rate Adjustment

March 1, 2023

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I. INTRODUCTION

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

A. My name is Florian Teme. My position is Vice President, Marketing, Sales and Energy Planning at the Philadelphia Gas Works.

Q. HOW LONG HAVE YOU HELD THIS POSITION?

A. I assumed my present position in December 2020. Prior to this position, I was Vice President, Marketing and Sales.

Q. AS IT PERTAINS TO ENERGY PLANNING AND RATEMAKING, WHAT ARE YOUR JOB RESPONSIBILITIES?

A. In my present position, I am responsible for the short and long term planning of gas demand, gas supply, raw material expense and revenue; overseeing the preparation of sales, sendout, revenue and fuel expense projections; developing peak day/hour load projections; overseeing the development of the various filings before the Pennsylvania Public Utility Commission ("PUC") and Philadelphia Gas Commission ("PGC"), including the quarterly and annual Gas Cost Rate ("GCR") filings; preparing the Integrated Resource Planning Report; and providing supporting documentation for gas costs related to PGW's Operating Budget before the PGC.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. I have been employed with PGW since August 2003. I became PGW's Vice President, Marketing, Sales and Energy Planning in December 2020. Prior to that, I had various positions with PGW: Vice President, Marketing and Sales (September 2016 – December 2020), Director, Marketing and Sales (April 2013 – September 2016), Manager, Residential and Commercial Sales, Marketing

(March 2012 – April 2013); Manager, Controls and Analytics, Supply Chain (January 2010 – March 2012); Project Manager, Information Services (January 2007 – January 2010); Supply Analyst, Gas Planning (April 2005 – January 2007); and Technical Project Administrator, Marketing (August 2003 – March 2005).

I received my Bachelor of Business Administration (Management Information Systems) from Temple University - Fox School of Business and Management in 2003 and my Master of Business Administration (Business Intelligence, Six Sigma) from Saint Joseph's University - Erivan K. Haub School of Business in 2011.

Q. HAVE YOU EVER PROVIDED TESTIMONY BEFORE THIS COMMISSION?

A. Yes, I have provided testimony in PGW's last three base rate cases (Docket Nos. R-2023-3037933, R-2020-3017206, and R-2017-2586783), in PGW's 2019-2020 GCR proceeding (Docket No. R-2019-3007636), in PGW's 2021-2022 GCR proceeding (Docket No. R-2021-3023970); and in PGW's 2022-2023 GCR proceeding (Docket No. R-2022-3030686).

Q. HOW IS YOUR TESTIMONY STRUCTURED?

A. First, I describe PGW's rate design and GCR calculation methodology. Second, I describe the level of heating degree-days utilized in this filing. Third, I identify the methodology for determining the number of customers and calculating firm sales. Fourth, I discuss the calculation for the Unaccounted for Adjustment Factor ("UAF"). Fifth, I discuss Off System Sales and Capacity Release credits. Lastly, I will discuss the reasonableness of PGW's gas costs.

II. RATE IMPACTS AND SUPPORTING DOCUMENTS

Q. PLEASE DESCRIBE THE IMPACT OF THE PROPOSED CHANGE IN PGW'S GCR IN THIS PROCEEDING.

A. PGW's GCR on September 1, 2022 was $8.6371/Mcf, and this rate was decreased in the Company's first quarterly GCR filing on December 1, 2022 to $8.0242/Mcf. PGW's second quarter GCR filing, also submitted to the PUC concurrently with this filing, decreases the GCR to $4.9740/Mcf effective March 1, 2023. The proposed rate to be effective September 1, 2023 is $5.0576/Mcf (Sch. 1).

Q. PLEASE SUMMARIZE THE EVIDENCE THAT PGW IS SUBMITTING IN SUPPORT OF ITS PROPOSED GCR ADJUSTMENT.

A. This filing contains the schedules supporting the filing requirements of Section 53.64(a) for the proposed GCR for the period September 1, 2023 through August 31, 2024, which corresponds to PGW's Fiscal Year ("FY") 2024.

- Schedule 1 identifies the Levelized Gas Cost Rate. Specifically, this schedule identifies the GCR Firm Sales Volumes in Mcfs ("S"), Total Applicable GCR Expense ("C"), and adjustments for Prior Year Reconciliation and Interest ("E"). An adjustment is also included for the Interruptible Revenue Credit (IRC). Additionally, this schedule calculates the company's total projected recovery plus the load balancing revenue and LNG sales demand revenue to determine if these rates adequately cover the Net Applicable GCR Expense (a Net Over/Under Recovery amount is displayed to prove the calculation). Schedule 1a details the Price to Compare for the PGW rate classes.

- Schedule 2 identifies the calculation of GCR Firm Sales in Mcfs ("S") and the Applicable Volumes. The company utilizes Total Volumes and subtracts the volumes associated with Firm Transportation, Interruptible Sales, LNG Sales and AC Sales to arrive at GCR Firm Sales ("S"). Also included in Schedule 2 are the Applicable Volumes which is comprised of GCR Firm Sales less 20% of the sales attributable to Senior Citizens (Senior Citizen Discount Sales) plus the Firm Transportation Volumes.
- Schedule 3 identifies the Projected Applicable Fuel Expense. Specifically, this schedule identifies PGW's Net Natural Gas Expense and Total Applicable Expenses. To arrive at the Net Natural Gas Expense, the total cost of commodity and pipeline charges for firm sales are calculated per month. Two credits are then applied for the portion of gas costs recovered from PGW's Interruptible Sales customers (i.e. the "Interruptible & Firm A/C Credit") and for gas used by PGW (i.e. "Gas Used by Utility"). Next, the Company calculates the net effect of gas supplies being transferred into and out of storage and LNG. The result is the Net Natural Gas Expense. To arrive at the Total Applicable Expenses in Schedule 3, the fuel expenses for Purchased Electric and miscellaneous are added to the Net Natural Gas Expenses to arrive at Total Applicable Expenses.
- Schedule 4(a) is the actual/estimated data for FY 23. Schedule 4(b) is the C factor Reconciliation for FY 23. Schedule 4(c) is the E factor Reconciliation for FY 23. Schedule 4(d) is the IRC Revenue Billed for FY 23. Schedule 4(e) is the Reconciliation of Demand Charges for FY 23.

- Schedule 5(a) ("Interest Calculation") provides the calculation of the interest expense or credit for the period of September 2022 through August 2023 for the under/over recovery of fuel costs and the interest for the natural gas refunds. Schedule 5(b) ("Interest on Natural Gas Refunds") provides information on historic refunds that have been received by the Company resulting from various cases before the Federal Energy Regulatory Commission and the interest on these refunds. Schedule 5(c) provides the calculation of the interest for the demand and commodity charges.
- Schedule 6 presents the load balancing revenue for the forecast period of September 2023 to August 2024.
- Schedule 7 calculates total projected recovery with the proposed GCR.
- Schedule 8 shows the changes in rates identifying the proposed changes to the GCR and distribution charge and the impact on the proposed total commodity rate.
- Schedule 9(a) shows the calculation of the Universal Service & Energy Conservation Surcharge to be effective September 1, 2023. Schedule 9(b) is the reconciliation of the Universal Service & Energy Conservation Surcharge for the period September 2022 to August 2023.
- Schedule 10(a) shows the calculation of the Interruptible Revenue Credit to be effective September 1, 2023. Schedule 10(b) is the forecasted Interruptible Revenue Margin for FY 2024. Schedule 10(c) is the reconciliation of the Interruptible Revenue Credit for FY 2023.

- Schedule 11(a) shows the calculation of the Other Post Employment Benefit (OPEB) Surcharge to be effective September 1, 2023. Schedule 11(b) is the reconciliation of the OPEB Surcharge for FY 2023.
- Schedule 12(a) shows the calculation of the Efficiency Cost Recovery Surcharge to be effective September 1, 2023. Schedule 12(b) shows the reconciliation of the Efficiency Cost Recovery Surcharge for the FY 2023.
- Schedule 13(a) is the calendar year 2022 reconciliation of the Load Balancing Charge and Schedule 13(b) is the 2022 Load Balancing Expense and Interest Calculation.
- Schedule 14 sets the load balancing charge to be effective September 1, 2023 which is an increase from last year.
- Schedule 15 identifies the natural gas prices that were used in the preparation of this filing.
- Schedule 16 is the annual reconciliation of the retainage rate and lost and unaccounted for rate.

Q. WHAT IS THE TIME PERIOD FOR FORECASTING PGW'S FUTURE GAS COSTS?

A. PGW's forecast period is a twenty (20) month period that commences on January 1, 2023 (two months before this filing) and eight months before the effective date of the tariff on September 1, 2023. The 2023-2024 GCR year is from September 1, 2023 to August 31, 2024, however, since the required forecast covers 20 months, it must begin eight months earlier, consistent with Commission regulations.

III. RATE DESIGN AND GCR CALCUATION METHODOLOGY

Q. PLEASE PROVIDE A GENERAL DESCRIPTION OF PGW'S RATE DESIGN AND GCR CALCULATION METHODOLOGY.

A. The volumetric rates charged to PGW's customers are the distribution charge and the Gas Cost Rate plus the Merchant Function Charge ("MFC") and Gas Procurement Charge ("GPC"). The distribution charge consists of the Delivery Charge; the Universal Service and Energy Conservation Surcharge; the Other Post Retirement Benefit Surcharge; the Efficiency Cost Recovery Surcharge; and Restructuring and Consumer Education Surcharge. The Universal Service and Energy Conservation Surcharge provides for the recovery of Customer Responsibility Program ("CRP") discounts; Senior Citizen Discounts; the costs of the Enhanced Low Income Retrofit Program ("ELIRP"); CRP arrearage forgiveness and the Conservation Incentive Credit. The Other Post Retirement Benefit Surcharge recovers the amount to fund these obligations. The Efficiency Cost Recovery Surcharge recovers the cost of the energy efficiency programs.

The second element of the rate is the Gas Cost Rate or GCR factor. This charge is a mechanism used to flow through the costs of natural gas costs and other raw materials in a timely and equitable manner. The specific elements of PGW's GCR are set forth in PGW's Tariff.

Generally, the cost of gas purchased to serve the requirements of PGW's customers constitutes the largest single item in the delivered price of gas. In the past, all natural gas costs were recovered through base rates (distribution charge). However, in the early 1970's, the price of gas lost its stability and underwent rapid escalation during and after a worldwide oil crisis. To combat this instability and

prevent the economic harm to all parties caused by regulatory lag in reflecting these price fluctuations in base rates, the concept of a fuel adjustment surcharge mechanism was introduced by PGW. This mechanism provides the flexibility to rapidly reflect current conditions without the time delay inherent in a full-scale base rate alteration. The intent is to achieve an annual balance of the costs incurred for fuel and its pass-through to customers. The costs for pipeline transportation, storage capacity and related fuel prices charged by the interstate pipeline suppliers are largely outside of distributor control. The PUC oversees the pass-through of these charges and the balancing activity. The Gas Cost Rate Section in PGW's Tariff identifies the appropriate formula for such a balance and the charges that may be recovered through this mechanism. Charges for natural gas and other raw materials are included in the GCR. In addition, the interest expense for the over or under recovery of gas costs and natural gas refunds are also included in the GCR. No labor or profit component is added by PGW. The GCR represents the direct pass-through of actual costs incurred.

Only costs related to meeting customer sendout requirements, including associated plant fuel, may be included as a fuel expense for GCR purposes. Purchases diverted into storage and/or LNG become an expense only when withdrawn for customer delivery. Costs associated with purchases made to supply interruptible customers are excluded from the Total Applicable GCR Expenses used to calculate the GCR. Also, demand costs for pipeline transportation for the firm transportation customers are excluded from the GCR.

Various adjustments are then made to the total applicable expenses

eligible for the GCR. Natural gas refunds and interest on the refunds are credited in the calculation of the GCR in the fiscal year received. An adjustment is made to correct for any over or under recovery during the previous period resulting from differences between rates used to project the prior GCR and those actually experienced. The interest expense or credit on the over or under recovery is applied to calculate the total adjustment. An additional adjustment is made for the Interruptible Revenue Credit which is a credit that firm sales customers receive for the interruptible sales margin.

To determine the unit level of the GCR, the remaining total expenses must be divided by the sum of the volumes over which they can be effectively distributed.

Q. WHAT IS THE BASIS FOR THE PRICES USED IN DETERMINING THE GAS COSTS USED IN THIS FILING?

A. The pricing methodology utilized by the Company is consistent with that used in the recent quarterly filings with the inclusion of the additional months in the 20-month forecast. Specifically, the company utilized actual prices for January 2023 and the NYMEX Futures close data (as of January 18, 2023) for the 19 forecast months of February 2023 through August 2024.

Q. HOW DOES THE GCR FOR THE FORECAST PERIOD COMPARE WITH THE GCR FORECASTED IN THE COMPANY'S LAST ANNUAL GCR FILING?

A. The GCR forecasted for 2023-2024 is $0.5472/Mcf smaller than the level PGW had forecasted for the 2022-2023 GCR ($5.6048; R-2021-3023970 Jt. Pet. For Settlement, App. A). The level of costs in the 2023-2024 period are being influenced by the decrease in natural gas costs compared to the prior year.

IV. LEVEL OF HEATING DEGREE DAYS

Q. DESCRIBE THE LEVEL OF HEATING DEGREE-DAYS THAT WERE USED IN YOUR ANALYSIS.

A. The Company utilizes the temperatures recorded at the PGW Richmond Plant to calculate the average temperature for a given day. The Company subtracts the average temperature from 65 degrees to calculate the number of degree-days for the day. The degree-days for all of the days in the year are aggregated to arrive at the total number of degree-days for the year. Next, the Company calculates the average heating degree-days for the past 20 years to arrive at the forecasted heating degree-days in a normal year, and in this filing PGW is using the 20 year average of 3923 degree days.

V. METHODOLOGY FOR DETERMINING NUMBER OF CUSTOMERS AND CALCULATING FIRM SALES

Q. HOW HAS THE COMPANY CALCULATED THE NUMBER OF CUSTOMERS IN EACH RATE CLASS?

A. PGW determined the actual number of customer billings on December 31, 2022 using the PGW Gas Sales and Revenue Reports. Next, the Marketing Department load forecast was used to factor in the addition and loss of customers. Finally, the customer numbers were adjusted for the loss of customers due to non-payment terminations.

Q. WHAT IS THE METHOLOGY FOR CALCULATING THE WEATHER NORMALIZED BILLED SALES?

A. PGW used a two-step process to arrive at the appropriate level of usage per customer. First, a trial domestic factor is developed by class of customers from sales reported for the previous year's summer months. 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 domestic 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 cold 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.

Utilizing these domestic and heating factors, billed sales are then forecasted using 3923 degree days and the number of customers.

VI. CALCULATION OF UNACCOUNTED FOR ADJUSTMENT FACTOR

Q. WHAT IS THE UNACCOUNTED FOR GAS PERCENTAGE USED IN THIS FILING?

A. The level of unaccounted for gas and retainage rate used in this filing is 2.4% and is based on a 3-year average.

VII. OFF SYSTEM SALES AND CAPACITY RELEASE CREDITS

Q. WHAT IS THE TOTAL AMOUNT OF OFF SYSTEM SALES, CAPACITY RELEASE CREDITS, AND ASSET MANAGEMENT CREDITS THAT ARE INCORPORATED INTO THE GCR?

A. PGW has projected the amount of off system sales, capacity release credits, and asset management credits within the GCR period of 2023-2024. This amount is based on a 3-year average. Of that amount, $16,909,282 was credited to the GCR.

IX RATE BUS

Q. AS PART OF THE SETTLEMENT IN PGW'S MOST RECENT BASE RATE CASE (R-2020-3017206, ¶ 32), PGW AGREED TO PROVIDE DATA AS PART OF ITS ANNUAL GCR FILINGS ON THE NUMBER OF CUSTOMERS, SALES LEVELS, REVENUES, AND THE COSTS INCURRED TO PROVIDE SERVICE UNDER RATE BUS. CAN YOU PROVIDE THOSE DATA?

A. Yes. The information pertaining to the number of customers, sales levels, revenues, and the costs incurred to provide service under Rate BUS is provided below:

Tariff Rate	Total Customer Count	Total Annual Sales Volume (MCF)	Total Annual Revenue	Total Customer Capital Cost
Back-Up Service – Rate BUS	54	1,890	$209,116	$1,368,160

VIII. REASONABLENESS OF GAS COSTS

Q. BASED UPON THE ABOVE SUPPORTING DATA, DO YOU BELIEVE THAT PGW'S GAS COSTS ARE REASONABLE?

A. Yes, PGW's GCR only contains the direct pass-through of actual costs incurred and projections of the same (for both gas costs and certain non-gas costs that were

previously approved by the PUC). As stated by Mr. Reeves in his testimony, PGW follows a least cost gas procurement strategy.

IX. CONCLUSION

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

VERIFICATION

I, Florian Teme, hereby state that: (1) I am the Vice President of Marketing & Energy Planning for Philadelphia Gas Works ("PGW"); (2) the facts set forth in my testimony are true and correct (or are true and correct to the best of my knowledge, information and belief); and, (3) I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: April 24, 2023

Florian Teme

Florian Teme
Vice President of Marketing & Energy Planning
Philadelphia Gas Works

Tab #6

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

Ryan E. Reeves

ON BEHALF OF
PHILADELPHIA GAS WORKS

Docket No. R-2023-3038069

Philadelphia Gas Works
Proposed 2023-2024 Annual Gas Cost Rate Adjustment

March 1, 2023

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RR-1	PGW's Gas Purchasing Strategy for the 2022-2023 Heating Season

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND CURRENT POSITION WITH PGW.

A. My name is Ryan E. Reeves. My position with Philadelphia Gas Works ("PGW" or "Company") is Director of Gas Supply, Transportation and Control.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. I received a Bachelor of Science degree in Chemical Engineering from Drexel University in 2009 and a Master's degree in Business Administration from Villanova University in 2016. I have held the following positions at PGW: Staff Engineer and Operations Engineer at PGW's Richmond LNG Plant, and Manager of Special Projects.

Q. PLEASE DESCRIBE YOUR DUTIES IN YOUR PRESENT POSITION.

A. I develop and monitor PGW's long-term Gas Supply Strategic Plan that ensures PGW has the financial resources and assets to execute its business strategy. I advance policies, procedures and practices that ensure safe, reliable, competitively priced gas supplies and other energy resources to meet current and future demands on PGW's systems, and I analyze the overall long-term capital and operating budget plans for Gas Supply.

Q. HAVE YOU EVER PROVIDED TESTIMONY BEFORE THIS COMMISSION?

A. Yes. Among other proceedings, I provided testimony in PGW's 2021-2022 Gas Cost Rate proceeding (Docket No. R-2021-3023970) and in PGW's 2022-2023 GCR proceeding (Docket No. R-2022-3030686).

Q. WHAT IS THE FOCUS OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My testimony discusses:

- PGW's gas purchasing policies and strategies applicable to FY 2024 (September 1, 2023 through August 31, 2024) and those utilized in FY 2023 (September 1, 2022 through August 31, 2023); and

- Price analysis and buying advisory service.

Q. PLEASE PROVIDE A GENERAL DESCRIPTION OF PGW'S GAS DISTRIBUTION SYSTEM.

A. PGW's gas distribution system is located in Southeastern Pennsylvania in the County and City of Philadelphia. Since this is not a gas-producing area, PGW and its natural gas customers are dependent upon the interstate gas pipeline system to deliver natural gas into the PGW gas distribution system. PGW relies on the interstate pipeline for all natural gas supply, storage, and transportation services, except for PGW's own on-system peak shaving facilities. PGW owns and operates two LNG facilities that are used primarily both to meet intraday, daily and seasonal supply needs as well as to meet peak day requirement.

Q. PLEASE IDENTIFY PGW'S CURRENT INTERSTATE SUPPLIERS.

A. Enbridge's Texas Eastern Transmission pipeline and Williams' Transco Gas Pipeline are the two interstate natural gas pipelines that deliver gas to PGW's city gates. In addition, PGW uses off-system natural gas storage services to meet winter peak requirements.

II. GAS PURCHASING POLICIES AND SUPPLY STRATEGY

Q. DOES PGW UTILIZE A LEAST-COST PROCUREMENT POLICY IN ITS GAS PURCHASING POLICIES AND SUPPLY STRATEGY?

A. Yes. PGW pursues a least cost gas procurement policy in a manner consistent with PGW's obligation to provide safe, adequate and reliable service to its customers.

Q. PLEASE DESCRIBE PGW'S SUPPLY STRATEGY.

A. PGW's supply strategy[1] (which is currently being used during the FY 2023 GCR period and which the Company intends to use for the FY 2024 GCR period) is a portfolio

[1] All natural gas supply strategies are presented to the Company's internal Supply Committee for review and approval. The Supply Committee is comprised of: the CEO, the COO, the CFO, Senior Vice President of Gas

approach in both contract structure and pricing. The portfolio approach of purchasing gas supply allows PGW to remove some of the volatility in purchasing natural gas supplies for its ratepayers. Without the use of the portfolio approach, firm ratepayer would be totally at the mercy of market volatility.

The Company's gas supply portfolio is divided into four distinct categories: (1) daily index price swing contracts; (2) physical forward purchased contracts; (3) storage; and (4) LNG.

(1) The advantage of daily index priced swing contracts is their operational flexibility which allows PGW to increase and decrease the volume in response to changes in sendout requirements. During certain time periods, these types of contracts also provide security of supply.

(2) The Company enters into physical forward purchased contracts for seasonal baseload supplies and long-term baseload supplies, including "pre-paid natural gas" arrangements (discussed below). These contracts permit the Company to make discretionary physical forward purchases on a year-round basis.

(3) The Company utilizes storage fields which act as additional sources of supply. The gas procured under these contracts also acts as a physical fixed price counter to market conditions.

(4) The Company operates its own LNG peak shaving liquefaction, vaporization, and storage facilities.

Management, and Vice President of Gas Supply. (Note: the COO and Vice President of Gas Supply positions are presently vacant.) The Supply Committee meets quarterly, or more often, at the invitation of the Senior Vice President Gas Management.

The Enbridge and Williams Gas Pipelines represent the only interstate pipeline facilities with physical connections to the PGW service territory. As a result, all of PGW's supply contracts utilize these pipelines, and the contracts also recognize pipeline receipt and delivery rights. These contracts contain the ability to "lock up" the price for upcoming months or to have the pricing default to an agreed upon market index if there is no market advantage in fixing a price before the month begins. As a result, PGW not only ensures security of supply from the pipelines but also can take advantage of varying basis differentiated pricing in the market. This differentiated pricing results from the fact that all shippers of natural gas receive their gas at varying locations along the pipeline. PGW uses a city-gate delivered price in comparing the various alternatives available. The city gate delivered price is computed considering the "into the pipe price of gas" plus all incremental charges levied by the transporting pipeline to deliver the gas to the city gate. These prices include, but are not limited to, reservation fees, fuel, transportation charges and FERC Annual Charge Adjustment ("ACA") charges.

Additionally, PGW utilizes storages and LNG to meet operational requirements. Bundled storage contracts give PGW the right to both store and deliver gas via bundled pipeline capacity. Unbundled storage contracts provide storage rights for gas which is transported on PGW's firm pipeline transportation capacity. These storages provide off-system storage, and LNG provides on-system storage. While both types of storages are important to fulfill operational requirements, PGW's on-system LNG storage is vital during peak days when customer demand exceeds the amount of gas that can be physically provided through PGW's city gates.

Once operational requirements are met, these assets are then used in the overall cost saving strategies. For example, once design winter sendout requirements are ensured, the Company may utilize bundled storage and LNG as a substitute for higher priced gas. PGW's summer gas procurement policy uses a similar approach to address system supply and storage refill. The Gas Supply Department also uses forecasted prices as a benchmark to purchase gas volumes for both system supply and storage refill below the projected cost (when possible) on a proportional basis, while leaving a portion of its needs to default to first of the month pricing.

Q. DOES PGW PURCHASE GAS FROM ANY AFFILIATED INTEREST?

A. No. PGW does not have any affiliated gas suppliers or pipelines.

Q. DOES PGW TAKE STEPS TO ENSURE SYSTEM RELIABILITY WHILE SEEKING TO PROCURE GAS AT THE LEAST COST?

A. Yes. PGW physically sources the gas in accordance with its firm pipeline paths. The pipelines give PGW firm entitlements on their systems for the sourcing of gas for which PGW pays a demand charge. By sourcing supply in this way, PGW ensures its sole entitlement to this space on the pipeline and cannot be accused of infringement. Transporting gas from different locations also mitigates the impact of potential regional disruptions because not all of the supply enters the pipe at the same location. As a result, if there is a disruption at one location, not all of PGW's supply will be affected. PGW's Gas Planning Department also runs a supply status model during the winter operating season which recognizes normal and design winter conditions and the latest actual balance of gas in all storage facilities. Gas Management utilizes the output of this model to make recommendations or changes in its supply operating strategy to ensure that peak day needs and design winter conditions can be met from that point forward.

Q. DOES PGW PERIODICALLY REVIEW ITS EXISTING CONTRACTS TO DETERMINE IF THEY ARE APPROPRIATE?

A. Yes. PGW reviews each of its existing contracts on a regular basis to ensure that none of the contracts are adverse to its customers' interests. Whenever appropriate, PGW initiates renegotiations (if the contract permits) to change the terms.

Q. IN PGW'S 2020-2021 GCR, YOU INDICATED THAT PGW HAD BEGUN TO TAKE ADVANTAGE OF A PREPAID GAS PROGRAM MADE POSSIBLE BY PROVISIONS IN THE INTERNAL REVENUE CODE THAT PERMITTED MUNICIPAL GAS COMPANIES TO OBTAIN GAS COST REDUCTIONS, IS THAT CORRECT?

A. Yes. Beginning in FY 2020, PGW has taken advantage of provisions in the Internal Revenue Code that permits municipal gas companies to use tax exempt bond financed prepaid gas purchase arrangements to obtain significant discounts on those purchases, the savings from which are passed on to PGW sales customers.

Q. WHAT IS A PREPAID GAS ARRANGEMENT?

A. A prepaid gas arrangement is an arrangement in which PGW has agreed to purchase gas from a gas supplier for (typically) 25-30 years. (PGW does not pay for the entire 30 years of purchases up front but receives a monthly invoice for gas received by PGW). The natural gas is purchased from a gas supplier, through a government authority. The authority issues a tax-free long-term bond and uses the proceeds to "prepay" for the natural gas it will purchase on behalf of various municipal gas utilities, including PGW. The gas supplier sells the natural gas to the authority (which then, in turn, sells it to PGW) at a discount, in recognition of the fact that the supplier is able to invest the prepayment at taxable rates. In order to share some of this investment income, the supplier provides PGW with natural gas at significant discounts from a market index price. The size of the discount is determined based on the spread between non-taxable

and taxable investments. As noted, the gas is purchased on index, but PGW receives a discount from the current index price due to the investment arbitrage.

Q. HOW MANY SUCH ARRANGEMENTS HAS PGW ENTERED INTO?

A. PGW is currently involved in nine (9) prepaid gas arrangements.

Q. WILL THESE ARRANGEMENTS EXIST IN THE 2023-2024 GCR PERIOD?

A. Yes. PGW will receive gas under nine (9) arrangements in FY 2024. Those contracts will reduce the monthly price of gas paid by PGW compared to the price it would otherwise pay. In FY 2022, PGW will save approximately $4.9 million for gas sales to customers as a result of prepaid gas purchase arrangements. For FY 2023 and FY 2024, PGW forecasts gas sales to customers will save approximately $5.9 million per year from the nine prepaid deals.

Q. IN YOUR OPINION, ARE THE GAS COSTS INCURRED BY PGW REASONABLE?

A. Yes. The gas costs incurred to date during the 2022-2023 period are the result of the least cost gas procurement strategy outlined in my testimony and are therefore reasonable. The gas costs that PGW is projecting for the 2023-2024 period are also the product of a least cost gas procurement strategy, consistent with PGW's obligation to provide safe, adequate and reliable service to its customers, and are therefore also reasonable.

Q. WHAT WAS INCORPORATED INTO PGW'S 2022-2023 GCR PROCEEDING SETTLEMENT AGREEMENT WITH REGARD TO PGW'S HEDGING?

A. PGW agreed to the following:

> 1. Within thirty (30) days after the entry of a PUC Order approving this Settlement, PGW shall submit to the Parties a Report on PGW's Gas Purchasing Strategy for the 2022-2023 Heating Season, which report will discuss PGW's consideration and utilization of hedging. For the 2023-24 Heating Season, PGW shall prepare a Hedging Plan which shall include a review of its timing and layering of purchases as part of a hedging plan that

could benefit customers by distributing cost changes over multiple quarters.

(a) PGW shall consider comments or suggestions for modification or refinement of the Hedging Plan and any Party may raise concerns or proposals for modification in PGW's GCR proceeding.

Q. WHAT IS THE STATUS OF PGW'S REPORT ON PGW'S GAS PURCHASING STRATEGY FOR THE 2022-2023 HEATING SEASON?

A. The Company's Report on PGW's Gas Purchasing Strategy for the 2022-2023 Heating Season, is attached as Exhibit RR-1.

Q. WHEN WILL THE COMPANY PROVIDE PGW'S HEDGING PLAN FOR THE FOR THE 2023-2024 HEATING SEASON?

A. The Company will Provide its Hedging Plan for the 2023-2024 Heating Season to the Partied by September 1, 2023.

III. CAPACITY RELEASE, OFF-SYSTEM SALES MARGIN AND ASSET MANAGEMENT CREDITS/FEES

Q. HAS PGW BEEN RETAINING A PORTION OF NET PROCEEDS FROM CAPACITY RELEASE CREDITS, OFF-SYSTEM SALES MARGIN AND ASSET MANAGEMENT CREDIT/FEES?

A. Yes. During the 2008-2009 GCR proceeding (Docket No. R-2008-2021348), the parties agreed that PGW would be permitted to retain 25% of all off-system sales margins and capacity release credits with the remaining 75% applied as an offset to purchased gas costs for the retention period of September 1, 2008 to August 31, 2011. Likewise, the parties agreed that, for the subsequent GCR period, PGW would retain 25% of all off-system sales margins, capacity release credits and margins or fees arising from asset management arrangements[2] with the remaining 75% applied as an offset to purchased gas

[2] Asset management margins/credits/fees are received when PGW enters into a contract with a third party to manage all or part of a storage contract or firm pipeline transportation contract.

costs. This sharing arrangement was approved by the PUC in all subsequent GCR proceedings.

Q. DOES PGW HAVE A RETENTION PROPOSAL FOR THE PERIODS BEGINNING ON SEPTEMBER 1, 2023?

A. Yes. PGW proposes to continue the retention of 25% of capacity release credits, off system sales margin and asset management margin/credit/fees and apply the remaining 75% to the Gas Cost Rate.

Q. DO OTHER PENNSYLVANIA NATURAL GAS DISTRIBUTION COMPANIES ("NGDCS") HAVE SHARING MECHANISMS FOR CAPACITY OFF SYSTEM SALES CREDITS?

A. Yes. All of the largest NGDCs have sharing mechanisms similar to PGW's and the sharing percentage for all of the NGDCs is 25%.

Q. WHAT WAS INCORPORATED INTO PGW'S 2022-2023 GCR PROCEEDING SETTLEMENT AGREEMENT, WITH REGARD TO THE 2022-2023 PERIOD AND GOING FORWARD FOR THE CALCULATION OF OFF SYSTEM SALES?

A. PGW agreed to the following:

1. For the 2022-23 period and going forward (and unless Section b applies):

(a) PGW will calculate the cost of gas used for an off-system sale ("OSS") as the Weighted Average Cost of Flowing Gas (WACOFG) on the day on which the OSS is made.

(b) Notwithstanding (a), above, if PGW: (1) purchases natural gas specifically for resale as an OSS; or (2) identifies a specific purchase of natural gas that PGW then determines (prior to the sale) should be sold via an OSS for price mitigation purposes, it will utilize that specific cost of that gas (including any associated incremental transmission costs) as the cost of gas to calculate the off system sales margin.

Q. HOW ARE SHARING MECHANISMS BENEFICIAL TO BOTH RATEPAYERS AND UTILITIES?

A. The ratepayers and the utility benefit from the policy because it creates an incentive to maximize efforts to fully utilize gas supply assets by making off-system sales and capacity release transactions, thereby reducing the overall cost of gas supply and the resulting gas cost rate. For PGW, the lesser portion retained by the Company is used to offset the overall cost of service that must be recovered in base rates.

Q. DID PGW ENGAGE IN ANY CAPACITY RELEASE OR OFF-SYSTEM SALES IN FY 2023?

A. Yes. PGW contracted for an off-system sales and several capacity releases. For each of these arrangements, the margin in excess of the incremental costs was split 75-25%, with 75% being credited to the GCR. PGW retained the remaining 25% in base rates and used it to offset other costs of operation.

Q. FOR THE OFF-SYSTEM SALE, DID PGW CALCULATE THE COST OF GAS USED FOR AN OFF-SYSTEM SALE AS THE WEIGHTED AVERAGE COST OF FLOWING GAS (WACOFG) ON THE DAY ON WHICH THE OSS IS MADE?

A. Yes.

Q. DID ANY OF PGW'S OFF-SYSTEM SALES MADE "SPECIFICALLY FOR RESALE" OR MADE FOR "PRICE MITIGATION PURPOSES", AS CONTEMPLATED IN THE 2022-2023 SETTLEMENT AGREEMENT, SUCH THAT THE SPECIFIC COST OF THAT GAS WAS USED AS THE COST OF GAS?

A. No.

Q. DID PGW ENGAGE IN AN ASSET MANAGEMENT ARRANGEMENT IN FY 2023?

A. Yes. PGW entered into an AMA arrangement with a counterparty for the winter season of FY 2023. The revenue from the AMA arrangement will be split 75-25%, with 75% being credited to the GCR. PGW retained the remaining 25% in base rates and used it to offset other costs of operation.

IV. PGW LNG

Q. WHAT WAS INCORPORATED INTO PGW'S 2022-2023 GCR PROCEEDING SETTLEMENT AGREEMENT, WITH REGARD TO PGW'S REPORTING OF LNG SALES?

A. PGW agreed to the following:

> For the next three years, PGW will provide a report to the Parties thirty (30) days after the end of each Winter Heating Season detailing the amount of LNG sales (if any) made and the amount of profit realized. The report will include the cost of gas and other inputs into the profit calculation.

Q. WHEN IS PGW'S FIRST REPORT ON LNG SALES DUE?

A. PGW will provide its first Report on LNG Sales thirty (30) days after the end of the Winter Heating Season, which is May 1, 2023.

Q. WHAT WAS INCORPORATED INTO PGW'S 2022-2023 GCR PROCEEDING SETTLEMENT AGREEMENT, WITH REGARD TO PGW PROVIDING AFFIRMATIVE TESTIMONY REGARING LNG SALESIN THE COMPANY'S NEXT BASE RATE CASE?

A. PGW agreed to the following:

> In its next base rate case, PGW will provide affirmative testimony indicating whether and where it has included a projection of LNG sales and/or profits, their levels and calculation in its revenue requirement calculation.

Q. HAS PGW FULFILLED THIS REQUIREMENT?

A. Yes. PGW witness Joseph F. Golden, Jr. addressed the incorporation of LNG Sales into the Company's base rate case revenues, in PGW's February 27, 2023 Base Rate Case filing in Docket No. R-2023-3037933.

V. PRICE ANALYSIS AND BUYING ADVISORY SERVICE

Q. WHAT DOES PGW CURRENTLY USE FOR A PRICE ANALYSIS AND BUYING ADVISORY SERVICE OR SERVICES AS PART OF ITS EFFORTS TO OBTAIN GAS AT LEAST COST?

A. PGW continues to utilize a firm called Planalytics to provide such services. In addition, PGW has been utilizing a concurrent service to insure that PGW provides value to the ratepayer by striving for a least cost service.

Q. WHAT TYPES OF SERVICES DOES PLANALYTICS PROVIDE TO PGW?

A. Planalytics provides the following services:

- Price feed from Nymex and Globex for natural gas, crude oil, heating oil and RBOB (reformulated gasoline);
- Buying suggestions up to 18 months in the future;
- A charting tool for technical analysis;
- Short and medium range weather forecasts;
- Weather alerts (issued in advance of significant weather events); and
- Planalytics' pre-season hurricane forecast and in-season updates;

Q. WHAT WAS INCORPORATED INTO PGW'S 2022-2023 GCR PROCEEDING SETTLEMENT AGREEMENT WITH REGARD TO PRICE ANALYSIS AND ENERGY BUYING ADVISORY SERVICE?

A. PGW agreed to the following:

> PGW shall continue to be authorized to recover in the GCR the annual fee for subscribing to Planalyics Gas Buying Analysis Service except that PGW shall be authorized to substitute a comparable service, as the same or lower cost, for Planalytics if, in its discretion, another service better meets its need for natural gas purchasing analysis and advice. PGW will report on any such change in its next GCR Proceeding.

Q. WHAT IS THE CURRENT STATUS OF PGW'S USE OF PRICE ANALYSIS AND ENERGY BUYING ADVISORY SERVICES?

A. PGW has been monitoring and comparing the offerings of Planalytics versus PGW's other market information sources. Since the July 2022, PGW has used the Intercontinental Exchange ("ICE") price information service to supplement its pricing analysis.

Presently, PGW does not have sufficient operating experience with ICE to make a determination if ICE is a suitable substitute for Planalytics. Compared with Planalytics' Nymex pricing quotes, ICE offers real time pricing at the natural gas price hubs from which PGW purchases gas.

Q. WHAT IS THE PRICE COMPARISON OF PLANALYTICS AND ICE?

A. Planalytics costs $125,000 per year, while ICE costs approximately $25,000 per year.

Q. WHAT COSTS ARE PGW SEEKING TO RECOVER IN THIS GCR?

A. PGW is only seeking the continued recovery of Planalytics in this GCR. The Company is absorbing the costs of ICE during this testing period.

Q. DOES PGW WISH TO CONTINUE THE PLANALYTICS BUYING ADVISORY SERVICES?

A. Yes. PGW will continue to monitor and compare the pricing features of Planalytics versus ICE over the next several months and make a decision whether to continue with both services or move toward ICE only in the Company's next GCR.

VI. GAS SUPPLY PURCHASES

Q. WHERE DID PGW PURCHASE NATURAL GAS SUPPLY ON THE TEXAS EASTERN TRANSMISSION CORPORATION ("TETCO") PIPELINE IN FY 2023?

A. 100% of all baseload and swing supply purchases on the TETCO pipeline were from Market Zone M-2 in FY 2023.

VII. CONCLUSION

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

Philadelphia Gas Works

Natural Gas Purchasing Strategy

For 2022-2023 Heating Season

I. Introduction

As reasonably anticipated PGW intends on meeting its contractual obligations to supply all 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 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 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. PGW Optimization Standard for Purchasing and Utilizing Gas Supplies

Incorporated into PGW's projections are an implementation plan for developing a cohesive gas supply/demand strategy for the near term and the longer range. 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 there is an opportunity 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.

PGW's supply strategy incorporates maintaining full current winter day deliverability regarding 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. 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.

III. PGW's Current Gas Purchasing Strategy for 2022-2023 Heating Season

PGW's strategy for gas purchasing for the 2022-2023 Heating Season conforms to the requirements of PGW's Optimization Standard for Purchasing and Utilizing Gas Supplies.

PGW's current strategy for meeting the system's supply requirements is a portfolio approach. The Company's supply portfolio is split into four categories. First, the Company enters baseload supply contracts, which account for approximately thirty-seven percent (37%) of PGW's daily firm transportation entitlements on both Enbridge's Texas Eastern and Williams' Transco Gas Pipelines. As part of PGW's baseload supply, PGW has secured long term contracts for approximately 41% of its total baseload gas supply under discounted prepaid agreements with the municipal authorities Public Energy Authority of Kentucky (PEAK) and Municipal Gas Authority of Georgia (MGAG) in FY 2022. Over the past four years, PGW ratepayers have saved approximately $11 Million and are estimated to save approximately another $5.9 Million dollars over the 2022-2023 fiscal year.

The Enbridge and Williams' pipelines are the only interstate pipeline facilities with physical connections to the PGW service territory. These supply contracts also recognize pipeline receipt and delivery rights. These contracts 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 are 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, PGW utilizes bundled storage to allow as another source of supply and transport during the higher demand times of the year.

Fourth, PGW has on-site LNG to meet operational requirements when sendout requirements demand it.

Both the bundled storage and on-site LNG allow PGW to meet its design day requirements and to accomplish other cost saving initiatives. Specifically, once design winter sendout requirements are met, the company may utilize bundled storage and LNG inventories to displace higher priced supply based on the current market conditions. PGW uses a portfolio approach to address system supply and storage refill in the traditional non-peak season. The Gas Supply Department uses the GCR filing as a template 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 follows the directives of the Gas Supply Committee, which meets frequently and includes a review of PGW's gas purchase plans. The principal strategy for mitigating price volatility is to continuously monitor the market, fixing month(s) ahead pricing when an opportunity arises, within the parameters of the market advice we follow. PGW considers the recommendations of Planalytics, ICAP, and supplemented with instantaneous price monitoring data using the ICE platform.

PGW takes steps to both reduce the cost and mitigate the risk of volatility in gas prices when hedging or price locking is possible at a reasonable cost.

This year, PGW has used the tools at its disposal and worked with its gas suppliers to fix prices to reduce volatility to the ratepayer. As stated in "The Purchasing Guidelines FY 23", PGW lock-in pricing for PGW's daily baseload, this gas was locked-in anywhere from the prior month to several month before. When PGW can lock-in a single month or a strip of months at the same time. Any baseload volumes that are locked-in, the pricing will default to the closing index price. For FY 23, the locked-in volumes were as follows: September 85% of the baseload, October 95% of the baseload, November 7% of the baseload, December 0% of the base load, January

20% of the baseload, February 3% of the baseload, and March 7% of the baseload. For the rest of FY 2023, PGW currently has about 12% of the baseload locked-in and is constantly evaluating if more volumes should be locked-in. PGW has also worked with PEAK and MGAG, in accordance to their long-term deals to fix pricing for future season to help mitigate the volatility to the ratepayer.

IV. Discussion of Hedging Strategy and Utilization for 2023-2024 Heating Season

Moving forward, PGW has refined its plan in a few ways. PGW has stayed an active participant in the long-term deals and is watching market conditions to find deals that will maximize the saving to our ratepayers. Secondly, in issuing the RFP for baseload supply, PGW requested a monthly supply sculpted in a way to reflect the monthly usage differentials from each month rather than seasonal approach. Another refinement PGW made to its monitoring activity was to add the ICE platform as a complement to Planalytics. ICE allows PGW to monitor pricing data at specific points where we purchase gas on an instantaneous basis; this has allowed PGW greater insight into the market to make sure PGW is buying gas at its lowest price.

PGW continues to keep a watchful eye on futures prices and has taken advantage of the ability to enter into fixed price agreements with Municipal Authority agents so that, when opportunities arise, PGW can retain the significant prepaid discounts along with dips in NYMEX futures. For all other winter contracts, in the RFP, PGW requires that any supply contracts in which PGW enters must have an option to fix the contract price. PGW has begun to lock-in prices for volumes of future contract for the winter of 2023-2024.

In recent years, PGW has observed the changes to the market volatility and market norms which have had impacts on the rate payers. As the market changes and provides new challenges, PGW understands that it needs to be vigilant in its strategy while not being too hasty as well. PGW needs to be flexible, especially in this market, to move with the market trends as PGW seems fit.

With all of these changes, PGW feels the combination of its physical hedging abilities with storage facilities and its current tools to lock in future pricing on its baseload gas deals is the best approach.

Please see attached Exhibit for month by month details of PGW's hedging activity.

Exhibit RR-1

Purchasing Plan Guideline												
	September	October	November	December	January	February	March	April	May	June	July	August
Daily Volume												
Baseload	68,236	68,236	116,073	119,073	119,873	117,073	113,455	68,236	68,236	68,236	68,236	68,236
Swing												
Tetco												
Index pricing (max 35,000 Dth/day)	11,500	37,500	15,000	35,000	35,000	35,000	35,000	35,000	35,000	29,000	27,000	27,000
Transco												
Index pricing (max 45,000 Dth/day)	6,600	26,500	15,000	45,000	45,000	45,000	45,000	37,000	39,000	22,000	19,000	15,000
Total Swing	18,100	64,000	30,000	80,000	80,000	80,000	80,000	72,000	74,000	51,000	46,000	42,000
Daily Total Swing & Baseload	86,336	132,236	146,073	199,073	199,873	197,073	193,455	140,236	142,236	119,236	114,236	110,236
Target Locked in Volume/Hedge Percentage of Daily Baseload Volume	85%	95%	7%	0%	20%	3%	7%	12% to 50%	12% to 50%	12% to 50%	12% to 50%	12% to 50%

Exhibit RR-1

Purchasing Plan Guideline for FY 2024												
	September	October	November	December	January	February	March	April	May	June	July	August
Daily Volume												
Baseload	68,236	68,236	116,073	119,073	119,873	117,073	113,455	68,236	68,236	68,236	68,236	68,236
Swing												
Tetco												
Index pricing (max 35,000 Dth/day)	11,500	37,500	15,000	35,000	35,000	35,000	35,000	35,000	35,000	29,000	27,000	27,000
Transco												
Index pricing (max 45,000 Dth/day)	6,600	26,500	15,000	45,000	45,000	45,000	45,000	37,000	39,000	22,000	19,000	15,000
Total Swing	18,100	64,000	30,000	80,000	80,000	80,000	80,000	72,000	74,000	51,000	46,000	42,000
Daily Total Swing & Baseload	86,336	132,236	146,073	199,073	199,873	197,073	193,455	140,236	142,236	119,236	114,236	110,236
Target Locked in Volume/Hedge Percentage of Daily Baseload Volume	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%	5% to 50%

VERIFICATION

I, Ryan E. Reeves, hereby state that: (1) I am the Director of Gas Supply, Transportation, and Control for Philadelphia Gas Works ("PGW"); (2) the facts set forth in my testimony are true and correct (or are true and correct to the best of my knowledge, information and belief); and, (3) I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: 3/1/2023

Ryan E. Reeves
Director of Gas Supply, Transportation, and Control
Philadelphia Gas Works

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

REJOINDER TESTIMONY OF

RYAN E. REEVES

ON BEHALF OF
PHILADELPHIA GAS WORKS

Docket No. R-2023-3038069

Philadelphia Gas Works
Proposed 2023–2024 Annual Gas Cost Rate Adjustment

April 24, 2023

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I. INTRODUCTION

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

A. My name is Ryan E. Reeves. My position with Philadelphia Gas Works ("PGW" or "Company") is Director of Gas Supply, Transportation and Control.

Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY IN THIS PROCEEDING?

A. Yes, I provided Direct Testimony ("PGW St. 2") on March 1, 2023, and Rebuttal Testimony ("PGW St. 2R") on April 13, 2023.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. The purpose of my Rebuttal testimony is to respond to the Surrebuttal testimony of Grays Ferry Cogeneration Partnership ("Grays Ferry" or "GFCP") and Vicinity Energy Philadelphia, Inc. ("Vicinity" or "VEPI") (jointly "GFCP/VEPI") witness James L. Crist submitted on April 20, 2023 ("GFCP/VEPI Statement No. 1-SR").

II. RESPONSE TO THE SURREBUTTAL TESTIMONY BY JAMES L. CRIST, P.E.

Q. MR. CRIST STATES THAT GFCP/VEPI WOULD BE AGREEABLE TO A RECALLABLE RELEASE "UNDER SIMILAR TERMS AS WERE IN EFFECT" UNDER THE LAPSED 1996 CONTRACT. GFCP/VEPI STATEMENT NO. 1-SR AT 70–71. DO YOU HAVE A RESPONSE?

A. Yes. My initial observation is that GFCP/VEPI is gambling on the capacity not being recalled by imposing special conditions that are not compatible with the terms for release established by the Federal Energy Regulatory Commission ("FERC") and Texas Eastern Transmission Company ("TETCO").

Mr. Crist is suggesting that GFCP/VEPI would accept interruptible capacity that, when interrupted, would force the shut-down of a substantial portion of it its electric generation and steam supply to Vicinity in the coldest months of the year, exactly those circumstances under which PGW would be recalling it.

As Mr. Crist explained in the *GFCP/VEPI Complaint Proceeding*:[1]

> The Grays Ferry cogeneration plant was constructed in 1997 and consists of a combined cycle plant with a gas combustion turbine-generator ("CT") and a waste heat recovery boiler or heat recovery steam generator ("HRSG"), a 700klb/hr. auxiliary boiler and an extraction steam turbine ("ST"). The outputs of the ST and CT are 58 MW and 135 MW respectively. The CT and HRSG burn only natural gas….The facility is available in excess of 99% of the time and in 2021 sold 958.3 GWH into the PJM. Such sales are structured as firm sales.[2]

In that testimony, GFCP/VEPI rejected PGW's offer of interruptible transportation service (with firm standby) stating:

> Residential and essential human needs customers such as hospitals and nursing homes absolutely require firm service as the health and welfare of individuals depends on firm service especially in periods of cold weather.
>
> ***
>
> For the past twenty-five years Grays Ferry's service has been firm, and the electricity that Grays Ferry sells into the PJM is offered on a firm basis. The steam that VEPI receives from Grays Ferry which then is sold to residential and commercial customers including hospitals and nursing homes, is also provided on a firm basis. . . . Obviously, an interruptible quality of service is not practical for Grays Ferry.[3]

The offer now to accept interruptible capacity is a radical change of this position and I'm not sure that I understand why, but the devil is in the details.

Mr. Crist qualifies the terms of what the term recallable by the phrase "under similar terms" to the existing ARS arrangement. In order for GFCP/VEPI to avoid interruption and their electric and steam guarantees of firm service to their own customers, I seriously doubt that

---

[1] *Formal Complaint of Grays Ferry Cogeneration Partnership and Vicinity Energy Philadelphia, Inc.*, Docket No. C-2021-3029259 ("*GFCP/VEPI Complaint Proceeding*").

[2] *Id.*, GFCP/VEPI Statement JC-1 at 4.

[3] *Id.* at 12.

GFCP/VEPI could or would accept recall under the usual understanding of "recallable" as set forth under the FERC rules and TETCO tariffs, which is "at will."

The terms of ARS limit interruption to 15 days annually and only on days when the temperature is less than 25ºF. There are no restrictions on the recall of released interstate pipeline capacity, which may occur at any time under any circumstances. TETCO, the counter party to the capacity contracts on its system, will not negotiate these terms as they are determined by FERC and tariff rules.

Q. MR. CRIST REPEATEDLY STATES THAT THAT THE FACT THAT GAS HAS FLOWED USING PGW'S CAPACITY ON TETCO WITHOUT INTERRUPTION. GFCP/VEPI STATEMENT NO. 1-SR AT 1–2, 6, 8. DO YOU HAVE A RESPONSE?

A. Yes. GFCP/VEPI were not interrupted during the last twenty-five years because ARS provides relatively firm, not interruptible, service. All of the customer that are interruptible would have to be interrupted first and only then would we be forced to consider impinging on firm services like ARS. Previously, during the last twenty-five years, we have interrupted, including firm, but ARS was not affected in any way.

The fact that PGW never interrupted GFCP/VEPI's service is not proof that there is excess capacity. It only shows that we have adequate capacity to serve our firm customers.

The reason ARS has not been interrupted, even when PGW has interrupted customers on its distribution system, is because ARS is a displacement service. The ARS is a net neutral service on the gas supply to PGW and its firm customers. As long as the gas provided by the third-party, in this case GFCP/VEPI, matches the gas PGW provides to GFCP/VEPI, PGW's firm customers are kept whole.

Q. WHAT ARE THE FINANCIAL TERMS THAT GFCP/VEPI SUGGEST?

A. Mr. Crist asserts that PGW should release 21,000 Dth/day of capacity to Grays Ferry "on a year-round basis at a fair market rate."[4]

Q. HOW DOES MR. CRIST CALCULATE "THE FAIR MARKET RATE"?

A. He doesn't. He uses the tariff rate set by FERC and not the open market determined price. The market rates are higher, as I explained in my rebuttal testimony.

Q. MR. CRIST ALSO CLAIMS THAT THE AVERAGE RATE THAT PGW RECEIVED FOR RELEASE CAPACITY (2018–2022) IS $0.35/DTH (EXH JC-8 AND JC-9) AND THAT THIS COMPARES FAVORABLY TO THE $0.80/DTH TETCO TARIFF RATE BEING OFFERED BY GRAYS FERRY AND VICINITY. GFCP/VEPI STATEMENT NO. 1-SR AT 4, EXS. JC-8, JC-9. DO YOU HAVE A RESPONSE?

A. Yes. First, I want to say that PGW's answer to Vicinity Set II-7 was never "updated" because the request only asked for information for the 2018-2022 period, not 2023. Secondly, Mr. Crist's reference to the November 1, 2022 – March 31, 2023 release to Paulboro Refining was only one of the TETCO releases in the 2022–2023 winter period. The Paulboro transaction was for 15,708 Dth/Day at a rate of $0.10/Dth under which PGW realized $237,190.80. It was not a "lucky" transaction.[5] We frequently receive multiple bids like this one for five-month winter period as shown in Exhibit JC-9.

Q. WOULD YOU EXPLAIN THE RELEASES IN THE WINTER OF 2022–2023?

A. As I testified in my rebuttal, during the winter of 2022–2023, PGW released 18,708 Dth on TETCO at an average price of $3.25/Dth, far in excess of the tariffed TETCO rate. Therefore, PGW was able to generate approximately $9.2 million dollars in revenues for the benefit of its customers. These were possible because of the total capacity held by

[4] GFCP/VEPI Statement No. 1-SR at 8.

[5] GFCP/VEPI Statement No. 1-SR at 5.

PGW on the TETCO system. If 21,000 Dth of that capacity were to be removed and these contracts were assigned to GFCP/VEPI, as Mr. Crist suggests, then the amount of TETCO capacity available for release by PGW would be at or near zero, as would be the revenues received and credited to PGW's other customers.

Mr. Crist's continues to insist a narrow view focused on GFCP/VEPI's self-interests, which ignores the adverse impacts on other customers.

Q. WERE THE REVENUES RECEIVED IN THE WINTER OF 2022–2023 AN OUTLIER?

A. No, I do not think so. Firm pipeline capacity is becoming an increasingly scarce resource and of increasing value. The interstate pipeline system has been experiencing more and more restrictions and bottlenecks. Part of this is due to an increasing flow into aging systems. Moreover, new pipeline construction is limited. More broadly, in terms of trends, natural gas is becoming of greater use for electric power generation, replacing coal, and as demand on the electric grid expands to accommodate new loads, electric vehicles being prominent example. The pipeline system is becoming more strained, and this will increase. Therefore, it is my opinion, that pipeline capacity release prices and revenues will only become greater in the future.

Q. HOW DOES THE ONGOING REVENUE STREAM THAT YOU EXPECT FROM RECALLABLE CAPACITY SOLD UNDER THE FERC'S REGULATIONS FOR INTERSTATE CAPACITY RELEASE COMPARE WITH WHAT MR. CRIST SAYS THAT GRAYS FERRY AND VICINITY ARE OFFERING?

A. Mr. Crist calculates the value of the GFCP/VEPI offer to be approximately $6.1 million per year. There is no "demand" upside to this figure (GFCP/VEPI might consume more).[6] This is fixed amount for capacity calculated as $0.80 x 21,000 Dth.

[6] *See* GFCP/VEPI Statement No. 1-SR at 5.

Parenthetically, Mr. Crist used a rate proposed in a rate case filed by TETCO. TETCO settled its FERC rate case in December 2022 and the proper final rate for WLA to M-3 is $0.51/Dth (rounded) and the revenues that PGW and its customers can expect under GFCP/VEPI's proposal is now only $3.9 million.

I believe that the value of 21,000 Dth on TETCO to be much more going forward and that $0.51/Dth (corrected) is too low compared to what PGW might receive, particularly given the increasingly crowded conditions on the pipelines, as I described previously. Each year the prices for capacity release have been increasing. In 2020–2021, PGW averaged $0.98/Dth in TETCO releases. It was higher in 2021–2022 at $1.70/Dth and, as I have said, was $3.25 last heating season.

Q. MR. CRIST ALSO CALLS INTO QUESTION YOUR EXHIBIT RER-1 BECAUSE THERE IS "NO SHOWING OF PROBABILITY." GFCP/VEPI STATEMENT NO. 1-SR AT 6. CAN YOU RESPOND?

A. In my rebuttal testimony, I explained that: "If PGW were to permanently release 21,000 Dth/day, PGW's distribution system would experience failures in 11 of the 18 scenarios that were examined. During any one of these 11 failures, PGW would have to curtail firm customers. If the capacity was not released, then there would be zero failures."[7]

We have seen gate stations and LNG facilities fail before so these are not improbable events. These are not improbable events. The interstate pipelines serving PGW are older and can fail. In order to protect our firm customers, we need to plan for such an eventuality. All of these events are possible. In my view, PGW should not be required to risk curtailments to firm and essential needs customers in any circumstance, particularly when it is in the self-interest of only one customer to do so.

[7] PGW St. 2R at 11.

Q. DID MR. CRIST PREVIOUSLY CHALLENGE EXHIBIT RER-1 WHEN IT WAS PRESENTED IN THE *GFCP/VEPI COMPLAINT PROCEEDING*?

A. Only on cross examination and in passing on the transcript. Mr. Crist and GCP/VEPI have had the study since July 29, 2022, and have made no attempt to review the document. The fact that PGW would raise it again in response to Mr. Crist's same argument about "excess capacity" should have been reasonably anticipated. The fact that they inquired so late into this proceeding is self-inflicted.

Q. HAS PGW REFUSED TO PROVIDE THE STUDY?

A. No, but inasmuch as it is "Confidential Security Information," we explicitly stated that the full study was available for inspection be on site at our offices. This caveat was also applied in the GFCP/VEPI Complaint Proceeding. To say that PGW "refused" to provide the underlying study is simply untrue.

III. CONCLUSION

Q. DOES THAT COMPLETE YOUR REJOINDER TESTIMONY?

A. Yes. I reserve the right to offer further responsive testimony. Thank you.

VERIFICATION

I, Ryan E. Reeves, hereby state that: (1) I am the Director of Gas Supply, Transportation, and Control for Philadelphia Gas Works ("PGW"); (2) the facts set forth in my testimony are true and correct (or are true and correct to the best of my knowledge, information and belief); and, (3) I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: April 24, 2023

Ryan E. Reeves
Director of Gas Supply, Transportation, and Control
Philadelphia Gas Works

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

REBUTTAL TESTIMONY OF

RYAN E. REEVES

ON BEHALF OF
PHILADELPHIA GAS WORKS

Docket No. R-2023-3038069

Philadelphia Gas Works
Proposed 2023–2024 Annual Gas Cost Rate Adjustment

April 13, 2023

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I. INTRODUCTION

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

A. My name is Ryan E. Reeves. My position with Philadelphia Gas Works ("PGW" or "Company") is Director of Gas Supply, Transportation and Control.

Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY IN THIS PROCEEDING?

A. Yes, I provided Direct Testimony ("PGW St. 2") on March 1, 2023.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my Rebuttal testimony is to respond to the Direct testimony of Grays Ferry Cogeneration Partnership ("Grays Ferry" or "GFCP") and Vicinity Energy Philadelphia, Inc. ("Vicinity" or "VEPI") (jointly "GFCP/VEPI") witness James L. Crist submitted on April 3, 2023 ("GFCP/VEPI Statement No. 1").

Q. PLEASE IDENTIFY THE EXHIBITS THAT ACCOMPANY YOUR REBUTTAL TESTIMONY.

A. The following exhibits accompany my testimony:

RER-1R	Summary of Failure Study
RER-2R	GFCP/VEPI Response to PGW Interrogatory Set I No. 4

Q. WERE THOSE EXHIBITS PREPARED BY YOU OR UNDER YOUR DIRECTION AND SUPERVISION?

A. Yes.

Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.

A. Mr. Crist has submitted testimony on behalf of GFCP/VEPI, PGW's largest retail customer, claiming that PGW's upstream capacity portfolio, which the Company utilizes to ensure that it can meet the natural gas demands of its firm customers, including GFCP/VEPI, represents "over-capacity" and that PGW should be forced to reduce its capacity contracts by 21,000 Dth/day on the Texas Eastern Transmission Pipeline

("TETCO") Philadelphia Lateral and release the capacity directly to GFCP/VEPI. Mr. Crist's claims should be rejected because:

(1) There is no need. While GFCP/VEPI hold insufficient capacity for their own needs on TETCO, PGW is able to provide (has been providing for twenty-five years), a displacement service that provides capacity sufficient to serve GFCP/VEPI's winter peaking needs;

(2) The premise is incorrect. There is no excess capacity held by PGW, including on the TETCO system, and Mr. Crist's claim to the contrary fails to reflect all of PGW's load and, therefore, results in an understated number.

(3) The remaining customers would be financially disadvantaged. Where PGW is able to release TETCO capacity, its customers receive greater proceeds than GFCP/VEPI is offering; and

(4) Under FERC rules, PGW cannot directly assign TETCO capacity rights to GFCP/VEPI.

II. RESPONSE TO THE DIRECT TESTIMONY BY JAMES L. CRIST, P.E.

A. OVERVIEW OF PGW OPERATIONS

Q. PLEASE PROVIDE A GENERAL DESCRIPTION OF PGW'S GAS DISTRIBUTION SYSTEM.

A. PGW maintains a distribution system of approximately 3,000 miles of gas mains and 475,000 service lines, and provides gas service to approximately 500,000 residential, commercial and industrial customers in Philadelphia.

PGW's gas distribution system is located in Southeastern Pennsylvania in the County and City of Philadelphia. Since this is not a gas-producing area, PGW and its natural gas customers are dependent upon the interstate gas pipeline system to deliver natural gas into the PGW gas distribution system.

B. GRAYS FERRY AND VICINITY OPERATIONS; PGW SERVICES

Q. PLEASE BRIEFLY DESCRIBE THE OPERATIONS OF GRAY'S FERRY AND VICINITY?

A. GFCP is an unregulated cogeneration facility which produces electricity for sale into the PJM market and the "waste" steam outputs are sold to VEPI, who then resells the steam to customers in Philadelphia as a Commission regulated steam utility. VEPI also operates auxiliary steam production peaking boilers that are fueled by natural gas.[1]

Grays Ferry and Vicinity are affiliate companies and jointly owned by Vicinity Energy, Inc. Grays Ferry and Vicinity are for-profit entities jointly owned by a foreign private equity firm.

Q. ARE GRAYS FERRY AND VICINITY CUSTOMERS OF PGW?

A. Yes. Both are retail customers of PGW. The rates for PGW services were originally established under a set of contracts which became effective in 1996 (prior to the Commission's jurisdiction over PGW). These contracts expired on December 31, 2022,[2] and the rates for service prospectively from January 1, 2023 are the subject of a Complaint Proceeding currently pending decision by the Commission.[3] If the Initial Decision of Administrative Law Judge Guhl is adopted by the Commission, PGW and GFCP/VEPI will transition existing services to tariff-based rates, terms, conditions effective as of January 1, 2023.

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[1] During times of peak, when Gray Ferry waste steam is unavailable, VEPI operates its own natural gas boilers to generate auxiliary steam. *Formal Complaint of Grays Ferry Cogeneration Partnership and Vicinity Energy Philadelphia, Inc.*, Docket No. C-2021-3029259 ("*GFCP/VEPI Complaint Proceeding*"), PGW St. 1R, Ex. JCZ-2.

[2] As the Commission recently made clear, these contracts were not to be renewed or extended. *See GFCP/VEPI Petition for Interim Emergency Relief Certified Question*, Docket No. C-2021-3029259, Opinion and Order at 21 (Dec. 28, 2022).

[3] *See GFCP/VEPI Complaint Proceeding*, Docket No. C-2021-3029259, Initial Decision (Dec. 27, 2022).

Q. WHAT SERVICES DOES PGW CURRENTLY PROVIDE TO GRAYS FERRY AND VICINITY?

A. Through the current version of PGW's GTS-Firm tariff, which expires on April 23, 2023, PGW provides: Transportation, short-term Capacity Release during the summer months, Sales Service and Alternative Receipt Service ("ARS"), as I will explain.

Transportation service to GFCP/VEPI is principally accomplished via the PGW distribution system. GFCP/VEPI arrange the supply of natural gas from upstream gas producers and then has the gas transported to TETCO, for delivery along TETCO's Philadelphia Lateral to TETCO's Gate Station 060, whereupon the volumes are handed off to PGW for the final delivery to GFCP and VEPI. This transportation path serves the majority of their natural gas needs.[4]

For Capacity Release, as part of the contract, PGW would release 36,000 Dths per day of firm capacity rights on TETCO to GFCP/VEPI during the summer season on a short-term basis. Both parties to the Complaint Proceeding have agreed that this service is unnecessary and can be discontinued.

Sales Service is also available to GFCP/VEPI under the now terminated contract where GFCP/VEPI purchased natural gas directly from PGW for a rate equal to the weighted average cost of gas ("WACOG") plus $0.61.

ARS is also a service that was available under the soon to be ending contract. ARS is a service which allows GFCP/VEPI to deliver natural gas to PGW's O-34 gate station on the

[4] This delivery service constitutes about 70% of GFCP/VEPI's annual load. *GFCP/VEPI Complaint Proceeding*, PGW Main Brief at 20 (Sept. 20, 2022) (citing GFCP/VEPI Statement JC-1 at 21). There is also some limited sales service provided by PGW which is billed at a transportation rate of $0.61 per Dth plus the weighted average cost of gas ("WACOG") as determine in PGW's gas cost rate. *Id.* at 21; *GFCP/VEPI Complaint Proceeding*, PGW St. 2SR at 2. This pricing of sales service is not in controversy.

Skippack Lateral and PGW, in turn, uses its firm capacity rights on the Philadelphia Lateral to flow gas to the O-60 gate station for GFCP/VEPI's use.

Q. DO GRAYS FERRY AND VICINITY HAVE SUFFICIENT TETCO CAPACITY TO MEET THEIR WINTER NEEDS ON TETCO?

A. No. GFCP/VEPI are net short of interstate transportation capacity during the winter period. GFCP/VEPI possess insufficient delivery rights (capacity) on TETCO's Philadelphia Lateral during the winter – owning only 35,000 Dth per day of delivery capacity compared to their winter peak requirement of 56,000 Dth per day.[5] GFCP/VEPI's only capacity rights are on TETCO's Philadelphia Lateral to Gate Station 060.

As OSBA witness Mr. Knecht noted in the pending Complaint Proceeding involving the post-contract setting of rates for GFCP/VEPI: "It is . . . unclear why GFCP [in 1995] would construct a large industrial facility without ensuring long-term access to firm gas transmission capacity."[6] But it did so and, at this time, there is no new capacity left. Capacity rights on TETCO's Philadelphia Lateral are fully subscribed to by other TETCO customers, such that no new capacity is available.[7]

Q. HOW THEN DO GRAYS FERRY AND VICINITY OVERCOME THEIR WINTER CAPACITY SHORTFALL?

A. They rely on PGW and its distribution network. The solution for the last twenty-five years, and the one requested by GFCP/VEPI in the record of the Complaint Proceeding, has been the use of PGW's other distribution facilities, besides the specific pipeline facilities used to serve GFCP/VEPI, to enable sufficient natural gas to be delivered to GFCP/VEPI during

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5 GFCP/VEPI Statement No. 1 at 6; *see also GFCP/VEPI Complaint Proceeding*, PGW Main Brief at 24.

6 *GFCP/VEPI Complaint Proceeding*, OSBA Statement No. 1-R at 4.

7 *GFCP/VEPI Complaint Proceeding*, PGW Main Brief at 56; *GFCP/VEPI Complaint Proceeding*, PGW Reply Brief at 35 (Oct. 4, 2022).

peak winter periods. During the winter season and shoulder months, GFCP/VEPI have used ARS under which PGW provides the opportunity for GFCP/VEPI to deliver gas elsewhere on the PGW distribution system. Under ARS, GFCP/VEPI deliver gas, not via the Philadelphia Lateral to Gate Station 060, but to a different TETCO delivery point in Northeast Philadelphia, Gate Station O-34 on the Skippack Lateral, which connects to PGW's distribution system. Capacity on the Skippack Lateral is unconstrained and readily available to GFCP/VEPI. Then, using PGW's firm capacity rights on the Philadelphia Lateral, PGW delivers that same volume of gas to Gate Station 060 to GFCP/VEPI. Concurrent with this, PGW uses its distribution system to displace the gas that would normally come from the Philadelphia Lateral. This is basically a displacement transaction. In the Complaint Proceeding pending before the Commission, PGW has agreed to continue providing a ARS-type displacement service as part of the transportation rate, if GFCP/VEPI is to be served on a "special rate" in the future.[8] While the ALJ found that GFCP/VEPI had not justified special rate service and directed that GFCP/VEPI be placed under either of two existing tariffed rates (GS-Transportation or Interruptible Service),[9] PGW would *continue to have the same responsibility* to ensure that there is sufficient capacity available to meet GFCP/VEPI's peak demand needs.

In other words, the fact that GFCP/VEPI are capacity short on TETCO is nothing new and has been and will continue to be accommodated by PGW to the best of its ability.

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[8] PGW's cost of service study included the ARS volumes in calculating a new "special rate" *GFCP/VEPI Complaint Proceeding*, PGW St. 4R at 7. As explained by PGW: "That rate would include the costs associated with the provision of the exchange service we currently provide under Alternate Receipt Service ("ARS") and so a separate rate for this exchange service is unneeded." *GFCP/VEPI Complaint Proceeding*, PGW St. 1R at 20.

[9] *GFCP/VEPI Complaint Proceeding*, Initial Decision at 22–23.

III. SUMMARY OF MR. CRIST'S RECOMMENDATION

Q. WHAT ARE GRAYS FERRY AND VICINITY REQUESTING IN THIS PROCEEDING?

A. GFCP/VEPI demand that the Commission force PGW to sell 21,000 Dth/day of its TETCO capacity to fill their 25-year-old capacity shortfall. Mr. Crist's basic predicate is that PGW's current portfolio of TETCO capacity is excessive and a financial burden to its GCR ratepayers. He asserts that PGW customers would be financially better off were the capacity to be sold to GFCP/VEPI.[10] None of the assertions are even remotely true. GFCP/VEPI, as they have in the Complaint Proceeding, are simply seeking to enrich themselves at the expense of other PGW customers and, in this instance, are also threatening the winter reliability of PGW's Firm Service customers. I will explain.

C. THERE IS NO EXCESS CAPACITY

1. DESIGN DAY

Q. GFCP/VEPI WITNESS CRIST TESTIFIES THAT PGW HAS EXCESS OVERALL CAPACITY THAT IT CAN AND SHOULD RELEASE TO GFCP/VEPI. HOW DO YOU RESPOND?

A. Mr. Crist is incorrect. As I explain below, PGW does not have excess capacity.

Q. PLEASE EXPLAIN WHAT WOULD HAPPEN IF PGW WERE TO RELEASE 21,000 DTH ON ITS DESIGN DAY, STARTING FIRST BY IDENTIFYING PGW'S CURRENT INTERSTATE SUPPLIERS.

A. PGW relies on the interstate pipelines for all natural gas supply, storage, and transportation services, except for PGW's own on-system peak shaving facilities (i.e., its LNG capabilities).

[10] GFCP/VEPI Statement No. 1 at 9.

PGW's system is directly connected to the only two interstate natural gas pipelines that deliver natural gas to PGW's service territory through nine gate stations: TETCO and Transco Gas Pipeline ("Transco"). On each pipeline, PGW has an allocation of capacity for which it has contracted, and which is paid for by PGW's GCR customers. The gate stations are entry points where natural gas is regulated and depressurized before being pumped into the PGW's distribution system. These interstate pipelines transport gas subject to the jurisdiction of the Federal Energy Regulatory Commission ("FERC").

PGW has a maximum daily firm capacity of 134,822 Dth on the TETCO pipeline and a maximum daily capacity of 167,179 Dth on the Transco pipeline. That combined total of daily capacity of 302,001 Dth is less than PGW's Design Day requirement of 708,423 Dth, so PGW relies on off-site storage assets and stored LNG to meet its design day demands. This means that on the Company's design day, as well as *many days during the winter, PGW's firm demand is greater than PGW's existing firm capacity rights*. This requires PGW to rely on its off-system storage and LNG assets to meet the remaining demand. This is also why PGW always has the right to recall any capacity that it releases into the open market during the winter, as I will discuss later.

Q. PLEASE DESCRIBE THE DESIGN DAY DEMANDS ON PGW'S GAS DISTRIBUTION SYSTEM.

A. First, it is important to recognize that a natural gas distribution company's required capacity must be evaluated based on its supply requirements on a "design" basis. Accordingly, to properly evaluate its supply needs, PGW projects customer gas requirements for a Design (coldest) Hour, Design Day and Design Winter. These gas requirements form the basis for capacity commitments for pipeline supply, storage, and

transportation contracting. Under this model, PGW includes all firm sales and transportation load.

PGW's Design Day requirements are approximately 708,423 Dth. Approximately 40% of PGW's Design Day supplies comes from firm pipeline deliveries to the city gate stations. As mentioned previously, PGW supplies the remaining Design Day requirement by LNG) produced at its Richmond plant and upstream storage service along the interstate pipelines.

Q. DOES PGW HAVE "EXCESS CAPACITY"?

A. No. PGW has no excess capacity. GFCP/VEPI are the only party making this claim in order to obtain capacity rights for themselves so that they would not have to pay PGW – payments which help to reduce the gas rates of PGW's remaining firm customers. This is obviously a self-serving position. PGW needs to retain its capacity rights on TETCO in order to serve its customers during the coldest days.

2. MR. CRIST'S CALCULATION IS FLAWED

Q. HOW THEN DOES MR. CRIST MAKE THE ARGUMENT THAT THERE IS EXCESS CAPACITY?

A. Mr. Crist creates the false impression that there is excess capacity by under calculating the amount of capacity needed and the winter needs of our customers. There are several flaws in his approach.

First, Mr. Crist relied on information (Exhibit JC-5 which is PGW's response to OCA I-4) *from a Peak Day* analysis for 2024, *not a Design Day* analysis. As an LDC and supplier of last resort for "safe, adequate and continuous" service under all anticipated conditions, PGW prudently plans for the worst foreseeable conditions and uses the calculation of

Design Day usage for its planning.[11] PGW's Peak Day demand is 678,445 Dth, whereas the Design Day demand is 708,423 Dth. Therefore, his calculation understates the capacity needed by PGW's customers.

Secondly, Mr. Crist's analysis ignores the fact there is a whole other class of customers that use PGW's capacity rights. His analysis is based on the claim, again derived from Exhibit JC-5, that PGW needs only 119,282 Dth of its TETCO capacity (again, incorrectly using the Peak Day forecast).[12] Mr. Crist clearly neglected the other line item right below the "Texas Eastern" Line, labeled "Firm Transportation," which is transportation volumes supplied to PGW customers by gas suppliers participating in the Natural Gas Choice and Competition Act (the "Choice Act"), under which PGW releases some of its firm capacity rights to firm Choice suppliers participating in that program.[13] PGW releases this capacity split, to the best of PGW's ability, between Texas Eastern and Transco pipelines.

Therefore, PGW's capacity/supply on this Peak Day is actually as follows:

Capacity from TETCO for PGW Firm Load:	119,282
PGW TETCO Capacity Released to Suppliers	16,757
Total	136,039
PGW Capacity on TETCO	134,882
Shortfall	1157[14]

When the capacity released for the Choice Program is included, Mr. Crist's calculation of excess capacity disappears, and it is clear that PGW needs every therm of capacity for

[11] The Design Day anticipates a high degree day period of 24 hours equivalent to zero degrees Fahrenheit. Comparatively, Peak Day is based upon the coldest day in a normal degree day winter of three degrees Fahrenheit.

[12] GFCP/VEPI Statement No. 1 at 8–9, Exhibit JC-5.

[13] *See* 66 Pa. C.S. § 2204(d).

[14] PGW would make up this deficiency by more heavily drawing on TRANSCO capacity to serve supplier assigned capacity.

which it holds contracts even on its projected peak – not its higher design – day. Finally, Mr. Crist's calculation only looks at one day usage over an entire winter season. He neglects the overall cost and season long operational impact that reducing PGW's firm interstate pipeline rights would have on its LNG facilities and off-site storages, which would be forced to make up the difference.

Q. WHAT WOULD BE THE IMPACT ON PGW'S ABILITY TO MEET ITS CUSTOMERS PEAK DAY NEEDS WERE IT FORCED TO SELL 21,000 DTH/DAY CAPACITY TO GRAYS FERRY AND VICINITY?

A. Notably, Mr. Crist did not present data or analysis regarding customer demand. In fact, on many days during the winter, PGW does not have sufficient pipeline capacity to meet customer demand and has to use other assets, such as its contracted off-site storage rights and LNG assets, to do so. PGW has been able to avoid interrupting or curtailing GFCP/VEPI historically by using its other supply assets to meet customer demands throughout the system thereby husbanding its capacity to meet GFCP/VEPI requirements. If PGW permanently released Philadelphia Lateral capacity to GFCP/VEPI, such a release would likely threaten PGW's ability to meet the demands of its remaining customers, including essential needs customers.

As GFCP/VEPI and Mr. Crist are well aware, the permanent release of that capacity could result in system failures that would require PGW to curtail firm customer load (as well as interrupting all IT customers). My **Exhibit RER-1R** is a summary of a design day failure analysis.[15] If PGW were to permanently release 21,000 Dth/day, PGW's distribution system would experience failures in 11 of the 18 scenarios that were examined. During

[15] This document was also introduced into the record of the *GFCP/VEPI Complaint Proceeding* as part of my PGW St. No. 2SR as Exhibit RER-1SR. The study was ignored by Mr. Crist both there and here.

any one of these 11 failures, PGW would have to curtail firm customers. If the capacity was not released, then there would be zero failures.

PGW always strives to provide the best service to all of its customers, including firm, interruptible, choice, and non-choice customers. PGW does not desire to interrupt customers. While PGW has previously been forced to seriously consider interrupting service because of severe weather or operating conditions or both, so far it has managed to avoid having to do so. This occurred most recently when PGW issued an operational flow order in January 2018. PGW wishes to continue to provide uninterrupted service and avoid jeopardizing supply.

Q. MR. CRIST ALSO CLAIMS THAT PGW MUST HAVE EXCESS PIPELINE CAPACITY BECAUSE SENDOUT ON ITS MOST RECENT PEAK DAY WAS 81% OF IS FORECAST PEAK. IS HE CORRECT?

A. No, he is not. Mr. Crist does not appear to understand that PGW's capacity contracts supply only a portion of total send out on any peak day. PGW only has 302,001 of pipeline capacity, which even Mr. Crist admits is well below PGW's most recent observed peak day (550,000 Dth). Looking again at PGW's forecasted Peak Day analysis, it shows that PGW projected it would use some 302,001 of total pipeline capacity;[16] PGW's maximum contract quantity is 302,001. PGW needs every therm of pipeline capacity that it holds.

Q. WHAT WOULD BE THE RESULT, THEREFORE, IF PGW REDUCED ITS CONTRACT DEMAND ON TETCO'S PHILADELPHIA LATERAL BY 21,000 DTH/DAY AS GFCP/VEPI WITNESS CRIST SUGGESTS?

A. Mr. Crist's recommendations would seriously threaten PGW's ability to provide reliable service to its remaining Firm customers. Any unanticipated event on an extreme winter

[16] GFCP/VEPI Statement No. 1, Exhibit JC-5 (PGW Response to OCA-I-4): Pipeline Gas (278,576) plus WSS Storage (PGW must use pipeline capacity to deliver the storage to its gate stations), 28,619; minus Pipeline fuels (5,194) = 302,001.

day would mean that PGW would have to curtail firm residential and commercial customers.

D. THE VALUE TO CUSTOMERS OF PGW'S CAPACITY RELEASE FAR EXCEEDS WHAT WOULD BE RECEIVED UNDER GRAYS FERRY'S PROPOSAL

Q. IN YOUR DIRECT TESTIMONY, YOU DISCUSS PGW'S CAPACITY RELEASE PROGRAM. DO CAPACITY RELEASES MEAN THAT PGW HAS EXCESS CAPACITY ON TETCO AT THE PHILADELPHIA LATERAL?

