



Natural Gas Statistics Report for Pennsylvania

February 2010

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I. Executive Summary

Introduction

Section 59.48 of the Public Utility Code (Code) requires natural gas distribution companies (NGDCs) to file annual financial reports. These Gas Annual Reports detail such items as financial and accounting data including revenues and expenses. Section 59.81 of the Code requires annual resource planning reports (ARPR) for major gas utilities. NGDCs with sales of 8 billion cubic feet per year or more must file these reports, which include the past year's historical data, program changes, and the next three year forecast of demand requirements. This report has been prepared using information filed by the NGDCs.

Overview

The Bureau of CEEP has prepared the Natural Gas Statistical Report, which consists of six major sections, 1) a discussion regarding natural gas infrastructure, 2) U.S. natural gas data, 3) Pennsylvania natural gas data, 4) Pennsylvania natural gas distribution company (NGDC) customer data, 5) NGDC supply and demand data, and 6) financial statistics from the Gas Annual Reports filed by the NGDCs, and data from the Energy Information Administration (EIA). This update of the previous reports also includes new information for the Philadelphia Gas Works (PGW). There have been a number of acquisitions since the last gas report. UGI has purchased PPL Gas (Formerly Penn Fuel Gas and North Penn Gas) which is now listed as Central Penn Gas. UGI also acquired PG Energy (formerly known as Pennsylvania Gas and Water). The previous report presented data from the years 1997 through 2001.

There are 36 gas companies in Pennsylvania, nine interstate pipelines, and four liquified natural gas (LNG) facilities¹. Infrastructure needs are being met by expansion

¹ Metro, Paul. Pennsylvania State Hazardous Materials & Pipeline Safety Meeting presentation to the PA State Fire Marshals, 3/20/2008. http://www.puc.state.pa.us/transport/gassafe/pdf/Presentation-Hazardous_Materials032008.pdf

and replacement efforts of existing pipelines, with new pipelines and compressor stations being constructed.

National storage inventory reached a new record at the end of the 2009 storage period (October 31) of more than 3.8 trillion cubic feet. Natural gas prices remain volatile, but EIA predicts the Henry Hub annual average spot price to increase from \$4.06 per thousand cubic feet (Mcf) to \$5.36 in 2010 and \$6.12 in 2011. Total consumption is expected to remain unchanged in 2010².

Pennsylvania's Marcellus shale operations are expected to ramp up in 2010 with the prospect of producing 550 MMCF per day in 2010 if producers can resolve potential wastewater issues³. Pennsylvania waterways are already impacted by total dissolved solids (TDS) and the Marcellus shale drilling wastewaters are high in this pollutant. The Pennsylvania Department of Environmental Protection (DEP) has proposed strict TDS limits that will come into effect in 2011. The first wastewater treatment plant in PA that can handle TDS will be online in 2011, but will be only able to handle a small fraction of the projected wastewater⁴. Drillers will need to develop onsite options or ship the wastewaters out. Wastewater samples have been found high in naturally occurring radioactive materials (NORM) at some drilling sites in New York⁵.

Financial statistics taken from the Gas Annual Reports of the NGDCs are presented in time series fashion from 2002 through 2008. Broad category financial data is presented for several categories, such as Revenue, Expenses, Plant in Service, Depreciation, Maintenance, Gas Costs, etc.

² EIA Short Term Energy and Winter Fuels Outlook, released October 6, 2009 and January 12, 2010. <http://www.eia.doe.gov/emeu/steo/pub/contents.html>

³ Considine, Timothy, et al. "An Emerging Giant: Prospects and Economic Impacts of Developing the Marcellus Shale Natural Gas Play". August 5, 2009. <http://www.pamarcellus.com/EconomicImpactsofDevelopingMarcellus.pdf>

⁴ Sapien, Joaquin. "With Natural Gas Drilling Boom, Pennsylvania Faces an Onslaught of Wastewater." *ProPublica*. October 3, 2009. <http://www.propublica.org/feature/wastewater-from-gas-drilling-boom-may-threaten-monongahela-river>

⁵ Lustgarten, Abraham. "Is New York's Marcellus Shale Too Hot to Handle?" *ProPublica*, November 9, 2009. <http://www.propublica.org/feature/is-the-marcellus-shale-too-hot-to-handle-1109>

Data on the number of customers, reserves, wellhead prices, Pennsylvania production, and average consumption figures are provided. The source of this information is the ARPRs, the Gas Annual Reports, the Energy Information Administration and the Pennsylvania Topographic and Geologic Survey.

