

**Tab 4**

Philadelphia Gas Works  
 Forecasted Summary of Total Fuel Purchased  
 January 2013-August 2014

Schedule 3  
 item 53.64(c)(1)

Volumes (Dth)

	01/01/2013: Jan	02/01/2013: Feb	03/01/2013: Mar	04/01/2013: Apr	05/01/2013: May	06/01/2013: Jun	07/01/2013: Jul	08/01/2013: Aug	09/01/2013: Sep	10/01/2013: Oct
Spot Purchases - Transco	941,880	1,783,250	2,475,354	3,180,976	2,471,833	1,119,412	1,048,643	1,446,903	1,835,499	2,991,679
Spot Purchases - Tetco	196,029	1,105,228	810,230	715,780	793,184	758,961	764,442	764,442	764,442	766,428
Transco Supply 1	-	-	-	-	-	-	-	-	-	-
Transco Supply 2	412,834	450,000	500,000	365,000	261,000	120,000	62,000	-	25,000	175,000
Transco Supply 3	-	-	-	-	-	-	-	-	-	-
Transco Supply 4	-	-	-	-	-	-	-	-	-	-
Transco Supply 5	-	-	-	-	-	-	-	-	-	-
Transco Supply 6	310,000	280,000	-	-	-	-	-	-	-	-
Transco Supply 7	572,478	460,000	268,554	200,000	-	580,000	600,000	260,000	120,000	220,000
Transco Supply 8	310,000	-	-	-	-	-	-	-	-	-
Transco Supply 9	-	-	-	-	-	-	-	-	-	-
Transco Supply 10	-	-	-	-	-	-	-	-	-	-
Transco Supply 11	-	-	-	-	-	-	-	-	-	-
Transco Supply 12	-	-	-	-	-	-	-	-	-	-
Transco Supply 13	-	-	-	-	-	-	-	-	-	-
Transco Supply 14	155,000	-	-	-	-	-	-	-	-	-
Transco Supply 15	-	-	-	-	-	-	-	-	-	-
Transco Supply 16	-	-	-	-	-	-	-	-	-	-
Transco Supply 17	-	-	-	-	-	-	-	-	-	-
Transco Supply 18	-	-	-	-	-	-	-	-	-	-
Transco Supply 19	-	-	-	-	-	-	-	-	-	-
Transco Supply 20	-	-	-	-	-	-	-	-	-	-
Transco Supply 21	-	-	-	-	-	-	-	-	-	-
Transco Supply 22	155,000	140,000	-	-	-	-	-	-	-	-
Transco Supply 23	310,000	280,000	155,000	-	-	-	-	-	-	-
Transco Supply 24	-	140,000	155,000	-	-	-	-	-	-	-
Transco Supply 25	-	-	-	-	-	-	-	-	-	-
Transco Supply 26	155,000	140,000	155,000	-	-	-	-	-	-	-
Transco Supply 27	155,000	140,000	155,000	-	-	-	-	-	-	-
Transco Supply 28	155,000	140,000	155,000	-	-	-	-	-	-	-
Tetco Supply 1	62,500	62,500	85,124	62,500	-	7,981	7,981	7,981	-	95,481
Tetco Supply 2	-	-	-	-	-	-	-	-	-	-
Tetco Supply 3	155,000	-	-	-	-	-	-	-	-	-
Tetco Supply 4	-	-	-	-	-	-	-	-	-	-
Tetco Supply 5	-	-	-	-	-	-	-	-	-	-
Tetco Supply 6	-	-	-	-	-	-	-	-	-	-
Tetco Supply 7	-	-	-	-	-	-	-	-	-	-
Tetco Supply 8	-	-	-	-	-	-	-	-	-	-
Tetco Supply 9	-	-	-	-	-	-	-	-	-	-
Tetco Supply 10	-	-	-	-	-	-	-	-	-	-
Tetco Supply 11	-	-	-	-	-	-	-	-	-	-
Tetco Supply 12	-	-	-	-	-	-	-	-	-	-
Tetco Supply 13	775,000	787,500	967,500	107,280	105,000	17,500	17,500	17,500	-	227,500
Tetco Supply 14	310,000	280,000	155,000	-	-	-	-	-	-	-
Tetco Supply 15	-	-	-	-	-	-	-	-	-	-
Tetco Supply 16	310,000	140,000	155,000	-	-	-	-	-	-	-
Tetco Supply 17	310,000	280,000	310,000	-	-	-	-	-	-	-
Tetco Supply 18	-	-	-	-	-	-	-	-	-	-
Tetco Supply 19	-	-	-	-	-	-	-	-	-	-
Tetco Supply 20	-	-	-	-	-	-	-	-	-	-
Tetco Supply 21	-	-	-	-	-	-	-	-	-	-
Tetco Supply 22	155,000	140,000	-	-	-	-	-	-	-	-
Tetco Supply 23	155,000	140,000	155,000	-	-	-	-	-	-	-
<b>Total Volumes</b>	<b>6,060,721</b>	<b>6,888,478</b>	<b>6,656,761</b>	<b>4,631,536</b>	<b>3,631,017</b>	<b>2,583,854</b>	<b>2,500,566</b>	<b>2,496,826</b>	<b>2,744,941</b>	<b>4,476,088</b>

Philadelphia Gas Works  
 Forecasted Summary of Total Fuel Purchased  
 January 2013-August 2014

Schedule 3  
 item 53.64(c)(1)

**Volumes (Dth)**

	11/01/2013: Nov	12/01/2013: Dec	01/01/2014: Jan	02/01/2014: Feb	03/01/2014: Mar	04/01/2014: Apr	05/01/2014: May	06/01/2014: Jun	07/01/2014: Jul	08/01/2014: Aug
Spot Purchases - Transco	3,519,678	4,427,061	4,137,732	3,902,127	3,428,584	3,222,207	2,586,559	1,766,669	1,518,348	1,535,006
Spot Purchases - Teteo	1,111,129	1,946,288	2,473,569	2,009,283	1,737,589	573,677	337,946	276,655	286,194	286,194
Transco Supply 1	-	-	-	-	-	-	-	-	-	-
Transco Supply 2	225,000	-	-	-	475,000	325,000	100,000	-	-	-
Transco Supply 3	-	-	-	-	-	-	-	-	-	-
Transco Supply 4	-	-	-	-	-	-	-	-	-	-
Transco Supply 5	-	-	-	-	-	-	-	-	-	-
Transco Supply 6	-	-	-	-	-	-	-	-	-	-
Transco Supply 7	160,000	-	-	-	380,000	160,000	200,000	240,000	260,000	240,000
Transco Supply 8	-	-	-	-	-	-	-	-	-	-
Transco Supply 9	-	-	-	-	-	-	-	-	-	-
Transco Supply 10	-	-	-	-	-	-	-	-	-	-
Transco Supply 11	-	-	-	-	-	-	-	-	-	-
Transco Supply 12	-	-	-	-	-	-	-	-	-	-
Transco Supply 13	-	-	-	-	-	-	-	-	-	-
Transco Supply 14	-	-	-	-	-	-	-	-	-	-
Transco Supply 15	-	-	-	-	-	-	-	-	-	-
Transco Supply 16	-	-	-	-	-	-	-	-	-	-
Transco Supply 17	-	-	-	-	-	-	-	-	-	-
Transco Supply 18	-	-	-	-	-	-	-	-	-	-
Transco Supply 19	-	-	-	-	-	-	-	-	-	-
Transco Supply 20	-	-	-	-	-	-	-	-	-	-
Transco Supply 21	-	-	-	-	-	-	-	-	-	-
Transco Supply 22	-	-	-	-	-	-	-	-	-	-
Transco Supply 23	-	-	-	-	-	-	-	-	-	-
Teteo Supply 1	150,000	347,125	387,500	350,000	175,000	125,114	-	-	-	-
Teteo Supply 2	-	-	-	-	-	-	-	-	-	-
Teteo Supply 3	-	-	-	-	-	-	-	-	-	-
Teteo Supply 4	-	-	-	-	-	-	-	-	-	-
Teteo Supply 5	-	-	-	-	-	-	-	-	-	-
Teteo Supply 6	-	-	-	-	-	-	-	-	-	-
Teteo Supply 7	-	-	-	-	-	-	-	-	-	-
Teteo Supply 8	-	-	-	-	-	-	-	-	-	-
Teteo Supply 9	-	-	-	-	-	-	-	-	-	-
Teteo Supply 10	-	-	-	-	-	-	-	-	-	-
Teteo Supply 11	-	-	-	-	-	-	-	-	-	-
Teteo Supply 12	-	-	-	-	-	-	-	-	-	-
Teteo Supply 13	356,247	472,060	526,313	472,692	428,708	373,400	89,576	9,540	9,540	9,540
Teteo Supply 14	-	-	-	-	-	-	-	-	-	-
Teteo Supply 15	-	-	-	-	-	-	-	-	-	-
Teteo Supply 16	-	-	-	-	-	-	-	-	-	-
Teteo Supply 17	-	-	-	-	-	-	-	-	-	-
Teteo Supply 18	-	-	-	-	-	-	-	-	-	-
Teteo Supply 19	-	-	-	-	-	-	-	-	-	-
Teteo Supply 20	-	-	-	-	-	-	-	-	-	-
Teteo Supply 21	-	-	-	-	-	-	-	-	-	-
Teteo Supply 22	-	-	-	-	-	-	-	-	-	-
Teteo Supply 23	-	-	-	-	-	-	-	-	-	-
<b>Total Volumes</b>	<b>5,522,055</b>	<b>7,192,534</b>	<b>7,525,114</b>	<b>6,734,103</b>	<b>6,624,882</b>	<b>4,779,398</b>	<b>3,314,081</b>	<b>2,292,863</b>	<b>2,074,083</b>	<b>2,070,740</b>

Philadelphia Gas Works  
Forecasted Summary of Total Fuel Purchased  
January 2013-August 2014

Schedule 3  
Item 53.64(c)(1)

	01/01/2013: Jan	02/01/2013: Feb	03/01/2013: Mar	04/01/2013: Apr	05/01/2013: May	06/01/2013: Jun	07/01/2013: Jul	08/01/2013: Aug	09/01/2013: Sep	10/01/2013: Oct
Williams	\$ 2,683,077	\$ 2,679,196	\$ 3,335,002	\$ 3,295,945	\$ 3,234,013	\$ 3,195,765	\$ 3,185,796	\$ 3,185,785	\$ 3,077,738	\$ 3,136,156
Texas Eastern	\$ 3,013,146	\$ 2,867,808	\$ 2,690,538	\$ 2,227,489	\$ 2,214,517	\$ 2,220,252	\$ 2,207,398	\$ 2,207,398	\$ 1,894,492	\$ 1,890,023
Dominion	\$ 135,062	\$ 126,066	\$ 121,767	\$ 124,892	\$ 130,537	\$ 130,184	\$ 130,537	\$ 130,537	\$ 130,184	\$ 130,184
Equitrans	\$ 48,734	\$ 48,367	\$ 48,085	\$ 12,399	\$ 12,399	\$ 12,399	\$ 12,399	\$ 12,399	\$ 12,399	\$ 12,399
Spot Purchases - Transco	\$ 3,211,812	\$ 6,205,709	\$ 8,614,231	\$ 11,165,225	\$ 8,775,009	\$ 4,041,078	\$ 3,827,547	\$ 5,324,603	\$ 6,772,990	\$ 11,129,045
Spot Purchases - Tecto	\$ 648,854	\$ 3,757,775	\$ 2,754,784	\$ 2,455,125	\$ 2,752,348	\$ 2,608,531	\$ 2,729,058	\$ 2,751,991	\$ 2,759,636	\$ 2,789,797
Transco Supply 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 2	\$ 1,514,327	\$ 1,662,250	\$ 1,846,563	\$ 1,368,387	\$ 1,021,339	\$ 519,525	\$ 331,932	\$ 106,563	\$ 195,375	\$ 757,563
Transco Supply 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 6	\$ 1,081,900	\$ 910,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 7	\$ 1,955,249	\$ 1,603,600	\$ 937,667	\$ 705,000	\$ 3,100	\$ 2,096,800	\$ 2,193,100	\$ 959,900	\$ 445,800	\$ 821,500
Transco Supply 8	\$ 1,026,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 14	\$ 520,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 21	\$ 540,950	\$ 488,600	\$ 540,950	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 22	\$ 1,106,700	\$ 967,400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 23	\$ -	\$ 470,400	\$ 520,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 24	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 26	\$ 533,200	\$ 481,600	\$ 533,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 27	\$ 544,825	\$ 492,100	\$ 544,825	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transco Supply 28	\$ 536,300	\$ 484,400	\$ 536,300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 1	\$ 260,156	\$ 265,781	\$ 342,701	\$ 267,656	\$ 53,281	\$ 81,456	\$ 81,775	\$ 82,014	\$ 53,281	\$ 400,834
Tecto Supply 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 3	\$ 511,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 13	\$ 2,706,300	\$ 2,735,950	\$ 3,225,950	\$ 370,596	\$ 367,063	\$ 64,400	\$ 65,188	\$ 65,713	\$ 2,625	\$ 830,813
Tecto Supply 14	\$ 1,018,350	\$ 948,500	\$ 511,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 16	\$ 1,046,250	\$ 439,600	\$ 489,025	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 17	\$ 1,091,200	\$ 907,900	\$ 1,005,175	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 21	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 22	\$ 541,725	\$ 486,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tecto Supply 23	\$ 503,750	\$ 459,480	\$ 508,710	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FT PAYBACK ADJUSTMENT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 205,473	\$ 207,720	\$ 209,404	\$ 209,967	\$ 211,651
<b>Total Costs</b>	<b>\$ 26,780,267</b>	<b>\$ 29,488,983</b>	<b>\$ 29,107,773</b>	<b>\$ 21,992,715</b>	<b>\$ 18,563,604</b>	<b>\$ 14,764,916</b>	<b>\$ 14,557,010</b>	<b>\$ 14,617,498</b>	<b>\$ 15,134,553</b>	<b>\$ 21,686,661</b>