A. No. PGW does not have capacity on TETCO's Philadelphia Lateral that is in excess of PGW's present or expected future needs for such capacity.

Mr. Crist's discussion gives the misleading impression that PGW always has "excess" capacity, since he fails to acknowledge that PGW only releases capacity when its analysis shows that, in the coming days or weeks, it is unlikely to require all of the available contracted for capacity to meet customer demand. Even then, PGW engages in capacity releases with the "right to recall" during the highest load times. The right to recall the capacity releases means that PGW has the sole right to recall any capacity it has released from the party to whom PGW released the capacity. Contrary to Mr. Crist's testimony, PGW's capacity releases do not show that PGW has excess capacity in the heating season. It shows that PGW tries to manage its assets to the best of its ability to lower the costs to its GCR customers.

Q. WHAT REVENUES HAS PGW HISTORICALLY RECIEVED FROM CAPACILITY RELEASE?

A. Typically, PGW will perform a capacity release with the right to recall during the winter season and generate more revenue than PGW pays for the capacity. Over the last two winter seasons, PGW received approximately between 200% and 350% of the cost of the

capacity. This allows PGW to help offset cost for GCR customers while ensuring their needs will be met during the highest of demand days.

Q. HOW DOES THIS FIGURE COMPARE TO THE REVENUES THAT MR. CRIST STATES PGW WOULD RECEIVE FROM A RELEASE TO GRAYS FERRY AND VICINITY?

A. One of the reasons that our system of capacity release is so beneficial is that, under FERC regulations for interstate capacity release, the maximum rate for release durations of less than one year is permitted to exceed the interstate pipeline's tariff rate. However, releases for a year or greater, as requested here by GFCP/VEPI here, is the lower interstate tariffed rate.[17] So, for example, this past winter, PGW released 18,708 per day on TETCO at a price of $3.25 per Dth, far in excess of the tariffed TECO rate. Therefore, PGW was able to generate approximately $9.2 million dollars in revenues for the benefit of its customers. If PGW were forced to accept GFCP/VEPI's offer of a long-term release at a rate equal to TETCO's tariff, the value of which Mr. Crist calculates to be approximately $6.1 million, *PGW's ratepayers would be losing well over $3 million annually*.[18]

It is worth emphasizing that the release of 18,708 is just for that winter season while Grays Ferry is requesting a full year release.

GFCP/VEPI's self-serving proposal, therefore, not only jeopardies all other customers' firm supplies, but is financially harmful to them and would force rate increases.

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[17] *See* 18 C.F.R. § 284.8(b)(2) ("The rate charged the replacement shipper for a release of capacity may not exceed the applicable maximum rate, except that no rate limitation applies to the release of capacity for a period of one year or less if the release is to take effect on or before one year from the date on which the pipeline is notified of the release. Payments or other consideration exchanged between the releasing and replacement shippers in a release to an asset manager as defined in paragraph (h)(3) of this section are not subject to the maximum rate.")

[18] Note that GFCP/VEPI are requesting the release of 21,000 Dth/day. The actual revenues of $9.2 million were for the release of 18,708 Dth. Were PGW to release the 21,000 Dth/day requested by GFCP/VEPI, which PGW cannot do without threatening reliability, the forgone revenues would be even greater.

Q. MR. CRIST ALSO DISCUSSES THE 25/75 SPLIT OF CAPACITY RELEASE REVENUES. IS HIS DESCRIPTION ACCURATE?

A. No. Mr. Crist seems to believe that all capacity release revenues are not fully restored to our customers, claiming that only 75% is credited to our customers.[19] This is also not true. As I explained in my direct testimony, the revenues are split 75/25%; with the 75% being credited to the GCR rates and the remaining 25% credited to base rates to offset other costs of PGW's operation. So, in fact, the PGW's customers see 100% revenues returned to them.

No portion of these proceeds is retained by the Company. PGW is not privately owned. Nor is PGW regulated on a cost-of-service basis. PGW has no shareholders and does not pay a dividend or a rate of return to its owners (instead it remits a statutorily fixed annual payment to the City of Philadelphia). Accordingly, 100% of the revenues from capacity releases, off-system sales, and Asset Management Agreements benefit ratepayers.

E. PGW CANNOT RELEASE CAPACITY UNDER THE TERMS SUGGESTED BY MR. CRIST

Q. CAN PGW DIRECTLY RELEASE CAPACITY TO GRAYS FERRY/VEPI?

A. No. Under FERC regulations for capacity release, capacity cannot be released directly, but rather is released back to TETCO and would then be auctioned off by TETCO.[20] GFCP/VEPI would have to bid on the capacity on this very constrained portion of TETCO's system and hope that they are awarded the contract. There are no assurances that GFCP/VEPI would have the winning bid and such bidding is not something

[19] GFCP/VEPI Statement No. 1 at 11.

[20] *See* 18 C.F.R. § 284.8(a); TETCO Gas Tariff, Part 6: General Terms and Conditions, Section 3.14 (Capacity Release). Note that this rule does not apply to "[a] release of capacity to a marketer participating in a state-regulated retail access program. . . ." 18 C.F.R. § 284.8(h)(1)(ii), (h)(4).

GFCP/VEPI has historically attempted to address their capacity shortfall. I have attached, as Exhibit RER-2R, GFCP/VEPI's response to PGW Interrogatory Set I No. 4, indicating that GFCP/VEPI has made no bids for capacity on TETCO over the last ten (10) years.

Q. CAN THE COMMISSION FORCE PGW TO SELL CAPACITY TO GFCP/VEPI?

A. I am not an attorney, but am advised by counsel that, while the Commission has many powers, they do not include the power to force a utility to sell assets, including its capacity rights.

IV. CONCLUSION

Q. BASED ON THE ABOVE, WHAT IS YOUR RECOMMENDATION?

A. The Commission should reject the transparent, self-serving attempt by GFCP/VEPI to solve their twenty-five-year-old capacity shortfall by threatening other customers' service reliability and raising their rates for the sole purpose of permitting a private entity to realize lower gas rates and allow it to continue to reap profits from selling wholesale electricity, among other things. This commandeering of capacity is not permitted under the FERC's capacity release rules and, I am advised by counsel, is not within this Commission's authority.

Nor is there any need to do so. The current system of ARS has worked well and satisfied GFCP/VEPI service needs for that twenty-five-year period and will continue, in some form, whether under PGW's current tariffs or by special rate, as determined by the Commission in the Complaint Proceeding.

Q. DOES THAT COMPLETE YOUR REBUTTAL TESTIMONY?

A. Yes. I reserve the right to offer further responsive testimony. Thank you.

PGW EXHIBIT RER-1

Summary of Failure Study

As part of PGW's Design Day study, PGW has developed and uses a model that takes in the needs of all PGW's firm customers at a given temperature. PGW will run the model with several different scenarios during winter conditions to help determine if PGW's distribution system can handle the gas load if such conditions were to occur.

Model Overview

The model is built with the following criteria: a failure occurs when a distribution system pipe goes over its MOAP (Maximum Operation Allowable Pressure), if the required inlet pressure for a gate station is higher than the contract required pressure, or if the flow of the gas is higher than the station can handle. A failure of any scenario would mean that PGW would be required to curtail **Firm** customers on its system to maintain pressures on the system. This would mean residents, hospitals, schools, and business would be impacted on their ability to use natural gas. The actual length and extent of curtailment would be dependent on the scenario.

For the failure scenarios, PGW uses all current pipeline rights, for its gate stations both on TETCO and Transco. The pipelines provide PGW with a minimum guaranteed pressure of 100 psi, so this is a cap for the model. If a gate station requires an inlet pressure higher than 100 psi, the scenario will be considered an instant failure. Each station also has operational limits on how much gas can flow through the station. If the model requires a flow greater than the station can handle it is also considered a failure. The model considers PGW's LNG capabilities as well. For the model, the Passyunk LNG Facility is capped at 45,000 Mcf per day/ 1,880 Mcf per hr and the Richmond LNG Facility is capped at 500,000 Mcf per day/ 22,170 Mcf per hr.

For PGW's design day failure scenarios, each of the scenarios consists of a design hour (which is an average temperature of -5 deg F), as well as consideration of different critical pieces of distribution infrastructure failing when a certain temperature is experienced in the City; these facilities include individual gate stations, individual distribution mains, or the individual LNG facilities.

Scenarios With Present Resources

Assuming PGW's current operations and pipeline capacity rights, PGW passes all the failure scenarios.

Model Changes to Test Capacity Release to Vicinity

To test whether PGW could permanently release Philadelphia Lateral capacity in order to accommodate Vicinity's need for capacity that is now met by Alternative Receipt Service, PGW reran all its failure scenarios removing 20,000 Mcf per day of rights from O-30 gate station to mimic the loss of capacity rights on the Philadelphia Lateral that Vicinity would need for the release. Typically, during the winter season, Vicinity requests 21,000 Dth per day of ARS so PGW assumed Vicinity would require the same amount of release.

Specific Scenarios Assuming Capacity Release to Vicinity

When all 18 scenarios were run, 11 of the scenarios failed; all scenarios would have passed absent the capacity removal.[1]

Set forth on Attachment A is a description of the scenarios that PGW studied and the results. The analyses were run with only one change to the model, the reduced allowable volume from O-30 to reflect PGW permanently releasing the capacity on the Philadelphia Lateral. The result in all cases was curtailment of firm load. PGW could, in some cases, mitigate the degree of failure by upgrading the capacity of various gate stations, distribution mains or LNG vaporization facilities, but time did not permit a detailed analysis of feasibility or cost of those alternatives. It is reasonable to conclude, however, that any such effort would require multiple infrastructure upgrade projects likely costing tens of millions of dollars.

Notice

PGW reiterates that the actual data on which this summary is based is highly confidential and Confidential Security Information because the analyses would identify system infrastructure the failure of which would cause major system failures and the disruption of gas service to all or a large portion of PGW's customers. Accordingly, it may only be reviewed at PGW headquarters by individuals qualified to review highly confidential materials under PGW's supervision.

[1] Note that PGW's design day analysis is conducted assuming that IT load is not occurring and thus effectively interrupted.

Attachment A

Scenario	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
Temp	-5° F Hour	3° F Hour	3° F Hour	3° F Hour	3° F Hour	3° F Hour	3° F Hour	3° F Hour	3° F Hour	3° F Hour	3° F Hour
System Modification	None	One Specific Gate Station Unavailable	One Specific Gate Station Unavailable	One Specific Gate Station Unavailable	One Specific Gate Station Unavailable	One Specific Gate Station Unavailable	Distribution Main Failure	Distribution Main Not Available	Distribution Main Not Available	Distribution Main Not Available	LNG Facility Not Available to Vaporize
Result	Gate Station at higher than contracted	Unable to maintain pressure on portion of 150 lb distribution line	Run Gate Station at higher than allowed pressure; Required flow rate is higher than Station is designed for	Run Gate Station at higher than allowed pressure; Required flow rate is higher than Station is designed for	Run Gate Station at higher than allowed pressure; Required flow rate is higher than Station is designed for	Run Gate Station at higher than allowed pressure	Gate Station at higher than allowed flow pressure; Required flow rate is higher than Station is designed for	Required flow Rate is higher than Station is designed for	Gate Station at higher than allowed pressure & Required flow rate is higher than Station is designed for	Gate Station at higher than allowed pressure & Required flow rate is higher than Station is designed for	Gate Station at higher than allowed pressure & Required flow rate is higher than Station is designed for
Effect on Customer's System	Curtailment of Firm Customers	Curtail some of the Firm Customers served off 150 lb distribution line	Curtailment of Firm Customers	Curtailment of Firm Customers	Curtailment of Firm Customers	Curtailment Firm Customers	Curtailment of Firm Customers	Curtailment of Firm Customers	Curtailment of Firm Customers	Curtailment of Firm Customers	Curtailment of Firm Customers

PGW EXHIBIT RER-2

RESPONSES OF
GRAYS FERRY COGENERATION PARTNERSHIP
AND VICINITY ENERGY PHILADELPHIA, INC.
TO INTERROGATORIES AND REQUESTS FOR PRODUCTION OF DOCUMENTS
TO PHILADELPHIA GAS WORKS, SET I

Docket Nos. R-2023-3037933 and C-2023-3038727

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4. Identify and provide complete copies of any and all bids that GFCP/VEPI has made for capacity on TETCO over the last ten (10) years. State whether such bids were successful and, if so, produce the documents related thereto.

RESPONSE:

Other than the purchase under the 25-year contract as referenced in Set IV-2, GFCP/VEPI has not purchased excess capacity release.

Provided By: James L. Crist

VERIFICATION

I, Ryan E. Reeves, hereby state that: (1) I am the Director of Gas Supply, Transportation, and Control for Philadelphia Gas Works ("PGW"); (2) the facts set forth in my testimony are true and correct (or are true and correct to the best of my knowledge, information and belief); and, (3) I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: 4/13/2023

Ryan E. Reeves
Director of Gas Supply, Transportation, and Control
Philadelphia Gas Works

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Grays Ferry Cogeneration Partnership and Vicinity Energy Philadelphia, Inc.	:	
Complainants,	:	
	:	Docket No. R-2023-3038069 and
v.	:	C-2023-3038722
	:	
Philadelphia Gas Works,	:	
Respondent.	:	

DIRECT TESTIMONY OF JAMES L. CRIST, P.E. ON BEHALF OF GRAYS FERRY COGENERATION PARTNERSHIP AND VICINITY ENERGY PHILADELPHIA, INC.

Vicinity Statement No. 1
April 3, 2023

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS, AND ON WHOSE BEHALF YOU ARE TESTIFYING.

A. I am James L. Crist, President of Lumen Group, Inc. a consulting firm focused on regulatory and market issues. My business address is 4226 Yarmouth Drive, Suite 101, Allison Park, Pennsylvania 15101. I am presenting testimony on behalf of Grays Ferry Cogeneration Partnership ("Grays Ferry") and Vicinity Energy Philadelphia, Inc. ("VEPI") (collectively "Vicinity").

Q. DO YOU HAVE ANY QUALIFICATIONS OR OTHER SPECIALIZED KNOWLEDGE THAT WOULD ASSIST THE PENNSYLVANIA PUBLIC UTILITY COMMISSION ("COMMISSION") IN ITS DELIBERATIONS IN THIS CASE?

A. Yes. I have a B.S. in Chemical Engineering from Carnegie Mellon University and an M.B.A. from the University of Pittsburgh. Additionally, I am a Registered Professional Engineer in the Commonwealth of Pennsylvania. I have attached a copy of my CV and Regulatory Experience as **Appendix A and Appendix B**, respectively.

Q. BRIEFLY DESCRIBE YOUR RELEVANT BUSINESS QUALIFICATIONS.

A. I have run a consulting practice for the past 25 years focused on regulated and deregulated energy company strategy, market strategy, and regulatory issues. During 2004 and 2005, I undertook a consulting assignment as the Vice President of Consumer Markets for ACN Energy. ACN is a gas and electric marketer that is active in eight states. Prior to my consulting practice, I worked at three major energy companies for a total of 19 years. Most

recently I was Vice President of Marketing for Equitable Resources. In that function, I was responsible for the development of the company's deregulated business strategy.

Prior to that I was Vice President of Marketing for Citizens Utilities, responsible for gas, electric, water and wastewater marketing activities in several service territories within the United States. The gas and electric utility operations were in Vermont, Louisiana, Arizona, Colorado, and Hawaii. Under my direction, Citizens initiated commercial and industrial transportation and supply services at its gas operation in Arizona. I also directed significant gas supply contracting activities with large industrial and commercial customers in Citizens' gas operation in Louisiana.

Before that, during 1988 through 1994, I was the Marketing Director at the Peoples Natural Gas Company where I was actively involved in many gas transportation programs as the company relaxed transportation requirements so that customers would have supply choices.

In summary, I have considerable experience in several states involving residential, commercial, and industrial customer energy procurement, regulatory issues and industry restructuring programs.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION?

A. Yes, I have appeared before the Commission in numerous gas and electric regulatory proceedings. Additionally, I provided testimony on a variety of issues relating to energy procurement, industry restructuring, and demand response before regulatory Commissions in Arizona, Maryland, New Mexico, Illinois, Ohio, Wyoming and the U.S. Virgin Islands.

I. ISSUES

Q. WHAT ARE THE ISSUES YOU WILL DISCUSS IN THIS TESTIMONY?

A. Specifically, in my Direct Testimony I will:

1. Review the history of the Grays Ferry Cogeneration facility going back twenty-five years and the agreements with Philadelphia Gas Works ("PGW") that facilitate the transportation of the majority of gas used by Grays Ferry.
2. Review the capacity held by PGW to provide service to its sales and transportation customers, including Grays Ferry. Then I will review the capacity used by PGW to meet its peak day needs, identify excess capacity held by PGW, and discuss the cost of such excess capacity.
3. Propose a mechanism for PGW to sell a portion of its excess capacity to Grays Ferry on an ongoing basis. This will provide benefits to PGWs end-user customers and reduce their costs of purchased gas.

II. GRAYS FERRY COGENERATION PLANT

Q. WOULD YOU DESCRIBE THE HISTORY OF THE DEVELOPMENT OF GRAYS FERRY?

A. The Grays Ferry cogeneration plant was constructed in 1997 to produce 1) electricity which is sold to the PJM Grid and 2) steam which is sold to its affiliated steam system. The cogeneration plant consists of a combined cycle plant with a gas combustion turbine-generator ("CT") and a waste heat recovery boiler or heat recovery steam generator ("HRSG"), a 700klb/hr. auxiliary boiler and an extraction steam turbine ("ST"). The outputs of the ST and CT are 58 MW and 135 MW respectively. The CT and HRSG burn

only natural gas. The auxiliary boiler burns either natural gas or low sulfur distillate oil ("LSDO"), and the ST can be fed with steam from the HRSG and/or the auxiliary boiler. Initially developed as a partnership of Trigen, Philadelphia Electric ("PECO") and O'Brien Energy, the facility is currently owned by Grays Ferry Cogeneration Partnership, which is in turn owned by Vicinity Energy, Inc. ("Vicinity"), parent company of the downtown district energy system owned and operated by Vicinity Energy Philadelphia Inc. ("VEPI"). The entirety of the net electrical power output of the plant is sold into the wholesale market through the PJM Interconnect LLC ("PJM") the regional transmission organization ("RTO") responsible for, among other areas, the Philadelphia market.

Q. WHAT IS THE NATURE OF THE CONTRACT BETWEEN GRAYS FERRY AND PGW?

A. In January 1996, Grays Ferry signed a Service Contract with the Philadelphia Authority for Industrial Development ("PAID") – a City of Philadelphia entity capable of signing this long-term contract on behalf of Philadelphia Gas Works ("PGW"), the City's municipally owned gas utility. The contract is an integral part of Grays Ferry's natural gas transportation assets. The contract expired on 12/31/2022, but service from PGW is currently extended under the original contract terms pending a final order by the Commission in the complaint proceeding at Docket No. C-2021-3029259.

Q. WHAT WAS THE ORIGINAL PLAN TO OBTAIN GAS SUPPLY FOR GRAYS FERRY?

A, Recognizing the need for a firm, secure supply of natural gas, in 1996 during the construction phase of the plant, Grays Ferry had a high-pressure natural gas pipeline designed and permitted that would connect its plant directly to the Philadelphia Lateral of Texas Eastern Transmission ("TETCO"). The Philadelphia Lateral is a segment of interstate pipeline owned and operated by TETCO that branches off of TETCO's main line near Eagle, Pennsylvania and allows TETCO to deliver natural gas to the southern part of Philadelphia.

Q. WHY DID GRAYS FERRY ELECT TO OBTAIN GAS SERVICE THROUGH PGW INSTEAD OF CONSTRUCTING ITS OWN DEDICATED LINE?

A. Philadelphia Gas Works and Grays Ferry negotiated a contract that, in lieu of Grays Ferry constructing its own high pressure pipeline, required PGW to construct the dedicated natural gas pipeline connecting Grays Ferry to TETCO's Philadelphia Lateral. PGW used (1) an abandoned liquids pipeline located near the Philadelphia Lateral, that it converted to natural gas service, in combination with (2) construction of a 16" high pressure steel pipe to extend the abandoned pipe and connect directly to the Grays Ferry facility. PGW's TETCO/Grays Ferry connection allowed PGW to remain at least a passive participant in the transportation of gas to a major Philadelphia business (in this case, Grays Ferry).

Q. WHAT IS THE DIFFERENCE BETWEEN A PIPELINE CONNECTION AND CAPACITY?

A. A pipeline connection of a distribution pipe, in this case the dedicated high pressure four-mile line from the Philadelphia Lateral to Grays Ferry, allows an amount of gas to flow from TETCO to Grays Ferry. The maximum amount of gas a pipeline can transport depends primarily on its diameter, and operating pressure. TETCO allocates that maximum capacity (in Dth/day) among the customers that hold the capacity rights. The Philadelphia Lateral is fully subscribed, meaning that all of its capacity is allocated to customers. PGW holds 134,800 Dth/day and Grays Ferry holds 35,000 Dth/day. In the winter Grays Ferry has peak needs of 56,000 Dth, which is why it relies on the PGW Alternate Receipt Service for 21,000 Dth/day. Grays Ferry deliver 21,000 Dth/day at the PGW alternate receipt point and Grays Ferrys gas is transported down the Philadelphia Lateral using 21,000 Dth/day of PGW's own capacity. To summarize, in the summer all of Grays Ferry's high pressure gas supply flows down the Philadelphia Lateral using Grays Ferry's TETCO capacity. In the winter, deliveries require Grays Ferry's capacity and PGW's capacity on TETCO[1]. The difference is that in the winter PGW does not release the capacity to Grays Ferry but instead provides the gas under a swap mechanism called Alternative Receipt Service.

Q. WHAT IS RELEASE CAPACITY?

A. Capacity is the right to transport a specific amount of gas on a particular interstate pipeline and is typically measured in dekatherms per day ("Dth/day"). PGW holds excess capacity, or more capacity than it can reasonably expect to need. It sells the excess capacity to other

[1] Winter transportation on the Philadelphia Lateral is provided through the ARS arrangement.

parties that could use the capacity and charges for those parties to use the capacity – otherwise known as release capacity. Twenty five percent of those release capacity revenues are retained by PGW, even though PGW's customers pay 100% of the cost of that capacity.

Q. HOW DOES PGW MEET ITS PEAK NEEDS?

A. PGW has a maximum daily firm capacity of 134,822 Dth on the TETCO pipeline and a maximum daily capacity of 167,179 Dth on the Transco pipeline. This means that every day, unless it releases it through release capacity, PGW has the ability to move 302,001 Dth onto its system. PGW supplements its firm pipeline capacity with its off-site storage assets and stored Liquified Natural Gas ("LNG") on system to meet its design day demands.

Q. WHAT CAPACITY ASSETS DOES PGW HOLD ON THE PHILADELPHIA LATERAL?

A. As conveyed in its response to Vicinity's Set I-1 (**Exhibit JC-1**), PGW holds four capacity contracts on the Philadelphia Lateral. These four capacity contracts are for 75,000 Dth/d, 23,822 Dth/d, 18,000 Dth/d, and 18,000 Dth/d, totaling 134,822 Dth/d. This is more than enough capacity required by PGW to satisfy its customers' peak needs. We know this because there has never been an instance in the past 10 years when PGW had to interrupt deliveries to Grays Ferry or any other customers due to lack of capacity on the Philadelphia Lateral. In the response to Vicinity's data request Set II-1 (**Exhibit JC-2**) Mr. Florian Teme

stated, "PGW has had no general curtailments or otherwise had gas delivery interruptions over the past 10 years."

Q. DOES PGW HOLD EXCESS CAPACITY ON THE PHILADELPHIA LATERAL?

A. Yes. In its reply to Vicinity's Set II-9 (**Exhibit JC-3**), PGW witness Mr. Reeves provided data for the most recent five winter periods that showed the daily volumes of gas flowing through the Philadelphia Lateral and delivered to PGWs low pressure distribution system and to the high-pressure four-mile line that serves Grays Ferry. Even with the Gray Ferry deliveries, PGW still had more capacity available on the Philadelphia Lateral than it needs.

Q. WHAT IS THE STORAGE CAPACITY AND WITHDRAWAL CAPACITY OF PGW'S LNG FACILITIES?

A. PGW operates two LNG facilities. The storage capacity of those facilities is approximately 3,900,000 Mcf, and the daily withdrawal capability is 545,000 Mcf as noted in PGW's response to OCA Set I, No. 31 (**Exhibit JC-4**).

Q. HOW DOES PGW PLAN TO MEET ITS SUPPLY REQUIREMENTS ON ITS FORECASTED PEAK DAY?

A. In response to OCA Set I-4 (**Exhibit JC-5**) PGW lists its supply plan for the forecast peak day and shows how PGWs pipeline, storage and LNG assets would meet the forecasted requirement of 678,445 Dth. It shows that on the peak day 119,298 Dth of supply would need to flow through TETCO. As stated earlier, PGW holds 134,882 Dth/day of firm

capacity which reflects an excess of 15,540 Dth/day of capacity on TETCO. It is capacity on the TETCO Philadelphia Lateral that is needed to provide gas to Grays Ferry.

Q. DOES PGW HAVE EXCESS OVERALL CAPACITY?

A. Yes. PGW holds a combined total of 302,001 Dth/day of firm capacity on the Transco and TETCO pipelines and has storage and on-system LNG. (Response to Vicinity Set II-2, **Exhibit JC-6**). PGW presented its 3-day peak analysis in response to I&E Set I-25 (**Exhibit JC-7**) that stated on January 29, 2022, the peak day in the recent heating season, the sendout was 531,582 Mcf (about 550,000 Dth), only 81% of its forecast peak.

Q. WHAT DOES PGW DO WITH THIS EXCESS CAPACITY?

A. Because PGW's capacity assets exceed its needs it engages in the practice of off-system sales and capacity release. Off-system sales involve the sale of gas or capacity to entities outside the PGW service territory; PGW engages in off-system sales perennially and allows PGW to earn extra revenue from the assets that otherwise might not be used. Of the revenues it obtains from off-system sales 75% are credited to the Gas Cost Rate ("GCR") which benefits firm sales service customers, and 25% are retained by PGW. Providing the capacity that Grays Ferry needs to operate should take precedence over capacity release off the PGW system. As a Philadelphia-based business Grays Ferry employs 81 people and its regulated steam utility VEPI distributes steam to over 250 commercial and residential buildings (approximately 90 million square feet of building space), primarily in center city. Releasing the capacity to Grays Ferry will produce superior financial benefits to PGW customers than PGWs current actions of off-system release.

Q. WHAT AMOUNT HAS PGW FORECAST FOR OFF SYSTEM SALES, CAPACITY RELEASE CREDITS, AND ASSET MANAGEMENT CREDITS?

A. PGW's witness, Mr. Florian Teme, stated in his direct testimony, "PGW has projected the amount of off system sales, capacity release credits, and asset management credits within the GCR period of 2023-2024. This amount is based on a 3-year average. Of that amount, $16,909,282 was credited to the GCR." (Source: PGW St. 1 12:5-7). PGW controls substantial assets that exceed its needs.

Q. WHAT PORTION OF THE NET MARGINS FROM OFF SYSTEM SALES ARE CREDITED TO GCR CUSTOMERS?

A. Consistent with its tariff, PGW credits 75% of its historic review period off-system sales net margins, capacity release credits, and storage asset management fees to GCR customers and retains the remaining 25% pursuant to the sharing provisions of its tariff (Ninety Third Revised Page No. 67). Similar sharing provisions are currently in place for all other natural gas distribution companies ("NGDCs") in Pennsylvania that are subject to Section 1307(f) gas cost recovery. PGW forecasts $16.9 million, which is 75% of the total amount of off-system sales, capacity release, and asset management credits within 2023-2024 period, is to be credited to the GCR. This means the remaining 25% or $5.6 million is retained by PGW.

Q. HOW DOES PGW BENEFIT FINANCIALLY BY NOT RELEASING EXCESS CAPACITY ANNUALLY?

A. While it might seem attractive to GCR customers that PGW credits 75% of off system sales and capacity release revenues and storage asset management fees to the GCR, it must be noted that PGW retains 25% of those revenues. If PGW were not overcapacity, for example if it reduced the amount of capacity it holds by permanently releasing capacity, those capacity costs (e.g., the maximum tariff rate charged by TETCO for capacity) would be paid in full by the receiving party. This would reduce the cost to GCR customers by 100% of the capacity costs, not just give them 75% of the revenues received when and if that capacity is released.

Additionally, PGW benefits financially by selling LNG off system, because it retains 100% of those revenues even though the capacity that is used to flow the LNG is system capacity paid for by GCR customers, and the LNG facilities are PGW facilities that are owned and operated for benefit of its customers. PGW has an incentive to underutilize LNG for system use, i.e., to supply customers on its system, so that it can sell more gas to off system parties. PGW has the capability of such actions because it holds excess pipeline capacity.

Q. UNDER WHAT ARRANGEMENT DOES GRAYS FERRY OBTAIN THE CAPACITY IT NEEDS?

A. Because Grays Ferry was unable to obtain all of the necessary capacity it needed in 1996, the original contract with PGW provided for PGW to release capacity to Grays Ferry in the summer, from May through September. In exchange, Grays Ferry pays PGW the market

rate[2] for the capacity, and last year that amount was $1.4 million. In 2012 Grays Ferry was able to obtain additional capacity on its own behalf, and therefore no longer is dependent on PGW's release capacity in the summer, however it does need the capacity in the winter months. A 12-month capacity release of the very same assets PGW uses now to serve Grays Ferry would provide financial benefits to PGW. Absent such a year-round release, Grays Ferry would intend to discontinue acceptance of the summer capacity, which would reduce the subsidy Grays Ferry provides to PGW gas costs by $1.4 million.

Q. ARE YOU ABLE TO CALCULATE THE SAVINGS THAT PGW CUSTOMERS WOULD REALIZE IF PGW WERE TO RELEASE THE CAPACITY TO VICINITY?

A. I calculate the value of that 21,000 Dth/day capacity to be over approximately $6 million, which would result in an approximate benefit to the GCR customers of $5 million. If PGW were to release the 21,000 Dth/day, the purchaser of that capacity (presumably Grays Ferry) would pay TETCO the full tariff cost of that capacity of $0.80/Dth which would be $6.132 million annually, and that will eliminate that cost from the GCR because the purchaser of that capacity, and not PGW would be paying TETCO. Currently, Grays Ferry pays PGW for 36,000 Dth/day release capacity in the five summer months and pays the market rate which was $0.23/Dth during the six-year period of 2017 through 2022, or $1.27 million annually, and Grays Ferry pays $54,000 for ARS. The PGW GCR customers would benefit by approximately $5 million per year.

[2] Contractually Grays Ferry's rate is capped at 65% of the full tariff rate, however it is rare that the market rate exceeds the cap.

III. SUMMARY

Q. WHAT ARE YOUR RECOMMENDATIONS?

A. PGW should be directed to release 21,000 Dth/day TETCO capacity. The payment for the capacity will benefit the residential and commercial GCR customers of PGW.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

APPENDIX A

JAMES L. CRIST

PRESIDENT, LUMEN GROUP, INC.

Suite 101, 4226 Yarmouth Drive ● Allison Park, PA 15101

Phone: 412.487.9708 ● Cell: 412.613.8886 ● E-mail: JLCrist@aol.com

DEMONSTRATED AREAS OF EXPERTISE

- **GENERAL MANAGEMENT** — Proven executive-level management expertise with excellent capabilities in developing, implementing, and supervising corporate-wide policies and procedures in areas including sales, marketing, customer service, public relations, rates, regulatory affairs, and administration. Possess a unique combination of abilities to set goals, develop winning business strategies, organize structures and work methods, and train the right people for the right positions to make it all work. Skilled in strategic short and long-term planning and budgeting with effective abilities in reducing the "fat" and increasing organizational efficiency. A creative, decisive leader who can successfully meet challenges and overcome obstacles to achieve profit objectives.

- **REGULATORY STRATEGY** — A thorough strategist with an extensive background in utility business unit operation (electric, natural gas, water/wastewater) the full range of rate and regulatory functions, from tariff development and special contract negotiation. Proven personal testifying skills with an outstanding record of developing and presenting successful written and oral testimony, along with settlement negotiations.

- **PERSONNEL MANAGEMENT** — Effective interpersonal communications skills support outstanding capabilities in recruiting, training, motivating, and directing staff at all levels. Proven ability to build productive, highly motivated teams of sales/marketing, operations, technical, and customer service personnel who contribute to top organizational performance.

- **PERSONAL ATTRIBUTES** — A determined, hardworking, challenge-driven executive with the skills and experience to bring excellence to any business organization. A high-energy mover and shaper ... experienced in successful start-ups and turn-arounds. An excellent communicator - written and verbal. A frequent speaker at professional symposiums, able to interpret and communicate complex concepts for diverse audiences. An engineering/technical specialist and a management generalist. Active in civic and community affairs.

EMPLOYMENT HISTORY

LUMEN GROUP, INC., Pittsburgh, PA — 1996 - Present

President - A consulting practice specializing in strategic planning, business planning, regulatory strategy, marketing and venture development in the electric, natural gas and energy services industries. Please see Addendum for amplification of consulting assignments.

ACN ENERGY, Farmington Hills, MI — 2004-2005

Vice President, Consumer Markets

OPTIRON, Pittsburgh, PA — 2003-2004

Vice President, Marketing

E R I SERVICES, Pittsburgh, PA — 1996

Vice President, Marketing & Product Development

CITIZENS UTILITIES, Harvey, LA & Stamford, CT — 1994 - 1995

Vice President, Marketing

CONSOLIDATED NATURAL GAS, Pittsburgh, PA — 1977 - 1994

Director, Residential & Commercial Marketing (1988 - 1994)
Manager, Technical Sales/Market Development (1985 - 1988)
Market Development Specialist (1982 - 1985)
Project Engineer (1979 - 1982) ... promoted from ... **Process Engineer** (1977 - 1979)

OCCIDENTIAL CHEMICAL CORP., Niagara Falls, NY — 1975 - 1977

Research Engineer

PENNSYLVANIA STATE UNIVERSITY, State College, PA — 1988

CLEVELAND STATE UNIVERSITY, Cleveland, OH — 1984

Instructor (Evening Division) - Economics, Engineering Economics

SELECTED ACCOMPLISHMENTS

VICE PRESIDENT, CONSUMER MARKETS - ACN ENERGY

Retained for a turnaround assignment with an independent energy marketing company. Participated on the executive management team and directed a decentralized 3-person market management staff responsible for sales to 85,000 customers. Worked directly with the parent company executives and business unit management to create market-driven strategies for the corporation. Sharpened marketing and sales efforts of an energy marketing company operating in seven states and packaged company for eventual sale to Commerce Energy.

- Primary executive responsible for sales. Directed a team of market managers that was responsible for all aspects of 11 different markets (electric and natural gas) around the country. Provided direction and support to sales channel organization of commissioned representatives. Turned around five-year annual loss to significant gain in 2004. Tightened focus on market decisions.
- Directed regulatory involvement to insure compliance with market rules. Focused on maintaining positive relationships with state utility regulators to avoid penalties.
- Led weekly operations meetings during absence of COO. This involved direction of call center, provisioning, billing, credit & collection, and marketing.
- Worked in a team setting with other executives (VP Finance, VP Supply, COO) to provide consistent, professional focus to workforce experiencing changing environment.
- Directed development of annual business plan and budget with targets resulting in both goal achievements and income improvements.
- During transition period working with merger partner Commerce Energy's executive team to train and advise incoming executives.
- Directed customer service improvements in the customer acquisition process which resulting in replacing outdated paper/fax process with phone order process.
- Organized and directed trade show presence at national sales convention for alliance sales channel to create awareness of new product and market focus.

VICE PRESIDENT, MARKETING - OPTIRON

Retained as part of executive team in venture capital startup company developing new CIS/CRM software for the energy industry. Worked closely with CEO, COO, and Director of Sales to determine business strategy and develop marketing strategy to create market awareness and brand attributes in medium and small energy companies.

- Added in-house marketing communications function and personnel and revamped all marketing materials.
- Added new website functionality and content.
- Implemented first print advertising campaign in industry publications.
- Using industry contacts, positioned Option as expert presenter at several conferences and trade shows.
- Developed business plan to identify sales prospects and created competitive database of CIS/CRM vendors.
- Participated in development of exit strategy plan resulting in the successful sale to large software company.

VICE PRESIDENT, MARKETING & PRODUCT DEVELOPMENT - ERI Services

Assumed responsibility for creating a new corporate marketing vision and strategy to facilitate entry into new deregulated energy markets nationally.

- Recruited and selected an exceptional management team and integrated marketing and sales activities into one functional operating unit.
- Established the product innovation process to identify and create new and profitable market-driven service offerings.
- Directed strategic branding to launch the new corporate identity; managed a $2 million national advertising campaign; and developed over $1 million of new sales/marketing collateral materials.
- Instituted financial controls that reduced costs 60% in the Iowa market rollout while maintaining 80% market share and high customer satisfaction.

VICE PRESIDENT, MARKETING - Citizens Utilities

Directed a decentralized 20-person sales staff and a five person marketing staff. Worked directly with the Board of Directors, Corporate President, and Sector Vice President to create market-driven sales strategies for the corporation. Revamped and redirected sales efforts of a five-state energy utility with 440,000 customers.

- Increased industrial sales revenues by reorganizing unregulated gas marketing effort.
- Revamped merchandising utilizing inbound telemarketing in Louisiana Gas.
- Revised training programs for entire sales force, identifying and correcting missing technical and equipment training, adding a greater competency in the commercial and industrial sectors.
- Developed first business plan in sales and marketing organization with monthly budget monitoring and

targets resulting in both goal achievements and cost improvements.
- ¨ Launched an aggressive direct marketing program that increased sales 500% over previous year.
- ¨ Increased share of gas transportation business in Arizona by 15% in first year of operation through marketing efforts.
- ¨ Created a telephone long distance business in Louisiana that captured a 20% share (2nd to AT & T).

DIRECTOR, RESIDENTIAL & COMMERCIAL MARKETING - Consolidated Natural Gas

Managed a marketing staff of 12 and a "dotted-line" 24-person field sales force. Directed marketing and sales efforts in consumer, business, and manufacturing markets with $154 million revenue.

- ¨ Added $6 million in revenue by developing new products in gas transportation, supply, and agency.
- \- Directed sales activities in residential, commercial, institutional and governmental accounts for both product sales and technology sales.
- ¨ Produced $600,000 annual revenue and doubled competitive project wins by revamping market approaches to residential and commercial new construction.
- ¨ Secured 50% increase in customer decisions over 5 gas companies and 4 electric companies.
- ¨ Experienced in PUC and Legislature lobbying. Increased revenues $2.3 million through regulatory strategy/testifying and received major competitive program approval.

MANAGER, TECHNICAL SALES / MARKET DEVELOPMENT - Consolidated Natural Gas

Directed new market development and competitive market support.

- ¨ Focused on commercial and industrial accounts and increased the depth of relationship beyond the typical utility provider of service to a rich full service information provider and business partner.
- \- Captured $150,000 in new business annually by competitive pricing analysis, sales tool development, and market approach.
- ¨ Developed total advertising and promotional plan launching new market programs.
- ¨ Compiled extensive technical database and developed economic model for project analysis, eliminating a $100,000 operating budget expense.
- ¨ Led statewide coalition with customers and government agencies for fair treatment of new technology.

EDUCATION - PROFESSIONAL

UNIVERSITY OF PITTSBURGH, Pittsburgh, PA 1982
M.B.A. Degree

CARNEGIE - MELLON UNIVERSITY, Pittsburgh, PA 1975
B.S. Degree in Chemical Engineering

Registered Professional Engineer AGA Hall of Fame, 4/1991

APPENDIX B

JAMES L. CRIST

Lumen Group, Inc.
Suite 101, 4226 Yarmouth Drive ● Allison Park, PA 15101
Phone: 412.487.9708 ●Cell: 412.613.8886 ●E-mail: JLCrist@AOL.com

AMPLIFICATION OF LUMEN GROUP CONSULTING ASSIGNMENTS

A consulting practice specializing in strategic planning, business planning, marketing and venture development in the telecommunications, energy, and services industries.

REGULATORY

Represented the National Energy Marketers Association and their members in Equitable-Dominion Peoples merger case. Developed strategy, presented written and oral testimony and negotiated on behalf of clients. Worked with other interveners and FTC on anti-competitive issues.

UTILITY RATE NEGOTIATION

Represented large client group seeking to obtain rate reduction from electric utility. Prepared strategy, wrote testimony, and exceeded expectations by achieving a 40% reduction in charges, producing a $2 million annual reduction.

STRATEGIC PLANNING FOR ON-SITE POWER GENERATION

Participated in proposal development for a 27-MW power plant on Kauai. Handled critical customer needs assessment in rapid turnaround fashion to meet proposal deadline. Maintained relationships with clients, vendors and proposal partners. Our proposal was selected as the preferred bidder out of five strong competitors.

NEW BUSINESS START-UP / TARIFF NEGOTIATIONS

Participated in the development of a new gas distribution utility in New York. Handled tariff development, pricing structure, transportation contracting, and operations, maintenance, and emergency manual preparation.

SALES STRATEGY/BUSINESS DEVELOPMENT

Developed sales strategy to focus on profitable accounts and markets. Developed sales training and account management plans and provided consulting to energy marketing organizations to improve overall sales.

BUSINESS STRATEGY/BUSINESS DEVELOPMENT

Developed business strategy to verticalize eCommerce/Customer Relationship Management product for the energy/utility industry. Produced sales training for global applications, product promotion presentations, developed alliance relationships with system integrators and software partners, developed business. Client is market leader in North America.

JOINT VENTURE/PRODUCT DEVELOPMENT

Assembled joint ventures resulting in sales to offer new hedge-based weather risk management retail product. Identified venture partners, and developed business arrangements and closed million-dollar deals

ENERGY PROCUREMENT

Served as energy expert on project team that obtained long-term natural gas supply for major government facilities. Prepared project specifications, negotiated with suppliers, prepared RFP, negotiated major reduction in delivery charges. This project resulted in annual cost reduction of $2.5 million.

NEW BUSINESS DEVELOPMENT - TELECOMMUNICATIONS

Analyzed use of electric utility assets for possible telecommunications business venture. Wrote the business plan that identifies regulatory and non-regulatory issues, marketing plans, financial analysis, and organizational requirements. Launched the new non-regulated business unit in 1996.

JOINT VENTURE DEVELOPMENT - TELECOMMUNICATIONS

Conducted analysis of potential joint venture partners for new unregulated telecommunications venture, bypassing the Bell operating company. Held screening discussions with potential partners and selected lead candidate for venture. Developed working agreement with partners along with business case to launch venture.

JOINT VENTURE DEVELOPMENT - TELECOMMUNICATIONS & ENERGY

Developed strategic plan for joint venture involving gas, electric, and telecommunications partners. Screened potential business partners and held discussions with lead candidates. Assembled justification for top management approval.

PRODUCT DEVELOPMENT - UNREGULATED ENERGY SERVICES

Developed energy products for start-up subsidiary of major energy utility. Identified potential products and selected most likely candidates for further development. Developed market plans and sales plans for products.

MARKET PLAN - DIRECT MARKETING

Developed the market plan for large, global direct marketing agency to enter the energy industry. Identified strategies, strengths, weaknesses, and target prospects. Initiated sales effort and developed new business.

CORPORATE IMAGE DEVELOPMENT

Developed complete business unit identity for a new operations and services company. Produced capabilities brochure for use with prospects.

MARKET RESEARCH

Conducted market research to identify new customer/new business opportunities for major energy utility. Comprehensive project with two additional similar projects were completed. Entailed determination of goals, development of research methodology, script preparation, vendor selection, data analysis, and development of action plan.

MARKET DEVELOPMENT

Organized intervener group in Illinois consisting of retail marketers and intervened in three rate proceedings (Nicor Gas base case, WPS-Peoples merger case, Peoples Gas base case) and secured significant improvements in rules and procedures enabling marketers to increase their business and profitability. Developed strategy and presented written and oral testimony.

PARTIAL LIST OF REGULATORY EXPERIENCE OF JAMES L. CRIST

1. Dominion Energy Ohio Motion, Case No. 18-1419-GA-EXM, Representing Retail Energy Supply Association
2. Aqua America/Peoples Natural Gas Merger, Docket R-2018-3006061, Representing Natural Gas Supplier Parties and Retail Energy Supply Association
3. Peoples Natural Gas General Base Rate Increase, Docket R-2018-3006818, Representing Peoples Industrial Intervenors
4. Duquesne Light Company General Base Rate Increase, Docket R-2018-3000124, Representing the Duquesne Industrial Intervenors
5. Columbia of PA General Base Rate Increase, Docket R-2018-2647577, Representing the Pennsylvania State University
6. West Penn Power Company, Default Service Program, Docket R-2017-2637866, Representing the Pennsylvania State University
7. Vectren Energy Delivery Ohio, Alternative Rate Plan, Case No. 18-0049-GA-ALT, Representing Retail Energy Supply Association
8. Columbia of PA Gas Cost Increase, Docket R-2017-2591326, Representing the Pennsylvania State University
9. West Penn Power Company, General Base Rate Increase, Docket R-2016-2537359, Representing the Pennsylvania State University
10. Columbia of PA General Base Rate Increase, Docket R-2016-2529660, Representing the Pennsylvania State University
11. UGI Utilities General Base Rate Increase, Docket R-2015-2518438, Representing Dominion Retail, Inc., Shipley, Choice, LLC, Interstate Gas Supply, Inc., Amerigreen Energy, and Rhoads Energy
12. Columbia of PA General Base Rate Increase, Docket R-2015-2468056, Representing the Pennsylvania State University
13. West Penn Power Company, General Base Rate Increase, Docket R-2014-2428742, Representing the Pennsylvania State University
14. Herman Oil & Gas Company, General Base Rate Increase, R-2014-2414379, Representing Herman Oil & Gas Company
15. Columbia of PA General Base Rate Increase, Docket R-2014-2406274, Representing the Pennsylvania State University
16. Ameren Gas- General Base Rate Increase, Docket No. 13-0192, Representing Dominion Retail and Interstate Gas Supply of Illinois
17. Columbia of PA General Base Rate Increase, Docket R-2012-2321748, Representing the Pennsylvania State University, Dominion Retail, Interstate Gas Supply, and Shipley Energy
18. Columbia of PA Petition for Approval of a Distribution System Improvement Charge Docket R-2012-2338282, Representing the Pennsylvania State University
19. PUC PA Generic Investigation Regarding Gas-On-Gas Competition, Docket No. P-2011-2277868, Representing the Pennsylvania State University
20. Ameren Gas- General Base Rate Increase, Docket 11-0282 (Cons.), Representing Dominion Retail and Interstate Gas Supply of Illinois
21. Water and Power Authority (USVI)- Electric Base Rate Case, Docket 575, June 2009, Representing Frenchman's Reef Marriott
22. Water and Power Authority (USVI)- Water Base Rate Case, Docket 576, June 2009, Representing Frenchman's Reef Marriott
23. Public Service of New Mexico 2010 Base Rate Case, Informal rate design workshops pursuant to the stipulation in NMPRC Case No. 08-00273-UT, Representing City of Albuquerque
24. Public Service of New Mexico, Electric base case at Case No. 08-00273-UT, Representing City of Albuquerque
25. Public Service of New Mexico 2009 Renewable Energy Procurement Plan for 2010, Case No. 09-00260-UT, Representing City of Albuquerque and Santa Fe County
26. Public Service of New Mexico, Gas sale case at Case No. 08-00078-UT, Representing City of Albuquerque
27. UGI Utilities, Central Penn Gas, Penn Natural Gas, Gas Cost Increase, Docket No. R-2011-2238953, Representing Shipley Energy, Rhodes Energy, and CenterPoint Energy
28. UGI Utilities- Gas Division, Gas Cost Increase, Docket No. R-2010-2172933, Representing Shipley Energy
29. Columbia of PA General Base Rate Increase, Docket R-2010-2215623, Representing the Pennsylvania State University, Dominion Retail, Interstate Gas Supply, and Shipley Energy
30. Columbia of PA General Base Rate Increase, Docket R-2009-2149262, Representing the Pennsylvania State University, Dominion Retail, Interstate Gas Supply, and Shipley Energy
31. Columbia of PA General Base Rate Increase, Docket R-2008-2011621, Representing Hess Energy, Dominion Retail, Interstate Gas Supply, and Shipley Energy
32. Columbia of PA Gas Cost Increase, Docket R-2008-2028039, Representing Dominion Retail, Interstate Gas Supply, and Shipley Energy
33. PPL Electric Utilities Voluntary Purchase of Accounts Receivables Program and Merchant Function Charge, Docket No. P-2009-2129502

34. Nicor Gas Company, Provision of facilities and services and the transfer of assets between Nicor Gas Company and Nicor Inc., Docket No. 09-0301, Representing Dominion Retail
35. North Shore Gas and Peoples Gas Light and Coke Company, General Base Rate Increase, Dockets 09-0166 and 09-0167, Representing Dominion Retail, Interstate Gas Supply and Nicor Advanced Energy
36. Nicor Gas Company, Base Rate Increase, Docket No. 08-0363, Representing Interstate Gas Supply and Dominion Retail
37. North Shore Gas and Peoples Gas Light and Coke Company, General Base Rate Increase, Dockets 07-0241 and 07-0242, Representing Dominion Retail, Interstate Gas Supply and U.S. Energy Savings
38. WPS Resources, Peoples Energy, Peoples Gas Light and Coke Company, North Shore Gas Company, Application pursuant to Section 7-204 of the Public Utilities Act for authority to engage in a Reorganization, Docket 06-0540, Representing Dominion Retail, Interstate Gas Supply, US Energy Savings, MxEnergy, and Direct Energy Services.
39. Allegheny Energy, Approval of Retail Electric Default Service Program and Competitive Procurement Plan, Docket No. P-2008-2021608, Representing the Pennsylvania State University
40. Allegheny Energy, Generation Rate Cap, Docket No. P-2007-2001828, Representing the Pennsylvania State University
41. Equitable Gas Company, Rate Increase, Docket R-2008-2029325, Representing Independent Oil & Gas Association and Hess Corp.
42. Equitable Gas Company and Peoples Gas, Merger Case, Docket A-122250F5000, Representing National Energy Marketers, Hess Corporation, and Constellation New Energy.

EXHIBIT JC-1

Philadelphia Gas Works
Case Name: GCR 23
Docket No(s): R-2023-3038069

Response to Discovery Request: Vicinity Set I-1
Date of Response: 3/24/2023
Response Provided By: Ryan Reeves

Question:
Provide copies of all PGW's capacity and storage service contracts effective during the period 2017-2022

Attachments: 22
Vicinity_Set_I_1_K1005001 Amend 1-Superceded.pdf
Vicinity_Set_I_1_S-2 Amend 1.pdf
Vicinity_Set_I_1_400121.pdf
Vicinity_Set_I_1_S-2 Amend 2.pdf
Vicinity_Set_I_1_400209.pdf
Vicinity_Set_I_1_800232.pdf
Vicinity_Set_I_1_S-2 Orig.pdf
Vicinity_Set_I_1_K1038582 WSS-OA amend 2.pdf
Vicinity_Set_I_1_K1038582 WSS-OA orig.pdf
Vicinity_Set_I_1_331725.pdf
Vicinity_Set_I_1_800514.pdf
Vicinity_Set_I_1_K1005001 -PS-FT-orig-Superceded.pdf
Vicinity_Set_I_1_K1003691 FT amend 1.pdf
Vicinity_Set_I_1_800515.pdf
Vicinity_Set_I_1_331822.pdf
Vicinity_Set_I_1_K1000791 GSS amend 1.pdf
Vicinity_Set_I_1_800233.pdf
Vicinity_Set_I_1_K1003691-2018-07-11-FT.pdf
Vicinity_Set_I_1_K1003691 FT Orig.pdf
Vicinity_Set_I_1_K1000791 GSS orig.pdf
Vicinity_Set_I_1_K1038582 WSS-OA amend 1.pdf
Vicinity_Set_I_1_330791.pdf

Response:

Please see attached documents.

92 1099 003

FORM OF SERVICE AGREEMENT
(For Use Under Seller's Rate Schedule FT)

THIS AGREEMENT entered into this 11 day of JULY, 2018, by and between TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC, a Delaware limited liability company, hereinafter referred to as "Seller," first party, and PHILADELPHIA GAS WORKS, by Philadelphia Facilities Management Corporation in its capacity as operator and manager of the municipally owned Philadelphia Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended, hereinafter referred to as "Buyer," second party,

WITNESSETH

WHEREAS, Seller and Buyer are parties to that certain Service Agreement, dated August 1, 1991 (Seller's Contract #1005001, hereinafter referred to as "the Service Agreement"), under Seller's Rate Schedule FT pursuant to which Seller provides firm transportation service for Buyer up to a Transportation Contract Quantity of 1,967 dt per day; and

WHEREAS, Seller and Buyer desire to amend the Service Agreement to modify Exhibit A of the Service Agreement to remove all of the receipt points and volumes with the exception of the receipt points at Compressor Stations 30, 45, 50, 54, 62 and 65 and the associated volumes for each; and

WHEREAS, in accordance with the settlement approved by the FERC in Docket No. RP12-993-000, Seller and Buyer also desire to amend Exhibit A of the Service Agreement to remove the column for the billing determinant quantities; and

WHEREAS, Seller and Buyer also desire to amend the Service Agreement to reflect the conversion of the quantities of gas under the Service Agreement from Mcf to dt at a conversion factor of 1.035 dt per Mcf; and

WHEREAS, Seller and Buyer further desire to amend the Service Agreement to include a non-conforming provision specifying the responsible party for payments for transportation service provided by Seller under the Service Agreement in Article VI, Paragraph 6; and

WHEREAS, consistent with Federal Energy Regulatory Commission requirements, Seller and Buyer have agreed to supersede and cancel the Service Agreement and execute a new agreement reflecting these amendments and otherwise restating the terms and conditions of the Service Agreement, which will then be submitted to the Federal Energy Regulatory Commission for approval.

NOW THEREFORE, Seller and Buyer agree as follows:

ARTICLE I
GAS TRANSPORTATION SERVICE

1. Subject to the terms and provisions of this agreement and of Seller's Rate Schedule FT, Buyer agrees to deliver or cause to be delivered to Seller gas for transportation and Seller agrees to receive, transport and redeliver natural gas to Buyer or for the account of Buyer, on a firm basis, up to a Transportation Contract Quantity ("TCQ") of 1,967 dt per day.

2. Transportation service rendered hereunder shall not be subject to curtailment or interruption except as provided in Section 11 and, if applicable, Section 42 of the General Terms and Conditions of Seller's FERC Gas Tariff.

ARTICLE II
POINT(S) OF RECEIPT

Buyer shall deliver or cause to be delivered gas at the point(s) of receipt hereunder at a pressure sufficient to allow the gas to enter Seller's pipeline system at the varying pressures that may exist in such system from time to time; provided, however, the pressure of the gas delivered or caused to be delivered by Buyer shall not exceed the maximum operating pressure(s) of Seller's pipeline system at such point(s) of receipt. In the event the maximum operating pressure(s) of Seller's pipeline system, at the point(s) of receipt hereunder, is from time to time increased or decreased, then the maximum allowable pressure(s) of the gas delivered or caused to be delivered by Buyer to Seller at the point(s) of receipt shall be correspondingly increased or decreased upon written notification of Seller to Buyer. The point(s) of receipt for natural gas received for transportation pursuant to this agreement shall be:

See Exhibit A, attached hereto, for points of receipt.

ARTICLE III
POINT(S) OF DELIVERY

Seller shall redeliver to Buyer or for the account of Buyer the gas transported hereunder at the following point(s) of delivery and at a pressure(s) of:

See Exhibit B, attached hereto, for points of delivery and pressures.

ARTICLE IV
TERM OF AGREEMENT

This agreement shall be effective as of September 1, 2018 and shall remain in force and effect until 9:00 a.m. Central Clock Time September 1, 2021 and thereafter until terminated by Seller or Buyer upon at least three (3) years written notice; provided, however, this agreement shall terminate immediately and, subject to the receipt of necessary authorizations, if any, Seller may discontinue service hereunder if (a) Buyer, in Seller's reasonable judgment fails to demonstrate creditworthiness, and (b) Buyer fails to provide adequate security in accordance with Section 32 of the General Terms and Conditions of Seller's Volume No. 1 Tariff. As set forth in Section 8 of Article II of Seller's August 7, 1989 revised Stipulation and Agreement in Docket Nos. RP88-68 et.al., (a) pregranted abandonment under Section 284.221(d) of the Commission's regulations shall not apply to any long term conversions from firm sales service to transportation service under Seller's Rate Schedule FT and (b) Seller shall not exercise its right to terminate this service agreement as it applies to transportation service resulting from conversions from firm sales service so long as Buyer is willing to pay rates no less favorable than Seller is otherwise able to collect from third parties for such service.

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ARTICLE V
RATE SCHEDULE AND PRICE

1. Buyer shall pay Seller for natural gas delivered to Buyer hereunder in accordance with Seller's Rate Schedule FT and the applicable provisions of the General Terms and Conditions of Seller's FERC Gas Tariff as filed with the Federal Energy Regulatory Commission, and as the same may be legally amended or superseded from time to time. Such rate schedule and General Terms and Conditions are by this reference made a part hereof. In the event Buyer and Seller mutually agree to a negotiated rate pursuant to the provisions in Section 53 of the General Terms and Conditions and specified term for service hereunder, provisions governing such negotiated rate (including surcharges) and term shall be set forth on Exhibit C to the service agreement.

2. Seller and Buyer agree that the quantity of gas that Buyer delivers or causes to be delivered to Seller shall include the quantity of gas retained by Seller for applicable compressor fuel, line loss make-up (and injection fuel under Seller's Rate Schedule GSS, if applicable) in providing the transportation service hereunder, which quantity may be changed from time to time and which will be specified in the currently effective Statement of Rates and Fuel in Part II, Section 12.1 of this tariff which relates to service under this agreement and which is incorporated herein.

3. In addition to the applicable charges for firm transportation service pursuant to Section 3 of Seller's Rate Schedule FT, Buyer shall reimburse Seller for any and all filing fees incurred as a result of Buyer's request for service under Seller's Rate Schedule FT, to the extent such fees are imposed upon Seller by the Federal Energy Regulatory Commission or any successor governmental authority having jurisdiction.

ARTICLE VI
MISCELLANEOUS

1. This Agreement supersedes and cancels as of the effective date hereof the following contract(s): FT Service Agreement, dated August 1, 1991 (Seller's Contract #1005001).

2. No waiver by either party of any one or more defaults by the other in the performance of any provisions of this agreement shall operate or be construed as a waiver of any future default or defaults, whether of a like or different character.

3. The interpretation and performance of this agreement shall be in accordance with the laws of the State of Texas, without recourse to the law governing conflict of laws, and to all present and future valid laws with respect to the subject matter, including present and future orders, rules and regulations of duly constituted authorities.

4. This agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective successors and assigns.

5. Notices to either party shall be in writing and shall be considered as duly delivered when mailed to the other party at the following address:

(a) If to Seller:
Transcontinental Gas Pipe Line Company, LLC
P. O. Box 1396
Houston, Texas 77251
Attention: Manager – Customer Services

(b) If to Buyer:
Philadelphia Gas Works
800 West Montgomery Avenue
Philadelphia, Pennsylvania 19122
Attention: Vice President – Rates and Federal Regulatory Affairs

Such addresses may be changed from time to time by mailing appropriate notice thereof to the other party by certified or registered mail.

6. It is understood and agreed that any payments required to be made by the Philadelphia Facilities Management Corporation and/or PGW as a result of or arising out of its entering into this Service Agreement shall be made solely from the revenues of the Philadelphia Gas Works.

92 1089 003

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be signed by their respective officers or representatives thereunto duly authorized.

TRANSCONTINENTAL GAS PIPE LINE
COMPANY, LLC
(Seller)

By Hector Alatorre

Print Name HECTOR ALATORRE

Title DIRECTOR, CUSTOMER SERVICE

PHILADELPHIA GAS WORKS
(Buyer)

By John C. Zuk

Print Name John C. Zuk

Title V.P Gas Supply

92 1089 003

Exhibit A

Point(s) of Receipt	Maximum Daily Capacity Entitlement at each Receipt Point (DT/day)*
1. Suction Side of Seller's Compressor Station 30 at the Existing Point of Interconnection between Seller's Central Texas Lateral and Seller's Mainline at Wharton County, Texas. (Station 30 – TP#7133)	334
2. Discharge Side of Seller's Compressor Station 45 at the Existing Point of Interconnection between Seller's Southwest Louisiana Lateral and Seller's Mainline Beauregard Parish, Louisiana. (Station 45 TP#7101)	826
3. Suction Side of Seller's Compressor Station 50 at the Existing Point of Interconnection Between Seller's Central Louisiana Lateral and Seller's Mainline Evangeline Parish, Louisiana. (Station 50 TP#6948)	1,200
4. Discharge Side of Seller's Compressor Station 54 at Seller's Washington Storage Field, St. Landry Parish, Louisiana (Station 54 TP#6768)	1,967
5. Suction Side of Seller's Compressor Station 62 on Seller's Southeast Louisiana Lateral in Terrebonne Parish, Louisiana. (Station 62 TP#7141)	767
6. Suction Side of Seller's Compressor Station 65 at Existing Point of Interconnection between Seller's Southeast Louisiana Lateral and Seller's Mainline St. Helena Parish, Louisiana. (Station 65 TP#6685)	1,967

* These quantities do not include the additional quantities of gas retained by Seller for applicable compressor fuel and line loss make-up provided for in Article V, 2 of this service agreement, which are subject to change as provided for in Article V, 2 hereof.

Exhibit B

Point(s) of Delivery		Maximum Daily Capacity Entitlement at each Delivery Point(Dt/Day)	Pressure
1.	Station 54	1,967	Not Applicable.
2.	Seller's Eminence Storage Field, Covington County, Mississippi	1,967	Prevailing pressure in Seller's pipeline system not to exceed maximum allowable operating pressure.
3.	Ashmead Road Meter Station, located on Seller's Oreland Line at mile post 13.44 in Cheltenham Township, Montgomery County, Pennsylvania, near the city limits line of the City of Philadelphia, Pennsylvania.	1,967	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.
4.	Whitman Meter Station, located in the City of Philadelphia, Pennsylvania, on Delaware Avenue approximately 550 feet south of the intersection of Delaware Avenue and Packer Avenue where the facilities of Seller connect with those of Buyer.	1,967	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.

5.	Richmond Meter Station, located adjacent to Seller's Trenton-Woodbury line at mile post 36.83 and near the intersection of Lewis and Delaware Avenue, Philadelphia County, Philadelphia, Pennsylvania.	1,967	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.
6.	Northeast Philadelphia Meter Station (Somerton), located near the westerly terminus of Brookside Drive and approximately 1200 feet northeasterly from County Line Road in Lower Southampton Township, Bucks County, Pennsylvania.	1,967	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.
7.	Oreland Meter Station, located on Seller's Oreland Line at mile post 6.09 in Springfield Township, Montgomery County, Pennsylvania.	1,967	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.

92 1089 203

Exhibit C

Specification of Negotiated Rate and Term

None.

EXHIBIT A 00 3829 001

AMENDMENT TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE S-2

This Amendment is made and entered into as of this 16th day of April, 1996 by and between Transcontinental Gas Pipe Line Corporation, hereinafter referred to as "Seller" and Philadelphia Gas Works , hereinafter referred to as "Buyer".

WITNESSETH:

WHEREAS, Buyer and Seller entered into an Agreement under Seller's Rate Schedule S-2 effective November 1, 1954 ("Agreement"); and

WHEREAS, the primary term of the Agreement has expired and Buyer and Seller desire to amend the Agreement to extend the primary term thereof as stated in Article II of the Agreement.

NOW THEREFORE, in consideration of the premises and mutual covenants hereinafter contained, the parties amend the Agreement as follows:

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CORPORATE RECORDS

1. Article II is hereby deleted in its entirety effective April 16, 1996 and the following substituted therefor:

ARTICLE II
TERM OF AGREEMENT

Subject to the provisions of Article I hereof, this Agreement shall be effective on April 16, 1996 and shall continue for a period of five (5) contract years and thereafter until terminated by either Seller or Buyer upon twelve (12) months prior written notice to the other specifying a termination date at the end of such period or any yearly period thereafter, provided, however, that either party may cancel this Agreement in the event the said agreement of December 8, 1953, between Seller and Texas Eastern is canceled.

2. Except as hereinabove amended, the Agreement shall remain in full force and effect as written.

IN WITNESS THEREOF, the parties have executed this Amendment as of the date first above written.

TRANSCONTINENTAL GAS PIPE LINE CORPORATION

By: _____
Frank J. Ferazzi
Vice President
Customer Service

VCL PWS

SHIPPER

By: Gregory D. Martin
Name: Gregory D. Martin
Title: Executive V.P. & COO

GDM EMP

Contract #: 400121

SERVICE AGREEMENT
FOR RATE SCHEDULE SS-1

This agreement, made and entered into this 1 day of June, 1993, by and between TEXAS EASTERN TRANSMISSION CORPORATION, a Delaware Corporation (herein called "Pipeline") and PHILADELPHIA GAS WORKS, by the Philadelphia Facilities Management Corporation in its capacity as manager and operator of the city-owned Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended (herein called "Customer," whether one or more),

W I T N E S S E T H:

WHEREAS, the Federal Energy Regulatory Commission required Pipeline to restructure Pipeline's services to reflect compliance with Order Nos. 636, 636-A, and 636-B (collectively hereinafter referred to as "Order No. 636"); and

WHEREAS, by order issued January 13, 1993 (62 FERC P61,015) and order issued April 22, 1993 (63 FERC P61,100), the Federal Energy Regulatory Commission accepted Pipeline's revised tariff sheets filed in compliance with Order No. 636 to become effective June 1, 1993, subject to certain conditions set forth in the April 22, 1993 order; and

WHEREAS, Customer made its final Order No. 636 service elections on May 3, 1993 pursuant to the April 22, 1993 order and Pipeline filed revised tariff sheets to become effective June 1, 1993 in compliance with the April 22, 1993 order;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the parties do covenant and agree as follows:

ARTICLE I

SCOPE OF AGREEMENT

Subject to the terms, conditions and limitations hereof and of Pipeline's Rate Schedule SS-1, Pipeline agrees to provide firm service for Customer under Rate Schedule SS-1 and to receive and store for Customer's account quantities of natural gas up to the following quantity:

Maximum Daily Injection Quantity (MDIQ) 13,606 dth
Maximum Storage Quantity (MSQ) 2,647,080 dth

Pipeline agrees to withdraw from storage for Customer, at Customer's request, quantities of gas up to Customer's Maximum Daily Withdrawal Quantity (MDWQ) of 44,118 dekatherms, or such

lesser quantity as determined pursuant to Rate Schedule SS-1, from Customer's Storage Inventory, plus Applicable Shrinkage, and to deliver for Customer's account such quantities. Pipeline's obligation to withdraw gas on any day is governed by the provisions of Rate Schedule SS-1, including but not limited to Section 6.

ARTICLE II

TERM OF AGREEMENT

The term of this Service Agreement shall commence on June 1, 1993 and shall continue in force and effect until 04/30/2012 and year to year thereafter unless this Service Agreement is terminated as hereinafter provided. This Service Agreement may be terminated by either Pipeline or Customer upon five (5) years prior written notice to the other specifying a termination date of any year occurring on or after the expiration of the primary term. Subject to Section 22 of Pipeline's General Terms and Conditions and without prejudice to such rights, this Service Agreement may be terminated at any time by Pipeline in the event Customer fails to pay part or all of the amount of any bill for service hereunder and such failure continues for thirty (30) days after payment is due; provided, Pipeline gives thirty (30) days prior written notice to Customer of such termination and provided further such termination shall not be effective if, prior to the date of termination, Customer either pays such outstanding bill or furnishes a good and sufficient surety bond guaranteeing payment to Pipeline of such outstanding bill.

THE TERMINATION OF THIS SERVICE AGREEMENT WITH A FIXED CONTRACT TERM OR THE PROVISION OF A TERMINATION NOTICE BY CUSTOMER TRIGGERS PREGRANTED ABANDONMENT UNDER SECTION 7 OF THE NATURAL GAS ACT AS OF THE EFFECTIVE DATE OF THE TERMINATION. PROVISION OF A TERMINATION NOTICE BY PIPELINE ALSO TRIGGERS CUSTOMER'S RIGHT OF FIRST REFUSAL UNDER SECTION 3.13 OF THE GENERAL TERMS AND CONDITIONS ON THE EFFECTIVE DATE OF THE TERMINATION.

In the event there is gas in storage for Customer's account on April 30 of the year of termination of this Service Agreement, this Service Agreement shall continue in force and effect for the sole purpose of withdrawal and delivery of said gas to Customer for an additional one-hundred and twenty (120) days.

ARTICLE III

RATE SCHEDULE

This Service Agreement in all respects shall be and remain subject to the applicable provisions of Rate Schedule SS-1 and of the General Terms and Conditions of Pipeline's FERC Gas Tariff on file with the Federal Energy Regulatory Commission, all of which are by this reference made a part hereof.

Customer shall pay Pipeline, for all services rendered hereunder and for the availability of such service in the period stated, the applicable prices established under Pipeline's Rate Schedule SS-1 as filed with the Federal Energy Regulatory Commission and as the same may be hereafter revised or changed.

Customer agrees that Pipeline shall have the unilateral right to file with the appropriate regulatory authority and make changes effective in (a) the rates and charges applicable to service pursuant to Pipeline's Rate Schedule SS-1, (b) Pipeline's Rate Schedule SS-1, pursuant to which service hereunder is rendered or (c) any provision of the General Terms and Conditions applicable to Rate Schedule SS-1. Notwithstanding the foregoing, Customer does not agree that Pipeline shall have the unilateral right without the consent of Customer subsequent to the execution of this Service Agreement and Pipeline shall not have the right during the effectiveness of this Service Agreement to make any filings pursuant to Section 4 of the Natural Gas Act to change the MDIQ, MSQ and MDWQ specified in Article I, to change the term of the service agreement as specified in Article II, to change Point(s) of Receipt specified in Article IV, to change the Point(s) of Delivery specified in Article IV, or to change the firm character of the service hereunder. Pipeline agrees that Customer may protest or contest the aforementioned filings, and Customer does not waive any rights it may have with respect to such filings.

ARTICLE IV

POINT(S) OF RECEIPT AND POINT(S) OF DELIVERY

The natural gas received by Pipeline for Customer's account for storage injection pursuant to this Service Agreement shall be those quantities scheduled for delivery pursuant to Service Agreements between Pipeline and Customer under Rate Schedules CDS, FT-1, SCT, PTI or IT-1 which specify as a Point of Delivery the "SS-1 Storage Point". For purposes of billing of Usage Charges under Rate Schedules CDS, FT-1, SCT, PTI or IT-1, deliveries under Rate Schedules CDS, FT-1, SCT, PTI or IT-1 for injection into storage scheduled directly to the "SS-1 Storage Point" shall be deemed to have been delivered 60% in Market Zone

2 and 40% in Market Zone 3. In addition, at Customer's request any positive or negative variance between scheduled deliveries and actual deliveries on any day at Customer's Points of Delivery under Rate Schedules CDS, FT-1, SCT, or IT-1 shall be deemed for billing purposes delivered at the Point of Delivery and shall be injected into or withdrawn from storage for Customer's account. In addition to accepting gas for storage injection at the SS-1 Storage Point, Pipeline will accept gas tendered at points of interconnection between Pipeline and third party facilities at Oakford and Leidy Storage Fields provided that such receipt does not result in Customer tendering aggregate quantities for storage in excess of the Customer MDIQ.

The Point(s) of Delivery at which Pipeline shall deliver gas shall be specified in Exhibit A of the executed service agreement.

Exhibit A and B are hereby incorporated as part of this Service Agreement for all intents and purposes as if fully copied and set forth herein at length.

ARTICLE V

QUALITY

All natural gas tendered to Pipeline for Customer's account shall conform and be subject to the provisions of Section 5 of the General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept natural gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such gas as necessary to comply with such quality specifications.

ARTICLE VI

ADDRESSES

Except as herein otherwise provided or as provided in the General Terms and Conditions of Pipeline's FERC Gas Tariff, any notice, request, demand, statement, bill or payment provided for in this Service Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when mailed by registered, certified, or regular mail to the post office address of the parties hereto, as the case may be, as follows:

(a) Pipeline: Texas Eastern Transmission Corporation
5400 Westheimer Court
Houston, Texas 77056-5310

(b) Customer: PHILADELPHIA GAS WORKS
GAS AQUISITION & FED. REGULATORY AFFAIRS DEPT.
800 W. MONTGOMERY AVENUE
PHILADELPHIA, PA 19122

or such other address as either party shall designate by formal written notice.

ARTICLE VII

ASSIGNMENTS

Any Company which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of Customer, or of Pipeline, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Service Agreement; and either Customer or Pipeline may assign or pledge this Service Agreement under the provisions of any mortgage, deed of trust, indenture, bank credit agreement, assignment, receivable sale, or similar instrument which it has executed or may execute hereafter; otherwise, neither Customer nor Pipeline shall assign this Service Agreement or any of its rights hereunder unless it first shall have obtained the consent thereto in writing of the other; provided further, however, that neither Customer nor Pipeline shall be released from its obligations hereunder without the consent of the other. In addition, Customer may assign its rights to capacity pursuant to Section 3.14 of the General Terms and Conditions. To the extent Customer so desires, when it releases capacity pursuant to Section 3.14 of the General Terms and Conditions, Customer may require privity between Customer and the Replacement Customer, as further provided in the applicable Capacity Release Umbrella Agreement.

ARTICLE VIII

INTERPRETATION

The interpretation and performance of this Service Agreement shall be in accordance with the laws of the State of Texas without recourse to the law governing conflict of laws.

This Service Agreement and the obligations of the parties are subject to all present and future valid laws with respect to the subject matter, State and Federal, and to all valid present and future orders, rules, and regulations of duly constituted authorities having jurisdiction.

ARTICLE IX

CANCELLATION OF PRIOR CONTRACT(S)

This Service Agreement supersedes and cancels, as of the effective date of this Service Agreement, the contract(s) between the parties hereto as described below:

Service Agreement(s) dated, 08/09/1991 between Pipeline and Customer under Pipeline's Rate Schedule SS-1, and SCQ (Pipeline's Contract No. 400021 and 312051).

SERVICE AGREEMENT
FOR RATE SCHEDULE SS-1
(Continued)

IN WITNESS WHEREOF, the Parties hereto have caused this Service Agreement to be signed by their respective Presidents, Vice Presidents, or other duly authorized agents and their respective corporate seals to be hereto affixed and attested by their respective Secretaries or Assistant Secretaries, the day and year first above written.

TEXAS EASTERN TRANSMISSION CORPORATION

By Diane J. Tom
Vice President

ATTEST: Robert W. Reed

PHILADELPHIA GAS WORKS*

By A. P. Degen
Executive Vice President

ATTEST: Sydney M. Arent

*PHILADELPHIA GAS WORKS, by the Philadelphia Facilities Management Corporation in its capacity as manager and operator of the city-owned Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended

Contract #: 121

EXHIBIT A, POINT(S) OF DELIVERY, DATED _____,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE SS-1
BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("Pipeline")
AND PHILADELPHIA GAS WORKS ("Customer"), DATED _____:

Point of Delivery	Description	Maximum Daily Delivery Obligation	Delivery Pressure Obligation	Measurement Responsibilities	Owner	Operator
1. 70030	P.G.W. Philadelphia Co., PA	33,738 dth	100 pounds per square inch gauge	TE	TE	Philadelphia Gas
2. 70034	P.G.W. Montgomery Co., PA	23,357 dth	100 pounds per square inch gauge	TE	TE	Philadelphia Gas

provided, however, that until changed by a subsequent Agreement between Pipeline and Customer, Pipeline's aggregate maximum daily delivery obligations at each of the points of delivery described above, including Pipeline's maximum daily delivery obligations under this and all other firm Service Agreements existing between Pipeline and Customer, shall in no event exceed the following:

Point of Delivery	Aggregate Maximum Daily Delivery Obligation
No. 1	137,073 dth
No. 2	137,310 dth

SIGNED FOR IDENTIFICATION:

PIPELINE: Diane L. Jones

CUSTOMER: Harry Samuels

00 3829 002

AMENDMENT TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE S-2

This Amendment is made and entered into as of this 1st day of May 1998 by and between Transcontinental Gas Pipe Line Corporation ("Seller") and the Philadelphia Gas Works by Philadelphia Facilities Management Corporation ("PFMC") solely in its capacity as operator and manager of the municipally owned Philadelphia Gas Works, under and pursuant to an agreement with the City of Philadelphia dated December 29,1972, as amended, (collectively "PGW" or "Buyer")

WITNESSTH

WHEREAS, Seller and the United Gas Improvement Company entered into an Agreement under Seller's Rate Schedule S-2, dated December 14, 1953, effective November 1, 1954 to deliver natural gas to meter stations: Oreland, 030 Point Breeze and 034 Levick Street serving the Gas Works owned by the City of Philadelphia ("Agreement");

WHEREAS, the Buyer, PGW is the successor in interest to the Agreement under and pursuant to an agreement with the City of Philadelphia dated December 29,1972, as amended for the operation and management of the municipally owned Philadelphia Gas Works;

WHEREAS, the primary term of the Agreement has expired and Buyer and Seller desire to amend the Agreement to extend the primary term thereof as stated in Article II of the Agreement.

NOW THEREFORE, in consideration of the premises and mutual covenants hereinafter contained, the parties amend the Agreement as follows:

1. Article II is hereby deleted in its entirety effective April 16, 1996 and the following substituted therefore:

ARTICLE II
TERM OF AGREEMENT

Subject to the provisions of Article I hereof, this Agreement shall be effective on April 16, 1996 and shall continue for a period of five (5) contract years and thereafter until terminated by either Seller or Buyer upon twelve (12) months prior written notice to the other specifying a termination date at the end of such period or any yearly period thereafter, provided, however, that either party may cancel this Agreement in the event the said agreement of December 8, 1953, between Seller and the Texas Eastern Transmission Corporation is canceled.

2. Except as hereinabove amended, the Agreement shall remain in full force and effect as written.

IN WITNESS THEREOF, the parties have executed this Amendment as of the date first above written.

TRANSCONTINENTAL GAS PIPE LINE CORPORATION

By: _____ Date: _____
Frank J. Frazzi, Vice Pres. Customer Service

Attest: _____ Date: 7-5-98

PHILADELPHIA GAS WORKS BY PHILADELPHIA FACILITIES MANAGEMENT CORPORATION

By: Gregory D. Martin Date: 6/30/98
Gregory D. Martin, Executive Vice Pres.
Chief Operating Officer

Attest: _____ Date: 7/1/98

Contract #: 400209

SERVICE AGREEMENT
FOR RATE SCHEDULE SS-1

This agreement, made and entered into this 1 day of June, 1993, by and between TEXAS EASTERN TRANSMISSION CORPORATION, a Delaware Corporation (herein called "Pipeline") and PHILADELPHIA GAS WORKS, by the Philadelphia Facilities Management Corporation in its capacity as manager and operator of the city-owned Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended (herein called "Customer," whether one or more),

W I T N E S S E T H:

WHEREAS, the Federal Energy Regulatory Commission required Pipeline to restructure Pipeline's services to reflect compliance with Order Nos. 636, 636-A, and 636-B (collectively hereinafter referred to as "Order No. 636"); and

WHEREAS, by order issued January 13, 1993 (62 FERC P61,015) and order issued April 22, 1993 (63 FERC P61,100), the Federal Energy Regulatory Commission accepted Pipeline's revised tariff sheets filed in compliance with Order No. 636 to become effective June 1, 1993, subject to certain conditions set forth in the April 22, 1993 order; and

WHEREAS, Customer made its final Order No. 636 service elections on May 3, 1993 pursuant to the April 22, 1993 order and Pipeline filed revised tariff sheets to become effective June 1, 1993 in compliance with the April 22, 1993 order;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the parties do covenant and agree as follows:

ARTICLE I

SCOPE OF AGREEMENT

Subject to the terms, conditions and limitations hereof and of Pipeline's Rate Schedule SS-1, Pipeline agrees to provide firm service for Customer under Rate Schedule SS-1 and to receive and store for Customer's account quantities of natural gas up to the following quantity:

Maximum Daily Injection Quantity (MDIQ) 12,656 dth *
Maximum Storage Quantity (MSQ) 2,462,120 dth *

* Quantities subject to Court determination and/or final FERC action. PGW reserves all rights.