To summarize the relevant statistics in this report, natural gas delivery to Pennsylvania has remained steady from 2002 to the present at approximately 600 BCF per year. Pennsylvania gas production peaked at 196.6 BCF in 2004 and was at 181.4 BCF in 2007 (the most recent data available)⁶. Retail and residential sales have increased since 2002 in Pennsylvania, but retail industrial and electric power sales have fallen.

⁶ EIA, Natural Gas Summary, Dry Production, http://tonto.eia.doe.gov/dnav/ng/hist/na1160_spa_2a.htm

II. Pennsylvania Natural Gas Infrastructure

Distribution – Aging Infrastructure

There are approximately 3 million natural gas customers in Pennsylvania served by more than 40,000 miles of gas mains. Pennsylvania has 3,600 miles of cast iron and 9,000 miles of unprotected steel pipes. Bare steel and cast iron account for 5 percent of the distribution pipe and 95 percent of leaks. Most of these date to the World War II era. These pipes should be replaced with more durable plastic lines. Replacement costs are estimated at \$13 billion over 20 years⁷.

In 2007, Columbia Gas began a 20-year program to replace 2,400 miles of pipeline in the southwestern part of the state. The program is expected to cost \$1.2 billion. As Columbia replaces main lines, they are converting from low pressure to medium pressure and adding excess flow valves that shut off when a surge of gas is detected. Equitable Gas replaces 25 miles of mostly old bare steel pipeline each year at a cost of more than \$100 million over the past 5 years. T.W. Phillips replaces about 40 miles of line each year and repairs over 1,350 average leaks per year. About 1,100 miles of the T.W. Phillips system is bare steel⁸.

Lost and Unaccounted for Natural Gas

Lost and unaccounted (L&U) for natural gas is the difference between the total gas available from all sources and the total gas accounted for from sales, net interchange, and company use. Releases occur through leaks from compressor and pump seals and vented emissions from operation practices or accidental breaks.

⁷ See footnote 1. Also: Leonard, Kim. "Gas Companies Work to Update Aging System." *Pittsburgh Tribune Review*, 3/7/2008. www.pittsburghlive.com/x/pittsburghtrib/news/cityregion/print_556017.html

⁸ Leonard, Kim. "Gas Companies Work to Update Aging System." *Pittsburgh Tribune Review*, 3/7/2008. www.pittsburghlive.com/x/pittsburghtrib/news/cityregion/print_556017.html

Several tons of gas is either flared off or released to the atmosphere when pipelines are repaired. DEP has developed a work plan for reduction of L&U as part of their greenhouse gas (GHG) emission reduction efforts, since natural gas is a more powerful GHG than carbon dioxide. EIA tracks L&U for Pennsylvania as a balancing item in its disposition statistics. The EIA L&U numbers are highly variable. For 2007 there was a positive balance of 6,742 mcf, and in 2006 there was a net loss of 14,797 mcf⁹. This variability may be due to inaccurate metering and reporting. Gas that is used internally for transportation, lost through line breaks or vented is not accounted for.

DEP provides three primary areas that need to be addressed for better understanding of L&U: (1) accurate measurement and reporting; (2) operations and maintenance improvements (or replacements) to lines and aging parts; and (3) minimization of accidental losses through line breaks¹⁰.

Pipelines

Twenty interstate natural gas pipelines exist in the Northeast Region (Connecticut, Delaware, Massachusetts, Maine, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Virginia, and West Virginia). These interstate pipelines deliver to several intrastate pipelines and over 50 local distribution companies (LDCs). They also deliver to natural gas fired electric generating facilities and large industrial concerns. The pipelines in Pennsylvania have access to flows from the Southeast and Midwest and most recently from the Rockies via the Rockies Express pipeline in Ohio¹¹.

⁹ EIA Natural Gas Annual Supply & Disposition by State.
http://tonto.eia.doe.gov/dnav/ng/ng_sum_snd_dcu_SPA_a.htm

¹⁰ PA DEP. "Reduce Lost and Unaccounted for Natural Gas Work Plan for Potential GHG Reduction Measure." 10/22/2008

¹¹ Natural Gas Pipelines in the Northeast Region, EIA About US Natural Gas Pipelines, retrieved 10/7/2009.