FT PAYBACK ADJUSTMENT

March 2013

Philadelphia Gas Works  
Forecasted Summary of Total Fuel Purchased  
January 2013-August 2014

Schedule 3  
Item 53.64(c)(1)

	11/01/2013:	Nov	12/01/2013:	Dec	01/01/2014:	Jan	02/01/2014:	Feb	03/01/2014:	Mar	04/01/2014:	Apr	05/01/2014:	May	06/01/2014:	Jun	07/01/2014:	Jul	08/01/2014:	Aug
Williams	\$	3,151,544	\$	3,205,586	\$	3,234,033	\$	3,226,435	\$	3,363,899	\$	3,347,599	\$	3,319,911	\$	3,280,862	\$	3,261,383	\$	3,261,224
Texas Eastern	\$	2,246,313	\$	2,620,497	\$	2,679,517	\$	2,643,240	\$	2,683,949	\$	2,398,973	\$	2,344,054	\$	2,344,132	\$	2,335,407	\$	2,335,407
Dominion	\$	119,601	\$	122,972	\$	123,928	\$	123,136	\$	120,230	\$	119,601	\$	119,601	\$	119,601	\$	119,601	\$	119,601
Equitrans	\$	12,399	\$	26,538	\$	26,538	\$	26,538	\$	26,538	\$	12,399	\$	12,399	\$	12,399	\$	12,399	\$	12,399
Spot Purchases - Transco	\$	13,443,172	\$	17,796,785	\$	17,088,834	\$	16,115,786	\$	13,954,339	\$	12,759,938	\$	10,294,505	\$	7,066,676	\$	6,134,127	\$	6,232,124
Spot Purchases - Tectco	\$	4,153,622	\$	7,668,373	\$	10,017,954	\$	8,137,595	\$	6,932,980	\$	2,225,869	\$	1,317,990	\$	1,084,486	\$	1,133,330	\$	1,139,054
Transco Supply 1	\$	962,625	\$	106,563	\$	106,563	\$	96,250	\$	2,039,813	\$	1,390,125	\$	504,563	\$	103,125	\$	106,563	\$	106,563
Transco Supply 2	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 3	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 4	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 5	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 6	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 7	\$	614,200	\$	3,100	\$	3,100	\$	2,800	\$	1,549,700	\$	636,600	\$	799,100	\$	963,000	\$	1,053,500	\$	977,500
Transco Supply 8	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 9	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 10	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 11	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 12	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 13	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 14	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 15	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 16	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 17	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 18	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 19	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 20	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 21	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 22	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transco Supply 23	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 1	\$	614,281	\$	1,420,952	\$	1,622,656	\$	1,470,781	\$	751,531	\$	538,725	\$	53,281	\$	53,281	\$	53,281	\$	53,281
Tectco Supply 2	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 3	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 4	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 5	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 6	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 7	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 8	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 9	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 10	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 11	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 12	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 13	\$	1,334,989	\$	1,862,630	\$	2,134,280	\$	1,916,854	\$	1,713,258	\$	1,451,417	\$	352,058	\$	40,021	\$	40,490	\$	40,681
Tectco Supply 14	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 15	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 16	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 17	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 18	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 19	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 20	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 21	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 22	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tectco Supply 23	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
FT PAYBACK ADJUSTMENT	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	393,274	\$	397,160	\$	399,108
<b>Total Costs</b>	\$	26,656,747	\$	34,833,997	\$	37,037,404	\$	33,759,416	\$	33,136,237	\$	24,881,245	\$	19,117,462	\$	14,674,309	\$	13,852,921	\$	13,878,726

March 2013

4

Philadelphia Gas Works  
 Forecasted Summary of Total Fuel Purchased  
 January 2013-August 2014

Schedule 3  
 item 53.64(C)(1)

**TRANSCONTINENTAL**

Cost of Natural Gas

Suppliers	01/01/2013: Jan	02/01/2013: Feb	03/01/2013: Mar	04/01/2013: Apr	05/01/2013: May	06/01/2013: Jun	07/01/2013: Jul	08/01/2013: Aug	09/01/2013: Sep	10/01/2013: Oct
TR Spot	\$ 3,211,812	\$ 6,205,709	\$ 8,614,231	\$ 11,165,225	\$ 8,775,009	\$ 4,041,078	\$ 3,827,547	\$ 5,324,603	\$ 6,772,990	\$ 11,129,045
Supplier 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 2	\$ 1,514,327	\$ 1,662,250	\$ 1,846,563	\$ 1,368,387	\$ 1,021,339	\$ 519,525	\$ 331,932	\$ 106,563	\$ 195,375	\$ 757,563
Supplier 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 6	\$ 1,081,900	\$ 910,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 7	\$ 1,955,249	\$ 1,603,600	\$ 937,667	\$ 705,000	\$ 3,100	\$ 2,096,800	\$ 2,193,100	\$ 959,900	\$ 445,800	\$ 821,500
Supplier 8	\$ 1,026,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 14	\$ 520,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 21	\$ 540,950	\$ 488,600	\$ 540,950	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 22	\$ 1,106,700	\$ 967,400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 23	\$ -	\$ 470,400	\$ 520,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 24	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 26	\$ 533,200	\$ 481,600	\$ 533,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 27	\$ 544,825	\$ 492,100	\$ 544,825	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 28	\$ 536,300	\$ 484,400	\$ 536,300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Suppliers</b>	\$ 12,572,162	\$ 13,766,059	\$ 14,074,536	\$ 13,238,612	\$ 9,799,447	\$ 6,657,403	\$ 6,352,579	\$ 6,391,066	\$ 7,414,165	\$ 12,708,107

Transportation Costs

Tr Spot -Sup 28	\$ 179,815	\$ 179,241	\$ 194,299	\$ 172,402	\$ 125,897	\$ 82,800	\$ 77,680	\$ 77,669	\$ 90,774	\$ 158,629
Williams Total	\$ 179,815	\$ 179,241	\$ 194,299	\$ 172,402	\$ 125,897	\$ 82,800	\$ 77,680	\$ 77,669	\$ 90,774	\$ 158,629
<b>Total Costs</b>	\$ 12,751,978	\$ 13,945,301	\$ 14,268,834	\$ 13,411,014	\$ 9,925,345	\$ 6,740,203	\$ 6,430,260	\$ 6,468,735	\$ 7,504,938	\$ 12,866,736

Philadelphia Gas Works  
 Forecasted Summary of Total Fuel Purchased  
 January 2013-August 2014

Schedule 3  
 item 53.64(c)(1)

**TRANSCONTINENTAL**

**Cost of Natural Gas**

<u>Suppliers</u>	11/01/2013:	Nov	12/01/2013:	Dec	01/01/2014:	Jan	02/01/2014:	Feb	03/01/2014:	Mar	04/01/2014:	Apr	05/01/2014:	May	06/01/2014:	Jun	07/01/2014:	Jul	08/01/2014:	Aug
TR Spot	\$ 13,445,172	\$ 17,796,785	\$ 17,088,834	\$ 16,115,786	\$ 13,954,339	\$ 12,759,938	\$ 10,294,505	\$ 7,066,676	\$ 6,134,127	\$ 6,232,124										
Supplier 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 2	\$ 962,625	\$ 106,563	\$ 106,563	\$ 96,250	\$ 2,039,813	\$ 1,390,125	\$ 504,563	\$ 103,125	\$ 106,563	\$ 106,563										
Supplier 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 7	\$ 614,200	\$ 3,100	\$ 3,100	\$ 2,800	\$ 1,549,700	\$ 636,600	\$ 799,100	\$ 963,000	\$ 1,053,500	\$ 977,500										
Supplier 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 21	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 22	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 23	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 24	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 26	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 27	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 28	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Suppliers</b>	<b>\$ 15,021,997</b>	<b>\$ 17,906,448</b>	<b>\$ 17,198,496</b>	<b>\$ 16,214,836</b>	<b>\$ 17,543,851</b>	<b>\$ 14,786,662</b>	<b>\$ 11,598,167</b>	<b>\$ 8,132,801</b>	<b>\$ 7,294,190</b>	<b>\$ 7,316,187</b>										

**Transportation Costs**

Tr Spot-Sup 28	\$ 185,457	\$ 210,268	\$ 210,654	\$ 190,928	\$ 203,453	\$ 176,078	\$ 137,100	\$ 95,309	\$ 84,465	\$ 84,306										
Williams Total	\$ 185,457	\$ 210,268	\$ 210,654	\$ 190,928	\$ 203,453	\$ 176,078	\$ 137,100	\$ 95,309	\$ 84,465	\$ 84,306										
<b>Total Costs</b>	<b>\$ 15,207,454</b>	<b>\$ 18,116,716</b>	<b>\$ 17,409,151</b>	<b>\$ 16,405,764</b>	<b>\$ 17,747,305</b>	<b>\$ 14,962,740</b>	<b>\$ 11,735,268</b>	<b>\$ 8,228,110</b>	<b>\$ 7,378,654</b>	<b>\$ 7,400,492</b>										

Philadelphia Gas Works  
 Forecasted Summary of Total Fuel Purchased  
 January 2013-August 2014

Schedule 3  
 item 53.64(c)(1)

**TRANSCONTINENTAL**

**Volumes (Dth)**

<u>Suppliers</u>	<u>01/01/2013: Jan</u>	<u>02/01/2013: Feb</u>	<u>03/01/2013: Mar</u>	<u>04/01/2013: Apr</u>	<u>05/01/2013: May</u>	<u>06/01/2013: Jun</u>	<u>07/01/2013: Jul</u>	<u>08/01/2013: Aug</u>	<u>09/01/2013: Sep</u>	<u>10/01/2013: Oct</u>
TR Spot	941,880	1,783,250	2,475,354	3,180,976	2,471,833	1,119,412	1,048,643	1,446,903	1,835,499	2,991,679
Supplier 1	-	-	-	-	-	-	-	-	-	-
Supplier 2	412,834	450,000	500,000	365,000	261,000	120,000	62,000	-	25,000	175,000
Supplier 3	-	-	-	-	-	-	-	-	-	-
Supplier 4	-	-	-	-	-	-	-	-	-	-
Supplier 5	-	-	-	-	-	-	-	-	-	-
Supplier 6	310,000	280,000	-	-	-	-	-	-	-	-
Supplier 7	572,478	460,000	268,554	200,000	-	580,000	600,000	260,000	120,000	220,000
Supplier 8	310,000	-	-	-	-	-	-	-	-	-
Supplier 9	-	-	-	-	-	-	-	-	-	-
Supplier 10	-	-	-	-	-	-	-	-	-	-
Supplier 11	-	-	-	-	-	-	-	-	-	-
Supplier 12	-	-	-	-	-	-	-	-	-	-
Supplier 13	-	-	-	-	-	-	-	-	-	-
Supplier 14	155,000	-	-	-	-	-	-	-	-	-
Supplier 15	-	-	-	-	-	-	-	-	-	-
Supplier 16	-	-	-	-	-	-	-	-	-	-
Supplier 17	-	-	-	-	-	-	-	-	-	-
Supplier 18	-	-	-	-	-	-	-	-	-	-
Supplier 19	-	-	-	-	-	-	-	-	-	-
Supplier 20	-	-	-	-	-	-	-	-	-	-
Supplier 21	155,000	140,000	155,000	-	-	-	-	-	-	-
Supplier 22	310,000	280,000	-	-	-	-	-	-	-	-
Supplier 23	-	140,000	155,000	-	-	-	-	-	-	-
Supplier 24	-	-	-	-	-	-	-	-	-	-
Supplier 25	-	-	-	-	-	-	-	-	-	-
Supplier 26	155,000	140,000	155,000	-	-	-	-	-	-	-
Supplier 27	155,000	140,000	155,000	-	-	-	-	-	-	-
Supplier 28	155,000	140,000	155,000	-	-	-	-	-	-	-
<b>Total Volumes</b>	<b>3,632,192</b>	<b>3,953,250</b>	<b>4,018,907</b>	<b>3,745,976</b>	<b>2,732,833</b>	<b>1,819,412</b>	<b>1,710,643</b>	<b>1,706,903</b>	<b>1,980,499</b>	<b>3,386,679</b>



**TRANSCONTINENTAL**

**Volumes (Dth)**

<u>Suppliers</u>	11/01/2013: Nov	12/01/2013: Dec	01/01/2014: Jan	02/01/2014: Feb	03/01/2014: Mar	04/01/2014: Apr	05/01/2014: May	06/01/2014: Jun	07/01/2014: Jul	08/01/2014: Aug
TR Spot	3,519,678	4,427,061	4,137,732	3,902,127	3,428,584	3,222,207	2,586,559	1,766,669	1,518,348	1,535,006
Supplier 1	-	-	-	-	-	-	-	-	-	-
Supplier 2	225,000	-	-	-	475,000	325,000	100,000	-	-	-
Supplier 3	-	-	-	-	-	-	-	-	-	-
Supplier 4	-	-	-	-	-	-	-	-	-	-
Supplier 5	-	-	-	-	-	-	-	-	-	-
Supplier 6	-	-	-	-	-	-	-	-	-	-
Supplier 7	160,000	-	-	-	380,000	160,000	200,000	240,000	260,000	240,000
Supplier 8	-	-	-	-	-	-	-	-	-	-
Supplier 9	-	-	-	-	-	-	-	-	-	-
Supplier 10	-	-	-	-	-	-	-	-	-	-
Supplier 11	-	-	-	-	-	-	-	-	-	-
Supplier 12	-	-	-	-	-	-	-	-	-	-
Supplier 13	-	-	-	-	-	-	-	-	-	-
Supplier 14	-	-	-	-	-	-	-	-	-	-
Supplier 15	-	-	-	-	-	-	-	-	-	-
Supplier 16	-	-	-	-	-	-	-	-	-	-
Supplier 17	-	-	-	-	-	-	-	-	-	-
Supplier 18	-	-	-	-	-	-	-	-	-	-
Supplier 19	-	-	-	-	-	-	-	-	-	-
Supplier 20	-	-	-	-	-	-	-	-	-	-
Supplier 21	-	-	-	-	-	-	-	-	-	-
Supplier 22	-	-	-	-	-	-	-	-	-	-
Supplier 23	-	-	-	-	-	-	-	-	-	-
Supplier 24	-	-	-	-	-	-	-	-	-	-
Supplier 25	-	-	-	-	-	-	-	-	-	-
Supplier 26	-	-	-	-	-	-	-	-	-	-
Supplier 27	-	-	-	-	-	-	-	-	-	-
Supplier 28	-	-	-	-	-	-	-	-	-	-
<b>Total Volumes</b>	<b>3,904,678</b>	<b>4,427,061</b>	<b>4,137,732</b>	<b>3,902,127</b>	<b>4,283,584</b>	<b>3,707,207</b>	<b>2,886,559</b>	<b>2,006,669</b>	<b>1,778,348</b>	<b>1,775,006</b>