Pipeline agrees to withdraw from storage for Customer, at Customer's request, quantities of gas up to Customer's Maximum Daily Withdrawal Quantity (MDWQ) of 20,847 dekatherms, or such lesser quantity as determined pursuant to Rate Schedule SS-1, from Customer's Storage Inventory, plus Applicable Shrinkage, and to deliver for Customer's account such quantities. Pipeline's obligation to withdraw gas on any day is governed by the provisions of Rate Schedule SS-1, including but not limited to Section 6.

ARTICLE II

TERM OF AGREEMENT

The term of this Service Agreement shall commence on June 1, 1993 and shall continue in force and effect until 04/30/2012 and year to year thereafter unless this Service Agreement is terminated as hereinafter provided. This Service Agreement may be terminated by either Pipeline or Customer upon five (5) years prior written notice to the other specifying a termination date of any year occurring on or after the expiration of the primary term. Subject to Section 22 of Pipeline's General Terms and Conditions and without prejudice to such rights, this Service Agreement may be terminated at any time by Pipeline in the event Customer fails to pay part or all of the amount of any bill for service hereunder and such failure continues for thirty (30) days after payment is due; provided, Pipeline gives thirty (30) days prior written notice to Customer of such termination and provided further such termination shall not be effective if, prior to the date of termination, Customer either pays such outstanding bill or furnishes a good and sufficient surety bond guaranteeing payment to Pipeline of such outstanding bill.

THE TERMINATION OF THIS SERVICE AGREEMENT WITH A FIXED CONTRACT TERM OR THE PROVISION OF A TERMINATION NOTICE BY CUSTOMER TRIGGERS PREGRANTED ABANDONMENT UNDER SECTION 7 OF THE NATURAL GAS ACT AS OF THE EFFECTIVE DATE OF THE TERMINATION. PROVISION OF A TERMINATION NOTICE BY PIPELINE ALSO TRIGGERS CUSTOMER'S RIGHT OF FIRST REFUSAL UNDER SECTION 3.13 OF THE GENERAL TERMS AND CONDITIONS ON THE EFFECTIVE DATE OF THE TERMINATION.

In the event there is gas in storage for Customer's account on April 30 of the year of termination of this Service Agreement, this Service Agreement shall continue in force and effect for the sole purpose of withdrawal and delivery of said gas to Customer for an additional one-hundred and twenty (120) days.

ARTICLE III

RATE SCHEDULE

This Service Agreement in all respects shall be and remain subject to the applicable provisions of Rate Schedule SS-1 and of the General Terms and Conditions of Pipeline's FERC Gas Tariff on file with the Federal Energy Regulatory Commission, all of which are by this reference made a part hereof.

Customer shall pay Pipeline, for all services rendered hereunder and for the availability of such service in the period stated, the applicable prices established under Pipeline's Rate Schedule SS-1 as filed with the Federal Energy Regulatory Commission and as the same may be hereafter revised or changed.

Customer agrees that Pipeline shall have the unilateral right to file with the appropriate regulatory authority and make changes effective in (a) the rates and charges applicable to service pursuant to Pipeline's Rate Schedule SS-1, (b) Pipeline's Rate Schedule SS-1, pursuant to which service hereunder is rendered or (c) any provision of the General Terms and Conditions applicable to Rate Schedule SS-1. Notwithstanding the foregoing, Customer does not agree that Pipeline shall have the unilateral right without the consent of Customer subsequent to the execution of this Service Agreement and Pipeline shall not have the right during the effectiveness of this Service Agreement to make any filings pursuant to Section 4 of the Natural Gas Act to change the MDIQ, MSQ and MDWQ specified in Article I, to change the term of the service agreement as specified in Article II, to change Point(s) of Receipt specified in Article IV, to change the Point(s) of Delivery specified in Article IV, or to change the firm character of the service hereunder. Pipeline agrees that Customer may protest or contest the aforementioned filings, and Customer does not waive any rights it may have with respect to such filings.

ARTICLE IV

POINT(S) OF RECEIPT AND POINT(S) OF DELIVERY

The natural gas received by Pipeline for Customer's account for storage injection pursuant to this Service Agreement shall be those quantities scheduled for delivery pursuant to Service Agreements between Pipeline and Customer under Rate Schedules CDS, FT-1, SCT, PTI or IT-1 which specify as a Point of Delivery the "SS-1 Storage Point". For purposes of billing of Usage Charges under Rate Schedules CDS, FT-1, SCT, PTI or IT-1,

deliveries under Rate Schedules CDS, FT-1, SCT, PTI or IT-1 for injection into storage scheduled directly to the "SS-1 Storage Point" shall be deemed to have been delivered 60% in Market Zone 2 and 40% in Market Zone 3. In addition, at Customer's request any positive or negative variance between scheduled deliveries and actual deliveries on any day at Customer's Points of Delivery under Rate Schedules CDS, FT-1, SCT, or IT-1 shall be deemed for billing purposes delivered at the Point of Delivery and shall be injected into or withdrawn from storage for Customer's account. In addition to accepting gas for storage injection at the SS-1 Storage Point, Pipeline will accept gas tendered at points of interconnection between Pipeline and third party facilities at Oakford and Leidy Storage Fields provided that such receipt does not result in Customer tendering aggregate quantities for storage in excess of the Customer MDIQ.

The Point(s) of Delivery at which Pipeline shall deliver gas shall be specified in Exhibit A of the executed service agreement.

Exhibit A and B are hereby incorporated as part of this Service Agreement for all intents and purposes as if fully copied and set forth herein at length.

ARTICLE V

QUALITY

All natural gas tendered to Pipeline for Customer's account shall conform and be subject to the provisions of Section 5 of the General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept natural gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such gas as necessary to comply with such quality specifications.

ARTICLE VI

ADDRESSES

Except as herein otherwise provided or as provided in the General Terms and Conditions of Pipeline's FERC Gas Tariff, any notice, request, demand, statement, bill or payment provided for in this Service Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when mailed by registered, certified, or regular mail to the post office address of the parties hereto, as the case may be, as follows:

(a) Pipeline: Texas Eastern Transmission Corporation
5400 Westheimer Court
Houston, Texas 77056-5310

(b) Customer: PHILADELPHIA GAS WORKS
GAS ACQUISITION & FED. REGULATORY AFFAIRS DEPT.
800 W. MONTGOMERY AVENUE
PHILADELPHIA, PA 19122

or such other address as either party shall designate by formal written notice.

ARTICLE VII

ASSIGNMENTS

Any Company which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of Customer, or of Pipeline, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Service Agreement; and either Customer or Pipeline may assign or pledge this Service Agreement under the provisions of any mortgage, deed of trust, indenture, bank credit agreement, assignment, receivable sale, or similar instrument which it has executed or may execute hereafter; otherwise, neither Customer nor Pipeline shall assign this Service Agreement or any of its rights hereunder unless it first shall have obtained the consent thereto in writing of the other; provided further, however, that neither Customer nor Pipeline shall be released from its obligations hereunder without the consent of the other. In addition, Customer may assign its rights to capacity pursuant to Section 3.14 of the General Terms and Conditions. To the extent Customer so desires, when it releases capacity pursuant to Section 3.14 of the General Terms and Conditions, Customer may require privity between Customer and the Replacement Customer, as further provided in the applicable Capacity Release Umbrella Agreement.

ARTICLE VIII

INTERPRETATION

The interpretation and performance of this Service Agreement shall be in accordance with the laws of the State of Texas without recourse to the law governing conflict of laws.

This Service Agreement and the obligations of the parties are subject to all present and future valid laws with respect to the subject matter, State and Federal, and to all valid present and future orders, rules, and regulations of duly constituted authorities having jurisdiction.

ARTICLE IX

CANCELLATION OF PRIOR CONTRACT(S)

This Service Agreement supersedes and cancels, as of the effective date of this Service Agreement, the contract(s) between the parties hereto as described below:

Service Agreement(s) dated, 03/22/1990 between Pipeline and Customer under Pipeline's Rate Schedule CD-2 (Pipeline's Contract No. 311975).

SERVICE AGREEMENT
FOR RATE SCHEDULE SS-1
(Continued)

IN WITNESS WHEREOF, the Parties hereto have caused this Service Agreement to be signed by their respective Presidents, Vice Presidents, or other duly authorized agents and their respective corporate seals to be hereto affixed and attested by their respective Secretaries or Assistant Secretaries, the day and year first above written.

TEXAS EASTERN TRANSMISSION CORPORATION

By Diane J. Tom
Vice President

ATTEST:
Robert W. Reed

PHILADELPHIA GAS WORKS*

By A.P. Degen
Executive Vice President

ATTEST:
Sydney M Arent

*PHILADELPHIA GAS WORKS, by the Philadelphia Facilities Management Corporation in its capacity as manager and operator of the city-owned Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended

Contract #: 400202

EXHIBIT A, POINT(S) OF DELIVERY, DATED _____,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE SS-1
BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("Pipeline")
AND PHILADELPHIA GAS WORKS ("Customer"), DATED _____:

Point of Delivery	Description	Maximum Daily Delivery Obligation	Delivery Pressure Obligation	Measurement Responsibilities	Owner	Operator
1. 70030	P.G.W. Philadelphia Co., PA	20,847 dth	100 pounds per square inch gauge	TE	TE	Philadelphia Gas
2. 70034	P.G.W. Montgomery Co., PA	20,847 dth	100 pounds per square inch gauge	TE	TE	Philadelphia Gas
3. 71682	P.G.W. Philadelphia Co., PA	5,000 dth	100 pounds per square inch gauge	TE	TE	TE

provided, however, that until changed by a subsequent Agreement between Pipeline and Customer, Pipeline's aggregate maximum daily delivery obligations at each of the points of delivery described above, including Pipeline's maximum daily delivery obligations under this and all other firm Service Agreements existing between Pipeline and Customer, shall in no event exceed the following:

Point of Delivery	Aggregate Maximum Daily Delivery Obligation
No. 1	137,073 dth
No. 2	137,310 dth
No. 3	5,000 dth

SIGNED FOR IDENTIFICATION:

PIPELINE: _____

CUSTOMER: _____

SUPERSEDES EXHIBIT A DATED _____

Contract #: 800232R1

SERVICE AGREEMENT
FOR RATE SCHEDULE CDS

This Service Agreement, made and entered into this 31st day of December, 1999, by and between TEXAS EASTERN TRANSMISSION CORPORATION, a Delaware Corporation (herein called "Pipeline") and PHILADELPHIA GAS WORKS, by the Philadelphia Facilities Management Corporation in its capacity as manager and operator of the city-owned Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended (herein called "Customer", whether one or more),

W I T N E S S E T H:

WHEREAS, Customer and Pipeline are parties to an executed service agreement dated December 15, 1998, under Pipeline's Rate Schedule CDS (Pipeline's Contract No. 800232R); and

WHEREAS, Pipeline and Customer desire to enter into this Service Agreement to supersede Pipeline's currently effective Contract No. 800232R;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the parties do covenant and agree as follows:

ARTICLE I

SCOPE OF AGREEMENT

Subject to the terms, conditions and limitations hereof, of Pipeline's Rate Schedule CDS, and of the General Terms and Conditions, transportation service hereunder will be firm. Subject to the terms, conditions and limitations hereof and of Sections 2.3 and 2.4 of Pipeline's Rate Schedule CDS, Pipeline shall deliver to those points on Pipeline's system as specified in Article IV herein or available to Customer pursuant to Section 14 of the General Terms and Conditions (hereinafter referred to as Point(s) of Delivery), for Customer's account, as requested for any day, natural gas quantities up to Customer's MDQ. Customer's MDQ is as follows:

Maximum Daily Quantity (MDQ) 75,000 dth

provided, however, Customer shall have the option to reduce the MDQ of this Service Agreement by 7,500 dth upon one (1) year prior written notice to Pipeline with such reduction to be effective November 1, 2002. Pipeline and Customer agree

that any reduction in MDQ of this Service Agreement will (i)reduce all of Customer's market zone entitlements by the quantity of such reduction; and (ii)reduce Customer's firm rights under this Service Agreement in each of Pipeline's acess area zones by 10%.

Subject to variances as may be permitted by Sections 2.4 of Rate Schedule CDS or the General Terms and Conditions, Customer shall deliver to Pipeline and Pipeline shall receive, for Customer's account, at those points on Pipeline's system as specified in Article IV herein or available to Customer pursuant to Section 14 of the General Terms and Conditions (hereinafter referred to as Point(s) of Receipt) daily quantities of gas equal to the daily quantities delivered to Customer pursuant to this Service Agreement up to Customer's MDQ, plus Applicable Shrinkage as specified in the General Terms and Conditions.

Pipeline shall not be obligated to, but may at its discretion, receive at any Point of Receipt on any day a quantity of gas in excess of the applicable Maximum Daily Receipt Obligation (MDRO), plus Applicable Shrinkage, but shall not receive in the aggregate at all Points of Receipt on any day a quantity of gas in excess of the applicable MDQ, plus Applicable Shrinkage. Pipeline shall not be obligated to, but may at its discretion, deliver at any Point of Delivery on any day a quantity of gas in excess of the applicable Maximum Daily Delivery Obligation (MDDO), but shall not deliver in the aggregate at all Points of Delivery on any day a quantity of gas in excess of the MDQ.

In addition to the MDQ and subject to the terms, conditions and limitations hereof, Rate Schedule CDS and the General Terms and Conditions, Pipeline shall deliver within the Access Area under this and all other service agreements under Rate Schedules CDS, FT-1, and/or SCT, quantities up to Customer's Operational Segment Capacity Entitlements, excluding those Operational Segment Capacity Entitlements scheduled to meet Customer's MDQ, for Customer's account, as requested on any day.

ARTICLE II

TERM OF AGREEMENT

The term of this Service Agreement shall commence on the first day of the first month after Customer fully executes this Service Agreement and shall continue in force and effect until October 31, 2003 and year to year thereafter unless this Service Agreement is terminated as hereinafter provided. This Service Agreement may be terminated by either Pipeline or Customer upon one (1) year prior written notice to the other specifying a termination date of October 31, 2003 or any October 31 thereafter. Subject to Section 22 of Pipeline's General Terms and Conditions and without prejudice to such rights, this Service Agreement may be terminated at any time by Pipeline in the event Customer fails to pay part or all of the amount of any bill for service hereunder and such failure continues for thirty (30) days after payment is due; provided, Pipeline gives thirty (30) days prior written notice to Customer of such termination and provided further such termination shall not be effective if, prior to the date of termination, Customer either pays such outstanding bill or furnishes a good and sufficient surety bond guaranteeing payment to Pipeline of such outstanding bill.

THE TERMINATION OF THIS SERVICE AGREEMENT WITH A FIXED CONTRACT TERM OR THE PROVISION OF A TERMINATION NOTICE BY CUSTOMER TRIGGERS PREGRANTED ABANDONMENT UNDER SECTION 7 OF THE NATURAL GAS ACT AS OF THE EFFECTIVE DATE OF THE TERMINATION. PROVISION OF A TERMINATION NOTICE BY PIPELINE ALSO TRIGGERS CUSTOMER'S RIGHT OF FIRST REFUSAL UNDER SECTION 3.13 OF THE GENERAL TERMS AND CONDITIONS ON THE EFFECTIVE DATE OF THE TERMINATION.

Any portions of this Service Agreement necessary to correct or cash-out imbalances under this Service Agreement as required by the General Terms and Conditions of Pipeline's FERC Gas Tariff, Volume No. 1, shall survive the other parts of this Service Agreement until such time as such balancing has been accomplished.

ARTICLE III

RATE SCHEDULE

This Service Agreement in all respects shall be and remain subject to the applicable provisions of Rate Schedule CDS and of the General Terms and Conditions of Pipeline's FERC Gas Tariff on file with the Federal Energy Regulatory Commission, all of which are by this reference made a part hereof.

Customer shall pay Pipeline, for all services rendered hereunder and for the availability of such service in the period stated, the applicable prices established under Pipeline's Rate Schedule CDS as filed with the Federal Energy Regulatory Commission, and as same may hereafter be legally amended or superseded.

Customer agrees that Pipeline shall have the unilateral right to file with the appropriate regulatory authority and make changes effective in (a) the rates and charges applicable to service pursuant to Pipeline's Rate Schedule CDS, (b) Pipeline's Rate Schedule CDS pursuant to which service hereunder is rendered or (c) any provision of the General Terms and Conditions applicable to Rate Schedule CDS. Notwithstanding the foregoing, Customer does not agree that Pipeline shall have the unilateral right without the consent of Customer subsequent to the execution of this Service Agreement and Pipeline shall not have the right during the effectiveness of this Service Agreement to make any filings pursuant to Section 4 of the Natural Gas Act to change the MDQ specified in Article I, to change the term of the agreement as specified in Article II, to change Point(s) of Receipt specified in Article IV, to change the Point(s) of Delivery specified in Article IV, or to change the firm character of the service hereunder. Pipeline agrees that Customer may protest or contest the aforementioned filings, and Customer does not waive any rights it may have with respect to such filings.

ARTICLE IV

POINT(S) OF RECEIPT AND POINT(S) OF DELIVERY

The Point(s) of Receipt and Point(s) of Delivery at which Pipeline shall receive and deliver gas, respectively, shall be specified in Exhibit(s) A and B of the executed service agreement. Customer's Zone Boundary Entry Quantity and Zone Boundary Exit Quantity for each of Pipeline's zones shall be specified in Exhibit C of the executed service agreement.

Exhibit(s) A, B and C are hereby incorporated as part of this Service Agreement for all intents and purposes as if fully copied and set forth herein at length.

ARTICLE V

QUALITY

All natural gas tendered to Pipeline for Customer's account shall conform to the quality specifications set forth in Section 5 of Pipeline's General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept natural gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such gas as necessary to comply with such quality specifications. Customer shall execute or cause its supplier to execute, if such supplier has retained processing rights to the gas delivered to Customer, the appropriate agreements prior to the commencement of service for the transportation and processing of any liquefiable hydrocarbons and any PVR quantities associated with the processing of gas received by Pipeline at the Point(s) of Receipt under such Customer's service agreement. In addition, subject to the execution of appropriate agreements, Pipeline is willing to transport liquids associated with the gas produced and tendered for transportation hereunder.

ARTICLE VI

ADDRESSES

Except as herein otherwise provided or as provided in the General Terms and Conditions of Pipeline's FERC Gas Tariff, any notice, request, demand, statement, bill or payment provided for in this Service Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when mailed by registered, certified, or regular mail to the post office address of the parties hereto, as the case may be, as follows:

(a) Pipeline: TEXAS EASTERN TRANSMISSION CORPORATION
5400 Westheimer Court
Houston, TX 77056-5310

(b) Customer: PHILADELPHIA GAS WORKS
GAS ACQUISITiON & FEDERAL REGULATORY AFFAIRS DEPT.
800 W. MONTGOMERY AVENUE
PHILADELPHIA, PA 19122

or such other address as either party shall designate by formal written notice.

ARTICLE VII

ASSIGNMENTS

Any Company which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of Customer, or of Pipeline, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Service Agreement; and either Customer or Pipeline may assign or pledge this Service Agreement under the provisions of any mortgage, deed of trust, indenture, bank credit agreement, assignment, receivable sale, or similar instrument which it has executed or may execute hereafter; otherwise, neither Customer nor Pipeline shall assign this Service Agreement or any of its rights hereunder unless it first shall have obtained the consent thereto in writing of the other;

provided further, however, that neither Customer nor Pipeline shall be released from its obligations hereunder without the consent of the other. In addition, Customer may assign its rights to capacity pursuant to Section 3.14 of the General Terms and Conditions. To the extent Customer so desires, when it releases capacity pursuant to Section 3.14 of the General Terms and Conditions, Customer may require privity between Customer and the Replacement Customer, as further provided in the applicable Capacity Release Umbrella Agreement.

ARTICLE VIII

INTERPRETATION

The interpretation and performance of this Service Agreement shall be in accordance with the laws of the State of Texas without recourse to the law governing conflict of laws.

This Service Agreement and the obligations of the parties are subject to all present and future valid laws with respect to the subject matter, State and Federal, and to all valid present and future orders, rules, and regulations of duly constituted authorities having jurisdiction.

ARTICLE IX

CANCELLATION OF PRIOR CONTRACT(S)

This Service Agreement supersedes and cancels, as of the effective date of this Service Agreement, the contract(s) between the parties hereto as described below:

service agreement dated December 15, 1998, between Pipeline and Customer under Pipeline's Rate Schedule CDS (Pipeline's Contract No. 800232R).

SERVICE AGREEMENT
FOR RATE SCHEDULE CDS
(Continued)

WITNESS WHEREOF, the parties hereto have caused this Service Agreement to be signed by their respective Presidents, Vice Presidents or other duly authorized agents and their respective corporate seals to be hereto affixed and attested by their respective Secretaries or Assistant Secretaries, the day and year first above written.

TEXAS EASTERN TRANSMISSION CORPORATION

By _____ Pres

ATTEST:

Beverly J Site
Assistant Secretary

PHILADELPHIA GAS WORKS*

By _____ VP

ATTEST:

_____

*PHILADELPHIA GAS WORKS, by the Philadelphia Facilities Management Corporation in its capacity as manager and operator of the city-owned Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended

800232

Contract #800232R

R1A1

EXHIBIT A, TRANSPORTATION PATHS
FOR BILLING PURPOSES, DATED 12/31/1999,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE CDS
BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("Pipeline")
AND PHILADELPHIA GAS WORKS ("Customer"), DATED 12/31/1999:

(1) Customer's firm Point(s) of Receipt:

Point of Receipt	Description	Maximum Daily Receipt Obligation (plus Applicable Shrinkage)	Measurement Responsibilities	Owner	Operator
None					

(2) Customer shall have Pipeline's Master Receipt Point List ("MRPL"). Customer hereby agrees that Pipeline's MRPL as revised and published by Pipeline from time to time is incorporated herein by reference.

Customer hereby agrees to comply with the Receipt Pressure Obligation as set forth in Section 6 of Pipeline's General Terms and Conditions at such Point(s) of Receipt.

Transportation Path	Transportation Path Quantity (Dth/D)
M1 to M3	75000

SIGNED FOR IDENTIFICATION

PIPELINE: _____ JMM

CUSTOMER: _____

SUPERSEDES EXHIBIT A DATED: _____

800232R4

Contract #:800232R1
R1 B1

EXHIBIT B, POINT(S) OF DELIVERY, DATED 12/31/1999,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE CDS
BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("Pipeline"), AND
PHILADELPHIA GAS WORKS ("Customer"),
DATED 12/31/1999:

	Point of Delivery	Description	Maximum Daily Delivery Obligation (dth)	Delivery Pressure Obligation	Measurement Responsibilities	Owner	Operator
1.	70030	PHILADELPHIA GAS WORKS - POINT BREEZE,PA PHILADELPHIA CO., PA	75,000	100 POUNDS PER SQUARE INCH GAUGE	TX EAST TRAN	TX EAST TRAN	PHIL GAS WKS
2.	70034	PHILADELPHIA GAS WORKS - LEVICK ST., PA MONTGOMERY CO., PA	75,000	100 POUNDS PER SQUARE INCH GAUGE	TX EAST TRAN	TX EAST TRAN	PHIL GAS WKS
3.	71682	PHILADELPHIA GAS WORKS PENROSE (EASTWICK)-PHILADEL PHILADELPHIA CO., PA	5,000	100 POUNDS PER SQUARE INCH GAUGE	TX EAST TRAN	TX EAST TRAN	PHIL GAS WKS
4.	79513	SS-1 STORAGE POINT	26,262 04/01-10/31 26,262 11/01-03/31	N/A	N/A	N/A	N/A
5.	73060	HARKNESS PHILADELPHIA PHILADELPHIA CO., PA	49,000	125 POUNDS PER SQUARE INCH GAUGE	TX EAST TRAN	TX EAST TRAN	PHIL GAS WKS

provided, however, that until changed by a subsequent Agreement between Pipeline and Customer, Pipeline's aggregate maximum daily delivery obligations under this and all other firm Service Agreements existing between Pipeline and Customer, shall in no event exceed the following:

800232R6

Contract #:800232R1

EXHIBIT B, POINT(S) OF DELIVERY (Continued)
PHILADELPHIA GAS WORKS

Point of Delivery	Aggregate Maximum Daily Delivery Obligation (dth)
No.1	92,073 12/01-02/28 101,073 03/01-11/30
No.2	137,310
No.3	5,000
No.4	26,262
No.5	49,000

and further provided, however, that Pipeline's maximum daily delivery obligation shall not exceed 101,073 dth in the aggregate at Points of Delivery 70030 and 73060.

SIGNED FOR IDENTIFICATION

PIPELINE: _____ JMM

CUSTOMER: _____ KAT

SUPERSEDES EXHIBIT B DATED: December 15, 1998

Contract #:800232R

R1C1

EXHIBIT C, ZONE BOUNDARY ENTRY QUANTITY AND ZONE BOUNDARY EXIT QUANTITY, DATED 12/31/1999, TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE CDS BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("PIPELINE") AND PHILADELPHIA GAS WORKS ("CUSTOMER"), DATED 12/31/1999:

ZONE BOUNDARY ENTRY QUANTITY
Dth/D

To

FROM	STX	ETX	WLA	ELA	M1-24	M1-30	M1-TXG	M1-TGC	M2-24	M2-30	M2-TXG	M2-TGC	M2	M3
STX								2127						
ETX					9040		3218							
WLA							979	2127						
ELA						58727								
M1-24									9040					
M1-30										58727				
M1-TXG											4198			
M1-TGC												4254		
M2-24														
M2-30														
M2-TXG														
M2-TGC														
M2														75000
M3														

800232R4

Contract #:800232R

EXHIBIT C (Continued)
PHILADELPHIA GAS WORKS

ZONE BOUNDARY EXIT QUANTITY
Dth/D

To

FROM	STX	ETX	WLA	ELA	M1-24	M1-30	M1-TXG	M1-TGC	M2-24	M2-30	M2-TXG	M2-TGC	M2	M3
STX														
ETX														
WLA														
ELA														
M1-24									9040					
M1-30										58727				
M1-TXG											4198			
M1-TGC												4254		
M2-24														
M2-30														
M2-TXG														
M2-TGC														
M2														75000
M3														

SIGNED FOR IDENTIFICATION:

PIPELINE: Hredcw JMM

CUSTOMER: Gary White LAC

SUPERCEDES EXHIBIT C DATED _____

THIS AGREEMENT entered into this 14th day of December, 1953, by and between TRANSCONTINENTAL GAS PIPE LINE CORPORATION, a Delaware Corporation, hereinafter referred to as "Seller", first party, and THE UNITED GAS IMPROVEMENT COMPANY, hereinafter referred to as "Buyer", second party,

W I T N E S S E T H :

WHEREAS, Seller has entered into an agreement with Texas Eastern Transmission Corporation (Texas Eastern), dated December 8, 1953, providing for the delivery of natural gas to Seller from the Oakford Storage Field, Westmoreland County, Pennsylvania, during the period of November 16th through April 15th and for the return to storage of an equivalent quantity of natural gas during the period of April 16th through November 15th of each year, and Seller has or can provide capacity for the delivery to and the return by Buyer of certain quantities of natural gas during such respective periods; and

WHEREAS, Buyer desires to receive delivery of certain quantities of such natural gas during the period of November 16th through April 15th of each year, and to return equivalent quantities of natural gas to storage during the period of April 16th through November 15th of each year as hereinafter provided;

NOW, THEREFORE, Seller and Buyer agree as follows:

ARTICLE I

GOVERNMENTAL AUTHORIZATION
AND CONSTRUCTION OF FACILITIES

Seller and Buyer agree to use due diligence to obtain

all necessary permits, licenses and approvals from regulatory bodies having jurisdiction, particularly including a Certificate of Public Convenience and Necessity satisfactory to Seller.

If Seller does not obtain such necessary permits, licenses and approvals from regulatory bodies having jurisdiction on or before April 30, 1954, then either party may terminate this Agreement by giving the other party notice of its intentions to terminate this Agreement within ten (10) days thereof.

ARTICLE II

TERM OF AGREEMENT

Subject to the provisions of Article I hereof, this Agreement shall be effective on November 1, 1954. Natural gas service rendered hereunder shall commence on November 16, 1954, and continue for a period of twenty (20) contract years and thereafter until terminated either by Seller or Buyer upon twelve (12) months prior written notice to the other specifying a termination date at the end of such period or any yearly period thereafter, provided, however, that either party may cancel this Agreement in the event the said agreement of December 8, 1953, between Seller and Texas Eastern is cancelled.

ARTICLE III

CONTRACT DEMAND AND ANNUAL CONTRACT QUANTITY

Subject to the terms and provisions of this Agreement, Seller, during the period November 16th through April 15th, inclusive, of each contract year, agrees to sell and deliver to Buyer such volumes of natural gas as Buyer shall specify up to the following maximum daily quantities:

The period from November 16 through February 16,	5,111 Mcf per day;
Commencing February 17 the Maximum Daily Quantity shall decrease each successive day by 96 Mcf per day until March 1, on which date the Maximum Daily Quantity shall be	3,828 Mcf per day;
Commencing March 2 the Maximum Daily Quantity shall decrease each successive day by 77 Mcf per day until March 16, on which date the Maximum Daily Quantity shall be	2,680 Mcf per day;
Commencing March 17 the Maximum Daily Quantity shall decrease each successive day by 114 Mcf per day until April 1, and for the period from April 1 through April 15, the Maximum Daily Quantity shall be	957 Mcf per day;

provided, that Seller shall have no obligation to deliver to Buyer during each contract year a volume of natural gas in excess of the following total quantities during the periods hereinafter set forth:

From November 16 through February 15, not in excess of	348,204 Mcf
From November 16 through March 15, not in excess of	432,729 Mcf
From November 16 through April 15, not in excess of	459,372 Mcf

For the purpose of computing the demand charge in Seller's Rate Schedule S-2, the foregoing maximum daily quantity of 5,111 Mcf shall constitute the Contract Storage Demand of Buyer, and Buyer agrees to pay Seller therefor as provided in Article V hereof.

The term "contract year" as used in this Contract and in Seller's Rate Schedule S-2 shall mean a period commencing on the sixteenth day of November of each calendar year of the term hereof and continuing through the next ensuing fifteenth day of November.

In the event that Seller fails or is unable to commence deliveries hereunder by November 16, 1954, but commences deliveries

hereunder during any of the periods thereafter as hereinafter set forth, Buyer agrees to take and pay for, or pay for whether taken or not, pursuant to Section 4 of Seller's Rate Schedule S-2, quantities of natural gas, as follows:

If deliveries commence after November 16, 1954, but before December 1, 1954, during the period December 1, 1954, through April 15, 1955	413,435 Mcf
If deliveries commence after December 1, 1954, but before December 16, 1954, during the period December 16, 1954, through April 15, 1955	385,873 Mcf
If deliveries commence after December 16, 1954, but before January 1, 1955, during the period January 1, 1955, through April 15, 1955	330,748 Mcf
If deliveries commence after January 1, 1955, but before January 16, 1955, during the period January 16, 1955, through April 15, 1955	275,624 Mcf
If deliveries commence after January 16, 1955, but before February 1, 1955, during the period February 1, 1955, through April 15, 1955	192,936 Mcf
If deliveries commence after February 1, 1955, but before February 16, 1955, during the period February 16, 1955, through April 15, 1955	110,249 Mcf
If deliveries commence after February 16, 1955, but before March 1, 1955, during the period March 1, 1955, through April 15, 1955	68,905 Mcf
If deliveries commence after March 1, 1955, but before March 16, 1955, during the period March 16, 1955, through April 15, 1955	27,562 Mcf

ARTICLE IV

POINTS OF DELIVERY
AND DELIVERY PRESSURE

Seller shall deliver natural gas hereunder to Buyer at the following Points of Delivery and at a pressure of not less than one hundred (100) pounds per square inch gauge:

Oreland Meter Station, Ashmead Road, Pennsylvania.

Meter Station 030 Point Breeze, Pennsylvania.

Meter Station 034 Levick Street, Pennsylvania.

ARTICLE V

PRICE

Commencing on the effective date hereof Buyer shall pay Seller for all natural gas service rendered hereunder in accordance with Seller's Rate Schedule S-2 as filed with the Federal Power Commission, and as same may be legally amended or superseded.

This Agreement in all respects shall be and remain subject to the applicable provisions of Seller's Rate Schedule S-2, which is made a part hereof by reference.

ARTICLE VI

MISCELLANEOUS

1. The subject headings of the Articles of this Agreement are inserted for the purpose of convenient reference and are not intended to be a part of this Agreement nor to be considered in any interpretation of the same.

This Agreement supersedes and cancels as of the effective date hereof the following contracts between the parties hereto for the sale of natural gas by Seller to the Buyer:

NONE

3. No waiver by either party of any one or more defaults by the other in the performance of any provisions of this Agreement

shall operate or be construed as a waiver of any future default or defaults, whether of a like or different character.

4. It is agreed by Buyer and Seller that this Agreement is entered into pursuant to the provisions of Paragraph 2 of Article IV and subject to the provisions of Article III of the Gas Sales Contract between Transcontinental Gas Pipe Line Corporation and The Philadelphia Gas Works Company (to which The United Gas Improvement Company, Buyer herein, is successor by merger) and, any provision hereof to the contrary notwithstanding, the term of this Agreement shall not under any circumstances extend beyond the date when the said Gas Sales Contract dated as January 1, 1951, as the same may be amended, superseded or extended by agreement of the parties, shall have been terminated.

5. This Agreement shall be interpreted, performed, and enforced in accordance with the laws of the State of Pennsylvania.

6. This Agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed by their respective Presidents or Vice Presidents thereunto duly authorized and have caused their respective corporate seals to be hereunto affixed and attested by their

respective Secretaries or Assistant Secretaries the day and year above written.

ATTEST:

TRANSCONTINENTAL GAS PIPE LINE CORPORATION

Secretary

By _____
President

SELLER

ATTEST:

THE UNITED GAS IMPROVEMENT COMPANY

Secretary

By _____
Vice - President

BUYER

21 0289 002

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AMENDMENT TO SERVICE AGREEMENT

THIS AMENDMENT ("Amendment") is entered into this 16 day of June, 2011 by and between TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC, a Delaware limited liability company, hereinafter referred to as "Seller", first party, and PHILADELPHIA GAS WORKS, hereinafter referred to as "Buyer", second party.

WITNESSETH

WHEREAS, Seller and Buyer entered into that certain Service Agreement dated April 3, 2001 under Seller's Rate Schedule WSS-Open Access pursuant to which Seller provides firm storage service for Buyer of a Storage Capacity Quantity of 3,335,909 dekatherms (Seller's Contract #1038582, hereinafter referred to as "the Service Agreement"); and

WHEREAS, Seller submitted the filing to reduce the certificated maximum daily deliverability at the Washington Storage Field on December 6, 2010 in Docket No. CP11-45, and received Commission order authorizing the abandonment on March 30, 2011 to be effective May 1, 2011; and

WHEREAS, Seller and Buyer now agree to amend Buyer's Storage Demand Quantity to Buyer's proportionate reduced delivery capability at the Washington Storage Field.

NOW THEREFORE, Seller and Buyer hereby agree to amend the Service Agreement as follows:

1. Article I of the Service Agreement is hereby deleted in its entirety and replaced by the following:

"ARTICLE I
SERVICE TO BE RENDERED

Subject to the terms and provisions of this agreement and of Seller's Rate Schedule WSS-Open Access, Seller agrees to inject into storage for Buyer's account, store and withdraw from storage, quantities of natural gas as follows:

To withdraw from storage up to a maximum quantity on any day of 35,115 dt, which quantity shall be Buyer's Storage Demand Quantity, or such greater daily quantity, as applicable from time to time, pursuant to the terms and conditions of Seller's Rate Schedule WSS-Open Access.

To receive and store up to a total quantity at any one time of 3,335,909 dt, which quantity shall be Buyer's Storage Capacity Quantity."

2. This Amendment shall be effective on May 1, 2011.

3. Except as herein amended, the Service Agreement shall remain in full force and effect pursuant to the terms thereof.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be signed by their respective officers or representative thereunto duly authorized.

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

By _____
Paul F. Egner III
Director, Customer Services

PHILADELPHIA GAS WORKS

By _____
Printed Name DOUGLAS A. MOSER
Title SR. VICE PRESIDENT GAS MANAGEMENT

Contract No. 3.8582

21 0289 000

SERVICE AGREEMENT

between

TRANSCONTINENTAL GAS PIPE LINE CORPORATION

and

PHILADELPHIA GAS WORKS

DATED

April 1, 2001

SERVICE AGREEMENT UNDER RATE SCHEDULE WSS-OPEN ACCESS

THIS AGREEMENT entered into this 3rd day of April, 2001, by and between TRANSCONTINENTAL GAS PIPE LINE CORPORATION, a Delaware corporation, hereinafter referred to as "Seller," first party, and PHILADELPHIA GAS WORKS*, hereinafter referred to as "Buyer," second party,

WITNESSETH:

WHEREAS, Seller has made available to Buyer storage capacity from its Washington Storage Field under Part 284 of the Commission's Regulations; and Buyer desires to purchase and Seller desires to sell natural gas storage service under Seller's Rate Schedule WSS-Open Access as set forth herein;

NOW, THEREFORE, Seller and Buyer agree as follows:

ARTICLE I
SERVICE TO BE RENDERED

Subject to the terms and provisions of this agreement and of Seller's Rate Schedule WSS–Open Access, Seller agrees to inject into storage for Buyer's account, store and withdraw from storage, quantities of natural gas as follows:

To withdraw from storage up to maximum quantity on any day of 39,246 dt, which quantity shall be Buyer's Storage Demand Quantity, as applicable from time to time, pursuant to the terms and conditions of Seller's Rate Schedule WSS-Open Access.

To receive and store up to a total quantity at any one time of 3,335,909 dt, which quantity shall be Buyer's Storage Capacity Quantity.

ARTICLE II
POINT(S) OF RECEIPT AND DELIVERY

The Point of Receipt for injection of natural gas delivered to Seller by Buyer and the Point

* Philadelphia Gas Works by the Philadelphia Facilities Management Corporation, a non-profit Pennsylvania corporation, solely in its capacity as operator and manager of the city-owned Philadelphia Gas Works, under and pursuant to an agreement with the City of Philadelphia, dated December 29, 1972, as amended.

of Delivery for withdrawal of natural gas delivered by Seller to Buyer under this agreement shall be Seller's Washington Storage Field located at Seller's Station 54 in St. Landry Parish, Louisiana. Gas delivered or received in Seller's pipeline system shall be at the prevailing pressure not to exceed the maximum allowable operating pressure.

ARTICLE III
TERM OF AGREEMENT

This agreement shall be effective April 1, 2001 and shall remain in force and effect until March 31, 2002, and year to year thereafter, subject to termination by either party upon six months written notice to the other party.

ARTICLE IV
RATE SCHEDULE AND PRICE

Buyer shall pay Seller for natural gas service rendered hereunder in accordance with Seller's Rate Schedule WSS–Open Access, and the applicable provisions of the General Terms and Conditions of Seller's FERC Gas Tariff as filed with the Federal Energy Regulatory Commission, and as the same may be amended or superseded from time to time. Such Rate Schedule and General Terms and Conditions are by this reference made a part hereof. In the event Buyer and Seller mutually agree to a negotiated rate pursuant to the provisions of Section 53 of the General Terms and Conditions and specified term for service hereunder, provisions governing such negotiated rate (including surcharges) and term shall be set forth on Exhibit A to the service agreement.

ARTICLE V
MISCELLANEOUS

1. The subject headings of the Articles of this agreement are inserted for the purpose of convenient reference and are not intended to be a part of this agreement nor to be considered in any interpretation of the same.

2. This agreement supersedes and cancels as of the effective date hereof the following contracts between the parties hereto: Service Agreement under Rate Schedule WSS dated August 1,1991 (Seller's system contract number 0.0790).

3. No waiver by either party of any one or more defaults by the other in the performance of any provisions of this agreement shall operate or be construed as a waiver of any future default or

defaults, whether of a like or different character.

4. This agreement shall be interpreted, performed and enforced in accordance with the laws of the State of Texas.

5. This agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be signed by their respective officers or representatives thereunto duly authorized.

Attest:

Abby L. Pozefsky,
Assistant Secretary

TRANSCONTINENTAL GAS PIPE LINE CORPORATION (Seller)

By _____
Frank J. Ferazzi - Vice President
Customer Service and Rates

PHILADELPHIA GAS WORKS
(Buyer)

By Sumar Krishnchand

Title: President & CEO

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EXHIBIT A

Specification of Negotiated Rate and Term

None

Contract #: 331725

SERVICE AGREEMENT
FOR RATE SCHEDULE FTS-7

This Service Agreement, made and entered into this 7th day of August, 1996, by and between TEXAS EASTERN TRANSMISSION CORPORATION, a Delaware Corporation (herein called "Pipeline") and PHILADELPHIA GAS WORKS, by the Philadelphia Facilities Management Corporation in its capacity as manager and operator of the city-owned Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended (herein called "Customer", whether one or more),

W I T N E S S E T H:

WHEREAS, Customer and Pipeline are parties to an executed service agreement under Pipeline's Rate Schedule FTS-7, Pipeline's Contract No. 331006, which specifies an MDQ of 7,470 dekatherms per day ("Dth/d"); and

WHEREAS, pursuant to the terms and conditions of Section 10 of Rate Schedule FTS-7, as approved by the Commission, Customer desires to increase its MDQ thereunder by 318 Dth/d; and

WHEREAS, subject to the terms and conditions set forth in the Precedent Agreement dated October 21, 1994 entered into by and between Customer and Pipeline ("Precedent Agreement") and the terms and conditions of this Service Agreement, Customer and Pipeline desire to supersede Pipeline's Contract No. 331006 by entering into this Service Agreement to reflect the additional firm transportation service as described above;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the parties do covenant and agree as follows:

ARTICLE I

SCOPE OF AGREEMENT

Subject to the terms, conditions and limitations hereof and of Pipeline's Rate Schedule FTS-7, Pipeline agrees to deliver on a firm basis for Customer's account quantities of gas up to the following quantity:

Maximum Daily Quantity (MDQ) 7,788 dth

Pipeline shall receive for Customer's account, at the Customer Point(s), for transportation hereunder daily quantities of gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the CNG Point(s), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall receive for Customer's account, at the CNG Point(s), for transportation hereunder daily quantities of gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the Customer Point(s), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall not be obligated to, but may at its discretion, receive at any Point of Receipt on any day a quantity of gas in excess of the applicable Maximum Daily Receipt Obligation (MDRO), plus Applicable Shrinkage, but shall not receive in the aggregate at all Points of Receipt on any day a quantity of gas in excess of the applicable MDQ, plus Applicable Shrinkage, as specified in the executed service agreement. Pipeline shall not be obligated to, but may at its discretion, deliver at any Point of Delivery on any day a quantity of gas in excess of the applicable Maximum Daily Delivery Obligation (MDDO), but shall not deliver in the aggregate at all Points of Delivery on any day a quantity of gas in excess of the applicable MDQ, as specified in the executed service agreement.

ARTICLE II

TERM OF AGREEMENT

The term of this Service Agreement shall commence on the date specified by Pipeline in Pipeline's written notice to Customer pursuant to Paragraph 3 of the Precedent Agreement which date will be the later of: (i) November 1, 1996; or (ii) the date that all of the conditions precedent set forth in Paragraph 6 of the Precedent Agreement have been satisfied or waived by mutual written agreement of the parties and Pipeline is ready and able to place the necessary facilities into gas service. In the event the Precedent Agreement is terminated in accordance with Paragraph 10 of the Precedent Agreement, then the term of this Service Agreement shall not commence and this Service Agreement shall be null and void. After commencement of the term of this Service Agreement, the term of this Service Agreement shall continue in force and effect until March 31, 2006, and year to year thereafter unless this Service Agreement is terminated as hereinafter provided. This Service Agreement may be terminated by either Pipeline or Customer upon twenty-four (24) months prior written notice to the other specifying a termination date of March 31, 2006 or any March 31 thereafter.

Subject to Section 22 of Pipeline's General Terms and Conditions and without prejudice to such rights, this Service Agreement may be terminated at any time by Pipeline in the event Customer fails to pay part or all of the amount of any bill for service hereunder and such failure continues for thirty (30) days after payment is due; provided, Pipeline gives thirty (30) days prior written notice to Customer of such termination and provided further such termination

shall not be effective if, prior to the date of termination, Customer either pays such outstanding bill or furnishes a good and sufficient surety bond guaranteeing payment to Pipeline of such outstanding bill. Notwithstanding the foregoing, service shall not be terminated unless and until Pipeline has received abandonment authority pursuant to Section 7 of the Natural Gas Act. Customer shall have the right to oppose Pipeline's application to the Federal Energy Regulatory Commission, or any successor agency, for such abandonment authority. For the 120 days following termination of this Service Agreement, Pipeline shall utilize its best efforts to provide Customer with such additional interruptible transportation service, to be provided pursuant to Rate Schedule IT-1 or successor of Rate Schedule IT-1, as is necessary for Customer to withdraw and receive delivery of all gas remaining in storage pursuant to CNG's Rate Schedule GSS.

Any portions of this Service Agreement necessary to correct or cash-out imbalances under this Service Agreement as required by the General Terms and Conditions of Pipeline's FERC Gas Tariff, Volume No. 1, shall survive the other parts of this Service Agreement until such time as such balancing has been accomplished.

ARTICLE III

RATE SCHEDULE

This Service Agreement in all respects shall be and remain subject to the applicable provisions of Rate Schedule FTS-7 and of the General Terms and Conditions of Pipeline's FERC Gas Tariff on file with the Federal Energy Regulatory Commission, all of which are by this reference made a part hereof.

Customer shall pay Pipeline for, all services rendered hereunder and for the availability of such service in the period stated, the applicable prices established under Pipeline's Rate Schedule FTS-7 as filed with the Federal Energy Regulatory Commission and as the same may be hereafter revised or changed.

Pipeline shall have the right from time to time, by the filing of a revised rate schedule, to increase or decrease the rates, to change the form of the applicable rate schedule and to take such other and further action with respect thereto without further consent by Customer and such changes in rates and other changes shall become the Rate Schedule and Terms and Conditions under which the gas shall be transported hereunder. Customer shall have the right to oppose any of the foregoing and to request reduction in rates to the extent that Customer is legally permitted to do so under the Natural Gas Act.

SERVICE AGREEMENT
FOR RATE SCHEDULE FTS-7
(Continued)

ARTICLE IV

CUSTOMER POINT(S) AND CNG POINT(S)

Natural gas to be received by Pipeline for Customer's account for service hereunder shall be received on the outlet side of the measuring station at or near the following designated Customer Point(s) or CNG Point(s), and natural gas to be delivered by Pipeline for Customer's account hereunder shall be delivered at the outlet side of the measuring stations at or near the following designated CNG Point(s) or Customer Point(s), in accordance with the Maximum Daily Receipt Obligation (MDRO) plus Applicable Shrinkage, Maximum Daily Delivery Obligation (MDDO), receipt and delivery pressure obligations and measurement responsibilities indicated below for each:

	Customer Point	Maximum Daily Obligation	Pressure Obligation	Measurement Responsibilities
1.	In the City of Philadelphia, Pennsylvania, and designated by Pipeline as Measuring Station 70030	7,788 dth	100 psig	Pipeline
2.	On the Montgomery-Philadelphia County Line, in Philadelphia, Pennsylvania and designated by Pipeline as Measuring Station 70034	7,788 dth	100 psig	Pipeline

	CNG Point	Maximum Daily Obligation	Pressure Obligation	Measurement Responsibilities
1.	In Westmoreland County, Pennsylvania, and designated by Pipeline as Measuring Station 75082.	7,788 dth	At such pressure necessary to enter Pipeline's facilities not to exceed the Maximum Allowable Operating Pressure.	Pipeline
2.	In Clinton County, Pennsylvania, and designated by Pipeline as Measuring Station 75931.	0 dth	At such pressure necessary to enter Pipeline's facilities not to exceed the Maximum Allowable Operating Pressure.	CNG Transmission

provided, however, receipt of gas by Pipeline for Customer's account at Customer Point(s) shall be accomplished solely by the displacement of gas quantities otherwise deliverable to Customer by Pipeline pursuant to other contractual arrangements between Pipeline and Customer, and which quantities shall be billed by Pipeline and paid by Customer as if such deliveries in fact occurred pursuant to the relevant contractual arrangements.

further provided, however, that until changed by a subsequent Agreement between Pipeline and Customer, Pipeline's aggregate maximum daily delivery obligations at each of the Customer Points described above, including Pipeline's maximum daily delivery obligations under this and all other firm Service Agreements existing between Pipeline and Customer, shall in no event exceed the following:

Customer Point	Aggregate Maximum Daily Delivery Obligation
No. 1	86,398 dth
No. 2	137,310 dth

and provided further that Pipeline shall have no obligation to deliver natural gas designated as MDQ at any Customer Point other than those listed below:

Customer Point

Measuring Station 70030, City of Philadelphia, Pennsylvania, up to 4,053 dth/d
and
Measuring Station 70034, Montgomery County, Pennsylvania, up to 3,735 dth/d

ARTICLE V

QUALITY

All natural gas tendered to Pipeline for Customer's account shall conform to the quality specifications set forth in Section 5 of Pipeline's General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept natural gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such gas as necessary to comply with such quality specifications.

ARTICLE VI

ADDRESSES

Except as herein otherwise provided or as provided in the General Terms and Conditions of Pipeline's FERC Gas Tariff, any notice, request, demand, statement, bill or payment provided for in this Service Agreement, or any notice which any party may desire to

give to the other, shall be in writing and shall be considered as duly delivered when mailed by registered, certified, or regular mail to the post office address of the parties hereto, as the case may be, as follows:

(a) Pipeline: TEXAS EASTERN TRANSMISSION CORPORATION
5400 Westheimer Court
Houston, TX 77056-5310

(b) Customer: Philadelphia Gas Works
1800 North Ninth Street
Philadelphia, PA 19122

or such other address as either party shall designate by formal written notice.

ARTICLE VII

ASSIGNMENTS

Any Company which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of Customer, or of Pipeline, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Service Agreement; and either Customer or Pipeline may assign or pledge this Service Agreement under the provisions of any mortgage, deed of trust, indenture, bank credit agreement, assignment, receivable sale, or similar instrument which it has executed or may execute hereafter; otherwise, neither Customer nor Pipeline shall assign this Service Agreement or any of its rights hereunder unless it first shall have obtained the consent thereto in writing of the other; provided further, however, that neither Customer nor Pipeline shall be released from its obligations hereunder without the consent of the other.

ARTICLE VIII

INTERPRETATION

The interpretation and performance of this Service Agreement shall be in accordance with the laws of the State of Texas without recourse to the law governing conflict of laws.

This Service Agreement and the obligations of the parties are subject to all present and future valid laws with respect to the subject matter, State and Federal, and to all valid present and future orders, rules, and regulations of duly constituted authorities having jurisdiction.

ARTICLE IX

AUTHORITY FOR PAYMENT

It is understood and agreed that in entering into and performing this Agreement, PFMC acts solely in its capacity as operator and manager of the municipally owned Philadelphia Gas Works pursuant to an agreement with the City of Philadelphia, dated December 29, 1972, as amended, and not otherwise; and further that any and all payments required to be made in connection with this agreement shall be made solely from the revenues of Philadelphia Gas Works.

ARTICLE X

CANCELLATION OF PRIOR CONTRACT(S)

This Service Agreement supersedes and cancels, as of the effective date of this Service Agreement, the contract(s) between the parties hereto as described below:

Service Agreement dated June 1, 1993, between Pipeline and Customer under Pipeline's Rate Schedule FTS-7 (Pipeline's Contract No. 331006).

SERVICE AGREEMENT
FOR RATE SCHEDULE FTS-7
(Continued)

IN WITNESS WHEREOF, the parties hereto have caused this Service Agreement to be signed by their respective Presidents, Vice Presidents or other duly authorized agents and their respective corporate seals to be hereto affixed and attested by their respective Secretaries or Assistant Secretaries, the day and year first above written.

TEXAS EASTERN TRANSMISSION CORPORATION

By Robert B. Evans
Vice President

ATTEST:

Robert W. Reed

ROBERT W. REED
CORPORATE SECRETARY

PHILADELPHIA GAS WORKS*

By Gregory D. Martin
GREGORY D. MARTIN
EXECUTIVE VICE PRESIDENT &
CHIEF OPERATING OFFICER

ATTEST:

Sydney M. Avent

*PHILADELPHIA GAS WORKS, by the Philadelphia Facilities Management Corporation in its capacity as manager and operator of the city-owned Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended

SERVICE AGREEMENT
FOR RATE SCHEDULE FT-1

This Service Agreement, made and entered into this 15th day of December, 1998, by and between TEXAS EASTERN TRANSMISSION CORPORATION, a Delaware Corporation (herein called "Pipeline") and PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT (herein called "Customer", whether one or more),

W I T N E S S E T H:

WHEREAS, Pipeline and Customer are parties to an executed service agreement dated February 29, 1996, under Pipeline's Rate Schedule FT-1 (Pipeline's Contract No. 800514); and

WHEREAS, Pipeline and Customer desire to enter into this Service Agreement to supersede Pipeline's currently effective Contract No. 800514;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the parties do covenant and agree as follows:

ARTICLE I

SCOPE OF AGREEMENT

Subject to the terms, conditions and limitations hereof, of Pipeline's Rate Schedule FT-1, and of the General Terms and Conditions, transportation service hereunder will be firm. Subject to the terms, conditions and limitations hereof and of Pipeline's Rate Schedule FT-1, Pipeline agrees to deliver for Customer's account quantities of natural gas up to the following quantity:

Maximum Daily Quantity (MDQ) 18,000 dth

Pipeline shall receive for Customer's account, at those points on Pipeline's system as specified in Article IV herein or available to Customer pursuant to Section 14 of the General Terms and Conditions (hereinafter referred to as Point(s) of Receipt) for transportation hereunder daily quantities of gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at those points on Pipeline's system as specified in Article IV herein or available to Customer pursuant to Section 14 of the General Terms and Conditions (hereinafter referred to as Point(s) of Delivery), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall not be obligated to, but may at its discretion, receive at any Point of Receipt on any day a quantity of gas in excess of the applicable Maximum Daily Receipt Obligation (MDRO), plus Applicable Shrinkage, but shall not receive in the aggregate at all Points of Receipt on any day a quantity of gas in excess of the applicable MDQ, plus Applicable Shrinkage. Pipeline shall not be obligated to, but may at its discretion, deliver at any Point of Delivery on any day a quantity of gas in excess of the applicable Maximum Daily Delivery Obligation (MDDO), but shall not deliver in the aggregate at all Points of Delivery on any day a quantity of gas in excess of the applicable MDQ.

In addition to the MDQ and subject to the terms, conditions and limitations hereof, Rate Schedule FT-1 and the General Terms and Conditions, Pipeline shall deliver within the Access Area under this and all other service agreements under Rate Schedules CDS, FT-1, and/or SCT, quantities up to Customer's Operational Segment Capacity Entitlements, excluding those Operational Segment Capacity Entitlements scheduled to meet Customer's MDQ, for Customer's account, as requested on any day.

ARTICLE II

TERM OF AGREEMENT

The term of this Service Agreement shall commence the first day of the first month after Customer fully executes this Service Agreement and shall continue in force and effect until October 31, 2003 and year to year thereafter unless this Service Agreement is terminated as hereinafter provided. This Service Agreement may be terminated by either Pipeline or Customer upon two (2) years prior written notice to the other specifying a termination date of October 31, 2003 or any October 31 thereafter. Subject to Section 22 of Pipeline's General Terms and Conditions and without prejudice to such rights, this Service Agreement may be terminated at any time by Pipeline in the event Customer fails to pay part or all of the amount of any bill for service hereunder and such failure continues for thirty (30) days after payment is due; provided, Pipeline gives thirty (30) days prior written notice to Customer of such termination and provided further such termination shall not be effective if, prior to the date of termination, Customer either pays such outstanding bill or furnishes a good and sufficient surety bond guaranteeing payment to Pipeline of such outstanding bill.

THE TERMINATION OF THIS SERVICE AGREEMENT WITH A FIXED CONTRACT TERM OR THE PROVISION OF A TERMINATION NOTICE BY CUSTOMER TRIGGERS PREGRANTED ABANDONMENT UNDER SECTION 7 OF THE NATURAL GAS ACT AS OF THE EFFECTIVE DATE OF THE TERMINATION. PROVISION OF A TERMINATION NOTICE BY PIPELINE ALSO TRIGGERS CUSTOMER'S RIGHT OF FIRST REFUSAL UNDER SECTION 3.13 OF THE GENERAL TERMS AND CONDITIONS ON THE EFFECTIVE DATE OF THE TERMINATION.

Any portions of this Service Agreement necessary to correct or cash-out imbalances under this Service Agreement as required by the General Terms and Conditions of Pipeline's FERC Gas Tariff, Volume No. 1, shall survive the other parts of this Service Agreement until such time as such balancing has been accomplished.

ARTICLE III

RATE SCHEDULE

This Service Agreement in all respects shall be and remain subject to the applicable provisions of Rate Schedule FT-1 and of the General Terms and Conditions of Pipeline's FERC Gas Tariff on file with the Federal Energy Regulatory Commission, all of which are by this reference made a part hereof.

Customer shall pay Pipeline, for all services rendered hereunder and for the availability of such service in the period stated, the applicable prices established under Pipeline's Rate Schedule FT-1 as filed with the Federal Energy Regulatory Commission, and as same may hereafter be legally amended or superseded.

Customer agrees that Pipeline shall have the unilateral right to file with the appropriate regulatory authority and make changes effective in (a) the rates and charges applicable to service pursuant to Pipeline's Rate Schedule FT-1, (b) Pipeline's Rate Schedule FT-1 pursuant to which service hereunder is rendered or (c) any provision of the General Terms and Conditions applicable to Rate Schedule FT-1. Notwithstanding the foregoing, Customer does not agree that Pipeline shall have the unilateral right without the consent of Customer subsequent to the execution of this Service Agreement and Pipeline shall not have the right during the effectiveness of this Service Agreement to make any filings pursuant to Section 4 of the Natural Gas Act to change the MDQ specified in Article I, to change the term of the agreement as specified in Article II, to change Point(s) of Receipt specified in Article IV, to change the Point(s) of Delivery specified in Article IV, or to change the firm character of the service hereunder. Pipeline agrees that Customer may protest or contest the aforementioned filings, and Customer does not waive any rights it may have with respect to such filings.

ARTICLE IV

POINT(S) OF RECEIPT AND POINT(S) OF DELIVERY

The Point(s) of Receipt and Point(s) of Delivery at which Pipeline shall receive and deliver gas, respectively, shall be specified in Exhibit(s) A and B of the executed service

agreement. Customer's Zone Boundary Entry Quantity and Zone Boundary Exit Quantity for each of Pipeline's zones shall be specified in Exhibit C of the executed service agreement.

Exhibit(s) A, B and C are hereby incorporated as part of this Service Agreement for all intents and purposes as if fully copied and set forth herein at length.

ARTICLE V

QUALITY

All natural gas tendered to Pipeline for Customer's account shall conform to the quality specifications set forth in Section 5 of Pipeline's General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept natural gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such gas as necessary to comply with such quality specifications. Customer shall execute or cause its supplier to execute, if such supplier has retained processing rights to the gas delivered to Customer, the appropriate agreements prior to the commencement of service for the transportation and processing of any liquefiable hydrocarbons and any PVR quantities associated with the processing of gas received by Pipeline at the Point(s) of Receipt under such Customer's service agreement. In addition, subject to the execution of appropriate agreements, Pipeline is willing to transport liquids associated with the gas produced and tendered for transportation hereunder.

ARTICLE VI

ADDRESSES

Except as herein otherwise provided or as provided in the General Terms and Conditions of Pipeline's FERC Gas Tariff, any notice, request, demand, statement, bill or payment provided for in this Service Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when mailed by registered, certified, or regular mail to the post office address of the parties hereto, as the case may be, as follows:

(a) Pipeline: TEXAS EASTERN TRANSMISSION CORPORATION
5400 Westheimer Court
Houston, TX 77056-5310

(b) Customer: PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT
2600 Center Square West 15th St. & Market St.
Philadelphia, PA 19102-2126

or such other address as either party shall designate by formal written notice.

ARTICLE VII

ASSIGNMENTS

Any Company which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of Customer, or of Pipeline, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Service Agreement; and either Customer or Pipeline may assign or pledge this Service Agreement under the provisions of any mortgage, deed of trust, indenture, bank credit agreement, assignment, receivable sale, or similar instrument which it has executed or may execute hereafter; otherwise, neither Customer nor Pipeline shall assign this Service Agreement or any of its rights hereunder unless it first shall have obtained the consent thereto in writing of the other; provided further, however, that neither Customer nor Pipeline shall be released from its obligations hereunder without the consent of the other. In addition, Customer may assign its rights to capacity pursuant to Section 3.14 of the General Terms and Conditions. To the extent Customer so desires, when it releases capacity pursuant to Section 3.14 of the General Terms and Conditions, Customer may require privity between Customer and the Replacement Customer, as further provided in the applicable Capacity Release Umbrella Agreement.

ARTICLE VIII

INTERPRETATION

The interpretation and performance of this Service Agreement shall be in accordance with the laws of the State of Texas without recourse to the law governing conflict of laws.

This Service Agreement and the obligations of the parties are subject to all present and future valid laws with respect to the subject matter, State and Federal, and to all valid present and future orders, rules, and regulations of duly constituted authorities having jurisdiction.

ARTICLE IX

CANCELLATION OF PRIOR CONTRACT(S)

This Service Agreement supersedes and cancels, as of the effective date of this Service Agreement, the contract(s) between the parties hereto as described below:

service agreement dated February 29, 1996, between Pipeline and Customer under Pipeline's Rate Schedule FT-1 (Pipeline's Contract No. 800514).

IN WITNESS WHEREOF, the parties hereto have caused this Service Agreement to be signed by their respective Presidents, Vice Presidents or other duly authorized agents and their respective corporate seals to be hereto affixed and attested by their respective Secretaries or Assistant Secretaries, the day and year first above written.

TEXAS EASTERN TRANSMISSION CORPORATION

By _____ PMT

ATTEST:

_____

PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT

By _____

ATTEST:

_____

EXHIBIT A, TRANSPORTATION PATHS
FOR BILLING PURPOSES, DATED 12/15/98,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE FT-1
BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("Pipeline")
AND PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT ("Customer"), DATED 12/15/98:

(1) Customer's firm Point(s) of Receipt:

Point of Receipt	Description	Maximum Daily Receipt Obligation (plus Applicable Shrinkage)	Measurement Responsibilities	Owner	Operator
None					

(2) Customer shall have Pipeline's Master Receipt Point List ("MRPL"). Customer hereby agrees that Pipeline's MRPL as revised and published by Pipeline from time to time is incorporated herein by reference.

Customer hereby agrees to comply with the Receipt Pressure Obligation as set forth in Section 6 of Pipeline's General Terms and Conditions at such Point(s) of Receipt.

Transportation Path	Transportation Path Quantity (Dth/D)
M1 to M3	18,000

SIGNED FOR IDENTIFICATION

PIPELINE: _____ JMM

CUSTOMER: _____ 400

SUPERSEDES EXHIBIT A DATED: _____

Contract #:800514R

EXHIBIT B, POINT(S) OF DELIVERY, DATED 12/15/98,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE FT-1
BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("Pipeline"), AND
PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT ("Customer"),
DATED 12/15/98:

	Point of Delivery	Description	Maximum Daily Delivery Obligation (dth)	Delivery Pressure Obligation	Measurement Responsi-bilities	Owner	Operator
1.	70030	PHILADELPHIA GAS WORKS - POINT BREEZE, PA PHILADELPHIA CO., PA	18,000	100 POUNDS PER SQUARE INCH GAUGE	TX EAST TRAN	TX EAST TRAN	PHIL GAS WKS
2.	73060	HARKNESS PT. - PA PHILADELPHIA CO., PA	18,000	125 POUNDS PER SQUARE INCH GAUGE	TX EAST TRAN	TX EAST TRAN	PHIL GAS WKS

provided, however, that until changed by a subsequent Agreement between Pipeline and Customer, Pipeline's aggregate maximum daily delivery obligations under this and all other firm Service Agreements existing between Pipeline and Customer, shall in no event exceed the following:

EXHIBIT B, POINT(S) OF DELIVERY (Continued)
PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT

Point of Delivery	Aggregate Maximum Daily Delivery Obligation (dth)
No.1	36,000 12/01-02/28 21,000 03/01-11/30
No.2	36,000

and further provided, however, that Pipeline's maximum daily delivery obligation shall not exceed 36,000 dth in the aggregate at Points of Delivery 70030 and 73060.

SIGNED FOR IDENTIFICATION

PIPELINE: _____ JmM

CUSTOMER: _____ MF

SUPERSEDES EXHIBIT B DATED: _____

Contract #:800514R

EXHIBIT C, ZONE BOUNDARY ENTRY QUANTITY AND ZONE BOUNDARY EXIT QUANTITY,
DATED 12/15/98, TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE FT-1
BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("PIPELINE") AND
PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT ("CUSTOMER"), DATED 12/15/98:

ZONE BOUNDARY ENTRY QUANTITY
Dth/D

To

FROM	STX	ETX	WLA	ELA	M1-24	M1-30	M1-TXG	M1-TGC	M2-24	M2-30	M2-TXG	M2-TGC	M2	M3
STX														
ETX														
WLA														
ELA						9,360								
M1-24														
M1-30										18,000				
M1-TXG														
M1-TGC														
M2-24														
M2-30														
M2-TXG														
M2-TGC														
M2														18,000
M3														

Contract #:800514R

EXHIBIT C (Continued)
PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT
ZONE BOUNDARY EXIT QUANTITY
Dth/D

To

FROM	STX	ETX	WLA	ELA	M1-24	M1-30	M1-TXG	M1-TGC	M2-24	M2-30	M2-TXG	M2-TGC	M2	M3
STX														
ETX														
WLA														
ELA														
M1-24														
M1-30														
M1-TXG										18,000				
M1-TGC														
M2-24														
M2-30														
M2-TXG														
M2-TGC														
M2														
M3														18,000

SIGNED FOR IDENTIFICATION:

PIPELINE: _____ Jmm

CUSTOMER: _____

SUPERCEDES EXHIBIT C DATED _____

System Contract #.5001

92 1089 000

SERVICE AGREEMENT

between

TRANSCONTINENTAL GAS PIPE LINE CORPORATION

and

PHILADELPHIA GAS WORKS

DATED

August 1, 1991

PGW File #91-TRA-1-PS-1

FORM OF SERVICE AGREEMENT
(For Use Under Seller's Rate Schedule FT)

THIS AGREEMENT entered into this 1st day of August, 1991, by and between TRANSCONTINENTAL GAS PIPE LINE CORPORATION, a Delaware corporation, hereinafter referred to as "Seller", first party, and PHILADELPHIA GAS WORKS, hereinafter referred to as "Buyer," second party,

W I T N E S S E T H

WHEREAS, Seller and Buyer have agreed to convert Buyers firm sales service under Seller's PS Rate Schedule to firm transportation; and

WHEREAS, Seller and Buyer have agreed to terminate and abandon Buyer's existing PS firm sales service to permit such conversion; and

WHEREAS, Seller is agreeable as part of such conversion to receiving, transporting and redelivering or causing the redelivery of such gas as requested under the terms and conditions hereinafter set forth,

NOW, THEREFORE, Seller and Buyer agree as follows:

ARTICLE I
GAS TRANSPORTATION SERVICE

1. Subject to the terms and provisions of this agreement and of Seller's Rate Schedule FT, Buyer agrees to deliver or cause to be delivered to Seller gas for transportation and Seller agrees to receive, transport and redeliver natural gas to Buyer or for the account of Buyer, on a firm basis, up to the dekatherm equivalent of a Transportation Contract Quantity ("TCQ") of 1,900 Mcf per day.

2. Transportation service rendered hereunder shall not be subject to curtailment or interruption except as provided in Section 11 of the General Terms and Conditions of Seller's FERC Gas Tariff.

FORM OF SERVICE AGREEMENT
(For Use Under Seller's Rate Schedule FT)
(Continued)

ARTICLE II
POINT(S) OF RECEIPT

Buyer shall deliver or cause to be delivered gas at the Point(s) of receipt hereunder at a pressure sufficient to allow the gas to enter Seller's pipeline system at the varying pressures that may exist in such system from time to time; provided, however, that such pressure of the gas delivered or caused to be delivered by Buyer shall not exceed the maximum operating pressure(s) specified below. In the event the maximum operating pressure(s) of Seller's pipeline system, at the Point(s) of receipt hereunder, is from time to time increased or decreased, then the maximum allowable pressure(s) of the gas delivered or caused to be delivered by Buyer to Seller at the point(s) of receipt shall be correspondingly increased or decreased upon written notification of Seller to Buyer. The point(s) of receipt for natural gas received for transportation pursuant to this agreement shall be:

SEE Exhibit A, attached hereto, for points of receipt.

ARTICLE III
POINT(S) OF DELIVERY

Seller shall redeliver to Buyer or for the account of Buyer the gas transported hereunder at the following point(s) of delivery and at a pressure(s) of:

SEE Exhibit B, attached hereto, for points of delivery.

ARTICLE IV
TERM OF AGREEMENT

This agreement shall be effective as of August 1, 1991 and shall remain in force and effect until 8:00 a.m. Eastern Standard Time July 31, 2011 and thereafter until terminated by Seller or Buyer upon at least three (3) years written notice; provided, however, this agreement shall terminate immediately and, subject to the receipt of necessary authorizations, if any, Seller may discontinue service hereunder if (a) Buyer, in Seller's reasonable judgment fails to demonstrate credit worthiness, and (b) Buyer fails to provide adequate security in accordance with Section 8.3 of Seller's Rate Schedule FT. As set forth in Section 8 of Article II of Seller's August 7, 1989 revised Stipulation and Agreement in Docket Nos. RP88-68 et. al., (a) pregranted abandonment under Section 284.221 (d) of the Commission's Regulations shall not apply to any long term conversions from firm sales service to

transportation service under Seller's Rate Schedule FT and (b) Seller shall not exercise its right to terminate this service agreement as it applies to transportation service resulting from conversions from firm sales service so long as Buyer is willing to pay rates no less favorable than Seller is otherwise able to collect from third parties for such service.

ARTICLE V

RATE SCHEDULE AND PRICE

1. Buyer shall pay Seller for natural gas delivered to Buyer hereunder in accordance with Seller's Rate Schedule FT and the applicable provisions of the General Terms and Conditions of Seller's FERC Gas Tariff as filed with the Federal Energy Regulatory Commission, and as the same may be legally amended or superseded from time to time. Such Rate Schedule and General Terms and Conditions are by this reference made a part hereof.

2. Seller and Buyer agree that the quantity of gas that Buyer delivers or causes to be delivered to Seller shall include the quantity of gas retained by Seller for applicable compressor fuel, line loss make-up (and injection fuel under Seller's Rate Schedule GSS, if applicable) in providing the transportation service hereunder, which quantity may be changed from time to time and which will be specified in the currently effective Sheet No. 44 of Volume No. 1 of this Tariff which relates to service under this agreement and which is incorporated herein.

3. In addition to the applicable charges for firm transportation service pursuant to Section 3 of Seller's Rate Schedule FT, Buyer shall reimburse Seller for any and all filing fees incurred as a result of Buyer's request for service under Seller's Rate Schedule FT, to the extent such fees are imposed upon Seller by the Federal Energy Regulatory Commission or any successor governmental authority having jurisdiction.

ARTICLE VI
MISCELLANEOUS

1. This Agreement supersedes and cancels as of the effective date hereof the following contract(s) between the parties hereto:

PS Service Agreement between Buyer and Seller dated November 11, 1970.

FORM OF SERVICE AGREEMENT
(For Use Under Seller's Rate Schedule FT)
(Continued)

2. No waiver by either party of any one or more defaults by the other in the performance of any provisions of this agreement shall operate or be construed as a waiver of any future default or defaults, whether of a like or different character.

3. The interpretation and performance of this agreement shall be in accordance with the laws of the State of Texas, without recourse to the law governing conflict of laws, and to all present and future valid laws with respect to the subject matter, including present and future orders, rules and regulations of duly constituted authorities.

4. This agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective successors and assigns.

5. Notices to either party shall be in writing and shall be considered as duly delivered when mailed to the other party at the following address:

(a) If to Seller:

Transcontinental Gas Pipe Line Corporation
P. O. Box 1396
Houston, Texas 77251
Attention: Customer Services

(b) If to Buyer:

Philadelphia Gas Works
800 West Montgomery Avenue
Philadelphia, Pennsylvania 19122
Attention: Vice President - Rates and Federal Regulatory Affairs

Such address may be changed from time to time by mailing appropriate notice thereof to the other party by certified or registered mail.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be signed by their respective officers or representatives thereunto duly authorized.