In 2007, there were nine pipeline expansions in the Northeast which made up 1.7 BCF of new capacity per day¹². A recent project in Pennsylvania was completed by Texas Eastern. The project included new pipeline in Somerset and Bedford counties, replacement of pipeline in Franklin and Bucks county and a new compressor station in Heidlersburg.

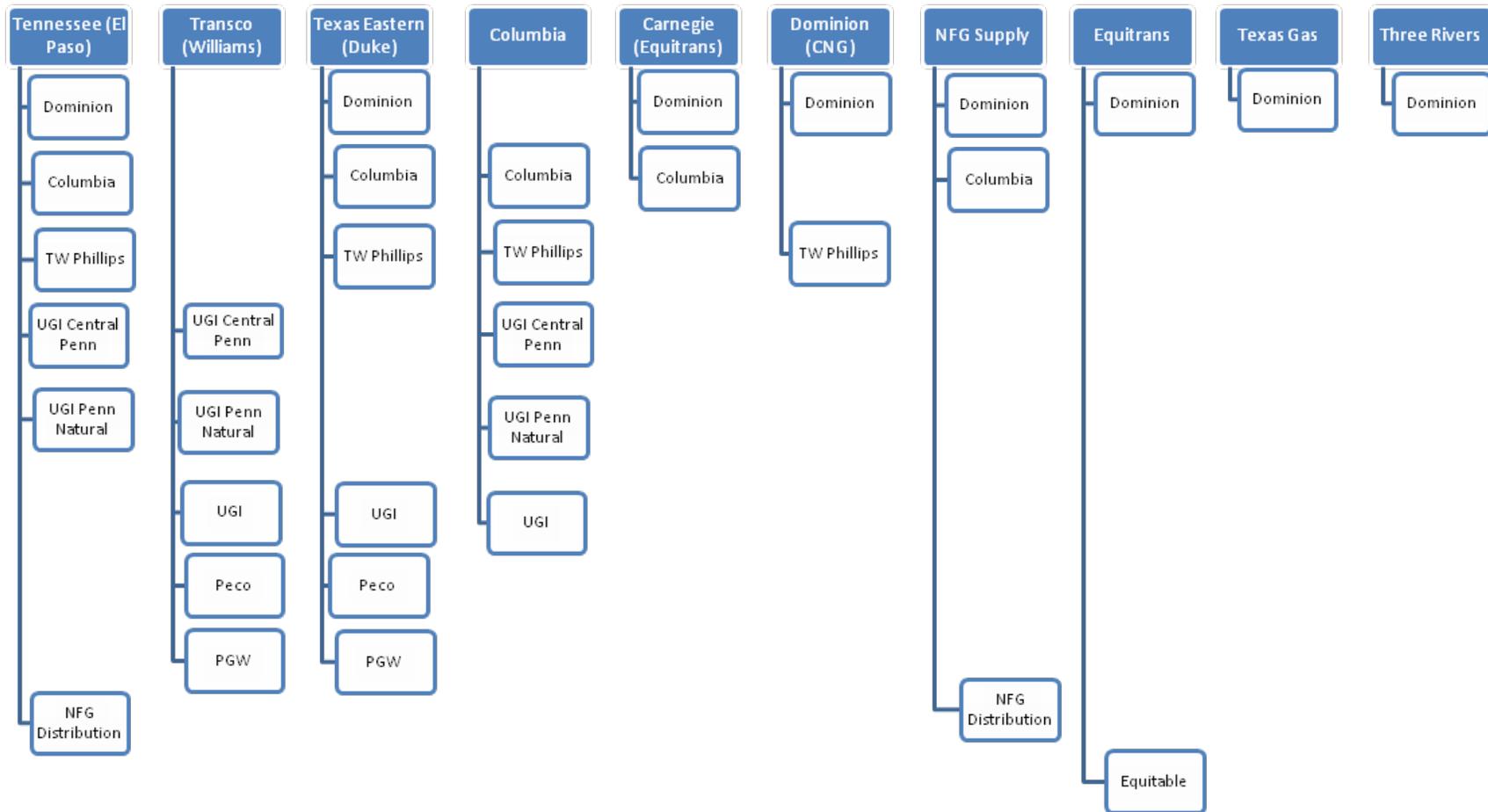
Compressor stations are pumping facilities that move natural gas. They are usually 50 to 100 miles apart along the length of a pipeline with the average compressor station moving about 700 million cubic feet per day¹³. Compressor station construction will be needed as the Marcellus Shale resource increases production and to serve any additional natural gas electric generating stations.