Philadelphia Gas Works  
 Forecasted Summary of Total Fuel Purchased  
 January 2013-August 2014

Schedule 3  
 item 53.64(c)(1)

Texas Eastern  
 Cost of Natural Gas

Suppliers	01/01/2013: Jan	02/01/2013: Feb	03/01/2013: Mar	04/01/2013: Apr	05/01/2013: May	06/01/2013: Jun	07/01/2013: Jul	08/01/2013: Aug	09/01/2013: Sep	10/01/2013: Oct
TE Spot	\$ 648,854	\$ 3,757,775	\$ 2,754,784	\$ 2,455,125	\$ 2,752,348	\$ 2,608,531	\$ 2,729,058	\$ 2,751,991	\$ 2,759,636	\$ 2,789,797
Supplier 1	\$ 260,156	\$ 265,781	\$ 342,701	\$ 267,656	\$ 53,281	\$ 81,456	\$ 81,775	\$ 82,014	\$ 53,281	\$ 400,834
Supplier 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 3	\$ 511,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 13	\$ 2,706,300	\$ 2,735,950	\$ 3,225,950	\$ 370,596	\$ 367,063	\$ 64,400	\$ 65,188	\$ 65,713	\$ 2,625	\$ 830,813
Supplier 14	\$ 1,018,350	\$ 948,500	\$ 511,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 16	\$ 1,046,250	\$ 439,600	\$ 489,025	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 17	\$ 1,091,200	\$ 907,900	\$ 1,005,175	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 21	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 22	\$ 541,725	\$ 486,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 23	\$ 503,750	\$ 459,480	\$ 508,710	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Sub Total</b>	<b>\$ 8,328,086</b>	<b>\$ 10,001,486</b>	<b>\$ 8,837,845</b>	<b>\$ 3,093,378</b>	<b>\$ 3,172,691</b>	<b>\$ 2,754,387</b>	<b>\$ 2,876,021</b>	<b>\$ 2,899,718</b>	<b>\$ 2,815,542</b>	<b>\$ 4,021,443</b>
<b>Transportation Costs</b>										
TE Spot-Sup23	\$ 408,715	\$ 283,384	\$ 214,181	\$ 58,106	\$ 58,934	\$ 50,159	\$ 51,831	\$ 51,831	\$ 50,159	\$ 71,482
Total TE	\$ 408,715	\$ 283,384	\$ 214,181	\$ 58,106	\$ 58,934	\$ 50,159	\$ 51,831	\$ 51,831	\$ 50,159	\$ 71,482
ANR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equitrans	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Costs</b>	<b>\$ 8,736,800</b>	<b>\$ 10,284,871</b>	<b>\$ 9,052,026</b>	<b>\$ 3,151,484</b>	<b>\$ 3,231,626</b>	<b>\$ 2,804,546</b>	<b>\$ 2,927,851</b>	<b>\$ 2,951,549</b>	<b>\$ 2,865,701</b>	<b>\$ 4,092,925</b>

Philadelphia Gas Works  
 Forecasted Summary of Total Fuel Purchased  
 January 2013-August 2014

Schedule 3  
 item 53.64(c)(1)

Texas Eastern  
 Cost of Natural Gas

Suppliers	11/01/2013	Nov 12/01/2013	Dec 01/01/2013	Jan 02/01/2014	Feb 03/01/2014	Mar 04/01/2014	Apr 05/01/2014	May 06/01/2014	Jun 07/01/2014	Jul 08/01/2014	Aug
TE Spot	\$ 4,155,622	\$ 7,668,373	\$ 10,017,954	\$ 8,137,595	\$ 6,932,980	\$ 2,225,869	\$ 1,317,990	\$ 1,084,486	\$ 1,133,330	\$ 1,133,330	\$ 1,139,054
Supplier 1	\$ 614,281	\$ 1,420,952	\$ 1,622,656	\$ 1,470,781	\$ 751,531	\$ 538,725	\$ 53,281	\$ 53,281	\$ 53,281	\$ 53,281	\$ 53,281
Supplier 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 13	\$ 1,334,989	\$ 1,862,630	\$ 2,134,280	\$ 1,916,854	\$ 1,713,258	\$ 1,451,417	\$ 352,058	\$ 40,021	\$ 40,490	\$ 40,490	\$ 40,681
Supplier 14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 21	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 22	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplier 23	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Sub Total</b>	<b>\$ 6,104,893</b>	<b>\$ 10,951,956</b>	<b>\$ 13,774,890</b>	<b>\$ 11,525,230</b>	<b>\$ 9,397,769</b>	<b>\$ 4,216,010</b>	<b>\$ 1,723,330</b>	<b>\$ 1,177,788</b>	<b>\$ 1,227,101</b>	<b>\$ 1,233,016</b>	

Transportation Costs

TE Spot-Sup23	\$ 106,124	\$ 219,674	\$ 271,320	\$ 225,929	\$ 159,773	\$ 70,352	\$ 28,052	\$ 18,779	\$ 19,405	\$ 19,405	\$ 19,405
Total TE	\$ 106,124	\$ 219,674	\$ 271,320	\$ 225,929	\$ 159,773	\$ 70,352	\$ 28,052	\$ 18,779	\$ 19,405	\$ 19,405	\$ 19,405
ANR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equitrans	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Costs</b>	<b>\$ 6,211,017</b>	<b>\$ 11,171,630</b>	<b>\$ 14,046,210</b>	<b>\$ 11,751,159</b>	<b>\$ 9,557,542</b>	<b>\$ 4,286,362</b>	<b>\$ 1,751,382</b>	<b>\$ 1,196,567</b>	<b>\$ 1,246,506</b>	<b>\$ 1,253,420</b>	

Philadelphia Gas Works  
Forecasted Summary of Total Fuel Purchased  
January 2013-August 2014

Texas Eastern  
Volumes

Suppliers

	<u>01/01/2013: Jan</u>	<u>02/01/2013: Feb</u>	<u>03/01/2013: Mar</u>	<u>04/01/2013: Apr</u>	<u>05/01/2013: May</u>	<u>06/01/2013: Jun</u>	<u>07/01/2013: Jul</u>	<u>08/01/2013: Aug</u>	<u>09/01/2013: Sep</u>	<u>10/01/2013: Oct</u>
TE Spot	196,029	1,105,228	810,230	715,780	793,184	738,961	764,442	764,442	764,442	766,428
Supplier 1	62,500	62,500	85,124	62,500	-	7,981	7,981	7,981	-	95,481
Supplier 2	-	-	-	-	-	-	-	-	-	-
Supplier 3	155,000	-	-	-	-	-	-	-	-	-
Supplier 4	-	-	-	-	-	-	-	-	-	-
Supplier 5	-	-	-	-	-	-	-	-	-	-
Supplier 6	-	-	-	-	-	-	-	-	-	-
Supplier 7	-	-	-	-	-	-	-	-	-	-
Supplier 8	-	-	-	-	-	-	-	-	-	-
Supplier 9	-	-	-	-	-	-	-	-	-	-
Supplier 10	-	-	-	-	-	-	-	-	-	-
Supplier 11	-	-	-	-	-	-	-	-	-	-
Supplier 12	-	-	-	-	-	-	-	-	-	-
Supplier 13	775,000	787,500	967,500	107,280	105,000	17,500	17,500	17,500	-	227,500
Supplier 14	310,000	280,000	155,000	-	-	-	-	-	-	-
Supplier 15	-	-	-	-	-	-	-	-	-	-
Supplier 16	310,000	140,000	155,000	-	-	-	-	-	-	-
Supplier 17	310,000	280,000	310,000	-	-	-	-	-	-	-
Supplier 18	-	-	-	-	-	-	-	-	-	-
Supplier 19	-	-	-	-	-	-	-	-	-	-
Supplier 20	-	-	-	-	-	-	-	-	-	-
Supplier 21	-	-	-	-	-	-	-	-	-	-
Supplier 22	155,000	140,000	-	-	-	-	-	-	-	-
Supplier 23	155,000	140,000	155,000	-	-	-	-	-	-	-
<b>Total</b>	<b>2,428,529</b>	<b>2,935,228</b>	<b>2,637,854</b>	<b>885,560</b>	<b>898,184</b>	<b>764,442</b>	<b>789,923</b>	<b>789,923</b>	<b>764,442</b>	<b>1,089,409</b>

Philadelphia Gas Works  
Forecasted Summary of Total Fuel Purchased  
January 2013-August 2014

Texas Eastern  
Volumes

Suppliers

	11/01/2013:	Nov	12/01/2013:	Dec	01/01/2014:	Jan	02/01/2014:	Feb	03/01/2014:	Mar	04/01/2014:	Apr	05/01/2014:	May	06/01/2014:	Jun	07/01/2014:	Jul	08/01/2014:	Aug
TE Spot	1,111,129		1,946,288		2,473,569		2,009,283		1,737,389		573,677		337,946		276,655		286,194		286,194	
Supplier 1	150,000		347,125		387,500		350,000		175,000		125,114									
Supplier 2	-		-		-		-		-		-		-		-		-		-	
Supplier 3	-		-		-		-		-		-		-		-		-		-	
Supplier 4	-		-		-		-		-		-		-		-		-		-	
Supplier 5	-		-		-		-		-		-		-		-		-		-	
Supplier 6	-		-		-		-		-		-		-		-		-		-	
Supplier 7	-		-		-		-		-		-		-		-		-		-	
Supplier 8	-		-		-		-		-		-		-		-		-		-	
Supplier 9	-		-		-		-		-		-		-		-		-		-	
Supplier 10	-		-		-		-		-		-		-		-		-		-	
Supplier 11	-		-		-		-		-		-		-		-		-		-	
Supplier 12	-		-		-		-		-		-		-		-		-		-	
Supplier 13	356,247		472,060		526,313		472,692		428,708		373,400		89,576		9,540		9,540		9,540	
Supplier 14	-		-		-		-		-		-		-		-		-		-	
Supplier 15	-		-		-		-		-		-		-		-		-		-	
Supplier 16	-		-		-		-		-		-		-		-		-		-	
Supplier 17	-		-		-		-		-		-		-		-		-		-	
Supplier 18	-		-		-		-		-		-		-		-		-		-	
Supplier 19	-		-		-		-		-		-		-		-		-		-	
Supplier 20	-		-		-		-		-		-		-		-		-		-	
Supplier 21	-		-		-		-		-		-		-		-		-		-	
Supplier 22	-		-		-		-		-		-		-		-		-		-	
Supplier 23	-		-		-		-		-		-		-		-		-		-	
<b>Total</b>	<b>1,617,376</b>		<b>2,765,473</b>		<b>3,387,382</b>		<b>2,831,975</b>		<b>2,341,297</b>		<b>1,072,192</b>		<b>427,522</b>		<b>286,194</b>		<b>295,734</b>		<b>295,734</b>	

Philadelphia Gas Works  
Forecasted Summary of Total Fuel Purchased  
January 2013-August 2014