TRANSCONTINENTAL GAS PIPE LINE CORPORATION
(Seller)

By: Thomas E Skains DSR CSH for
Thomas E. Skains
Senior Vice President
Transportation and Customer Services

PHILADELPHIA GAS WORKS
(Buyer)

By: A.P. Dyer LAT

Title: Vice President, PFMC

System Contract #.5001

EXHIBIT "A"

Point(s) of Receipt		Buyer's Cumulative Mainline Capacity Entitlement (Mcf/d)	Billing Determinent Quantity****
1.	Suction Side of Seller's Compressor Station 30 at the Existing Point of Interconnection between Seller's Central Texas Lateral and Seller's Mainline at Wharton County, Texas. (Station 30 TP#7133)	323	158
2.	Existing Point of Interconnection between Seller and Valero Transmission Company (Seller Meter No. 3396) at Wharton County, Texas. (Wharton Valero TP#6690)	323	
3.	Existing Point of Interconnection between Seller and Meter named Spanish Camp (Seller Meter No. 3365) Wharton County, Texas. (Spanish Camp-Delhi TP#6895)	323	
4.	Existing Point of Interconnection between Seller and Meter named Denton Cooley #1 (Seller Meter No. 3331), In Fort Bend County, Texas (Denton Cooley #1 -TP#1106)	323	
5.	Existing Point of Interconnection between Seller and Meter named Randon East (Fulshear) (Seller Meter No. 1427), in Fort Bend County, Texas. (Randon East (Fulshear) TP#299)	323	
6.	Existing Point of Interconnection between Seller and Houston Pipeline Company (Seller Meter No. 3364) At Fulshear, Fort Bend County, Texas. (Fulshcar-HPL TP#6097)	323	
7.	Existing Point of Interconnection between Seller and Meter named White Oak Bayou-Exxon Gas System, Inc. (Seller Meter No. 3545), in Harris County, Texas. (White Oak Bayou-EGSI-TP#1036)	323	

Point(s) of Receipt		Buyer's Cumulative Mainline Capacity Entitlement (Mcf/d)	Billing Determinent Quantity****
8.	Existing Point of Interconnection between Seller and Houston Pipeline Company (Seller Meter No. 4359) at Bammel, Harris County, Texas. (Bammel-HPL TP#6014)	323	
9.	Existing Point of Interconnection between Seller and Delhi Pipeline Company (Seller Meter No. 3346) at Hardin County, Texas. (Hardin-Delhi TP#6696)	323	
10.	Existing Point of Interconnection between Seller and Meter named Vidor Field Junction (Seller Meter No. 3554), in Jasper County, Texas. (Vidor Field Junction-TP#2337)	323	
11.	Existing Point of Interconnection between Seller and Meter named Starks McConathy (Seller Meter No. 3535), in Calcasieu Parish, Louisiana. (Starks McConathy-TP#7346)	323	
12.	Existing Point of Interconnection between Seller and Meter named DeQuincy Intercon (Seller Meter No. 2698), in Calcasieu Parish, Louisiana. (DeQuincy Intercon-TP#7035)	323	
13.	Existing Point of Interconnection between Seller and Meter named DeQuincy Great Scott (Seller Meter No. 3357), in Calcasieu Parish, Louisiana. (DeQuincy Great Scott-TP#6809)	323	
14.	Existing Point of Interconnection between Seller and Meter named Perkins-Phillips (Seller Meter No. 3532), in Calcasieu Parish, Louisiana. (Perkins-Phillips-TP#7508)	323	
15.	Existing Point of Interconnection between Seller and Meter named Perkins (Intercon) (Seller Meter No. 3395), in Calcasieu Parish, Louisiana. (Perkins (Intercon) -TP#7036)	323	
16.	Existing Point of Interconnection between Seller and Meter named Perkins East (Seller Meter No. 2369), in Beauregard Parish, Louisiana. (Perkins East-TP#139)	323	

	Point(s) of Receipt	Buyer's Cumulative Mainline Capacity Entitlement (Mcf/d)	Billing Determinent Quantity****
17.	Discharge Side of Seller's Compressor Station 45 at the Existing point of Interconnection between Seller's Southwest Louisiana Lateral and Seller's Mainline Beauregard Parish, Louisiana. (Station 45 TP#7101)	798	233
18.	Existing Point of Interconnection between Seller and Texas Eastern Transmission Corporation, (Seller Meter No. 4198) at Ragley, Beauregard Parish, Louisiana. (Ragley-TET TP#6217)	798	
19.	Existing Point of Interconnection between Seller and Trunkline Gas Company (Seller Meter No. 4215) at Ragley, Beauregard Parish, Louisiana. (Ragley-Trunkline TP#6218)	798	
20.	Existing Point of Interconnection between Seller and Tennessee Gas Transmission Company (Seller Meter No. 3371) at Kinder, Allen Parish, Louisiana. (Kinder TGT-TP#6149)**	798	
21.	Existing Point of Interconnection between Seller and Texas Gas Transmission Corporation (Seller Meter Nos. 3227, 4314, 4457) at Eunice, Evangeline Parish, Louisiana. (Eunice Mamou Tx. Gas TP#6923)	798	
22.	Suction Side of Seller's Compressor Station 50 at the Existing Point of Interconnection between Seller's Central Louisiana Lateral and Seller's Mainline Evangeline Parish, Louisiana. (Station 50 TP#6948)	1,159	177
23.	Existing Point of Interconnection between Seller and Columbia Gulf Transmission Corporation (Seller Meter No. 3142) at Eunice, Evangeline Parish, Louisiana. (Eunice Evangeline Col. Gulf TP#6414)	1,159	

	Point(s) of Receipt	Buyer's Cumulative Mainline Capacity Entitlement (Mcf/d)	Billing Determinent Quantity****
24.	Discharge Side of Seller's Compressor Station 54 at Seller's Washington Storage Field, St. Landry Parish, Louisiana (Station 54 TP#6768)*****	1,159	
25.	Existing Point of Interconnection between Seller and Acadian Pipeline (Seller Meter No. 3506) in Pointe Coupee Parish, Louisiana. (Morganza-Acadian Pipeline TP#7060)	1,159	
26.	Existing Point of Interconnection (Seller Meter No. 3272) at M.P. 566.92, Morganza Field, Pointe Coupee Parish, Louisiana. (Morganza Field - TP#576)	1,159	
27.	Existing Point of Interconnection between Seller and Meter named West Feliciana Parish-Creole (Seller Meter No. 4464), in West Feliciana Parish, Louisiana. (West Feliciana Parish-Creole TP#7165)	1,159	
28.	Existing Point of Interconnection between Seller and Mid-Louisiana Gas Company (Seller Meter Nos. 4137, 4184, 3229) at Ethel, East Feliciana Parish, Louisiana. (Ethel-Mid LA TP#6083)	1,159	
29.	Existing Point of Interconnection between Seller and Meter named Liverpool Northwest (Seller Meter No. 3390), in St. Helena Parish, Louisiana. (Liverpool Northwest-TP#6757)	1,159	
30.	Suction Side of Seller's Compressor Station 62 on Seller's Southeast Louisiana Lateral in Terrebonne Parish Louisiana.(Station 62 TP#7141)	741	363
31.	Existing Point of Interconnection between Seller and Meter named Texas Gas - TLIPCO-Thibodeaux (Seller Meter No. 3533), in Lafourche Parish, Louisiana. (TXGT-TLIPCO -Thibodeaux-TP#7206)	741	

Point(s) of Receipt		Buyer's Cumulative Mainline Capacity Entitlement (Mcf/d)	Billing Determinent Quantity****
32.	Existing Point of Interconnection between Seller and Meter named Romeville-Monterey Pipeline (Seller Meter No. 4410), in St. James Parish, Louisiana. (Romeville-Monterey Pipeline-TP#580)	741	
33.	Existing Point of Interconnection between Seller and Meter named St. James CCIPC (Seller Meter No. 4462), in St. James Parish, Louisiana. (St. James CCIPC-TP#7164)**	741	
34.	Existing Point of Interconnection between Seller and Meter named St. James Faustina (St. Amelia)(Seller Meter No. 3328), in St. James Parish, Louisiana. (St. James Faustina (St. Amelia) TP#6268)**	741	
35.	Existing Point of Interconnection between Seller and Meter named St. James Acadian (Seller Meter No. 4366), in St. James Parish, Louisiana. (St. James Acadian-TP#6677)**	741	
36.	Existing Point of Interconnection between Seller and Meter Named Livingston-Flare (Seller Meter No. 3540), in Livingston Parish, Louisiana. (Livingston-Flare-TP#8739)	741	
37.	Existing Point of Interconnection between Seller and Florida Gas Transmission Company (Seller Meter No. 3217) at St. Helena, St. Helena Parish, Louisiana. (St. Helena FGT-TP#6267)	741	
38.	Existing Point of Interconnection between Seller and Meter named Beaver Dam Creek (Seller Meter No. 3536), in St. Helena Parish, Louisiana. (Beaver Dam Creek-TP#8218)	741	
39.	Suction Side of Seller's Compressor Station 65 at the Existing Point of Interconnection between Seller's Southeast Louisiana Lateral and Seller's Mainline St. Helena Parish, Louisiana. (Station 65 TP#6685)	1,900	

Point(s) of Receipt		Buyer's Cumulative Mainline Capacity Entitlement (Mcf/d)	Billing Determinent Quantity****
40.	Existing Point of Interconnection between Seller and Meter named Amite County/Koch (Seller Meter No. 3332), in Amite County, Mississippi (Amite County/Koch-TP#6701)	1,900	
41.	Existing Point of Interconnection between Seller and Meter named McComb (Seller Meter No. 3461), in Pike County, Mississippi. (McComb-TP#6446)	1,900	
42.	Existing Point of Interconnection between Seller and United Gas Pipe Line Company at Holmesville (Seller Meter No. 3150), Pike County, Mississippi. (Holmesville-United TP#6128)	1,900	
43.	Discharge Side of Seller's Compressor Station 70 at M.P. 661.77 in Walthall County, Mississippi. (M.P. 661.77-Station 70 Discharge-TP#7142)	1,900	
44.	Existing Point of Interconnection between Seller and United Gas Pipe Line Company at Walthall (Seller Meter No. 3095), Walthall County, Mississippi. (Walthall-UGPL TP#6310)***	1,900	
45.	Existing Point of Interconnection between Seller and Meter named Darbun-Pruett 34-10 (Seller Meter No. 3446) at M.P. 668.46 on Seller's Main Transmission Line, Darbun Field, Walthall County, Mississippi. (Darbun Pruett TP#6750)	1,900	
46.	Existing Point of Interconnection between Seller and Meter named Ivy Newsome (Seller Meter No. 3413) in Marion County, Mississippi. (Ivy Newsome-TP#6179)	1,900	
47.	Existing Point of Interconnection between Seller and West Oakvale Field at M.P. 680.47-Marion County, Mississippi. (M.P. 680.47-West Oakvale Field-TP#7144)	1,900	

Point(s) of Receipt		Buyer's Cumulative Mainline Capacity Entitlement (Mcf/d)	Billing Determinent Quantity****
48.	Existing Point of Interconnection between Seller and East Morgantown Field at M.P. 680.47 in Marion County, Mississippi. (M.P. 680.47-E. Morgantown Field-TP#7145)	1,900	
49.	Existing Point of Interconnection between Seller and Greens Creek Field, at M.P. 681.84 Marion County, Mississippi. (M. P. 681.84 Greens Creek Field TP#7146)	1,900	
50.	Existing Point of Interconnection between Seller and Meter named M.P.685.00-Oakville Unit 6-6 in Jefferson Davis County, Mississippi. (M.P. 685.00-Oakville Unit 6-6 TP#1376)	1,900	
51.	Existing Point of Interconnection between Seller and Meter named M.P. 687.23-Oakvale Field in Marion County, Mississippi. (M.P. 687.23-Oakvale Field-TP#7147)	1,900	
52.	Existing Point of Interconnection between Seller and Bassfield at named M.P. 696.40 in Marion County, Mississippi. (M.P. 696.40 Bassfield-TP#9439)	1,900	
53.	Existing Point of Interconnection between Seller and Meter named Lithium/Holiday Creek -Frm (Seller Meter No. 3418), in Jefferson Davis County, Mississippi. (Lithium/Holiday Creek-Frm-TP#7041)	1,900	
54.	Existing Point of Interconnection between Seller and S. W. Sumrall Field and Holiday Creek at M.P. 692.05-Holiday Creek in Jefferson Davis, Mississippi. (M.P. 692.05 -Holiday Creek-TP#7159)	1,900	
55.	Existing Point of Interconnection between Seller and ANR Pipe Line Company at Holiday Creek (Seller Meter No. 3241), Jefferson David County, Mississippi. (Holiday Creek-ANR TP#398)	1,900	

Point(s) of Receipt		Buyer's Cumulative Mainline Capacity Entitlement (Mcf/d)	Billing Determinent Quantity****
56.	Existing Point of Interconnection between Seller and Mississippi Fuel Company at Jeff Davis (Seller Meter No. 3252), Jefferson Davis County, Mississippi. (Jefferson Davis County-Miss Fuels TP#6579)***	1,900	
57.	Existing Point of Interconnection between Seller and Meter named Jefferson Davis-Frm (Seller Meter No. 4420). in Jefferson Davis County, Mississippi. (Jefferson Davis-Frm-TP#7033)	1,900	
58.	Existing Point of Interconnection between Seller and Carson Dome Field M.P. 696.41, in Jefferson Davis County, Mississippi. (M.P. 696.41-Carson Dome Field-TP#7148)	1,900	
59.	Existing Point of Interconnection between Seller and Meter Station named Bassfield-ANR Company at M.P. 703.17 on Seller's Main Transmission Line (Seller Meter No. 3238), Covington County, Mississippi. (Bassfield-ANR TP#7029)	1,900	
60.	Existing Point of Interconnection between Seller and Meter named Patti Bihm #1 (Seller Meter No. 3468), in Covington County, Mississippi. (Patti Bihm #1-TP#7629)	1,900	
61.	Discharge Side of Seller's Compressor at Seller's Eminence Storage Field (Seller Meter No. 4166 and 3160) Covington County, Mississippi. (Eminence Storage TP#5561)	1,900	
62.	Existing Point of Interconnection between Seller and Dont Dome Field at M.P. 713.39 in Covington, County, Mississippi. (M.P. 713.39-Dont Dome-TP#1396)	1,900	
63.	Existing Point of Interconnection between Seller and Endevco in Covington County, Mississippi. (Hattiesburg-Interconnect storage TP#1686)	1,900	

Point(s) of Receipt		Buyer's Cumulative Mainline Capacity Entitlement (Mcf/d)	Billing Determinent Quantity****
64.	Existing Point at M.P. 719.58 on Seller's Main Transmission Line (Seller Meter No. 3544), Centerville Dome Field, Jones County, Mississippi. (Centerville Dome Field-TP#1532)	1,900	
65.	Existing Point at M.P. 727.78 on Seller's Main Transmission Line, Jones County, Mississippi. (Jones County-Gitano TP#7166)	1,900	
66.	Existing Point of Interconnection between Seller and a Meter named Koch Reedy Creek (Seller Meter No. 3333), Jones County, Mississippi. (Reedy Creek-Koch TP#670)	1,900	
67.	Existing Point of Interconnection between Seller and Meter named Sharon Field (Seller Meter No. 3000), in Jones County, Mississippi. (Sharon Field-TP#419)	1,900	
68.	Existing Point of Interconnection between Seller and Tennessee Gas Transmission Company at Heidelberg (Seller Meter No. 3109), Jasper County, Mississippi. (Heidelberg-Tennessee TP#6120)***	1,900	
69.	Existing Point of Interconnection between Seller and Mississippi Fuel Company at Clarke (Seller Meter No. 3254), Clarke County, Mississippi. (Clarke County-Miss Fuels TP#6047)***	1,900	
70.	Existing Point of Interconnection between Seller and Meter named Clarke County-Koch at M.P. 757.29 in Clarke County, Mississippi. (Clarke County-Koch-TP#5566)	1,900	
71.	Existing Point of Interconnection between Seller's mainline and Mobile Bay Lateral at Butler, Choctaw County, Alabama (Butler - TP#6034)	1,900	

Point(s) of Receipt		Buyer's Cumulative Mainline Capacity Entitlement (Mcf/d)	Billing Determinent Quantity****
72.	Existing Point of Interconnection between Seller and Southern Natural Gas Company, (Seller Meter No. 4087) at Jonesboro, Clayton County, Georgia.(Jonesboro-SNG-TP#6141)	1,900	
73.	Existing Point of Interconnection between Seller and Columbia Gas Transmission (Seller Meter No. 7157) at Dranesville, Fairfax County, Virginia.(Dranesville-Colgas-TP#6068)**	1,900	
74.	Existing Point of Interconnection between Seller and Columbia Gas Transmission (Seller Meter No. 4080) at Rockville, Baltimore County, Maryland. (Rockville-Colgas-TP#6227)**	1,900	
75.	Existing Point of Interconnection between Seller and Columbia Gas Transmission (Seller Meter No. 3088) at Downingtown, Chester County, Pennsylvania.(Downington-Colgas-TP#6067)**	1,900	
76.	Existing Point of Interconnection between Seller and Texas Eastern Transmission Corporation (Seller Meter No. 4133) at Skippack, Montgomery County, Pennsylvania. (Skippack-TET-TP#6249)**	1,900	

Buyer shall not tender, without the prior consent of Seller, at any point(s) of receipt on any day, a quantity in excess of the applicable Buyer's cumulative mainline capacity entitlement for such point(s) of receipt.

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* These quantities do not include the additional quantities of gas retained by Seller for applicable compressor fuel and line loss make-up provided for in Article V, 2 of this Service Agreement, which are subject to change as provided for in Article V, 2 hereof.

** Receipt of gas by displacement only.

*** Receipt of gas limited to physical capacity of Seller's lateral line facilities.

**** In order to effectuate the cost allocation and rate design allocation approved in the Settlement in docket Nos. RP87-7 et. al., the parties recognize that the quantities reflected herein shall be considered Buyer's applicable TCQ Quantities for the purpose of billing the rates and charges hereunder, and such billing determinants are subject to change through rate filings of Seller pursuant to the terms and conditions of Article V hereof.

***** Buyer's cumulative mainline capacity entitlements at Compressor Station 54 shall not supersede or otherwise affect any rights, obligations or limitations which are stated in Seller's WSS Rate Schedule.

System Contract #.5001

Exhibit B

Point(s) of Delivery		Pressure(s)
1.	Station 54*	Not Applicable.
2.	Seller's Eminence Storage Field, Covington County, Mississippi.	Prevailing pressure in Seller's pipeline system not to exceed maximum allowable operating pressure.
3.	Ashmead Road Meter Station, located on Seller's Oreland Line at mile post 13.44 in Cheltemham Township, Montgomery County, Pennsylvania, near the city limits line of the City of Philadelphia, Pennsylvania.	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.
4.	Whitman Meter Station, located in the City of Philadelphia, Pennsylvania, on Delaware Avenue approximately 550 feet south of the intersection of Delaware Avenue and Packer Avenue where the facilities of Seller connect with those of Buyer.	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.
5.	Richmond Meter Station, located adjacent to Seller's Trenton-Woodbury line at mile post 36.83 and near the intersection of Lewis and Delaware Avenue, Philadelphia County, Philadelphia, Pennsylvania.	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operations of Seller and Buyer.

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* Delivery to Seller's Washington Storage Field for injection into storage is subject to the terms, conditions and limitations of Seller's WSS Rate Schedule.

Exhibit B

Point(s) of Delivery	Pressure(s)
6. Northeast Philadelphia Meter Station (Somerton), located near the westerly terminus of Brookside Drive and approximately 1200 feet northeasterly from County Line Road in Lower Southampton Township, Bucks County, Pennsylvania.	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and buyer.
7. Oreland Meter Station, located on Seller's Oreland Line at mile post 6.09 in Springfield Township, Montgomery County, Pennsylvania.	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operations of Seller and Buyer.

27 0041 003

FORM OF SERVICE AGREEMENT
(For Use Under Seller's Rate Schedule FT)

THIS AGREEMENT entered into this 11 day of JULY, 2018, by and between TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC, a Delaware limited liability company, hereinafter referred to as "Seller," first party, and PHILADELPHIA GAS WORKS, by Philadelphia Facilities Management Corporation in its capacity as operator and manager of the municipally owned Philadelphia Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended, hereinafter referred to as "Buyer, " second party,

WITNESSETH

WHEREAS, Seller and Buyer are parties to that certain Service Agreement, dated February 1, 1992 (Seller's Contract #1003691, hereinafter referred to as "the Service Agreement"), under Seller's Rate Schedule FT pursuant to which Seller provides firm transportation service for Buyer up to a Transportation Contract Quantity of 165,212 dt per day; and

WHEREAS, Seller and Buyer desire to amend the Service Agreement to modify Exhibit A of the Service Agreement to remove all of the receipt points and volumes with the exception of the receipt points at Compressor Stations 30, 45, 50, 54, 62 and 65 and the associated volumes for each; and

WHEREAS, Seller and Buyer also desire to amend the Service Agreement to reflect the conversion of the quantities of gas under the Service Agreement from Mcf to dt at a conversion factor of 1.035 dt per Mcf; and

WHEREAS, Seller and Buyer further desire to amend the Service Agreement to include a non-conforming provision specifying the responsible party for payments for transportation service provided by Seller under the Service Agreement in Article VI, Paragraph 6; and

WHEREAS, consistent with Federal Energy Regulatory Commission requirements, Seller and Buyer have agreed to supersede and cancel the Service Agreement and execute a new agreement reflecting these amendments and otherwise restating the terms and conditions of the Service Agreement, which will then be submitted to the Federal Energy Regulatory Commission for approval.

NOW THEREFORE, Seller and Buyer agree as follows:

ARTICLE I
GAS TRANSPORTATION SERVICE

1. Subject to the terms and provisions of this agreement and of Seller's Rate Schedule FT, Buyer agrees to deliver or cause to be delivered to Seller gas for transportation and Seller agrees to receive, transport and redeliver natural gas to Buyer or for the account of Buyer, on a firm basis, up to a Transportation Contract Quantity ("TCQ") of 165,212 dt per day.

2. Transportation service rendered hereunder shall not be subject to curtailment or interruption except as provided in Section 11 and, if applicable, Section 42 of the General Terms and Conditions of Seller's FERC Gas Tariff.

ARTICLE II
POINT(S) OF RECEIPT

Buyer shall deliver or cause to be delivered gas at the point(s) of receipt hereunder at a pressure sufficient to allow the gas to enter Seller's pipeline system at the varying pressures that may exist in such system from time to time; provided, however, the pressure of the gas delivered or caused to be delivered by Buyer shall not exceed the maximum operating pressure(s) of Seller's pipeline system at such point(s) of receipt. In the event the maximum operating pressure(s) of Seller's pipeline system, at the point(s) of receipt hereunder, is from time to time increased or decreased, then the maximum allowable pressure(s) of the gas delivered or caused to be delivered by Buyer to Seller at the point(s) of receipt shall be correspondingly increased or decreased upon written notification of Seller to Buyer. The point(s) of receipt for natural gas received for transportation pursuant to this agreement shall be:

See Exhibit A, attached hereto, for points of receipt.

ARTICLE III
POINT(S) OF DELIVERY

Seller shall redeliver to Buyer or for the account of Buyer the gas transported hereunder at the following point(s) of delivery and at a pressure(s) of:

See Exhibit B, attached hereto, for points of delivery and pressures.

ARTICLE IV
TERM OF AGREEMENT

This agreement shall be effective as of September 1, 2018 and shall remain in force and effect until 9:00 a.m. Central Clock Time September 1, 2021 and thereafter until terminated by Seller or Buyer upon at least three (3) years written notice; provided, however, this agreement shall terminate immediately and, subject to the receipt of necessary authorizations, if any, Seller may discontinue service hereunder if (a) Buyer, in Seller's reasonable judgment fails to demonstrate creditworthiness, and (b) Buyer fails to provide adequate security in accordance with Section 32 of the General Terms and Conditions of Seller's Volume No. 1 Tariff. As set forth in Section 8 of Article II of Seller's August 7, 1989 revised Stipulation and Agreement in Docket Nos. RP88-68 et.al., (a) pregranted abandonment under Section 284.221(d) of the Commission's regulations shall not apply to any long term conversions from firm sales service to transportation service under Seller's Rate Schedule FT and (b) Seller shall not exercise its right to terminate this service agreement as it applies to transportation service resulting from conversions from firm sales service so long as Buyer is willing to pay rates no less favorable than Seller is otherwise able to collect from third parties for such service.

ARTICLE V
RATE SCHEDULE AND PRICE

1. Buyer shall pay Seller for natural gas delivered to Buyer hereunder in accordance with Seller's Rate Schedule FT and the applicable provisions of the General Terms and Conditions of Seller's FERC Gas Tariff as filed with the Federal Energy Regulatory Commission, and as the same may be legally amended or superseded from time to time. Such rate schedule and General Terms and Conditions are by this reference made a part hereof. In the event Buyer and Seller mutually agree to a negotiated rate pursuant to the provisions in Section 53 of the General Terms and Conditions and specified term for service hereunder, provisions governing such negotiated rate (including surcharges) and term shall be set forth on Exhibit C to the service agreement.

2. Seller and Buyer agree that the quantity of gas that Buyer delivers or causes to be delivered to Seller shall include the quantity of gas retained by Seller for applicable compressor fuel, line loss make-up (and injection fuel under Seller's Rate Schedule GSS, if applicable) in providing the transportation service hereunder, which quantity may be changed from time to time and which will be specified in the currently effective Statement of Rates and Fuel in Part II, Section 12.1 of this tariff which relates to service under this agreement and which is incorporated herein.

3. In addition to the applicable charges for firm transportation service pursuant to Section 3 of Seller's Rate Schedule FT, Buyer shall reimburse Seller for any and all filing fees incurred as a result of Buyer's request for service under Seller's Rate Schedule FT, to the extent such fees are imposed upon Seller by the Federal Energy Regulatory Commission or any successor governmental authority having jurisdiction.

ARTICLE VI
MISCELLANEOUS

1. This Agreement supersedes and cancels as of the effective date hereof the following contract(s): FT Service Agreement, dated February 1, 1992 (Seller's Contract #1003691).

2. No waiver by either party of any one or more defaults by the other in the performance of any provisions of this agreement shall operate or be construed as a waiver of any future default or defaults, whether of a like or different character.

3. The interpretation and performance of this agreement shall be in accordance with the laws of the State of Texas, without recourse to the law governing conflict of laws, and to all present and future valid laws with respect to the subject matter, including present and future orders, rules and regulations of duly constituted authorities.

4. This agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective successors and assigns.

5. Notices to either party shall be in writing and shall be considered as duly delivered when mailed to the other party at the following address:

(a) If to Seller:
Transcontinental Gas Pipe Line Company, LLC
P. O. Box 1396
Houston, Texas 77251
Attention: Manager – Customer Services

(b) If to Buyer:
Philadelphia Gas Works
800 West Montgomery Avenue
Philadelphia, Pennsylvania 19122
Attention: Vice President – Rates and Federal Regulatory Affairs

Such addresses may be changed from time to time by mailing appropriate notice thereof to the other party by certified or registered mail.

6. It is understood and agreed that any payments required to be made by the Philadelphia Facilities Management Corporation and/or PGW as a result of or arising out of its entering into this Service Agreement shall be made solely from the revenues of the Philadelphia Gas Works.

27 0041 203

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be signed by their respective officers or representatives thereunto duly authorized.

TRANSCONTINENTAL GAS PIPE LINE
COMPANY, LLC
(Seller)

By Hector Alatorre

Print Name HECTOR ALATORRE

Title DIRECTOR, CUSTOMER SERVICE

PHILADELPHIA GAS WORKS
(Buyer)

By John C. Zuk

Print Name John C. Zuk

Title VP Gas Supply

Exhibit A

Point(s) of Receipt	Maximum Daily Capacity Entitlement at each Receipt Point (DT/day)*]
1. Suction Side of Seller's Compressor Station 30 at the Existing Point of Interconnection between Seller's Central Texas Lateral and Seller's Mainline at Wharton County, Texas. (Station 30 TP#7133)	28,086
2. Discharge Side of Seller's Compressor Station 45 at the Existing Point of Interconnection between Seller's Southwest Louisiana Lateral and Seller's Mainline Beauregard Parish, Louisiana. (Station 45 TP#7101)	69,388
3. Suction Side of Seller's Compressor Station 50 at the Existing Point of Interconnection between Seller's Central Louisiana Lateral and Seller's Mainline Evangeline Parish, Louisiana. (Station 50 TP#6948)	100,779
4. Discharge Side of Seller's Compressor Station 54 at Seller's Washington Storage Field, St. Landry Parish, Louisiana (Station 54 TP#6768)	101,546 Mar.–Nov. 100,779 Dec.–Feb.
5. Suction Side of Seller's Compressor Station 62 on Seller's Southeast Louisiana Lateral in Terrebonne Parish, Louisiana. (Station 62 TP#7141)	64,433
6. Suction Side of Seller's Compressor Station 65 at Existing Point of Interconnection between Seller's Southeast Louisiana Lateral and Seller's Mainline St. Helena Parish, Louisiana. (Station 65 TP#6685)	165,212

* These quantities do not include the additional quantities of gas retained by Seller for applicable compressor fuel and line loss make-up provided for in Article V, 2 of this service agreement, which are subject to change as provided for in Article V, 2 hereof.

Exhibit B

Point(s) of Delivery	Maximum Daily Capacity Entitlement at each Delivery Point(Dt/Day)	Pressure
1. Station 54	101,546 Mar.–Nov. 100,779 Dec.–Feb.	Not Applicable.
2. Seller's Eminence Storage Field, Covington County, Mississippi	165,212	Prevailing pressure in Seller's pipeline system not to exceed maximum allowable operating pressure.
3. Ashmead Road Meter Station, located on Seller's Oreland Line at mile post 13.44 in Cheltenham Township, Montgomery County, Pennsylvania, near the city limits line of the City of Philadelphia, Pennsylvania.	165,212	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.
4. Whitman Meter Station, located in the City of Philadelphia, Pennsylvania, on Delaware Avenue approximately 550 feet south of the intersection of Delaware Avenue and Packer Avenue where the facilities of Seller connect with those of Buyer.	165,212	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.

5.	Richmond Meter Station, located adjacent to Seller's Trenton-Woodbury line at mile post 36.83 and near the intersection of Lewis and Delaware Avenue, Philadelphia County, Philadelphia, Pennsylvania.	165,212	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.
6.	Northeast Philadelphia Meter Station (Somerton), located near the westerly terminus of Brookside Drive and approximately 1200 feet northeasterly from County Line Road in Lower Southampton Township, Bucks County, Pennsylvania.	165,212	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.
7.	Oreland Meter Station, located on Seller's Oreland Line at mile post 6.09 in Springfield Township, Montgomery County, Pennsylvania.	165,212	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.

Exhibit C

Specification of Negotiated Rate and Term

None.

SERVICE AGREEMENT
FOR RATE SCHEDULE FT-1

This Service Agreement, made and entered into this 15th day of December, 1998, by and between TEXAS EASTERN TRANSMISSION CORPORATION, a Delaware Corporation (herein called "Pipeline") and PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT (herein called "Customer", whether one or more),

W I T N E S S E T H:

WHEREAS, Pipeline and Customer are parties to an executed service agreement dated February 29, 1996, under Pipeline's Rate Schedule FT-1 (Pipeline's Contract No. 800515); and

WHEREAS, Pipeline and Customer desire to enter into this Service Agreement to supersede Pipeline's currently effective Contract No. 800515;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the parties do covenant and agree as follows:

ARTICLE I

SCOPE OF AGREEMENT

Subject to the terms, conditions and limitations hereof, of Pipeline's Rate Schedule FT-1, and of the General Terms and Conditions, transportation service hereunder will be firm. Subject to the terms, conditions and limitations hereof and of Pipeline's Rate Schedule FT-1, Pipeline agrees to deliver for Customer's account quantities of natural gas up to the following quantity:

Maximum Daily Quantity (MDQ) 18,000 dth

Pipeline shall receive for Customer's account, at those points on Pipeline's system as specified in Article IV herein or available to Customer pursuant to Section 14 of the General Terms and Conditions (hereinafter referred to as Point(s) of Receipt) for transportation hereunder daily quantities of gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at those points on Pipeline's system as specified in Article IV herein or available to Customer pursuant to Section 14 of the General Terms and Conditions (hereinafter referred to as Point(s) of Delivery), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall not be obligated to, but may at its discretion, receive at any Point of Receipt on any day a quantity of gas in excess of the applicable Maximum Daily Receipt Obligation (MDRO), plus Applicable Shrinkage, but shall not receive in the aggregate at all Points of Receipt on any day a quantity of gas in excess

of the applicable MDQ, plus Applicable Shrinkage. Pipeline shall not be obligated to, but may at its discretion, deliver at any Point of Delivery on any day a quantity of gas in excess of the applicable Maximum Daily Delivery Obligation (MDDO), but shall not deliver in the aggregate at all Points of Delivery on any day a quantity of gas in excess of the applicable MDQ.

In addition to the MDQ and subject to the terms, conditions and limitations hereof, Rate Schedule FT-1 and the General Terms and Conditions, Pipeline shall deliver within the Access Area under this and all other service agreements under Rate Schedules CDS, FT-1, and/or SCT, quantities up to Customer's Operational Segment Capacity Entitlements, excluding those Operational Segment Capacity Entitlements scheduled to meet Customer's MDQ, for Customer's account, as requested on any day.

ARTICLE II

TERM OF AGREEMENT

The term of this Service Agreement shall commence on the first day of the first month after Customer fully executes this Service Agreement and shall continue in force and effect until October 31, 2006 and year to year thereafter unless this Service Agreement is terminated as hereinafter provided. This Service Agreement may be terminated by either Pipeline or Customer upon two (2) years prior written notice to the other specifying a termination date of October 31, 2006 or any October 31 thereafter. Subject to Section 22 of Pipeline's General Terms and Conditions and without prejudice to such rights, this Service Agreement may be terminated at any time by Pipeline in the event Customer fails to pay part or all of the amount of any bill for service hereunder and such failure continues for thirty (30) days after payment is due; provided, Pipeline gives thirty (30) days prior written notice to Customer of such termination and provided further such termination shall not be effective if, prior to the date of termination, Customer either pays such outstanding bill or furnishes a good and sufficient surety bond guaranteeing payment to Pipeline of such outstanding bill.

THE TERMINATION OF THIS SERVICE AGREEMENT WITH A FIXED CONTRACT TERM OR THE PROVISION OF A TERMINATION NOTICE BY CUSTOMER TRIGGERS PREGRANTED ABANDONMENT UNDER SECTION 7 OF THE NATURAL GAS ACT AS OF THE EFFECTIVE DATE OF THE TERMINATION. PROVISION OF A TERMINATION NOTICE BY PIPELINE ALSO TRIGGERS CUSTOMER'S RIGHT OF FIRST REFUSAL UNDER SECTION 3.13 OF THE GENERAL TERMS AND CONDITIONS ON THE EFFECTIVE DATE OF THE TERMINATION.

Any portions of this Service Agreement necessary to correct or cash-out imbalances under this Service Agreement as required by the General Terms and Conditions of Pipeline's FERC Gas Tariff, Volume No. 1, shall survive the other parts of this Service Agreement until such time as such balancing has been accomplished.

ARTICLE III

RATE SCHEDULE

This Service Agreement in all respects shall be and remain subject to the applicable provisions of Rate Schedule FT-1 and of the General Terms and Conditions of Pipeline's FERC Gas Tariff on file with the Federal Energy Regulatory Commission, all of which are by this reference made a part hereof.

Customer shall pay Pipeline, for all services rendered hereunder and for the availability of such service in the period stated, the applicable prices established under Pipeline's Rate Schedule FT-1 as filed with the Federal Energy Regulatory Commission, and as same may hereafter be legally amended or superseded.

Customer agrees that Pipeline shall have the unilateral right to file with the appropriate regulatory authority and make changes effective in (a) the rates and charges applicable to service pursuant to Pipeline's Rate Schedule FT-1, (b) Pipeline's Rate Schedule FT-1 pursuant to which service hereunder is rendered or (c) any provision of the General Terms and Conditions applicable to Rate Schedule FT-1. Notwithstanding the foregoing, Customer does not agree that Pipeline shall have the unilateral right without the consent of Customer subsequent to the execution of this Service Agreement and Pipeline shall not have the right during the effectiveness of this Service Agreement to make any filings pursuant to Section 4 of the Natural Gas Act to change the MDQ specified in Article I, to change the term of the agreement as specified in Article II, to change Point(s) of Receipt specified in Article IV, to change the Point(s) of Delivery specified in Article IV, or to change the firm character of the service hereunder. Pipeline agrees that Customer may protest or contest the aforementioned filings, and Customer does not waive any rights it may have with respect to such filings.

ARTICLE IV

POINT(S) OF RECEIPT AND POINT(S) OF DELIVERY

The Point(s) of Receipt and Point(s) of Delivery at which Pipeline shall receive and deliver gas, respectively, shall be specified in Exhibit(s) A and B of the executed service

agreement. Customer's Zone Boundary Entry Quantity and Zone Boundary Exit Quantity for each of Pipeline's zones shall be specified in Exhibit C of the executed service agreement.

Exhibit(s) A, B and C are hereby incorporated as part of this Service Agreement for all intents and purposes as if fully copied and set forth herein at length.

ARTICLE V

QUALITY

All natural gas tendered to Pipeline for Customer's account shall conform to the quality specifications set forth in Section 5 of Pipeline's General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept natural gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such gas as necessary to comply with such quality specifications. Customer shall execute or cause its supplier to execute, if such supplier has retained processing rights to the gas delivered to Customer, the appropriate agreements prior to the commencement of service for the transportation and processing of any liquefiable hydrocarbons and any PVR quantities associated with the processing of gas received by Pipeline at the Point(s) of Receipt under such Customer's service agreement. In addition, subject to the execution of appropriate agreements, Pipeline is willing to transport liquids associated with the gas produced and tendered for transportation hereunder.

ARTICLE VI

ADDRESSES

Except as herein otherwise provided or as provided in the General Terms and Conditions of Pipeline's FERC Gas Tariff, any notice, request, demand, statement, bill or payment provided for in this Service Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when mailed by registered, certified, or regular mail to the post office address of the parties hereto, as the case may be, as follows:

(a) Pipeline: TEXAS EASTERN TRANSMISSION CORPORATION
5400 Westheimer Court
Houston, TX 77056-5310

(b) Customer: PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT
2600 Center Square West 15th St. & Market St.
Philadelphia, PA 19102-2126

or such other address as either party shall designate by formal written notice.

ARTICLE VII

ASSIGNMENTS

Any Company which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of Customer, or of Pipeline, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Service Agreement; and either Customer or Pipeline may assign or pledge this Service Agreement under the provisions of any mortgage, deed of trust, indenture, bank credit agreement, assignment, receivable sale, or similar instrument which it has executed or may execute hereafter; otherwise, neither Customer nor Pipeline shall assign this Service Agreement or any of its rights hereunder unless it first shall have obtained the consent thereto in writing of the other; provided further, however, that neither Customer nor Pipeline shall be released from its obligations hereunder without the consent of the other. In addition, Customer may assign its rights to capacity pursuant to Section 3.14 of the General Terms and Conditions. To the extent Customer so desires, when it releases capacity pursuant to Section 3.14 of the General Terms and Conditions, Customer may require privity between Customer and the Replacement Customer, as further provided in the applicable Capacity Release Umbrella Agreement.

ARTICLE VIII

INTERPRETATION

The interpretation and performance of this Service Agreement shall be in accordance with the laws of the State of Texas without recourse to the law governing conflict of laws.

This Service Agreement and the obligations of the parties are subject to all present and future valid laws with respect to the subject matter, State and Federal, and to all valid present and future orders, rules, and regulations of duly constituted authorities having jurisdiction.

ARTICLE IX

CANCELLATION OF PRIOR CONTRACT(S)

This Service Agreement supersedes and cancels, as of the effective date of this Service Agreement, the contract(s) between the parties hereto as described below:

service agreement dated February 29, 1996, between Pipeline and Customer under Pipeline's Rate Schedule FT-1 (Pipeline's Contract No. 800515).

IN WITNESS WHEREOF, the parties hereto have caused this Service Agreement to be signed by their respective Presidents, Vice Presidents or other duly authorized agents and their respective corporate seals to be hereto affixed and attested by their respective Secretaries or Assistant Secretaries, the day and year first above written.

TEXAS EASTERN TRANSMISSION CORPORATION

By _____ PMT

ATTEST:

_____

PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT

By _____

ATTEST:

_____

EXHIBIT A, TRANSPORTATION PATHS
FOR BILLING PURPOSES, DATED 12/15/98,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE FT-1
BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("Pipeline")
AND PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT ("Customer"), DATED 12/15/98:

(1) Customer's firm Point(s) of Receipt:

Point of Receipt	Description	Maximum Daily Receipt Obligation (plus Applicable Shrinkage)	Measurement Responsibilities	Owner	Operator
None					

(2) Customer shall have Pipeline's Master Receipt Point List ("MRPL"). Customer hereby agrees that Pipeline's MRPL as revised and published by Pipeline from time to time is incorporated herein by reference.

Customer hereby agrees to comply with the Receipt Pressure Obligation as set forth in Section 6 of Pipeline's General Terms and Conditions at such Point(s) of Receipt.

Transportation Path	Transportation Path Quantity (Dth/D)
M1 to M3	18,000

SIGNED FOR IDENTIFICATION

PIPELINE: _____ JMM

CUSTOMER: _____ VAF

SUPERSEDES EXHIBIT A DATED: _____

Contract #:800515R

EXHIBIT B, POINT(S) OF DELIVERY, DATED 12/15/98,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE FT-1
BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("Pipeline"), AND
PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT ("Customer"),
DATED 12/15/98:

	Point of Delivery	Description	Maximum Daily Delivery Obligation (dth)	Delivery Pressure Obligation	Measurement Responsibilities	Owner	Operator
1.	70030	PHILADELPHIA GAS WORKS - POINT BREEZE, PA PHILADELPHIA CO., PA	18,000	100 POUNDS PER SQUARE INCH GAUGE	TX EAST TRAN	TX EAST TRAN	PHIL GAS WKS
2.	73060	HARKNESS PT. - PA PHILADELPHIA CO., PA	18,000	125 POUNDS PER SQUARE INCH GAUGE	TX EAST TRAN	TX EAST TRAN	PHIL GAS WKS

provided, however, that until changed by a subsequent Agreement between Pipeline and Customer, Pipeline's aggregate maximum daily delivery obligations under this and all other firm Service Agreements existing between Pipeline and Customer, shall in no event exceed the following:

EXHIBIT B, POINT(S) OF DELIVERY (Continued)
PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT

Point of Delivery	Aggregate Maximum Daily Delivery Obligation (dth)
No.1	36,000 12/01-02/28 21,000 03/01-11/30
No.2	36,000

and further provided, however, that Pipeline's maximum daily delivery obligation shall not exceed 36,000 dth in the aggregate at Points of Delivery 70030 and 73060.

SIGNED FOR IDENTIFICATION

PIPELINE: _____ JMM

CUSTOMER: _____ AKP LAA

SUPERSEDES EXHIBIT B DATED: _____

Contract #:800515R

EXHIBIT C, ZONE BOUNDARY ENTRY QUANTITY AND ZONE BOUNDARY EXIT QUANTITY,
DATED 12/15/98, TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE FT-1
BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("PIPELINE") AND
PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT ("CUSTOMER"), DATED 12/15/98:

ZONE BOUNDARY ENTRY QUANTITY
Dth/D

To

FROM	STX	ETX	WLA	ELA	M1-24	M1-30	M1-TXG	M1-TGC	M2-24	M2-30	M2-TXG	M2-TGC	M2	M3
STX														
ETX														
WLA														
ELA						9,360								
M1-24														
M1-30										18,000				
M1-TXG														
M1-TGC														
M2-24														
M2-30														
M2-TXG														
M2-TGC														
M2														18,000
M3														

800515R1

Contract #:800515R

EXHIBIT C (Continued)
PHILADELPHIA AUTHORITY FOR INDUSTRIAL DEVELOPMENT

ZONE BOUNDARY EXIT QUANTITY
Dth/D

To

FROM	STX	ETX	WLA	ELA	M1-24	M1-30	M1-TXG	M1-TGC	M2-24	M2-30	M2-TXG	M2-TGC	M2	M3
STX														
ETX														
WLA														
ELA														
M1-24														
M1-30										18,000				
M1-TXG														
M1-TGC														
M2-24														
M2-30														
M2-TXG														
M2-TGC														
M2														18,000
M3														

SIGNED FOR IDENTIFICATION:

PIPELINE:_____ Jmm

CUSTOMER:_____

SUPERCEDES EXHIBIT C DATED_____

Contract #: 331822

SERVICE AGREEMENT
FOR RATE SCHEDULE FTS-8

This Service Agreement, made and entered into this 7th day of August, 1996, by and between TEXAS EASTERN TRANSMISSION CORPORATION, a Delaware Corporation (herein called "Pipeline") and PHILADELPHIA GAS WORKS, by the Philadelphia Facilities Management Corporation in its capacity as manager and operator of the city-owned Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended (herein called "Customer", whether one or more),

W I T N E S S E T H:

WHEREAS, Customer and Pipeline are parties to an executed service agreement under Pipeline's Rate Schedule FTS-8, Pipeline's Contract No. 331016, which specifies an MDQ of 25,702 dekatherms per day ("Dth/d"); and

WHEREAS, pursuant to the terms and conditions of Section 10 of Rate Schedule FTS-8, as approved by the Commission, Customer desires to increase its MDQ thereunder by 7 Dth/d; and

WHEREAS, subject to the terms and conditions set forth in the Precedent Agreement dated October 21, 1994 entered into by and between Customer and Pipeline ("Precedent Agreement") and the terms and conditions of this Service Agreement, Customer and Pipeline desire to supersede Pipeline's Contract No. 331016 by entering into this Service Agreement to reflect the additional firm transportation service as described above;

NOW, THEREFORE, in consideration of the premises and of the mutual convenants and agreements herein contained, the parties do convenant and agree as follows:

ARTICLE I

SCOPE OF AGREEMENT

Subject to the terms, conditions and limitations hereof and of Pipeline's Rate Schedule FTS-8, Pipeline agrees to deliver on a firm basis for Customer's account quantities of gas up to the following quantity:

Maximum Daily Quantity (MDQ) 25,709 dth

Pipeline shall receive for Customer's account, at the Customer Point(s), for transportation hereunder daily quantities of gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the CNG Point(s), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall receive for Customer's account, at the CNG Point(s), for transportation hereunder daily quantities of gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver

for Customer's account, at the Customer Point(s), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall not be obligated to, but may at its discretion, receive at any Point of Receipt on any day a quantity of gas in excess of the applicable Maximum Daily Receipt Obligation (MDRO), plus Applicable Shrinkage, but shall not receive in the aggregate at all Points of Receipt on any day a quantity of gas in excess of the applicable MDQ, plus Applicable Shrinkage, as specified in the executed service agreement. Pipeline shall not be obligated to, but may at its discretion, deliver at any Point of Delivery on any day a quantity of gas in excess of the applicable Maximum Daily Delivery Obligation (MDDO), but shall not deliver in the aggregate at all Points of Delivery on any day a quantity of gas in excess of the applicable MDQ, as specified in the executed service agreement.

ARTICLE II

TERM OF AGREEMENT

The term of this Service Agreement shall commence on the date specified by Pipeline in Pipeline's written notice to Customer pursuant to Paragraph 3 of the Precedent Agreement, which date will be the later of: (i) November 1, 1996; or (ii) the date that all of the conditions precedent set forth in Paragraph 6 of the Precedent Agreement have been satisfied or waived by mutual written agreement of the parties and Pipeline is ready and able to place the necessary facilities into gas service.- In the event the Precedent Agreement is terminated in accordance with Paragraph 10 of the Precedent Agreement, then the term of this Service Agreement shall not commence and this Service Agreement shall be null and void. After commencement of the term of this Service Agreement, the term of this Service Agreement shall continue in force and effect until March 31, 2006, and year to year thereafter unless this Service Agreement is terminated as hereinafter provided. This Service Agreement may be terminated by either Pipeline or Customer upon twenty-four (24) months prior written notice to the other specifying a termination date of March 31, 2006 or any March 31 thereafter.

Subject to Section 22 of Pipeline's General Terms and Conditions and without prejudice to such right, this Service Agreement may be terminated at any time by Pipeline in the event Customer fails to pay part or all of the amount of any bill for service hereunder and such failure continues for thirty (30) days after payment is due; provided, Pipeline gives thirty (30) days prior written notice to Customer of such termination and provided further such termination shall not be effective if, prior to the date of termination, Customer either pays such outstanding bill or furnishes a good and sufficient surety bond guaranteeing payment to Pipeline of such outstanding bill. Notwithstanding the foregoing, service shall not be terminated unless and until Pipeline has received abandonment authority pursuant to Section 7 of the Natural Gas Act. Customer shall have the right to oppose Pipeline's application to the Federal Energy Regulatory

Commission, or any successor agency, for such abandonment authority. For the 120 days following termination of this Service Agreement, Pipeline shall utilize its best efforts to provide Customer with such additional interruptible transportation service, to be provided pursuant to Rate Schedule IT-1 or successor of Rate Schedule IT-1, as is necessary for Customer to withdraw and receive delivery of all gas remaining in storage pursuant to CNG's Rate Schedule GSS.

Any portions of this Service Agreement necessary to correct or cash-out imbalances under this Service Agreement as required by the General Terms and Conditions of Pipeline's FERC Gas Tariff, Volume No. 1, shall survive the other parts of this Service Agreement until such time as such balancing has been accomplished.

ARTICLE III

RATE SCHEDULE

This Service Agreement in all respects shall be and remain subject to the applicable provisions of Rate Schedule FTS-8 and of the General Terms and Conditions of Pipeline's FERC Gas Tariff on file with the Federal Energy Regulatory Commission, all of which are by this reference made a part hereof.

Customer shall pay Pipeline for, all services rendered hereunder and for the availability of such service in the period stated, the applicable prices established under Pipeline's Rate Schedule FTS-8 as filed with the Federal Energy Regulatory Commission and as the same may be hereafter revised or changed.

Pipeline shall have the right from time to time, by the filing of a revised rate schedule, to increase or decrease the rates, to change the form of the applicable rate schedule and to take such other and further action with respect thereto without further consent by Customer and such changes in rates and other changes shall become the Rate Schedule and Terms and Conditions under which the gas shall be transported hereunder. Customer shall have the right to oppose any of the foregoing and to request reduction in rates to the extent that Customer is legally permitted to do so under the Natural Gas Act.

ARTICLE IV

CUSTOMER POINT(S) AND CNG POINT(S)

Natural gas to be received by Pipeline for Customer's account for service hereunder shall be received on the outlet side of the measuring station at or near the following designated Customer Point(s) or CNG Point(s), and natural gas to be delivered by Pipeline for Customer's account hereunder shall be delivered at the outlet side of the measuring stations at or near the following designated CNG Point(s) or Customer Point(s), in accordance with the Maximum Daily Receipt Obligation

(MDRO) plus Applicable Shrinkage, Maximum Daily Delivery Obligation (MDDO), receipt and delivery pressure obligations and measurement responsibilities indicated below for each:

	Customer Point	Maximum Daily Obligation	Pressure Obligation	Measurement Responsibilities
1.	In the City of Philadelphia, Pennsylvania, and designated by Pipeline as Measuring Station 70030	25,709 dth	100 pounds per square inch gauge.	Pipeline
2.	On the Montgomery Philadelphia, County Line, in Philadelphia, and designated by Pipeline as Measuring Station 70034	25,709 dth	100 pounds per square inch gauge.	Pipeline
3.	In the City of Philadelphia, Pennsylvania, and designated by Pipeline as Measuring Station 71682	5,000 dth	100 pounds per square inch gauge.	Pipeline

	CNG Point	Maximum Daily Obligation	Pressure Obligation	Measurement Responsibilities
1.	In Noble County, Ohio, and designated by Pipeline as Measuring Station 70450.	0 dth [1/] 13,451 dth [2/]	At such pressure existing in Pipeline's facilities not to exceed the Maximum Allowable Operating Pressure.	Pipeline
2.	In Monroe County, Ohio, and designated by Pipeline as Measuring Station 70471.	0 dth [1/] 13,451 dth [2/]	At such pressure existing in Pipeline's facilities not to exceed the Maximum Allowable Operating Pressure.	Pipeline

3.	In Monroe County, Ohio, and designated by Pipeline as Measuring Station 70983.	0 dth 1/ 13,451 dth 2/	At such pressure existing in Pipeline's facilities not to exceed the Maximum Allowable Operating Pressure.	CNG Transmission
4.	In Monroe County, Ohio, and designated by Pipeline as Measuring Station 70004.	0 dth 1/ 13,451 dth 2/	At such pressure existing in Pipeline's facilities not to exceed the Maximum Allowable Operating Pressure.	Pipeline
5.	In Marshall County, West Virginia, and designated by Pipeline as Measuring Station 70372.	0 dth 1/ 13,451 dth 2/	At such pressure existing in Pipeline's facilities not to exceed the Maximum Allowable Operating Pressure.	Pipeline
6.	In Greene County, Pennsylvania, and designated by Pipeline as Measuring Station 75037.	13,451 dth 1/ 13,451 dth 2/	At such pressure existing in Pipeline's facilities not to exceed the Maximum Allowable Operating Pressure.	Pipeline
7.	In Somerset County, Pennsylvania, and designated by Pipeline as Measuring Station 70051.	13,451 dth 1/ 13,451 dth 2/	At such pressure existing in Pipeline's facilities not to exceed the Maximum Allowable Operating Pressure.	Pipeline
8.	In Westmoreland County, Pennsylvania, and designated by Pipeline as Measuring Station 75082.	13,458 dth 1/ 13,458 dth 2/	At such pressure existing in Pipeline's facilities not to exceed the Maximum Allowable Operating Pressure.	CNG Transmission
9.	In Clinton County, Pennsylvania, and designated by Pipeline as Measuring Station 75931.	12,251 dth 1/ 12,251 dth 2/	At such pressure existing in Pipeline's facilities not to exceed the Maximum Allowable Operating Pressure.	CNG Transmission

1/ for receipt by Pipeline for Customer's account

2/ for delivery by Pipeline for Customer's account

provided, however, that Pipeline's maximum daily receipt obligation shall not exceed 13,451 dth in the aggregate at CNG Points (6) and (7) and 13,458 dth in the aggregate at CNG Points (6), (7) and (8) above;

further provided, however, that Pipeline's maximum daily delivery obligation shall not exceed 13,458 dth in the aggregate at CNG Points (1) through (8) above;

further provided, however, receipt of gas by Pipeline for Customer's account at Customer Point(s) shall be accomplished solely by the displacement of gas quantities otherwise deliverable to Customer by Pipeline pursuant to other contractual arrangements between Pipeline and Customer, and which quantities shall be billed by Pipeline and paid by Customer as if such deliveries in fact occurred pursuant to the relevant contractual arrangements;

further provided, however, that until changed by a subsequent Agreement between Pipeline and Customer, Pipeline's aggregate maximum daily delivery obligations at each of the Customer Points described above, including Pipeline's maximum daily delivery obligations under this and all other Service Agreements existing between Pipeline and Customer, shall in no event exceed the following:

Customer Point	Aggregate Maximum Daily Delivery Obligation
No. 1	86,398 dth
No. 2	137,310 dth
No. 3	5,000 dth

and provided further that Pipeline shall have no obligation to deliver natural gas designated as MDQ at any Customer Point other than those listed below:

Customer Points

Measuring Station 70030, Philadelphia, Pennsylvania, up to 12,858 dth/d and
Measuring Station 70034, Montgomery County, Pennsylvania, up to 12,851 dth/d

ARTICLE V

QUALITY

All natural gas tendered to Pipeline for Customer's account shall conform to the quality specifications set forth in Section 5 of Pipeline's General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept natural gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such gas as necessary to comply with such quality specifications.

ARTICLE VI

ADDRESSES

Except as herein otherwise provided or as provided in the General Terms and Conditions of Pipeline's FERC Gas Tariff, any notice, request, demand, statement, bill or payment provided for in this Service Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when mailed by registered, certified, or regular mail to the post office address of the parties hereto, as the case may be, as follows:

(a) Pipeline: Texas Eastern Transmission Corporation
5400 Westheimer Court
Houston, Texas 77056-5310

(b) Customer: Philadelphia Gas Works
800 W. Montgomery Avenue
Philadelphia, PA 19122

or such other address as either party shall designate by formal written notice.

ARTICLE VII

ASSIGNMENTS

Any Company which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of Customer, or of Pipeline, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Service Agreement; and either Customer or Pipeline may assign or pledge this Service Agreement under the provisions of any mortgage, deed of trust, indenture, bank credit agreement, assignment, receivable sale, or similar instrument which it has executed or may execute hereafter; otherwise, neither Customer nor Pipeline shall assign this Service

Agreement or any of its rights hereunder unless it first shall have obtained the consent thereto in writing of the other; provided further, however, that neither Customer nor Pipeline shall be released from its obligations hereunder without the consent of the other.

ARTICLE VIII

INTERPRETATION

The interpretation and performance of this Service Agreement shall be in accordance with the laws of the State of Texas without resources to the law governing conflict of laws.

This Service Agreement and the obligations of the parties are subject to all present and future valid laws with respect to the subject matter, State and Federal, and to all valid present and future orders, rules, and regulations of duly constituted authorities having jurisdiction.

ARTICLE IX

AUTHORITY FOR PAYMENT

It is understood and agreed that in entering into and performing this Agreement, PFMC acts solely in its capacity as operator and manager of the City-owned Philadelphia Gas Works pursuant to an agreement with the City of Philadelphia, dated December 29, 1972, as amended, and not otherwise; and further that any and all payments required to be made in connection with this agreement shall be made solely from the revenues of Client.

ARTICLE X

CANCELLATION OF PRIOR CONTRACT(S)

This Service Agreement supersedes and cancels, as of the effective date of this Service Agreement, the contract(s) between the parties hereto as described below:

Service Agreement dated June 1, 1993, between Pipeline and Customer under Pipeline's Rate Schedule FTS-8 (Pipeline's Contract No. 331016)

SERVICE AGREEMENT
FOR RATE SCHEDULE FTS-8
(Continued)

IN WITNESS WHEREOF, the parties hereto have caused this Service Agreement to be signed by their respective Presidents, Vice Presidents or other duly authorized agents and their respective corporate seals to be hereto affixed and attested by their respective Secretaries or Assistant Secretaries, the day and year first above written.

TEXAS EASTERN TRANSMISSION CORPORATION

By Robert B. Evans
Vice President

PMT

ATTEST:
Robert W. Reed

ROBERT W. REED
CORPORATE SECRETARY

PHILADELPHIA GAS WORKS*

By Gregory D. Martin

LAF

GREGORY D. MARTIN
EXECUTIVE VICE PRESIDENT &
CHIEF OPERATING OFFICER

ATTEST:
Sydney M. Avent

*PHILADELPHIA GAS WORKS, by the Philadelphia Facilities Management Corporation in its capacity as manager and operator of the city-owned Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended

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AMENDMENT TO SERVICE AGREEMENT UNDER RATE SCHEDULE GSS

THIS AMENDMENT ("Amendment") is entered into this 9 day of July, 2012 by and between TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC, a Delaware limited liability company, hereinafter referred to as "Seller", first party, and PHILADELPHIA GAS WORKS, by Philadelphia Facilities Management Corporation in its capacity as operator and manager of the municipally owned Philadelphia Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended, hereinafter referred to as "Buyer", second party.

WITNESSETH

WHEREAS, Seller and Buyer are parties to that certain Service Agreement dated July 1, 1996, under Seller's Rate Schedule GSS, pursuant to which Seller provides natural gas storage service for Buyer ("Service Agreement") (which Service Agreement superseded the Service Agreement between Buyer and Seller dated October 1, 1993); and

WHEREAS, pursuant to the terms of the Application to Amend Seller's Certificate, in Docket No. CP61-194, as approved by the Federal Energy Regulatory Commission's order dated June 13, 1996 in Docket No. CP96-226-000, the Service Agreement allows for a partial decrease in Buyer's Storage Demand and Buyer's Storage Capacity Quantity beginning July 1, 2001; and

WHEREAS, Buyer has requested and Seller has agreed not to decrease Buyer's Storage Demand and Buyer's Storage Capacity Quantity, and to maintain those quantities at the higher level for the remaining term of the Storage Service Agreement; and

WHEREAS, Seller's firm storage service under Rate Schedule GSS is supported, in part, by a contract storage service purchased from Dominion Transmission, Inc. ("DTI") pursuant to an agreement dated August 23, 1993 under DTI's Rate Schedule GSS ("DTI Storage Service Agreement"); and

WHEREAS, DTI and Seller have negotiated for an extension of the DTI Storage Service Agreement through March 31, 2023; and

WHEREAS, Seller and Buyer desire to continue transacting business pursuant to the Service Agreement and extend the primary term of the Service Agreement to March 31, 2023.

NOW THEREFORE, Seller and Buyer hereby agree as follows:

1. Effective as of the date hereof, Article I of the Service Agreement is hereby deleted in its entirety and replaced by the following:

ARTICLE I
SERVICE TO BE RENDERED

Subject to the terms and provisions of this agreement and of Seller's Rate Schedule GSS, Seller agrees to receive from Buyer for storage, inject into storage for Buyer's account, store, withdraw from storage (or cause to be injected into storage for Buyer's account, stored, and withdrawn from storage) and deliver to Buyer, quantities of natural gas as follows:

To withdraw from storage or cause to be withdrawn from storage, the gas stored for Buyer's account up to a maximum quantity in any day of 61,567 dt, which quantity shall be Buyer's Storage Demand.

To receive and store or cause to be stored up to a total quantity at any one time of 4,123,733 dt, which quantity shall be Buyer's Storage Capacity Quantity.

2. Effective as of April 1, 2013, Article IV of the Service Agreement is hereby deleted in its entirety and replaced by the following:

ARTICLE IV
TERM OF AGREEMENT

This agreement shall be effective July 1, 1996 and shall remain in force and effect for a period ending March 31, 2023.

3. Except as herein renewed and amended, the Service Agreement shall remain in full force and effect pursuant to the terms thereof.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be signed by their respective officers or representatives thereunto duly authorized.

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC
(Seller)

By _____

Print Name Paul F. Egner III

Title Director, Customer Services

PHILADELPHIA GAS WORKS by Philadelphia Facilities Management Corporation
(Buyer)

By _____

Print Name Douglas A. Mosel

Title EVP & COO

Contract #: 800233R1

SERVICE AGREEMENT
FOR RATE SCHEDULE FT-1

This Service Agreement, made and entered into this 31st day of December, 1999, by and between TEXAS EASTERN TRANSMISSION CORPORATION, a Delaware Corporation (herein called "Pipeline") and PHILADELPHIA GAS WORKS, by the Philadelphia Facilities Management Corporation in its capacity as manager and operator of the city-owned Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended (herein called "Customer", whether one or more),

W I T N E S S E T H:

WHEREAS, Customer and Pipeline are parties to an executed service agreement dated December 15, 1998, under Pipeline's Rate Schedule FT-1 (Pipeline's Contract No. 800233R); and

WHEREAS, Pipeline and Customer desire to enter into this Service Agreement to supersede Pipeline's currently effective Contract No. 800233R;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the parties do covenant and agree as follows:

ARTICLE I

SCOPE OF AGREEMENT

Subject to the terms, conditions and limitations hereof, of Pipeline's Rate Schedule FT-1, and of the General Terms and Conditions, transportation service hereunder will be firm. Subject to the terms, conditions and limitations hereof and of Pipeline's Rate Schedule FT-1, Pipeline agrees to deliver for Customer's account quantities of natural gas up to the following quantity:

Maximum Daily Quantity (MDQ) 23,822 dth

provided, however, Customer shall have the option to reduce the MDQ of this Service Agreement by 2,382 dth upon one (1) year prior written notice to Pipeline with such reduction to be effective November 1, 2002. Pipeline and Customer agree that any reduction in MDQ

of this Service Agreement will (i)reduce all of Customer's market zone entitlements by the quantity of such reduction; and (ii)reduce Customer's firm rights under this Service Agreement in each of Pipeline's acess area zones by 10%.

Pipeline shall receive for Customer's account, at those points on Pipeline's system as specified in Article IV herein or available to Customer pursuant to Section 14 of the General Terms and Conditions (hereinafter referred to as Point(s) of Receipt) for transportation hereunder daily quantities of gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at those points on Pipeline's system as specified in Article IV herein or available to Customer pursuant to Section 14 of the General Terms and Conditions (hereinafter referred to as Point(s) of Delivery), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall not be obligated to, but may at its discretion, receive at any Point of Receipt on any day a quantity of gas in excess of the applicable Maximum Daily Receipt Obligation (MDRO), plus Applicable Shrinkage, but shall not receive in the aggregate at all Points of Receipt on any day a quantity of gas in excess of the applicable MDQ, plus Applicable Shrinkage. Pipeline shall not be obligated to, but may at its discretion, deliver at any Point of Delivery on any day a quantity of gas in excess of the applicable Maximum Daily Delivery Obligation (MDDO), but shall not deliver in the aggregate at all Points of Delivery on any day a quantity of gas in excess of the applicable MDQ.

In addition to the MDQ and subject to the terms, conditions and limitations hereof, Rate Schedule FT-1 and the General Terms and Conditions, Pipeline shall deliver within the Access Area under this and all other service agreements under Rate Schedules CDS, FT-1, and/or SCT, quantities up to Customer's Operational Segment Capacity Entitlements, excluding those Operational Segment Capacity Entitlements scheduled to meet Customer's MDQ, for Customer's account, as requested on any day.

ARTICLE II

TERM OF AGREEMENT

The term of this Service Agreement shall commence on the first day of the first month after Customer fully executes this Service Agreement and shall continue in force and effect until October 31, 2003 and year to year thereafter unless this Service Agreement is terminated as hereinafter provided. This Service Agreement may be terminated by either Pipeline or Customer upon one (1) year prior written notice to the other specifying a termination date of October 31, 2003, or any October 31 thereafter. Subject to Section 22 of Pipeline's General Terms and Conditions and without prejudice to such rights, this Service Agreement may be terminated at any time by Pipeline in the event Customer fails to pay part or all of the amount of any bill for service hereunder and such failure continues for thirty (30) days after payment is due; provided, Pipeline gives thirty (30) days prior written notice to Customer of such termination and provided further such termination shall not be effective if, prior to the date of termination, Customer either pays such outstanding bill or furnishes a good and sufficient surety bond guaranteeing payment to Pipeline of such outstanding bill.

THE TERMINATION OF THIS SERVICE AGREEMENT WITH A FIXED CONTRACT TERM OR THE PROVISION OF A TERMINATION NOTICE BY CUSTOMER TRIGGERS PREGRANTED ABANDONMENT UNDER SECTION 7 OF THE NATURAL GAS ACT AS OF THE EFFECTIVE DATE OF THE TERMINATION. PROVISION OF A TERMINATION NOTICE BY PIPELINE ALSO TRIGGERS CUSTOMER'S RIGHT OF FIRST REFUSAL UNDER SECTION 3.13 OF THE GENERAL TERMS AND CONDITIONS ON THE EFFECTIVE DATE OF THE TERMINATION.

Any portions of this Service Agreement necessary to correct or cash-out imbalances under this Service Agreement as required by the General Terms and Conditions of Pipeline's FERC Gas Tariff, Volume No. 1, shall survive the other parts of this Service Agreement until such time as such balancing has been accomplished.

ARTICLE III

RATE SCHEDULE

This Service Agreement in all respects shall be and remain subject to the applicable provisions of Rate Schedule FT-1 and of the General Terms and Conditions of Pipeline's FERC Gas Tariff on file with the Federal Energy Regulatory Commission, all of which are by this reference made a part hereof.

Customer shall pay Pipeline, for all services rendered hereunder and for the availability of such service in the period stated, the applicable prices established under Pipeline's Rate Schedule FT-1 as filed with the Federal Energy Regulatory Commission, and as same may hereafter be legally amended or superseded.

Customer agrees that Pipeline shall have the unilateral right to file with the appropriate regulatory authority and make changes effective in (a) the rates and charges applicable to service pursuant to Pipeline's Rate Schedule FT-1, (b) Pipeline's Rate Schedule FT-1 pursuant to which service hereunder is rendered or (c) any provision of the General Terms and Conditions applicable to Rate Schedule FT-1. Notwithstanding the foregoing, Customer does not agree that Pipeline shall have the unilateral right without the consent of Customer subsequent to the execution of this Service Agreement and Pipeline shall not have the right during the effectiveness of this Service Agreement to make any filings pursuant to Section 4 of the Natural Gas Act to change the MDQ specified in Article I, to change the term of the agreement as specified in Article II, to change Point(s) of Receipt specified in Article IV, to change the Point(s) of Delivery specified in Article IV, or to change the firm character of the service hereunder. Pipeline agrees that Customer may protest or contest the aforementioned filings, and Customer does not waive any rights it may have with respect to such filings.

ARTICLE IV

POINT(S) OF RECEIPT AND POINT(S) OF DELIVERY

The Point(s) of Receipt and Point(s) of Delivery at which Pipeline shall receive and deliver gas, respectively, shall be specified in Exhibit(s) A and B of the executed service

agreement. Customer's Zone Boundary Entry Quantity and Zone Boundary Exit Quantity for each of Pipeline's zones shall be specified in Exhibit C of the executed service agreement.

Exhibit(s) A, B and C are hereby incorporated as part of this Service Agreement for all intents and purposes as if fully copied and set forth herein at length.

ARTICLE V

QUALITY

All natural gas tendered to Pipeline for Customer's account shall conform to the quality specifications set forth in Section 5 of Pipeline's General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept natural gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, Customer shall pay all costs associated with processing of such gas as necessary to comply with such quality specifications. Customer shall execute or cause its supplier to execute, if such supplier has retained processing rights to the gas delivered to Customer, the appropriate agreements prior to the commencement of service for the transportation and processing of any liquefiable hydrocarbons and any PVR quantities associated with the processing of gas received by Pipeline at the Point(s) of Receipt under such Customer's service agreement. In addition, subject to the execution of appropriate agreements, Pipeline is willing to transport liquids associated with the gas produced and tendered for transportation hereunder.

ARTICLE VI

ADDRESSES

Except as herein otherwise provided or as provided in the General Terms and Conditions of Pipeline's FERC Gas Tariff, any notice, request, demand, statement, bill or payment provided for in this Service Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when mailed by registered,

certified, or regular mail to the post office address of the parties hereto, as the case may be, as follows:

(a) Pipeline: TEXAS EASTERN TRANSMISSION CORPORATION
5400 Westheimer Court
Houston, TX 77056-5310

(b) Customer: PHILADELPHIA GAS WORKS
GAS ACQUISITION & FED. REGULATORY AFFAIRS DEPT.
800 W. MONTGOMERY AVENUE
PHILADELPHIA, PA 19122

or such other address as either party shall designate by formal written notice.

ARTICLE VII

ASSIGNMENTS

Any Company which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of Customer, or of Pipeline, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Service Agreement; and either Customer or Pipeline may assign or pledge this Service Agreement under the provisions of any mortgage, deed of trust, indenture, bank credit agreement, assignment, receivable sale, or similar instrument which it has executed or may execute hereafter; otherwise, neither Customer nor Pipeline shall assign this Service Agreement or any of its rights hereunder unless it first shall have obtained the consent thereto in writing of the other; provided further, however, that neither Customer nor Pipeline shall be released from its obligations hereunder without the consent of the other. In addition, Customer may assign its rights to capacity pursuant to Section 3.14 of the General Terms and Conditions. To the extent Customer so desires, when it releases capacity pursuant to Section 3.14 of the General Terms and Conditions, Customer may require privity between Customer and the Replacement Customer, as further provided in the applicable Capacity Release Umbrella Agreement.

ARTICLE VIII

INTERPRETATION

The interpretation and performance of this Service Agreement shall be in accordance with the laws of the State of Texas without recourse to the law governing conflict of laws.

This Service Agreement and the obligations of the parties are subject to all present and future valid laws with respect to the subject matter, State and Federal, and to all valid present and future orders, rules, and regulations of duly constituted authorities having jurisdiction.

ARTICLE IX

CANCELLATION OF PRIOR CONTRACT(S)

This Service Agreement supersedes and cancels, as of the effective date of this Service Agreement, the contract(s) between the parties hereto as described below:

service agreement dated December 15, 1998, between Pipeline and Customer under Pipeline's Rate Schedule FT-1 (Pipeline's Contract No. 800233R).

IN WITNESS WHEREOF, the parties hereto have caused this Service Agreement to be signed by their respective Presidents, Vice Presidents or other duly authorized agents and their respective corporate seals to be hereto affixed and attested by their respective Secretaries or Assistant Secretaries, the day and year first above written.

TEXAS EASTERN TRANSMISSION CORPORATION

By _____ PMT

ATTEST:

Beverly J. Fite
Assistant Secretary

PHILADELPHIA GAS WORKS*

By _____ bjf

ATTEST:

*PHILADELPHIA GAS WORKS, by the Philadelphia Facilities Management Corporation in its capacity as manager and operator of the city-owned Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended.

Contract #800233R

R1A1

EXHIBIT A, TRANSPORTATION PATHS
FOR BILLING PURPOSES, DATED 12/31/1999,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE FT-1
BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("Pipeline")
AND PHILADELPHIA GAS WORKS ("Customer"), DATED 12/31/1999:

(1) Customer's firm Point(s) of Receipt:

Point of Receipt	Description	Maximum Daily Receipt Obligation (plus Applicable Shrinkage)	Measurement Responsibilities	Owner	Operator
None					

(2) Customer shall have Pipeline's Master Receipt Point List ("MRPL"). Customer hereby agrees that Pipeline's MRPL as revised and published by Pipeline from time to time is incorporated herein by reference.

Customer hereby agrees to comply with the Receipt Pressure Obligation as set forth in Section 6 of Pipeline's General Terms and Conditions at such Point(s) of Receipt.

Transportation Path	Transportation Path Quantity (Dth/D)
M1 to M3	23,822

SIGNED FOR IDENTIFICATION

PIPELINE: _____ JMM

CUSTOMER: _____ SAK

SUPERSEDES EXHIBIT A DATED: _____

Contract #:800233R1
R1B1

EXHIBIT B, POINT(S) OF DELIVERY, DATED 12/31/1999,
TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE FT-1
BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("Pipeline"), AND
PHILADELPHIA GAS WORKS ("Customer"),
DATED 12/31/1999:

	Point of Delivery	Description	Maximum Daily Delivery Obligation (dth)	Delivery Pressure Obligation	Measurement Responsibilities	Owner	Operator
1.	70030	PHILADELPHIA GAS WORKS - POINT BREEZE,PA PHILADELPHIA CO., PA	23,822	100 POUNDS PER SQUARE INCH GAUGE	TX EAST TRAN	TX EAST TRAN	PHIL GAS WKS
2.	70034	PHILADELPHIA GAS WORKS - LEVICK ST., PA MONTGOMERY CO., PA	23,822	100 POUNDS PER SQUARE INCH GAUGE	TX EAST TRAN	TX EAST TRAN	PHIL GAS WKS
3.	71682	PHILADELPHIA GAS WORKS PENROSE (EASTWICK)-PHILADEL PHILADELPHIA CO., PA	5,000	100 POUNDS PER SQUARE INCH GAUGE	TX EAST TRAN	TX EAST TRAN	PHIL GAS WKS
4.	79513	SS-1 STORAGE POINT	23,822 04/01-10/31 23,822 11/01-03/31	N/A	N/A	N/A	N/A
5.	73060	HARKNESS PT. - PHILADELPHIA, PA PHILADELPHIA CO., PA	23,822	125 POUNDS PER SQUARE INCH GAUGE	TX EAST TRAN	TX EAST TRAN	PHIL GAS WKS

provided, however, that until changed by a subsequent Agreement between Pipeline and Customer, Pipeline's aggregate maximum daily delivery obligations under this and all other firm Service Agreements existing between Pipeline and Customer, shall in no event exceed the following:

800233R1

Contract #:800233R1

EXHIBIT B, POINT(S) OF DELIVERY (Continued)
PHILADELPHIA GAS WORKS

Point of Delivery	Aggregate Maximum Daily Delivery Obligation (dth)
No.1	92,073 12/01-02/28 101,073 03/01-11/30
No.2	137,310
No.3	5,000
No.4	26,262
No.5	49,000

and further provided, however, that Pipeline's maximum daily delivery obligation shall not exceed 101,073 dth in the aggregate at Points of Delivery 70030 and 73060.

SIGNED FOR IDENTIFICATION

PIPELINE: _____ Jmm

CUSTOMER: _____ LAK

SUPERSEDES EXHIBIT B DATED: December 15, 1998

800233R1

Contract #:800233R

R1C1

EXHIBIT C, ZONE BOUNDARY ENTRY QUANTITY AND ZONE BOUNDARY EXIT QUANTITY, DATED 12/31/1999, TO THE SERVICE AGREEMENT UNDER RATE SCHEDULE FT-1 BETWEEN TEXAS EASTERN TRANSMISSION CORPORATION ("PIPELINE") AND PHILADELPHIA GAS WORKS ("CUSTOMER"), DATED 12/31/1999:

ZONE BOUNDARY ENTRY QUANTITY
Dth/D

To

FROM	STX	ETX	WLA	ELA	M1-24	M1-30	M1-TXG	M1-TGC	M2-24	M2-30	M2-TXG	M2-TGC	M2	M3
STX								1696						
ETX					7210		2567							
WLA							781	1696						
ELA						28123								
M1-24									7210					
M1-30										10843				
M1-TXG											3348			
M1-TGC												3393		
M2-24														
M2-30														
M2-TXG														
M2-TGC														
M2														23822
M3														

800233R1

Contract #:800233R

EXHIBIT C (Continued)
PHILADELPHIA GAS WORKS

ZONE BOUNDARY EXIT QUANTITY
Dth/D

To

FROM	STX	ETX	WLA	ELA	M1-24	M1-30	M1-TXG	M1-TGC	M2-24	M2-30	M2-TXG	M2-TGC	M2	M3
STX														
ETX														
WLA														
ELA														
M1-24									7210					
M1-30										10840				
M1-TXG											3348			
M1-TGC												3393		
M2-24														
M2-30														
M2-TXG														
M2-TGC														
M2														23822
M 3														

SIGNED FOR IDENTIFICATION:

PIPELINE: _____ JMM

CUSTOMER: _____

SUPERSEDES EXHIBIT C DATED: _____

FORM OF SERVICE AGREEMENT
(For Use Under Seller's Rate Schedule FT)

THIS AGREEMENT entered into this 11 day of July, 2018, by and between TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC, a Delaware limited liability company, hereinafter referred to as "Seller," first party, and PHILADELPHIA GAS WORKS, by Philadelphia Facilities Management Corporation in its capacity as operator and manager of the municipally owned Philadelphia Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended, hereinafter referred to as "Buyer, " second party,

WITNESSETH

WHEREAS, Seller and Buyer are parties to that certain Service Agreement, dated February 1, 1992 (Seller's Contract #1003691, hereinafter referred to as "the Service Agreement"), under Seller's Rate Schedule FT pursuant to which Seller provides firm transportation service for Buyer up to a Transportation Contract Quantity of 165,212 dt per day; and

WHEREAS, Seller and Buyer desire to amend the Service Agreement to modify Exhibit A of the Service Agreement to remove all of the receipt points and volumes with the exception of the receipt points at Compressor Stations 30, 45, 50, 54, 62 and 65 and the associated volumes for each; and

WHEREAS, Seller and Buyer also desire to amend the Service Agreement to reflect the conversion of the quantities of gas under the Service Agreement from Mcf to dt at a conversion factor of 1.035 dt per Mcf; and

WHEREAS, Seller and Buyer further desire to amend the Service Agreement to include a non-conforming provision specifying the responsible party for payments for transportation service provided by Seller under the Service Agreement in Article VI, Paragraph 6; and

WHEREAS, consistent with Federal Energy Regulatory Commission requirements, Seller and Buyer have agreed to supersede and cancel the Service Agreement and execute a new agreement reflecting these amendments and otherwise restating the terms and conditions of the Service Agreement, which will then be submitted to the Federal Energy Regulatory Commission for approval.

NOW THEREFORE, Seller and Buyer agree as follows:

ARTICLE I
GAS TRANSPORTATION SERVICE

1. Subject to the terms and provisions of this agreement and of Seller's Rate Schedule FT, Buyer agrees to deliver or cause to be delivered to Seller gas for transportation and Seller agrees to receive, transport and redeliver natural gas to Buyer or for the account of Buyer, on a firm basis, up to a Transportation Contract Quantity ("TCQ") of 165,212 dt per day.

2. Transportation service rendered hereunder shall not be subject to curtailment or interruption except as provided in Section 11 and, if applicable, Section 42 of the General Terms and Conditions of Seller's FERC Gas Tariff.

ARTICLE II
POINT(S) OF RECEIPT

Buyer shall deliver or cause to be delivered gas at the point(s) of receipt hereunder at a pressure sufficient to allow the gas to enter Seller's pipeline system at the varying pressures that may exist in such system from time to time; provided, however, the pressure of the gas delivered or caused to be delivered by Buyer shall not exceed the maximum operating pressure(s) of Seller's pipeline system at such point(s) of receipt. In the event the maximum operating pressure(s) of Seller's pipeline system, at the point(s) of receipt hereunder, is from time to time increased or decreased, then the maximum allowable pressure(s) of the gas delivered or caused to be delivered by Buyer to Seller at the point(s) of receipt shall be correspondingly increased or decreased upon written notification of Seller to Buyer. The point(s) of receipt for natural gas received for transportation pursuant to this agreement shall be:

See Exhibit A, attached hereto, for points of receipt.

ARTICLE III
POINT(S) OF DELIVERY

Seller shall redeliver to Buyer or for the account of Buyer the gas transported hereunder at the following point(s) of delivery and at a pressure(s) of:

See Exhibit B, attached hereto, for points of delivery and pressures.

ARTICLE IV
TERM OF AGREEMENT

This agreement shall be effective as of September 1, 2018 and shall remain in force and effect until 9:00 a.m. Central Clock Time September 1, 2021 and thereafter until terminated by Seller or Buyer upon at least three (3) years written notice; provided, however, this agreement shall terminate immediately and, subject to the receipt of necessary authorizations, if any, Seller may discontinue service hereunder if (a) Buyer, in Seller's reasonable judgment fails to demonstrate creditworthiness, and (b) Buyer fails to provide adequate security in accordance with Section 32 of the General Terms and Conditions of Seller's Volume No. 1 Tariff. As set forth in Section 8 of Article II of Seller's August 7, 1989 revised Stipulation and Agreement in Docket Nos. RP88-68 et.al., (a) pregranted abandonment under Section 284.221(d) of the Commission's regulations shall not apply to any long term conversions from firm sales service to transportation service under Seller's Rate Schedule FT and (b) Seller shall not exercise its right to terminate this service agreement as it applies to transportation service resulting from conversions from firm sales service so long as Buyer is willing to pay rates no less favorable than Seller is otherwise able to collect from third parties for such service.

ARTICLE V
RATE SCHEDULE AND PRICE

1. Buyer shall pay Seller for natural gas delivered to Buyer hereunder in accordance with Seller's Rate Schedule FT and the applicable provisions of the General Terms and Conditions of Seller's FERC Gas Tariff as filed with the Federal Energy Regulatory Commission, and as the same may be legally amended or superseded from time to time. Such rate schedule and General Terms and Conditions are by this reference made a part hereof. In the event Buyer and Seller mutually agree to a negotiated rate pursuant to the provisions in Section 53 of the General Terms and Conditions and specified term for service hereunder, provisions governing such negotiated rate (including surcharges) and term shall be set forth on Exhibit C to the service agreement.

2. Seller and Buyer agree that the quantity of gas that Buyer delivers or causes to be delivered to Seller shall include the quantity of gas retained by Seller for applicable compressor fuel, line loss make-up (and injection fuel under Seller's Rate Schedule GSS, if applicable) in providing the transportation service hereunder, which quantity may be changed from time to time and which will be specified in the currently effective Statement of Rates and Fuel in Part II, Section 12.1 of this tariff which relates to service under this agreement and which is incorporated herein.

3. In addition to the applicable charges for firm transportation service pursuant to Section 3 of Seller's Rate Schedule FT, Buyer shall reimburse Seller for any and all filing fees incurred as a result of Buyer's request for service under Seller's Rate Schedule FT, to the extent such fees are imposed upon Seller by the Federal Energy Regulatory Commission or any successor governmental authority having jurisdiction.

ARTICLE VI
MISCELLANEOUS

1. This Agreement supersedes and cancels as of the effective date hereof the following contract(s): FT Service Agreement, dated February 1, 1992 (Seller's Contract #1003691).

2. No waiver by either party of any one or more defaults by the other in the performance of any provisions of this agreement shall operate or be construed as a waiver of any future default or defaults, whether of a like or different character.

3. The interpretation and performance of this agreement shall be in accordance with the laws of the State of Texas, without recourse to the law governing conflict of laws, and to all present and future valid laws with respect to the subject matter, including present and future orders, rules and regulations of duly constituted authorities.

4. This agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective successors and assigns.

5. Notices to either party shall be in writing and shall be considered as duly delivered when mailed to the other party at the following address:

(a) If to Seller:
Transcontinental Gas Pipe Line Company, LLC
P. O. Box 1396
Houston, Texas 77251
Attention: Manager – Customer Services

(b) If to Buyer:
Philadelphia Gas Works
800 West Montgomery Avenue
Philadelphia, Pennsylvania 19122
Attention: Vice President – Rates and Federal Regulatory Affairs

Such addresses may be changed from time to time by mailing appropriate notice thereof to the other party by certified or registered mail.

6. It is understood and agreed that any payments required to be made by the Philadelphia Facilities Management Corporation and/or PGW as a result of or arising out of its entering into this Service Agreement shall be made solely from the revenues of the Philadelphia Gas Works.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be signed by their respective officers or representatives thereunto duly authorized.