The NGDC/Pipeline Relationship diagram follows. Figure 1 details where the NGDCs obtain their gas supplies. The diagram was developed from the Interstate Natural Gas Infrastructure Map Book and the Gas Annual Reports.

¹² EIA. "Additions to Capacity on the US Natural Gas Pipeline Network: 2007." EIA Office of Oil and Gas. 7/2008

¹³ EIA. "Natural Gas Compressor Stations on the Interstate Pipeline Network: Developments Since 1996." EIA Office of Oil and Gas. November 2007.

Figure 1 NGDC/Pipeline Relationship



New pipelines are in the planning stages for Dominion – adding a line from fields in West Virginia to Delmont for 2012 and a line from Greene County to Chester County¹⁴. These lines are in the preliminary stages and not yet approved by the Federal Energy Regulatory Commission (FERC), which has jurisdiction over interstate natural gas transmission pipelines. Transco is planning a new pipeline approved by FERC in Chester County¹⁵. Texas Eastern has approval from FERC for a pipeline to connect existing pipelines in Peach Bottom Township, York County and Marietta, Lancaster County¹⁶.

Electric Generation

By the end of 2008, Pennsylvania had 10,447 MW of natural gas fired electric generation. These facilities constitute 25 percent of Pennsylvania's generating capacity. The PJM queues at the end of 2008 of new generation included 133 MW of proposed new natural gas fired capacity. Typically about 25 percent of the queue actually gets built. Figure 2 illustrates the 2008 generating capacity in Pennsylvania by fuel type. Figure 3 presents the 2008 queue data for PJM. Both figures are derived from PJM's 2009 Regional Transmission Expansion Plan.

¹⁴ "Dominion Plans \$600 Million West Virginia Gas Pipeline." Oct 5, 2009, www.UPI.com

¹⁵ Lynch, Danielle. "Chesco Townships Unite for Talks About Natural Gas Pipeline." *Pottstown Mercury*. Nov. 10, 2008.

¹⁶ "Preliminary approval for York County Natural Gas Pipeline." September 16, 2009 <http://pipelinesinternational.com>