	01/01/2013: Jan	02/01/2013: Feb	03/01/2013: Mar	04/01/2013: Apr	05/01/2013: May	06/01/2013: Jun	07/01/2013: Jul	08/01/2013: Aug	09/01/2013: Sep	10/01/2013: Oct
<b>Texas Eastern Storages</b>										
<b>SSIA</b>										
Injections	\$ -	\$ -	\$ -	\$ 4,732	\$ 6,324	\$ 6,120	\$ 6,324	\$ 6,324	\$ 6,120	\$ 6,120
Withdrawal	\$ 36,394	\$ 17,081	\$ 2,016	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capacity	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522
Demand	\$ 218,534	\$ 212,622	\$ 212,622	\$ 212,622	\$ 212,622	\$ 212,622	\$ 212,622	\$ 212,622	\$ 212,622	\$ 212,622
Total Charges	\$ 283,430	\$ 258,225	\$ 243,160	\$ 245,877	\$ 247,469	\$ 247,265	\$ 247,469	\$ 247,469	\$ 247,265	\$ 247,265
<b>SSIB</b>										
Injections	\$ -	\$ -	\$ -	\$ 6,777	\$ 6,318	\$ 6,100	\$ 6,303	\$ 6,303	\$ 6,100	\$ 6,100
Withdrawal	\$ 25,235	\$ 19,637	\$ 9,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capacity	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529
Demand	\$ 103,282	\$ 100,489	\$ 100,489	\$ 100,489	\$ 100,489	\$ 100,489	\$ 100,489	\$ 100,489	\$ 100,489	\$ 100,489
Total Charges	\$ 155,047	\$ 146,656	\$ 136,119	\$ 133,795	\$ 133,336	\$ 133,118	\$ 133,321	\$ 133,321	\$ 133,118	\$ 133,118
<b>GSSTE</b>										
Injections	\$ -	\$ -	\$ -	\$ 5,291	\$ 10,936	\$ 10,583	\$ 10,936	\$ 10,936	\$ 10,583	\$ 10,583
Retention Fuel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawal	\$ 15,461	\$ 6,465	\$ 2,166	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capacity	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825
Demand	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776
Total Charges	\$ 135,062	\$ 126,066	\$ 121,767	\$ 124,892	\$ 130,537	\$ 130,184	\$ 130,537	\$ 130,537	\$ 130,184	\$ 130,184
<b>EQUITRANS</b>										
Injections	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawal	\$ 1,035	\$ 668	\$ 386	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capacity	\$ 13,689	\$ 13,689	\$ 13,689	\$ 13,689	\$ 13,689	\$ 13,689	\$ 13,689	\$ 13,689	\$ 13,689	\$ 13,689
Demand	\$ 7,472	\$ 7,472	\$ 7,472	\$ 7,472	\$ 7,472	\$ 7,472	\$ 7,472	\$ 7,472	\$ 7,472	\$ 7,472
Total Charges	\$ 22,196	\$ 21,829	\$ 21,547	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Injection Charges</b>	\$ -	\$ -	\$ -	\$ 16,801	\$ 23,578	\$ 22,803	\$ 23,563	\$ 23,563	\$ 22,803	\$ 22,803
<b>Total Injections/Retention Fuel</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Withdrawal Charges</b>	\$ 78,125	\$ 43,851	\$ 13,668	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Capacity Charges</b>	\$ 125,566	\$ 125,566	\$ 125,566	\$ 125,566	\$ 125,566	\$ 125,566	\$ 125,566	\$ 125,566	\$ 125,566	\$ 125,566
<b>Total Demand Charges</b>	\$ 392,064	\$ 383,358	\$ 383,358	\$ 375,887	\$ 375,887	\$ 375,887	\$ 375,887	\$ 375,887	\$ 375,887	\$ 375,887
<b>Total Transportation Charge</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ 595,755	\$ 552,775	\$ 522,592	\$ 504,565	\$ 511,341	\$ 510,566	\$ 511,327	\$ 511,327	\$ 510,566	\$ 510,566
<b>Forecasted Summary of Firm Transportation</b>										
<b>Texas Eastern Demand</b>	\$ 2,306,564	\$ 2,306,564	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709
<b>Capacity Release Credits</b>	\$ (140,631)	\$ (127,021)	\$ (140,631)	\$ (447,998)	\$ (462,931)	\$ (447,998)	\$ (462,931)	\$ (462,931)	\$ (773,758)	\$ (799,550)
<b>Net Total</b>	\$ 2,165,934	\$ 2,179,543	\$ 2,097,078	\$ 1,789,711	\$ 1,774,778	\$ 1,789,711	\$ 1,774,778	\$ 1,774,778	\$ 1,463,951	\$ 1,438,159
<b>Equitrans</b>	\$ 26,538	\$ 26,538	\$ 26,538	\$ 12,399	\$ 12,399	\$ 12,399	\$ 12,399	\$ 12,399	\$ 12,399	\$ 12,399
<b>Total Demand Charges</b>	\$ 2,192,472	\$ 2,206,082	\$ 2,123,617	\$ 1,802,110	\$ 1,787,177	\$ 1,802,110	\$ 1,787,177	\$ 1,787,177	\$ 1,476,349	\$ 1,450,557



Philadelphia Gas Works  
 Forecasted Summary of Total Fuel Purchased  
 January 2013-August 2014

Schedule 3  
 Item 53.64(c)(1)

Texas Eastern  
 Storages

	11/01/2013: Nov	12/01/2013: Dec	01/01/2014: Jan	02/01/2014: Feb	03/01/2014: Mar	04/01/2014: Apr	05/01/2014: May	06/01/2014: Jun	07/01/2014: Jul	08/01/2014: Aug
<b>SS1A</b>										
Injections	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,125	\$ 5,120	\$ 4,954	\$ 5,120	\$ 5,120
Withdrawal	\$ 1,456	\$ 19,605	\$ 22,325	\$ 16,622	\$ 5,310	\$ -	\$ -	\$ -	\$ -	\$ -
Capacity	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522	\$ 28,522
Demand	\$ 212,622	\$ 212,622	\$ 212,622	\$ 212,622	\$ 212,622	\$ 212,622	\$ 212,622	\$ 212,622	\$ 212,622	\$ 212,622
Total Charges	\$ 242,601	\$ 260,750	\$ 263,470	\$ 257,766	\$ 246,454	\$ 247,270	\$ 246,264	\$ 246,099	\$ 246,264	\$ 246,264
<b>SS1B</b>										
Injections	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,089	\$ 4,762	\$ 4,609	\$ 4,762	\$ 4,762
Withdrawal	\$ 1,354	\$ 18,236	\$ 22,890	\$ 14,201	\$ 4,094	\$ 617	\$ -	\$ -	\$ -	\$ -
Capacity	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529	\$ 26,529
Demand	\$ 100,489	\$ 100,489	\$ 100,489	\$ 100,489	\$ 100,489	\$ 100,489	\$ 100,489	\$ 100,489	\$ 100,489	\$ 100,489
Total Charges	\$ 128,372	\$ 145,254	\$ 149,908	\$ 141,219	\$ 131,072	\$ 133,724	\$ 131,780	\$ 131,627	\$ 131,780	\$ 131,780
<b>GSSTE</b>										
Injections	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Injections/Retention Fuel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawal	\$ -	\$ 3,371	\$ 4,328	\$ 3,535	\$ 629	\$ -	\$ -	\$ -	\$ -	\$ -
Capacity	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825	\$ 56,825
Demand	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776	\$ 62,776
Total Charges	\$ 119,601	\$ 122,972	\$ 123,928	\$ 123,136	\$ 120,230	\$ 119,601	\$ 119,601	\$ 119,601	\$ 119,601	\$ 119,601
<b>EQUITRANS</b>										
Injections	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Charges	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Injection Charges	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,215	\$ 9,882	\$ 9,563	\$ 9,882	\$ 9,882
Total Injections/Retention Fuel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Withdrawal Charges	\$ 2,810	\$ 41,212	\$ 49,543	\$ 34,358	\$ 9,993	\$ 617	\$ -	\$ -	\$ -	\$ -
Total Capacity Charges	\$ 111,877	\$ 111,877	\$ 111,877	\$ 111,877	\$ 111,877	\$ 111,877	\$ 111,877	\$ 111,877	\$ 111,877	\$ 111,877
Total Demand Charges	\$ 375,887	\$ 375,887	\$ 375,887	\$ 375,887	\$ 375,887	\$ 375,887	\$ 375,887	\$ 375,887	\$ 375,887	\$ 375,887
Total Transportation Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 490,574	\$ 528,976	\$ 537,306	\$ 522,122	\$ 497,756	\$ 500,595	\$ 497,646	\$ 497,327	\$ 497,646	\$ 497,646

Forecasted Summary of Firm Transportation

Texas Eastern Demand	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709	\$ 2,237,709
Capacity Release Credits	\$ (468,493)	\$ (242,890)	\$ (219,384)	\$ (91,059)	\$ (290,082)	\$ (290,082)	\$ (290,082)	\$ (290,082)	\$ (290,082)	\$ (290,082)
Net Total	\$ 1,769,216	\$ 1,994,819	\$ 1,994,819	\$ 2,018,325	\$ 2,146,650	\$ 1,947,627	\$ 1,937,958	\$ 1,947,627	\$ 1,937,958	\$ 1,937,958
Equitrans	\$ 12,399	\$ 26,538	\$ 26,538	\$ 26,538	\$ 26,538	\$ 12,399	\$ 12,399	\$ 12,399	\$ 12,399	\$ 12,399
Total Demand Charges	\$ 1,781,615	\$ 2,021,358	\$ 2,021,358	\$ 2,044,863	\$ 2,173,188	\$ 1,960,026	\$ 1,950,357	\$ 1,960,026	\$ 1,950,357	\$ 1,950,357

CAPACITY RELEASE (Dth)

	Contract 3691		Contract 800232		Contract 800515-514 Paid		TOTAL DOLLARS		TOTAL VOLUMES	
	VOLUMES	DOLLARS	VOLUMES	DOLLARS	VOLUMES	DOLLARS	TRANSCO	TETCO	TRANSCO	TETCO
Sep-12	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	-	-
Oct-12	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	-	-
Nov-12	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	-	-
Dec-12	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	-	-
Jan-13	620,000	\$ 179,056	486,948	\$ 140,631	-	\$ -	\$ 179,056	\$ 140,631	620,000	486,948
Feb-13	560,000	\$ 161,728	439,824	\$ 127,021	-	\$ -	\$ 161,728	\$ 127,021	560,000	439,824
Mar-13	620,000	\$ 179,056	486,948	\$ 140,631	-	\$ -	\$ 179,056	\$ 140,631	620,000	486,948
Apr-13	600,000	\$ 173,280	471,240	\$ 136,094	1,080,000	\$ 311,904	\$ 173,280	\$ 447,998	600,000	1,551,240
May-13	620,000	\$ 179,056	486,948	\$ 140,631	1,116,000	\$ 322,301	\$ 179,056	\$ 462,931	620,000	1,602,948
Jun-13	600,000	\$ 173,280	471,240	\$ 136,094	1,080,000	\$ 311,904	\$ 173,280	\$ 447,998	600,000	1,551,240
Jul-13	620,000	\$ 179,056	486,948	\$ 140,631	1,116,000	\$ 322,301	\$ 179,056	\$ 462,931	620,000	1,602,948
Aug-13	620,000	\$ 179,055	486,948	\$ 140,631	1,116,000	\$ 322,301	\$ 179,055	\$ 462,931	620,000	1,602,948
<b>TOTAL, September 12 - August 13</b>	<b>4,860,000</b>	<b>\$ 1,403,567</b>	<b>3,817,044</b>	<b>\$ 1,102,362</b>	<b>5,508,000</b>	<b>\$ 1,590,710</b>	<b>\$ 1,403,567</b>	<b>\$ 2,693,073</b>	<b>4,860,000</b>	<b>9,325,044</b>

CAPACITY RELEASE (Dth)

	TRANSCO		TETCO		TETCO		TOTAL DOLLARS		TOTAL VOLUMES	
	Contract 3691		Contract 800232		Contract 800515-514					
	VOLUMES	DOLLARS	VOLUMES	DOLLARS	VOLUMES	DOLLARS	TRANSCO	TETCO	TRANSCO	TETCO
Sept-13	600,000	\$ 299,280	471,240	\$ 235,055	1,080,000	\$ 538,704	\$ 299,280	\$ 773,758	600,000	1,551,240
Oct-13	620,000	\$ 309,256	486,948	\$ 242,890	1,116,000	\$ 556,661	\$ 309,256	\$ 799,550	620,000	1,602,948
Nov-13	600,000	\$ 299,280	471,240	\$ 235,055	468,000	\$ 233,438	\$ 299,280	\$ 468,493	600,000	939,240
Dec-13	620,000	\$ 309,256	486,948	\$ 242,890	-	\$ -	\$ 309,256	\$ 242,890	620,000	486,948
Jan-14	620,000	\$ 309,256	486,948	\$ 242,890	-	\$ -	\$ 309,256	\$ 242,890	620,000	486,948
Feb-14	560,000	\$ 279,328	439,824	\$ 219,384	-	\$ -	\$ 279,328	\$ 219,384	560,000	439,824
Mar-14	620,000	\$ 115,940	486,948	\$ 91,059	-	\$ -	\$ 115,940	\$ 91,059	620,000	486,948
Apr-14	600,000	\$ 112,200	471,240	\$ 88,122	1,080,000	\$ 201,960	\$ 112,200	\$ 290,082	600,000	1,551,240
May-14	620,000	\$ 115,940	486,948	\$ 91,059	1,116,000	\$ 208,692	\$ 115,940	\$ 299,751	620,000	1,602,948
Jun-14	600,000	\$ 112,200	471,240	\$ 88,122	1,080,000	\$ 201,960	\$ 112,200	\$ 290,082	600,000	1,551,240
Jul-14	620,000	\$ 115,940	486,948	\$ 91,059	1,116,000	\$ 208,692	\$ 115,940	\$ 299,751	620,000	1,602,948
Aug-14	620,000	\$ 115,940	486,948	\$ 91,059	1,116,000	\$ 208,692	\$ 115,940	\$ 299,751	620,000	1,602,948
<b>TOTAL September 13 - August 14</b>	<b>7,300,000</b>	<b>\$ 2,493,816</b>	<b>5,733,420</b>	<b>\$ 1,958,643</b>	<b>8,172,000</b>	<b>\$ 2,358,799</b>	<b>\$ 2,493,816</b>	<b>\$ 4,317,442</b>	<b>7,300,000</b>	<b>13,905,420</b>

**Tab 5**

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

**KENNETH S. DYBALSKI**

ON BEHALF OF  
PHILADELPHIA GAS WORKS

Docket No. R-2013-2346376

Philadelphia Gas Works  
Proposed 2013 Annual GCR Adjustment

March 1, 2013

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

2

3 A. My name is Kenneth S. Dybalski. My position is Director - Gas Planning & Rates  
4 at the Philadelphia Gas Works.

5

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

7

8 A. I assumed the position of Director - Gas Planning & Rates in 2006. Prior to this  
9 position, I was the Manager of Gas Planning from 2001 to 2006.

10

11 **Q. WHAT ARE YOUR VARIOUS JOB RESPONSIBILITIES?**

12

13 A. In my present position, I am responsible for developing and coordinating short  
14 and long term planning of gas demand, gas supply, raw material expense and  
15 revenue; overseeing the preparation of sales, sendout, revenue and fuel expense  
16 projections; developing peak day/hour load projections; overseeing the  
17 development of the various filings before the Pennsylvania Public Utility  
18 Commission (PUC) and Philadelphia Gas Commission (PGC), including the  
19 quarterly and annual Gas Cost Rate (GCR) filings; preparing the Integrated  
20 Resource Planning Report; and providing supporting documentation for gas costs  
21 related to PGW's Operating Budget before the Philadelphia Gas Commission.