TRANSCONTINENTAL GAS PIPE LINE
COMPANY, LLC
(Seller)

By Hector Alatorre

Print Name HECTOR ALATORRE

Title DIRECTOR, CUSTOMER SERVICE

PHILADELPHIA GAS WORKS
(Buyer)

By John C. Zuk

Print Name John C. Zuk

Title VP Gas Supply

Exhibit A

Point(s) of Receipt	Maximum Daily Capacity Entitlement at each Receipt Point (DT/day)*]
1. Suction Side of Seller's Compressor Station 30 at the Existing Point of Interconnection between Seller's Central Texas Lateral and Seller's Mainline at Wharton County, Texas. (Station 30 TP#7133)	28,086
2. Discharge Side of Seller's Compressor Station 45 at the Existing Point of Interconnection between Seller's Southwest Louisiana Lateral and Seller's Mainline Beauregard Parish, Louisiana. (Station 45 TP#7101)	69,388
3. Suction Side of Seller's Compressor Station 50 at the Existing Point of Interconnection between Seller's Central Louisiana Lateral and Seller's Mainline Evangeline Parish, Louisiana. (Station 50 TP#6948)	100,779
4. Discharge Side of Seller's Compressor Station 54 at Seller's Washington Storage Field, St. Landry Parish, Louisiana (Station 54 TP#6768)	101,546 Mar.–Nov. 100,779 Dec.–Feb.
5. Suction Side of Seller's Compressor Station 62 on Seller's Southeast Louisiana Lateral in Terrebonne Parish, Louisiana. (Station 62 TP#7141)	64,433
6. Suction Side of Seller's Compressor Station 65 at Existing Point of Interconnection between Seller's Southeast Louisiana Lateral and Seller's Mainline St. Helena Parish, Louisiana. (Station 65 TP#6685)	165,212

* These quantities do not include the additional quantities of gas retained by Seller for applicable compressor fuel and line loss make-up provided for in Article V, 2 of this service agreement, which are subject to change as provided for in Article V, 2 hereof.

Exhibit B

Point(s) of Delivery	Maximum Daily Capacity Entitlement at each Delivery Point(Dt/Day)	Pressure
1. Station 54	101,546 Mar.–Nov. 100,779 Dec.–Feb.	Not Applicable.
2. Seller's Eminence Storage Field, Covington County, Mississippi	165,212	Prevailing pressure in Seller's pipeline system not to exceed maximum allowable operating pressure.
3. Ashmead Road Meter Station, located on Seller's Oreland Line at mile post 13.44 in Cheltenham Township, Montgomery County, Pennsylvania, near the city limits line of the City of Philadelphia, Pennsylvania.	165,212	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.
4. Whitman Meter Station, located in the City of Philadelphia, Pennsylvania, on Delaware Avenue approximately 550 feet south of the intersection of Delaware Avenue and Packer Avenue where the facilities of Seller connect with those of Buyer.	165,212	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.

5.	Richmond Meter Station, located adjacent to Seller's Trenton-Woodbury line at mile post 36.83 and near the intersection of Lewis and Delaware Avenue, Philadelphia County, Philadelphia, Pennsylvania.	165,212	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.
6.	Northeast Philadelphia Meter Station (Somerton), located near the westerly terminus of Brookside Drive and approximately 1200 feet northeasterly from County Line Road in Lower Southampton Township, Bucks County, Pennsylvania.	165,212	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.
7.	Oreland Meter Station, located on Seller's Oreland Line at mile post 6.09 in Springfield Township, Montgomery County, Pennsylvania.	165,212	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.

Exhibit C

Specification of Negotiated Rate and Term

None.

27 0041 000

System Contract #0.3691

NEED NEW BASE ##

ATION

DATED

February 1, 1992

PGW File #87-TRA-1-FT-10

27 0041 000

SERVICE AGREEMENT

THIS AGREEMENT entered into this 13th day of February, 1992, by and between TRANSCONTINENTAL GAS PIPE LINE CORPORATION, a Delaware corporation, hereinafter referred to as "Seller", first party, and PHILADELPHIA GAS WORKS 1/, hereinafter referred to as "Buyer," second party,

W I T N E S S E T H

WHEREAS, Buyer and Seller desire to consolidate the existing limited term and long term firm transportation service agreements between Buyer and Seller into a single long term service agreement under Seller's Rate Schedule FT.

NOW, THEREFORE, Seller and Buyer agree as follows:

ARTICLE I
GAS TRANSPORTATION SERVICE

1. Subject to the terms and provisions of this agreement and of Seller's Rate Schedule FT, Buyer agrees to deliver or cause to be delivered to Seller gas for transportation and Seller agrees to receive, transport and redeliver natural gas to Buyer or for the account of Buyer, on a firm basis, up to the dekatherm equivalent of a Transportation Contract Quantity ("TCQ") of 159,625 Mcf per day.

2. Transportation service rendered hereunder shall not be subject to curtailment or interruption except as provided in Section 11 of the General Terms and Conditions of Seller's FERC Gas Tariff.

ARTICLE II
POINT(S) OF RECEIPT

Buyer shall deliver or cause to be delivered gas at the Point(s) of receipt hereunder at a pressure sufficient to allow the gas to enter Seller's pipeline system at the varying pressures that may exist in such system from time to time; provided, however, that such pressure of the gas delivered or caused to be delivered by Buyer shall not exceed the maximum operating pressure(s) specified below. In the event the maximum operating pressure(s) of Seller's pipeline system, at the Point(s) of receipt hereunder, is from time to time increased or decreased, then the maximum allowable pressure(s) of the gas delivered or caused to be delivered by Buyer to Seller at the point(s) of receipt shall be correspondingly increased or decreased upon written notification of Seller to Buyer. The point(s) of receipt for natural gas received for transportation pursuant to this agreement shall be:

SEE Exhibit A, attached hereto, for points of receipt.

ARTICLE III
POINT(S) OF DELIVERY

Seller shall redeliver to Buyer or for the account of Buyer the gas transported hereunder at the following point(s) of delivery and at a pressure(s) of:

SEE Exhibit B, attached hereto, for points of delivery and pressures.

ARTICLE IV
TERM OF AGREEMENT

This agreement shall be effective as of February 1, 1992 and shall remain in force and effect until 8:00 a.m. Eastern Standard Time March 31, 2005 and thereafter until terminated by Seller or Buyer upon at least three (3) years written notice; provided, however, this agreement shall terminate immediately and, subject to the receipt of necessary authorizations, if any, Seller may discontinue service hereunder if (a) Buyer, in Seller's reasonable judgment fails to demonstrate credit worthiness, and (b) Buyer fails to provide adequate security in accordance with Section 8.3 of Seller's Rate Schedule FT. As set forth in Section 8 of Article II of Seller's August 7, 1989 revised Stipulation and Agreement in Docket Nos. RP88-68 et al., (a) pregranted abandonment under Section 284.221 (d) of the Commission's Regulations shall not apply to any long term conversions from firm sales service to transportation service under Seller's Rate Schedule FT and (b) Seller shall not exercise its right to terminate this service agreement as it applies to transportation service resulting from conversions from firm sales service so long as Buyer is willing to pay rates no less favorable than Seller is otherwise able to collect from third parties for such service.

ARTICLE V

RATE SCHEDULE AND PRICE

1. Buyer shall pay Seller for natural gas delivered to Buyer hereunder in accordance with Seller's Rate Schedule FT and the applicable provisions of the General Terms and Conditions of Seller's FERC Gas Tariff as filed with the Federal Energy Regulatory Commission, and as the same may be legally amended or superseded from time to time. Such Rate Schedule and General Terms and Conditions are by this reference made a part hereof.

2. Seller and Buyer agree that the quantity of gas that Buyer delivers or causes to be delivered to Seller shall include the quantity of gas retained by Seller for applicable compressor fuel, line loss make-up (and injection fuel under Seller's Rate Schedule GSS, if applicable) in providing the transportation service hereunder, which quantity may be changed from time to time and which will be specified in the currently effective Sheet No. 44 of Volume No. 1 of this Tariff which relates to service under this agreement and which is incorporated herein.

SERVICE AGREEMENT
(Continued)

3. In addition to the applicable charges for firm transportation service pursuant to Section 3 of Seller's Rate Schedule FT, Buyer shall reimburse Seller for any and all filing fees incurred as a result of Buyer's request for service under Seller's Rate Schedule FT, to the extent such fees are imposed upon Seller by the Federal Energy Regulatory Commission or any successor governmental authority having jurisdiction.

ARTICLE VI
MISCELLANEOUS

1. This Agreement supersedes and cancels as of the effective date hereof the following contract(s) between the parties hereto:

FT Service Agreement dated April 1, 1991, as amended August 1, 1991 (system contract 0.3691); FT (limited term) Service Agreement dated April 10, 1990, as amended April 1, 1991 and August 1, 1991 (system contract 0.3409/0.3449) the term of which Buyer and Seller hereby agree to extend until the effective date of service hereunder.

2. No waiver by either party of any one or more defaults by the other in the performance of any provisions of this agreement shall operate or be construed as a waiver of any future default or defaults, whether of a like or different character.

3. The interpretation and performance of this agreement shall be in accordance with the laws of the State of Texas, without recourse to the law governing conflict of laws, and to all present and future valid laws with respect to the subject matter, including present and future orders, rules and regulations of duly constituted authorities.

4. This agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective successors and assigns.

5. Notices to either party shall be in writing and shall be considered as duly delivered when mailed to the other party at the following address:

(a) If to Seller:

Transcontinental Gas Pipe Line Corporation
P. O. Box 1396
Houston, Texas 77251
Attention: Director - Transportation Services

(b) If to Buyer:

Philadelphia Gas Works
800 West Montgomery Avenue
Philadelphia, Pennsylvania 19122
Attention: Vice President - Rates and Federal Regulatory Affairs

Such address may be changed from time to time by mailing appropriate notice thereof to the other party by certified or registered mail.

SERVICE AGREEMENT
(Continued)

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be signed by their respective officers or representatives thereunto duly authorized.

TRANSCONTINENTAL GAS PIPE LINE CORPORATION
(Seller)

By: _____
Thomas E. Skains
Senior Vice President
Transportation and Customer Services

PHILADELPHIA GAS WORKS
(Buyer)

By: _____

Title: _____

1/ PHILADELPHIA GAS WORKS by PHILADELPHIA FACILITIES MANAGEMENT CORPORATION, a non-profit Pennsylvania corporation, in its capacity as operator and manager of the City-owned facility, pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended.

EXHIBIT "A" **System Contract #.3691**
(FT)

	Point(s) of Receipt	Buyer's Cumulative Mainline Capacity Entitlement (Mcf/day)*
1.	Suction Side of Seller's Compressor Station 30 at the Existing Point of Interconnection between Seller's Central Texas Lateral and Seller's Mainline at Wharton County, Texas. (Station 30 TP#7133)	27,136
2.	Existing Point of Interconnection between Seller and Valero Transmission Company (Seller Meter No. 3396) at Wharton County, Texas. (Wharton Valero TP#6690)	27,136
3.	Existing Point of Interconnection between Seller and Meter named Spanish Camp (Seller Meter No. 3365) Wharton County, Texas. (Spanish Camp-Delhi TP#6895)	27,136
4.	Existing Point of Interconnection between Seller and Meter named Denton Cooley #1 (Seller Meter No. 3331), In Fort Bend County, Texas (Denton Cooley #1 -TP#1106)	27,136
5.	Existing Point of Interconnection between Seller and Meter named Randon East (Fulshear) (Seller Meter No. 1427), in Fort Bend County, Texas. (Randon East (Fulshear) TP#299)	27,136
6.	Existing Point of Interconnection between Seller and Houston Pipeline Company (Seller Meter No. 3364) At Fulshear, Fort Bend County, Texas. (Fulshear-HPL TP#6097)	27,136
7.	Existing Point of Interconnection between Seller and Meter named White Oak Bayou-Exxon Gas System, Inc. (Seller Meter No. 3545), in Harris County, Texas. (White Oak Bayou-EGSI-TP#1036)	27,136

Point(s) of Receipt	Buyer's Cumulative Mainline Capacity Entitlement (Mcf/day)*
8. Existing Point of Interconnection between Seller and Houston Pipeline Company (Seller Meter No. 4359) at Bammel, Harris County, Texas. (Bammel-HPL TP#6014)	27,136
9. Existing Point of Interconnection between Seller and Delhi Pipeline Company (Seller Meter No. 3346) at Hardin County, Texas. (Hardin-Delhi TP#6696)	27,136
10. Existing Point of Interconnection between Seller and Meter named Vidor Field Junction (Seller Meter No. 3554), in Jasper County, Texas. (Vidor Field Junction-TP#2337)	27,136
11. Existing Point of Interconnection between Seller and Meter named Starks McConathy (Seller Meter No. 3535), in Calcasieu Parish, Louisiana. (Starks McConathy-TP#7346)	27,136
12. Existing Point of Interconnection between Seller and Meter named DeQuincy Intercon (Seller Meter No. 2698), in Calcasieu Parish, Louisiana. (DeQuincy Intercon-TP#7035)	27,136
13. Existing Point of Interconnection between Seller and Meter named DeQuincy Great Scott (Seller Meter No. 3357), in Calcasieu Parish, Louisiana. (DeQuincy Great Scott-TP#6809)	27,136
14. Existing Point of Interconnection between Seller and Meter named Perkins-Phillips (Seller Meter No. 3532), in Calcasieu Parish, Louisiana. (Perkins-Phillips-TP#7508)	27,136
15. Existing Point of Interconnection between Seller and Meter named Perkins (Intercon) (Seller Meter No. 3395), in Calcasieu Parish, Louisiana. (Perkins (Intercon) -TP#7036)	27,136
16. Existing Point of Interconnection between Seller and Meter named Perkins East (Seller Meter No. 2369), in Beauregard Parish, Louisiana. (Perkins East-TP#139)	27,136

Point(s) of Receipt	Buyer's Cumulative Mainline Capacity Entitlement (Mcf/day)*
17. Discharge Side of Seller's Compressor Station 45 at the Existing point of Interconnection between Seller's Southwest Louisiana Lateral and Seller's Mainline Beauregard Parish, Louisiana. (Station 45 TP#7101)	67,043
18. Existing Point of Interconnection between Seller and Texas Eastern Transmission Corporation, (Seller Meter No. 4198) at Ragley, Beauregard Parish, Louisiana. (Ragley-TET TP#6217)	67,043
19. Existing Point of Interconnection between Seller and Trunkline Gas Company (Seller Meter No. 4215) at Ragley, Beauregard Parish, Louisiana. (Ragley-Trunkline TP#6218)	67,043
20. Existing Point of Interconnection between Seller and Tennessee Gas Transmission Company (Seller Meter No. 3371) at Kinder, Allen Parish, Louisiana. (Kinder TGT-TP#6149)**	67,043
21. Existing Point of Interconnection between Seller and Texas Gas Transmission Corporation (Seller Meter Nos. 3227, 4314, 4457) at Eunice, Evangeline Parish, Louisiana. (Eunice Mamou Tx. Gas TP#6923)	67,043
22. Suction Side of Seller's Compressor Station 50 at the Existing Point of Interconnection between Seller's Central Louisiana Lateral and Seller's Mainline Evangeline Parish, Louisiana. (Station 50 TP#6948)	97,371
23. Existing Point of Interconnection between Seller and Columbia Gulf Transmission Corporation (Seller Meter No. 3142) at Eunice, Evangeline Parish, Louisiana. (Eunice Evangeline Col. Gulf TP#6414)	97,371

Point(s) of Receipt	Buyer's Cumulative Mainline Capacity Entitlement (Mcf/day)*
24. Discharge Side of Seller's Compressor Station 54 at Seller's Washington Storage Field, St. Landry Parish, Louisiana (Station 54 TP#6768)	98,112 March-November 97,371 December-February
25. Existing Point of Interconnection between Seller and Acadian Pipeline (Seller Meter No. 3506) in Pointe Coupee Parish, Louisiana. (Morganza-Acadian Pipeline TP#7060)	97,371
26. Existing Point of Interconnection (Seller Meter No. 3272) at M.P. 566.92, Morganza Field, Pointe Coupee Parish, Louisiana. (Morganza Field - TP#576)	97,371
27. Existing Point of Interconnection between Seller and Meter named West Feliciana Parish-Creole (Seller Meter No. 4464), in West Feliciana Parish, Louisiana. (West Feliciana Parish-Creole TP#7165)	97,371
28. Existing Point of Interconnection between Seller and Mid-Louisiana Gas Company (Seller Meter Nos. 4137, 4184, 3229) at Ethel, East Feliciana Parish, Louisiana. (Ethel-Mid LA TP#6083)	97,371
29. Existing Point of Interconnection between Seller and Meter named Liverpool Northwest (Seller Meter No. 3390), in St. Helena Parish, Louisiana. (Liverpool Northwest-TP#6757)	97,371
30. Suction Side of Seller's Compressor Station 62 on Seller's Southeast Louisiana Lateral in Terrebonne Parish Louisiana.(Station 62 TP#7141)	62,254
31. Existing Point of Interconnection between Seller and Meter named Texas Gas - TLIPCO-Thibodeaux (Seller Meter No. 3533), in Lafourche Parish, Louisiana. (TXGT-TLIPCO -Thibodeaux-TP#7206)	62,254

Point(s) of Receipt	Buyer's Cumulative Mainline Capacity Entitlement (Mcf/day)*
32. Existing Point of Interconnection between Seller and Meter named Romeville-Monterey Pipeline (Seller Meter No. 4410), in St. James Parish, Louisiana. (Romeville-Monterey Pipeline-TP#580)	62,254
33. Existing Point of Interconnection between Seller and Meter named St. James CCIPC (Seller Meter No. 4462), in St. James Parish, Louisiana. (St. James CCIPC-TP#7164)**	62,254
34. Existing Point of Interconnection between Seller and Meter named St. James Faustina (St. Amelia)(Seller Meter No. 3328), in St. James Parish, Louisiana. (St. James Faustina (St. Amelia) TP#6268)**	62,254
35. Existing Point of Interconnection between Seller and Meter named St. James Acadian (Seller Meter No. 4366), in St. James Parish, Louisiana. (St. James Acadian-TP#6677)**	62,254
36. Existing Point of Interconnection between Seller and Meter Named Livingston-Flare (Seller Meter No. 3540), in Livingston Parish, Louisiana. (Livingston-Flare-TP#8739)	62,254
37. Existing Point of Interconnection between Seller and Florida Gas Transmission Company (Seller Meter No. 3217) at St. Helena, St. Helena Parish, Louisiana. (St. Helena FGT-TP#6267)	62,254
38. Existing Point of Interconnection between Seller and Meter named Beaver Dam Creek (Seller Meter No. 3536), in St. Helena Parish, Louisiana. (Beaver Dam Creek-TP#8218)	62,254
39. Suction Side of Seller's Compressor Station 65 at the Existing Point of Interconnection between Seller's Southeast Louisiana Lateral and Seller's Mainline St. Helena Parish, Louisiana. (Station 65 TP#6685)	159,625

Point(s) of Receipt	Buyer's Cumulative Mainline Capacity Entitlement (Mcf/day)*
40. Existing Point of Interconnection between Seller and Meter named Amite County/Koch (Seller Meter No. 3332), in Amite County, Mississippi (Amite County/Koch-TP#6701)	159,625
41. Existing Point of Interconnection between Seller and Meter named McComb (Seller Meter No. 3461), in Pike County, Mississippi. (McComb-TP#6446)	159,625
42. Existing Point of Interconnection between Seller and United Gas Pipe Line Company at Holmesville (Seller Meter No. 3150), Pike County, Mississippi. (Holmesville-United TP#6128)	159,625
43. Discharge Side of Seller's Compressor Station 70 at M.P. 661.77 in Walthall County, Mississippi. (M.P. 661.77-Station 70 Discharge-TP#7142)	159,625
44. Existing Point of Interconnection between Seller and United Gas Pipe Line Company at Walthall (Seller Meter No. 3095), Walthall County, Mississippi. (Walthall-UGPL TP#6310)	159,625
45. Existing Point of Interconnection between Seller and Meter named Darbun-Pruett 34-10 (Seller Meter No. 3446) at M.P. 668.46 on Seller's Main Transmission Line, Darbun Field, Walthall County, Mississippi. (Darbun Pruett TP#6750)	159,625
46. Existing Point of Interconnection between Seller and Meter named Ivy Newsome (Seller Meter No. 3413) in Marion County, Mississippi. (Ivy Newsome-TP#6179)	159,625
47. Existing Point of Interconnection between Seller and West Oakvale Field at M.P. 680.47-Marion County, Mississippi. (M.P. 680.47-West Oakvale Field-TP#7144)	159,625

Point(s) of Receipt	Buyer's Cumulative Mainline Capacity Entitlement (Mcf/day)*
48. Existing Point of Interconnection between Seller and East Morgantown Field at M.P. 680.47 in Marion County, Mississippi. (M.P. 680.47-E. Morgantown Field-TP#7145)	159,625
49. Existing Point of Interconnection between Seller and Greens Creek Field, at M.P. 681.84 Marion County, Mississippi. (M. P. 681.84 Greens Creek Field TP#7146)	159,625
50. Existing Point of Interconnection between Seller and Meter named M.P.685.00-Oakvale Unit 6-6 in Jefferson Davis County, Mississippi. (M.P. 685.00-Oakvale Unit 6-6 -TP#1376)	159,625
51. Existing Point of Interconnection between Seller and Meter named M.P. 687.23-Oakvale Field in Marion County, Mississippi. (M.P. 687.23-Oakvale Field-TP#7147)	159,625
52. Existing Point of Interconnection between Seller and Bassfield at named M.P. 696.40 in Marion County, Mississippi. (M.P. 696.40 Bassfield-TP#9439)	159,625
53. Existing Point of Interconnection between Seller and Meter named Lithium/Holiday Creek -Frm (Seller Meter No. 3418), in Jefferson Davis County, Mississippi. (Lithium/Holiday Creek-Frm-TP#7041)	159,625
54. Existing Point of Interconnection between Seller and S. W. Sumrall Field and Holiday Creek at M.P. 692.05-Holiday Creek in Jefferson Davis, Mississippi. (M.P. 692.05 -Holiday Creek-TP#7159)	159,625
55. Existing Point of Interconnection between Seller and ANR Pipe Line Company at Holiday Creek (Seller Meter No. 3241), Jefferson David County, Mississippi. (Holiday Creek-ANR TP#398)	159,625

Point(s) of Receipt	Buyer's Cumulative Mainline Capacity Entitilement (Mcf/day)*
56. Existing Point of Interconnection between Seller and Mississippi Fuel Company at Jeff Davis (Seller Meter No. 3252), Jefferson Davis County, Mississippi. (Jefferson Davis County-Miss Fuels TP#6579)	159,625
57. Existing Point of Interconnection between Seller and Meter named Jefferson Davis-Frm (Seller Meter No. 4420), in Jefferson Davis County, Mississippi. (Jefferson Davis-Frm-TP#7033)	159,625
58. Existing Point of Interconnection between Seller and Carson Dome Field M.P. 696.41, in Jefferson Davis County, Mississippi. (M.P. 696.41-Carson Dome Field-TP#7148)	159,625
59. Existing Point of Interconnection between Seller and Meter Station named Bassfield-ANR Company at M.P. 703.17 on Seller's Main Transmission Line (Seller Meter No. 3238), Covington County, Mississippi. (Bassfield-ANR TP#7029)	159,625
60. Existing Point of Interconnection between Seller and Meter named Patti Bihm #1 (Seller Meter No. 3468), in Covington County, Mississippi. (Patti Bihm #1-TP#7629)	159,625
61. Discharge Side of Seller's Compressor at Seller's Eminence Storage Field (Seller Meter No. 4166 and 3160) Covington County, Mississippi. (Eminence Storage TP#5561)	159,625
62. Existing Point of Interconnection between Seller and Dont Dome Field at M.P. 713.39 in Covington, County, Mississippi. (M.P. 713.39-Dont Dome-TP#1396)	159,625
63. Existing Point of Interconnection between Seller and Endevco in Covington County, Mississippi. (Hattiesburg-Interconnect storage TP#1686)	159,625

Point(s) of Receipt	Buyer's Cumulative Mainline Capacity Entitlement (Mcf/day)*
64. Existing Point at M.P. 719.58 on Seller's Main Transmission Line (Seller Meter No. 3544), Centerville Dome Field, Jones County, Mississippi. (Centerville Dome Field-TP#1532)	159,625
65. Existing Point of Interconnection between Seller and Meter named Calhoun (Seller Meter No. 3404), in Jones County, Mississippi. (Calhoun-TP#378)	159,625
66. Existing Point at M.P. 727.78 on Seller's Main Transmission Line, Jones County, Mississippi. (Jones County-Gitano TP#7166)	159,625
67. Existing Point of Interconnection between Seller and a Meter named Koch Reedy Creek (Seller Meter No. 3333), Jones County, Mississippi. (Reedy Creek-Koch TP#670)	159,625
68. Existing Point of Interconnection between Seller and Meter named Sharon Field (Seller Meter No. 3000), in Jones County, Mississippi. (Sharon Field-TP#419)	159,625
69. Existing Point of Interconnection between Seller and Tennessee Gas Transmission Company at Heidelberg (Seller Meter No. 3109), Jasper County, Mississippi. (Heidelberg-Tennessee TP#6120)	159,625
70. Existing Point of Interconnection between Seller and Mississippi Fuel Company at Clarke (Seller Meter No. 3254), Clarke County, Mississippi. (Clarke County-Miss Fuels TP#6047)	159,625
71. Existing Point of Interconnection between Seller and Meter named Clarke County-Koch at M.P. 757.29 in Clarke County, Mississippi. (Clarke County-Koch-TP#5566)	159,625

Point(s) of Receipt	Buyer's Cumulative Mainline Capacity Entitlement (Mcf/day)*
72. Existing Point of Interconnection between Seller's mainline and Mobile Bay Lateral at M.P. 784.66 in Choctaw County, Alabama. (Station 85 - Mobile Bay Pool TP#8244)	159,625
73. Existing Point of Interconnection between Seller's mainline and Mobile Bay Lateral at M.P. 784.66 in Choctaw County, Alabama. (Station 85 - Mainline Pool TP#6971)	159,625
74. Existing Point of Interconnection between Seller and Magnolia Pipeline in Chilton County, Alabama. (Magnolia Pipeline Interconnect-TP#1808)	159,625
75. Existing Point of Interconnection between Seller and Southern Natural Gas Company, (Seller Meter No. 4087) at Jonesboro, Clayton County, Georgia.(Jonesboro-SNG-TP#6141)	159,625
76. Existing Point of Interconnection between Seller and Columbia Gas Transmission (Seller Meter No. 7157) at Dranesville, Fairfax County, Virginia.(Dranesville-Colgas-TP#6068)**	159,625
77. Existing Point of Interconnection between Seller and Columbia Gas Transmission (Seller Meter No. 4080) at Rockville, Baltimore County, Maryland. (Rockville-Colgas-TP#6227)**	159,625
78. Existing Point of Interconnection between Seller and Columbia Gas Transmission (Seller Meter No. 3088) at Downingtown, Chester County, Pennsylvania.(Downington-Colgas-TP#6067)**	159,625
79. Existing Point of Interconnection between Seller and Texas Eastern Transmission Corporation (Seller Meter No. 4133) at Skippack, Montgomery County, Pennsylvania. (Skippack-TET-TP#6249)**	159,625

Buyer shall not tender, without the prior consent of Seller, at any point(s) of receipt on any day a quantity in excess of the applicable Buyer's Cumulative Mainline Capacity Entitlement for such point(s) of receipt.

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* These quantities do not include the additional quantities of gas retained by Seller for applicable compressor fuel and line loss make-up provided for in Article V, 2 of this Service Agreement, which are subject to change as provided for in Article V, 2 hereof.

** Receipt of gas by displacement only.

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89 2306 [illegible]

Exhibit B

Point(s) of Delivery		Pressure(s)
1.	Station 54*	Not Applicable.
2.	Seller's Eminence Storage Field, Covington County, Mississippi.	Prevailing pressure in Seller's pipeline system not to exceed maximum allowable operating pressure.
3.	Ashmead Road Meter Station, located on Seller's Oreland Line at mile post 13.44 in Cheltemham Township, Montgomery County, Pennsylvania, near the city limits line of the City of Philadelphia, Pennsylvania.	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.
4.	Whitman Meter Station, located in the City of Philadelphia, Pennsylvania, on Delaware Avenue approximately 550 feet south of the intersection of Delaware Avenue and Packer Avenue where the facilities of Seller connect with those of Buyer.	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and Buyer.
5.	Richmond Meter Station, located adjacent to Seller's Trenton-Woodbury line at mile post 36.83 and near the intersection of Lewis and Delaware Avenue, Philadelphia County, Philadelphia, Pennsylvania.	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operations of Seller and Buyer.

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* Delivery to Seller's Washington Storage Field for injection into storage is subject to the terms, conditions and limitations of Seller's WSS Rate Schedule.

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Exhibit B

Point(s) of Delivery		Pressure(s)
6.	Northeast Philadelphia Meter Station (Somerton), located near the westerly terminus of Brookside Drive and approximately 1200 feet northeasterly from County Line Road in Lower Southampton Township, Bucks County, Pennsylvania.	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operation of Seller and buyer.
7.	Oreland Meter Station, located on Seller's Oreland Line at mile post 6.09 in Springfield Township, Montgomery County, Pennsylvania.	Not less than one hundred (100) pounds per square inch gauge or at such other pressures as may be agreed upon in the day to day operations of Seller and Buyer.

97 0614 000

SERVICE AGREEMENT

between

TRANSCONTINENTAL GAS PIPE LINE CORPORATION

and

PHILADELPHIA GAS WORKS

July 1, 1996

SERVICE AGREEMENT UNDER RATE SCHEDULE GSS

97 0614 000

THIS AGREEMENT entered into this 1st day of July 1996, by and between, PHILADELPHIA GAS WORKS by PHILADELPHIA FACILITIES MANAGEMENT CORPORATION ("PFMC') soley in its capacity as operator and manager of the City owned PHILADELPHIA GAS WORKS ("Buyer" or "PGW"), under and pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended and TRANSCONTINENTAL GAS PIPE LINE CORPORATION, a Delaware corporation, hereinafter referred to as "Seller"

WITNESSETH:

WHEREAS, Buyer desires to purchase and Seller desires to sell natural gas storage service under Seller's Rate Schedule GSS as set forth herein; and

WHEREAS, pursuant to the terms of the Joint Stipulation and Settlement Agreement approved by the Federal Energy Regulatory Commission's ("Commission") Order dated July 16, 1993 in Docket Nos. RS92-86-003, RP92-108-000, and RP92-137-000 which amended Seller's Certificate in Docket No. CP61-194, Seller and Buyer agreed to a twenty year contract term through March 31, 2013, as set forth in that Order, for the Storage Demand Quantity and Storage Capacity Quantity which are supported by service provided by CNG Transmission Corporation; and

WHEREAS, pursuant to the terms of the Application to Amend Seller's Certificate, in Docket No. CP61-194, as approved by the Commission's Order dated June 13, 1996 in Docket No. CP96-226-000, Seller and Buyer agreed to the Storage Demand Quantity and Storage Capacity Quantity set forth in Article I hereof;

NOW, THEREFORE, Seller and Buyer agree as follows:

ARTICLE I
SERVICE TO BE RENDERED

Subject to the terms and provisions of this agreement and of Seller's Rate Schedule GSS, Seller agrees to receive from Buyer for storage, inject into storage for Buyer's account, store, withdraw from storage (or cause to be injected into storage for Buyer's account, stored, and withdrawn from storage) and deliver to Buyer, quantities of natural gas as follows:

To withdraw from storage or cause to be withdrawn from storage, transport and deliver to Buyer at the delivery points set forth below, the gas stored for Buyer's account up to a maximum quantity in any day of

59,485 Mcf, during the period beginning July 1, 1996 and ending on June 30, 2001, and

32,338 Mcf, during the period beginning July 1, 2001 and ending on March 31, 2013,

which quantity shall be Buyer's Storage Demand.

To receive and store or cause to be stored up to a total quantity at any one time of

3,984,283 Mcf, during the period beginning July 1, 1996 and ending on June 30, 2001, and

2,269,277 Mcf, during the period beginning July 1, 2001 and ending on March 31, 2013,

which quantity shall be Buyer's Storage Capacity Quantity.

ARTICLE II
POINT(S) OF DELIVERY

The Point or Points of Delivery for all natural gas delivered by Seller to Buyer under this agreement shall be at or near:

(1) Ashmead Road Meter Station, located on Seller's Oreland Line at milepost 13.44 in Cheltenham Township, Montgomery County, Pennsylvania, near the city limits line of the City of Philadelphia, Pennsylvania.

(2) Whitman Meter Station, located in the City of Philadelphia, Pennsylvania, on Delaware Avenue approximately 550 feet south of the intersection of Delaware Avenue and Packer Avenue, where the facilities of Seller connect with those of Buyer.

(3) Richmond Meter Station, located adjacent to Seller's Trenton-Woodbury line at milepost 36.83 and near the intersection of Lewis and Delaware Ave., Philadelphia County, Philadelphia, Pennsylvania.

(4) Northeast Philadelphia Meter Station (Somerton), located near the westerly terminus of Brookside Drive and approximately 1,200 feet northeasterly from County Line Road in Lower Southampton Township, Bucks County, Pennsylvania.

(5) Oreland Meter Station, located on Seller's Oreland line at milepost 6.09 in Springfield Township, Montgomery County, Pennsylvania.

Pennsylvania

ARTICLE III
DELIVERY PRESSURE

Seller shall deliver natural gas to Buyer at the Point(s) of Delivery at a pressure(s) of: not less than one hundred (100) pounds per square inch gauge, or at such other pressures as may be agreed upon in the day-to-day operations of Buyer and Seller.

ARTICLE IV
TERM OF AGREEMENT

This agreement shall be effective July 1, 1996 and shall remain in force and effect through March 31, 2013.

ARTICLE V
RATE SCHEDULE AND PRICE

Buyer shall pay Seller for natural gas service rendered hereunder in accordance with Seller's Rate Schedule GSS and the applicable provisions of the General Terms and Conditions of Seller's FERC Gas Tariff as filed with the Federal Energy Regulatory Commission, and as the same may be amended or superseded from time to time at the initiative of either party. Such rate schedule and General Terms and Conditions are by this reference made a part hereof.

ARTICLE VI
MISCELLANEOUS

1. The subject headings of the Articles of this agreement are inserted for the purpose of convenient reference and are not intended to be a part of this agreement nor to be considered in any interpretation of the same.

SERVICE AGREEMENT UNDER RATE SCHEDULE GSS
(Continued)

97 0614 000

2. This agreement supersedes and cancels as of the effective date hereof the following contract(s): Any and all Service Agreements previously entered into between Buyer and Seller under Seller's Rate Schedule GSS.

3. No waiver by either party of any one or more defaults by the other in the performance of any provisions of this agreement shall operate or be construed as a waiver of any future default or defaults, whether of a like or different character.

4. This agreement shall be interpreted, performed and enforced in accordance with the laws of the State of Pennsylvania.

5. This agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective successors and assigns.

6. It is understood and agreed that in entering into and performing this Agreement, PFMC acts solely in its capacity as operator and manager of the municipally owned Philadelphia Gas Works pursuant to an agreement with the City of Philadelphia, dated December 29, 1972, as amended, and not otherwise; and further that any and all payments required to be made in connection with this agreement shall be made solely from the revenues of PGW.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be signed by their respective Presidents or Vice Presidents thereunto duly authorized and have caused their respective corporate seals to be hereunto affixed and attested by their respective Secretaries or Assistant Secretaries the day and year above written.

TRANSCONTINENTAL GAS PIPE LINE
CORPORATION
(Seller)

ATTEST:
[SEAL]

Secretary
Randall R. Conklin
Assistant Secretary

By _____
Frank J. Ferazzi
Vice President
Customer Service

PHILADELPHIA GAS WORKS
(Buyer)

ATTEST:
[SEAL]

Sydney M. Avent
Asst Secretary

By _____

Title V.P. - GAS MGMT.

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AMENDMENT TO SERVICE AGREEMENT

THIS AMENDMENT ("Amendment") is entered into this 16 day of June, 2011 by and between TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC, a Delaware limited liability company, hereinafter referred to as "Seller", first party, and PHILADELPHIA GAS WORKS, hereinafter referred to as "Buyer", second party.

WITNESSETH

WHEREAS, Seller and Buyer entered into that certain Service Agreement dated April 3, 2001 under Seller's Rate Schedule WSS-Open Access pursuant to which Seller provides firm storage service for Buyer of a Storage Capacity Quantity of 3,335,909 dekatherms (Seller's Contract #1038582, hereinafter referred to as "the Service Agreement"); and

WHEREAS, Seller submitted the filing to reduce the certificated maximum daily deliverability at the Washington Storage Field on December 6, 2010 in Docket No. CP11-45, and received Commission order authorizing the abandonment on March 30, 2011 to be effective May 1, 2011; and

WHEREAS, Seller and Buyer now agree to amend Buyer's Storage Demand Quantity to Buyer's proportionate reduced delivery capability at the Washington Storage Field.

NOW THEREFORE, Seller and Buyer hereby agree to amend the Service Agreement as follows:

1. Article I of the Service Agreement is hereby deleted in its entirety and replaced by the following:

"ARTICLE I
SERVICE TO BE RENDERED

Subject to the terms and provisions of this agreement and of Seller's Rate Schedule WSS-Open Access, Seller agrees to inject into storage for Buyer's account, store and withdraw from storage, quantities of natural gas as follows:

To withdraw from storage up to a maximum quantity on any day of 35,115 dt, which quantity shall be Buyer's Storage Demand Quantity, or such greater daily quantity, as applicable from time to time, pursuant to the terms and conditions of Seller's Rate Schedule WSS-Open Access.

Contract #: 330791

SERVICE AGREEMENT
FOR RATE SCHEDULE FTS-2

This Service Agreement, made and entered into this 1 day of June, 1993 by and between TEXAS EASTERN TRANSMISSION CORPORATION, a Delaware Corporation (herein called "Pipeline") and PHILADELPHIA GAS WORKS, by the Philadelphia Facilities Management Corporation in its capacity as manager and operator of the city-owned Gas Works pursuant to an Agreement with the City of Philadelphia dated December 29, 1972, as amended (herein called "Customer", whether one or more),

W I T N E S S E T H:

WHEREAS, the Federal Energy Regulatory Commission required Pipeline to restructure Pipeline's services to reflect compliance with Order Nos. 636, 636-A, and 636-B (collectively hereinafter referred to as "Order No. 636"); and

WHEREAS, by order issued January 13, 1993 (62 FERC P61;015) and order issued April 22, 1993 (63 FERC P61,100), the Federal Energy Regulatory Commission accepted Pipeline's revised tariff sheets filed in compliance with Order No. 636 to become effective June 1, 1993,, subject to certain conditions set forth in the April 22, 1993 order; and

WHEREAS, Customer made its final Order No. 636 service elections on May 3, 1993 pursuant to the April 22, 1993 order and Pipeline filed revised tariff sheets to become effective June 1, 1993 in compliance with the April 22, 1993 order;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the parties do covenant and agree as follows:

ARTICLE I

SCOPE OF AGREEMENT

Subject to the terms, conditions and limitations hereof and of Pipeline's Rate Schedule FTS-2, Pipeline agrees to deliver on a firm basis for Customer's account quantities of gas up to the following quantity:

Maximum Daily Quantity (MDQ) 5,394 dth

Pipeline shall receive for Customer's account, at the Customer Point(s), for transportation hereunder daily quantities of gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall

transport and deliver for Customer's account, at the Equitrans Point(s), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall receive for Customer's account, at the Equitrans Point(s), for transportation hereunder daily quantities of gas up to Customer's MDQ, plus Applicable Shrinkage. Pipeline shall transport and deliver for Customer's account, at the Customer Point(s), such daily quantities tendered up to such Customer's MDQ.

Pipeline shall not be obligated to, but may at its discretion, receive at any Point of Receipt on any day a quantity of gas in excess of the applicable Maximum Daily Receipt Obligation (MDRO), plus Applicable Shrinkage, but shall not receive in the aggregate at all Points of Receipt on any day a quantity of gas in excess of the applicable MDQ, plus Applicable Shrinkage, as specified in the executed service agreement. Pipeline shall not be obligated to, but may at its discretion, deliver at any Point of Delivery on any day a quantity of gas in excess of the applicable Maximum Daily Delivery obligation (MDDO), but shall not deliver in the aggregate at all Points of Delivery on any day a quantity of gas in excess of the applicable MDQ, as specified in the executed service agreement.

ARTICLE II

TERM OF AGREEMENT

This Service Agreement shall become effective on June 1, 1993, and shall continue in force and effect until and including March 31, 2002 ("Primary Term") and shall continue thereafter unless terminated by either party at the end of the Primary Term or the end of any subsequent month by twelve (12) months prior written notice.

Customer hereby expressly acknowledges and agrees that, to the extent not utilized by Customer for transportation of gas for Customer's account, Pipeline has the sole right to utilize any pipeline capacity attributable to facilities constructed by Pipeline to provide service pursuant to this Service Agreement as part of Pipeline's overall general system capacity. To that end, Customer agrees not to instigate or cause to be instigated any action designed to alter or increase Customer's right to utilize the pipeline capacity attributable to facilities constructed by Pipeline to provide service pursuant to this Service Agreement. Upon termination of this Service Agreement, all rights of Customer to the transportation service provided by the facilities constructed and utilized to provide service hereunder shall terminate and the capacity provided by such facilities shall be

available without limitation for Pipeline's use as Pipeline in its sole discretion deems desirable. If Customer elects to terminate this Service Agreement, then notwithstanding such termination Customer shall continue to pay the monthly charge provided under Section 3.2(A) of Rate Schedule FTS-2 until the earlier of (i) the date Pipeline recovers through said monthly charge the full original cost of the facilities attributable to the service which has been terminated, or (ii) the date Pipeline makes effective its next general rate filing and begins receiving recovery on an alternate basis, which may include system wide recovery, of the costs of facilities attributable to the service which has been terminated. At such time Customer shall cease paying the monthly charge attributable to the terminated service. In addition, if and to the extent that Customer terminates this Service Agreement and the Federal Energy Regulatory Commission or any other Agency having jurisdiction over the premises ever determines that the facilities attributable to such service are not used or useful in providing natural gas service on Pipeline's system or otherwise precludes Pipeline from recovering the full original cost of such facilities then Customer shall reimburse Pipeline the remaining initial cost of said facilities not previously recovered by Pipeline through depreciation charges. Such reimbursement shall not be applicable if and to the extent that Pipeline elects to terminate this Service Agreement.

Any portions of this Service Agreement necessary to correct or cash-out imbalances under this Service Agreement as required by the General Terms and Conditions of Pipeline's FERC Gas Tariff, Volume No. 1, shall survive the other parts of this Service Agreement until such time as such balancing has been accomplished.

ARTICLE III

RATE SCHEDULE

This Service Agreement in all respects shall be and remain subject to the applicable provisions of Rate Schedule FTS-2 and of the General Terms and Conditions of Pipeline's FERC Gas Tariff on file with the Federal Energy Regulatory Commission, all of which are by this reference made a part hereof.

Customer shall pay Pipeline, for all services rendered hereunder and for the availability of such service in the period stated, the applicable prices established under Pipeline's Rate Schedule FTS-2 as filed with the Federal Energy Regulatory Commission and as the same may be hereafter revised or changed.

Customer agrees that Pipeline shall have the unilateral right to file with the appropriate regulatory authority and make changes effective in (a) the rates and charges applicable to service pursuant to Pipeline's Rate Schedule FTS-2, (b) Pipeline's Rate Schedule FTS-2, pursuant to which service hereunder is rendered provided, however, that the firm character of service shall not be subject to change hereunder, or (c) any provision of the General Terms and Conditions applicable to Rate Schedule FTS-2. Pipeline agrees that Customer may protest or contest the aforementioned filings, or may seek authorization from duly constituted regulatory authorities for such adjustment of Pipeline's existing FERC Gas Tariff as may be found necessary to assure that the provisions in (a), (b), or (c) above are just and reasonable.

ARTICLE IV

CUSTOMER POINT(S) AND EQUITRANS POINT(S)

Natural gas to be received by Pipeline or for Customer's account for service hereunder shall be received on the outlet side of the measuring station at or near the following designated Customer Point(s) or Equitrans Point(s), and natural gas to be delivered by Pipeline for Customer's account hereunder shall be delivered at the outlet side of the measuring stations at or near the following designated Equitrans Point(s) or Customer Point(s), in accordance with the Maximum Daily Receipt obligation (MDRO) plus Applicable Shrinkage, Maximum Daily Delivery Obligation (MDDO), and receipt and delivery pressure obligations and measurement responsibilities indicated below for each:

Customer Point	Maximum Daily Obligation	Pressure Obligation	Measurement Responsibilities
1. In the City of Philadelphia, PA, and designated by Pipeline as Measuring Station 70030.	5,394 dth	100 pounds per square inch gauge.	Pipeline
2. On the Montgomery-Philadelphia County Line, in Philadelphia, PA, and designated by Pipeline as Measuring Station 70034.	5,394 dth	100 pounds per square inch gauge.	Pipeline

Customer Point	Maximum Daily Obligation	Pressure Obligation	Measurement Responsibilities
3. In the City of Philadelphia, PA, and designated by Pipeline as Measuring Station 71682.	5,000 dth	100 pounds per square inch gauge.	Pipeline

Equitrans Point	Maximum Daily Obligation	Pressure Obligation	Measurement Responsibilities
1. In Greene County, Pennsylvania, and designated by Pipeline as Measuring Station 75009.	5,394 dth, plus Applicable Shrinkage	At pressures existing on Pipeline's facilities not to exceed Maximum Allowable Operating Pressure.	Pipeline

provided, however, that until changed by a subsequent Agreement between Pipeline and Customer, Pipeline's aggregate maximum daily delivery obligations at the Customer Points described above, including Pipeline's maximum daily delivery obligations under this and all other Service Agreements existing between Pipeline and Customer, shall in no event exceed the following:

Customer Point	Aggregate Maximum Daily Delivery Obligation
No. 1	137,073 dth
No. 2	137,310 dth
No. 3	5,000 dth

and provided further that Pipeline shall have no obligation to deliver natural gas designated as MDQ at any Customer Point other than that listed below:

Customer Point

Measuring Station 70034, Montgomery County, Pennsylvania

ARTICLE V

QUALITY

All natural gas tendered to Pipeline for Customer's account shall conform to the quality specifications set forth in Section 5 of Pipeline's General Terms and Conditions. Customer agrees that in the event Customer tenders for service hereunder and Pipeline agrees to accept natural gas which does not comply with Pipeline's quality specifications, as expressly provided for in Section 5 of Pipeline's General Terms and Conditions, customer shall pay all costs associated with processing of such gas as necessary to comply with such quality specifications.

ARTICLE VI

ADDRESSES

Except as herein otherwise provided or as provided in the General Terms and Conditions of Pipeline's FERC Gas Tariff, any notice, request, demand, statement, bill or payment provided for in this Service Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when mailed by registered, certified, or regular mail to the post office address of the parties hereto, as the case may be, as follows:

(a) Pipeline: TEXAS EASTERN TRANSMISSION CORPORATION
5400 Westheimer Court
Houston, TX 77056-5310

(b) Customer: Philadelphia Gas Works
Gas Acquisition & Fed. Regulatory Affairs
800 W. Montgomery Ave.
Philadelphia, Pennsylvania 19122

or such other address as either party shall designate by formal written notice.

ARTICLE VII

ASSIGNMENTS

Any company which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of Customer, or of Pipeline, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Service Agreement; and either Customer or Pipeline may assign or pledge this Service Agreement under the provisions of any mortgage, deed of trust, indenture, bank credit agreement, assignment, receivable sale, or similar instrument which it has executed or may execute hereafter; otherwise, neither Customer nor Pipeline shall assign this Service Agreement or any of its rights hereunder unless it first shall have obtained the consent thereto in writing of the other; provided further, however, that neither Customer nor Pipeline shall be released from its obligations hereunder without the consent of the other.

ARTICLE VIII

INTERPRETATION

The interpretation and performance of this Service Agreement shall be in accordance with the laws of the State of Texas without recourse to the law regarding conflict of laws.

This Service Agreement and the obligations of the parties are subject to all present and future valid laws with respect to the subject matter, State and Federal, and to all valid present and future orders, rules, and regulations of duly constituted authorities having jurisdiction.

ARTICLE IX

CANCELLATION OF PRIOR CONTRACT(S)

This Service Agreement supersedes and cancels, as of the effective date of this Service Agreement, the contract(s) between the parties hereto as described below:

Service Agreement dated October 16, 1986, between Pipeline and Customer under Pipeline's Rate Schedule FTS-2 (Pipeline's Contract No. 8791)

SERVICE AGREEMENT
FOR RATE SCHEDULE FTS-2
(Continued)

IN WITNESS WHEREOF, the parties hereto have caused this Service Agreement to be signed by their respective Presidents, Vice Presidents or other duly authorized agents and their respective corporate seals to be hereto affixed and attested by their respective Secretaries or Assistant Secretaries, the day and year first above written.

TEXAS EASTERN TRANSMISSION CORPORATION

By Diane L. Jorn
Vice President

ATTEST:

Robert W. Reed

PHILADELPHIA GAS WORKS*

By W.P. Dejen
Executive Vice President

LAF

ATTEST:

Sydney M Arent

*Philadelphia Gas Works by the Philadelphia Facilities Management Corporation, a non-profit Pennsylvania corporation in its capacity as operator and manager of the city-owned Gas Works, pursuant to an Agreement with the City of Philadelphia, dated December 29, 1972, as amended.

To receive and store up to a total quantity at any one time of 3,335,909 dt, which quantity shall be Buyer's Storage Capacity Quantity."

2. This Amendment shall be effective on May 1, 2011.

3. Except as herein amended, the Service Agreement shall remain in full force and effect pursuant to the terms thereof.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be signed by their respective officers or representative thereunto duly authorized.

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

By _____
Paul F. Egner III
Director, Customer Services

PHILADELPHIA GAS WORKS

By _____
Printed Name DOUGLAS A. MOSER
Title SR. VICE PRESIDENT GAS MANAGEMENT

EXHIBIT JC-2

Philadelphia Gas Works
Case Name: GCR 23
Docket No(s): R-2023-3038069

Response to Discovery Request: Vicinity Set II-1
Date of Response: 3/30/2023
Response Provided By: Florian Teme

Question:
List any and all incidents that occurred during the last 10 years where customers were curtailed or otherwise had gas delivery interruptions. Explain cause and duration of event.

Attachments: 0

Response:

PGW has had no general curtailments or otherwise had gas delivery interruptions over the past 10 years. There have been individual instances where customers may have been affected due to unplanned work such as an emergency but these are not tracked on an individual customer basis.

EXHIBIT JC-3

Philadelphia Gas Works
Case Name: GCR 23
Docket No(s): R-2023-3038069

Response to Discovery Request: Vicinity Set II-9
Date of Response: 3/30/2023
Response Provided By: Ryan Reeves

Question:
For each of the most recent five winter periods (Nov - Mar), please detail PGW's daily volume of firm TETCO capacity rights on the Philadelphia Lateral by Meter Number, as well as the actual daily deliveries off of the Philadelphia Lateral for PGW's system use, also by Meter Number. (Please do not include any transportation customers' usage).

Attachments: 1
Vicinity_Set_II_9_Vicinity Set II-9.pdf

Response:

As stated in PGW's response to Vicinity II-8, on Texas Eastern, PGW typically delivers its gas to O-30 Gate Station while choice suppliers deliver their gas to O-34. For ARS (Alternate Receipt Service), PGW will deliver gas to O-60 gate station while the counter party will deliver to O-34.

For firm TETCO capacity rights, please refer to PGW's response to Vicinity I-1. PGW provided all of PGW's pipeline contracts.

The attachment contains the flows for each of PGW's gate stations on the Philadelphia Lateral daily flow volume (in Mcf).

Date	O-30	Penrose	O-60
11/1/17 10:00	11,920	2,131	43,571
11/2/17 10:00	20,769	1,780	41,602
11/3/17 10:00	29,256	1,950	42,090
11/4/17 10:00	16,565	2,450	45,573
11/5/17 10:00	29,604	2,081	43,221
11/6/17 10:00	36,938	2,300	43,917
11/7/17 10:00	50,529	2,320	49,069
11/8/17 10:00	37,941	2,247	49,176
11/9/17 10:00	62,638	2,095	44,408
11/10/17 10:00	48,943	3,110	47,303
11/11/17 10:00	34,788	3,680	41,046
11/12/17 10:00	69,561	3,430	40,869
11/13/17 10:00	47,917	2,690	32,803
11/14/17 10:00	26,739	2,470	33,154
11/15/17 10:00	26,767	2,530	45,059
11/16/17 10:00	45,906	2,640	44,022
11/17/17 10:00	37,603	3,240	46,547
11/18/17 10:00	46,324	2,339	43,004
11/19/17 10:00	51,505	2,720	44,666
11/20/17 10:00	30,631	2,940	49,319
11/21/17 10:00	56,058	1,970	46,362
11/22/17 10:00	61,845	2,969	47,946
11/23/17 10:00	56,000	3,480	56,443
11/24/17 10:00	38,348	3,300	53,182
11/25/17 10:00	44,637	2,411	52,283
11/26/17 10:00	39,239	2,809	56,257
11/27/17 10:00	33,147	2,841	56,858
11/28/17 10:00	17,649	2,069	56,064
11/29/17 10:00	36,211	2,480	57,176
11/30/17 10:00	41,792	2,930	56,846
12/1/17 10:00	40,236	3,110	57,125
12/2/17 10:00	41,389	3,080	55,051
12/3/17 10:00	34,833	3,220	57,585
12/4/17 10:00	30,870	2,850	58,587
12/5/17 10:00	55,077	2,640	58,583
12/6/17 10:00	51,372	3,490	58,460
12/7/17 10:00	64,654	3,171	61,038
12/8/17 10:00	78,144	3,010	62,537
12/9/17 10:00	62,941	3,480	60,044
12/10/17 10:00	44,141	3,590	61,240
12/11/17 10:00	72,854	3,231	62,406
12/12/17 10:00	77,352	3,030	57,379
12/13/17 10:00	75,840	3,290	59,783
12/14/17 10:00	76,655	3,320	60,553
12/15/17 10:00	66,472	3,580	64,968
12/16/17 10:00	56,817	3,780	63,493

12/17/17 10:00	45,535	3,331	62,612
12/18/17 10:00	28,354	2,840	59,707
12/19/17 10:00	55,194	2,500	60,612
12/20/17 10:00	70,026	2,910	61,372
12/21/17 10:00	46,947	3,290	59,878
12/22/17 10:00	40,482	2,501	59,620
12/23/17 10:00	55,964	2,720	56,122
12/24/17 10:00	84,992	3,010	57,878
12/25/17 10:00	82,870	3,740	59,679
12/26/17 10:00	92,573	3,680	64,213
12/27/17 10:00	102,255	3,980	60,225
12/28/17 10:00	98,497	4,160	58,416
12/29/17 10:00	98,237	4,230	57,328
12/30/17 10:00	105,720	4,630	55,585
12/31/17 10:00	99,682	5,060	59,702
1/1/18 10:00	102,222	4,720	57,089
1/2/18 10:00	90,123	4,340	54,074
1/3/18 10:00	107,305	3,720	55,702
1/4/18 10:00	112,682	4,780	44,936
1/5/18 10:00	117,125	4,740	40,981
1/6/18 10:00	114,178	4,650	56,132
1/7/18 10:00	88,303	5,000	57,107
1/8/18 10:00	62,895	4,440	51,289
1/9/18 10:00	59,773	4,090	55,861
1/10/18 10:00	27,887	3,280	53,081
1/11/18 10:00	11,841	2,400	48,787
1/12/18 10:00	90,065	2,180	50,622
1/13/18 10:00	94,715	4,140	54,433
1/14/18 10:00	84,541	4,330	54,843
1/15/18 10:00	66,454	3,970	54,951
1/16/18 10:00	87,734	3,000	53,172
1/17/18 10:00	84,262	3,120	58,539
1/18/18 10:00	76,860	3,370	53,675
1/19/18 10:00	56,358	3,670	52,849
1/20/18 10:00	48,490	2,860	49,764
1/21/18 10:00	27,793	2,970	49,171
1/22/18 10:00	29,752	2,690	48,326
1/23/18 10:00	69,002	2,478	51,716
1/24/18 10:00	84,008	4,030	55,016
1/25/18 10:00	72,345	3,970	65,707
1/26/18 10:00	43,593	3,980	60,734
1/27/18 10:00	43,026	3,261	58,578
1/28/18 10:00	56,813	3,749	59,949
1/29/18 10:00	89,940	3,781	60,425
1/30/18 10:00	90,356	3,879	58,502
1/31/18 10:00	76,275	4,311	59,342
2/1/18 10:00	107,339	3,480	59,403

2/2/18 10:00	99,252	4,229	62,763
2/3/18 10:00	80,570	4,320	62,904
2/4/18 10:00	84,398	3,211	61,736
2/5/18 10:00	85,502	2,660	62,960
2/6/18 10:00	89,551	3,450	65,695
2/7/18 10:00	88,780	3,500	64,545
2/8/18 10:00	76,516	4,120	64,462
2/9/18 10:00	45,206	3,380	64,430
2/10/18 10:00	22,968	3,510	61,302
2/11/18 10:00	75,889	2,701	59,714
2/12/18 10:00	75,268	3,149	60,789
2/13/18 10:00	35,526	3,210	62,563
2/14/18 10:00	22,502	2,930	59,464
2/15/18 10:00	51,306	2,391	57,840
2/16/18 10:00	69,042	2,569	47,772
2/17/18 10:00	70,723	3,730	48,055
2/18/18 10:00	39,117	3,041	48,057
2/19/18 10:00	12,656	2,990	56,794
2/20/18 10:00	27,610	2,191	57,592
2/21/18 10:00	53,395	1,840	53,448
2/22/18 10:00	49,560	3,029	55,888
2/23/18 10:00	50,087	3,360	56,271
2/24/18 10:00	52,620	3,190	54,035
2/25/18 10:00	50,567	3,270	50,866
2/26/18 10:00	54,233	3,030	45,397
2/27/18 10:00	48,516	3,200	41,118
2/28/18 10:00	46,775	2,360	46,440
3/1/18 10:00	67,915	2,320	49,216
3/2/18 10:00	66,964	4,090	54,214
3/3/18 10:00	60,190	3,980	52,461
3/4/18 10:00	70,704	3,950	55,052
3/5/18 10:00	60,067	3,291	55,602
3/6/18 10:00	75,408	3,519	53,854
3/7/18 10:00	67,169	3,221	55,729
3/8/18 10:00	60,411	3,389	55,851
3/9/18 10:00	61,708	3,920	56,578
3/10/18 10:00	66,307	3,580	51,891
3/11/18 10:00	67,164	3,610	51,291
3/12/18 10:00	70,059	3,630	55,140
3/13/18 10:00	74,666	3,030	55,161
3/14/18 10:00	59,139	3,900	55,967
3/15/18 10:00	61,884	3,621	55,647
3/16/18 10:00	58,838	3,620	56,851
3/17/18 10:00	61,719	3,140	55,497
3/18/18 10:00	55,915	3,500	55,124
3/19/18 10:00	85,018	3,480	55,912
3/20/18 10:00	81,281	3,603	60,346

3/21/18 10:00	72,802	3,640	60,706
3/22/18 10:00	64,103	3,601	57,825
3/23/18 10:00	61,198	2,660	57,748
3/24/18 10:00	77,856	3,580	56,939
3/25/18 10:00	65,749	3,670	56,583
3/26/18 10:00	57,444	3,320	57,952
3/27/18 10:00	39,805	3,421	56,717
3/28/18 10:00	14,274	3,070	46,137
3/29/18 10:00	17,901	2,281	41,406
3/30/18 10:00	29,751	2,359	44,691
3/31/18 10:00	42,269	2,950	45,385
11/1/18 10:00	-	1,560	35,525
11/2/18 10:00	36,253	1,559	36,171
11/3/18 10:00	34,935	2,880	38,521
11/4/18 10:00	42,795	2,901	37,058
11/5/18 10:00	40,779	2,180	37,284
11/6/18 10:00	39,817	1,800	37,023
11/7/18 10:00	52,070	1,070	37,656
11/8/18 10:00	49,312	1,840	39,745
11/9/18 10:00	47,568	2,320	39,635
11/10/18 10:00	50,860	3,149	44,538
11/11/18 10:00	57,733	3,230	43,126
11/12/18 10:00	59,072	2,640	42,741
11/13/18 10:00	74,308	2,989	43,112
11/14/18 10:00	87,198	3,110	47,301
11/15/18 10:00	56,694	3,270	48,277
11/16/18 10:00	51,984	2,979	45,487
11/17/18 10:00	57,040	3,251	43,352
11/18/18 10:00	57,904	2,800	41,822
11/19/18 10:00	65,267	2,990	40,063
11/20/18 10:00	69,057	2,650	43,325
11/21/18 10:00	91,793	3,359	46,464
11/22/18 10:00	82,792	3,501	52,082
11/23/18 10:00	58,589	3,180	51,417
11/24/18 10:00	33,701	3,040	45,059
11/25/18 10:00	47,875	2,451	41,783
11/26/18 10:00	69,673	2,110	44,088
11/27/18 10:00	80,544	2,710	47,883
11/28/18 10:00	58,781	2,340	49,180
11/29/18 10:00	58,217	2,430	48,266
11/30/18 10:00	39,128	2,740	39,923
12/1/18 10:00	28,164	2,511	27,892
12/2/18 10:00	42,645	1,780	23,676
12/3/18 10:00	68,089	2,180	27,144
12/4/18 10:00	86,812	2,999	29,551
12/5/18 10:00	91,835	3,660	31,745
12/6/18 10:00	91,536	3,850	30,508

12/7/18 10:00	84,900	3,910	32,692
12/8/18 10:00	86,095	3,321	39,430
12/9/18 10:00	78,542	3,250	51,753
12/10/18 10:00	68,811	3,180	51,155
12/11/18 10:00	86,218	3,140	50,183
12/12/18 10:00	56,974	3,321	47,648
12/13/18 10:00	39,970	2,840	44,964
12/14/18 10:00	42,828	2,360	40,830
12/15/18 10:00	50,579	3,329	41,520
12/16/18 10:00	59,955	3,481	44,549
12/17/18 10:00	65,807	3,210	44,932
12/18/18 10:00	68,496	3,201	47,908
12/19/18 10:00	43,243	3,239	46,234
12/20/18 10:00	1,331	2,971	41,892
12/21/18 10:00	27,910	2,040	40,018
12/22/18 10:00	35,866	2,271	44,133
12/23/18 10:00	58,372	2,080	44,110
12/24/18 10:00	65,254	2,859	46,339
12/25/18 10:00	61,109	3,360	46,950
12/26/18 10:00	39,944	3,630	44,926
12/27/18 10:00	23,003	3,240	42,049
12/28/18 10:00	39,857	2,730	37,316
12/29/18 10:00	53,309	3,440	41,391
12/30/18 10:00	32,569	3,330	43,228
12/31/18 10:00	23,749	3,211	36,906
1/1/19 10:00	36,005	2,690	26,803
1/2/19 10:00	39,162	2,819	26,282
1/3/19 10:00	55,777	3,370	28,182
1/4/19 10:00	35,661	3,081	24,346
1/5/19 10:00	57,784	2,870	23,738
1/6/19 10:00	75,207	3,100	26,951
1/7/19 10:00	56,550	3,310	28,787
1/8/19 10:00	73,236	2,651	31,902
1/9/19 10:00	87,511	2,829	46,058
1/10/19 10:00	87,607	3,160	51,304
1/11/19 10:00	85,899	3,650	52,508
1/12/19 10:00	88,596	3,640	51,316
1/13/19 10:00	89,981	3,810	53,336
1/14/19 10:00	86,067	3,860	52,783
1/15/19 10:00	80,184	3,670	52,021
1/16/19 10:00	80,144	3,390	51,387
1/17/19 10:00	89,787	3,080	51,365
1/18/19 10:00	74,365	3,060	49,540
1/19/19 10:00	94,185	3,460	47,667
1/20/19 10:00	93,135	4,169	51,247
1/21/19 10:00	90,970	4,370	55,197
1/22/19 10:00	53,022	4,310	53,326

1/23/19 10:00	52,165	3,091	45,103
1/24/19 10:00	85,060	3,229	46,214
1/25/19 10:00	84,979	3,540	52,354
1/26/19 10:00	87,676	3,721	51,884
1/27/19 10:00	76,143	3,749	48,656
1/28/19 10:00	82,128	4,079	53,242
1/29/19 10:00	108,316	3,850	50,228
1/30/19 10:00	109,561	4,379	53,715
1/31/19 10:00	112,735	3,981	50,988
2/1/19 10:00	97,639	4,330	53,555
2/2/19 10:00	82,086	4,340	54,628
2/3/19 10:00	47,898	3,411	47,911
2/4/19 10:00	48,885	3,102	44,415
2/5/19 10:00	51,060	2,679	42,904
2/6/19 10:00	51,643	2,751	44,784
2/7/19 10:00	76,264	3,089	42,219
2/8/19 10:00	91,003	3,470	45,249
2/9/19 10:00	90,235	4,050	53,100
2/10/19 10:00	83,737	3,600	53,515
2/11/19 10:00	85,813	3,541	53,454
2/12/19 10:00	73,868	3,120	51,498
2/13/19 10:00	57,979	3,560	50,225
2/14/19 10:00	45,562	3,361	45,917
2/15/19 10:00	72,757	3,030	40,930
2/16/19 10:00	74,595	3,290	46,868
2/17/19 10:00	74,459	2,940	48,408
2/18/19 10:00	79,419	3,029	49,543
2/19/19 10:00	72,959	3,560	52,461
2/20/19 10:00	50,935	4,060	51,261
2/21/19 10:00	54,789	2,911	43,838
2/22/19 10:00	56,688	3,550	46,208
2/23/19 10:00	61,316	3,480	45,300
2/24/19 10:00	64,094	3,660	43,688
2/25/19 10:00	86,383	3,860	48,704
2/26/19 10:00	89,877	3,871	47,990
2/27/19 10:00	91,491	2,840	44,996
2/28/19 10:00	78,130	3,269	46,881
3/1/19 10:00	80,977	3,910	49,056
3/2/19 10:00	78,770	3,660	45,352
3/3/19 10:00	84,981	3,680	47,253
3/4/19 10:00	79,651	3,430	52,109
3/5/19 10:00	91,901	4,050	51,781
3/6/19 10:00	82,801	4,010	48,861
3/7/19 10:00	79,420	3,370	50,706
3/8/19 10:00	58,939	3,590	47,429
3/9/19 10:00	58,825	3,380	43,292
3/10/19 10:00	56,376	3,320	43,964

3/11/19 10:00	66,687	2,930	45,271
3/12/19 10:00	49,931	2,521	43,648
3/13/19 10:00	32,736	2,250	41,554
3/14/19 10:00	22,377	1,312	38,120
3/15/19 10:00	51,980	1,788	37,850
3/16/19 10:00	64,561	2,769	43,418
3/17/19 10:00	63,565	3,120	45,099
3/18/19 10:00	51,216	2,900	39,459
3/19/19 10:00	40,274	2,721	42,350
3/20/19 10:00	52,793	2,660	42,017
3/21/19 10:00	65,545	2,940	41,945
3/22/19 10:00	53,991	2,820	42,794
3/23/19 10:00	46,261	3,080	43,597
3/24/19 10:00	55,947	2,471	40,467
3/25/19 10:00	58,874	2,449	42,046
3/26/19 10:00	57,906	2,130	44,718
3/27/19 10:00	49,550	1,743	44,773
3/28/19 10:00	38,741	2,449	39,368
3/29/19 10:00	29,724	2,180	35,998
3/30/19 10:00	63,290	1,661	35,451
3/31/19 10:00	57,442	2,809	40,658
11/1/19 10:00	45,466	2,500	37,386
11/2/19 10:00	39,317	1,691	38,375
11/3/19 10:00	36,684	2,260	37,026
11/4/19 10:00	35,236	2,180	35,778
11/5/19 10:00	27,551	2,210	34,985
11/6/19 10:00	42,005	2,310	36,964
11/7/19 10:00	54,947	2,390	38,576
11/8/19 10:00	41,715	2,709	44,950
11/9/19 10:00	37,088	3,071	43,287
11/10/19 10:00	29,498	2,270	38,000
11/11/19 10:00	73,346	1,980	35,223
11/12/19 10:00	67,409	3,230	45,403
11/13/19 10:00	66,123	3,190	47,716
11/14/19 10:00	58,521	2,860	45,229
11/15/19 10:00	66,355	2,690	43,132
11/16/19 10:00	57,095	3,160	45,818
11/17/19 10:00	44,958	3,140	43,245
11/18/19 10:00	46,501	3,050	42,507
11/19/19 10:00	47,468	3,190	41,620
11/20/19 10:00	39,199	3,241	35,027
11/21/19 10:00	52,226	2,070	39,607
11/22/19 10:00	43,679	3,329	42,206
11/23/19 10:00	47,690	3,350	41,748
11/24/19 10:00	60,347	2,630	43,079
11/25/19 10:00	51,895	3,190	41,716
11/26/19 10:00	48,226	2,670	39,876

11/27/19 10:00	45,144	2,720	39,912
11/28/19 10:00	60,271	3,369	43,012
11/29/19 10:00	64,984	3,360	45,202
11/30/19 10:00	66,462	3,550	44,496
12/1/19 10:00	62,474	3,610	45,132
12/2/19 10:00	65,498	3,750	46,826
12/3/19 10:00	64,650	3,581	46,129
12/4/19 10:00	58,314	3,290	42,933
12/5/19 10:00	60,171	3,370	45,087
12/6/19 10:00	70,889	3,080	43,666
12/7/19 10:00	65,993	3,619	47,719
12/8/19 10:00	47,578	3,491	45,398
12/9/19 10:00	56,704	2,951	41,739
12/10/19 10:00	58,263	2,629	43,143
12/11/19 10:00	61,884	3,560	50,568
12/12/19 10:00	55,257	3,720	49,937
12/13/19 10:00	56,668	3,211	43,522
12/14/19 10:00	56,932	3,290	43,442
12/15/19 10:00	69,186	3,330	46,645
12/16/19 10:00	71,752	3,650	48,124
12/17/19 10:00	80,294	3,720	48,797
12/18/19 10:00	96,774	3,669	52,779
12/19/19 10:00	79,808	4,380	52,747
12/20/19 10:00	70,926	3,980	52,027
12/21/19 10:00	56,708	3,791	51,598
12/22/19 10:00	54,289	3,079	39,228
12/23/19 10:00	62,176	3,390	24,205
12/24/19 10:00	53,406	3,470	42,057
12/25/19 10:00	51,637	3,330	44,429
12/26/19 10:00	47,060	3,080	44,093
12/27/19 10:00	54,973	3,070	42,917
12/28/19 10:00	52,771	2,960	42,733
12/29/19 10:00	46,656	3,090	43,370
12/30/19 10:00	47,693	3,270	45,330
12/31/19 10:00	69,070	3,050	45,336
1/1/20 10:00	57,986	3,060	46,630
1/2/20 10:00	49,146	2,951	44,205
1/3/20 10:00	72,499	2,840	43,373
1/4/20 10:00	71,998	2,660	43,564
1/5/20 10:00	63,212	2,720	47,119
1/6/20 10:00	63,683	3,059	46,156
1/7/20 10:00	90,742	3,050	47,019
1/8/20 10:00	83,093	3,479	50,453
1/9/20 10:00	45,711	3,641	51,099
1/10/20 10:00	26,759	2,690	42,954
1/11/20 10:00	39,759	2,380	40,719
1/12/20 10:00	49,730	2,710	43,247

1/13/20 10:00	45,299	3,050	45,336
1/14/20 10:00	36,405	2,851	44,679
1/15/20 10:00	60,442	2,310	43,463
1/16/20 10:00	81,339	3,319	46,733
1/17/20 10:00	80,054	4,010	51,438
1/18/20 10:00	78,718	3,651	46,989
1/19/20 10:00	96,138	3,860	48,155
1/20/20 10:00	94,309	4,000	52,747
1/21/20 10:00	84,612	3,690	51,559
1/22/20 10:00	63,328	2,791	48,807
1/23/20 10:00	33,504	3,169	46,925
1/24/20 10:00	37,556	3,021	44,598
1/25/20 10:00	48,169	3,250	44,751
1/26/20 10:00	47,225	2,920	46,317
1/27/20 10:00	53,412	2,740	45,998
1/28/20 10:00	59,889	2,730	47,138
1/29/20 10:00	72,017	3,199	46,879
1/30/20 10:00	46,464	3,581	47,844
1/31/20 10:00	48,000	3,270	45,516
2/1/20 10:00	51,710	3,099	44,974
2/2/20 10:00	29,902	3,550	44,775
2/3/20 10:00	27,699	2,832	40,313
2/4/20 10:00	36,722	2,179	40,384
2/5/20 10:00	35,123	2,800	45,314
2/6/20 10:00	57,552	2,631	44,652
2/7/20 10:00	73,164	3,558	46,745
2/8/20 10:00	49,245	3,580	47,202
2/9/20 10:00	35,935	3,271	45,824
2/10/20 10:00	38,003	2,980	44,814
2/11/20 10:00	46,598	2,500	43,903
2/12/20 10:00	51,393	2,911	45,569
2/13/20 10:00	83,307	3,198	41,290
2/14/20 10:00	80,303	3,931	52,620
2/15/20 10:00	32,482	3,490	46,000
2/16/20 10:00	42,424	3,171	46,253
2/17/20 10:00	27,069	2,939	45,681
2/18/20 10:00	7,522	2,620	43,750
2/19/20 10:00	67,152	451	6,746
2/20/20 10:00	89,487	3,060	45,392
2/21/20 10:00	53,070	3,391	51,093
2/22/20 10:00	39,855	2,759	46,476
2/23/20 10:00	38,022	2,721	44,171
2/24/20 10:00	34,470	1,602	40,623
2/25/20 10:00	47,234	2,279	40,759
2/26/20 10:00	72,130	2,729	41,789
2/27/20 10:00	60,628	3,502	47,908
2/28/20 10:00	64,548	3,630	49,000

2/29/20 10:00	39,352	3,790	50,111
3/1/20 10:00	13,379	2,850	46,691
3/2/20 10:00	15,191	2,082	42,162
3/3/20 10:00	30,795	2,059	42,600
3/4/20 10:00	30,898	2,450	42,925
3/5/20 10:00	31,032	2,400	26,541
3/6/20 10:00	50,499	3,159	45,227
3/7/20 10:00	24,711	2,819	43,942
3/8/20 10:00	10,152	2,761	43,464
3/9/20 10:00	3,336	2,081	38,499
3/10/20 10:00	13,236	1,590	38,505
3/11/20 10:00	12,192	2,270	40,291
3/12/20 10:00	18,479	1,830	38,983
3/13/20 10:00	36,183	1,710	37,962
3/14/20 10:00	28,545	1,871	39,744
3/15/20 10:00	34,470	2,130	42,650
3/16/20 10:00	19,017	2,330	44,849
3/17/20 10:00	19,506	2,050	43,191
3/18/20 10:00	14,659	2,060	40,511
3/19/20 10:00	3,577	1,721	39,631
3/20/20 10:00	27,733	1,349	37,519
3/21/20 10:00	41,347	2,101	40,821
3/22/20 10:00	44,262	2,390	42,619
3/23/20 10:00	21,354	2,400	43,625
3/24/20 10:00	31,527	1,830	40,713
3/25/20 10:00	11,148	2,500	41,667
3/26/20 10:00	3,735	1,971	39,192
3/27/20 10:00	14,332	1,520	36,730
3/28/20 10:00	21,554	1,860	40,303
3/29/20 10:00	26,373	2,259	39,609
3/30/20 10:00	33,598	2,341	40,294
3/31/20 10:00	38,909	2,670	41,761
11/1/20 10:00	48,774	2,531	41,692
11/2/20 10:00	36,172	1,990	44,729
11/3/20 10:00	29,479	2,240	42,844
11/4/20 10:00	32,159	1,630	40,073
11/5/20 10:00	25,494	2,080	38,654
11/6/20 10:00	6,112	1,531	37,690
11/7/20 10:00	-	1,769	37,545
11/8/20 10:00	-	1,301	37,633
11/9/20 10:00	-	990	37,379
11/10/20 10:00	-	1,120	35,832
11/11/20 10:00	37,767	1,120	27,129
11/12/20 10:00	53,697	1,889	25,122
11/13/20 10:00	56,152	2,289	34,013
11/14/20 10:00	51,494	2,440	38,661
11/15/20 10:00	58,117	2,091	37,868

11/16/20 10:00	57,616	1,980	39,854
11/17/20 10:00	42,718	2,509	44,588
11/18/20 10:00	49,536	2,949	48,404
11/19/20 10:00	55,159	3,001	44,458
11/20/20 10:00	48,125	2,382	38,289
11/21/20 10:00	48,406	2,157	38,006
11/22/20 10:00	66,459	2,161	38,555
11/23/20 10:00	53,426	2,789	41,467
11/24/20 10:00	50,455	2,522	42,723
11/25/20 10:00	33,811	1,859	38,286
11/26/20 10:00	45,433	1,830	36,659
11/27/20 10:00	61,779	2,070	37,160
11/28/20 10:00	57,371	2,219	39,154
11/29/20 10:00	42,173	1,761	39,064
11/30/20 10:00	53,426	1,749	38,940
12/1/20 10:00	49,391	2,410	44,657
12/2/20 10:00	40,681	2,509	46,271
12/3/20 10:00	41,853	2,640	42,944
12/4/20 10:00	44,757	2,770	42,548
12/5/20 10:00	72,504	3,100	43,682
12/6/20 10:00	71,312	2,651	46,542
12/7/20 10:00	58,787	2,939	48,581
12/8/20 10:00	52,115	3,123	47,694
12/9/20 10:00	44,260	2,709	46,435
12/10/20 10:00	43,249	3,140	45,530
12/11/20 10:00	43,601	2,590	42,240
12/12/20 10:00	54,880	2,240	40,956
12/13/20 10:00	86,008	2,709	41,879
12/14/20 10:00	79,057	2,920	47,391
12/15/20 10:00	79,477	2,780	50,725
12/16/20 10:00	75,138	3,130	53,203
12/17/20 10:00	78,786	3,210	53,251
12/18/20 10:00	84,431	3,409	54,378
12/19/20 10:00	74,088	3,011	51,662
12/20/20 10:00	57,273	3,010	46,382
12/21/20 10:00	52,092	2,972	44,609
12/22/20 10:00	33,649	2,309	46,167
12/23/20 10:00	11,448	2,351	46,095
12/24/20 10:00	54,748	1,611	40,865
12/25/20 10:00	95,507	2,807	49,900
12/26/20 10:00	77,219	2,931	53,329
12/27/20 10:00	67,132	2,840	52,639
12/28/20 10:00	73,177	2,441	47,273
12/29/20 10:00	44,900	3,013	50,814
12/30/20 10:00	49,212	3,222	47,054
12/31/20 10:00	42,498	3,339	46,652
1/1/21 10:00	39,101	2,992	47,268

1/2/21 10:00	40,940	2,379	44,311
1/3/21 10:00	33,923	3,111	47,640
1/4/21 10:00	57,078	2,760	46,609
1/5/21 10:00	64,001	3,229	46,464
1/6/21 10:00	56,221	3,450	47,863
1/7/21 10:00	71,511	3,211	48,939
1/8/21 10:00	75,372	2,909	50,197
1/9/21 10:00	72,599	3,490	47,164
1/10/21 10:00	80,536	3,490	47,753
1/11/21 10:00	59,239	3,580	48,315
1/12/21 10:00	50,128	2,830	47,053
1/13/21 10:00	44,714	3,320	47,158
1/14/21 10:00	23,604	2,761	45,603
1/15/21 10:00	38,320	2,270	42,704
1/16/21 10:00	49,044	2,730	45,729
1/17/21 10:00	49,825	2,480	45,383
1/18/21 10:00	52,758	2,560	47,936
1/19/21 10:00	76,858	3,069	46,887
1/20/21 10:00	60,268	3,051	48,780
1/21/21 10:00	66,783	2,469	49,404
1/22/21 10:00	81,404	3,180	47,977
1/23/21 10:00	77,754	3,450	53,303
1/24/21 10:00	75,296	2,911	51,795
1/25/21 10:00	62,289	2,980	50,106
1/26/21 10:00	74,403	2,660	46,889
1/27/21 10:00	84,562	2,849	48,254
1/28/21 10:00	94,029	3,589	52,580
1/29/21 10:00	83,143	3,840	56,034
1/30/21 10:00	86,204	3,041	53,726
1/31/21 10:00	91,893	3,340	54,504
2/1/21 10:00	81,321	3,730	52,945
2/2/21 10:00	78,605	3,300	52,869
2/3/21 10:00	68,020	3,230	52,841
2/4/21 10:00	46,422	2,981	49,490
2/5/21 10:00	46,169	2,799	48,605
2/6/21 10:00	76,784	3,161	46,630
2/7/21 10:00	77,407	3,179	50,801
2/8/21 10:00	84,576	3,440	52,434
2/9/21 10:00	80,018	3,290	50,388
2/10/21 10:00	77,967	2,850	50,082
2/11/21 10:00	79,877	3,081	50,916
2/12/21 10:00	80,449	3,439	46,941
2/13/21 10:00	68,367	3,270	46,734
2/14/21 10:00	46,073	2,821	51,053
2/15/21 10:00	48,752	2,851	46,276
2/16/21 10:00	76,896	3,059	48,507
2/17/21 10:00	91,571	3,569	53,609