Figure 2 Existing Capacity in Pennsylvania

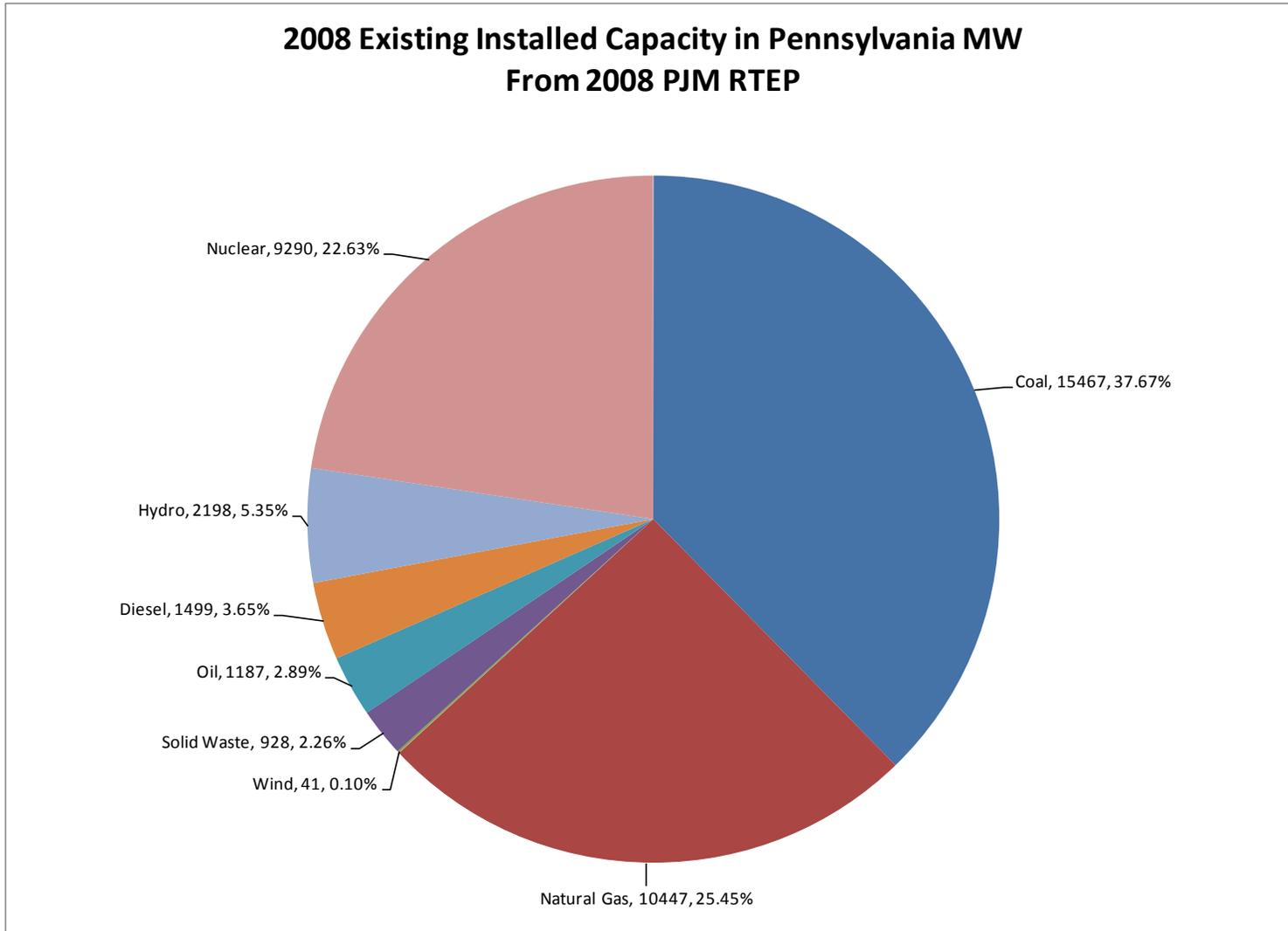
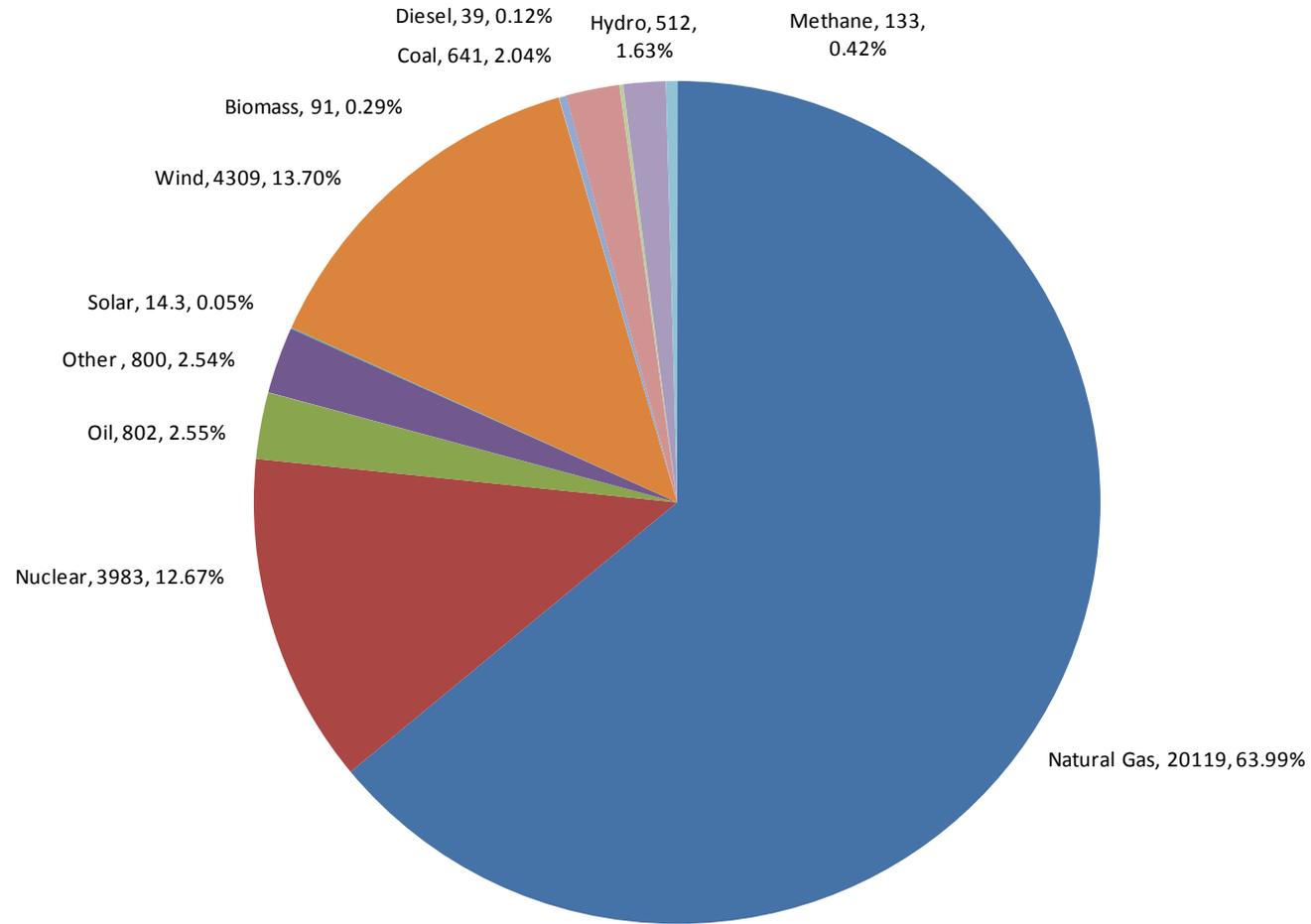