22

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

24

25 A. I have received a BS and MBA from Temple University in Philadelphia,  
26 Pennsylvania.

27

28

1 **Q. HAVE YOU EVER PROVIDED TESTIMONY BEFORE THIS**  
2 **COMMISSION?**

3  
4 A. Yes. I submitted testimony for the PGW 1307f Annual GCR Filings in Docket  
5 Nos. R-2012-2286447, R-2011-2224739, R-2010-20157062, R-2009-2088076,  
6 and R-2008-2021348. I have also submitted testimony in PGW's most recent base  
7 rate proceeding (Docket No. R-2009-2139884) and PGW's 2008 Extraordinary  
8 Rate Request (Docket No. R-2008-2073938). Additionally, I have submitted  
9 testimony in PGW's GPC/MFC Unbundling Filing (Docket No. R-2012-2333993)  
10 and DSIC Filing (Docket No. P-2012-2337737)

11

12 **Q. HOW IS YOUR TESTIMONY STRUCTURED**

13

14 A. First, I describe PGW's rate design and Gas Cost Rate (GCR) calculation  
15 methodology. Second, I describe the level of heating degree-days utilized in this  
16 filing. Third, I identify the methodology for determining the number of customers  
17 and calculating firm sales. Fourth, I discuss the calculation for the Unaccounted  
18 for Adjustment Factor (UAF). Fifth, I discuss Off System Sales and Capacity  
19 Release credits. Sixth, I affirm compliance with a provision in last year's  
20 settlement agreement. Lastly, I will discuss the reasonableness of PGW's gas  
21 costs.

22

23 **Q. PLEASE DESCRIBE THE IMPACT OF THE PROPOSED CHANGE IN**  
24 **PGW's GCR IN THIS PROCEEDING.**

25

26 A. PGW's GCR on September 1, 2012 was \$5.2247 / Mcf and this rate was increased  
27 to \$5.7323 in the Company's first quarterly GCR filing on December 1, 2012.  
28 PGW's second quarter GCR filing, also submitted to the PUC concurrently with  
29 this filing, increases the GCR to \$6.3991 effective March 1, 2013. The proposed  
30 rate to be effective September 1, 2013 is \$5.7615.

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**Q. PLEASE SUMMARIZE THE EVIDENCE THAT PGW IS SUBMITTING IN SUPPORT OF ITS PROPOSED GCR ADJUSTMENT.**

A. Tab 2 of this filing contains the sheets supporting the filing requirements of Section 53.64 (a) for the proposed GCR for the period September 1, 2013 through August 31, 2014.

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 of the net GCR applicable expenses by multiplying the GCR Firm Sales Volume times the proposed GCR plus the load balancing 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 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 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



1 and pipeline charges for firm sales are calculated per month. Two credits are then  
2 applied for the portion of gas costs recovered from PGW's Interruptible Sales  
3 customers (i.e. the "Interruptible Credit") and for gas used by PGW (i.e. "Gas  
4 Used by Utility"). Next, the Company calculates the net effect of gas supplies  
5 being transferred into and out of storage and LNG. The result is the Net Natural  
6 Gas Expense. To arrive at the Total Applicable Expenses in Schedule 3, the fuel  
7 expenses for Purchased Electric and miscellaneous are added to the Net Natural  
8 Gas Expenses to arrive at Total Applicable Expenses.

9  
10 Schedule 4(a) is the actual/estimated data for FY 13. Schedule 4(b) is the C factor  
11 Reconciliation for FY 13. Schedule 4(c) is the E factor Reconciliation for FY 13.  
12 Schedule 4(d) is the IRC Revenue Billed for FY 13.

13  
14 Schedule 5(a) ("Interest Rate Calculation") provides the interest rate for the  
15 over/under recovery and is calculated on the over/under recovery in calendar year  
16 2012. Schedule 5(b) ("Interest Calculation") provides the calculation of the  
17 interest expense or credit for the period of September 2012 through August 2013  
18 for the under/over recovery of fuel costs and the interest for the natural gas  
19 refunds.

20 Schedule 5(c) ("Interest on Natural Gas Refunds") provides information on  
21 historic refunds that have been received by the Company resulting from various  
22 cases before the Federal Energy Regulatory Commission and the interest on these  
23 refunds. Schedule 5(d) provides the calculation of the interest for the demand and  
24 commodity charges.

25  
26 Schedule 6 presents the migration rider and load balancing revenue for the  
27 forecast period of September 2013 to August 2014.

28  
29 Schedule 7 calculates total projected recovery with the proposed GCR.

30

1 Schedule 8 shows the changes in rates identifying the proposed changes to the  
2 GCR and distribution charge and the impact on the proposed total commodity  
3 rate.

4  
5 Schedule 9(a) shows the calculation of the Universal Service & Energy  
6 Conservation Surcharge to be effective September 1, 2013. Schedule 9(b) is the  
7 reconciliation of the Universal Service & Energy Conservation Surcharge for  
8 period of September 2012 to August 2013.

9  
10 Schedule 10(a) shows the calculation of the Interruptible Revenue Credit to be  
11 effective September 1, 2013. Schedule 10(b) is the forecasted Interruptible  
12 Revenue Margin for Fiscal Year 2014. Schedule 10(c) is the reconciliation of the  
13 Interruptible Revenue Credit for Fiscal Year 2012.

14  
15 Schedule 11(a) shows the calculation of the Other Post Employment Benefit  
16 (OPEB) Surcharge to be effective September 1, 2013. Schedule 11(b) is the  
17 reconciliation of the OPEB Surcharge for Fiscal Year 2012.

18  
19 Schedule 12(a) shows the calculation of the Efficiency Cost Recovery Surcharge  
20 to be effective September 1, 2013. Schedule 13(b) is the reconciliation of the  
21 Efficiency Cost Recovery Surcharge for Fiscal Year 2013.

22  
23 Schedule 13(a) is the calendar year 2012 reconciliation of the Supplier and  
24 Storage Peaking Charge (SSPC) and Schedule 13(b) is the SSPC expense and  
25 interest calculation.

26  
27 Schedule 14 identifies the natural gas prices that were used in the preparation of  
28 this filing.

29

1 **Q. WHAT IS THE TIME PERIOD FOR FORECASTING PGW'S FUTURE**  
2 **GAS COSTS?**

3

4 A. PGW's forecast period is a twenty (20) month period that commences on January  
5 1, 2013 (two months before this filing) and eight months before the effective date  
6 of the tariff on September 1, 2013. The 2013-14 GCR year is from September 1,  
7 2013 to August 31, 2014, however, since the required forecast covers 20 months,  
8 it must begin eight months earlier, consistent with Commission regulations.

9

10 **Q. PLEASE PROVIDE A GENERAL DESCRIPTION OF PGW'S RATE**  
11 **DESIGN AND GCR CALCULATION METHODOLOGY.**

12

13 A. The volumetric rates charged to PGW's customers are the distribution charge and  
14 the Gas Cost Rate. The distribution charge consists of the Delivery Charge; the  
15 Universal Service and Energy Conservation Surcharge; the Efficiency Cost  
16 Recovery Surcharge; and the Other Post Retirement Benefit Surcharge. The  
17 Universal Service and Energy Conservation Surcharge provides for the recovery  
18 of Customer Responsibility Program (CRP) discounts; Senior Citizen Discounts;  
19 the costs of the Enhanced Low Income Retrofit Program (ELIRP); and CRP  
20 arrearage forgiveness. The Efficiency Cost Recovery Surcharge recovers the cost  
21 of energy efficiency programs for the appropriate firm rate classes. The Other Post  
22 Retirement Benefit Surcharge recovers the amount to fund these obligations.

23

24 The second element of the rate is the Gas Cost Rate or GCR factor. This charge is  
25 a mechanism used to flow through the costs of natural gas costs and other raw  
26 materials in a timely and equitable manner. The specific elements of PGW's  
27 GCR are set forth in PGW's Tariff.

28

29 Generally, the cost of gas purchased to serve the requirements of PGW's  
30 customers constitutes the largest single item in the delivered price of gas. In the

1 past, all natural gas costs were recovered through base rates (distribution charge).  
2 However, in the early 1970's, the price of gas lost its stability and underwent rapid  
3 escalation during and after a worldwide oil crisis. To combat this instability and  
4 prevent the economic harm to all parties caused by regulatory lag in reflecting  
5 these price fluctuations in base rates, the concept of a fuel adjustment surcharge  
6 mechanism was introduced by PGW. This mechanism provides the flexibility to  
7 rapidly reflect current conditions without the time delay inherent in a full-scale  
8 base rate alteration. The intent is to achieve an annual balance of the costs  
9 incurred for fuel and its pass-through to customers. The costs for pipeline  
10 transportation, storage capacity and related fuel prices charged by the interstate  
11 pipeline suppliers are largely outside of distributor control. The State Public  
12 Utility Commission oversees the pass-through of these charges and the balancing  
13 activity. The Gas Cost Rate Section in PGW's Tariff identifies the appropriate  
14 formula for such a balance and the charges that may be recovered through this  
15 mechanism. Charges for natural gas and other raw materials are included in the  
16 GCR. In addition, the interest expense for the over or under recovery of gas costs  
17 and natural gas refunds are also included in the GCR. No labor or profit  
18 component is added by PGW. The GCR represents the direct pass-through of  
19 actual costs incurred.

20  
21 Only costs related to meeting customer sendout requirements, including  
22 associated plant fuel, may be included as a fuel expense for GCR purposes.  
23 Purchases diverted into storage and/or LNG become an expense only when  
24 withdrawn for customer delivery. Costs associated with purchases made to supply  
25 interruptible customers are excluded from the Total Applicable GCR Expenses  
26 used to calculate the GCR. Also, demand costs for pipeline transportation for the  
27 firm transportation customers are excluded from the GCR.

28  
29 Various adjustments are then made to the total applicable expenses eligible for the  
30 GCR. Natural gas refunds and interest on the refunds are credited in the

1 calculation of the GCR in the fiscal year received. An adjustment is made to  
2 correct for any over or under recovery during the previous period resulting from  
3 differences between rates used to project the prior GCR and those actually  
4 experienced. The interest expense or credit on the over or under recovery is  
5 applied to calculate the total adjustment. An additional adjustment is also made  
6 for the Interruptible Revenue Credit which is a credit that firm sales customers  
7 receive for the interruptible sales margin.

8  
9 To determine the unit level of the GCR, the remaining total expenses must be  
10 divided by the sum of the volumes over which they can be effectively distributed  
11 which is the GCR firm sales volume.

12  
13 **Q. WHAT IS THE BASIS FOR THE PRICES USED IN DETERMINING THE**  
14 **GAS COSTS USED IN THIS FILING?**

15  
16 A. The pricing methodology utilized by the Company is consistent with that used in  
17 the recent quarterly filings with the inclusion of the additional months in the 20-  
18 month forecast. Specifically, the company utilized actual prices for January 2013  
19 and the NYMEX Futures close data (as of January 16, 2013) for the 19 forecast  
20 months of February 2012 through August 2013.

21  
22 **Q. HOW DOES THE PROJECTED LEVEL OF GAS COSTS FOR THE**  
23 **FORECAST PERIOD COMPARE WITH THE LEVEL OF GAS COSTS**  
24 **FORECASTED IN THE COMPANY'S LAST ANNUAL GCR FILING?**

25  
26 A. The level of gas costs forecasted for 2013-2014 are higher than the level PGW  
27 had forecasted for the 2012-2013 GCR. The level of costs in the 2013-2014  
28 period are being influenced by the increase in prices for natural gas compared to  
29 the prior year.

1 **Q. DESCRIBE THE LEVEL OF HEATING DEGREE-DAYS THAT WERE**  
2 **USED IN YOUR ANALYSIS.**

3

4 A. The Company utilizes the temperatures recorded at the PGW Richmond Plant to  
5 calculate the average temperature for a given day. The Company subtracts the  
6 average temperature from 65 degrees to calculate the number of degree-days for  
7 the day. The degree-days for all of the days in the year are aggregated to arrive at  
8 the total number of degree-days for the year. Next, the Company calculates the  
9 average heating degree-days for the past 30 years to arrive at the forecasted  
10 heating degree-days in a normal year and in this filing PGW is using the 30 year  
11 average of 4,268 degree days.

12

13 **Q. HOW HAS THE COMPANY CALCULATED THE NUMBER OF**  
14 **CUSTOMERS IN EACH RATE CLASS?**

15

16 A. PGW determined the actual number of customer billings on December 31, 2012  
17 using the PGW Gas Sales and Revenue Reports. Next, the Marketing Department  
18 load forecast was used to factor in the addition and loss of customers. Finally, the  
19 customer numbers were adjusted for the loss of customers due to non-payment  
20 terminations.

21

22 **Q. WHAT IS THE METHODOLOGY FOR CALCULATING THE WEATHER**  
23 **NORMALIZED BILLED SALES?**

24

25 A. PGW used a two step process to arrive at the appropriate level of usage  
26 per customer. First, a trial domestic factor is developed by class of  
27 customers from sales reported for the previous year's summer months.  
28 This average factor is then utilized in the sendout formula with the  
29 customer counts for the months of July, August and September. A  
30 comparison between what the formula calculates and the actual

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

9  
10 The finalized domestic factor and the trial heating factor developed, as  
11 such, are then applied in the sendout calculations together with  
12 customer counts for the months of December, January and February (the  
13 peak winter cold period) to project an estimated sendout for each of  
14 these months. The projected sendout is then compared with the actual  
15 sendout experienced. Any variation between the projected and actual is  
16 adjusted to force the replication of the actual sendout experience, thus  
17 resulting in the determination of a finalized heating factor. The finalized  
18 heating factor was then averaged with the heating factor for the previous  
19 year.

20  
21 Utilizing these domestic and heating factors, billed sales are then  
22 forecasted using 4,268 degree days and the number of customers.

23  
24 **Q. WHAT IS THE UNACCOUNTED FOR GAS PERCENTAGE USED IN**  
25 **THIS FILING?**

26  
27 A. The level of unaccounted for gas used in this filing is 3.7 % and is based on a 3-  
28 year average.

29

1 **Q. WHAT IS THE TOTAL AMOUNT OF OFF SYSTEM SALES, CAPACITY**  
2 **RELEASE CREDITS, AND ASSET MANAGEMENT CREDITS THAT**  
3 **ARE INCORPORATED INTO THE GCR?**

4  
5 A. PGW has projected that the amount of off system sales, capacity release credits,  
6 and asset management credits within the GCR period of 2013-14 will amount to  
7 \$9,081,677. Of that amount, \$ 6,811,258 (75%) was credited to the GCR. This  
8 amount is based on a 3 year average.