2/18/21 10:00	83,007	3,191	50,008
2/19/21 10:00	78,379	3,240	54,368
2/20/21 10:00	75,141	3,769	56,146
2/21/21 10:00	71,552	2,861	52,475
2/22/21 10:00	69,076	2,720	53,232
2/23/21 10:00	39,104	2,780	48,706
2/24/21 10:00	40,042	2,071	44,295
2/25/21 10:00	63,312	2,568	45,566
2/26/21 10:00	72,896	3,221	44,883
2/27/21 10:00	70,325	2,860	43,342
2/28/21 10:00	88,286	2,681	44,266
3/1/21 10:00	85,137	2,659	47,417
3/2/21 10:00	59,796	2,721	48,053
3/3/21 10:00	64,174	2,050	44,788
3/4/21 10:00	68,963	2,789	48,926
3/5/21 10:00	63,090	3,310	49,544
3/6/21 10:00	63,823	3,211	49,262
3/7/21 10:00	73,638	3,100	50,254
3/8/21 10:00	60,567	2,970	47,418
3/9/21 10:00	49,053	1,991	39,257
3/10/21 10:00	34,266	2,210	36,652
3/11/21 10:00	47,482	2,021	32,764
3/12/21 10:00	63,984	1,519	38,410
3/13/21 10:00	80,474	2,089	39,518
3/14/21 10:00	81,771	2,169	43,701
3/15/21 10:00	60,042	2,761	47,965
3/16/21 10:00	50,712	3,190	46,674
3/17/21 10:00	72,398	2,511	43,332
3/18/21 10:00	68,021	2,450	43,757
3/19/21 10:00	60,273	3,119	46,162
3/20/21 10:00	51,523	2,740	41,645
3/21/21 10:00	50,648	1,951	40,216
3/22/21 10:00	41,335	2,271	39,595
3/23/21 10:00	43,891	1,740	38,808
3/24/21 10:00	30,912	1,880	37,444
3/25/21 10:00	22,897	1,901	37,284
3/26/21 10:00	21,405	1,880	31,829
3/27/21 10:00	36,943	1,391	24,822
3/28/21 10:00	47,570	2,078	30,531
3/29/21 10:00	38,313	2,140	42,782
3/30/21 10:00	37,338	1,821	41,065
3/31/21 10:00	72,110	1,479	41,346
11/1/21 10:00	37,470	2,179	37,362
11/2/21 10:00	30,817	2,162	40,902
11/3/21 10:00	40,318	2,457	40,919
11/4/21 10:00	41,874	2,472	41,366
11/5/21 10:00	42,241	2,211	41,092

11/6/21 10:00	21,405	1,951	42,235
11/7/21 10:00	6,837	1,871	37,845
11/8/21 10:00	5,083	1,560	35,383
11/9/21 10:00	18,086	1,291	35,481
11/10/21 10:00	12,037	1,490	37,261
11/11/21 10:00	23,622	1,340	36,269
11/12/21 10:00	30,549	1,609	37,114
11/13/21 10:00	53,837	2,149	40,133
11/14/21 10:00	49,729	2,140	40,651
11/15/21 10:00	47,191	2,289	42,903
11/16/21 10:00	30,274	2,669	42,393
11/17/21 10:00	39,796	2,213	33,126
11/18/21 10:00	52,533	1,738	36,952
11/19/21 10:00	45,784	2,719	45,683
11/20/21 10:00	35,489	2,613	44,633
11/21/21 10:00	60,962	2,279	43,214
11/22/21 10:00	54,973	2,528	46,399
11/23/21 10:00	53,330	2,990	49,260
11/24/21 10:00	38,035	2,762	46,896
11/25/21 10:00	60,895	2,091	43,850
11/26/21 10:00	71,248	2,311	47,592
11/27/21 10:00	45,034	2,879	47,291
11/28/21 10:00	52,045	2,958	46,408
11/29/21 10:00	47,559	2,782	49,593
11/30/21 10:00	49,382	2,909	47,855
12/1/21 10:00	42,306	2,581	45,217
12/2/21 10:00	36,793	2,341	43,228
12/3/21 10:00	34,257	2,349	45,170
12/4/21 10:00	34,650	2,830	44,924
12/5/21 10:00	35,389	2,263	44,153
12/6/21 10:00	48,731	2,387	44,836
12/7/21 10:00	50,465	2,890	48,759
12/8/21 10:00	51,437	3,099	50,280
12/9/21 10:00	24,971	3,092	49,203
12/10/21 10:00	20,247	2,481	44,702
12/11/21 10:00	33,688	2,260	39,689
12/12/21 10:00	25,154	2,818	45,290
12/13/21 10:00	27,388	2,643	43,725
12/14/21 10:00	14,558	2,139	43,578
12/15/21 10:00	14,862	1,621	39,814
12/16/21 10:00	14,639	1,671	39,632
12/17/21 10:00	22,291	1,969	41,166
12/18/21 10:00	59,544	2,200	39,289
12/19/21 10:00	60,470	2,639	49,206
12/20/21 10:00	56,039	2,630	52,709
12/21/21 10:00	62,119	2,928	50,217
12/22/21 10:00	52,237	3,310	50,767

12/23/21 10:00	22,174	3,251	52,060
12/24/21 10:00	15,507	2,711	47,805
12/25/21 10:00	39,240	2,599	41,930
12/26/21 10:00	32,937	2,461	45,107
12/27/21 10:00	31,629	2,920	49,588
12/28/21 10:00	35,847	2,719	46,593
12/29/21 10:00	39,226	2,640	44,343
12/30/21 10:00	31,802	2,621	44,034
12/31/21 10:00	3,710	1,972	42,725
1/1/22 10:00	43,886	1,869	40,678
1/2/22 10:00	96,060	2,376	43,836
1/3/22 10:00	77,529	3,389	58,486
1/4/22 10:00	65,644	3,053	52,250
1/5/22 10:00	67,286	2,469	47,902
1/6/22 10:00	88,673	2,790	49,693
1/7/22 10:00	78,473	3,327	43,497
1/8/22 10:00	60,890	3,311	52,983
1/9/22 10:00	87,085	3,091	49,524
1/10/22 10:00	99,251	3,517	50,570
1/11/22 10:00	70,943	3,931	48,446
1/12/22 10:00	60,458	3,023	49,294
1/13/22 10:00	77,354	2,610	46,452
1/14/22 10:00	100,822	3,247	50,776
1/15/22 10:00	85,801	3,771	50,309
1/16/22 10:00	83,246	3,400	50,954
1/17/22 10:00	77,347	3,780	50,261
1/18/22 10:00	48,966	3,301	46,293
1/19/22 10:00	92,914	2,922	44,701
1/20/22 10:00	114,480	3,645	43,547
1/21/22 10:00	88,350	4,090	42,717
1/22/22 10:00	72,467	3,831	49,546
1/23/22 10:00	58,528	3,241	49,321
1/24/22 10:00	75,330	3,312	41,434
1/25/22 10:00	94,494	2,770	35,743
1/26/22 10:00	89,300	2,999	52,610
1/27/22 10:00	81,270	3,209	50,770
1/28/22 10:00	106,738	3,608	51,618
1/29/22 10:00	104,342	4,260	47,753
1/30/22 10:00	92,254	3,921	46,581
1/31/22 10:00	84,474	3,800	46,621
2/1/22 10:00	59,710	3,601	50,118
2/2/22 10:00	27,882	3,193	42,479
2/3/22 10:00	60,976	2,310	37,956
2/4/22 10:00	90,020	3,557	46,187
2/5/22 10:00	77,490	3,779	50,385
2/6/22 10:00	64,953	3,461	45,265
2/7/22 10:00	67,233	3,020	43,750

2/8/22 10:00	48,659	3,274	45,727
2/9/22 10:00	43,698	2,758	40,039
2/10/22 10:00	27,064	2,879	38,692
2/11/22 10:00	37,186	2,363	35,979
2/12/22 10:00	85,903	2,467	38,226
2/13/22 10:00	96,840	3,548	47,543
2/14/22 10:00	86,456	3,860	54,285
2/15/22 10:00	47,530	3,433	50,396
2/16/22 10:00	9,595	2,303	44,771
2/17/22 10:00	191	2,017	40,458
2/18/22 10:00	38,617	3,080	48,991
2/19/22 10:00	45,840	3,747	52,105
2/20/22 10:00	-	3,043	51,448
2/21/22 10:00	-	2,699	45,617
2/22/22 10:00	13,587	2,313	40,923
2/23/22 10:00	55,919	2,736	44,935
2/24/22 10:00	61,673	3,369	51,245
2/25/22 10:00	64,919	3,440	49,912
2/26/22 10:00	49,968	3,491	50,882
2/27/22 10:00	65,408	3,270	48,270
2/28/22 10:00	62,400	3,112	51,111
3/1/22 10:00	54,842	2,550	44,726
3/2/22 10:00	59,305	2,829	43,824
3/3/22 10:00	79,230	3,318	49,508
3/4/22 10:00	50,939	3,461	50,223
3/5/22 10:00	35,094	2,971	42,105
3/6/22 10:00	14,551	2,083	37,689
3/7/22 10:00	56,545	1,928	39,856
3/8/22 10:00	65,403	2,548	43,096
3/9/22 10:00	41,137	3,231	46,100
3/10/22 10:00	52,158	3,000	43,981
3/11/22 10:00	83,737	2,569	41,133
3/12/22 10:00	79,554	3,747	52,314
3/13/22 10:00	45,504	3,563	52,362
3/14/22 10:00	43,801	2,733	43,207
3/15/22 10:00	36,449	1,890	39,113
3/16/22 10:00	41,855	1,409	38,258
3/17/22 10:00	12,415	1,801	38,779
3/18/22 10:00	17,291	2,131	37,492
3/19/22 10:00	45,776	1,990	36,520
3/20/22 10:00	44,873	2,258	39,730
3/21/22 10:00	42,738	2,181	39,675
3/22/22 10:00	41,727	2,419	40,879
3/23/22 10:00	39,796	2,443	41,234
3/24/22 10:00	54,213	2,687	40,684
3/25/22 10:00	44,098	2,241	39,040
3/26/22 10:00	63,169	2,788	41,356

3/27/22 10:00	86,676	3,468	48,090
3/28/22 10:00	71,915	3,849	51,705
3/29/22 10:00	45,402	3,411	48,969
3/30/22 10:00	31,120	2,843	42,839
3/31/22 10:00	72,630	2,389	37,561
11/1/22 10:00	-	1,447	34,624
11/2/22 10:00	-	1,879	34,784
11/3/22 10:00	-	1,961	35,142
11/4/22 10:00	3,327	1,162	34,795
11/5/22 10:00	-	1,689	38,132
11/6/22 10:00	4,007	1,660	36,625
11/7/22 10:00	9,440	1,541	38,026
11/8/22 10:00	5,773	1,589	40,236
11/9/22 10:00	255	1,850	38,876
11/10/22 10:00	21,899	1,241	36,428
11/11/22 10:00	28,818	991	36,095
11/12/22 10:00	36,789	1,156	35,671
11/13/22 10:00	50,040	2,199	38,460
11/14/22 10:00	41,994	2,819	43,284
11/15/22 10:00	43,753	2,580	43,083
11/16/22 10:00	56,895	2,601	43,952
11/17/22 10:00	66,726	2,379	46,877
11/18/22 10:00	57,506	2,649	45,588
11/19/22 10:00	68,754	2,899	45,557
11/20/22 10:00	65,682	3,183	49,218
11/21/22 10:00	46,976	2,649	46,827
11/22/22 10:00	44,684	2,441	43,828
11/23/22 10:00	51,653	2,477	41,465
11/24/22 10:00	45,721	2,712	40,973
11/25/22 10:00	36,352	2,778	41,578
11/26/22 10:00	42,651	2,861	40,906
11/27/22 10:00	49,947	2,463	39,872
11/28/22 10:00	39,635	2,308	42,058
11/29/22 10:00	54,169	2,441	42,918
11/30/22 10:00	68,516	2,409	43,823
12/1/22 10:00	45,558	2,650	46,958
12/2/22 10:00	36,810	2,442	42,866
12/3/22 10:00	47,116	2,647	41,985
12/4/22 10:00	48,313	3,211	45,851
12/5/22 10:00	36,792	2,492	44,979
12/6/22 10:00	47,296	2,081	38,684
12/7/22 10:00	53,822	2,299	37,545
12/8/22 10:00	56,097	2,678	41,112
12/9/22 10:00	52,784	2,799	44,182
12/10/22 10:00	48,008	2,593	44,713
12/11/22 10:00	66,772	2,580	44,745
12/12/22 10:00	72,579	2,709	48,004

12/13/22 10:00	67,315	3,269	48,990
12/14/22 10:00	42,376	3,349	48,343
12/15/22 10:00	41,953	2,963	45,348
12/16/22 10:00	52,759	2,241	44,054
12/17/22 10:00	70,173	2,547	44,458
12/18/22 10:00	71,720	2,930	47,272
12/19/22 10:00	70,835	2,901	50,050
12/20/22 10:00	64,459	2,840	48,563
12/21/22 10:00	49,701	2,770	46,940
12/22/22 10:00	95,774	2,171	42,515
12/23/22 10:00	90,352	3,614	44,644
12/24/22 10:00	84,880	3,812	43,049
12/25/22 10:00	83,987	3,123	50,024
12/26/22 10:00	77,661	3,210	47,459
12/27/22 10:00	53,331	3,049	47,579
12/28/22 10:00	53,173	3,409	45,771
12/29/22 10:00	36,863	3,401	43,935
12/30/22 10:00	47,812	2,821	40,400
12/31/22 10:00	47,647	2,519	39,907
1/1/23 10:00	32,176	2,930	40,573
1/2/23 10:00	46,375	2,422	40,930
1/3/23 10:00	36,721	2,501	39,968
1/4/23 10:00	49,025	2,220	36,545
1/5/23 10:00	64,938	2,470	39,419
1/6/23 10:00	72,514	3,250	43,920
1/7/23 10:00	73,332	2,980	44,293
1/8/23 10:00	73,869	3,340	44,756
1/9/23 10:00	70,546	3,440	45,769
1/10/23 10:00	65,932	3,100	45,671
1/11/23 10:00	54,718	3,390	45,251
1/12/23 10:00	70,985	3,170	40,887
1/13/23 10:00	86,405	3,330	44,462
1/14/23 10:00	79,421	3,870	48,570
1/15/23 10:00	63,809	3,650	48,327
1/16/23 10:00	54,981	2,920	45,738
1/17/23 10:00	34,903	3,090	43,522
1/18/23 10:00	48,634	2,500	42,741
1/19/23 10:00	57,169	3,097	44,072
1/20/23 10:00	66,793	3,280	44,390
1/21/23 10:00	46,255	3,150	45,258
1/22/23 10:00	61,777	3,230	45,261
1/23/23 10:00	66,966	3,240	46,374
1/24/23 10:00	61,844	3,380	45,663
1/25/23 10:00	62,570	3,270	43,899
1/26/23 10:00	63,554	3,420	45,450
1/27/23 10:00	54,188	2,900	46,367
1/28/23 10:00	50,353	2,670	43,127

1/29/23 10:00	50,274	2,740	43,364
1/30/23 10:00	59,104	2,950	42,712
1/31/23 10:00	74,536	2,770	47,001
2/1/23 10:00	72,291	2,600	49,961
2/2/23 10:00	94,340	3,280	48,109
2/3/23 10:00	84,494	3,620	53,658
2/4/23 10:00	37,301	3,350	53,557
2/5/23 10:00	46,707	2,490	45,426
2/6/23 10:00	52,742	3,220	46,246
2/7/23 10:00	53,225	3,480	45,104
2/8/23 10:00	44,774	3,270	39,659
2/9/23 10:00	53,877	2,980	39,788
2/10/23 10:00	53,147	3,180	40,632
2/11/23 10:00	57,916	3,071	44,348
2/12/23 10:00	52,789	3,060	44,356
2/13/23 10:00	46,799	2,950	42,187
2/14/23 10:00	34,255	3,110	41,696
2/15/23 10:00	15,925	2,610	38,595
2/16/23 10:00	48,256	2,670	39,544
2/17/23 10:00	51,359	2,610	44,326
2/18/23 10:00	27,232	2,640	46,836
2/19/23 10:00	44,850	2,320	41,337
2/20/23 10:00	42,368	2,260	40,242
2/21/23 10:00	41,259	2,620	41,810
2/22/23 10:00	39,190	3,010	44,041
2/23/23 10:00	55,592	2,850	39,085
2/24/23 10:00	71,202	3,110	47,374
2/25/23 10:00	38,179	3,410	49,431
2/26/23 10:00	50,204	3,218	44,761
2/27/23 10:00	55,580	3,260	44,873
2/28/23 10:00	27,465	3,370	43,559
3/1/23 10:00	29,570	3,200	43,963
3/2/23 10:00	37,210	2,870	43,069
3/3/23 10:00	59,748	2,301	43,694
3/4/23 10:00	54,056	2,679	43,682
3/5/23 10:00	51,109	2,851	43,501
3/6/23 10:00	72,630	2,350	41,438
3/7/23 10:00	52,536	2,640	42,500
3/8/23 10:00	56,434	2,570	46,324
3/9/23 10:00	55,633	2,291	45,453
3/10/23 10:00	57,690	2,440	45,502
3/11/23 10:00	45,702	2,480	45,390
3/12/23 10:00	47,229	2,460	46,627
3/13/23 10:00	61,366	2,510	45,702
3/14/23 10:00	60,860	3,000	47,965
3/15/23 10:00	62,529	2,730	46,885
3/16/23 10:00	34,051	2,360	43,811

3/17/23 10:00	32,507	2,240	41,896
3/18/23 10:00	60,194	2,260	45,332
3/19/23 10:00	34,771	2,880	48,518

EXHIBIT JC-4

Philadelphia Gas Works
Case Name: GCR 23
Docket No(s): R-2023-3038069

Response to Discovery Request: OCA Set I-31
Date of Response: 3/13/2023
Response Provided By: Daniel Cassidy

Question:

What are the current maximum daily production (withdrawal in Dth) capabilities of the Company's LNG facilities? Please provide a copy of all studies and reports since 2021 evaluating the maximum withdrawal capabilities of PGW's LNG facilities, including the potential to increase withdrawal capabilities

Attachments: 0

Response:

There are two LNG facilities, one at the Richmond Facility and one at the Passyunk Facility.

At Richmond, regasification of the liquid natural gas is accomplished with six vaporizers having a total output of 500,000 MCFD and 100,000 MCFD in reserve.

At Passyunk, there are two LNG vaporizers, each having a capacity of 45,000 Mcf per day, resulting in 45,000 Mcf per day planned capacity and 45,000 Mcf per day reserve.

There have been no recent studies or reports evaluating the vaporization capabilities at the plants nor are there any plans to increase those capabilities currently.

EXHIBIT JC-5

Philadelphia Gas Works
Case Name: GCR 23
Docket No(s): R-2023-3038069

Response to Discovery Request: OCA Set I-4
Date of Response: 3/13/2023
Response Provided By: Florian Teme

Question:
Please provide a detailed supply and requirements schedule for PGW's 2022-2023 projected design day of 685,131 Mcf (Tab 12). The schedule should include deliveries to the Company by pipeline contract, and sales and transportation customer requirements by class/service classification.

Attachments: 1
OCA_Set_I_4_OCA Set I-4.pdf

Response:

PGW's design day is 0°F. PGW models a 2°F peak day and attached is the forecast DTH requirements and sources for a 2°F day.

OCA-Set I-4

FY 2024 Forecasted Peak Day: 2 Degrees F. (63 DD)
All Volumes in (Dth)

Requirements	
Firm	580,246
Cogen	1,146
Firm Transportation	96,996
LNG Sales	58
Total Requirements	678,445
Supply	
Pipeline Gas	
Williams Pipeline Company	125,780
Texas Eastern	119,282
Firm Transportation	33,514
Total Pipeline Gas	278,576
Storage Withdrawals	
WSS	28,619
S 2	5,191
GSS-TR	61,567
SS1 A	44,505
SS1 B	21,030
GSS-TE	34,047
Total Storage Withdrawals	194,959
LNG Withdrawals	
Richmond	214,536
Passyunk	183
Total LNG Withdrawals	214,719
Total Gas Supply	688,254
Fuels	
Pipeline	5,194
Storage	1,164
LNG	3,451
Total Fuel Deductions	9,808
Delivered Supply	678,445

EXHIBIT JC-6

Philadelphia Gas Works
Case Name: GCR 23
Docket No(s): R-2023-3038069

Response to Discovery Request: Vicinity Set II-2
Date of Response: 3/30/2023
Response Provided By: Ryan Reeves

Question:
List the ten coldest days each heating season for 2018-19, 2019-20, 2020-21, 2021-22. On each day provide the total customer consumption and the total delivery capacity.

Attachments: 1
Vicinity_Set_II_2_Vicinity Set II-2.pdf

Response:

Please see attached spreadsheet. The clarification on the information provided, the column labeled, “Total Customer Consumption (in Mcf)”, is the volume of gas that flowed through PGW’s distribution system to its customers. The column labeled, “Total Delivery Capacity (in Dth)”, is the firm rights of pipeline capacity PGW contracts from Transco and Texas Eastern. PGW pays for these rights year-round and is recovered in the GCR.

This number (Total Delivery Capacity) does not include capacity on the pipelines owned by customers or deliveries made to PGW’s city gates by IT choice suppliers.

Date	Total Customer Consumption	Total Delivery Capacity
1/13/2019	499,890	302,001
1/20/2019	543,386	302,001
1/21/2019	665,010	302,001
1/22/2019	535,664	302,001
1/30/2019	642,798	302,001
1/31/2019	667,011	302,001
2/1/2019	641,028	302,001
2/2/2019	523,603	302,001
3/5/2019	501,408	302,001
3/6/2019	545,587	302,001
12/18/2019	489,693	302,001
12/19/2019	516,312	302,001
12/20/2019	471,460	302,001
1/8/2020	463,075	302,001
1/17/2020	484,623	302,001
1/19/2020	439,887	302,001
1/20/2020	506,845	302,001
1/21/2020	478,904	302,001
2/14/2020	502,500	302,001
2/15/2020	464,236	302,001
1/28/2021	509,523	302,001
1/29/2021	552,959	302,001
1/30/2021	480,643	302,001
1/31/2021	506,601	302,001
2/8/2021	480,954	302,001
2/11/2021	480,427	302,001
2/12/2021	487,222	302,001
2/13/2021	487,169	302,001
2/18/2021	490,090	302,001
2/20/2021	488,948	302,001
1/10/2022	505,212	302,001
1/11/2022	542,190	302,001
1/15/2022	581,637	302,001
1/21/2022	559,451	302,001
1/22/2022	508,776	302,001
1/26/2022	525,952	302,001
1/29/2022	587,386	302,001
1/30/2022	538,066	302,001
2/5/2022	514,012	302,001
2/14/2022	529,071	302,001

EXHIBIT JC-7

Philadelphia Gas Works
Case Name: GCR 23
Docket No(s): R-2023-3038069

Response to Discovery Request: IE Set I-25
Date of Response: 3/13/2023
Response Provided By: Florian Teme

Question:

Reference the peak day send-out for the winter of 2021-2022 shown on Item 53.64(c)12, Schedule 1. Provide a breakdown of the source of supply and volumes from each supply used to provide the following volumes on their respective peak days as shown:

A. 531,582 Mcf on January 29, 2022;

B. 490,112 Mcf on January 30, 2022;

C. 454,674 Mcf on January 31, 2022.

Attachments: 1
IE_Set_I_25_IE Set 1-25.pdf

Response:

Please see the attached Excel spreadsheet.

3 DAY PEAK ANALYSIS

Winter Peak Season	Date	Average Temp.	Hi Temp.	Low Temp.	Total Sendout (mcfs)	Firm Sendout	Cogen Sendout	LBS Sendout	BPS Sendout	GTS Sendout	IT Sendout	GRAYSFERRY Sendout (mcfs)
2017- 2018	Jan 5	15	19	10	625,642	547,239	44	0	0	0	78,359	20,030
2017 - 2018	Jan 6	13	16	8	639,043	565,130	44	0	0	0	73,869	36,380
2017- 2018	Jan 7	20	27	9	582,222	516,455	44	0	0	0	65,723	38,850
2018 - 2019	Jan 30	16	37	7	584,172	500,209	43	0	0	0	83,920	53,916
2018 - 2019	Jan 31	17	20	11	609,241	522,948	43	0	0	0	86,250	47,420
2018 - 2019	Feb 1	18	25	15	586,904	503,748	43	0	0	0	83,113	52,759
2019- 2020	Dec 18	31	42	23	435,785	374,997	45	0	0	0	60,743	52,320
2019- 2020	Dec 19	30	33	25	461,382	398,876	45	0	0	0	62,461	51,357
2019- 2020	Dec 20	33	37	29	417,993	362,084	45	0	0	0	55,864	51,897
2020- 2021	Jan 28	29	36	25	455,995	397,133	45	0	0	0	58,817	51,780
2020- 2021	Jan 29	26	31	22	495,584	435,311	45	0	0	0	60,228	55,038
2020- 2021	Jan 30	32	36	27	426,177	372,796	45	0	0	0	53,336	52,584
2021- 2022	Jan 29	16	24	11	531,582	474,039	42	0	0	0	57,501	47,589
2021- 2022	Jan 30	23	27	17	490,112	434,209	42	0	0	0	55,861	46,917
2021- 2022	Jan 31	27	34	23	454,674	397,965	42	0	0	0	56,667	46,939

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Grays Ferry Cogeneration Partnership and Vicinity Energy Philadelphia, Inc.	:	
Complainants,	:	
	:	Docket No. R-2023-3038069 and
v.	:	C-2023-3038722
	:	
Philadelphia Gas Works,	:	
Respondent.	:	

SURREBUTTAL TESTIMONY OF JAMES L. CRIST, P.E.
ON BEHALF OF
GRAYS FERRY COGENERATION PARTNERSHIP
AND VICINITY ENERGY PHILADELPHIA, INC.

Vicinity Statement No. 1-SR
April 20, 2023

Q. PLEASE STATE YOUR NAME AND ON WHOSE BEHALF YOU ARE TESTIFYING.

A. I am James L. Crist, President of Lumen Group, Inc. a consulting firm focused on regulatory and market issues. I presented direct testimony and am now presenting surrebuttal testimony on behalf of Grays Ferry Cogeneration Partnership ("Grays Ferry") and Vicinity Energy Philadelphia, Inc. ("VEPI") (collectively "Vicinity").

I. ISSUES

Q. WHAT ARE THE ISSUES YOU WILL DISCUSS IN THIS TESTIMONY?

A. Specifically, in my surrebuttal testimony I will:

1. Address claims made by Company witness Mr. Reeves.
2. Address comments and observations by OSBA witness Mr. Knecht.
3. Propose a mechanism for PGW to provide Philadelphia Lateral capacity during the winter to Grays Ferry on an ongoing basis. This will provide benefits to PGWs end-user customers and reduce their costs of purchased gas.

Q. MR. REEVES CLAIMS PGW LACKS CAPACITY TO MEET ITS DESIGN DAY NEEDS AND THEREFORE CANNOT RELEASE CAPACITY TO GRAYS FERRY. DOES PGW LACK SUFFICIENT CAPACITY?

A. Mr. Reeves makes several arguments in his rebuttal testimony, but does not dispute the principal and only critical fact that for the past 25 years all of the gas that was supplied to Grays Ferry flowed down the Philadelphia Lateral and through the dedicated four-mile high pressure line to Grays Ferry. Mr. Reeves took issue with my testimony because I

made the point that PGW has had significant resources to provide winter capacity on the Philadelphia Lateral to flow high-pressure gas to Grays Ferry. Mr. Reeves opines that I should have used PGW's design day and not the actual peak day that has actually occurred, but that does not refute that fact that PGW has delivered gas through the lateral to Grays Ferry for 25 years without interruption and can do so going forward. Despite Mr. Reeves stating that 11 of 18 scenarios of his failure analysis, which I will address in detail, would have resulted in interruption of firm service, not once in 25 years was PGW's capacity need been great enough to cause PGW to recall or otherwise refuse to provide the 21,000 Dth of Alternative Receipt Service that allows gas to flow on the Philadelphia Lateral using PGW's capacity.

Q. MR. REEVES CLAIMS THE CAPACITY ON THE PHILADELPHIA LATERAL THAT IS FULLY HELD BY PGW IS FULLY UTILIZED AND PGW WOULD NOT BE ABLE TO RELEASE ANY CAPACITY TO GRAYS FERRY. HOW DO YOU ADDRESS HIS ASSERTION?

A. In the winter, Grays Ferry's gas is transported down the Philadelphia Lateral using 35,000 Dth/day of capacity held by Grays Ferry and 21,000 Dth/day of capacity held by PGW. I am simply pointing out that the exact same 21,000 Dth/day could be released to Grays Ferry directly, rather than held by PGW and released to Grays Ferry indirectly. If Grays Ferry would cease operations entirely, then PGW would be left holding 21,000 Dth/day of capacity that would then be excess, which exposes PGW's GCR customers to financial risk.

Q. IS THE CAPACITY ON THE PHILADELPHIA LATERAL THE ONLY SUPPLY RESOURCE PGW HAS TO MEET CUSTOMERS' NEEDS?

A. No. The Philadelphia Lateral capacity in question is just one of many interstate pipeline gate stations at which PGW has firm capacity at their disposal. In this GCR filing, Mr. Reeves has explained that PGW has off system gas storage, and two LNG facilities that are on PGW's distribution system. He points out that a significant portion of PGW's peak day needs are supplied by the storage and LNG gas. He then made the non-logical leap that because PGW cannot supply its peak day needs using only Transco and TETCO pipeline capacity, that is proof the PGW cannot afford to release any capacity to Grays Ferry. His claim is without merit. Most local distribution utilities operating in the cold regions of the country such as Pennsylvania, rely on a combination of gas supplied through interstate pipeline capacity and storage and LNG that is available in the market area. It is not uncommon that gas customers' needs cannot be met solely by pipeline capacity. PGW has demonstrated that it has sufficient supply resources to supply its customers and Grays Ferry and if the capacity it uses were released to Grays Ferry, PGW would still have enough capacity to meet its other customers' needs.

Q. WHAT ATTRIBUTE OF RELEASE CAPACITY DOES MR. REEVES INCORPORATE INTO THE OTHER CAPACITY RELEASES UNDERTAKEN BY PGW?

A. Mr. Reeves explained that such releases are recallable, meaning that if there were factors that impaired PGW's ability to meet its customers' needs using its remaining pipeline capacity, gas storage, and on-system LNG that it could recall the release capacity and use

that to meet customer needs. Grays Ferry would be agreeable to such a condition under similar terms as were in effect for the past 25 years.

Q. WHAT DOES PGW RECEIVE AS COMPENSATION WHEN IT RELEASES CAPACITY?

A. I requested such data from PGW and Mr. Reeves provided it as the response to data request Set II-7. I took his data and summarized it to a more readable format. I then calculated the actual average rate that PGW has received for release capacity, and that rate is $0.35/Dth. I provided the summary and calculation as the reply to the OSBA data request Set I-4. (Attached as **Exhibit JC-8**). I also have attached Mr. Reeves' data response as **Exhibit JC-9**. It is clear that releasing capacity to Grays Ferry on a year-round basis provides superior benefits to PGW's GCR customers. The current maximum tariff rate is $0.80/Dth/day, which means there is a fairly wide gap between what PGW earns today and what it might earn on a regular basis if it were to release the capacity on a year-round basis.

Q. HOW DO YOU ADDRESS THE ONE EXAMPLE OF CAPACITY RELEASE REVENUES THAT MR. REEVES PRESENTED?

A. In his rebuttal testimony, Mr. Reeves cites one example of a capacity release during the past winter. Despite the fact that I had issued a data request (**Exhibit JC-9**) for all capacity release data on the Philadelphia Lateral, Mr. Reeves did not provide an update to his response that provided the data he discussed. None the less, he is cherry picking from his past six years of data for the one example that was an attractive release of capacity. If I estimate using the numbers he presented in his testimony, for as of this point writing this

testimony I still have not received the updated data, I calculate that the release period was about 151 days. Mr. Reeves got lucky in securing a 151 day winter release as examination of the data he provided from 2018 through 2022 shows that most of his winter releases are only for one month. His example is not representative. To provide a more evenly balanced analysis of the value of release capacity on the Philadelphia Lateral, I divided the total revenue received over the five-year period that Mr. Reeves had provided in discovery, and it is $2.5 million/year. I would expect this amount to be less than what could be realized through the 365-day release I am proposing, which could, depending on demand, produce substantially in excess of that amount.

Q. SHOULD PGW BE IN THE ARBITRAGE BUSINESS?

A. By holding on to the 21,000 Dth/day of Philadelphia Lateral capacity and hoping that he will be able to maximize revenue by attempting to release such capacity on a short-term basis creates risk for PGW's GCR customers. As the actual evidence has shown, Mr. Reeves has realized only $0.35/Dth for the capacity he has released on the Philadelphia Lateral. While forecasting the future success of Mr. Reeves' venture is difficult, it likely will not vary significantly from his past performance. Hoping that he can exploit short-term trends in the Philadelphia Lateral capacity market is a riskier action than agreeing to a dependable long-term release to a substantial customer. Such a release to Grays Ferry eliminates risk.

Q. MR. REEVES OPINES THAT RELEASING CAPACITY TO GRAYS FERRY COULD RESULT IN SYSTEM FAILURES. IS HIS CONCERN ACCURATE?

A. No, his concerns are inflated and unsupported by the data. Mr. Reeves provides a summary of a design day failure analysis that shows the possible consequences to the PGW system under a variety of scenarios. Such scenarios include extremely cold weather, unavailability of a gate station or a gas main, or of one of the two LNG facilities. He presents a summary table that shows in 11 of the 18 scenarios, the only solution would be a curtailment of firm customers. Mr. Reeves' portrayal of this outcome is greatly exaggerated. First, his analysis ignores the fact that in 7 of his 18 scenarios there was no risk at all to system GCR customers. Continuing to examine the 11 scenarios that did result in a curtailment, I note that Mr. Reeves has presented this data previously, in the complaint case (C-2021-3029259). At the time I observed that he failed to provide a critical piece of information, namely the probability that each of the scenarios would occur. Since he is presenting the same study again, and presenting it without the lacking probability data, I can conclude one of two things. Either he does not have the data, which would make his Summary of Failure Study incomplete and therefore should be ignored, or he has the data, and does not like that it may show an extremely low probability of those 11 scenarios occurring, making his point trivial. The fact that the gas supplied under the ARS agreement that flows on the Philadelphia Lateral using capacity held by PGW has never been recalled in 25 years surely shows the exaggeration.

Q. HAVE YOU BEEN PERMITTED TO VIEW MR. REEVES' STUDY?

A. No. The Company has refused to send it to me, claiming that it is Confidential System Information. It is impractical to travel to the Company's Philadelphia office to view the document in the short timetable of this proceeding. Therefore, I cannot verify the claims made by Mr. Reeves are not misleading.

Q. HOW DOES MAKING RELEASE CAPACITY RECALLABLE ADDRESS MR. REEVES CONCERNS BASED ON HIS SUMMARY OF FAILURE STUDY?

A. It makes those concerns disappear, as stated by Mr. Reeves, "Assuming PGW's current operations and pipeline capacity rights, PGW passes all the failure scenarios. (Exhibit RER-1R, page 1).

Q. HOW DO YOU RESPOND TO OSBA WITNESS MR. KNECHT'S CONCERNS?

A. Mr. Knecht believes as I do and stated, "Mr. Crist's argument that PGW has not needed that capacity for 25 years is certainly credible evidence that PGW has had excess capacity in the past" (OSBA Statement 1-R, 5:21-22). Mr. Knecht expresses concerns about the future as I offered no analysis to that effect, however, that fact that Grays Ferry is willing to agree to a recallable capacity release addresses such concerns, for it places any risk onto Grays Ferry and not on the backs of PGW's GCR customers. Mr. Knecht stated, "Mr. Crist does not indicate whether he is proposing that the capacity be released on a recallable or non-recallable basis. However, as Mr. Crist proposes that Grays Ferry pay the full tariff rate for the capacity, I have assumed that he proposes a non-recallable release." (id, p. 5,

footnote 6). My proposal to have capacity released on a recallable basis satisfies Mr. Knecht's concern.

II. SUMMARY

Q. WHAT IS THE SUMMARY OF YOUR SURREBUTTAL TESTIMONY?

A. 1. For the past 25 years, high pressure gas has flowed down the Philadelphia Lateral and through the dedicated four-mile line to Grays Ferry using a combination of capacity owned by Grays Ferry and PGW, and at no time during that period were any PGW customers, including Grays Ferry interrupted. PGW has sufficient capacity to continue release the needed winter capacity to Grays Ferry.

2. Grays Ferry is agreeable to Mr. Reeves' condition that released capacity be recallable as it has been for the last 25 years. This takes any concern that PGC customers will be at risk if capacity is released to Grays Ferry.

3. Data provided showing the Philadelphia Lateral capacity release revenues have averaged $0.35/Dth show that releasing capacity to Grays Ferry at any amount greater than that would provide an immediate ratepayer benefit.

Q. WHAT IS YOUR RECOMMENDATION?

A. PGW should release 21,000 Dth/day of capacity to Grays Ferry on a year-round basis at a fair market rate. Such capacity can be recallable under similar terms that have been in effect for 25 years. Alternatively, the same agreement could be accomplished via an Asset Management Agreement (AMA) if that were deemed more appropriate. This will benefit the residential and commercial GCR customers of PGW.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

EXHIBIT JC-8

Attachment 1.1.2 REV1
Vicinity Set II-7 Philla Lateral Releases 2018-2022 Reformatted

Company	Volume	Rate	Start	Stop	Days	Dkt Days	Revenue
Texla	3,000	$0.081	4/1/2018	10/31/2018	214	642,000	$52,002
Tenaska	15,708	$0.115	4/1/2018	10/31/2018	214	3,361,512	$386,573
Colonial	18,000	$0.097	4/1/2018	4/30/2018	30	540,000	$52,380
Colonial	18,000	$0.051	4/1/2018	4/30/2018	30	540,000	$27,540
Castleton	15,708	$1.600	11/1/2018	3/31/2019	151	2,371,908	$3,795,052
J Aron	18,000	$0.150	10/1/2018	10/31/2018	31	558,000	$83,700
J Aron	18,000	$0.150	10/1/2018	10/31/2018	31	558,000	$83,700
Colonial	15,708	$0.054	4/1/2019	10/31/2019	214	3,361,512	$181,521
Colonial	18,000	$0.041	4/1/2019	4/30/2019	30	540,000	$22,140
Sequent	18,000	$0.032	4/1/2019	4/30/2019	30	540,000	$17,280
Sequent	18,000	$0.048	10/1/2019	10/31/2019	31	558,000	$26,505
Sequent	18,000	$0.050	10/1/2019	10/31/2019	31	558,000	$27,900
PBF Energy	15,708	$0.250	11/1/2019	3/31/2020	152	2,387,616	$592,977
Sequent	18,000	$0.032	4/1/2020	4/30/2020	30	540,000	$17,280
Colonial	18,000	$0.030	4/1/2020	4/30/2020	30	540,000	$16,200
Vitol	18,000	$0.095	10/1/2020	10/31/2020	31	558,000	$53,010
Spotlight	18,000	$0.101	10/1/2020	10/31/2020	31	558,000	$56,358
Spotlight	15,708	$1.010	11/1/2020	3/31/2021	151	2,371,908	$2,395,627
Vitol	18,000	$0.080	4/1/2021	4/30/2021	30	540,000	$43,200
Vitol	18,000	$0.080	4/1/2021	4/30/2021	30	540,000	$43,200
Vitol	15,708	$0.050	4/1/2021	10/31/2021	214	3,361,512	$168,075
Twin Gagle	18,000	$0.031	10/1/2021	10/31/2021	31	558,000	$17,298
Castleton	18,000	$0.061	10/1/2021	10/31/2021	31	558,000	$34,038
Castleton	15,708	$1.691	11/1/2021	3/31/2022	151	2,371,908	$4,010,896
Twin Gagle	18,000	$0.061	4/1/2022	4/30/2022	30	540,000	$32,940
Vitol	18,000	$0.060	4/1/2022	4/30/2022	30	540,000	$32,400
Tenaska	15,708	$0.105	4/1/2022	10/31/2022	214	3,361,512	$352,958
Paulsboro	15,708	$0.100	11/1/2022	3/31/2023	151	2,371,908	$237,190
Twin Gagle	18,000	$0.046	10/1/2022	10/31/2022	31	558,000	$25,668
Twin Gagle	18,000	$0.046	10/1/2022	10/31/2022	31	558,000	$25,668
TOTAL						36,943,296	$12,911,276
						Ave=	$0.349
						Ann Ave=	$2,582,255

EXHIBIT JC-9

Tetco

1) Company: Texla Energy
Contact: Mark Conely
Contract #800233 (STX 24" - M3)
Volume – 3,000 DTH/Day
Rate: $0.081
Term: April 1, 2018 - October 31, 2018
Offer #: 081806
Award #: 085717
Revenue: $52,002.00

2) Company: Tenaska Gas Storage
Contact: Scott Prophit
Contract #800233
Volume – 15,708 DTH/Day
Rate: $0.115
Term: April 1, 2018 - October 31, 2018
Offer #: 081800
Award #: 085723
Revenue: $386,573.88

3) Company: Colonial Energy
Contact: James Toczyl
Contract #800514
Volume – 18,000 DTH/Day telescoped
Rate: $0.097
Term: April 1, 2018 - April 30, 2018
Offer #: 082051
Award #: 085919
Revenue: $ 52,380.00

4) Company: Colonial Energy
Contact: James Toczyl
Contract #800515
Volume – 18,000 DTH/Day telescoped
Rate: $0.051

Term: April 1, 2018 - April 30, 2018
Offer #: 082050
Award #: 085920
Revenue: $ 27,540.00

6) Company: Castleton Commodities Merchant Trading
Contact: Walker Weston
Contract #800233
Volume – 15,708 DTH/Day (STX 30" - M3)
Rate: $1.60
Term: November 1, 2018 - March 31, 2019
Offer #: 084871
Award #: 088625
Revenue: $ 3,795,052.80

6) Company: J Aron & Co
Contact:
Contract #800514
Volume – 18,000 DTH/Day telescoped
Rate: $0.15
Term: October 1, 2018 - October 31, 2018
Offer #: 085187
Award #: 088906
Revenue: $ 83,700.00

7) Company: J Aron & Co
Contact:
Contract #800515
Volume – 18,000 DTH/Day telescoped
Rate: $0.15
Term: October 1, 2018 - October 31, 2018
Offer #: 085188
Award #: 088905
Revenue: $ 83,700.00

Tetco

1) Company: Colonial Energy
Contact: James Toczyl
Contract #800233
STX 30" - M3 (Philadelphia Lateral Included)
Volume – 15,708 DTH/Day
Rate: $0.054
Term: April 1, 2019 - October 31, 2019
Offer #: 088818
Award #: 092211
Revenue: $181,521.65

3) Company: Colonial Energy
Contact: James Toczyl
Contract #800514
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.041
Term: April 1, 2019 - April 30, 2019
Offer #: 088775
Award #: 092221
Revenue: $22,140

4) Company: Sequent
Contact: John Turnbo
Contract #800515
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.032
Term: April 1, 2019 - April 30, 2019
Offer #: 088778
Award #: 092220
Revenue: $17,280.00

5) Company: Sequent
Contact: John Turnbo

Contract #800514
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.0475
Term: October 1, 2019 - October 31, 2019
Offer #: 091710
Award #: 094930
Revenue: $26,505.00

6) Company: Sequent
Contact: John Turnbo
Contract #800515
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.05
Term: October 1, 2019 - October 31, 2019
Offer #: 091712
Award #: 094929
Revenue: $27,900.00

8) Company: PBF Energy
Contact: Alan King
Contract #800233
M3 30" - M3 30"
Volume – 15,708 DTH/Day
Rate: $0.25
Term: November 1, 2019 - March 31, 2020
Offer #: 091831
Award #: 095037
Revenue: $592,977.00

Tetco

1) Company: Sequent
Contact: John Turnbo
Contract #800514
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.032
Term: April 1, 2020 - April 30, 2020
Offer #: 095431
Award #: 098359
Revenue: $17,280.00

2) Company: Colonial Energy
Contact: Cary Bender
Contract #800515
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.03
Term: April 1, 2020 - April 30, 2020
Offer #: 095432
Award #: 098358
Revenue: $16,200.00

5) Company: Vitol
Contact: Matt Monday
Contract #800514
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.095
Term: October 1, 2020 - October 301 2020
Offer #: 098785
Award #: 101481
Revenue: $53,010.00

6) Company: Spotlight Energy
Contact: Matt Steinberg

Contract #800515
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.101
Term: October 1, 2020 - October 301 2020
Offer #: 098786
Award #: 101480
Revenue: $56,358

7) Company: Spotlgiht Energy
Contact: Matt Steinberg
Contract #800233
STX 30" - M3 30" (Philadelphia Lateral Included)
Volume – 15,708 DTH/Day
Rate: $1.01
Term: November 1, 2020- March 31, 2021
Offer #: 098783
Award #: 101483
Revenue: $2,395,627.08

Tetco

1) Company: Vitol
Contact: Matt Monday
Contract #800514
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.08
Term: April 1, 2021 - April 30, 2021
Offer #: 102415
Award #: 104900
Revenue: $43,200

2) Company: Vitol
Contact: Matt Monday
Contract #800515
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.08
Term: April 1, 2021 - April 30, 2021
Offer #: 102416
Award #: 104899
Revenue: $43,200

3) Company: Vitol
Contact: Matt Monday
Contract #800233
STX 30" - M3 30" (Philadelphia Lateral Included)
Volume – 15,708 DTH/Day
Rate: $0.05
Term: April 1, 2021 - October 31, 2021
Offer #: 102420
Award #: 104897
Revenue: $168,075.60

5) Company: Twin Eagle
Contact: Angie LeBlanc

Contract #800514
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.031
Term: October 1, 2021 - October 31, 2021
Offer #: 105314
Award #: 107762
Revenue: $17,298

6) Company: Castleton
Contact: Jack Pellegrin
Contract #800515
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.061
Term: October 1, 2021 - October 31, 2021
Offer #: 105288
Award #: 107556
Revenue: $34,038

7) Company: Castleton
Contact: Jack Pellegrin
Contract #800233
STX 30" - M3 30" (Philadelphia Lateral Included)
Volume – 15,708 DTH/Day
Rate: $1.691
Term: November 1, 2021 - March 31, 2022
Offer #: 105289
Award #: 107555
Revenue: $4,010,896.43

Tetco

1) Company: Twin Eagle
Contact: Marc Tronzo
Contract #800514
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.061
Term: April 1, 2022 - April 30, 2022
Offer #: 108957
Award #: 110981
Revenue: $32,940

2) Company: Vitol
Contact: Matt Monday
Contract #800515
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.06
Term: April 1, 2022 - April 30, 2022
Offer #: 108961
Award #: 110978
Revenue: $32,400

3) Company: Tenaska Gas Storage
Contact: Greig Whitney
Contract #800233
STX 30" - M3 30" (Philadelphia Lateral Included)
Volume – 15,708 DTH/Day
Rate: $0.105
Term: April 1, 2022 - October 31, 2022
Offer #: 108959
Award #: 110980
Revenue: $352,958.76

6) Company: Paulsboro Refining

Contact: Alan King
Contract #800233
M3 30" - M3 30"
Volume – 15,708 DTH/Day
Rate: $0.10
Term: November 1, 2022 - March 31, 2023
Offer #: 112510
Award #: 114365
Revenue: $237,190.80

8) Company: Twin Eagle
Contact: Angie LeBlanc
Contract #800514
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.046
Term: October 1, 2022 - October 31, 2022
Offer #: 112650
Award #: 114445
Revenue: $25,668

9) Company: Twin Eagle
Contact: Angie LeBlanc
Contract #800515
Volume – 18,000 DTH/Day telescoped
3,000 DTH WLA; 6,000 DTH ELA; 9,000 DTH M1-M3 (on 30")
Rate: $0.046
Term: October 1, 2022 - October 31, 2022
Offer #: 112653
Award #: 114444
Revenue: $25,668

COMMONWEALTH OF PENNSYLVANIA

April 13, 2023

The Honorable Arlene Ashton
Commonwealth of Pennsylvania
Pennsylvania Public Utility Commission
801 Market Street, Suite 4063
Philadelphia, PA 19107

Re: Pennsylvania Public Utility Commission v. Philadelphia Gas Works (1307(f) Proceeding) / Docket No. R-2023-3038069

Dear Judge Ashton:

Enclosed please find the Rebuttal Testimony and Exhibits of Robert D. Knecht labeled OSBA Statement No. 1-R, on behalf of the Office of Small Business Advocate ("OSBA"), in the above-captioned proceeding.

As evidenced by the enclosed Certificate of Service, all known parties will be served, as indicated.

If you have any questions, please do not hesitate to contact me.

Sincerely,

/s/ Sharon E. Webb

Sharon E. Webb
Assistant Small Business Advocate
Attorney ID No. 73995

cc: PUC Secretary Rosemary Chiavetta, Cover letter and Certificate of Service only
Robert D. Knecht
Mark Ewen
Parties of Record

OSBA Statement No. 1-R

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**Docket No. R-2023-3038069**
PHILADELPHIA GAS WORKS	:	

Rebuttal Testimony and Exhibits of

ROBERT D. KNECHT

On Behalf of the

Pennsylvania Office of Small Business Advocate

Topics:

Capacity Release to Grays Ferry

Date Served: April 13, 2023

Date Submitted for the Record: _____

REBUTTAL TESTIMONY OF ROBERT D. KNECHT

Q. Mr. Knecht, please state your name and briefly describe your qualifications.

A. My name is Robert D. Knecht. I am an independent consultant, specializing in the economics and regulation of public utilities. For many years, I was a Principal of Industrial Economics, Incorporated ("IEc"), a consulting firm located at 2067 Massachusetts Avenue, Cambridge, MA 02140. This testimony was prepared under a contractual arrangement between IEc and the Pennsylvania Office of Small Business Advocate ("OSBA").

I have submitted testimony before the Pennsylvania Public Utility Commission ("Commission") in numerous regulatory proceedings involving the Philadelphia Gas Works ("PGW" or "the Company"), as well as for other regulated natural gas distribution companies ("NGDCs") in Pennsylvania. A copy of my résumé and a schedule of my recently filed expert testimony are attached as Exhibit RDK-1.

I participated in the complaint proceeding docketed at C-2021-3029259 involving PGW and the Grays Ferry Cogeneration Partnership ("Grays Ferry") and its affiliate Vicinity Energy Philadelphia Inc. ("VEPI") (collectively, "Vicinity"). Among other issues, that proceeding involved the upstream gas supply arrangements between PGW and Vicinity. Copies of my rebuttal and surrebuttal testimony in that proceeding are attached as Exhibits RDK-2 and RDK-3 respectively. My views in this proceeding are conceptually unchanged from that case.

Q. What is the purpose of this testimony?

A. This testimony responds to the proposal offered by Mr. James L. Crist on behalf of Vicinity. This testimony addresses only issues related to gas supply and GCR costs. A more thorough review of the various issues involving Vicinity and PGW is provided in Exhibits RDK-2 and RDK-3.

Q. Are there any caveats to this testimony?

A. Yes. I am advised by counsel that both PGW and OSBA timely submitted interrogatories to Vicinity relating to Mr. Crist's direct testimony. The responses to those interrogatories are not available at this writing. I will update this testimony promptly if those responses result in a need for substantive modifications to this testimony.

Q. Please provide a brief review of the background for the issues in this proceeding involving PGW's gas supply arrangements with Vicinity.

A. VEPI is a steam utility serving customers in downtown Philadelphia, regulated by the Commission. Grays Ferry operates a large gas-fired cogeneration facility that produces a significant majority of the steam needed by the VEPI steam utility, as well as providing electric energy and capacity to the PJM wholesale markets. Grays Ferry is interconnected to the "Philadelphia Lateral" on the Enbridge/Tetco interstate gas pipeline by two mains owned and operated by PGW. These mains are a 2-mile high-pressure main from Tetco Gate Station 060 to PGW's Passyunk LNG vaporization facility ("Naphtha Line"), and a 2-mile 16-inch high-pressure main from the Passyunk facility to Grays Ferry ("Distribution Extension"). Under normal operations, the Grays Ferry gas supply is provided entirely by these two mains, and Grays Ferry represents the entire load on both mains. Gas is metered by Tetco at Station 060 and metered again by PGW at Grays Ferry.

Grays Ferry is a traditional transportation service customer, which generally means that it has an obligation to arrange for its own gas commodity requirements and its upstream pipeline and load balancing capacity. For many years, Grays Ferry has taken transportation service under a 25-year contract with PGW and predecessor organizations, through PGW Rate GTS. That contract expired on December 31, 2022. The replacement of that contract is the subject matter of the complaint docketed at C-2021-3029259. Grays Ferry continues to take service pursuant to the terms of that contract, but it is my understanding that the resolution of the issues at Docket No. C-2021-3029259 will apply to Grays Ferry effective January 1, 2023.

In addition to covering transportation service from the city gate to the cogeneration plant, the contract includes provisions regarding Grays Ferry's use of capacity held by PGW on the Philadelphia Lateral. Grays Ferry requires deliverability capacity of 56,000 Dth per

day in the winter, and 36,000 Dth per day in the non-winter period.[1] Grays Ferry currently holds 35,000 Dth per day of capacity directly, and it relies on PGW for additional requirements. Under the long-term contract, Grays Ferry is obligated to take 36,000 Dth per day of capacity at market rates during the non-winter period (May to September), although it no longer requires that capacity in that period.[2] Winter deliveries on the Philadelphia Lateral are addressed in the contract by a swap arrangement, denoted Alternative Receipt Service ("ARS"), under which Grays Ferry is permitted to physically deliver gas to an alternate receipt point on PGW's distribution system. More specifically, Grays Ferry delivers gas to PGW via the Skippack Lateral (Tetco Gate 034), while PGW supplies GFCP with an equal amount of gas using the Philadelphia Lateral to Tetco Gate 060, up to a daily maximum ARS Quantity of 21,000 Dth per day.

As a contractual matter, the ARS arrangement is non-firm, meaning that PGW can interrupt supplies flowing to Grays Ferry and redirect those supplies into its distribution system. However, both PGW and Grays Ferry appear to have treated ARS as a firm service requirement. ARS service has never been interrupted during the 25-year term of the contract. Moreover, Grays Ferry appears to be able to rely on this service as sufficiently firm for it to obtain generation capacity payments in the PJM capacity markets.[3] Finally, in the complaint proceedings, Vicinity firmly took the position that it requires firm service from PGW (which is not surprising for a steam utility with an obligation to provide steam to meet peak day demands in the winter).

In a theoretical sense, the financial arrangements for the ARS should reflect the difference in value between capacity associated with delivery on the Skippack Lateral and capacity for delivery on the Philadelphia Lateral. However, both PGW and Mr. Crist take the position that there is no value associated with the capacity used by Grays Ferry to deliver

[1] Exhibit RDK-2, page 4.

[2] See Docket No. C-2021-3029259, Vicinity Statement No. 1, page 23. Since the PGW capacity is provided at market-based rates, Grays Ferry can presumably re-release that capacity (or release some of its own capacity) at those market rates. As such, this provision does not impose excess costs on Grays Ferry.

[3] Exhibit RDK-2, page 5.

gas on the Skippack Lateral, and, in fact, Grays Ferry does not even hold any capacity. In further surrebuttal testimony at the Docket No. C-2021-3029259, PGW witness Mr. Ryan A. Reeves indicated:

> "First, it is my understanding that GFCP/VEPI does not own/lease firm capacity rights to O-34 Gate Station . . . As explained by Mr. Crist in his Surrebuttal Testimony (Statement 16 JC-1SR at 19, lines 8–15), the Skippack lateral is never constrained which makes providing gas to this location quite easy and with little to no additional cost to the gas supplier who provides the gas on GFCP/VEPI's behalf compared to providing gas on the Philadelphia 19 Lateral, which is very constrained and difficult.[4]

Similarly, in this proceeding, Mr. Crist's testimony indicates that there is significant value to PGW associated with releasing some of its Philadelphia Lateral capacity to Grays Ferry, but he makes no reference to any lost value associated with reduced delivery on the Skippack Lateral.

Thus, since Grays Ferry pays only a nominal fee to PGW for what is effectively firm service under the ARS arrangement, it is apparent that PGW's ratepayers have been providing large subsidies to Grays Ferry with respect to gas supply costs for many years.

PGW's entire capacity on the Philadelphia Lateral is included in the GCR revenue requirement. As such, the gas supply subsidies to Grays Ferry have been borne by GCR ratepayers.

Q. Please summarize Mr. Crist's position.

A. In his testimony in the complaint proceeding at Docket No. C-2021-3029259, Mr. Crist took the position that ARS cost PGW nothing, and that PGW should continue to provide "recallable" winter capacity on the Philadelphia Lateral under the ARS arrangement.[5] In effect, Mr. Crist concluded that PGW's GCR customers should continue to provide substantial subsidies to Grays Ferry.

[4] Docket No. C-2021-3029259, PGW Statement No 2FSR, page 3.

[5] Docket No. C-2021-3029259, Vicinity Statement JC-1 at 19, Vicinity Statement JC-1SR at 33.

In this proceeding, Mr. Crist modifies his proposal to recommend that PGW release 21,000 Dth per day of its capacity on the Philadelphia Lateral to Grays Ferry on a year-round basis, for an unspecified period of time.[6] Mr. Crist proposes that PGW charge Grays Ferry for that capacity at the "full tariff cost" of $0.80 per Dth or $6.1 million per year. As I understand Mr. Crist's arithmetic, when current revenues from the ARS ($54,000) and current revenues from summer releases (estimated at either $1.27 million or $1.4 million by Mr. Crist) are deducted from the $6.1 million, the annual net benefit to PGW ratepayers would be about $5 million.[7]

In support of this proposal, Mr. Crist generally asserts:

- PGW has more than sufficient design day capacity to meet its requirements without the 21,000 Dth per day used for Grays Ferry (Vicinity Statement No. 1 page 7);

- Releasing the capacity to Vicinity would be better for ratepayers because the revenues would not be shared 75/25 between GCR ratepayers and "PGW" (Vicinity Statement No. 1 pages 9, 10 and 11);

- Releasing the capacity to Grays Ferry should take precedence over releasing the capacity to other non-GCR customers because Grays Ferry has 81 employees, and it provides steam service to over 250 residential and commercial buildings in Philadelphia (Vicinity Statement No. 1 page 9).

Q. Do you agree with Mr. Crist's conclusion that PGW has more than sufficient capacity on the Philadelphia Lateral to release 21,000 Dth per day to Grays Ferry?

A. Mr. Crist's argument that PGW has not needed that capacity for 25 years is certainly credible evidence that PGW has had excess capacity in the past, although it is not known whether PGW experienced design day conditions during that period. It is also evidence that PGW and Grays Ferry have hoodwinked GCR customers for many years, by having

[6] Mr. Crist does not indicate whether he is proposing that the capacity be released on a recallable or non-recallable basis. However, as Mr. Crist proposes that Grays Ferry pay the full tariff rate for the capacity, I have assumed that he proposes a non-recallable release.

[7] Vicinity Statement No. 1, page 12.

PGW release valuable firm capacity on the Philadelphia Lateral to Grays Ferry that was (a) paid for by GCR customers, (b) not needed by the Company to meet GCR customer requirements, and (c) at virtually zero cost.[8]

Going forward, however, it is unclear whether that excess capacity situation will continue. Mr. Crist offers no analysis to that effect. Moreover, Mr. Crist does not specify the period for which he proposes release of the capacity. As such, it is not clear as to how long Mr. Crist asserts the excess capacity position will continue. Without a more careful evaluation of PGW's design day requirements over the period for which capacity would be released, it would be imprudent for the Commission to require PGW to make such a release.

Q. Do you agree that ratepayers are disadvantaged by the 75/25 sharing of revenues and margins the Company could earn by releasing the capacity to third parties (or using it for off-system sales), as opposed to releasing the capacity to Grays Ferry?

A. No. PGW is a cash-flow regulated utility. The "sharing" of off-system sales margin and capacity release revenues is between GCR ratepayers and base distribution ratepayers. The 25 percent of those margins that is credited to "PGW" serves to offset future base rates revenue requirements. It is not used to supplement payments to PGW's shareholder.

Q. Do you agree that Grays Ferry's status as a Philadelphia employer and steam utility justify preferential treatment with respect to capacity release?

A. To the extent that Mr. Crist is arguing that capacity on the Philadelphia Lateral should be released to Grays Ferry at a below-market rate, I disagree.[9] First, with respect to equity, it takes a certain chutzpah for Grays Ferry to argue that, after reaping large subsidies from

[8] I acknowledge that the Company takes the position that the capacity used by Grays Ferry on the Philadelphia Lateral is necessary to meet design day demands for GCR customers. Docket No. C-2021-3029259, PGW Statement No. 2-R, pages 4 and 13-14. It simply has never needed to use the capacity that supplies Grays Ferry.

[9] From a quantitative perspective, there is some evidence that Mr.Crist's proposal would result in higher capacity release revenues than PGW's next best alternative Mr. Crist proposes a rate of $0.80 per Dth, based on the full tariff rate for the capacity. In contrast, PGW's testimony in the complaint proceeding indicated that the value of that capacity on the market would be $0.25 to $0.60 per Dth. It is unclear whether Mr. Reeve's figures were based on a recallable or non-recallable release. PGW Statement No. 2R, Ryan E. Reeves, at 9. Note also that PGW reports that it has released capacity at an annual rate of $0.73 per Dth for April 2021 to March 2022 (Vicinity II-7). If Grays Ferry is willing to pay a market price or and above-market price for released capacity, there is no need for preferential treatment.

GCR ratepayers for many years, it should be entitled to retain preferential treatment as a matter of fairness (even if that treatment is not quite as preferential as the past). Second, it is my (non-legal) understanding of Sections 1317 and 1318 of the Public Utility code that PGW is obligated to pursue a least cost procurement plan for fuel procurement for utility gas supply customers (i.e., the GCR customers). In my view, releasing capacity to Grays Ferry at below the value that could be obtained from third parties is not consistent with a least cost procurement plan. Third, maximizing the revenues from release of valuable capacity would benefit many Philadelphia businesses, most of which provide jobs and economic value to Philadelphia.[10] It is unclear why the public benefits associated with those small business customers should be subservient to benefits associated with Grays Ferry.

Q. What, then, do you recommend with respect to Mr. Crist's proposal?

A. I recommend that it be rejected. Moreover, as soon as it is contractually and legally possible, PGW should abandon the ARS arrangement which has provided large subsidies for many years to a favored customer. Instead, PGW should seek to maximize the value of all of its capacity on the Philadelphia Lateral by (a) carefully evaluating whether excess capacity exists on the Philadelphia lateral in excess of that needed to supply GCR customers on an annual basis, and (b) maximizing the value of that capacity to the GCR customers who pay for it through a competitive bidding process. The capacity can be released to Grays Ferry if it makes the most attractive offer.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does, subject to the caveats stated at the beginning of this testimony.

[10] By way of a rough comparison, 21,000 Dth per day represents the design day demands of about 4,600 commercial customers, based on PGW's estimate of the average commercial design day demand in its current base rate case. I expect that 4,600 small businesses would employ more than 81 people.

EXHIBIT RDK-1

RÉSUMÉ AND EXPERT TESTIMONY LIST

FOR

ROBERT D. KNECHT

Overview

Mr. Knecht has more than 40 years of economic consulting experience, focusing on the energy, utility, metals and mining industries. For the past 30 years, Mr. Knecht's practice has primarily involved providing analysis, consulting support and expert testimony in regulatory matters, primarily involving electric and natural gas utilities. Mr. Knecht's work includes many aspects of utility regulation, including industry restructuring, cost unbundling, cost allocation, rate design, rate of return, customer contributions, energy efficiency programs, smart metering programs, treatment of stranded costs and utility revenue requirement issues. He has consulted to state advocacy agencies, industrial customer groups, law firms, regulatory agencies, government agencies and utilities, in both the United States and Canada. He has provided expert testimony in more than one hundred separate utility proceedings.

In addition to his work with regulated utilities, Mr. Knecht has consulted on international industry restructuring studies, prepared economic policy analyses, participated in a variety of litigation matters involving economic damages, and developed energy industry forecasting models.

Mr. Knecht served as a Principal of IEc for 33 years, and as its Treasurer for 15 years. He is currently an independent consultant who remains affiliated with IEc.

Education

Master of Science, Management (Applied Economics and Finance), Sloan School of Management, M.I.T.

Bachelor of Science, Economics, Massachusetts Institute of Technology

Select Project Experience

For more than 25 years, Mr. Knecht has provided consulting services, analysis and expert testimony before the Pennsylvania Public Utility Commission on all manner of regulatory proceedings to the **PENNSYLVANIA OFFICE OF SMALL BUSINESS ADVOCATE**. In addition to expert testimony, Mr. Knecht has assisted OSBA with the development of public policy positions, litigation strategy, and longer term strategy.

For the **ATTORNEY GENERAL OF THE STATE OF RHODE ISLAND**, Mr. Knecht provided consulting and expert witness services in an acquisition proceeding involving PPL Corporation's proposed acquisition of Narragansett Electric from National Grid. Mr. Knecht's testimony addressed financial, economic, environmental, tax, operating cost and rate implications.

For the **NEW BRUNSWICK PUBLIC INTERVENER,** Mr. Knecht provides consulting and expert witness services in a variety of regulatory proceeding before the New Brunswick Energy and Utilities Board involving New Brunswick Power, Enbridge Gas New Brunswick, and petroleum products. Mr. Knecht has addressed issues of load forecasting, costs forecasting, cost of capital, allocation of corporate overhead costs, utility cost allocation, revenue allocation, market-based rate design, cost-based rate design, and rate decoupling.

For **L'ASSOCIATION QUÉBÉCOISE DES CONSOMMATEURS INDUSTRIELS D'ÉLECTRICITÉ (AQCIE) AND LE CONSEIL DE L'INDUSTRIE FORESTIÈRE DU QUÉBEC (CIFQ)**, Mr. Knecht provided analysis, consulting advice and expert testimony before the Régie de l'énergie in regulatory matters involving Hydro Québec Distribution and TransÉnergie. This work includes revenue requirement, power purchasing, cost allocation, treatment of cross-subsidies, and rate design.

For the **INDEPENDENT POWER PRODUCERS SOCIETY OF ALBERTA**, Mr. Knecht provided consulting advice, analysis and expert testimony before the Alberta Energy and Utilities Board in a series of proceedings involving the restructuring of the electric utility industry, the unbundling of rates, and the development of transmission rates.

EXHIBIT RDK-2

Docket No. C-2021-3029259 OSBA Statement No. 1-R

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Grays Ferry Cogeneration Partnership and Vicinity Energy Philadelphia, Inc. Complainants	:	
	:	**Docket No. C-2021-3029259**
v.	:	
Philadelphia Gas Works	:	

Rebuttal Testimony and Exhibits of

ROBERT D. KNECHT

On Behalf of the

Pennsylvania Office of Small Business Advocate

Topics:

Base Distribution Rates
Capacity Release
Gas-on-Steam Competition

Date Served: June 17, 2022

Date Submitted for the Record: _____

REBUTTAL TESTIMONY OF ROBERT D. KNECHT

1. Introduction and Background

Q. Mr. Knecht, please state your name and briefly describe your qualifications.

A. My name is Robert D. Knecht. I am an independent consultant, appearing in this proceeding on behalf of the Pennsylvania Office of Small Business Advocate ("OSBA"). For 33 years, I was a Principal of Industrial Economics, Incorporated ("IEc"), a consulting firm located at 2067 Massachusetts Avenue, Cambridge, MA 02140, and I served as Treasurer of that firm for 15 years. As part of my consulting practice, I prepare analyses and expert testimony in the field of regulatory economics on a variety of topics. I have submitted testimony before the Pennsylvania Public Utility Commission ("Commission") in several regulatory proceedings involving the Philadelphia Gas Works ("PGW" or "the Company") over the past 20 years, including PGW's base rates proceedings in 2007 (R-00061931), 2009/2010 (R-2009-2139884), 2017 (R-2017-2586783) and 2020 (R-2020301726). A copy of my résumé and a schedule of my recently filed expert testimony are attached as Exhibit RDK-1.

Q. What is the purpose of this testimony?

A. OSBA requested that I review the complaint ("Complaint") and associated expert witness testimony filed by Grays Ferry Cogeneration Partnership ("GFCP") and Vicinity Energy Philadelphia, Inc. ("VEPI") (together, "Complainants") and evaluate whether the rate proposals offered by Complainants in the expert testimony of Mr. James L. Crist are consistent with sound economics and regulatory principles, and with Commission policy and practice in Pennsylvania. In preparing this testimony, I also attempt to evaluate the Company's position regarding the cost to serve GFCP, based on its legal representations and interrogatory responses.

For the most part, this testimony reviews the positions of the parties as I understand them at this time. I have generally deferred making specific recommendations until I have had

an opportunity to review the Company's rebuttal testimony, but I offer observations based on the information currently available.

Q. Please a summary of your understanding of the background for the Complaint.

A. VEPI is a Commission-regulated steam utility serving downtown Philadelphia. While VEPI has some of its own oil and gas-fired steam production facilities, a significant majority of VEPI's steam supplies are purchased from GFCP. GFCP is a natural gas fired cogeneration facility, which produces electricity for sale into the PJM market and steam for sale to VEPI.

GFCP takes natural gas transportation service from PGW under Rate GTS, pursuant to a 25-year contract ("Contract") which runs from 1997 to the end of calendar year 2022.[1] The Contract addresses, inter alia, issues of base rates paid for distribution services, the treatment of some of PGW's capacity on the Tetco interstate pipeline, and certain bundled sales of natural gas.

The terms under which gas would continue to be supplied to GFCP are the subject of this proceeding. PGW takes the position that with the expiration of the Contract, GTS service will no longer be available. PGW does not currently have a firm transportation rate that is designed to serve large industrial customers, but it does offer interruptible transportation service under Rate IT. In responding to Complainants, PGW emphasizes that Rate IT provides virtually firm service.[2] GFCP takes the position that it has been negotiating with PGW for a replacement contract, but that PGW's negotiation positions have been sufficiently unreasonable that a complaint was necessary.

[1] Rate GTS is a legacy tariff class which can be used to provide firm or non-firm transportation service to large industrial customers. It has been closed to new customers since 2003. My understanding is that Complainants have been the only customers served under Rate GTS for many years.

[2] Philadelphia Gas Works' Answer with New Matter to Formal Complaint, Docket No. C-2021-3029259, November 22, 2021 ("Answer with New Matter") at 21 (*". . . PGW has not had unplanned interruptions of any IT customer for 17 years"*), footnote 25, 23, and footnote 34. PGW also indicates that it is willing to provide Rate IT service to GFCP ". . . *with provisions to eliminate the potential to be interrupted* . . ." Answer with New Matter at 2. In its last base rates case, PGW treated Rate IT customers as firm for allocation of mains and other distribution equipment costs, although revenues for the Rate IT class fall well short of allocated cost. See OSBA Statement No. 1, Docket No. R-2020-3017206, at 21-22 and 31.

GFCP is, by far, PGW's largest customer by volume, with recent annual throughput of more than 13 million mcf.

GFCP is interconnected to the Tetco interstate pipeline "Philadelphia Lateral" by two gas mains owned and operated by PGW. These mains are a 2-mile high-pressure main from Tetco Gate Station 060 to PGW's Passyunk LNG vaporization facility ("Naphtha Line"), and a 2-mile 16-inch high-pressure main from the Passyunk facility to GFCP ("Distribution Extension"). Under normal operations, GFCP gas supply is provided by only these two mains, and GFCP represents the entire load on both mains.[3] Gas is metered by Tetco at Station 060, and metered again by PGW at GFCP.[4] Differences between the meter reads are part of PGW's lost-and-unaccounted-for gas ("LUFG").

The mains connecting GFCP to Tetco were constructed by PGW in 1995-6, with a substantial contribution-in-aid-of-construction ("CIAC") from GFCP consisting of $10.4 million paid through monthly installment payments over 25 years, plus a $1.5 million payment made in installments over 18 months.[5] The Naphtha Line was constructed by converting an existing liquids pipeline, and the Distribution Extension was new pipe. Accurate records regarding the actual costs incurred by PGW to construct those mains are apparently not available, although it appears likely that the CIAC contributions made by GFCP represented most or all of the cost incurred by PGW to construct the two mains.[6]

Prior to contracting with PGW, GFCP evaluated the option to directly interconnect with Tetco and bypass PGW, but it opted to enter into the Contract with PGW. The rationale for GFCP's decision to contract with PGW for both distribution capacity and upstream

[3] PGW indicates that (a) gas flowing on the Naphtha Line can be redirected into its distribution system at the Passyunk plant, and (b) while GFCP is currently the only customer on the Distribution Extension, PGW looks for opportunities to use that capacity to serve other customers. At this writing, it is not clear whether any material volumes on the Naphtha Line are, in fact, redirected into PGW's distribution system.

[4] PGW reports that it could provide physical supplies to GFCP through Tetco Gate 030 which is also interconnected with the Passyunk plant, but at substantially reduced pressure (100 psi versus 350-400 through the Naphtha Line). OSBA-I-3(c, d), Complainants Statement No. 1 at 6.

[5] Complainants Statement No. 1 at 8. OSBA-Complainants-I-6. Answer with New Matter at 11. These payments were passed on to VEPI, and charged through the steam revenue requirement.

[6] Complainants Statement No. 1 at 6. OSBA-Complainants-I-4.

pipeline capacity is somewhat murky.[7] It is also unclear why GFCP would construct a large industrial facility without ensuring long-term access to firm gas transmission capacity.

Distribution base rate charges paid by GFCP for these facilities currently include a $250 per month customer charge, an 8 cent per mcf volumetric charge (a cost of a little over $1.0 million per year), and an annual maintenance charge that escalates with inflation (currently at about $160,000 per year).[8] Thus, at current volumes, GFCP is paying about $1.2 million per year for distribution service.

Under normal operations, GFCP requires 56,000 Dth/day of capacity on the Philadelphia Lateral in the winter, and about 36,000 Dth/day during the summer months (May to October).[9] At the time the Contract was signed, GFCP held 15,000 Dth/day of Tetco capacity, and per the Contract, PGW releases 36,000 Dth/day of its Tetco capacity to GFCP during the summer months, at a rate below the full tariff cost.[10] (Pipeline capacity, of course, has a lower value in the summer months.) Subsequently, in 2012 GFCP acquired an additional 20,000 Dth/day of Tetco capacity, obviating the need for the capacity release from PGW during the summer months.[11]

During the winter months, PGW retains all of its Tetco capacity, but the Contract provides for an Alternative Receipt Service ("ARS") swap mechanism, in which GFCP is permitted to physically deliver gas to PGW at a different receipt point (Skippack, Tetco Gate Station 034) while PGW supplies GFCP with an equal amount of gas using its Tetco capacity at Tetco Gate 060 on the Philadelphia Lateral, up to a daily maximum ARS Quantity of

[7] OSBA-Complainants-I-7. In Complainants Statement No. 1 at 7, Mr. Crist indicates that the decision to rely on PGW involved political considerations. However, Complainants also indicate that GFCP was not able to obtain sufficient upstream pipeline capacity in 1996, and thus an arrangement with PGW may have been necessary. *Id.,* at 15.

[8] Complainants Statement No. 1 at 8.

[9] OSBA-Complainants-I-7. GFCP also reports a maximum day requirement of 52,000 Dth. Complainants Statement No. 1 at 21.

[10] Complainants Statement No. 1 at 23.

[11] OSBA-Complainants-I-7.

21,000 Dth/day. The ARS arrangement is, at least contractually, non-firm. PGW is permitted to interrupt deliveries to GFCP if the Tetco capacity is needed for utility gas sales ("PGC") service, and GFCP does not hold pipeline capacity for its deliveries to Skippack.[12] The ARS is subject to monthly charges of $4,500, producing annual revenues for PGW of approximately $54,000.

Although the ARS arrangements are contractually non-firm, Complainants appear to treat that service as firm, and PGW appears to operate it as firm. GFCP indicates that ARS has never been interrupted.[13] Moreover, GFCP appears to be able to rely on this service as sufficiently firm for it to obtain generation capacity payments in the PJM capacity markets.[14] Finally, Complainants firmly take the position that they require firm service from PGW.[15]

The ARS arrangement is contractual, not physical. Gas supplies delivered to Skippack are not transported over PGW's distribution system to GFCP. GFCP's supplies come almost entirely through the Philadelphia Lateral and the Naphtha Line, and all supplies are provided through the Distribution Extension.

During periods when the Philadelphia Lateral is out of service, PGW provides bundled gas sales/delivery service using its distribution system to the Passyunk plant and through the Distribution Extension to GFCP.[16] These supplies are reportedly only needed during regular maintenance outages, and they occur during off-peak periods.

Q. What are Complainants' concerns?

[12] Per OSBA-I-1, ARS is interruptible up to 15 days per year on any day with a forecast average temperature below 25 degrees F. Per OSBA-I-13(d), PGW indicates that GFCP does not have firm capacity for deliveries to Skippack..

[13] OSBA-Complainants-I-8.

[14] OSBA-Complainants-I-8(b-c)

[15] Complainants Statement No. 1 at 12.

[16] OSBA-I-3(j).

A. With respect to negotiating a replacement for the Contract, Complainants object to PGW's proposed pricing for base rate services, for capacity release requirements, for ARS pricing, and for issues involving lost-and-unaccounted-for gas ("LUFG") and system balancing. In addition, Complainants object to PGW's use of rate discount mechanisms designed to increase PGW's margins, as well as potentially improper use of the provisions of the Rate IT tariff, to unfairly compete with steam service from VEPI.

Q. With that background, what issues do you address in this testimony?

A. I address the following issues:

- Assignment and recovery of gas distribution system costs for large industrial customers who, like GFCP, are located near interstate pipelines;
- Cost assignment and cost recovery related to the summer release of PGW's capacity on Tetco's Philadelphia Lateral and the winter ARS swap mechanism;
- PGW's apparent use of distribution rate subsidies to encourage VEPI's steam customers to convert to natural gas.

These issues are addressed sequentially in Sections 2 through 4 below.

Q. Why are these issues relevant to PGW's small business customers?

A. First, regarding base rates, GFCP currently provides PGW with roughly $1.2 million per year in distribution base rate revenues. Assuming the incremental cost of providing service to GFCP is relatively small, these revenues reduce the revenue requirement for all other PGW base rate customers. Increasing rates to GFCP obviously provides a larger offset for firm service customers; losing GFCP to bypass would harm other firm service customers.

Second, PGW and the Commission have long required firm service customers to contribute to its Universal Service and Energy Conservation ("USEC") costs to assist low-income residential ratepayers. GFCP currently makes no explicit contribution to those costs.

Third, PGW's treatment of released capacity on the Philadelphia Lateral and the associated ARS arrangement affect the utility cost of gas reflected in PGW's gas cost rate ("GCR").

Modifications to those arrangements will likely affect all GCR customers, including small businesses.

Fourth, "competition" between regulated utilities is not competition at all. Allowing one type of utility regulated by the Commission to discount its rates to compete with a different utility regulated by the Commission serves only to increase rates for those customers who are not fortunate enough to have access to service from both utilities. This is wholly unlike competition in unregulated markets, and it does little or nothing to encourage operating efficiency. Thus, "gas-on-steam" competition may serve to harm small business customers who do not have both options.

2. <u>Base Rate Cost Assignment and Recovery for Large Industrial Customers</u>

Q. Please summarize your understanding of the practices of Pennsylvania natural gas distribution companies ("NGDCs") for assigning and recovering costs for large industrial customers that are located in close proximity to interstate pipelines.

A. Conceptually, Pennsylvania NGDCs take two different approaches. First, the specific facilities used to provide distribution service to the customer (sometimes nothing more than metering equipment) are identified, and the book cost for those facilities are directly assigned to the customer. Rates are then based on allocated cost (and other considerations). Second, costs are assigned to these customers based on traditional allocation methods, but negotiated flex rates are available where the customer has a credible ability to physically bypass the NGDC. Flex rates are (or at least should be) negotiated to reflect the incremental costs that the customer would incur to bypass.

Based on my experience in Pennsylvania NGDC base rates, a brief summary of the practices follows:

Columbia Gas: Columbia uses both approaches. Mains costs for Mainline Distribution Service (MDS) class are directly assigned, and rates for MDS are set based on costs (although they currently materially exceed allocated costs). Columbia also has a set of non-MDS customers who have bypass or alternative fuel opportunities, with whom Columbia negotiates flex rates. Rates for these customers are far less than costs allocated using traditional allocation methods.

National Fuel Gas: NFG directly assigns mains costs to Rate LIS. To be conservative, where mains are used by customers other than the LIS customer, NFG assigns the full cost to the LIS class.

UGI Gas: UGI Gas directly assigns mains costs to its Rate XD customers, both firm and interruptible. Rates for that class are set using allocated costs, although revenues are currently well above allocated cost.

PECO Gas: For cost allocation purposes, PECO gas directly assigns certain mains and other distribution costs for some customers within the TS-F and TS-I rate classes who are located in close proximity to the pipeline, and excludes the loads from those customers in the allocation factors. For rate design, PECO provides discounted negotiated Rate NGS service to customers with credible bypass and alternative fuel options.

Q. What is your understanding of the positions of the parties regarding base rates costs?

A. As I understand Mr. Crist's testimony, GFCP argues that a direct assignment method should be used, based on the original cost and accumulated depreciation for the Naphtha Line and the Distribution Extension, net of GFCP's CIAC. It is not clear how Mr. Crist proposes to treat PGW metering/regulating plant for cost assignment purposes. He further opines that PGW's maintenance costs for this equipment should be based on a miles of pipe basis. While Mr. Crist does not develop a specific cost allocation analysis, he opines that the base rate charge to GFCP should remain at or below 8 cents per mcf, and that maintenance charges should be *de minimis*.[17]

PGW, by contrast, provides a cost-of-service allocation study ("CSAS") using revenue requirement values from its 2020 base rates proceedings, with GFCP identified as a separate rate class.[18] This CSAS produces an annual allocated cost of service for Grays

[17] Complainants Statement No. 1 at 13-14, 22.. Note that Mr. Crist appears to have used the wrong value for PGW's systemwide mains O&M costs in preparing his testimony. See OSBA-Complainants-I-9.

[18] This CSAS was provided in response to Complainants-I-13 and modified somewhat in response to OSBA-I-17. PGW also uses the term "COSS" to refer to this cost allocation analysis.

Ferry of $10.79 million, inclusive of Universal Service and Energy Conservation Plan ("USEC") costs.

In so doing, PGW does not adopt a direct assignment approach for the mains that are more-or-less dedicated to GFCP, nor does it treat GFCP as a typical gas distribution service customer. Rather, PGW treats some of GFCP's volumes as contributing to distribution mains cost causation, and other volumes as non-contributing.

Q. Please explain PGW's proposed approach in this proceeding for allocating distribution plant costs to GFCP in more detail.

A. Cost allocation studies for NGDCs are substantially driven by the allocation of rate base costs, primarily mains, services, and metering/regulating equipment. General plant, O&M, A&G, depreciation, and other costs of service are generally allocated based on the assignment of the underlying assets. Because service line costs are not relevant to GFCP, the primary drivers of costs allocated to GFCP in the Company's CSAS are the allocation factors for mains (Account 367) and general measurement/regulating equipment ("M&RE") (Account 378).[19]

Based on past practice and Commission precedent, PGW allocates both accounts using an "average-and-excess" ("A&E") allocation approach, in which the allocation factor represents a 50/50 weighting of average demand (arithmetically equivalent to annual throughput) and "excess" demand (which represents the difference between the class peak demand and average demand).

In this proceeding, however, the A&E allocator for GFCP that is used for mains costs is based only on GFCP's sales volumes (0.20 million mcf/year) plus its ARS throughput (3.67 million mcf/year), while the A&E allocator for M&RE is based on GFCP's total throughput

[19] As discussed further below, the cost allocation treatment of OPEB and USEC costs has material impacts on GFCP.

(13.37 million mcf/year).[20] PGW uses a peak demand value of 38,850 mcf/day[21] to derive the excess demand component of the A&E allocator for GFCP's entire load, reportedly based on the actual 2018 GFCP peak day, but which does not appear to be consistent with Complainants position that GFCP requires 56,000 Dth/day of capacity.

PGW defends the use of ARS and sales volumes as cost determinants for mains in its CSAS by arguing that ARS and sales service could not be provided without PGW's distribution system.[22] In effect, PGW's argument is that its mains costs should be assigned to GFCP as if PGW were physically delivering the ARS and sales service from Skippack (Gate 034) to GFCP.[23] PGW excludes non-ARS/sales volumes from the mains cost determinants on the basis that GFCP made a significant customer contribution to the PGW-owned facilities used to provide service (the Naphtha Line and the Distribution Extension).

Moreover, notwithstanding GFCP's CIAC, PGW assigns a full allocated share of system M&RE equipment.

This represents the primary difference between the parties for base rate cost causation: GFCP proposes that distribution plant costs be directly assigned based on historical costs for the facilities that are actually used to provide (almost all of the) service, while PGW proposes to use GFCP's shortage of transmission capacity to allocate costs as if the swapped ARS volumes are transported using PGW's distribution system to GFCP, and that PGW's distribution system must be sized to meet that load.[24]

[20] Mr. Crist is imprecise in implying that PGW allocates distribution costs to GFCP on the basis of total GFCP volumes. Complainants Statement No. 1 at 22.

[21] The Company also refers to GFCP's peak demand as 38,850 Dth/day in its response to OSBA-I-17.

[22] OSBA-I-3(j).

[23] Also, as ARS appears to be interruptible, PGW presumably does not consider the implications of the gas swap for its system planning.

[24] There is some logic to PGW's position that it incurs distribution system costs beyond those for the Naphtha and Distribution Extension mains to provide sales service to GFCP, since that service is reportedly provided when the Philadelphia Lateral is out for maintenance. However, the sales service volumes are very small compared to ARS volumes.

My final observation is that PGW does not assign any metering costs to GFCP in the CSAS filed in this proceeding, using the logic that those costs were covered by GFCP's CIAC.[25]

Q. In response to Complainants-I-13 and OSBA-I-17, PGW has prepared cost of service allocation studies ("CSASs") which allocate costs to a separate "Grays Ferry" rate class. In your experience with PGW, is this consistent with the Company's historical treatment of GFCP operations for cost allocation purposes?

A. No. Based on my records, in its 2007, 2009, and 2017 base rate cases, PGW included GFCP within an "IT/GTS" rate class for cost allocation purposes. In so doing, it assigned mains costs to the IT/GTS class using either a direct assignment method for the mains that provide distribution service to GFCP, or simply excluded demands and throughput from the GTS customers. PGW's rebuttal testimony at Docket No. R-2017-2586783 included the following description of cost causation for Rate GTS distribution costs:

> "As explained by Company witness Mr. Dybalski in his rebuttal testimony, these GTS customers are served on a separate individual gas main that was financed by those customers upon installation, and that is not part of PGW's distribution system. Because these GTS customers are served on a separate self-financed individual gas main, their distribution mains and supply costs are directly assignable and, thus, they should not be assigned responsibility for distribution system costs in the same way as other customers that receive service via PGW's interconnected distribution system. I currently lack the detailed data required to quantify the results of a CCOSS that treats the GTS Rate Class separately from the IT Rate Class. I believe that such a study would show that GTS customers impose limited mains-related costs on the distribution system. The result would be quite similar to that presented in my Original CCOSS and would demonstrate that Rate IT customers are not appropriately contributing their share of system costs." (Hanser)
>
> "This is because, as discussed above, the GTS customers that will remain in PGW's system impose limited mains-related costs on the distribution system." (Hanser)
>
> "The Company further explained that the two other GTS customers (Customers B and C) were not included in the Design Day Mains allocator in the COSS because they are served on a separate individual gas main that is not part of

[25] OSBA-I-17(e).

PGW's distribution system. . . . Customers B and C financed the individual gas main upon installation." (Dybalski)

To my knowledge, PGW did not include any separate consideration of costs associated with ARS or sales service volumes.

In its 2020 base rate case (after negotiations for a new contract with Complainants had begun), PGW excluded Rate GTS from the cost allocation study, except to include GTS revenues as an offset to cost.

In none of those proceedings did PGW adopt the cost allocation methodology that it proposes in the current proceeding for the GTS rate class.

Q. You earlier referred to PGW's USEC charges. What are the issues regarding this cost item?

A. Under current Commission policy, all of PGW's firm service customers except GFCP must pay the USEC charge, which is the same for each class on a per-mcf delivered basis. (That is, costs are recovered from the firm service customers on a volumetric basis.) That charge is currently set at $2.0884 per delivered mcf.

PGW's Interruptible Transportation ("IT") service customers are currently exempt from any responsibilities for USEC costs. This policy may simply be a leftover from an earlier regulatory regime, in which interruptible service was priced at the cost of alternative fuels, and thus further rate recovery was (at least in theory) not possible. However, for several years now, it has been the Commission's policy that Rate IT should be subject to cost-based rates. One possible interpretation for this bias in favor of Rate IT customers is that rate gradualism considerations have heretofore precluded PGW being able to recover USEC costs from these customers, particularly given the volumetric nature of the USEC.

To my knowledge, PGW is the only gas distribution utility in Pennsylvania at which low-income assistance program costs are recovered from both residential and non-residential customers. Even at PGW, however, some favored customer classes are permitted to escape an obligation to contribute.

The Company's position is that GFCP should be responsible to pay the USEC. However, unlike its treatment of all other firm service customers, PGW proposes that the USEC only apply to GFCP's sales/ARS volumes and not its total volumes. The logic for this approach is unclear. The Company's CSAS in this proceeding assigns $1.56 million per year in USEC costs to GFCP, and it recognizes $1.56 million per year in USEC revenues from that class.

GFCP concludes that it should not be required to contribute to USEC costs because (a) it is not eligible to participate in the USECP and (b) industrial customers at other Pennsylvania NGDCs are not required to do so.[26]

Q. Please address the issue of other post-employment benefit ("OPEB") costs and PGW's OPEB charge as it relates to GFCP base rates costs.

A. PGW's tariff includes a reconcilable OPEB surcharge that is a constant per-mcf charge to all firm service customers. Conceptually, the OPEB charge is simply a supplemental volumetric charge for distribution service, but it is designed to be reconcilable to ensure recovery of those costs.[27] The Company takes the position that the OPEB surcharge should apply to GFCP.

The Company's CSAS allocates OPEB costs on the basis of firm service volumes.[28] In this proceeding, the Company concludes that the OPEB cost and OPEB charges to GFCP be based only on ARS/sales volumes and not total volumes, inconsistent with its treatment of all other firm service customers. This results in allocated costs and OPEB surcharge revenues from the GFCP class of $1.19 million per year.

[26] OSBA-Complainants-I-2.

[27] PGW's tariff indicates that the OPEB surcharge applies to all volumes. However, PGW's tariff pages for Rate IT does not cite to any surcharges or riders that apply to Rate IT, and PGW allocates no OPEB costs associated with the surcharge to Rate IT.

[28] As I explained in the Company's last base rate proceeding, this allocation method for OPEB costs is not reasonable, because OPEB costs are conceptually equivalent to all other labor costs, which are allocated on a much different basis. See OSBA Statement No. 1 at Docket No. R-2020-3017206, at 28.

GFCP takes the position that it should not be subject to the OPEB surcharge, because it heretofore has not been subject to that charge.[29]

Q. What are the positions of the parties with respect to whether rates to GFCP should be subject to PGW Distribution System Improvement Charge ("DSIC")?

A. Neither party appears to have addressed this issue. Based on PGW's approach, however, I would expect that PGW would propose to treat base rates for GFCP as subject to its DSIC.

Q. Although neither party appears to advocate setting base rates for GFCP based on current bypass costs, what would the implications be for setting base rates for GFCP based on its current cost to bypass PGW?

A. The potential for GFCP to bypass PGW is complicated by GFCP's decision to construct and operate its facility without permanent access to firm natural transmission capacity necessary to meet operate its business. I address this issue in Section 3 below and focus here only on physical interconnection with Tetco.

As part of its negotiations and planning, GFCP has at least conducted some preliminary investigation of the cost of physical bypass of PGW, presented confidentially. It does not appear that GFCP can physically bypass PGW before its current contract expires, but GFCP appears to believe that physical bypass is a potential option.

PGW indicates that it has conducted no assessment of GFCP's cost to bypass. I assume, however, that PGW has reviewed the materials provided by GFCP regarding its investigations and has considered those materials in contract negotiations.

While GFCP's materials are confidential, I do not think it betrays any secrets to observe that the cost for physical bypass is much higher than the original cost for the Naphtha and Distribution Extension mains, but it is perhaps not as costly as the base rates costs allocated to GFCP under PGW's CSAS.

Q. If a bypass approach to setting rates for GFCP base rates, what are the implications for the various PGW charges and surcharges discussed above?

[29] OSBA-Complainants-I-3.

A. If the Commission adopts a cost allocation approach to setting base rates for GFCP, in which costs are assigned to GFCP based either on direct assignment or general allocation methods, a reasonable argument can be made that GFCP should contribute to USEC, OPEB and DSIC costs. It can also be reasonably argued that O&M and A&G allocations to GFCP (which would be based on underlying asset costs) should reflect the book cost of the assets before CIAC is deducted.

If, however, base rates for GFCP are set based on GFCP's cost to bypass the PGW distribution system, it would not be possible to add any additional surcharges without causing GFCP to bypass.

3. <u>Pipeline Capacity</u>

Q. What are the positions of the parties regarding PGW's capacity on the Philadelphia Lateral that GFCP needs in the winter to operate its facility?

A. GFCP appears to take the position that PGW holds more than sufficient upstream and peaking capacity to meet the design day requirements of its GCR customers, and that making the excess capacity available to GFCP should take precedence over releasing that capacity to third parties or using it for off-system sales.[30] Complainants actual proposal regarding PGW-held capacity for the winter months is not entirely clear. First, GFCP appears to consistently argue that PGW should stop requiring GFCP to accept the contractual capacity release of 36,000 Dth/day during the summer months, and that those lost revenues should become the responsibility of GCR ratepayers.[31] Second, regarding GFCP's 21,000 Dth per day winter capacity shortfall, Mr. Crist appears to propose that PGW release that amount of its capacity on the Philadelphia Lateral to GFCP (page 24), although it is unclear whether he is advocating for a recallable or non-recallable release. However, Mr. Crist also appears to suggest that PGW continue to provide virtually firm ARS service during the winter at near zero cost to GFCP (page 16-17).[32]

[30] Complainants Statement No. 1 at 15.

[31] Complainants Statement No. 1 at 16.

[32] This understanding is based on PGW's report that ARS volumes are not backed by upstream capacity upon which

My understanding of PGW's position is that it believes that it needs all of the capacity on its Philadelphia Lateral to meet the design day demand requirements of its GCR customers.[33] It is not clear whether PGW could substitute delivery capacity elsewhere on its system in order to use its Philadelphia Lateral capacity to provide firm service to GFCP during the winter. PGW does indicate that it has, in fact, been releasing capacity on the Philadelphia Lateral to third parties, albeit apparently on a recallable basis.[34]

Q. What are your preliminary views regarding this dispute?

A. Subject to the caveat that PGW's position regarding this capacity is not yet available, my observations are the following:

First, it certainly appears that PGW has effectively been providing GFCP with what is essentially firm capacity on the Philadelphia Lateral through the ARS swap, since it has never interrupted that service. As such, PGW's claim that it needs the capacity to serve GCR customers requires careful review.

Second, it is not at present clear to me how, from an operational perspective, releasing Philadelphia Lateral capacity to GFCP on a recallable basis has any material differences than the ARS approach. PGW would retain the capacity on the Philadelphia Lateral as needed in extreme conditions, volumes delivered to both Gate 060 and 034 (Skippack) would remain the same, and the only difference would be in which entity was providing the volumes to those gates.

Third, the PGW capacity that is providing this virtually firm service to GFCP for many years is included in the revenue requirement for PGW's GCR sales customers. It is not clear that the amount GFCP is currently paying for that capacity reasonably offsets the full costs of that capacity, since (a) the released capacity in the summer months is priced at market and is well below the average capacity rate, and (b) the amounts paid for the

PGW could rely for meeting GCR design day demands. OSBA-I-13(d).

[33] Answer with New Matter at 16.

[34] OSBA-I-13(b,c).

interruptible ARS swap do not appear to reflect the fact that GFCP is effectively being provided firm winter transmission capacity.

Going forward, and assuming that GFCP actually requires firm or virtually firm capacity on the Philadelphia Lateral, the amounts paid by GFCP for that service should reflect, at a minimum, the costs incurred by GCR customers for that capacity, including opportunity costs. Thus, the minimum charge ought to reflect the amounts paid to Tetco for the capacity. To the extent that using that capacity to serve GFCP requires PGW to retain higher cost capacity elsewhere on its system, GFCP should compensate GCR customers at the higher cost amount. Also, if PGW has alternative market opportunities for using the capacity serving GFCP such as off-system sales that would generate margins in excess of the pipeline cost, that opportunity cost should be similarly reflected in charges to GFCP.[35]

4. <u>Gas on Steam Competition</u>

Q. Please summarize Complainants' concern regarding PGW's marketing efforts to VECI steam customers.

A. Complainants take the position that it is unreasonable for PGW to use certain rate discounting programs within its tariff to compete with VECI steam service. These programs include the Technology and Economic Development Rider ("TED Rider") and the Micro-Combined Heat and Power Incentives ("Micro-CHP").[36] Mr. Crist opines that by using these subsidies, PGW is unreasonably subsidizing energy inefficiency.[37] Complainants also allege that PGW is offering Rate IT interruptible service to current steam customers who do not have the backup capability to withstand an interruption.

Mr. Crist proposes that the Commission preclude PGW's use of the TED Rider to avoid using it fund VECI steam, to require Commission pre-approval for other subsidies within

[35] This is an economic justification for providing reasonable protection to GCR ratepayers. I can take no position on PGW's legal obligations to offer this capacity to GFCP at cost before using it to generate third-party revenues.

[36] Complainants Statement No. 1 at 27.

[37] *Id*., at 31.

those rate mechanisms, and that the Commission require PGW to demonstrate that all of its Rate IT customers can reasonably withstand interruption.

PGW generally responds by observing that VECI also offers many discounted rates to customers with competitive alternatives, and that VECI could potentially use profits from the sale of electricity to fund further steam discounts to compete with PGW.[38]

Q. What are your preliminary observations on this subject?

A. As a general rule, it is not reasonable regulatory policy to allow utilities to "compete" amongst each other by offering targeted rate discounts to specific customers and recovering the lost revenues from those discounts from all other customers. This is not cost competition as it applies to unregulated firms, where it encourages competitors to innovate, to reduce cost, and to provide service more efficiently. This is cross-subsidy competition, and it is simply a matter of which utility can pass on more rate discounts onto its regular rate customers.

The Commission has generally reflected this reality in its treatment of "gas-on-gas" competition in western Pennsylvania, where some customers are located within overlapping NGDC service territories. The Commission has generally limited to such competition such that utilities are not allowed to set rates below the lowest regular tariff rate of the competitors (although it took an unreasonably long time).[39] In addition, my experience has been that the Commission has been reasonably cautious about the use of energy efficiency and conservation ("EE&C") plan subsidies for inter-fuel competition between gas and electric utilities. As such, Mr. Crist's concerns regarding rate subsidies for gas-on-steam competition merit some consideration.

Regarding Rate IT service, PGW has the ratemaking problem that it has been providing essentially firm service to Rate IT customers for many years, but it does not offer a firm service option for its largest customers. This problem is not easily solved by developing a

[38] Answer with New Matter at 4. At this writing, it is not clear whether the discounts offered by VECI are funded by other ratepayers, or are absorbed by VECI.

[39] See, Docket Nos. P-2011-2277868 and I-2012-2320323.

firm service rate, since no rational customer receiving firm service on Rate IT would choose to take a higher-cost firm service rate. As I indicated earlier, PGW's CSAS now treats Rate IT customers as firm for most cost allocation purposes (excluding, of course, USEC costs), and PGW appears to be following a longer-term plan of moving Rate IT charges in line with those allocated costs. As such, Mr. Crist's concerns regarding abuse of the Rate IT tariff, which may or may not have merit, may be better addressed in PGW's base rates proceedings involving rate design for large customers.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

EXHIBIT RDK-1

RÉSUMÉ AND EXPERT TESTIMONY LIST

FOR

ROBERT D. KNECHT

Overview

Mr. Knecht has more than 40 years of economic consulting experience, focusing on the energy, utility, metals and mining industries. For the past 30 years, Mr. Knecht's practice has primarily involved providing analysis, consulting support and expert testimony in regulatory matters, primarily involving electric and natural gas utilities. Mr. Knecht's work includes many aspects of utility regulation, including industry restructuring, cost unbundling, cost allocation, rate design, rate of return, customer contributions, energy efficiency programs, smart metering programs, treatment of stranded costs and utility revenue requirement issues. He has consulted to state advocacy agencies, industrial customer groups, law firms, regulatory agencies, government agencies and utilities, in both the United States and Canada. He has provided expert testimony in more than one hundred separate utility proceedings.

In addition to his work with regulated utilities, Mr. Knecht has consulted on international industry restructuring studies, prepared economic policy analyses, participated in a variety of litigation matters involving economic damages, and developed energy industry forecasting models.

Mr. Knecht served as a Principal of IEc for 33 years, and as its Treasurer for 15 years. He is currently an independent consultant who remains affiliated with IEc.

Education

Master of Science, Management (Applied Economics and Finance), Sloan School of Management, M.I.T.

Bachelor of Science, Economics, Massachusetts Institute of Technology

Select Project Experience

For more than 25 years, Mr. Knecht has provided consulting services, analysis and expert testimony before the Pennsylvania Public Utility Commission on all manner of regulatory proceedings to the **PENNSYLVANIA OFFICE OF SMALL BUSINESS ADVOCATE**. In addition to expert testimony, Mr. Knecht has assisted OSBA with the development of public policy positions, litigation strategy, and longer term strategy.

For the **ATTORNEY GENERAL OF THE STATE OF RHODE ISLAND**, Mr. Knecht provided consulting and expert witness services in an acquisition proceeding involving PPL Corporation's proposed acquisition of Narragansett Electric from National Grid. Mr. Knecht's testimony addressed financial, economic, environmental, tax, operating cost and rate implications.

For the **NEW BRUNSWICK PUBLIC INTERVENER,** Mr. Knecht provides consulting and expert witness services in a variety of regulatory proceeding before the New Brunswick Energy and Utilities Board involving New Brunswick Power, Enbridge Gas New Brunswick, and petroleum products. Mr. Knecht has addressed issues of load forecasting, costs forecasting, cost of capital, allocation of corporate overhead costs, utility cost allocation, revenue allocation, market-based rate design, cost-based rate design, and rate decoupling.

For **L'ASSOCIATION QUÉBÉCOISE DES CONSOMMATEURS INDUSTRIELS D'ÉLECTRICITÉ (AQCIE) AND LE CONSEIL DE L'INDUSTRIE FORESTIÈRE DU QUÉBEC (CIFQ)**, Mr. Knecht provided analysis, consulting advice and expert testimony before the Régie de l'énergie in regulatory matters involving Hydro Québec Distribution and TransÉnergie. This work includes revenue requirement, power purchasing, cost allocation, treatment of cross-subsidies, and rate design.

For the **INDEPENDENT POWER PRODUCERS SOCIETY OF ALBERTA**, Mr. Knecht provided consulting advice, analysis and expert testimony before the Alberta Energy and Utilities Board in a series of proceedings involving the restructuring of the electric utility industry, the unbundling of rates, and the development of transmission rates.

EXHIBIT RDK2

REFERENCED INTERROGATORY RESPONSES

Responses from PGW

OSBA-I-1 (without attachments)

OSBA-I-3

OSBA-I-13

OSBA-I-17

Responses from Complainants

OSBA-Complainants-I-2

OSBA-Complainants-I-3

OSBA-Complainants-I-4

OSBA-Complainants-I-6

OSBA-Complainants-I-7

OSBA-Complainants-I-8

OSBA-Complainants-I-9

Philadelphia Gas Works
Case Name: GRAYS FERRY COGENERATION PARTNERSHIP
Docket No(s): C-2021-3029259

Response to Discovery Request: OSBA Set I-1
Date of Response: 6/10/2022
Response Provided By: Craig Berry

Question:
Please provide copies of all currently effective contracts between PGW and the Complainants.

Attachments: 11
OSBA_Set_I_1_(1996-01-26) PGW Greys Ferry Cogeneration Project - Tab 1.pdf
OSBA_Set_I_1_(1996-01-26) PGW Greys Ferry Cogeneration Project - Tab 2.pdf
OSBA_Set_I_1_(1996-01-26) PGW Greys Ferry Cogeneration Project - Tab 3.pdf
OSBA_Set_I_1_(1996-01-26) PGW Greys Ferry Cogeneration Project - Tab 4.pdf
OSBA_Set_I_1_(1996-01-26) PGW Greys Ferry Cogeneration Project - Tab 5.pdf
OSBA_Set_I_1_(1996-01-26) PGW Greys Ferry Cogeneration Project - Tab 6.pdf
OSBA_Set_I_1_(1996-01-26) PGW Greys Ferry Cogeneration Project - Tab 8.pdf
OSBA_Set_I_1_(1996-01-26) PGW Greys Ferry Cogeneration Project - Tab 9.pdf
OSBA_Set_I_1_(1996-01-26) PGW Greys Ferry Cogeneration Project - Tab 10.pdf
OSBA_Set_I_1_(1996-01-26) PGW Greys Ferry Cogeneration Project - Tab 11.pdf
OSBA_Set_I_1_(1996-01-26) PGW Greys Ferry Cogeneration Project - Tab 15.pdf

Response:

Please see attached the various components of the 1996 Contract between PGW and the Complainants.

Philadelphia Gas Works
Case Name: GRAYS FERRY COGENERATION PARTNERSHIP
Docket No(s): C-2021-3029259

Response to Discovery Request: OSBA Set I-3
Date of Response: 6/10/2022
Response Provided By: Florian Teme

Question:

Please state PGW's position regarding whether rates for firm distribution service to Complainants should include a provision related to the recovery of universal service and energy conservation plan ("USECP") costs that applies to other firm service customers. Please provide a full rationale for the Company's position.

Attachments: 0

Response:

Yes, rates for firm distribution service to Complainants should include a provision related to the recovery of universal service and energy conservation plan costs that apply to other firm customers.

Philadelphia Gas Works
Case Name: GRAYS FERRY COGENERATION PARTNERSHIP
Docket No(s): C-2021-3029259

Response to Discovery Request: OSBA Set I-13
Date of Response: 6/10/2022
Response Provided By: Ryan Reeves

Question:

Reference PGW Response to Complainants-II-8 and I-13 (ARS):

a. Please identify specifically where and how the costs associated with Alternative Receipt Service ("ARS"), which appears to be a gas supply arrangement, are reflected in the Cost of Service Study referenced in the response.

b. Please identify any other direct or opportunity costs incurred by PGW associated with providing ARS service to Complainants beyond those identified in your response to part (a).

c. In I-13, PGW appears to calculate the cost of the ARS swap as the net foregone capacity release revenues associated with using the Philadelphia lateral capacity to serve GFCP. Please confirm that PGW's foregone revenue estimate is based on an interruptible release, consistent with the interruptible nature of ARS. If you cannot confirm, please explain. Please also indicate whether GFCP's deliveries at the Skippack gate station (presumably using Complainants' own capacity) enable PGW to release capacity elsewhere or offset its capacity requirements.

d. Is it PGW's contention that the market value of capacity on Tetco's Philadelphia Lateral is far higher than that for pipeline capacity serving Skippack, thereby providing a substantial benefit to Complainants? Please explain.

Attachments: 0

Response:

a. The cost of service allocates costs related to ARS by including the GFCP throughput for ARS and Firm Sales in Factor 3, which allocates costs related to mains, as both these volumes use and benefit from PGW's distribution system. Neither the ARS nor Firm Service would be available to GFCP without PGW's distribution system. The cost of service assumes ARS throughput of 3,000,000 Dth per year and Firm Sales throughput of 1,000,000 Dth per year. The ARS throughput, along with all GFCP throughput, is also included in calculating Factor 3A, which allocates costs associated with distribution, other than mains. The total throughput for GFCP assumed in Factor 3A of the cost of service study is 13,373,288 Dth per year. These allocations of costs then flow through to the calculation of the composite factors in the cost of service study. Specifically, Factors 8 and 9 which allocate distribution operation other expenses and assets, Factor 10 which allocated administrative and general expenses, Factor 11 which allocates labor related taxes and benefits, and Factor 12 which allocates the surplus and interest expense.

b. Alternative Receipt Service allows GFCP access to part of PGW's Philadelphia Lateral capacity for a minimal fee. The Philadelphia Lateral on TETCO pipeline system is a fully-subscribed lateral where customers on the lateral are interested in more capacity. This desire has allowed PGW generate revenues for its GCR customers when PGW is not using the capacity.

c. Yes, when PGW releases capacity on the interstate pipelines, it releases with a right to recall and reput, which allows PGW to recall the capacity at anytime and reput the release during the timeframe of the capacity release.

d. It is PGW understanding that both PGW and GFCP have firm rights contracts to flow gas on the Philadelphia Lateral. GFCP does not have firm contracts on the Skippack Lateral but is able to deliver gas to O-34 without issue to achieve their gas delivery that is required for ARS. If it were as easy to get capacity on the Philadelphia Lateral, GFCP would not need the ARS or capacity release services that GFCP needs from PGW.

Philadelphia Gas Works
Case Name: GRAYS FERRY COGENERATION PARTNERSHIP
Docket No(s): C-2021-3029259

Response to Discovery Request: OSBA Set I-17
Date of Response: 6/10/2022
Response Provided By: Constance Heppenstall

Question:

Reference PGW Responses to Complainants-I-13, cost of service allocation study:
a. Please provide the bases for the values for GF/Veolia in Factors 1 and 1A.
b. Please provide the bases for the values for GF/Veolia for average daily throughput and peak day capacity as used for Factor 2/Factor 3 and for Factor 2B/Factor 3A.
c. Please provide the bases for the values for GF/Veolia for average daily throughput and peak day capacity as used for Factor 2B.
d. Please explain the differences in the average day and peak day values used to derive Factor 2 and Factor 2B. Please confirm that this difference difference is not due to interruptibility, as Rate IT values are the same for Factor 2 and Factor 2B.
e. Please explain why no meter set costs are assigned to GF/Veolia in Factor 4.
f. Please confirm that the $8.858 million revenue requirement for Grays Ferry on Schedule C page 4 is net of assumed payment by GF of an OPEB charge of $1.231 million and a USEC surcharge of $0.996 million. If you cannot confirm, please explain why the GF revenue requirement is reduced by those amounts.

Attachments: 2

OSBA_Set_I_17_OSBA Set I-17-Attachment Cost of Service Study Excel.pdf
OSBA_Set_I_17_OSBA Set I-17 Attachment Cost of Service Study.pdf

Response:

a. In reviewing the throughput levels used for GF/Veolia in the cost of service study, PGW submits a revised study that incorporates 2021 overall throughput and a 3-year average of ARS and Firm Delivery volumes. The revised cost of service is included in the attachment to this data request in PDF and Excel format.

The values in Factor 1 are daily volumes based on the GF/Veolia's Firm Service (or Sales Service) throughput of 196,206 Dth per year based on a three year average of these volumes as shown below:

Year	Firm Service
2019	429,232
2020	11,945
2021	147,441
Average	196,206

The values in Factor 1A are daily volumes included in Factor 1 plus the daily volumes of ARS throughput based on 3-year average of ARS annual volumes, as shown below.

Year	ARS Volumes
2019	3,469,920
2020	3,762,149
2021	3,768,449
Average	3,666,839

b. The value for GF/Veolia for average daily throughput in Factor 2/Factor 3 equals the volumes in Factor 1A. The peak day capacity as used for Factor 2/Factor 3 the total peak day for GF/Veolia recorded in 2018 of 38,850 Dth, prorated for ARS and Firm Service flow used in Factor 1A. The value for GF/Veolia for average daily throughput in Factor 2B/Factor 3A equals the total volume of GF/Veolia throughput for 2021, or 13,373,288 Dth divided by 365. The peak day capacity as used for Factor 2B/Factor 3A is the total peak day for GF/Veolia recorded in 2018 of 38,850 Dth.

c. See response to part b.

d. The differences in average day and peak day flows for Factors 2 and 2B are described in part b. The flow that uses the GF/Veolia dedicated line, only, is added in for Factor 2B. PGW recognizes that GF/Veolia contributed the cost of the main that services them directly. Therefore, the calculation of Factor 3 excludes those volumes that are neither ARS nor Firm Service. However, PGW also recognizes that the Firm Service and the ARS service relies on PGW's distribution system. Therefore, the calculation of Factor 3, which allocates the costs of mains, excludes those volumes that are neither ARS nor Firm Service. Factor 3A, which allocates all distribution costs other than mains, uses the full throughput of GF/Veolia. The difference is not due to the interruptible volumes.

e. No meter set costs are assigned to GF/Veolia as PGW assumed that these costs were contributed by GF/Veolia.

f. The revised revenue requirement of $8,035,000 for GF/Veolia does not include any surcharge payments made by GF/Veolia for OPEB and USEC. GF/Veolia does not presently pay those surcharges.

PHILADELPHIA GAS WORKS

SUMMARY OF GRAYS FERRY COST OF SERVICE POSITION*

	Present	Proposed
REVENUE PER COST OF SERVICE	$ 1,069,863	$ 8,035,000
ANNUAL DTH (36,000 per day)	13,373,288	13,373,288
RATE	$ 0.080	$ 0.601

Applies certain distribution plant to Grays Ferry, including Compression Station Equipment, Measuring and Regulating Equipment based on full usage of 36,639 Dth per day with extra capacity based on 2018 peaking. Also assumes that the customer flow includes 538 Dth per day firm delivery and 10,046 Dth per day ARS or transportation volumes and the customer is allocated the cost of mains accordingly. The cost of mains are only allocated on these volumes, not the full 36,639 Dth per day.

* Based on prior rate case revenue requirements.

PHILADELPHIA GAS WORKS

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR GRAYS FERRY FOR THE TWELVE MONTHS ENDED AUGUST 31, 2021

Service Classification	Pro Forma Cost of Service (in 000's) Amount	Pro Forma Margin Revenues, Under Present Rates Amount (in 000's)	Pro Forma Margin Revenues, Under Proposed Rates Amount (in 000's)	Revenue Increase Amount	Revenue Increase Percent Increase
(1)	(2)	(4)	(6)	(8)	(9)
Gray's Ferry/Veolia	$ 8,035	$ 1,107	$ 8,035	$ 6,928	626.0%

PHILADELPHIA GAS WORKS

COMPARISON OF COST OF SERVICE
BY SERVICE CLASSIFICATION FOR THE TWELVE MONTHS ENDED AUGUST 31, 2021

Service Classification	Pro Forma Cost of Service (in 000's) Amount	Percent
(1)	(2)	(3)
Other Classes	$ 467,535	98.3%
Gray's Ferry	8,035	1.7%
Total	$ 475,570	100.0%
GTS and Other Contract Revenue	733	
Other Surcharges and Revenue	73,105	
Other Operating Revenues	27,525	
Total Other Revenues	101,363	
Total	$ 576,934	

PHILADELPHIA GAS WORKS
SUMMARY OF COST OF SERVICE BY SERVICE CLASSIFICAITON

	Cost of Service (Schedule C)	Residential	Commercial	Industrial	Muncipal	PHA- GS	PHA - Rate 8	NGVS	Interruptible	Gray's Ferry/Veolia
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	$ 181,999	$ 181,999								
	43,188		43,188							
	3,684			3,684						
	4,368				4,368					
	952					952				
	1,837						1,837			
	5							5		
	28,854								28,854	
	8,035									8,035
	272,922	181,999	43,188	3,684	4,368	952	1,837	5	28,854	8,035
	172,566	172,566								
	24,517		$ 24,517							
	1,183			$ 1,183						
	2,468				$ 2,468					
	1,094					$ 1,094				
							$ 771			
	1							$ 1		
	48								$ 48	
	-									$ -
	201,877	172,566	24,517	1,183	2,468	1,094	771	1	48	-
	$ 474,799	$ 354,565	$ 67,705	$ 4,867	$ 6,836	$ 2,046	$ 2,608	$ 6	$ 28,902	$ 8,035

PHILADELPHIA GAS WORKS

COST OF SERVICE AS OF AUGUST 31, 2021, AT PROPOSED REVENUE LEVEL ALLOCATED TO CUSTOMER CLASS SERVICE CLASSIFICATIONS

Account		Factor Ref.	Cost of Service in '000's	Volumetric Costs									Customer Costs							
				Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - R8	NGVS	Interruptible	Grays Ferry	Res	Com	Ind	Muni	PHA - GS	PHA - R8	NGVS	Interruptible
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
OPERATION AND MAINTENANCE EXPENSES																				
PRODUCTION EXPENSES																				
	Manufactured Gas Production Expenses																			
701	Operation Labor and Expenses	1	259	207	43	3	3	1	-	-	-	1	-	-	-	-	-	-	-	-
702	Boiler Fuel	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
703	Misc. Steam Expenses	1	350	279	59	4	5	1	-	-	-	2	-	-	-	-	-	-	-	-
706	Maintenance of Structures	1	5	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
707	Maintenance of Boiler Plant Equipment	1	232	185	39	2	3	1	-	-	-	1	-	-	-	-	-	-	-	-
708	Maintenance of Other Production Plant	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
710	Operation Supervision and Engineering	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
712	Other Power Expenses	1	744	594	125	8	10	3	1	-	-	4	-	-	-	-	-	-	-	-
734	Duplicate Charges - Credit	1	(543)	(433)	(91)	(6)	(7)	(2)	(1)	-	-	(3)	-	-	-	-	-	-	-	-
735	Misc. Production Expenses	1	1,367	1,091	229	15	18	6	1	-	-	6	-	-	-	-	-	-	-	-
740	Maintenance Supervision and Engineering	1	373	298	63	4	5	2	-	-	-	2	-	-	-	-	-	-	-	-
741	Maintenance of Structures	1	125	100	21	1	2	1	-	-	-	1	-	-	-	-	-	-	-	-
742	Maintenance of Production Equipment	1	449	358	75	5	6	2	-	-	-	2	-	-	-	-	-	-	-	-
	Total - Manu. Gas Production Expenses		3,361	2,683	564	36	45	15	1	0	0	16	0	0	0	0	0	0	0	0
	Other Gas Supply Expenses																			
804	Natural Gas Transmission Line Purchases	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
807	Purchased Gas Expense	1	4,939	3,941	829	53	66	21	5	-	-	23	-	-	-	-	-	-	-	-
808	Purchases Gas Cost Adjustments	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
812	Gas Used for Operations	1	378	302	63	4	5	2	-	-	-	2	-	-	-	-	-	-	-	-
813	Other Gas Supply Expenses	1	2,625	2,096	441	28	35	11	3	-	-	12	-	-	-	-	-	-	-	-
	Total Other Gas Supply Expenses		7,942	6,339	1,333	85	106	34	8	-	-	37	-	-	-	-	-	-	-	-
	Total Natural Gas Production Expenses		**11,303**	**9,022**	**1,897**	**121**	**151**	**49**	**9**	**-**	**-**	**53**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
OTHER STORAGE EXPENSE																				
840	Operating Supervision and Engineering	2A	1,551	1,196	278	26	31	6	14	-	-	-	-	-	-	-	-	-	-	-
841	Operation Labor and Expenses	2A	3,312	2,554	594	55	66	12	31	-	-	-	-	-	-	-	-	-	-	-
842	Rents	2A	296	228	53	5	6	1	3	-	-	-	-	-	-	-	-	-	-	-
843	Maintenance	2A	7,554	5,825	1,355	125	151	28	70	-	-	-	-	-	-	-	-	-	-	-
850	Operation Supervision and Engineering	2A	1,550	1,195	278	26	31	6	14	-	-	-	-	-	-	-	-	-	-	-
	Total Natural Gas Storage Expense		**14,263**	**10,998**	**2,558**	**237**	**285**	**53**	**132**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

PHILADELPHIA GAS WORKS

COST OF SERVICE AS OF AUGUST 31, 2021, AT PROPOSED REVENUE LEVEL ALLOCATED TO CUSTOMER CLASS SERVICE CLASSIFICATIONS

Account		Factor Ref.	Cost of Service in '000's	Volumetric Costs									Customer Costs							
				Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - R8	NGVS	Interruptible	Grays Ferry	Res	Com	Ind	Muni	PHA - GS	PHA - R8	NGVS	Interruptible
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
DISTRIBUTION EXPENSES																				
870	Supervision And Engineering	8	2,042	654	173	15	18	3	8	-	150	43	738	191	13	25	5	7	-	-
871	Distribution Load Dispatching	3A	1,944	1,139	300	26	31	6	14	-	253	177	-	-	-	-	-	-	-	-
874	Mains And Services Expenses																			
	Mains	3	2,606	1,615	429	37	44	8	20	-	374	78	-	-	-	-	-	-	-	-
	Services	6	2,606	-	-	-	-	-	-	-	-	-	2,285	276	3	17	19	6	-	-
875	M & R Station Expenses -General	3A	2,492	1,459	384	33	39	7	18	-	324	228	-	-	-	-	-	-	-	-
877	M & R Station Expenses - City Gate Station	3A	615	360	95	8	10	2	4	-	80	56	-	-	-	-	-	-	-	-
878	Meter and House Regulator Expenses	4	19,109	-	-	-	-	-	-	-	-	-	13,674	4,296	313	590	82	152	1	-
879	Customer Installations Expenses	4	8,696	-	-	-	-	-	-	-	-	-	6,223	1,955	142	269	37	69	-	-
880	Other Expenses	8	10,301	3,297	875	76	89	16	41	-	757	218	3,724	961	65	125	23	33	-	-
881	Rents	8	12	4	1	-	-	-	-	-	1	-	4	1	-	-	-	-	-	-
885	Maintenance Super. And Engineering	8	316	101	27	2	3	1	1	-	23	7	114	29	2	4	1	1	-	-
887	Maint. Of Mains	3	29,148	18,069	4,802	416	491	90	225	1	4,178	877	-	-	-	-	-	-	-	-
889	Maint. Of Measuring Station Expenses - General	3A	1,039	608	160	14	16	3	8	-	135	95	-	-	-	-	-	-	-	-
890	Maint. Of Measuring Station Expenses - Industrial	6	62	-	-	-	-	-	-	-	-	-	54	7	-	-	-	-	-	-
891	Maint. Of Measuring Station Expenses - City Gate	3A	534	313	82	7	8	2	4	-	69	49	-	-	-	-	-	-	-	-
892	Maint. Of Services	6	1,815	-	-	-	-	-	-	-	-	-	1,592	192	2	12	13	4	-	-
893	Maint. Of Meters and House Regulators	7	2,957	-	-	-	-	-	-	-	-	-	2,783	145	3	5	12	7	-	2
	Total Distribution Expenses		**86,294**	**27,619**	**7,328**	**634**	**749**	**138**	**343**	**1**	**6,344**	**1,828**	**31,191**	**8,053**	**543**	**1,047**	**192**	**279**	**1**	**2**
CUSTOMER ACCOUNTING EXPENSES																				
	Operation																			
901	Supervision	7	2,192	-	-	-	-	-	-	-	-	-	2,063	107	3	4	9	5	-	2
902	Meter Reading Expenses	7	761	-	-	-	-	-	-	-	-	-	716	37	1	1	3	2	-	1
903	Customer Records & Coll Expenses	7	29,896	-	-	-	-	-	-	-	-	-	28,139	1,463	35	50	118	66	-	25
904	Uncollectible Accounts - MFC	DA	9,420	9,048	287	8		76												
904	Uncollectible Accounts - CRP Forgiveness	1A	12,950	8,668	2,691	218	250	44	113	-	-	965	-	-	-	-	-	-	-	-
904	Uncollectible Accounts - Other	14	10,731	-	-	-	-	-	-	-	-	-	10,365	280	9	-	77	-	-	-
	Total Customer Accounting Expenses		**65,950**	**17,716**	**2,978**	**226**	**250**	**120**	**113**	**-**	**-**	**965**	**41,283**	**1,887**	**48**	**55**	**207**	**73**	**-**	**28**
CUSTOMER SERVICE AND INFORMATION EXPENSES																				
	Operation																			
908	Customer Assistance Expenses	7	5,510	-	-	-	-	-	-	-	-	-	5,186	270	6	9	22	12	-	5
	Total Customer Service & Info Expenses		**5,510**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**5,186**	**270**	**6**	**9**	**22**	**12**	**-**	**5**

PHILADELPHIA GAS WORKS

COST OF SERVICE AS OF AUGUST 31, 2021, AT PROPOSED REVENUE LEVEL ALLOCATED TO CUSTOMER CLASS SERVICE CLASSIFICATIONS

Account		Factor Ref.	Cost of Service in '000's	Volumetric Costs									Customer Costs							
				Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - R8	NGVS	Interruptible	Grays Ferry	Res	Com	Ind	Muni	PHA - GS	PHA - R8	NGVS	Interruptible
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
ADMINISTRATIVE AND GENERAL EXPENSES																				
920	Administrative & General Salaries	10	14,931	5,323	1,202	99	117	29	49	-	517	232	6,325	832	49	90	34	30	-	3
920	LIURP Costs	1A	5,808	3,888	1,207	98	112	20	51	-	-	433	-	-	-	-	-	-	-	-
921	Office Supplies and Expenses	10	32,398	11,549	2,609	215	254	63	106	-	1,121	503	13,725	1,805	106	196	75	64	-	6
921	LIURP Costs	1A	2,181	1,460	453	37	42	7	19	-	-	163	-	-	-	-	-	-	-	-
922	Administrative Expenses Transferred-Credit	10	(31,676)	(11,292)	(2,551)	(211)	(248)	(62)	(103)	-	(1,096)	(492)	(13,419)	(1,764)	(103)	(192)	(73)	(63)	-	(6)
923	Outside Services Employed - Other	10	3,059	1,091	246	20	24	6	10	-	106	48	1,296	170	10	19	7	6	-	1
925	Injuries and Damages	11	9,813	4,990	1,252	104	123	25	51	-	871	205	1,976	175	8	15	9	7	-	1
926	Employee Pensions and Benefits	11	61,467	31,258	7,844	653	773	159	318	1	5,453	1,284	12,376	1,094	51	93	58	42	-	9
999	OPEB Funding - Surcharge	1A	16,000	10,710	3,324	269	309	55	140	-	-	1,192	-	-	-	-	-	-	-	-
999	OPEB Funding	11	9,422	4,791	1,202	100	119	24	49	-	836	197	1,897	168	8	14	9	6	-	1
924	Property Insurance	10	1,847	658	149	12	14	4	6	-	64	29	782	103	6	11	4	4	-	-
928	Regulatory Commission Expense	10	5,532	1,972	445	37	43	11	18	-	191	86	2,344	308	18	34	13	11	-	1
929	Duplicate Charges	10	(715)	(255)	(58)	(5)	(6)	(1)	(2)	-	(25)	(11)	(303)	(40)	(2)	(4)	(2)	(1)	-	-
930	General Advertising Expenses	10	8,282	2,952	667	55	65	16	27	-	287	129	3,509	461	27	50	19	16	-	2
	Refunding and Other Savings	10	(753)	(268)	(61)	(5)	(6)	(1)	(2)	-	(26)	(12)	(319)	(42)	(2)	(5)	(2)	(1)	-	-
	Total Administrative & General Expenses		137,596	68,827	17,930	1,478	1,735	355	737	1	8,299	3,986	30,189	3,270	176	321	151	121	-	18
	Total Operation and Maintenance Expenses		**320,916**	**134,182**	**32,691**	**2,696**	**3,170**	**715**	**1,334**	**2**	**14,643**	**6,832**	**107,849**	**13,480**	**773**	**1,432**	**572**	**485**	**1**	**53**
DEPRECIATION AND AMORTIZATION EXPENSE																				
PRODUCTION PLANT																				
305	Structures and Improvements	1	789	629	132	8	11	3	1	-	-	4	-	-	-	-	-	-	-	-
306	Boiler Plant Equipment	1	88	70	15	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
307	Other Power Equipment	1	13	11	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
311	LPG Equipment	1	78	62	13	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
312	Oil Gas Equipment	1	3	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
317	Purification Equipment	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
318	Residual Refining Equipment	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
319	Gas Mixing Equpment	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
320	Other Equipment	1	806	643	135	9	11	3	1	-	-	4	-	-	-	-	-	-	-	-
STORAGE PLANT																				
361	Structures and Improvements	2A	323	249	58	5	6	1	3	-	-	-	-	-	-	-	-	-	-	-
362	Gas Holders	2A	622	480	112	10	12	2	6	-	-	-	-	-	-	-	-	-	-	-
363	Purification Equipment	2A	10	8	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
364	Liquefaction Equipment	2A	1,140	879	204	19	23	4	11	-	-	-	-	-	-	-	-	-	-	-
365	Vaporizing Equipment	2A	801	618	144	13	16	3	7	-	-	-	-	-	-	-	-	-	-	-
366	Compressor Equipment	2A	305	235	55	5	6	1	3	-	-	-	-	-	-	-	-	-	-	-
367	Measuring and Regulating Equipment	2A	224	173	40	4	4	1	2	-	-	-	-	-	-	-	-	-	-	-
368	Other Equipment	2A	592	457	106	10	12	2	5	-	-	-	-	-	-	-	-	-	-	-
DISTRIBUTION PLANT																				
375	Structures And Improvements	9	54	22	5	-	1	-	-	-	5	1	18	3	-	-	-	-	-	-
376	Mains	3	17,309	10,730	2,851	247	291	54	134	-	2,481	521	-	-	-	-	-	-	-	-
	Direct Assign mains	DA										-								
377	Compression Station Equipment	3A	26	17	4	-	-	-	-	-	3	2	-	-	-	-	-	-	-	-
378	Measuring & Regulating Equipment - General	3A	444	260	68	6	7	1	3	-	58	41	-	-	-	-	-	-	-	-
380	Services	6	21,736	-	-	-	-	-	-	-	-	-	19,060	2,301	29	142	156	48	-	-
381	Meters	4	2,886	-	-	-	-	-	-	-	-	-	2,066	649	47	89	12	23	-	-
382	Meter Installations	4	2,692	-	-	-	-	-	-	-	-	-	1,927	605	44	83	12	21	-	-
383	House Regulators	6	55	1	-	-	-	-	-	-	-	-	48	6	-	-	-	-	-	-
384	House Regulator Installations	4	95	-	-	-	-	-	-	-	-	-	68	21	2	3	-	1	-	-
385	Industrial Measuring & Regulating Equipment	DA	12	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
387	Other Equipment	9	488	180	48	4	5	1	2	-	42	9	166	26	1	2	1	1	-	-
GENERAL PLANT																				
390	Structures And Improvements	10	2,500	891	203	17	20	5	8	-	87	39	1,059	139	8	15	6	5	-	-
391	Office Furniture And Equipment	10	4,893	1,745	394	33	38	10	16	-	169	76	2,073	273	16	30	11	10	-	1
392	Transportation Equipment	10	6,613	2,359	532	44	52	13	22	-	229	103	2,803	368	22	40	15	13	-	1
393	Stores Equipment	10	22	8	2	-	-	-	-	-	1	-	9	1	-	-	-	-	-	-
394	Tools, Shop And Garage Equipment	10	624	224	50	4	5	1	2	-	22	10	264	35	2	4	1	1	-	-
396	Power Operated Equipment	10	104	37	8	1	1	-	-	-	4	2	44	6	-	1	-	-	-	-
397	Communication Equipment	10	1,003	358	85	7	8	2	3	-	35	16	425	56	3	6	2	2	-	-
398	Miscellaneous Equipment	10	580	210	47	4	5	1	2	-	20	9	246	32	2	4	1	1	-	-
	Total Depreciation & Amortization Expense		**67,934**	**21,558**	**5,316**	**464**	**536**	**108**	**231**	**-**	**3,156**	**837**	**30,276**	**4,521**	**176**	**419**	**217**	**126**	**-**	**2**
	Cost of Removal	**12**	**4,500**	**1,741**	**447**	**39**	**45**	**9**	**20**	**-**	**335**	**78**	**1,510**	**230**	**9**	**21**	**11**	**6**	**-**	**-**
	Total Operating Expenses		**393,350**	**157,481**	**38,454**	**3,200**	**3,751**	**832**	**1,585**	**2**	**18,134**	**7,747**	**139,635**	**18,231**	**958**	**1,872**	**800**	**617**	**1**	**55**

PHILADELPHIA GAS WORKS

COST OF SERVICE AS OF AUGUST 31, 2021, AT PROPOSED REVENUE LEVEL ALLOCATED TO CUSTOMER CLASS SERVICE CLASSIFICATIONS

Account	Factor Ref.	Cost of Service in '000's	Volumetric Costs									Customer Costs							
			Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - R8	NGVS	Interruptible	Grays Ferry	Res	Com	Ind	Muni	PHA - GS	PHA - R8	NGVS	Interruptible
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
INTEREST AND OTHER EXPENSE																			
Interest on Long Term Debt	12	54,442	21,041	5,402	470	548	107	243	1	4,055	939	18,270	2,786	107	259	134	77	-	2
Other	12	(9,612)	(3,715)	(954)	(83)	(97)	(19)	(43)	-	(716)	(166)	(3,226)	(492)	(19)	(46)	(24)	(14)	-	-
AFUDC	12	(2,212)	(855)	(219)	(19)	(22)	(4)	(10)	-	(165)	(38)	(742)	(113)	(4)	(11)	(5)	(3)	-	-
Loss From Extinguishment of Debt	12	4,460	1,724	443	38	45	9	20	-	332	77	1,497	228	9	21	11	6	-	-
Total Interest and Other Expense		47,078	18,195	4,672	406	474	93	210	1	3,506	812	15,799	2,409	93	223	116	66	-	2
CITY PAYMENT	**12**	**18,000**	**6,957**	**1,786**	**155**	**181**	**35**	**80**	**-**	**1,341**	**311**	**6,041**	**921**	**35**	**86**	**44**	**26**	**-**	**1**
NET INCOME	**12**	**118,493**	**45,792**	**11,759**	**1,024**	**1,193**	**233**	**531**	**2**	**8,828**	**2,045**	**39,765**	**6,064**	**233**	**563**	**293**	**168**	**-**	**4**
TOTAL COST OF SERVICE		**576,921**	**228,425**	**56,671**	**4,785**	**5,599**	**1,193**	**2,406**	**5**	**31,809**	**10,915**	**201,240**	**27,625**	**1,319**	**2,744**	**1,253**	**877**	**1**	**62**
Less: Other Revenues																			
Interest Gain/Loss and Other Income	12	7,400	2,859	734	64	74	15	33	-	551	128	2,483	379	15	35	18	11	-	-
Appliance Repair and Other Revenues	13	7,964	3,212	793	67	78	17	33	-	422	-	2,863	389	19	39	17	13	-	1
Other Revenues	13	1,661	670	165	14	16	4	7	-	88	-	597	81	4	8	4	3	-	-
Late Payment Fees	7	10,500	-	-	-	-	-	-	-	-	-	9,883	514	12	18	41	23	-	9
DSIC Surcharge	13	35,000	14,115	3,487	293	343	74	147	-	1,855	-	12,584	1,709	84	172	77	55	-	4
OPEB Surcharge	1A	16,000	10,710	3,324	269	309	55	140	-	-	1,192	-	-	-	-	-	-	-	-
CRP Forgiveness	1A	12,950	8,668	2,691	218	250	44	113	-	-	965	-	-	-	-	-	-	-	-
LIURP	1A	7,989	5,348	1,660	134	154	27	70	-	-	595	-	-	-	-	-	-	-	-
venues Efficiency Cost Recovery	DA	1,166	548	556	36	-	3	23	-	-	-	-	-	-	-	-	-	-	-
Contract Revenues	13	733	296	73	6	7	2	3	-	39	-	264	36	2	4	2	1	-	-
Subtotal		101,363	46,426	13,483	1,101	1,231	241	569	-	2,955	2,880	28,674	3,108	136	276	159	106	-	14
TOTAL COST OF SERVICE RELATED TO TARIFF SALES AND TRANSPORTATION		**$ 475,558**	**$ 181,999**	**$ 43,188**	**$ 3,684**	**$ 4,368**	**$ 952**	**$ 1,837**	**$ 5**	**$ 28,854**	**$ 8,035**	**$ 172,566**	**$ 24,517**	**$ 1,183**	**$ 2,468**	**$ 1,094**	**$ 771**	**$ 1**	**$ 48**

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 1. ALLOCATION OF COSTS WHICH VARY DIRECTLY WITH SALE OF GAS

Factors are based on the pro forma average daily sales volumes for each service classification.

Service Classification	Pro Forma Average Daily PGC Volumes (Mcf)	Allocation Factor 1	Pro Forma Average Daily Firm Sales (Mcf)	Allocation Factor 1A
(1)	(2)	(3)	(4)	(5)
Volumetric Costs				
Residential	90,870	0.79793	95,087	0.66938
Commercial	19,118	0.16788	29,515	0.20778
Industrial	1,212	0.01065	2,387	0.01680
Municipal	1,532	0.01345	2,744	0.01932
PHA GS	487	0.00428	487	0.00343
PHA R8	122	0.00107	1,245	0.00876
NGVS	2	0.00002	2	0.00002
Interruptible	-	-		-
Grays Ferry/Veolia	538	0.00472	10,584	0.07451
Total	113,881	1.00000	142,050	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTORS 2 AND 2A. CALCULATION OF MAXIMUM DAY EXTRA DEMAND FACTORS.

Factors are based on the maximum day extra demand throughput for each classification.

Service Classification	Pro Forma Average Daily Throughput Volumes (Mcf)	Peak Day Capacity (Mcf)	Extra Capacity (Mcf)	Allocation Factor 2	Allocation Factor 2A
(1)	(2)	(3)	(4)=(3)-(2)	(5)	
Volumetric Costs					
Residential	95,087	429,513	334,426	0.71134	0.77118
Commercial	29,515	107,276	77,761	0.16540	0.17932
Industrial	2,387	9,559	7,172	0.01525	0.01654
Municipal	2,744	11,394	8,650	0.01840	0.01995
PHA GS	487	2,119	1,633	0.00347	0.00376
PHA R8	1,245	5,251	4,006	0.00852	0.00924
NGVS	2	6	4	0.00001	0.00001
Interruptible	37,849	73,696	35,847	0.07625	
Grays Ferry/Veolia	10,584	11,222	639	0.00136	
Total	179,899	650,037	470,137	1.00000	1.00000
Load Factor	0.276752		0.723248		

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTORS 2B. CALCULATION OF MAXIMUM DAY EXTRA DEMAND FACTORS.

Factors are based on the maximum day extra demand throughput for each classification.

Service Classification	Pro Forma Average Daily Throughput Volumes (Mcf)	Peak Day Capacity (Mcf)	Extra Capacity (Mcf)	Allocation Factor 2B
(1)	(2)	(3)	(4)=(3)-(2)	(5)
Volumetric Costs				
Residential	95,087	429,513	334,426	0.70897
Commercial	29,515	107,276	77,761	0.16485
Industrial	2,387	9,559	7,172	0.01520
Municipal	2,744	11,394	8,650	0.01834
PHA GS	487	2,119	1,633	0.00346
PHA R8	1,245	5,251	4,006	0.00849
NGVS	2	6	4	0.00001
Interruptible	37,849	73,696	35,847	0.07599
Grays Ferry/Veolia	36,639	38,850	2,211	0.00469
Total	205,955	677,664	471,710	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 3. ALLOCATION OF COSTS ASSOCIATED WITH DISTRIBUTION MAINS

Factors are based on the weighting of the factors derived from average daily throughput volumes volumes and from maximum day extra capacity demand for each service classification, as follows:

	Average Daily Throughput			Maximum Day Extra Demand		
Service Classification	MCF/Day	Allocation Factor	Weighted Factor*	Allocation Factor 2	Weighted Factor*	Allocation Factor 3
(1)	(2)	(3)	(4)=(3)x 0.50000	(5)	(6)=(5)x 0.50000	(7)=(4)+(6)
Volumetric Costs						
Residential	95,087	0.52856	0.26425	0.71134	0.35565	0.61990
Commercial	29,515	0.16406	0.08203	0.16540	0.08270	0.16473
Industrial	2,387	0.01327	0.00664	0.01525	0.00763	0.01427
Municipal	2,744	0.01525	0.00763	0.01840	0.00920	0.01683
PHA GS	487	0.00271	0.00136	0.00347	0.00174	0.00310
PHA R8	1,245	0.00692	0.00346	0.00852	0.00426	0.00772
NGVS	2	0.00001	0.00001	0.00001	0.00001	0.00002
Interruptible	37,849	0.21039	0.10520	0.07625	0.03813	0.14333
Grays Ferry/Veolia	10,584	0.05883	0.02942	0.00136	0.00068	0.03010
Total	179,899	1.00000	0.50000	1.00000	0.50000	1.00000

* The weighting of the factors is based on the percentage of average daily throughput.

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 3A. ALLOCATION OF COSTS ASSOCIATED WITH DISTRIBUTION, OTHER THAN MAINS

Factors are based on the weighting of the factors derived from average daily throughput volumes volumes and from maximum day extra capacity demand for each service classification, as follows:

	Average Daily Throughput			Maximum Day Extra Demand		
Service Classification	MCF/Day	Allocation Factor	Weighted Factor*	Allocation Factor 2B	Weighted Factor*	Allocation Factor 3A
(1)	(2)	(3)	(4)=(3)x 0.50000	(5)	(6)=(5)x 0.50000	(7)=(4)+(6)
Volumetric Costs						
Residential	95,087	0.46170	0.23083	0.70897	0.35446	0.58529
Commercial	29,515	0.14331	0.07166	0.16485	0.08243	0.15409
Industrial	2,387	0.01159	0.00580	0.01520	0.00760	0.01340
Municipal	2,744	0.01332	0.00666	0.01834	0.00917	0.01583
PHA GS	487	0.00236	0.00118	0.00346	0.00173	0.00291
PHA R8	1,245	0.00604	0.00302	0.00849	0.00425	0.00727
NGVS	2	0.00001	0.00001	0.00001	0.00001	0.00002
Interruptible	37,849	0.18377	0.09189	0.07599	0.03800	0.12989
Grays Ferry/Veolia	36,639	0.17790	0.08895	0.00469	0.00235	0.09130
Total	205,955	1.00000	0.50000	1.00000	0.50000	1.00000

* The weighting of the factors is based on the percentage of average daily throughput.

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH METERS AND ACCOUNTS 381

Factors are based on the cost of meters by class included in Accounts 381 Meters and M&R Equipment.

Service Classification	Original Cost of Meters	Allocation Factor
(1)	(2)	(3)
Customer Costs		
Residential	$ 57,306,393	0.71560
Commercial	18,004,478	0.22483
Industrial	1,311,869	0.01638
Municipal	2,474,336	0.03090
PHA - GS	344,988	0.00431
PHA - Rate 8	636,266	0.00795
NGVS	2,419	0.00003
Interruptible	-	-
Total	$ 80,080,750	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH INDUSTRIAL MEASURING AND REGULATING EQUIPMENT.

Directly assigned to the Industrial Class

Service Classification	Allocation Factor
(1)	(1)
Volumetric	
Industrial	1.0000

FACTOR 6. ALLOCATION OF COSTS ASSOCIATED WITH SERVICES AND HOUSE REGULATORS.

Factors are based on the cost of services by class included in Account 380, Service Lines.

Service Classification	Original Cost of Service Lines	Allocation Factor
(1)	(2)	(3)
Customer Costs		
Residential	$ 682,254,829	0.87688
Commercial	82,378,351	0.10588
Industrial	1,036,743	0.00133
Municipal	5,079,791	0.00653
PHA - GS	5,560,935	0.00716
PHA - Rate 8	1,725,978	0.00222
NGVS	1	-
Interruptible	-	-
		-
Total	$ 778,036,628	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 7. ALLOCATION OF COSTS ASSOCIATED WITH CUSTOMER ACCOUNTING AND METER READING.

Factors are based on the number of customers for each classification, as follows.

Service Classification	Number of Customers	Allocation Factor 7
(1)	(2)	(3)
Customer Costs		
Residential	479,356	0.94122
Commercial	24,915	0.04892
Industrial	594	0.00117
Municipal	850	0.00167
PHA - GS	2,011	0.00395
PHA - Rate 8	1,129	0.00222
NGVS	3	0.00001
Interruptible	427	0.00084
Total	509,286	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 8. ALLOCATION OF DISTRIBUTION OPERATION OTHER EXPENSES AND RENT.

Factors are based on distribution operation expenses other than those being allocated.

Service Classification	Operation Expenses	Allocation Factor
(1)	(2)	(3)
Volumetric Costs		
Residential	$ 23,563	0.32005
Commercial	6,252	0.08492
Industrial	541	0.00735
Municipal	639	0.00868
PHA GS	118	0.00160
PHA R8	293	0.00398
NGVS	1	0.00001
Interruptible	5,413	0.07352
Grays Ferry/Veolia	1,560	0.02119
Customer Costs		
Residential	26,611	0.36147
Commercial	6,871	0.09333
Industrial	463	0.00629
Municipal	893	0.01213
PHA GS	163	0.00221
PHA R8	238	0.00323
NGVS	1	0.00001
Interruptible	2	0.00003
Total	$ 73,622	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 9. ALLOCATION OF DISTRIBUTION ASSETS

Factors are based on distribution assets other than those being allocated.

Service Classification	Rate Base Costs	Allocation Factor
(1)	(2)	(3)
Volumetric Costs		
Residential	$ 461,864	0.36908
Commercial	122,721	0.09807
Industrial	10,818	0.00865
Municipal	12,538	0.01002
PHA GS	2,310	0.00185
PHA R8	5,752	0.00460
NGVS	15	0.00001
Interruptible	106,738	0.08530
Grays Ferry/Veolia	23,021	0.01840
Customer Costs		
Residential	425,443	0.33999
Commercial	66,720	0.05332
Industrial	2,341	0.00187
Municipal	6,003	0.00480
PHA GS	3,303	0.00264
PHA R8	1,758	0.00140
NGVS	4	-
Interruptible	-	-
Total	$ 1,251,349	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 10. ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES.

Factors are based on the allocation of operation and maintenance expenses.

Service Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Volumetric Costs		
Residential	$ 65,355	0.3565
Commercial	14,761	0.0805
Industrial	1,218	0.0067
Municipal	1,435	0.0078
PHA GS	360	0.0020
PHA R8	597	0.0033
NGVS	1	0.0000
Interruptible	6,344	0.0346
Grays Ferry/Veolia	2,846	0.0155
Customer Costs		
Residential	77,660	0.4236
Commercial	10,210	0.0557
Industrial	597	0.0033
Municipal	1,111	0.0061
PHA GS	421	0.0023
PHA R8	364	0.0020
NGVS	1	0.0000
Interruptible	35	0.0002
Total	$ 183,317	1.0000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 11. ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of total operation and maintenance direct labor expense to service classifications as shown on the following page.

Service Classification	Total Labor Expense	Allocation Factor
(1)	(2)	(3)
Volumetric Costs		
Residential	$ 69,882	0.50853
Commercial	17,537	0.12762
Industrial	1,461	0.01063
Municipal	1,729	0.01258
PHA GS	356	0.00259
PHA R8	712	0.00518
NGVS	2	0.00001
Interruptible	12,190	0.08871
Grays Ferry/Veolia	2,871	0.02089
Customer Costs		
Residential	27,669	0.20135
Commercial	2,446	0.01780
Industrial	114	0.00083
Municipal	207	0.00151
PHA GS	129	0.00094
PHA R8	93	0.00068
NGVS	-	-
Interruptible	20	0.00015
Total	$ 137,418	1.00000

PHILADELPHIA GAS WORKS

FACTOR 11 - ALLOCATION OF LABOR COSTS TO CUSTOMER CLASS SERVICE CLASSIFICATIONS

	Account	Factor Ref.	Labor Costs	Volumetric Costs									Customer Costs							
				Residential	Commercial	Industrial	Municipal	PHA GS	PHA - R8	NGVS	Interruptible	Grays Ferry/Viola	Res	Com	Ind	Muni	PHA - GS	PHA - Rate 8	NGVS	Interruptible
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
OPERATION AND MAINTENANCE EXPENSES																				
	TOTAL PAYROLL - 2019																			
02	President & CEO	10	$ 92	$ 33	$ 7	$ 1	$ 1	$ -	$ -	$ -	$ 3	$ 1	$ 39	$ 5	$ -	$ 1	$ -	$ -	$ -	$ -
03	Corporate Communications	10	1,067	380	86	7	8	2	3	-	37	17	452	59	3	6	2	2	-	-
04	Officers Salaries	10	4,188	1,493	337	28	33	8	14	-	145	65	1,774	233	14	25	10	8	-	1
05	Legal	10	1,358	484	109	9	11	3	4	-	47	21	575	76	4	8	3	3	-	-
07	Commercial Resource Center	7	959	-	-	-	-	-	-	-	-	-	903	47	1	2	4	2	-	1
09	Gas Control & Acquisition	1	2,314	1,846	388	25	31	10	2	-	-	11	-	-	-	-	-	-	-	-
10	VP Reg. Compliance & Customer Programs	10	3,139	1,119	253	21	25	6	10	-	109	49	1,330	175	10	19	7	6	-	1
11	Human Resources	10	1,002	357	81	7	8	2	3	-	35	16	424	56	3	6	2	2	-	-
13	Chief Operating Officer	10	79	28	6	1	1	-	-	-	3	1	33	4	-	-	-	-	-	-
14	Security	10	188	67	15	1	1	-	1	-	7	3	80	10	1	1	-	-	-	-
15	VP Regulatory & Legislative Affairs	10	96	34	8	1	1	-	-	-	3	1	41	5	-	1	-	-	-	-
16	VP Supply Chain	10	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	VP Budget & Strategic Development	10	594	212	48	4	5	1	2	-	21	9	252	33	2	4	1	1	-	-
20	Gas Planning & Rates	10	546	195	44	4	4	1	2	-	19	8	231	30	2	3	1	1	-	-
21	Customer Review	7	878	-	-	-	-	-	-	-	-	-	826	43	1	1	3	2	-	1
22	By-Pass Bonuses	10	55	20	4	-	-	-	-	-	2	1	23	3	-	-	-	-	-	-
30	Engineering Services	3	911	565	150	13	15	3	7	-	131	27	-	-	-	-	-	-	-	-
31	Chemical Services	1	568	453	95	6	8	2	1	-	-	3	-	-	-	-	-	-	-	-
38	VP Technical Compliance	10	648	231	52	4	5	1	2	-	22	10	275	36	2	4	1	1	-	-
39	SVP HRD, Labor, & Corp Comm	10	245	87	20	2	2	-	1	-	8	4	104	14	1	1	1	-	-	-
40	Chief Financial Officer	10	80	29	6	1	1	-	-	-	3	1	34	4	-	-	-	-	-	-
41	Risk Management	10	914	326	74	6	7	2	3	-	32	14	387	51	3	6	2	2	-	-
43	Account Management	7	2,024	-	-	-	-	-	-	-	-	-	1,905	99	2	3	8	4	-	2
44	Customer Service	7	9,229	-	-	-	-	-	-	-	-	-	8,687	451	11	15	36	20	-	8
45	Accounting & Reporting	10	1,603	571	129	11	13	3	5	-	55	25	679	89	5	10	4	3	-	-
46	Treasury	10	865	308	70	6	7	2	3	-	30	13	366	48	3	5	2	2	-	-
47	Information Services	10	5,054	1,802	407	34	40	10	16	-	175	78	2,141	282	16	31	12	10	-	1
49	Collections	7	2,119	-	-	-	-	-	-	-	-	-	1,994	104	2	4	8	5	-	2
50	Field Services	3	27,686	17,163	4,561	395	466	86	214	1	3,968	833	-	-	-	-	-	-	-	-
52	Distribution	3	38,863	24,091	6,402	555	654	120	300	1	5,570	1,170	-	-	-	-	-	-	-	-
53	Gas Processing	1	10,862	8,667	1,824	116	146	46	12	-	-	51	-	-	-	-	-	-	-	-
54	Internal Auditing	10	297	106	24	2	2	1	1	-	10	5	126	17	1	2	1	1	-	-
56	SVP Operations & Supply Chain	3	71	44	12	1	1	-	1	-	10	2	-	-	-	-	-	-	-	-
57	SVP Gas Management	3	555	344	91	8	9	2	4	-	80	17	-	-	-	-	-	-	-	-

PHILADELPHIA GAS WORKS

FACTOR 11 - ALLOCATION OF LABOR COSTS TO CUSTOMER CLASS SERVICE CLASSIFICATIONS

	Account	Factor Ref.	Labor Costs	Volumetric Costs									Customer Costs							
				Residential	Commercial	Industrial	Municipal	PHA GS	PHA - R8	NGVS	Interruptible	Grays Ferry/Viola	Res	Com	Ind	Muni	PHA - GS	PHA - Rate 8	NGVS	Interruptible
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
58	VP Marketing	10	135	48	11	1	1	-	-	-	5	2	57	8	-	1	-	-	-	-
59	Organizational Development	10	936	334	75	6	7	2	3	-	32	15	397	52	3	6	2	2	-	-
60	Marketing	10	2,686	958	216	18	21	5	9	-	93	42	1,138	150	9	16	6	5	-	1
65	Labor Relations	10	259	92	21	2	2	1	1	-	9	4	111	14	1	2	1	1	-	-
67	Corporate Planning	10	550	196	44	4	4	1	2	-	19	9	234	31	2	3	1	1	-	-
68	Customer Programs	7	700	-	-	-	-	-	-	-	-	-	659	34	1	1	3	2	-	1
71	Supply Chain	3	6,208	3,848	1,023	89	104	19	48	-	890	187	-	-	-	-	-	-	-	-
72	Facilities Management	3	2,242	1,390	369	32	38	7	17	-	321	67	-	-	-	-	-	-	-	-
73	Fleet Operations	10	3,286	1,171	265	22	26	6	11	-	114	51	1,392	183	11	20	8	7	-	1
77	Resource Management and Technology	3	1,273	790	210	18	21	4	10	-	182	38	-	-	-	-	-	-	-	-
TOTAL LABOR RELATED COST FOR ALLOCATION			$ 137,424	$ 69,882	$ 17,537	$ 1,461	$ 1,729	$ 356	$ 712	$ 2	$ 12,190	$ 2,871	$ 27,669	$ 2,446	$ 114	$ 207	$ 129	$ 93	$ -	$ 20

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 12. ALLOCATION OF SURPLUS AND INTEREST EXPENSE.

Factors are based on the result of allocating the original cost measure of value, as presented on the following pages.

Service Classification	Original Cost Less Depreciation	Allocation Factor
(1)	(2)	(3)
Volumetric Costs		
Residential	$ 596,742	0.38649
Commercial	153,206	0.09923
Industrial	13,317	0.00863
Municipal	15,529	0.01006
PHA GS	3,027	0.00196
PHA R8	6,904	0.00447
NGVS	17	0.00001
Interruptible	115,015	0.07449
Grays Ferry/Veolia	26,635	0.01725
Customer Costs		
Residential	518,148	0.33559
Commercial	79,015	0.05118
Industrial	3,046	0.00197
Municipal	7,327	0.00475
PHA GS	3,815	0.00247
PHA R8	2,191	0.00142
NGVS	6	-
Interruptible	40	0.00003
Total	$ 1,543,980	1.00000

FACTOR 13. ALLOCATION OF REGULATORY COMMISSION EXPENSES, ASSESSMENTS AND OTHER REVENUES.

Factors are based on the allocated cost of service excluding those items being allocated.

Service Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Volumetric Costs		
Residential	$ 194,769	0.40329
Commercial	48,119	0.09963
Industrial	4,048	0.00838
Municipal	4,737	0.00981
PHA GS	1,021	0.00211
PHA R8	2,029	0.00420
NGVS	4	0.00001
Interruptible	25,600	0.05301
Grays Ferry/Veolia	-	-
Customer Costs		
Residential	173,649	0.35955
Commercial	23,589	0.04883
Industrial	1,156	0.00239
Municipal	2,366	0.00490
PHA GS	1,060	0.00219
PHA R8	762	0.00158
NGVS	1	-
Interruptible	57	0.00012
Total	$ 482,967	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 14. ALLOCATION OF UNCOLLECTIBLES NOT RECOVERED FROM MFC

Factors are based on 3-year average of uncollectibles.