9  
10 **Q. HAS PGW COMPLIED WITH PRIOR YEAR SETTLEMENT**  
11 **AGREEMENT PROVISION SET FORTH IN PARAGRAPH III.6.?**

12  
13 A. Yes, PGW has complied with the following settlement provision:

14  
15 **III. SETTLEMENT**

16 \*\*\*

17 6) QUARTERLY/ANNUAL FILING AND C/E FACTOR ISSUES

18 PGW agrees to:

- 19 a) define the acronym "GAC";
- 20 b) report its projected migration volumes for the upcoming PGC year  
21 in both its annual and compliance 1307(f) filings;
- 22 c) calculate interest of over and under collections as set forth in I &  
23 E's direct testimony;
- 24 d) include actual data for the second month preceding a quarterly  
25 GCR filing;
- 26 e) only use three months of actual data (starting with the month that  
27 begins four months before the quarterly filing date) in its quarterly  
28 filings;
- 29 f) (i) base the September 1 E factor on 11 months actual & 1 month  
30 estimated data, and residual E-factor dollar balances from prior PGC



1 years; (ii) base the December 1 E factor on fixed 12 months  
2 (September 1 through August 31) of actual data, and residual E-factor  
3 dollar balances from prior PGC years; (iii) only adjust the E factor  
4 during the GCR year for current PGC year sales volume; and (iv)  
5 reconcile the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarter gas cost adjustments through the C  
6 factor; and track and record e-factor billed revenues (which includes  
7 both GCR and migration sources) separately to ease reconciliation of  
8 the e-factor.

9

10 **Q. BASED UPON THE ABOVE SUPPORTING DATA, DO YOU BELIEVE**  
11 **THAT PGW'S GAS COSTS ARE REASONABLE?**

12

13 A. Yes, PGW's GCR only contains the direct pass-through of actual costs incurred  
14 and projections of the same (for both gas costs and certain non-gas costs that were  
15 previously approved by the PUC). As stated by Mr. Snyder in his testimony,  
16 PGW follows a least cost gas procurement strategy.

17

18

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

20

21 A. Yes.

**Tab 6**

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF

**RAYMOND M. SNYDER**

ON BEHALF OF  
PHILADELPHIA GAS WORKS

Docket No. R-2013-2346376

Philadelphia Gas Works  
Proposed 2013 Annual GCR Adjustment

March 1, 2013

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND CURRENT POSITION WITH PGW.**

3 A. My name is Raymond M. Snyder. My position with PGW is Vice President of Gas  
4 Management.

5 **Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.**

6 A. I received a Bachelor of Science degree in Civil Engineering from Pennsylvania State  
7 University in 1979. I have also received a Masters in Engineering Management from  
8 Drexel University in 1988. I am a registered Professional Engineer in Pennsylvania.  
9 I have held the following positions at PGW: Engineering Assistant; Assistant Staff  
10 Engineer; Staff Engineer; Senior Staff Engineer; Assistant Manager, Engineering;  
11 Manager, Engineering; Director, Operations Systems Administration; and Director, Gas  
12 Processing.

13 **Q. HAVE YOU EVER PROVIDED TESTIMONY BEFORE THIS COMMISSION?**

14 A. No.

15 **Q. WHAT IS THE FOCUS OF YOUR TESTIMONY IN THIS PROCEEDING?**

16 A. My testimony discusses:

- 17 • PGW's gas purchasing policies and strategies applicable to the current filing  
18 period (i.e. FY 2014 – September 1, 2013 to August 31, 2014) and the prior GCR  
19 period (i.e. FY 2013 – September 1, 2012 – August 31, 2013);
- 20 • PGW's design day requirement;
- 21 • Capacity release, off-system sales and asset management fee sharing;
- 22 • Asset management;
- 23 • Price analysis and buying advisory service; and
- 24 • First of month priced daily gas supply contracts.

1 **Q. PLEASE PROVIDE A GENERAL DESCRIPTION OF PGW'S GAS**  
2 **DISTRIBUTION SYSTEM.**

3 A. PGW's gas distribution system is located in Southeastern Pennsylvania in the County and  
4 City of Philadelphia. Since this is not a gas-producing area, PGW and its natural gas  
5 customers are dependent upon the interstate natural gas pipeline system to deliver natural  
6 gas into the PGW gas distribution system. PGW relies on the interstate pipeline for all  
7 natural gas supply, storage, and transportation services, except for PGW's own on-system  
8 peak shaving facilities. PGW owns and operates a LNG facility that is used both to meet  
9 intraday, daily and seasonal supply needs as well as to meet peak day requirement.

10 **Q. PLEASE IDENTIFY PGW'S CURRENT INTERSTATE SUPPLIERS.**

11 A. Spectra Energy's Texas Eastern Transmission pipeline and Williams' Transco Gas  
12 Pipeline comprise the two interstate natural gas pipelines that deliver gas to PGW's city  
13 gates. In addition, PGW uses natural gas storage services to meet winter peak  
14 requirements.

15

16 **II. GAS PURCHASING POLICIES AND SUPPLY STRATEGY**

17 **Q. DOES PGW UTILIZE A LEAST-COST PROCUREMENT POLICY IN ITS GAS**  
18 **PURCHASING POLICIES AND SUPPLY STRATEGY?**

19

20 A. Yes.

21 **Q. PLEASE DESCRIBE PGW'S SUPPLY STRATEGY.**

22 A. PGW's supply strategy<sup>1</sup> (which is currently being used during the FY 2013 GCR  
23 period and which the Company intends to use for the FY 2014 GCR period) is a portfolio

---

<sup>1</sup> All natural gas supply strategies are presented to the Company's internal Supply Committee for review and approval. The Supply Committee is comprised of senior corporate management as well as Gas Supply, Energy Planning, Gas Control, Gas Supply and Regulatory departmental management. The Supply Committee meets monthly.

1 approach in both contract structure and pricing. The portfolio approach of purchasing gas  
2 supply allows PGW to remove some of the volatility in purchasing natural gas supplies  
3 for its ratepayers. Without the use of the portfolio approach, the firm ratepayer would be  
4 totally at the mercy of market volatility.

5 The Company's gas supply portfolio is divided into four distinct categories: (1)  
6 first of the month priced daily and daily index priced gas supply contracts; (2) physical  
7 forward purchased contracts; (3) storage; and (4) LNG.

8 (1) The advantage of first of the month priced daily and daily index priced gas  
9 supply contracts are their operational flexibility which allows PGW to increase or  
10 decrease the volume in response to changes in send out requirements with first of the  
11 month priced daily contracts providing supply at a known price and the daily index priced  
12 contracts providing supply at a daily market price. During certain time periods, these  
13 types of contracts also provide security of supply.

14 (2) The Company enters into physical forward purchased contracts for summer  
15 and winter baseload supplies. These contracts permit the Company to make discretionary  
16 physical forward purchases on a year-round basis.

17 (3) The Company utilizes storage fields which act as additional sources of supply.  
18 The gas procured under these contracts also act as a physical fixed price counter to  
19 market conditions.

20 (4) The Company operates its own LNG peak shaving liquefaction, vaporization,  
21 and storage facilities.

22 Spectra Energy and Williams Gas Pipeline represent the only interstate pipeline  
23 facilities with physical connections to the PGW service territory. As a result, all of

1 PGW's supply contracts utilize these pipelines and the contracts also recognize pipeline  
2 receipt and delivery rights. These contracts contain the ability to "lock up" the price for  
3 upcoming months or to have the pricing default to an agreed upon market index if there is  
4 no market advantage in fixing a price before the month begins. As a result, PGW not  
5 only ensures security of supply from the pipelines but also can take advantage of varying  
6 basis differentiated pricing in the market. This differentiated pricing results from the fact  
7 that all shippers of natural gas receive their gas at varying locations along the pipeline.  
8 PGW uses a city-gate delivered price in comparing the various alternatives available.  
9 The city gate delivered price is computed considering the "into the pipe price of gas" plus  
10 all incremental charges levied by the transporting pipeline to deliver the gas to the city  
11 gate. These prices include, but are not limited to, fuel shrinkage, transportation charges  
12 and FERC Annual Charge Adjustment ("ACA") charges.

13 Additionally, PGW utilizes storages and LNG to meet operational requirements.  
14 Bundled storage contracts provide for the right both to storage of the gas and its delivery  
15 to PGW via bundled pipeline capacity. Unbundled storage contracts provide storage  
16 rights for gas which is transported on PGW firm pipeline transportation capacity. The  
17 storages provide off-system storage and LNG provides on-system storage. While both  
18 types of storages are important to fulfill operational requirements, PGW's on-system  
19 LNG storage is vital during peak days when customer demand exceeds the amount of gas  
20 that can be physically provided through PGW's city gates.

21 Once operational requirements are met, these assets are then used in the overall  
22 cost saving strategies. For example, once design winter sendout requirements are  
23 ensured, the Company may utilize bundled storage and LNG as a substitute for higher

1 priced gases. PGW's summer gas procurement policy uses a similar approach to address  
2 system supply and storage refill. The Gas Supply department also uses forecasted prices  
3 as a benchmark to purchase gas volumes for both system supply and storage refill below  
4 the projected cost (when possible) on a proportional basis, while leaving a portion of its  
5 needs to default to "first of the month" pricing.

6 **Q. DOES PGW PURCHASE GAS FROM ANY AFFILIATED INTEREST?**

7 A. No. PGW does not have any affiliated gas suppliers or pipelines.

8 **Q. WHILE PGW IS ENSURING THE LEAST COST PROCUREMENT, HOW DOES**  
9 **IT PROVIDE FOR SYSTEM RELIABILITY?**

10  
11 A. PGW physically sources the gas in accordance with its firm pipeline paths. The  
12 pipelines give PGW firm entitlements on their systems for the sourcing of gas for which  
13 PGW pays a demand charge. By sourcing supply this way, PGW ensures its sole  
14 entitlement to this space on the pipeline and can not be accused of infringement.  
15 Transporting gas from different locations also mitigates the impact of potential regional  
16 disruptions because not all of the supply enters the pipe at the same location. As a result,  
17 if there is a disruption at one location, not all of PGW's supply will be affected.

18 PGW's Gas Planning Department also runs a supply status model during the  
19 winter operating season which recognizes normal and design winter conditions and the  
20 latest actual balance of gas in all storage facilities. Gas Management utilizes the output  
21 of this model to make recommendations or changes in its supply operating strategy to  
22 ensure that peak day needs and design winter conditions can be met from that point  
23 forward.

24 **Q. DOES PGW PERIODICALLY REVIEW ITS EXISTING CONTRACTS TO**  
25 **DETERMINE IF THEY ARE APPROPRIATE?**  
26



1 A. Yes. PGW reviews each of its existing contracts on a regular basis to ensure that none of  
2 the contracts are adverse to its customers' interests. Whenever appropriate, PGW  
3 initiates renegotiations (if the contract permits) to change the terms.

4 **Q. IN YOUR OPINION, ARE THE GAS COSTS INCURRED BY PGW**  
5 **REASONABLE?**

6  
7 A. Yes. The 2011-2012 gas costs and the gas costs incurred to date during the 2012-2013  
8 period are the result of the least cost gas procurement strategy outlined in my testimony.

9

10 **III. DESIGN DAY REQUIREMENT**

11 **Q. PLEASE PROVIDE AN OVERVIEW OF THE DESIGN DAY REQUIREMENT.**

12 A. Details of PGW's design day methodology and an account of the 2012/2013 winter  
13 design day requirement can be found in the responses to items 53.64 (c)(13) and  
14 53.64(c)(14) which were provided in PGW's February 1, 2013 GCR Filing.

15

16 **IV. CAPACITY RELEASE, OFF-SYSTEM SALES MARGIN AND ASSET**  
17 **MANAGEMENT FEES**

18  
19 **Q. HAS PGW BEEN RETAINING A PORTION OF NET PROCEEDS FROM**  
20 **CAPACITY RELEASE CREDITS, OFF-SYSTEM SALES MARGIN AND**  
21 **ASSET MANAGEMENT FEES?**

22

23 A. Yes. During the 2008-2009 GCR proceeding (Docket No. R-2008-2021348), the parties  
24 agreed that PGW will retain 25% of all off-system sales margins and capacity release  
25 credits with the remaining 75% applied as an offset to purchased gas costs for the  
26 retention period of September 1, 2008 to August 31, 2011. Likewise, during the 2011-  
27 2012 GCR proceeding (Docket No. R-2011-2224739) and 2012-2013 GCR proceeding  
28 (Docket No. R-2012-2286447), the parties agreed that PGW will retain 25% of all off-

1 system sales margins, capacity release credits and asset management margins/credits/fees  
2 with the remaining 75% applied as an offset to purchased gas costs for the retention  
3 period of September 1, 2011 to August 31, 2012 and September 1, 2012 to August 31,  
4 2013. The Company also agreed to include an off-system sales margin, capacity release  
5 credit and asset management margins/credits/fees retention proposal for the Purchased  
6 Gas Cost period(s) beginning on September 1, 2013 in its March 1, 2013 annual 1307(f)  
7 filing.

8 **Q. DOES PGW HAVE A RETENTION PROPOSAL FOR THE PGC PERIODS**  
9 **BEGINNING ON SEPTEMBER 1, 2013?**

10  
11 A. Yes. PGW proposes to continue the retention of 25% of capacity release credits, off  
12 system sales margin and asset management margin/credit/fees and the application of the  
13 remaining 75% to the gas cost rate.

14 **Q. DO OTHER PENNSYLVANIA NATURAL GAS DISTRIBUTION COMPANIES**  
15 **(“NGDCs”) HAVE SHARING MECHANISMS FOR CAPACITY RELEASE AND**  
16 **OFF SYSTEM SALES CREDITS?**

17  
18 A. Yes. Please see Exhibit RMS-1 for a chart which provides a description of the sharing  
19 mechanisms currently in place. Six of the largest NGDCs have sharing mechanisms  
20 similar to PGW’s and the sharing percentage for all of the NGDCs is 25%.

21 **Q. HOW ARE SHARING MECHANISMS BENEFICIAL TO BOTH RATEPAYERS**  
22 **AND UTILITIES?**

23  
24 A. The ratepayers and the utility receive benefit from the policy because it creates an  
25 incentive to maximize efforts to make off system sales and capacity release transactions,  
26 thereby increasing the amounts applied to the gas cost rate and the lesser portion retained  
27 by the utility.