Service Classification	3-Year Average Uncollectibles	Allocation Factor
(1)	(2)	(3)
Customer Costs		
Residential	$ 36,884,034	0.96587
Commercial	996,900	0.02611
Industrial	33,769	0.00088
Municipal	-	-
PHA GS	272,444	0.00713
PHA R8	484	0.00001
Total	38,187,631	1.00000

PHILADELPHIA GAS WORKS

RATE BASE AS OF AUGUST 31, 2021, AT PROPOSED REVENUE LEVEL ALLOCATED TO
CUSTOMER CLASS SERVICE CLASSIFICATIONS

Account		Factor Ref.	Cost of Service in '000's	Volumetric Costs									Customer Costs							
				Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - R8	NGVS	Interruptible	Grays Ferry	Res	Com	Ind	Muni	PHA - GS	PHA - R8	NGVS	Interruptible
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
RATE BASE																				
PRODUCTION PLANT																				
304	Land and Land Rights	1	1.453	1.159	244	15	20	6	2	-	-	7	-	-	-	-	-	-	-	-
305	Structures and Improvements	1	14.148	11.289	2,375	151	190	61	15	-	-	67	-	-	-	-	-	-	-	-
306	Boiler Plant Equipment	1	414	330	69	4	6	2	-	-	-	2	-	-	-	-	-	-	-	-
307	Other Power Equipment	1	135	107	23	1	2	1	-	-	-	1	-	-	-	-	-	-	-	-
311	LPG Equipment	1	511	408	86	5	7	2	1	-	-	2	-	-	-	-	-	-	-	-
312	Oil Gas Equipment	1	78	63	13	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
317	Purification Equipment	1	(1)	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
318	Residual Refining Equipment	1	(0)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
319	Gas Mixing Equipment	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
320	Other Equipment	1	13,261	10,581	2,226	141	178	57	14	-	-	63	-	-	-	-	-	-	-	-
	Total Production Plant		29,999	23,936	5,036	318	404	129	32	-	-	142	-	-	-	-	-	-	-	-
STORAGE AND PROCESSING PLANT																				
360	Land and Land Rights	2A	328	253	59	5	7	1	3	-	-	-	-	-	-	-	-	-	-	-
361	Structures and Improvements	2A	6,641	5,121	1,191	110	132	25	61	-	-	-	-	-	-	-	-	-	-	-
362	Gas Holders	2A	(89)	(69)	(16)	(1)	(2)	-	(1)	-	-	-	-	-	-	-	-	-	-	-
363	Purification Equipment	2A	(17)	(13)	(3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
364	Liquefaction Equipment	2A	8,481	6,540	1,521	140	169	32	78	-	-	-	-	-	-	-	-	-	-	-
365	Vaporizing Equipment	2A	5,548	4,278	995	92	111	21	51	-	-	-	-	-	-	-	-	-	-	-
366	Compressor Equipment	2A	6,142	4,736	1,101	102	123	23	57	-	-	-	-	-	-	-	-	-	-	-
367	Measuring and Regulating Equipment	2A	1,282	989	230	21	26	5	12	-	-	-	-	-	-	-	-	-	-	-
368	Other Equipment	2A	13,065	10,075	2,343	216	261	49	121	-	-	-	-	-	-	-	-	-	-	-
	Total Storage and Processing Plant		41,380	31,910	7,421	685	827	156	382	-	-	-	-	-	-	-	-	-	-	-
DISTRIBUTION PLANT																				
374	Land and Land Rights	9	101	37	10	1	1	-	-	-	9	2	34	5	-	-	-	-	-	-
375	Structures And Improvements	9	(21)	(8)	(2)	-	-	-	-	-	(2)	-	(7)	(1)	-	-	-	-	-	-
376	Mains	3	736,129	456,326	121,263	10,505	12,389	2,282	5,683	15	105,509	22,157	-	-	-	-	-	-	-	-
	Portion of mains	DA										-								
377	Compression Station Equipment	3A	(33)	(19)	(5)	-	(1)	-	-	-	(4)	(3)	-	-	-	-	-	-	-	-
378	Measuring & Regulating Equipment - General	3A	9,495	5,557	1,463	127	150	28	69	-	1,233	867	-	-	-	-	-	-	-	-
380	Services	6	393,500	-	-	-	-	-	-	-	-	-	345,052	41,664	523	2,570	2,817	874	-	-
381	Meters	4	51,484	-	-	-	-	-	-	-	-	-	36,842	11,575	843	1,591	222	409	2	-
382	Meter Installations	4	59,400	-	-	-	-	-	-	-	-	-	42,506	13,355	973	1,835	256	472	2	-
383	House Regulators	6	1,131	-	-	-	-	-	-	-	-	-	992	120	2	7	8	3	-	-
384	House Regulator Installations	6	58	-	-	-	-	-	-	-	-	-	51	6	-	-	-	-	-	-
385	Industrial Measuring & Regulating Equipment	DA	186	-	-	186	-	-	-	-	-	-	-	-	-	-	-	-	-	-
387	Other Equipment	9	12,172	4,492	1,194	105	122	23	56	-	1,038	224	4,138	649	23	58	32	17	-	-
	Total Distribution Plant		1,263,602	466,385	123,923	10,924	12,661	2,333	5,808	15	107,783	23,247	429,608	67,373	2,364	6,061	3,335	1,775	4	-
GENERAL PLANT																				
389	Land and Land Rights	10	3,713	1,324	299	25	29	7	12	-	128	58	1,573	207	12	22	9	7	-	1
390	Structures And Improvements	10	72,433	25,822	5,832	482	567	142	236	1	2,507	1,125	30,685	4,035	236	439	167	144	1	14
391	Office Furniture And Equipment	10	59,655	21,266	4,803	397	467	117	194	1	2,065	926	25,272	3,323	194	362	137	119	1	11
392	Transportation Equipment	10	14,474	5,160	1,165	96	113	28	47	-	501	225	6,132	806	47	88	33	29	-	3
393	Stores Equipment	10	68	26	5	-	1	-	-	-	2	1	29	4	-	-	-	-	-	-
394	Tools, Shop And Garage Equipment	10	5,990	2,137	482	40	47	12	20	-	207	93	2,538	334	20	36	14	12	-	1
396	Power Operated Equipment	10	216	78	17	1	2	-	1	-	7	3	91	12	1	1	-	-	-	-
397	Communication Equipment	10	1,415	505	114	9	11	3	5	-	49	22	599	79	5	9	3	3	-	-
398	Miscellaneous Equipment	10	10,921	3,893	879	73	86	21	36	-	378	170	4,627	608	36	66	25	22	-	2
	Total General Plant		168,885	60,211	13,596	1,123	1,323	330	551	2	5,844	2,623	71,546	9,408	551	1,023	388	336	2	32
	Total Plant		1,503,865	582,442	149,976	13,050	15,215	2,948	6,773	17	113,627	26,012	501,154	76,781	2,915	7,084	3,723	2,111	6	32
OTHER RATE BASE ELEMENTS																				
	Cash Working Capital	10	40,115	14,300	3,230	267	314	79	131	-	1,388	623	16,994	2,234	131	243	92	80	-	8
	Total Other Rate Base Elements		40,115	14,300	3,230	267	314	79	131	-	1,388	623	16,994	2,234	131	243	92	80	-	8
	Total Measure of Value		$ 1,543,980	$ 596,742	$ 153,206	$ 13,317	$ 15,529	$ 3,027	$ 6,904	$ 17	$ 115,015	$ 26,635	$ 518,148	$ 79,015	$ 3,046	$ 7,327	$ 3,815	$ 2,191	$ 6	$ 40

PHILADELPHIA GAS WORKS

GRAYS FERRY USAGE

	Annual	Daily	
Usage (DTH)	13,373,288	36,639	
ARS	3,666,839	10,046	27%
Retail Sales - Firm	196,206	538	1%
Other	9,510,243	26,055	71%
	13,373,288	36,639	

PHILADELPHIA GAS WORKS
SUMMARY OF PRO FORMA VOLUMES BY CLASSIFICATION

Service Classification	FACTOR 1 All Gas Sales - Annual (1)	Annual Transport. (2)	FACTOR 2&3 Total MCF Throughput (3)=(1)+(2)	Peak Day - 2018 (4)	FACTOR 2&3 Average Day MCF Throughput (5)=(30)/365
R- No Heat	321,180	26,494	347,674	3,981	953
R-Heat	32,846,321	1,512,871	34,359,192	425,532	94,135
C-No Heat	992,898	535,552	1,528,450	10,107	4,188
C-Heat	5,985,337	3,259,300	9,244,637	97,169	25,328
I-No Heat	93,822	155,221	249,043	2,156	682
I-Heat	348,681	273,586	622,267	7,402	1,705
M- No Heat	101,286	67,507	168,793	1,415	462
M-Heat	457,754	375,187	832,941	9,980	2,282
PHA GS	177,673		177,673	2,119	487
PHA R8	44,625	409,661	454,286	5,251	1,245
NGVS	804		804	6	2
Interruptible*	0	13,814,858	13,814,858	73,696	37,849
Grays Ferry	196,206	3,666,839	3,863,045	11,222	10,584
Total	41,566,588	24,097,077	65,663,665	650,037	179,900

Daily Ave Throughput
169,317

Ratio to Peak Day
0.26047

Daily Ave Throughput Excl Interruptibles
131,468
Peak Day Excluding Interruptibles
565,118
Ratio to Peak Day Excluding Interruptibles
0.2326

PHILADELPHIA GAS WORKS

REVISED COST OF SERVICE

ALLOCATION STUDY AS OF AUGUST 31,

2021

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Valley Forge, Pennsylvania

C O N T E N T S

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PART I. INTRODUCTION

PHILADELPHIA GAS WORKS

COST OF SERVICE ALLOCATION STUDY
AS OF AUGUST 31, 2021

PART I. INTRODUCTION

PLAN OF REPORT

The report sets forth the results of the cost of service allocation study prepared for Philadelphia Gas Works, based on the twelve months ended August 31, 2021 (FPFTY). Part I, Introduction, includes statements with respect to the basis of the study, the procedures employed, and a summary of the results of the study. Part II, Cost of Service by Service Classification, presents the detailed schedules of the allocation of costs to service classifications, the bases for the allocations, and the development of certain customer and demand costs.

BASIS OF THE STUDY

The purpose of the study was to allocate costs of Philadelphia Gas Works to the several customer classifications based on considerations of quantity of gas consumed; sales and transportation; demand characteristics; and costs associated with metering, billing, and accounting. The allocation study was based on recognized procedures for allocating costs to customer classifications in proportion to each classification's use of the facilities, commodity, and services which entail the total cost of providing gas service.

ALLOCATION PROCEDURES

The allocation study was based on the Average and Extra Demand Method for allocating costs to service classifications. The method is identified as the "Average and

Excess Demand Method" in "Gas Rate Fundamentals," (published in 1987 by the American Gas Association's Rate Committee) in which it is described. The three basic categories of cost responsibility are commodity, capacity, and customer costs. In the Average and Extra Demand Method, the capacity costs are allocated to service classifications on a combined basis of average use and use above average at peak demands. The following presents a brief discussion of costs and the manner in which they were allocated.

Commodity Costs are the costs that tend to vary with the quantity of gas used. Commodity costs in this study include production plant expenses and associated costs. Commodity costs were allocated to service classifications on the basis of average daily sales volumes.

Capacity Costs are costs associated with meeting the peak demands of the system. Capacity costs attributable to sales and transportation service include Distribution expenses and capital costs not associated with the customer costs category. The capacity costs were allocated to service classifications on a combined basis of average use and extra demand (demand in excess of average use). For presentation purposes, the commodity and capacity costs are combined into the volumetric function for each classification.

Customer Costs are costs associated with serving customers regardless of their usage or demand characteristics. Customer costs include the expenses and capital costs related to meters, regulators, and services and expenses related to meter reading and billing. The customer costs were allocated to service classifications on the bases of the number of meters, services and customers.

The allocation of costs to service classifications and the bases for the allocations are presented in Part II, Cost of Service by Service Classification.

RESULTS OF STUDY

The data summarized in Schedule A, "Comparison of Cost of Service with Revenues Under Present and Proposed Rates by Service Classification for the Twelve Months Ended August 31, 2021," constitute the principal results of the allocation study. Schedules B through D in Part II of the report present the details of the allocation of costs of service, including the return based on the allocated measure of value, by service classification as well as the bases for the allocation factors.

PHILADELPHIA GAS WORKS

COMPARISON OF COST OF SERVICE
BY SERVICE CLASSIFICATION FOR THE TWELVE MONTHS ENDED AUGUST 31, 2021

Service Classification	Pro Forma Cost of Service (in 000's) Amount	Percent
(1)	(2)	(3)
Other Classes	$ 467,535	98.3%
Gray's Ferry	8,035	1.7%
Total	$ 475,570	100.0%
GTS and Other Contract Revenue	733	
Other Surcharges and Revenue	73,105	
Other Operating Revenues	27,525	
Total Other Revenues	101,363	
Total	$ 576,934	

PART II. COST OF SERVICE

BY SERVICE CLASSIFICATION

PHILADELPHIA GAS WORKS
SUMMARY OF COST OF SERVICE BY SERVICE CLASSIFICAITON

	Cost of Service (Schedule C)	Residential	Commercial	Industrial	Muncipal	PHA- GS	PHA - Rate 8	NGVS	Interruptible	Gray's Ferry/Veolia
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	$ 181,999	$ 181,999								
	43,188		43,188							
	3,684			3,684						
	4,368				4,368					
	952					952				
	1,837						1,837			
	5							5		
	28,854								28,854	
	8,035									8,035
	272,922	181,999	43,188	3,684	4,368	952	1,837	5	28,854	8,035
	172,566	172,566								
	24,517		$ 24,517							
	1,183			$ 1,183						
	2,468				$ 2,468					
	1,094					$ 1,094				
							$ 771			
	1							$ 1		
	48								$ 48	
	-									$ -
	201,877	172,566	24,517	1,183	2,468	1,094	771	1	48	-
	$ 474,799	$ 354,565	$ 67,705	$ 4,867	$ 6,836	$ 2,046	$ 2,608	$ 6	$ 28,902	$ 8,035

PHILADELPHIA GAS WORKS

COST OF SERVICE AS OF AUGUST 31, 2021, AT PROPOSED REVENUE LEVEL ALLOCATED TO
CUSTOMER CLASS SERVICE CLASSIFICATIONS

Account		Factor Ref.	Cost of Service in '000's	Volumetric Costs									Customer Costs							
				Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - R8	NGVS	Interruptible	Grays Ferry	Res	Com	Ind	Muni	PHA - GS	PHA - R8	NGVS	Interruptible
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
OPERATION AND MAINTENANCE EXPENSES																				
PRODUCTION EXPENSES																				
	Manufactured Gas Production Expenses																			
701	Operation Labor and Expenses	1	259	207	43	3	3	1	-	-	-	1	-	-	-	-	-	-	-	-
702	Boiler Fuel	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
703	Misc. Steam Expenses	1	350	279	59	4	5	1	-	-	-	2	-	-	-	-	-	-	-	-
706	Maintenance of Structures	1	5	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
707	Maintenance of Boiler Plant Equipment	1	232	185	39	2	3	1	-	-	-	1	-	-	-	-	-	-	-	-
708	Maintenance of Other Production Plant	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
710	Operation Supervision and Engineering	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
712	Other Power Expenses	1	744	594	125	8	10	3	1	-	-	4	-	-	-	-	-	-	-	-
734	Duplicate Charges - Credit	1	(543)	(433)	(91)	(6)	(7)	(2)	(1)	-	-	(3)	-	-	-	-	-	-	-	-
735	Misc. Production Expenses	1	1,367	1,091	229	15	18	6	1	-	-	6	-	-	-	-	-	-	-	-
740	Maintenance Supervision and Engineering	1	373	298	63	4	5	2	-	-	-	2	-	-	-	-	-	-	-	-
741	Maintenance of Structures	1	125	100	21	1	2	1	-	-	-	1	-	-	-	-	-	-	-	-
742	Maintenance of Production Equipment	1	449	358	75	5	6	2	-	-	-	2	-	-	-	-	-	-	-	-
	Total - Manu. Gas Production Expenses		3,361	2,683	564	36	45	15	1	0	0	16	0	0	0	0	0	0	0	0
	Other Gas Supply Expenses																			
804	Natural Gas Transmission Line Purchases	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
807	Purchased Gas Expense	1	4,939	3,941	829	53	66	21	5	-	-	23	-	-	-	-	-	-	-	-
808	Purchases Gas Cost Adjustments	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
812	Gas Used for Operations	1	378	302	63	4	5	2	-	-	-	2	-	-	-	-	-	-	-	-
813	Other Gas Supply Expenses	1	2,625	2,096	441	28	35	11	3	-	-	12	-	-	-	-	-	-	-	-
	Total Other Gas Supply Expenses		7,942	6,339	1,333	85	106	34	8	-	-	37	-	-	-	-	-	-	-	-
	Total Natural Gas Production Expenses		**11,303**	**9,022**	**1,897**	**121**	**151**	**49**	**9**	**-**	**-**	**53**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
OTHER STORAGE EXPENSE																				
840	Operating Supervision and Engineering	2A	1,551	1,196	278	26	31	6	14	-	-	-	-	-	-	-	-	-	-	-
841	Operation Labor and Expenses	2A	3,312	2,554	594	55	66	12	31	-	-	-	-	-	-	-	-	-	-	-
842	Rents	2A	296	228	53	5	6	1	3	-	-	-	-	-	-	-	-	-	-	-
843	Maintenance	2A	7,554	5,825	1,355	125	151	28	70	-	-	-	-	-	-	-	-	-	-	-
850	Operation Supervision and Engineering	2A	1,550	1,195	278	26	31	6	14	-	-	-	-	-	-	-	-	-	-	-
	Total Natural Gas Storage Expense		**14,263**	**10,998**	**2,558**	**237**	**285**	**53**	**132**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

PHILADELPHIA GAS WORKS

COST OF SERVICE AS OF AUGUST 31, 2021, AT PROPOSED REVENUE LEVEL ALLOCATED TO
CUSTOMER CLASS SERVICE CLASSIFICATIONS

Account		Factor Ref.	Cost of Service in '000's	Volumetric Costs									Customer Costs							
				Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - R8	NGVS	Interruptible	Grays Ferry	Res	Com	Ind	Muni	PHA - GS	PHA - R8	NGVS	Interruptible
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
DISTRIBUTION EXPENSES																				
870	Supervision And Engineering	8	2,042	654	173	15	18	3	8	-	150	43	738	191	13	25	5	7	-	-
871	Distribution Load Dispatching	3A	1,944	1,139	300	26	31	6	14	-	253	177	-	-	-	-	-	-	-	-
874	Mains And Services Expenses																			
	Mains	3	2,606	1,615	429	37	44	8	20	-	374	78	-	-	-	-	-	-	-	-
	Services	6	2,606	-	-	-	-	-	-	-	-	-	2,285	276	3	17	19	6	-	-
875	M & R Station Expenses -General	3A	2,492	1,459	384	33	39	7	18	-	324	228	-	-	-	-	-	-	-	-
877	M & R Station Expenses - City Gate Station	3A	615	360	95	8	10	2	4	-	80	56	-	-	-	-	-	-	-	-
878	Meter and House Regulator Expenses	4	19,109	-	-	-	-	-	-	-	-	-	13,674	4,296	313	590	82	152	1	-
879	Customer Installations Expenses	4	8,696	-	-	-	-	-	-	-	-	-	6,223	1,955	142	269	37	69	-	-
880	Other Expenses	8	10,301	3,297	875	76	89	16	41	-	757	218	3,724	961	65	125	23	33	-	-
881	Rents	8	12	4	1	-	-	-	-	-	1	-	4	1	-	-	-	-	-	-
885	Maintenance Super. And Engineering	8	316	101	27	2	3	1	1	-	23	7	114	29	2	4	1	1	-	-
887	Maint. Of Mains	3	29,148	18,069	4,802	416	491	90	225	1	4,178	877	-	-	-	-	-	-	-	-
889	Maint. Of Measuring Station Expenses - General	3A	1,039	608	160	14	16	3	8	-	135	95	-	-	-	-	-	-	-	-
890	Maint. Of Measuring Station Expenses - Industrial	6	62	-	-	-	-	-	-	-	-	-	54	7	-	-	-	-	-	-
891	Maint. Of Measuring Station Expenses - City Gate	3A	534	313	82	7	8	2	4	-	69	49	-	-	-	-	-	-	-	-
892	Maint. Of Services	6	1,815	-	-	-	-	-	-	-	-	-	1,592	192	2	12	13	4	-	-
893	Maint. Of Meters and House Regulators	7	2,957	-	-	-	-	-	-	-	-	-	2,783	145	3	5	12	7	-	2
	Total Distribution Expenses		**86,294**	**27,619**	**7,328**	**634**	**749**	**138**	**343**	**1**	**6,344**	**1,828**	**31,191**	**8,053**	**543**	**1,047**	**192**	**279**	**1**	**2**
CUSTOMER ACCOUNTING EXPENSES																				
	Operation																			
901	Supervision	7	2,192	-	-	-	-	-	-	-	-	-	2,063	107	3	4	9	5	-	2
902	Meter Reading Expenses	7	761	-	-	-	-	-	-	-	-	-	716	37	1	1	3	2	-	1
903	Customer Records & Coll Expenses	7	29,896	-	-	-	-	-	-	-	-	-	28,139	1,463	35	50	118	66	-	25
904	Uncollectible Accounts - MFC	DA	9,420	9,048	287	8		76												
904	Uncollectible Accounts - CRP Forgiveness	1A	12,950	8,668	2,691	218	250	44	113	-	-	965	-	-	-	-	-	-	-	-
904	Uncollectible Accounts - Other	14	10,731	-	-	-	-	-	-	-	-	-	10,365	280	9	-	77	-	-	-
	Total Customer Accounting Expenses		**65,950**	**17,716**	**2,978**	**226**	**250**	**120**	**113**	**-**	**-**	**965**	**41,283**	**1,887**	**48**	**55**	**207**	**73**	**-**	**28**
CUSTOMER SERVICE AND INFORMATION EXPENSES																				
	Operation																			
908	Customer Assistance Expenses	7	5,510	-	-	-	-	-	-	-	-	-	5,186	270	6	9	22	12	-	5
	Total Customer Service & Info Expenses		**5,510**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**5,186**	**270**	**6**	**9**	**22**	**12**	**-**	**5**

PHILADELPHIA GAS WORKS

COST OF SERVICE AS OF AUGUST 31, 2021, AT PROPOSED REVENUE LEVEL ALLOCATED TO
CUSTOMER CLASS SERVICE CLASSIFICATIONS

	Account	Factor Ref.	Cost of Service in '000's	Volumetric Costs									Customer Costs							
				Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - R8	NGVS	Interruptible	Grays Ferry	Res	Com	Ind	Muni	PHA - GS	PHA - R8	NGVS	Interruptible
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	ADMINISTRATIVE AND GENERAL EXPENSES																			
920	Administrative & General Salaries	10	14,931	5,323	1,202	99	117	29	49	-	517	232	6,325	832	49	90	34	30	-	3
920	LIURP Costs	1A	5,808	3,888	1,207	98	112	20	51	-	-	433	-	-	-	-	-	-	-	-
921	Office Supplies and Expenses	10	32,398	11,549	2,609	215	254	63	106	-	1,121	503	13,725	1,805	106	196	75	64	-	6
921	LIURP Costs	1A	2,181	1,460	453	37	42	7	19	-	-	163	-	-	-	-	-	-	-	-
922	Administrative Expenses Transferred-Credit	10	(31,676)	(11,292)	(2,551)	(211)	(248)	(62)	(103)	-	(1,096)	(492)	(13,419)	(1,764)	(103)	(192)	(73)	(63)	-	(6)
923	Outside Services Employed - Other	10	3,059	1,091	246	20	24	6	10	-	106	48	1,296	170	10	19	7	6	-	1
925	Injuries and Damages	11	9,813	4,990	1,252	104	123	25	51	-	871	205	1,976	175	8	15	9	7	-	1
926	Employee Pensions and Benefits	11	61,467	31,258	7,844	653	773	159	318	1	5,453	1,284	12,376	1,094	51	93	58	42	-	9
999	OPEB Funding - Surcharge	1A	16,000	10,710	3,324	269	309	55	140	-	-	1,192	-	-	-	-	-	-	-	-
999	OPEB Funding	11	9,422	4,791	1,202	100	119	24	49	-	836	197	1,897	168	8	14	9	6	-	1
924	Property Insurance	10	1,847	658	149	12	14	4	6	-	64	29	782	103	6	11	4	4	-	-
928	Regulatory Commission Expense	10	5,532	1,972	445	37	43	11	18	-	191	86	2,344	308	18	34	13	11	-	1
929	Duplicate Charges	10	(715)	(255)	(58)	(5)	(6)	(1)	(2)	-	(25)	(11)	(303)	(40)	(2)	(4)	(2)	(1)	-	-
930	General Advertising Expenses	10	8,282	2,952	667	55	65	16	27	-	287	129	3,509	461	27	50	19	16	-	2
	Refunding and Other Savings	10	(753)	(268)	(61)	(5)	(6)	(1)	(2)	-	(26)	(12)	(319)	(42)	(2)	(5)	(2)	(1)	-	-
	Total Administrative & General Expenses		137,596	68,827	17,930	1,478	1,735	355	737	1	8,299	3,986	30,189	3,270	176	321	151	121	-	18
	Total Operation and Maintenance Expenses		**320,916**	**134,182**	**32,691**	**2,696**	**3,170**	**715**	**1,334**	**2**	**14,643**	**6,832**	**107,849**	**13,480**	**773**	**1,432**	**572**	**485**	**1**	**53**
	DEPRECIATION AND AMORTIZATION EXPENSE																			
	PRODUCTION PLANT																			
305	Structures and Improvements	1	789	629	132	8	11	3	1	-	-	4	-	-	-	-	-	-	-	-
306	Boiler Plant Equipment	1	88	70	15	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
307	Other Power Equipment	1	13	11	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
311	LPG Equipment	1	78	62	13	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
312	Oil Gas Equipment	1	3	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
317	Purification Equipment	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
318	Residual Refining Equipment	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
319	Gas Mixing Equpment	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
320	Other Equipment	1	806	643	135	9	11	3	1	-	-	4	-	-	-	-	-	-	-	-
	STORAGE PLANT																			
361	Structures and Improvements	2A	323	249	58	5	6	1	3	-	-	-	-	-	-	-	-	-	-	-
362	Gas Holders	2A	622	480	112	10	12	2	6	-	-	-	-	-	-	-	-	-	-	-
363	Purification Equipment	2A	10	8	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
364	Liquefaction Equipment	2A	1,140	879	204	19	23	4	11	-	-	-	-	-	-	-	-	-	-	-
365	Vaporizing Equipment	2A	801	618	144	13	16	3	7	-	-	-	-	-	-	-	-	-	-	-
366	Compressor Equipment	2A	305	235	55	5	6	1	3	-	-	-	-	-	-	-	-	-	-	-
367	Measuring and Regulating Equipment	2A	224	173	40	4	4	1	2	-	-	-	-	-	-	-	-	-	-	-
368	Other Equipment	2A	592	457	106	10	12	2	5	-	-	-	-	-	-	-	-	-	-	-
	DISTRIBUTION PLANT																			
375	Structures And Improvements	9	54	22	5	-	1	-	-	-	5	1	18	3	-	-	-	-	-	-
376	Mains	3	17,309	10,730	2,851	247	291	54	134	-	2,481	521	-	-	-	-	-	-	-	-
	Direct Assign mains	DA										-								
377	Compression Station Equipment	3A	26	17	4	-	-	-	-	-	3	2	-	-	-	-	-	-	-	-
378	Measuring & Regulating Equipment - General	3A	444	260	68	6	7	1	3	-	58	41	-	-	-	-	-	-	-	-
380	Services	6	21,736	-	-	-	-	-	-	-	-	-	19,060	2,301	29	142	156	48	-	-
381	Meters	4	2,886	-	-	-	-	-	-	-	-	-	2,066	649	47	89	12	23	-	-
382	Meter Installations	4	2,692	-	-	-	-	-	-	-	-	-	1,927	605	44	83	12	21	-	-
383	House Regulators	6	55	1	-	-	-	-	-	-	-	-	48	6	-	-	-	-	-	-
384	House Regulator Installations	4	95	-	-	-	-	-	-	-	-	-	68	21	2	3	-	1	-	-
385	Industrial Measuring & Regulating Equipment	DA	12	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
387	Other Equipment	9	488	180	48	4	5	1	2	-	42	9	166	26	1	2	1	1	-	-
	GENERAL PLANT																			
390	Structures And Improvements	10	2,500	891	203	17	20	5	8	-	87	39	1,059	139	8	15	6	5	-	-
391	Office Furniture And Equipment	10	4,893	1,745	394	33	38	10	16	-	169	76	2,073	273	16	30	11	10	-	1
392	Transportation Equipment	10	6,613	2,359	532	44	52	13	22	-	229	103	2,803	368	22	40	15	13	-	1
393	Stores Equipment	10	22	8	2	-	-	-	-	-	1	-	9	1	-	-	-	-	-	-
394	Tools, Shop And Garage Equipment	10	624	224	50	4	5	1	2	-	22	10	264	35	2	4	1	1	-	-
396	Power Operated Equipment	10	104	37	8	1	1	-	-	-	4	2	44	6	-	1	-	-	-	-
397	Communication Equipment	10	1,003	358	85	7	8	2	3	-	35	16	425	56	3	6	2	2	-	-
398	Miscellaneous Equipment	10	580	210	47	4	5	1	2	-	20	9	246	32	2	4	1	1	-	-
	Total Depreciation & Amortization Expense		**67,934**	**21,558**	**5,316**	**464**	**536**	**108**	**231**	**-**	**3,156**	**837**	**30,276**	**4,521**	**176**	**419**	**217**	**126**	**-**	**2**
	Cost of Removal	**12**	**4,500**	**1,741**	**447**	**39**	**45**	**9**	**20**	**-**	**335**	**78**	**1,510**	**230**	**9**	**21**	**11**	**6**	**-**	**-**
	Total Operating Expenses		**393,350**	**157,481**	**38,454**	**3,200**	**3,751**	**832**	**1,585**	**2**	**18,134**	**7,747**	**139,635**	**18,231**	**958**	**1,872**	**800**	**617**	**1**	**55**

PHILADELPHIA GAS WORKS

COST OF SERVICE AS OF AUGUST 31, 2021, AT PROPOSED REVENUE LEVEL ALLOCATED TO CUSTOMER CLASS SERVICE CLASSIFICATIONS

Account	Factor Ref.	Cost of Service in '000's	Volumetric Costs									Customer Costs							
			Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - R8	NGVS	Interruptible	Grays Ferry	Res	Com	Ind	Muni	PHA - GS	PHA - R8	NGVS	Interruptible
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
INTEREST AND OTHER EXPENSE																			
Interest on Long Term Debt	12	54,442	21,041	5,402	470	548	107	243	1	4,055	939	18,270	2,786	107	259	134	77	-	2
Other	12	(9,612)	(3,715)	(954)	(83)	(97)	(19)	(43)	-	(716)	(166)	(3,226)	(492)	(19)	(46)	(24)	(14)	-	-
AFUDC	12	(2,212)	(855)	(219)	(19)	(22)	(4)	(10)	-	(165)	(38)	(742)	(113)	(4)	(11)	(5)	(3)	-	-
Loss From Extinguishment of Debt	12	4,460	1,724	443	38	45	9	20	-	332	77	1,497	228	9	21	11	6	-	-
Total Interest and Other Expense		47,078	18,195	4,672	406	474	93	210	1	3,506	812	15,799	2,409	93	223	116	66	-	2
CITY PAYMENT	**12**	**18,000**	**6,957**	**1,786**	**155**	**181**	**35**	**80**	**-**	**1,341**	**311**	**6,041**	**921**	**35**	**86**	**44**	**26**	**-**	**1**
NET INCOME	**12**	**118,493**	**45,792**	**11,759**	**1,024**	**1,193**	**233**	**531**	**2**	**8,828**	**2,045**	**39,765**	**6,064**	**233**	**563**	**293**	**168**	**-**	**4**
TOTAL COST OF SERVICE		**576,921**	**228,425**	**56,671**	**4,785**	**5,599**	**1,193**	**2,406**	**5**	**31,809**	**10,915**	**201,240**	**27,625**	**1,319**	**2,744**	**1,253**	**877**	**1**	**62**
Less: Other Revenues																			
Interest Gain/Loss and Other Income	12	7,400	2,859	734	64	74	15	33	-	551	128	2,483	379	15	35	18	11	-	-
Appliance Repair and Other Revenues	13	7,964	3,212	793	67	78	17	33	-	422	-	2,863	389	19	39	17	13	-	1
Other Revenues	13	1,661	670	165	14	16	4	7	-	88	-	597	81	4	8	4	3	-	-
Late Payment Fees	7	10,500	-	-	-	-	-	-	-	-	-	9,883	514	12	18	41	23	-	9
DSIC Surcharge	13	35,000	14,115	3,487	293	343	74	147	-	1,855	-	12,584	1,709	84	172	77	55	-	4
OPEB Surcharge	1A	16,000	10,710	3,324	269	309	55	140	-	-	1,192	-	-	-	-	-	-	-	-
CRP Forgiveness	1A	12,950	8,668	2,691	218	250	44	113	-	-	965	-	-	-	-	-	-	-	-
LIURP	1A	7,989	5,348	1,660	134	154	27	70	-	-	595	-	-	-	-	-	-	-	-
venues Efficiency Cost Recovery	DA	1,166	548	556	36	-	3	23	-	-	-	-	-	-	-	-	-	-	-
Contract Revenues	13	733	296	73	6	7	2	3	-	39	-	264	36	2	4	2	1	-	-
Subtotal		101,363	46,426	13,483	1,101	1,231	241	569	-	2,955	2,880	28,674	3,108	136	276	159	106	-	14
TOTAL COST OF SERVICE RELATED TO TARIFF SALES AND TRANSPORTATION		**$ 475,558**	**$ 181,999**	**$ 43,188**	**$ 3,684**	**$ 4,368**	**$ 952**	**$ 1,837**	**$ 5**	**$ 28,854**	**$ 8,035**	**$ 172,566**	**$ 24,517**	**$ 1,183**	**$ 2,468**	**$ 1,094**	**$ 771**	**$ 1**	**$ 48**

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 1. ALLOCATION OF COSTS WHICH VARY DIRECTLY WITH SALE OF GAS

Factors are based on the pro forma average daily sales volumes for each service classification.

Service Classification	Pro Forma Average Daily PGC Volumes (Mcf)	Allocation Factor 1	Pro Forma Average Daily Firm Sales (Mcf)	Allocation Factor 1A
(1)	(2)	(3)	(4)	(5)
Volumetric Costs				
Residential	90,870	0.79793	95,087	0.66938
Commercial	19,118	0.16788	29,515	0.20778
Industrial	1,212	0.01065	2,387	0.01680
Municipal	1,532	0.01345	2,744	0.01932
PHA GS	487	0.00428	487	0.00343
PHA R8	122	0.00107	1,245	0.00876
NGVS	2	0.00002	2	0.00002
Interruptible	-	-		-
Grays Ferry/Veolia	538	0.00472	10,584	0.07451
Total	113,881	1.00000	142,050	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTORS 2 AND 2A. CALCULATION OF MAXIMUM DAY EXTRA DEMAND FACTORS.

Factors are based on the maximum day extra demand throughput for each classification.

Service Classification	Pro Forma Average Daily Throughput Volumes (Mcf)	Peak Day Capacity (Mcf)	Extra Capacity (Mcf)	Allocation Factor 2	Allocation Factor 2A
(1)	(2)	(3)	(4)=(3)-(2)	(5)	
Volumetric Costs					
Residential	95,087	429,513	334,426	0.71134	0.77118
Commercial	29,515	107,276	77,761	0.16540	0.17932
Industrial	2,387	9,559	7,172	0.01525	0.01654
Municipal	2,744	11,394	8,650	0.01840	0.01995
PHA GS	487	2,119	1,633	0.00347	0.00376
PHA R8	1,245	5,251	4,006	0.00852	0.00924
NGVS	2	6	4	0.00001	0.00001
Interruptible	37,849	73,696	35,847	0.07625	
Grays Ferry/Veolia	10,584	11,222	639	0.00136	
Total	179,899	650,037	470,137	1.00000	1.00000
Load Factor	0.276752		0.723248		

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTORS 2B. CALCULATION OF MAXIMUM DAY EXTRA DEMAND FACTORS.

Factors are based on the maximum day extra demand throughput for each classification.

Service Classification	Pro Forma Average Daily Throughput Volumes (Mcf)	Peak Day Capacity (Mcf)	Extra Capacity (Mcf)	Allocation Factor 2B
(1)	(2)	(3)	(4)=(3)-(2)	(5)
Volumetric Costs				
Residential	95,087	429,513	334,426	0.70897
Commercial	29,515	107,276	77,761	0.16485
Industrial	2,387	9,559	7,172	0.01520
Municipal	2,744	11,394	8,650	0.01834
PHA GS	487	2,119	1,633	0.00346
PHA R8	1,245	5,251	4,006	0.00849
NGVS	2	6	4	0.00001
Interruptible	37,849	73,696	35,847	0.07599
Grays Ferry/Veolia	36,639	38,850	2,211	0.00469
Total	205,955	677,664	471,710	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 3. ALLOCATION OF COSTS ASSOCIATED WITH DISTRIBUTION MAINS

Factors are based on the weighting of the factors derived from average daily throughput volumes volumes and from maximum day extra capacity demand for each service classification, as follows:

	Average Daily Throughput			Maximum Day Extra Demand		
Service Classification	MCF/Day	Allocation Factor	Weighted Factor*	Allocation Factor 2	Weighted Factor*	Allocation Factor 3
(1)	(2)	(3)	(4)=(3)x 0.50000	(5)	(6)=(5)x 0.50000	(7)=(4)+(6)
Volumetric Costs						
Residential	95,087	0.52856	0.26425	0.71134	0.35565	0.61990
Commercial	29,515	0.16406	0.08203	0.16540	0.08270	0.16473
Industrial	2,387	0.01327	0.00664	0.01525	0.00763	0.01427
Municipal	2,744	0.01525	0.00763	0.01840	0.00920	0.01683
PHA GS	487	0.00271	0.00136	0.00347	0.00174	0.00310
PHA R8	1,245	0.00692	0.00346	0.00852	0.00426	0.00772
NGVS	2	0.00001	0.00001	0.00001	0.00001	0.00002
Interruptible	37,849	0.21039	0.10520	0.07625	0.03813	0.14333
Grays Ferry/Veolia	10,584	0.05883	0.02942	0.00136	0.00068	0.03010
Total	179,899	1.00000	0.50000	1.00000	0.50000	1.00000

* The weighting of the factors is based on the percentage of average daily throughput.

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 3A. ALLOCATION OF COSTS ASSOCIATED WITH DISTRIBUTION, OTHER THAN MAINS

Factors are based on the weighting of the factors derived from average daily throughput volumes volumes and from maximum day extra capacity demand for each service classification, as follows:

	Average Daily Throughput			Maximum Day Extra Demand		
Service Classification	MCF/Day	Allocation Factor	Weighted Factor*	Allocation Factor 2B	Weighted Factor*	Allocation Factor 3A
(1)	(2)	(3)	(4)=(3)x 0.50000	(5)	(6)=(5)x 0.50000	(7)=(4)+(6)
Volumetric Costs						
Residential	95,087	0.46170	0.23083	0.70897	0.35446	0.58529
Commercial	29,515	0.14331	0.07166	0.16485	0.08243	0.15409
Industrial	2,387	0.01159	0.00580	0.01520	0.00760	0.01340
Municipal	2,744	0.01332	0.00666	0.01834	0.00917	0.01583
PHA GS	487	0.00236	0.00118	0.00346	0.00173	0.00291
PHA R8	1,245	0.00604	0.00302	0.00849	0.00425	0.00727
NGVS	2	0.00001	0.00001	0.00001	0.00001	0.00002
Interruptible	37,849	0.18377	0.09189	0.07599	0.03800	0.12989
Grays Ferry/Veolia	36,639	0.17790	0.08895	0.00469	0.00235	0.09130
Total	205,955	1.00000	0.50000	1.00000	0.50000	1.00000

* The weighting of the factors is based on the percentage of average daily throughput.

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH METERS AND ACCOUNTS 381

Factors are based on the cost of meters by class included in Accounts 381 Meters and M&R Equipment.

Service Classification	Original Cost of Meters	Allocation Factor
(1)	(2)	(3)
Customer Costs		
Residential	$ 57,306,393	0.71560
Commercial	18,004,478	0.22483
Industrial	1,311,869	0.01638
Municipal	2,474,336	0.03090
PHA - GS	344,988	0.00431
PHA - Rate 8	636,266	0.00795
NGVS	2,419	0.00003
Interruptible	-	-
Total	$ 80,080,750	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH INDUSTRIAL MEASURING AND REGULATING EQUIPMENT.

Directly assigned to the Industrial Class

Service Classification	Allocation Factor
(1)	(1)
Volumetric	
Industrial	1.0000

FACTOR 6. ALLOCATION OF COSTS ASSOCIATED WITH SERVICES AND HOUSE REGULATORS.

Factors are based on the cost of services by class included in Account 380, Service Lines.

Service Classification	Original Cost of Service Lines	Allocation Factor
(1)	(2)	(3)
Customer Costs		
Residential	$ 682,254,829	0.87688
Commercial	82,378,351	0.10588
Industrial	1,036,743	0.00133
Municipal	5,079,791	0.00653
PHA - GS	5,560,935	0.00716
PHA - Rate 8	1,725,978	0.00222
NGVS	1	-
Interruptible	-	-
		-
Total	$ 778,036,628	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 7. ALLOCATION OF COSTS ASSOCIATED WITH CUSTOMER ACCOUNTING AND METER READING.

Factors are based on the number of customers for each classification, as follows.

Service Classification	Number of Customers	Allocation Factor 7
(1)	(2)	(3)
Customer Costs		
Residential	479,356	0.94122
Commercial	24,915	0.04892
Industrial	594	0.00117
Municipal	850	0.00167
PHA - GS	2,011	0.00395
PHA - Rate 8	1,129	0.00222
NGVS	3	0.00001
Interruptible	427	0.00084
Total	509,286	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 8. ALLOCATION OF DISTRIBUTION OPERATION OTHER EXPENSES AND RENT.

Factors are based on distribution operation expenses other than those being allocated.

Service Classification	Operation Expenses	Allocation Factor
(1)	(2)	(3)
Volumetric Costs		
Residential	$ 23,563	0.32005
Commercial	6,252	0.08492
Industrial	541	0.00735
Municipal	639	0.00868
PHA GS	118	0.00160
PHA R8	293	0.00398
NGVS	1	0.00001
Interruptible	5,413	0.07352
Grays Ferry/Veolia	1,560	0.02119
Customer Costs		
Residential	26,611	0.36147
Commercial	6,871	0.09333
Industrial	463	0.00629
Municipal	893	0.01213
PHA GS	163	0.00221
PHA R8	238	0.00323
NGVS	1	0.00001
Interruptible	2	0.00003
Total	$ 73,622	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 9. ALLOCATION OF DISTRIBUTION ASSETS

Factors are based on distribution assets other than those being allocated.

Service Classification	Rate Base Costs	Allocation Factor
(1)	(2)	(3)
Volumetric Costs		
Residential	$ 461,864	0.36908
Commercial	122,721	0.09807
Industrial	10,818	0.00865
Municipal	12,538	0.01002
PHA GS	2,310	0.00185
PHA R8	5,752	0.00460
NGVS	15	0.00001
Interruptible	106,738	0.08530
Grays Ferry/Veolia	23,021	0.01840
Customer Costs		
Residential	425,443	0.33999
Commercial	66,720	0.05332
Industrial	2,341	0.00187
Municipal	6,003	0.00480
PHA GS	3,303	0.00264
PHA R8	1,758	0.00140
NGVS	4	-
Interruptible	-	-
Total	$ 1,251,349	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 10. ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES.

Factors are based on the allocation of operation and maintenance expenses.

Service Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Volumetric Costs		
Residential	$ 65,355	0.3565
Commercial	14,761	0.0805
Industrial	1,218	0.0067
Municipal	1,435	0.0078
PHA GS	360	0.0020
PHA R8	597	0.0033
NGVS	1	0.0000
Interruptible	6,344	0.0346
Grays Ferry/Veolia	2,846	0.0155
Customer Costs		
Residential	77,660	0.4236
Commercial	10,210	0.0557
Industrial	597	0.0033
Municipal	1,111	0.0061
PHA GS	421	0.0023
PHA R8	364	0.0020
NGVS	1	0.0000
Interruptible	35	0.0002
Total	$ 183,317	1.0000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 11. ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of total operation and maintenance direct labor expense to service classifications as shown on the following page.

Service Classification	Total Labor Expense	Allocation Factor
(1)	(2)	(3)
Volumetric Costs		
Residential	$ 69,882	0.50853
Commercial	17,537	0.12762
Industrial	1,461	0.01063
Municipal	1,729	0.01258
PHA GS	356	0.00259
PHA R8	712	0.00518
NGVS	2	0.00001
Interruptible	12,190	0.08871
Grays Ferry/Veolia	2,871	0.02089
Customer Costs		
Residential	27,669	0.20135
Commercial	2,446	0.01780
Industrial	114	0.00083
Municipal	207	0.00151
PHA GS	129	0.00094
PHA R8	93	0.00068
NGVS	-	-
Interruptible	20	0.00015
Total	$ 137,418	1.00000

PHILADELPHIA GAS WORKS

FACTOR 11 - ALLOCATION OF LABOR COSTS TO CUSTOMER CLASS SERVICE CLASSIFICATIONS

				Volumetric Costs									Customer Costs							
	Account	Factor Ref.	Labor Costs	Residential	Commercial	Industrial	Municipal	PHA GS	PHA - R8	NGVS	Interruptible	Grays Ferry/Viola	Res	Com	Ind	Muni	PHA - GS	PHA - Rate 8	NGVS	Interruptible
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
OPERATION AND MAINTENANCE EXPENSES																				
	TOTAL PAYROLL - 2019																			
02	President & CEO	10	$ 92	$ 33	$ 7	$ 1	$ 1	$ -	$ -	$ -	$ 3	$ 1	$ 39	$ 5	$ -	$ 1	$ -	$ -	$ -	$ -
03	Corporate Communications	10	1,067	380	86	7	8	2	3	-	37	17	452	59	3	6	2	2	-	-
04	Officers Salaries	10	4,188	1,493	337	28	33	8	14	-	145	65	1,774	233	14	25	10	8	-	1
05	Legal	10	1,358	484	109	9	11	3	4	-	47	21	575	76	4	8	3	3	-	-
07	Commercial Resource Center	7	959	-	-	-	-	-	-	-	-	-	903	47	1	2	4	2	-	1
09	Gas Control & Acquisition	1	2,314	1,846	388	25	31	10	2	-	-	11	-	-	-	-	-	-	-	-
10	VP Reg. Compliance & Customer Programs	10	3,139	1,119	253	21	25	6	10	-	109	49	1,330	175	10	19	7	6	-	1
11	Human Resources	10	1,002	357	81	7	8	2	3	-	35	16	424	56	3	6	2	2	-	-
13	Chief Operating Officer	10	79	28	6	1	1	-	-	-	3	1	33	4	-	-	-	-	-	-
14	Security	10	188	67	15	1	1	-	1	-	7	3	80	10	1	1	-	-	-	-
15	VP Regulatory & Legislative Affairs	10	96	34	8	1	1	-	-	-	3	1	41	5	-	1	-	-	-	-
16	VP Supply Chain	10	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	VP Budget & Strategic Development	10	594	212	48	4	5	1	2	-	21	9	252	33	2	4	1	1	-	-
20	Gas Planning & Rates	10	546	195	44	4	4	1	2	-	19	8	231	30	2	3	1	1	-	-
21	Customer Review	7	878	-	-	-	-	-	-	-	-	-	826	43	1	1	3	2	-	1
22	By-Pass Bonuses	10	55	20	4	-	-	-	-	-	2	1	23	3	-	-	-	-	-	-
30	Engineering Services	3	911	565	150	13	15	3	7	-	131	27	-	-	-	-	-	-	-	-
31	Chemical Services	1	568	453	95	6	8	2	1	-	-	3	-	-	-	-	-	-	-	-
38	VP Technical Compliance	10	648	231	52	4	5	1	2	-	22	10	275	36	2	4	1	1	-	-
39	SVP HRD, Labor, & Corp Comm	10	245	87	20	2	2	-	1	-	8	4	104	14	1	1	1	-	-	-
40	Chief Financial Officer	10	80	29	6	1	1	-	-	-	3	1	34	4	-	-	-	-	-	-
41	Risk Management	10	914	326	74	6	7	2	3	-	32	14	387	51	3	6	2	2	-	-
43	Account Management	7	2,024	-	-	-	-	-	-	-	-	-	1,905	99	2	3	8	4	-	2
44	Customer Service	7	9,229	-	-	-	-	-	-	-	-	-	8,687	451	11	15	36	20	-	8
45	Accounting & Reporting	10	1,603	571	129	11	13	3	5	-	55	25	679	89	5	10	4	3	-	-
46	Treasury	10	865	308	70	6	7	2	3	-	30	13	366	48	3	5	2	2	-	-
47	Information Services	10	5,054	1,802	407	34	40	10	16	-	175	78	2,141	282	16	31	12	10	-	1
49	Collections	7	2,119	-	-	-	-	-	-	-	-	-	1,994	104	2	4	8	5	-	2
50	Field Services	3	27,686	17,163	4,561	395	466	86	214	1	3,968	833	-	-	-	-	-	-	-	-
52	Distribution	3	38,863	24,091	6,402	555	654	120	300	1	5,570	1,170	-	-	-	-	-	-	-	-
53	Gas Processing	1	10,862	8,667	1,824	116	146	46	12	-	-	51	-	-	-	-	-	-	-	-
54	Internal Auditing	10	297	106	24	2	2	1	1	-	10	5	126	17	1	2	1	1	-	-
56	SVP Operations & Supply Chair	3	71	44	12	1	1	-	1	-	10	2	-	-	-	-	-	-	-	-
57	SVP Gas Management	3	555	344	91	8	9	2	4	-	80	17	-	-	-	-	-	-	-	-

PHILADELPHIA GAS WORKS

FACTOR 11 - ALLOCATION OF LABOR COSTS TO CUSTOMER CLASS SERVICE CLASSIFICATIONS

				Volumetric Costs									Customer Costs							
	Account	Factor Ref.	Labor Costs	Residential	Commercial	Industrial	Municipal	PHA GS	PHA - R8	NGVS	Interruptible	Grays Ferry/Viola	Res	Com	Ind	Muni	PHA - GS	PHA - Rate 8	NGVS	Interruptible
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
58	VP Marketing	10	135	48	11	1	1	-	-	-	5	2	57	8	-	1	-	-	-	-
59	Organizational Development	10	936	334	75	6	7	2	3	-	32	15	397	52	3	6	2	2	-	-
60	Marketing	10	2,686	958	216	18	21	5	9	-	93	42	1,138	150	9	16	6	5	-	1
65	Labor Relations	10	259	92	21	2	2	1	1	-	9	4	111	14	1	2	1	1	-	-
67	Corporate Planning	10	550	196	44	4	4	1	2	-	19	9	234	31	2	3	1	1	-	-
68	Customer Programs	7	700	-	-	-	-	-	-	-	-	-	659	34	1	1	3	2	-	1
71	Supply Chain	3	6,208	3,848	1,023	89	104	19	48	-	890	187	-	-	-	-	-	-	-	-
72	Facilities Management	3	2,242	1,390	369	32	38	7	17	-	321	67	-	-	-	-	-	-	-	-
73	Fleet Operations	10	3,286	1,171	265	22	26	6	11	-	114	51	1,392	183	11	20	8	7	-	1
77	Resource Management and Technology	3	1,273	790	210	18	21	4	10	-	182	38	-	-	-	-	-	-	-	-
TOTAL LABOR RELATED COST FOR ALLOCATION			$ 137,424	$ 69,882	$ 17,537	$ 1,461	$ 1,729	$ 356	$ 712	$ 2	$ 12,190	$ 2,871	$ 27,669	$ 2,446	$ 114	$ 207	$ 129	$ 93	$ -	$ 20

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 12. ALLOCATION OF SURPLUS AND INTEREST EXPENSE.

Factors are based on the result of allocating the original cost measure of value, as presented on the following pages.

Service Classification	Original Cost Less Depreciation	Allocation Factor
(1)	(2)	(3)
Volumetric Costs		
Residential	$ 596,742	0.38649
Commercial	153,206	0.09923
Industrial	13,317	0.00863
Municipal	15,529	0.01006
PHA GS	3,027	0.00196
PHA R8	6,904	0.00447
NGVS	17	0.00001
Interruptible	115,015	0.07449
Grays Ferry/Veolia	26,635	0.01725
Customer Costs		
Residential	518,148	0.33559
Commercial	79,015	0.05118
Industrial	3,046	0.00197
Municipal	7,327	0.00475
PHA GS	3,815	0.00247
PHA R8	2,191	0.00142
NGVS	6	-
Interruptible	40	0.00003
Total	$ 1,543,980	1.00000

FACTOR 13. ALLOCATION OF REGULATORY COMMISSION EXPENSES, ASSESSMENTS AND OTHER REVENUES.

Factors are based on the allocated cost of service excluding those items being allocated.

Service Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Volumetric Costs		
Residential	$ 194,769	0.40329
Commercial	48,119	0.09963
Industrial	4,048	0.00838
Municipal	4,737	0.00981
PHA GS	1,021	0.00211
PHA R8	2,029	0.00420
NGVS	4	0.00001
Interruptible	25,600	0.05301
Grays Ferry/Veolia	-	-
Customer Costs		
Residential	173,649	0.35955
Commercial	23,589	0.04883
Industrial	1,156	0.00239
Municipal	2,366	0.00490
PHA GS	1,060	0.00219
PHA R8	762	0.00158
NGVS	1	-
Interruptible	57	0.00012
Total	$ 482,967	1.00000

PHILADELPHIA GAS WORKS

FACTORS FOR ALLOCATING COST OF SERVICE TO SERVICE CLASSIFICATIONS

FACTOR 14. ALLOCATION OF UNCOLLECTIBLES NOT RECOVERED FROM MFC

Factors are based on 3-year average of uncollectibles.

Service Classification	3-Year Average Uncollectibles	Allocation Factor
(1)	(2)	(3)
Customer Costs		
Residential	$ 36,884,034	0.96587
Commercial	996,900	0.02611
Industrial	33,769	0.00088
Municipal	-	-
PHA GS	272,444	0.00713
PHA R8	484	0.00001
Total	38,187,631	1.00000

PHILADELPHIA GAS WORKS

RATE BASE AS OF AUGUST 31, 2021, AT PROPOSED REVENUE LEVEL ALLOCATED TO
CUSTOMER CLASS SERVICE CLASSIFICATIONS

Account		Factor Ref.	Cost of Service in '000's	Volumetric Costs									Customer Costs							
				Residential	Commercial	Industrial	Municipal	PHA - GS	PHA - R8	NGVS	Interruptible	Grays Ferry	Res	Com	Ind	Muni	PHA - GS	PHA - R8	NGVS	Interruptible
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
RATE BASE																				
PRODUCTION PLANT																				
304	Land and Land Rights	1	1,453	1,159	244	15	20	6	2	-	-	7	-	-	-	-	-	-	-	-
305	Structures and Improvements	1	14,148	11,289	2,375	151	190	61	15	-	-	67	-	-	-	-	-	-	-	-
306	Boiler Plant Equipment	1	414	330	69	4	6	2	-	-	-	2	-	-	-	-	-	-	-	-
307	Other Power Equipment	1	135	107	23	1	2	1	-	-	-	1	-	-	-	-	-	-	-	-
311	LPG Equipment	1	511	408	86	5	7	2	1	-	-	2	-	-	-	-	-	-	-	-
312	Oil Gas Equipment	1	78	63	13	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
317	Purification Equipment	1	(1)	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
318	Residual Refining Equipment	1	(0)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
319	Gas Mixing Equipment	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
320	Other Equipment	1	13,261	10,581	2,226	141	178	57	14	-	-	63	-	-	-	-	-	-	-	-
	Total Production Plant		29,999	23,936	5,036	318	404	129	32	-	-	142	-	-	-	-	-	-	-	-
STORAGE AND PROCESSING PLANT																				
360	Land and Land Rights	2A	328	253	59	5	7	1	3	-	-	-	-	-	-	-	-	-	-	-
361	Structures and Improvements	2A	6,641	5,121	1,191	110	132	25	61	-	-	-	-	-	-	-	-	-	-	-
362	Gas Holders	2A	(89)	(69)	(16)	(1)	(2)	-	(1)	-	-	-	-	-	-	-	-	-	-	-
363	Purification Equipment	2A	(17)	(13)	(3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
364	Liquefaction Equipment	2A	8,481	6,540	1,521	140	169	32	78	-	-	-	-	-	-	-	-	-	-	-
365	Vaporizing Equipment	2A	5,548	4,278	995	92	111	21	51	-	-	-	-	-	-	-	-	-	-	-
366	Compressor Equipment	2A	6,142	4,736	1,101	102	123	23	57	-	-	-	-	-	-	-	-	-	-	-
367	Measuring and Regulating Equipment	2A	1,282	989	230	21	26	5	12	-	-	-	-	-	-	-	-	-	-	-
368	Other Equipment	2A	13,065	10,075	2,343	216	261	49	121	-	-	-	-	-	-	-	-	-	-	-
	Total Storage and Processing Plant		41,380	31,910	7,421	685	827	156	382	-	-	-	-	-	-	-	-	-	-	-
DISTRIBUTION PLANT																				
374	Land and Land Rights	9	101	37	10	1	1	-	-	-	9	2	34	5	-	-	-	-	-	-
375	Structures And Improvements	9	(21)	(8)	(2)	-	-	-	-	-	(2)	-	(7)	(1)	-	-	-	-	-	-
376	Mains	3	736,129	456,326	121,263	10,505	12,389	2,282	5,683	15	105,509	22,157	-	-	-	-	-	-	-	-
	Portion of mains	DA										-								
377	Compression Station Equipment	3A	(33)	(19)	(5)	-	(1)	-	-	-	(4)	(3)	-	-	-	-	-	-	-	-
378	Measuring & Regulating Equipment - General	3A	9,495	5,557	1,463	127	150	28	69	-	1,233	867	-	-	-	-	-	-	-	-
380	Services	6	393,500	-	-	-	-	-	-	-	-	-	345,052	41,664	523	2,570	2,817	874	-	-
381	Meters	4	51,484	-	-	-	-	-	-	-	-	-	36,842	11,575	843	1,591	222	409	2	-
382	Meter Installations	4	59,400	-	-	-	-	-	-	-	-	-	42,506	13,355	973	1,835	256	472	2	-
383	House Regulators	6	1,131	-	-	-	-	-	-	-	-	-	992	120	2	7	8	3	-	-
384	House Regulator Installations	6	58	-	-	-	-	-	-	-	-	-	51	6	-	-	-	-	-	-
385	Industrial Measuring & Regulating Equipment	DA	186	-	-	186	-	-	-	-	-	-	-	-	-	-	-	-	-	-
387	Other Equipment	9	12,172	4,492	1,194	105	122	23	56	-	1,038	224	4,138	649	23	58	32	17	-	-
	Total Distribution Plant		1,263,602	466,385	123,923	10,924	12,661	2,333	5,808	15	107,783	23,247	429,608	67,373	2,364	6,061	3,335	1,775	4	-
GENERAL PLANT																				
389	Land and Land Rights	10	3,713	1,324	299	25	29	7	12	-	128	58	1,573	207	12	22	9	7	-	1
390	Structures And Improvements	10	72,433	25,822	5,832	482	567	142	236	1	2,507	1,125	30,685	4,035	236	439	167	144	1	14
391	Office Furniture And Equipment	10	59,655	21,266	4,803	397	467	117	194	1	2,065	926	25,272	3,323	194	362	137	119	1	11
392	Transportation Equipment	10	14,474	5,160	1,165	96	113	28	47	-	501	225	6,132	806	47	88	33	29	-	3
393	Stores Equipment	10	68	26	5	-	1	-	-	-	2	1	29	4	-	-	-	-	-	-
394	Tools, Shop And Garage Equipment	10	5,990	2,137	482	40	47	12	20	-	207	93	2,538	334	20	36	14	12	-	1
396	Power Operated Equipment	10	216	78	17	1	2	-	1	-	7	3	91	12	1	1	-	-	-	-
397	Communication Equipment	10	1,415	505	114	9	11	3	5	-	49	22	599	79	5	9	3	3	-	-
398	Miscellaneous Equipment	10	10,921	3,893	879	73	86	21	36	-	378	170	4,627	608	36	66	25	22	-	2
	Total General Plant		168,885	60,211	13,596	1,123	1,323	330	551	2	5,844	2,623	71,546	9,408	551	1,023	388	336	2	32
	Total Plant		1,503,865	582,442	149,976	13,050	15,215	2,948	6,773	17	113,627	26,012	501,154	76,781	2,915	7,084	3,723	2,111	6	32
OTHER RATE BASE ELEMENTS																				
	Cash Working Capital	10	40,115	14,300	3,230	267	314	79	131	-	1,388	623	16,994	2,234	131	243	92	80	-	8
	Total Other Rate Base Elements		40,115	14,300	3,230	267	314	79	131	-	1,388	623	16,994	2,234	131	243	92	80	-	8
	Total Measure of Value		$ 1,543,980	$ 596,742	$ 153,206	$ 13,317	$ 15,529	$ 3,027	$ 6,904	$ 17	$ 115,015	$ 26,635	$ 518,148	$ 79,015	$ 3,046	$ 7,327	$ 3,815	$ 2,191	$ 6	$ 40

2. Please state Complainants' position regarding whether rates for firm distribution service to Complainants should include a provision related to the recovery of universal service and energy conservation plan ("USECP") costs that applies to all other firm service customers. Please provide a full rationale for the Complainants' position.

RESPONSE:

No. The basis is that Vicinity is by far the largest customer on the system and that it does not impose costs on the system for which it does not already reimburse PGW. As a utility-scale customer, Grays Ferry is not eligible to participate in PGW's USECP. There are other examples of non-residential customers that are not subject to a universal service rider (Columbia Gas of Pennsylvania, Peoples Gas) and of customers whose delivery is accomplished via a dedicated facility directly connected to an interstate pipeline being served at rates that do not include such costs, such as Columbia Gas of Pennsylvania Rate MLDS.

Provided By: James L. Crist

3. Please state Complainants' position regarding whether rates for firm distribution service to Complainants should include a provision related to the OPEB Surcharge that applies to all other firm service customers. Please provide a full rationale for Complainants' position.

RESPONSE:

No. The basis is that Vicinity is by far the largest customer on the system and that it does not impose costs on the system for which it does not already reimburse PGW. Grays Ferry has not reviewed the OPEB Surcharge and was not subject to the OPEB surcharge. Were Grays Ferry to bypass PGW it would not incur such a charge.

Provided By: James L. Crist

4. Reference Statement JC-1, Section II, page 7:

   a. Please provide evidentiary support for the statement that Mayor Rendell desired that PGW be part of the project.

   b. Please explain why GFCP acquiesced to the desires of Mayor Rendell when it left GFCP with a limited term contract for critical delivery service facilities and, apparently, reliance on PGW for necessary pipeline capacity on Tetco's Philadelphia Lateral.

   c. Please provide any reasons why it would it be unreasonable to assume that GFCP expected to receive benefits associated with acquiescing to political desires for PGW to be part of the project? Please explain any negative response.

RESPONSE:

a. Such evidentiary support does not exist. Grays Ferry had procured rights of way and conducted pipeline engineering and filed for regulatory approvals. It is evident that Mayor Rendell's desire caused Grays Ferry to cease its plan to construct a dedicated line that would bypass PGW.
b. The "limited term" contract had a significant 25-year term. Grays Ferry initiated discussions with PGW, in 2017, far enough in advance to pursue a new line and additional firm capacity if a renewal was not feasible.
c. What is likely is that Grays Ferry acquiesced to Mayor Rendell to avoid negative effects of political pressure.

Provided By: James L. Crist

6. Reference Statement JC-1, Section II, page 8:

   a. Were the costs associated with the CIAC passed on in whole or in part to Complainants' steam ratepayers? Please explain your response and quantify any ratepayer impact to the extent possible.

RESPONSE:

a. The $10.4 million paid to PGW was amortized and recovered via the 25-year contract between GFCP and VEPI at a monthly charge of $34,561 and those charges were recovered by VEPI through its steam.

Provided By: James L. Crist

7. Reference Statement JC-1 at 14-17, PGW-Complainants-V-34 and V-36, pipeline capacity requirements:

   a. Please specify GFCP's winter deliverability requirement for gas on the Philadelphia Lateral, including that implicitly provided through ARS, as compared to the capacity that it currently holds.

   b. Please specify GFCP's summer deliverability requirement for gas on the Philadelphia Lateral, including that provided through capacity release, as compared to the capacity that it currently holds.

   c. Does ARS provide firm capacity? Please explain your response.

   d. Please specify in detail the nature of the capacity that PGW releases to GFCP under the current contract, specifying receipt and delivery points, rates, and terms and conditions.

   e. Please define "the market rate for capacity" as that term is used on page 15, lines 21-22.

   f. Please specify when GFCP informed PGW that it no longer needed the released capacity.

RESPONSE:

   a. GFCP holds 35k/day of firm capacity and requires 56k/day in the winter with the 21k/day shortfall currently provided via the ARS.

   b. GFCP holds 35k/day of firm capacity and requires about 36k on the typical summer day. The excess 1,000 Dth/day in the summer typically flows as secondary capacity because demands on the Philadelphia Lateral are greatly reduced in the summer.

c. As per the Contract, PGW has the right to recall the ARS service in certain extreme cold conditions but as PGW has excess capacity, it has never recalled the ARS service.
d. Those requested details are explained in the 1996 contract.
e. The "market rate" is derived from the average cost of all similar release capacity transactions shown on monthly TETCO reports.
f. The release capacity became redundant in Nov 2012 when GFCP acquired an additional 20k/day of firm capacity from TETCO. Terms of the contract obligate Grays Ferry to accept the release capacity. This issue was discussed with PGW early in the contract renewal process in 2017.

Provided By: James L. Crist

8. Reference Statement JC-1 at 17, Sales Service Gas:

   a. Please indicate whether the referenced interruptions apply only to interruptions on Tetco's Philadelphia lateral, or whether there are also interruptions related to ARS from PGW.

   b. Please explain how GFCP can offer firm capacity into PJM when upstream gas supply capacity may be insufficient to allow for operation of the turbine.

   c. Please specify the timing and duration of each such interruption over the past five years.

RESPONSE:

a. PGW has never declined to provide or otherwise interrupted the ARS.
b. Grays Ferry has very rarely been interrupted and has 35,000 Dth/day firm capacity which is adequate to operate the combustion turbine-generator and meet its electric sales obligation. If Grays Ferry is dispatched for full load and needs to engage the Steam Turbine, it does so by operating its auxiliary boiler on oil.
c. TETCO interruptions during the recent five-year period occurred on:
   4/21/2018 – 4/27/2018
   6/4/2019 – 6/9-2019
   10/1/19 – 10/23/2019
   5/27/20
   5/24/2021 – 6/1/2021

   The TETCO interruptions occur during shoulder periods when PJM has an abundance of supply. The interruptions coincide with Grays Ferry's practice of a spring outage in preparation for summer and a fall outage in preparation for winter.

Provided By: James L. Crist

9. Reference Statement JC-1, page 14, O&M Expense:

   a. Please provide Mr. Crist's estimate of PGW's cost for maintaining metering and regulating equipment for GFCP, and the basis therefor.

   b. Please confirm that systemwide claimed PGW O&M costs for accounts 874 and 887 in the cost allocation study provided in response to Complainants-I-13 is in excess of $34 million, and that overall distribution O&M expense exceeds $86 million. If you cannot confirm, please provide references to the correct values from that proceeding.

RESPONSE:

a. Mr. Crist did not provide an estimate for metering and regulation maintenance in direct testimony. Such an estimate should be a direct allocation of the two meters at Grays Ferry.

b. Mr. Crist confirms that the costs for accounts 874 and 887 in the cost allocation study provided in response to Complainants-I-13 is in excess of $34 million, and that overall distribution O&M expense exceeds $86 million. Mr. Crist disagrees with PGW's allocation of expenses to Grays Ferry.

Provided By: James L. Crist

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Grays Ferry Cogeneration Partnership and Vicinity Energy Philadelphia, Inc. Complainants	:	
	:	**Docket No. C-2021-3029259**
v.	:	
Philadelphia Gas Works	:	

VERIFICATION

I, Robert D. Knecht, hereby state that the facts set forth in my Rebuttal Testimony labelled OSBA Statement No. 1-R and the associated Exhibits RDK-1 and RDK-2 are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 19 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: June 17, 2022

Robert D. Knecht

EXHIBIT RDK-3

Docket No. C-2021-3029259 OSBA Statement No. 1-S

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Grays Ferry Cogeneration Partnership and Vicinity Energy Philadelphia, Inc. Complainants	:	
	:	**Docket No. C-2021-3029259**
v.	:	
Philadelphia Gas Works	:	

Surrebuttal Testimony of

ROBERT D. KNECHT

On Behalf of the

Pennsylvania Office of Small Business Advocate

Topics:

Base Distribution Rates
Capacity Release
Gas-on-Steam Competition

Date Served: July 22, 2022

Date Submitted for the Record: _____

SURREBUTTAL TESTIMONY OF ROBERT D. KNECHT

Q. Mr. Knecht, please state your name and briefly describe your qualifications.

A. My name is Robert D. Knecht. I submitted rebuttal testimony and associated exhibits earlier in this proceeding, and my qualifications were detailed therein.

Q. What is the purpose of this surrebuttal testimony?

A. This surrebuttal testimony responds to certain aspects of the rebuttal testimony submitted by Philadelphia Gas Works ("PGW" or "the Company"), witnesses John C. Zuk, Ryan E. Reeves, Florian Teme, Constance E. Heppenstall and Frank Lacey. I also respond briefly to the rebuttal testimony of Pennsylvania Office of Consumer Advocate ("OCA") witness Jerome D. Mierzwa.

Overall, the Company's rebuttal testimony in this matter has little impact on the observations and conclusions in my rebuttal testimony. Moreover, it provides little in the way of clarification for the issues flagged in my rebuttal testimony as requiring additional explanation. This testimony therefore summarizes my current conclusions, and it addresses certain specific matters that arose in rebuttal.

Initialisms and acronyms in my rebuttal testimony apply also to this surrebuttal testimony.

Q. Do you agree with the Company's position advanced by Witness Zuk at page 15 that with the expiration of the 25-year contractual arrangements between PGW and Complainants ("Contract"), the options for continuing to provide distribution delivery service to GFCP are either service under existing tariff rate classes or by defining a new tariff service for a single customer?

A. I agree that these are two options. I believe that modifying Rate IT to allow for an extremely high-volume service (say, "IT-F"), or modifying Rate IT to allow for negotiated

"flex" rates in certain circumstances are also potential options, depending on how the Commission determines future rates for GFCP should be set.[1]

However, as the Company has advanced a cost of service allocation study ("CSAS") that treats GFCP as a separate class with one customer, and the Company concludes that GFCP has no credible bypass opportunities (discussed below), it appears that PGW sees some potential value in the single customer rate class approach.

Q. Turning to the primary area of disagreement for setting base rates, do you agree with PGW's position that the cost basis for distribution base rates should treat ARS volumes as being transported using PGW's distribution system, rather than treating the ARS arrangement as a gas swap with no physical implications?

A. No. I did not see any evidence from PGW that ARS gas supplies received at Skippack are physically transported to the GFCP via Passyunk, and PGW's testimony generally confirms that from an operations standpoint, GFCP is served almost entirely by the two main segments denoted the Naphtha Line and the Distribution Extension. PGW's argument that the ARS service could not be provided without the existence of the PGW distribution system is not particularly credible, because (a) it does not physically reflect how gas flows on PGW's system and therefore does not reflect distribution cost causation, and (b) it is not correct that a gas swap arrangement requires linking distribution system.

Regarding the latter argument, consider an alternative in which there is one large industrial Customer A at Tetco Gate 060 but which holds Tetco capacity to Gate 034, and one large industrial Customer B at Gate 034, but with Tetco capacity on the Philadelphia Lateral to Gate 060. These two customers could engage in a gas swap, without the need for any distribution system. Such a transaction would presumably reflect the difference in the market value of capacity to Gate 060 from the market value of capacity to Gate 034, but it would not need to reflect any costs of transporting gas between those two locations, because no gas would need to be cross-transported.

[1] PGW apparently has the option of negotiating a flex rate in Rule 2.3, as explained at footnote 3 of PGW Witness Teme's rebuttal testimony.

PGW Witness Reeves rebuttal analysis of the subsidies associated with ARS at pages 8 to 11 is telling in that respect. Witness Reeves concludes that, without the need to provide Philadelphia Lateral capacity through Gate 060 to GFPC as part of the ARS arrangement, PGW would be able to release that capacity to a third party for 25-60 cents per Dth. This analysis first confirms that ARS volumes used by GFCP are physically delivered through Gate 060, and are delivered using only the Naphtha and Distribution Extension lines. Second, this analysis recognizes that the value of the ARS arrangement to GFCP is related to the value of capacity on the Philadelphia Lateral, rather than costs related to transporting gas over PGW's distribution system. Finally, I note that, in the analysis, Witness Reeves either ignored the implied pipeline capacity value associated with the GFCP deliveries to Skippack at Gate 034, or he deemed that value to be zero. If PGW did not have to provide ARS service to GFCP, and it released all the Philadelphia Lateral capacity that currently provided that service to third parties, PGW would still need to be able to arrange for upstream capacity to deliver some of the foregone ARS supplies.

Q. Having said that, do you agree with PGW that if it, implicitly or explicitly, continues to provide quasi-interruptible capacity on the Philadelphia Lateral to GFCP, the charge for that service should reflect the market value of that capacity?

A. Yes. PGW's capacity on the Philadelphia Lateral is paid by GCR customers. Since GFCP chose not to secure the capacity it needs to meet peak winter demands, GCR customers should be compensated for providing that capacity when it is most valuable.[2]

That result could be achieved either by (a) releasing winter capacity on the Philadelphia Lateral to GFCP on a recallable basis at market prices, or (b) continuing the ARS arrangement and pricing the service at the difference between market prices for capacity on the Philadelphia Lateral and market prices for capacity to Skippack.

[2] To the extent Complainants argue that PGW has a legal obligation to release this capacity to GFCP at rates below the market value, I take no position and defer to the attorneys.

This arrangement would need to be regularly updated to reflect changing market conditions, and it would presumably continue until GFCP can directly arrange for the capacity that it requires.

Q. Do you agree with PGW that its charges for bundled sales service to Complainants when the Philadelphia Lateral is not operating are not reasonably priced in the current contract, as discussed by Witness Reeves at pages 11-12?

A. Generally I do. It is not entirely clear to me whether those supplies are delivered to Complainants at the CHP plant or at other locations. Either way, however, these supplies are delivered using the PGW gas distribution system. Both the delivery charges and gas supply charges should therefore reflect the appropriate regular tariff rates. If a special distribution rate is developed for GFCP, it should apply only to deliveries made through the Naphtha and Distribution Extension lines.

Q. If base rates for volumes to GFCP (other than bundled sales volumes) are not set based on the Company's assumption that ARS volumes are delivered from Skippack to Passyunk, how should those rates be set?

A. As I explained in my direct testimony the options include using either a flex bypass rate approach or a fully embedded cost rate approach, in which a direct assignment approach is used for the relevant plant costs.

Q. Witness Teme addresses GFCP's potential for bypass at pages 7 to 9 of the rebuttal testimony. Do you have any observations?

A. Witness Teme concludes that GFCP does not, at least at present, have a credible bypass threat. As I indicated in my direct testimony, I agree that GFCP has not presented any evidence that it does have such an opportunity, even over the longer term. I am advised by counsel that OSBA will review GFCP's surrebuttal testimony and evaluate the credibility of this option as necessary in its briefs in this matter.

Q. If the Commission determines that base rates for GFCP should be based on an embedded cost of service study ("CSAS"), please detail the modifications that you would recommend to the CSAS filed by PGW Witness Heppenstall at Exhibit CEH-1.

A. First, as a matter of clarification, I note that Witness Heppenstall indicates at page 7 that the costs assigned to GFCP in the PGW CSAS are $8.035 million, or $0.60 per mcf. In fact, the values cited by Witness Heppenstall are allocated costs *net* of OPEB and USEC charges which GFCP does not currently pay. Thus, the gross base rates cost for GFCP in the filed CSAS (Schedule C page 4) is $10.787 million, or $0.81 per mcf.

For the reasons detailed in my direct testimony, it would not be uncommon in Pennsylvania for the gross plant, accumulated depreciation, and annual depreciation costs to be allocated based on a direct assignment of costs of facilities used by GFCP. Such a direct assignment approach should reasonably include the relevant gate station costs, mains, meters and any relevant system regulating equipment. Due to PGW's poor record-keeping, these values would presumably need to be estimated. The gross plant values should reflect costs before GFCP's CIAC, in order that general plant, operating costs and administrative costs that support that plant are reasonably assigned to GFCP through the logic of the GFCP. GFCP's rate base then should be credited for the effects of CIAC, for the purposes of allocating depreciation, interest and income costs.[3]

Witness Heppenstall makes a point at page 5 of indicating that costs associated with PGW's LNG storage facilities are not assigned to Rate IT customers or GFCP, because these customers are transportation customers who do not rely on those facilities. Witness Heppenstall's claim is rebutted by PGW Witness Teme, who indicates, "In other words, PGW's LNG facilities tend to mitigate against most (but not all) of the circumstances that could trigger an interruption or curtailment in service for Rate IT customers." And Witness Teme's testimony is rebutted by the Company's response to OSBA-I-9(c) in its last base rates case, wherein the Company indicated, "Other Storage Expense includes the expense of LNG storage. Interruptible customers are transportation customers and do not benefit from the storage of LNG, therefore, they are not allocated any costs related to storage." It is respectfully recommended that PGW develop a consistent position regarding whether its

[3] PGW CSAS uses a common approach in cost allocation, namely that O&M and A&G costs are allocated based on the overall allocation of plant costs. However, if the GFCP gross plant is credited for CIAC, the CSAS will not reasonably allocate the O&M and overhead costs that PGW does incur to operate those facilities. Thus, the rate base credit associated with CIAC should only apply to rate base related costs, and not the associated O&M and overhead.

LNG capacity reduces interruptions for Rate IT and potentially GFCP customers, and allocate LNG costs accordingly.

PGW allocates a significant share of OPEB costs based on volumes, including GFCP ARS volumes. OPEB costs are labor-related costs, and should all be allocated using the labor allocation factor. That PGW collects these costs using a reconcilable volumetric charge is not relevant, because it does not reflect cost causation which is the primary principle for cost allocation. PGW collects many costs using volumetric charges, most of which are neither causally related nor allocated to volumes.

In its proposed CSAS, PGW allocates some $20.9 million of costs associated with its universal service program (CRP, arrearage forgiveness and LIURP) to firm service customers based on volume, including ARS volumes for GFCP, representing about 40 cents per mcf. As PGW's current universal service charge ("USEC") exceeds $2 per mcf, it is not clear where or how the balance of universal service costs are allocated in the filed CSAS. While I am not contesting PGW's long-standing policy of assigning universal service costs to all rate classes in this proceeding, it is unreasonable to exempt the Rate IT class from this obligation, particularly as it is acknowledged that Rate IT is essentially firm service. This, of course, is an issue for a base rates proceeding. However, there is also zero logic for assigning a subset of these costs to GFCP based on ARS volumes only, as proposed by PGW. There is no basis for concluding that GFCP's obligation for universal service costs should be proportion to volumes subject to a gas swap arrangement, and not based on overall volumes. The Company must develop a reasonable method for assigning universal service costs to all customer classes. Given the relative magnitude of distribution tariff charges, however, allocating USEC costs to GFCP (and potentially Rate IS) may require a modification to the current volumetric allocation method for these costs.

Q. Please comment on OCA Witness Mierzwa's proposal regarding cost allocation.

A. Witness Mierzwa accepts most of the Company's cost allocation analysis, and I disagree with that for the reasons listed above.

Witness Mierzwa also argues that mains should be allocated using a 50/50 weighted "peak and average" ("P&A") allocator, rather than a 50/50 "average-and-excess" allocator.

There has been much debate recently regarding the advantages and disadvantages of these alternative allocators in Pennsylvania, with the Commission recently approving both a 50/50 P&A approach (Columbia Gas) and a load-factor weighted A&E approach (PECO Gas). Without passing judgement on the relative merits of the two approaches, I observe that the 50/50 A&E approach is consistent with the Commission's decision for PGW at Docket No. R-00061931, and it produces results that generally lie between the P&A method adopted for Columbia and the A&E method adopted for PECO Gas.

Q. Do you have any comments on PGW Witness Lacey's rebuttal testimony?

A. As I understand it, two of Witness Lacey's conclusions are (a) the Commission has not required the steam utility VEPI to accurately calculate the cost of producing steam because it overstates fuel costs or fails to reasonably credit VEPI's cogen electric revenues to the fuel costs, and (b) VEPI typically sets contract prices below the regulated cost-based rates.

Regarding the former, I note that Mr. Lacey's observation would appear to be an issue better addressed in regulatory proceedings for the steam utility. For the purposes of this proceeding, I have simply assumed that the Commission has reasonably allocated costs to the steam business.

Second, as I understand Witness Lacey's description, it would appear that the competitive discounts offered by VEPI are borne by VEPI shareholders and not passed on to ratepayers. As PGW (frequently) observes, any costs it incurs are eventually passed back to ratepayers. Thus, PGW is competing with ratepayer funds, while VEPI is competing with shareholder funds. As such, I retain my view that Complainants' concerns about unfair competition should be given a thorough hearing.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Grays Ferry Cogeneration Partnership and Vicinity Energy Philadelphia, Inc. Complainants	:	
	:	**Docket No. C-2021-3029259**
v.	:	
Philadelphia Gas Works	:	

VERIFICATION

I, Robert D. Knecht, hereby state that the facts set forth in my Surrebuttal Testimony labelled OSBA Statement No. 1-S are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 19 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: July 22, 2022

Robert D. Knecht

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**Docket No. R-2023-3038069**
PHILADELPHIA GAS WORKS	:	

VERIFICATION

I, Robert D. Knecht, hereby state that the facts set forth in my Rebuttal Testimony labelled OSBA Statement No. 1-R and the associated Exhibits RDK-1, RDK-2 and RDK-3 are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 19 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: April 13, 2023

Robert D. Knecht

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	**Docket No. R-2023-3038069**
	:	
Philadelphia Gas Works 1307(f)	:	

CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the foregoing have been served via email (*unless other noted below*) upon the following persons, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

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DATE: April 13, 2023 `

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