28

1 V. **ASSET MANAGEMENT**

2 Q. **WHAT IS THE CURRENT STATUS OF PGW'S ASSET MANAGEMENT**  
3 **ARRANGMENT?**

4  
5 A. PGW entered into an asset management arrangement with a third party which involves  
6 the release of 1.5 Bcf of the Washington WSS storage service for the term of April 1,  
7 2012 through March 31, 2013. PGW issued an RFP in January 2013 requesting proposals  
8 for the asset management of all storages for a one year term. PGW will evaluate the RFP  
9 responses during February and March 2013.

10

11 VI. **PRICE ANALYSIS AND BUYING ADVISORY SERVICE**

12 Q. **PGW CURRENTLY USES PLANALYTICS ENERGY BUYER SERVICES AND**  
13 **IS CURRENTLY PERMITTED TO RECOVER THE ANNUAL \$125,000 FEE VIA**  
14 **THE GAS COST RATE DURING THE 2012- 2013 GCR PERIOD. WHAT TYPES**  
15 **OF SERVICES DOES PLANANYTICS PROVIDE TO PGW?**

16 A. Planalytics provides the following services:

- 17 • Price feed from Nymex and Globex for natural gas, crude oil, heating oil and  
18 RBOB (reformulated gasoline);
- 19 • Buying suggestions up to 18 months in the future;
- 20 • A charting tool for technical analysis;
- 21 • Short and medium range weather forecasts;
- 22 • Weather alerts (issued in advance of significant weather events);
- 23 • Planalytic's pre-season hurricane forecast and in-season updates; and
- 24 • Additional energy buyer features include reporting (i.e. mark-to-market,  
25 transaction history, etc.) and portfolio/hedging parameters.

1 **Q. WHAT WAS INCORPORATED INTO PGW'S 2012-2013 GCR PROCEEDING**  
2 **SETTLEMENT AGREEMENT WITH REGARD TO THE PLANALYTICS**  
3 **ENERGY BUYER SERVICES?**

4 A. PGW agreed to the following:

5 PGW is permitted to recover the Planalytics fee for price analysis and buying  
6 advisory services (not to exceed \$125,000) for the 2012-2013 GCR period.  
7 Continued recovery of the fee beyond the 2012-2013 GCR period must be  
8 addressed in next year's Purchased Gas Cost proceeding.  
9

10 **Q. DOES PGW WANT TO CONTINUE THE PLANALYTICS BUYING ADVISORY**  
11 **SERVICES?**

12 A. Yes. The Planalytics' service provides a comprehensive amount of information that the  
13 Company finds useful in the procurement of all gas supply. Nonetheless, PGW  
14 understands that it must reach a new agreement as to the continuing recovery of the  
15 Planalytics fee and the Company looks forward to discussing this issue with the parties  
16 involved in this year's proceeding.  
17

18 **VII. FIRST OF MONTH PRICED DAILY GAS SUPPLY CONTRACTS**

19 **Q. WHAT DOES THE PRIOR YEAR SETTLEMENT AGREEMENT SET FORTH**  
20 **REGARDING FIRST OF MONTH ("FOM") PRICED DAILY GAS SUPPLY**  
21 **CONTRACTS?**  
22

23 A. The Joint Petition for Settlement of PGW's 2012-2013 GCR Proceeding (paragraph  
24 III.4.) sets forth the following:

- 25 a) PGW will renew its current FOM [First of Month] Priced daily gas supply contracts  
26 which expire during 2012 at 50 percent of the current contract MDQ quantities for a  
27 term of one year.<sup>2</sup>
- 28 b) PGW will present an analysis of the costs and benefits associated with maintaining  
29 FOM priced daily contracts similar to that prepared by the OCA in the instant  
30 proceeding. PGW may include what it believes to be other relevant considerations in

---

<sup>2</sup> PGW may replace the other 50 percent of the current contract MDQ quantities with daily index price contracts.

1 its analysis. Contracting for FOM priced gas supplies beyond the period discussed in  
2 part (a) will be addressed in next year's 1307(f) proceeding.  
3

4 **Q. DID PGW RENEW THE FOM PRICED DAILY GAS SUPPLY CONTRACTS**  
5 **WHICH EXPIRED DURING 2012 AT 50 PERCENT OF THE CONTRACT MDQ**  
6 **QUANTITIES FOR A TERM OF ONE YEAR?**  
7

8 A. Yes. One of PGW's FOM priced daily gas supply contracts (also referred to as "FOM  
9 swing contracts") expired on August 31, 2012 and the remaining three contracts expired  
10 on October 31, 2012. As of November 1, 2012, 50 percent of PGW's swing contracts are  
11 FOM priced and 50 percent are daily index priced (also referred to as "daily index swing  
12 contracts").

13 **Q. DID PGW PREPARE AN ANALYSIS OF THE COSTS AND BENEFITS**  
14 **ASSOCIATED WITH MAINTAINING FOM SWING CONTRACTS FOR**  
15 **CALENDAR YEAR 2012?**  
16

17 A. Yes. PGW prepared an analysis using a spreadsheet format provided by Jerome  
18 Mierzwa, the Office of the Consumer Advocate's witness from last year's proceeding and  
19 the results are discussed below. The format of Mr. Mirzwa's spreadsheet requires the  
20 input of the daily purchased volumes for each FOM swing contract.<sup>3</sup> The daily FOM  
21 swing contract purchased volumes are then multiplied by the applicable FOM pricing in  
22 order to calculate the actual purchase price. The actual purchase price is then compared  
23 to what the purchase price would have been if these same volumes were purchased at the  
24 daily index price. This amount is calculated by multiplying the purchased volumes by  
25 the daily index price for the date of delivery. The intent of this analysis is to determine  
26 which pricing results in a higher cost. If the daily index purchase price is greater than  
27 that the FOM purchase price, then a pricing benefit has been provided by the FOM priced

---

<sup>3</sup> For each contract and delivery point.

1 swing contracts. The spreadsheet also documents the total demand charges for the FOM  
2 swing contracts.

3 **Q. WHAT ARE THE RESULTS OF THIS ANALYSIS?**

4  
5 A. The results are separated into two time periods. The first time period begins on January  
6 1, 2012 (because Mr. Mierzwa's analysis from last year's proceeding ended on December  
7 31, 2011) and ends on October 31, 2012 (because most of the FOM swing contracts did  
8 not expire until October 31, 2012). The second time period begins on November 1, 2012  
9 and ends on January 31, 2013.

10  
11 The analysis for the period of January 1, 2012 to October 31, 2012 shows:

12 FOM swing contract demand charges: \$5,338,234

13 Daily index purchase price less FOM purchase price: \$423,651

14  
15 The analysis for the period of November 1, 2012 to January 31, 2013 shows:

16 FOM swing contract demand charges: \$491,627

17 Daily index purchase price less FOM purchase price: \$(332,858)

18  
19 **Q. WHAT IS PGW PROPOSING WITH RESPECT TO ITS FOM SWING**  
20 **CONTRACTS?**

21  
22 A. The average demand charge per Dth for the period ending October 31, 2012 was  
23 \$0.24737 per Dth. The average demand charge for the period beginning on November 1,  
24 2012 (reflecting the new FOM swing contract rates) decreased substantially to \$0.1375  
25 per Dth and the daily deliverability has been halved to 37,500 Dth. Although the analysis  
26 for the period of November 1, 2012 to January 31, 2013 does not show that the new FOM

1 swing contracts are providing a pricing benefit, PGW will continue its analysis of the  
2 existing FOM swing contracts which expire October 31, 2013 through the end of May  
3 2013 when RFP's are issued for the next set of swing contracts to start on November 1,  
4 2013, and factor in the cost of prospective demand charges (along with any other relevant  
5 considerations) when determining if it will maintain FOM swing contracts after the  
6 current contracts expire. If PGW believes that FOM swing contracts can be cost  
7 beneficial for another one year period, it will continue with the same level of FOM swing  
8 contracts or reduce deliverability to some level below the 37,500 Dth. If not, it will  
9 switch entirely to daily index swing contracts (with daily deliverability of 75,000 Dth)  
10 after the current FOM swing contracts expire. If PGW continues with FOM swing  
11 contracts, it proposes to report the basis for its decision in its next 1307(f) annual filing  
12 on March 1, 2014.

13  
14 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

15 **A. Yes.**

Pennsylvania Natural Gas Distribution Companies - Sharing Formulas

<u>Utility</u>	<u>Type of Revenue Retained</u>	<u>Sharing %</u>	<u>Source</u>
Columbia	Off-system sales margin and capacity release.	25% of total.	Columbia Gas Tariff – Pa. P.U.C. No. 9, Supplement No. 188, 10 <sup>th</sup> Revised Pg. No. 159, Issued September 1, 2012, Effective October 1, 2012.
NFG	Off-system sales margin, capacity release, gas storage fill contracts savings and asset management arrangements under FERC Order 712 for capacity releases associated with identified capacity contracts.	25% of total.	NFG Gas Tariff – Pa. P.U.C. No. 9, Supplement No. 42, 2 <sup>nd</sup> Revised Pg. No. 154, Issued July 30, 2004, Effective August 1, 2004 & Supplement No. 95, 7 <sup>th</sup> Revised Pg. No. 155, Issued July 31, 2009, Effective August 1, 2009.
PECO	Off-system sales margin, capacity release and asset management agreement revenue. Effective March 31, 2008 through March 31, 2013.	25% of total.	PECO Gas Tariff – Pa. P.U.C. No. 2, Supplement No. 129, 20 <sup>th</sup> Revised Pg. No. 35, Issued November 29, 2012, Effective December 1, 2012.
UGI (Central Penn)	Off-system sales margin, locational exchange revenues, capacity release and storage asset management fees. Effective December 1, 2008, through November 30, 2016	25% of total.	UGI Central Penn Gas Tariff - PA P.U.C. No. 4, Supplement No. 2, 1 <sup>st</sup> Revised Page 38, Issued November 30, 2011, Effective December 1, 2011.
UGI (Penn Natural)	Off-system sales margin, capacity release, exchanges of natural gas and storage asset management fees. Effective December 1, 2011, through November 30, 2016	25% of total.	UGI Penn Natural Gas Tariff – Pa. P.U.C. No. 8, Supplement No. 19, 7 <sup>th</sup> Revised Pg. No. 31, Issued November 29, 2012, Effective December 1, 2012.
UGI	Off-system sales margin, locational exchange revenues, capacity release and storage asset management fees. Beginning December 1, 2008 and ending November 30, 2016	25% of total.	UGI Gas Tariff – Pa. P.U.C. No. 5, Supplement No. 88, 7 <sup>th</sup> Revised Pg. No. 30, Issued November 30, 2011, Effective December 1, 2011.



**Tab 7**

# Philadelphia Gas Works Unaccounted for Gas Review

For the 2012-2013 1307(f) Settlement Agreement

**03/01/2013**

**Vice President Technical Compliance**

**Mike Jones P.E.**

## **I. Introduction**

Philadelphia Gas Works (“PGW”) serves approximately 500,000 customers and is the largest municipally owned natural gas distribution company (“NGDC”) in the United States. PGW operates within the boundaries of the City of Philadelphia and has served the city and its residents for 175 years. Operated by approximately 1,660 employees, PGW’s gas system consists of approximately 3,000 miles of mains and 3,000 miles of services, 514,000 meters, more than 200 distribution system regulator stations, two miles of transmission pipeline and liquefied natural gas peak shaving facilities (includes a liquefier, vaporizers and storage). PGW is serviced by two pipeline companies, Spectra Energy and Williams Transco, through nine metering and regulating stations. PGW has an annual throughput of approximately 78 Billion cubic feet of gas.

### **Settlement Agreement**

In the 2012-2013 1307(f) settlement agreement paragraph III.7., PGW agreed “to identify its Unaccounted for Gas (“UFG”) mitigation strategies and evaluate whether UFG mitigation strategies employed by other similarly situated NGDCs (which have achieved reductions in UFG) are appropriate for PGW.” PGW further agreed to report on the foregoing efforts in its March 1, 2013 annual 1307(f) filing.

### **Unaccounted for Gas Definition**

A pending Pennsylvania Public Utility Commission regulation defines UFG as “the calculation for all gas lost by the system, including gas lost due to breaks, leaks, theft of service, unmetered consumption, meter inaccuracies, or any other point of lost, unidentifiable, or non-revenue

producing gas.”<sup>1</sup>

## **II. Additions to PGW’s UFG Mitigation Program**

PGW compared the elements of its current UFG mitigation program (Section III below) to the UFG mitigation programs of other Pennsylvania NGDCs (Section IV below). In performing this comparison, PGW has added the following to its UFG mitigation program:

- Some Pennsylvania NGDCs include accelerated main replacement in their UFG mitigation programs. PGW has now included the same. PGW filed a Long Term Infrastructure Improvement Plan (Docket No. P-2012-2337737) with the Pennsylvania Public Utility Commission (“PUC”) on December 3, 2012 which sets forth the Company’s accelerated main replacement program. This plan, which accelerates the replacement of both smaller diameter and larger diameter cast iron main, will be implemented upon approval by the PUC.
- PGW now includes measures in its standard operating practices which preclude venting large volumes of natural gas during pressure operations and plant maintenance.
- PGW will no longer install pressure relief devices which automatically vent gas into the atmosphere to prevent system over-pressure. Instead, PGW will install monitor regulators or internal relief regulators to control system and service pressures. These devices regulate or control pressure and do not vent gas to the atmosphere.
- PGW will continue to review and evaluate its UFG mitigation program set forth in section III in order to explore prospective opportunities to further reduce UFG.

---

<sup>1</sup> *Establishing A Uniform Definition and Metrics For Unaccounted-For-Gas*, Docket No. L-2012-2294746 (Proposed Rulemaking Order - June 7, 2012).

### **III. PGW UFG Mitigation Programs**

PGW has a mature, robust, multifaceted and comprehensive program to address UFG. The following are the components of PGW's UFG mitigation program.

#### **A. Automatic Meter Reading Program**

One of the most efficient methods of obtaining timely and accurate meter readings is by utilizing remote meters. Almost 100% of PGW's meter sets include an Automatic Meter Reading ("AMR") device. PGW also monitors its AMR program by investigating active accounts for which the Company has not received an automatic meter reading for more than three consecutive months. As a result of the foregoing, during calendar year 2012, bills estimated for a six month period were less than 0.04% and bills estimated for a 12 month period were less than 0.011%.

Reducing estimated bills generally helps minimize UFG because the UFG calculation is a type of reconciliation between the measurement of natural gas which enters PGW's distribution system via its gate stations and the measurement of natural gas billed to PGW's customers. If customer billings are more accurate, the UFG measurement will be more accurate.

#### **B. Meter and AMR Replacement Program**

PGW has a robust meter and AMR replacement program which enhances the accuracy and reliability of meter readings. The following is the meter and AMR replacement schedule for fiscal years 2012-2016:

FY 2012	20,000
FY 2013	20,000
FY 2014	20,000

FY 2015 25,000

FY 2016 25,000

C. Meter Reclamation Program

PGW monitors and investigates inactive accounts – if PGW has not received an automatic meter reading for an inactive account in three months, a field visit is scheduled to confirm the current account status. If the property is vacant or abandoned, the metering equipment is reclaimed and reconditioned (if possible).

D. PGW Meter Testing/Inspection Programs

PGW takes reasonable steps to ensure that its meters are functioning properly. PGW’s testing programs for meters and pressure/temperature correcting devices comport with PUC regulation 52 Pa.Code §59.21. Additionally, Fixed Factor Pressure Regulators are checked on an annual basis to ensure that the regulator is maintaining the proper gas delivery pressure applied to the customer’s bill. Furthermore, Metretek meter reading data collection systems (used for interruptible transportation customers) are inspected quarterly.

E. Company Use of Natural Gas

PGW meters all natural gas used to operate its facilities and distribution system. PGW’s company usage is recorded at the main office campus, the field service stations, the district offices, the heaters at the nine city gate stations and the gas fired equipment at the Richmond and the Passyunk Plants. The Company regularly monitors its company-use and investigates potential methods for reducing such use, when reasonable and appropriate.

F. Gas Theft Detection and Mitigation

PGW's Revenue Protection Unit ("RPU") investigates the theft of natural gas and operates PGW's revenue protection programs. These programs include:

Usage Discrepancy Program – this program utilizes an analytical screening software program to identify meters with unexpected usage variances. Identified meters are investigated for tampering and accuracy.

Soft Off Program – this program monitors inactive accounts in soft off status. PGW monitors these accounts via AMR readings and if usage exceeds a pre-determined volume, PGW provides the occupant with a gas service application. If gas service is not established, PGW begins procedures to physically terminate service.

Unauthorized User Program – this program physically terminates service to properties at which service has been restored without PGW's authorization.

User Without a Contract Program – this program provides gas service application information to customers using natural gas without a PGW service agreement. If the customer does not apply for service, PGW begins termination procedures.

The PGW Gas Theft Bonus Payment policy and procedure incentivizes the reporting of gas theft. The procedure includes all departments having knowledge of and/or information regarding unauthorized usage and tampering with meters.

PGW encourages the public to report gas theft. The PGW website (along with many other PGW sources) provides a tip hotline number to report suspected gas theft.

G. Main and Service Replacement Program

PGW has made substantial strides in its cast iron main and steel service replacement programs over the last 15 years by replacing approximately 250 miles of cast iron main and 150,000 steel services with plastic and protected coated steel. Additionally, in December 2012, PGW filed a Long Term Infrastructure Improvement Plan which, if approved by the PUC, will accelerate infrastructure replacement beyond historical levels. A summary of PGW’s proposed acceleration can be found at Docket No. P-2012-2337737.

H. Leak Response

PGW is committed to providing a response to reported leaks within one hour of receiving notification (via its dedicated leak hotline).

I. Leak Surveys

PGW performs leak surveys pursuant to Pipeline and Hazardous Material Safety Administration (“PHMSA”) regulation (49 C.F.R. 192.723) – see Table 1. PGW also performs supplemental winter leak surveys – see Table 2.

<b><u>Table 1</u></b>		
<b>Leak Survey Description</b>	<b>Method</b>	<b>Frequency</b>
Roadway	Mobile	Annually – Not to Exceed 15 Months
Footway	Walking	3 Years – Not to Exceed 3.5 Years
Center City	Walking	Semi-annually not to exceed 7 months
Business District	Walking/Mobile	Annually – Not to Exceed 15 Months
Transmission	Walking/Mobile	Quarterly – Not to Exceed 4 Months
Franklin Mills	Walking	Quarterly – Not to Exceed 4 Months



Plants and Gate Stations	Walking	Annually – Not to Exceed 15 Months
Master Meter (By Agreement)	Walking	3 Years – Not to Exceed 3.5 Years
Major Parades, Bike Race	Mobile	2 – 4 Weeks Prior
Buried Bridge Mains	Walking	Annually – Not to Exceed 15 Months
Blasting & Implosion	Walking/Mobile	As notified by Fire Marshall or PA One Call
Special 30” Cast Iron	Mobile	Quarterly
Winter Surveys	Mobile	December 1 through March 31

<b><u>Table 2</u></b>		
<b>Winter Leak Survey Type</b>	<b>Method</b>	<b>Frequency</b>
General Winter Patrol	Mobile	December 1 through March 31
Prudent Winter Patrol	Mobile	Based on frost events
12” Cast Iron	Mobile	Once every two months from December 1 through March 31

#### J. Damage Prevention Program

PGW was recently recognized by the American Gas Association as being a leading performer in Damage Prevention. PGW’s Damage Prevention Program includes regular patrols of transmission and high pressure pipelines and constant monitoring of large infrastructure excavation projects near transmission and critical distribution pipelines. PGW attributes the success of this program to being an active participating member of the Pennsylvania One Call System, employing an experienced and well trained facility mark out staff and maintaining an extensive and detailed facility mapping system.

#### K. Reimbursement for Gas Loss Associated with 3<sup>rd</sup> Party Damage

PGW seeks reimbursement for gas loss associated with 3<sup>rd</sup> party damage when appropriate. This generally includes damage to large diameter and higher pressure facilities (whereas the gas loss associated with small diameter and low pressure facilities is negligible, therefore, it is not billed). When gas loss of this nature is billed, the associated volume is no longer unaccounted for gas.

#### L. Distribution and Transmission Integrity Management Programs

PGW has developed and implemented a Distribution Integrity Management Program (“DIMP”) in compliance with PHMSA regulations (49 CFR Part 192 - Subpart P). A DIMP is a written integrity management plan which, among other things:

- demonstrates an operator’s understanding of its system;
- identifies the threats to its distribution system;
- evaluates the risks associated with its distribution pipeline;
- determines the relative importance of each threat;
- estimates and ranks the risks posed to its pipeline; and
- identifies the measures to address risks.

PGW also developed and implemented an Integrity Management Program (“IMP”) for its 2 miles of transmission pipeline pursuant to 49 CFR Part 192, Subpart O. The DIMP and IMP help minimize UFG because it assists PGW in identifying the sections of pipeline more likely to leak and break, which, in turn, leads to replacement prioritization of these sections.

#### M. Gas Odorization Program

Natural gas is odorized for the safety of PGW's customers. Odor is added to the natural gas and serves as a signal to warn of a possible gas leak. Gas odorization also aids leak detection and repair (thereby reducing UFG). Federal and state regulations require that natural gas odor levels be established and maintained so that natural gas is readily detectable by a person with a normal sense of smell.

#### N. Venting Alternatives

When conducting pressure operations to reduce the pressure in a gas pipeline, PGW limits venting when possible by exhausting gas from higher pressure systems into lower pressure systems rather than exhausting gas to the atmosphere. Additionally, PGW has removed all of the automatic relief devices at street regulators and will no longer install pressure relief devices which automatically vent gas into the atmosphere. Instead, PGW will install monitor regulators or internal relief regulators to control system and service pressures. These devices regulate or control pressure and do not vent gas to the atmosphere.

#### O. Validation of Delivered Volumes

PGW validates the accuracy of volumes delivered to its gate stations by validating daily receipt volumes. PGW compares the daily volumes reported by natural gas suppliers to PGW's own measurements. Discrepancies are promptly corrected.

#### P. Meter Sizing

PGW's engineering design practices ensure that proper measurement equipment is selected and installed for each customer application. This practice results in meters being properly sized for a customer's usage profile, therefore, customer usage is more accurately measured.

#### Q. Dual Meters

PGW installs dual (parallel) meters for customers which have highly variable flow rates in order to more accurately measure customer usage at varying levels of usage.

#### R. BTU Zones

PGW has segmented its distribution system into BTU zones for more accurate dekatherm calculations. PGW uses a model which calculates the BTU content of the gas delivered to various zones in its distribution system. The data is used to bill interruptible transportation ("IT") customers by therm, rather than by volume. BTU zones and therm billing for these larger customers assist in a better accounting for the volumes of IT gas transported from PGW's city gates to IT customer locations.

#### S. Gas Measurement Working Group

PGW has an established cross functional multi-disciplinary team which meets quarterly to address UFG issues as well as residential, commercial, industrial, intra-plant and natural gas supplier gas measurement issues. The Gas Measurement Working Group is comprised of the following departments: Budget and Accounting, Chemical Services, Commercial Resource Center, Distribution and Field Services Departments (including the Pressure Force and the Meter Shop), Gas Acquisition, Gas Control and Gas Processing.

#### **IV. Evaluation of Mitigation Strategies Employed by Other Similarly Situated NGDCs**

PGW initiated an Energy Association of Pennsylvania canvass requesting the contact information of PA NGDC subject matter experts who could provide information regarding their UFG mitigation strategies. Four companies, Equitable Gas, NiSource-Columbia Gas of Pennsylvania, PECO Energy Company, and UGI Central Penn Gas, provided the requested contact information. PGW conducted telephone interviews with the subject matter experts from each of these NGDCs.

##### **Equitable Gas Company**

Equitable Gas reduced UFG by metering the previously unmetered gas used by gate station heaters.

- ✓ All of PGW's gate station heaters are metered.

Equitable Gas installed temperature compensating meters where appropriate.

- ✓ PGW makes extensive use of temperature compensating meters in its system. These meters are installed on the system (where appropriate) to provide accurate measurement of gas consumed.

Equitable Gas uses a hydraulic model to calculate the amount of gas vented during venting operations; this model is also used to calculate gas losses due to 3<sup>rd</sup> party damage.

- ✓ PGW also uses a model which calculates the amount of gas expelled during emergency venting operations and for large losses associated with 3<sup>rd</sup> party damage.

Equitable Gas bills for the cost of gas lost associated with 3<sup>rd</sup> party damages.

- ✓ PGW bills for gas lost as a result of 3<sup>rd</sup> party damages when the lost gas is more than negligible and can be calculated.

## **NiSource-Columbia Gas of PA**

NiSource Columbia Gas of Pennsylvania's UFG mitigation program includes a damage prevention program, an aggressive leak repair program, bare steel leak surveys and an accelerated main replacement program.

- ✓ All of these are mature programs at PGW. Additionally, PGW now includes accelerated main replacement in its UFG mitigation program.

## **PECO Energy Company**

In a 2012 PECO UFG Plan and Report, PECO identified the following UFG mitigation strategies:

- Distribution Integrity Management Plan,
  - Transmission Integrity Management Plan,
  - Accelerated Gas Infrastructure Modernization Program,
  - Damage Prevention Program,
  - Leak Detections and Surveys,
  - Leak Response and Classification Program,
  - Meter Testing Programs; and
  - Investigation of Zero Registration from Automatic Meter Readings.
- ✓ PGW also employs each of these strategies.

## **UGI Central Penn Gas**

UGI Central Penn Gas verifies the pipeline meter measurements.

- ✓ PGW validates the accuracy of volumes delivered to its gate stations by validating daily receipt volumes. PGW compares the daily volumes reported by natural gas suppliers to PGW's own measurements. Discrepancies are promptly corrected.

UGI Central Penn Gas instituted a program that verifies the accuracy of large customer meters.

- ✓ PGW's testing programs for meters and pressure/temperature correcting devices comport with PUC regulation 52 Pa.Code §59.21. Additionally, Fixed Factor Pressure Regulators are checked on an annual basis to ensure that the regulator is maintaining the proper gas delivery pressure applied to the customer's bill. Furthermore, Metrotek meter reading data collection systems (used for interruptible transportation customers) are inspected quarterly.

Natural gas supplies at the gate are recorded in therms and there are differing BTU contents at each gate station. UGI Central Penn Gas developed a weighted average of BTU content for takes at all gates and applies the average customer bills (in therms).

- ✓ PGW employs a similar practice. PGW uses a model which calculates the BTU content of the gas delivered to the various zones in its distribution system. The data is used to bill interruptible transportation customers by therm, rather than by volume.

## **V. Conclusion**

PGW's UFG mitigation program is robust and comports with the best practices of other Pennsylvania NGDCs. In order to enhance PGW's UFG mitigation program, PGW has added the following to its program:

- Some Pennsylvania NGDCs include accelerated main replacement in their UFG mitigation programs. PGW has now included the same. PGW filed a Long Term Infrastructure Improvement Plan (Docket No. P-2012-2337737) with the Pennsylvania Public Utility Commission (“PUC”) on December 3, 2012 which sets forth the Company’s accelerated main replacement program. This plan, which accelerates the replacement of both smaller diameter and larger diameter cast iron main, will be implemented upon approval by the PUC.
- PGW now includes measures in its standard operating practices which preclude venting large volumes of natural gas during pressure operations and plant maintenance.
- PGW will no longer install pressure relief devices which automatically vent gas into the atmosphere to prevent system over-pressure. Instead, PGW will install monitor regulators or internal relief regulators to control system and service pressures. These devices regulate or control pressure and do not vent gas to the atmosphere.
- PGW will continue to review and evaluate its UFG mitigation program set forth in section III in order to explore prospective opportunities to further reduce UFG.