Figure 3 Electric Queue in Pennsylvania

2008 Electric Queued Capacity by Fuel Type in PA
From 2008 PJM RTEP



By the end of 2008, PJM's total capacity was 164,895 MW. The PJM capacity and generation supply mix for the entire PJM area, which includes Pennsylvania is summarized as follows¹⁷:

Table 1 PJM Capacity and Generation Mix in %

	2008 Capacity	2008 Generation
Coal	40.7%	55.0%
Nuclear	18.5%	34.6%
Natural Gas	29.3%	7.3%
Hydro, Wind & Solid Waste	5.0%	2.8%
Oil	6.5%	0.3%

Although natural gas provided only 7.3 percent of the 2008 generation in PJM, the marginal price or Locational Marginal Price (LMP) was set by natural gas generators in 2008 17 percent of the time and 14 percent of the time in 2009 so far. The marginal unit is the generator that can supply the next available MW of power. A summary of fuel type and marginal unit is presented below¹⁸:

Table 2 Fuel Type and Marginal Unit as % of Total Generation

Fuel Type	2008	2009
Coal	78%	79%
Misc	1%	3%
Natural Gas	17%	14%
Nuclear	0%	1%
Petroleum	3%	3%

¹⁷ "2008 State of the Market Report for PJM", www.monitoringanalytics.com, pp. 15-16.

¹⁸ Monitoring Analytics <http://www.monitoringanalytics.com/data/data-description.pdf> and <http://www.pjm.com/markets-and-operations/energy/real-time/historical-bid-data/marg-fuel-type-data.aspx>

When the natural gas facility sets the LMP, the other generators, including lower cost coal plants, are paid the higher price. Andrew Ott, Senior Vice President of Markets at PJM, asserts that this can occur because the lower cost base-load plants set their price below the actual marginal cost of generation, and the base load plants expect to make up the difference during periods of higher demand when natural gas sets a higher price¹⁹. This issue will likely become more complex as the cap and trade bill comes into effect and the cost of coal fired generation increases. At this point, there is not enough natural gas generation in Pennsylvania to replace base load coal plants with natural gas generation. Many of the natural gas generation facilities are severely limited by their air permits and can only serve as peaking units or mid-merit facilities. Changing an existing air permit can be expensive and time consuming. In some cases, units would need to be retrofitted with air pollution control equipment.

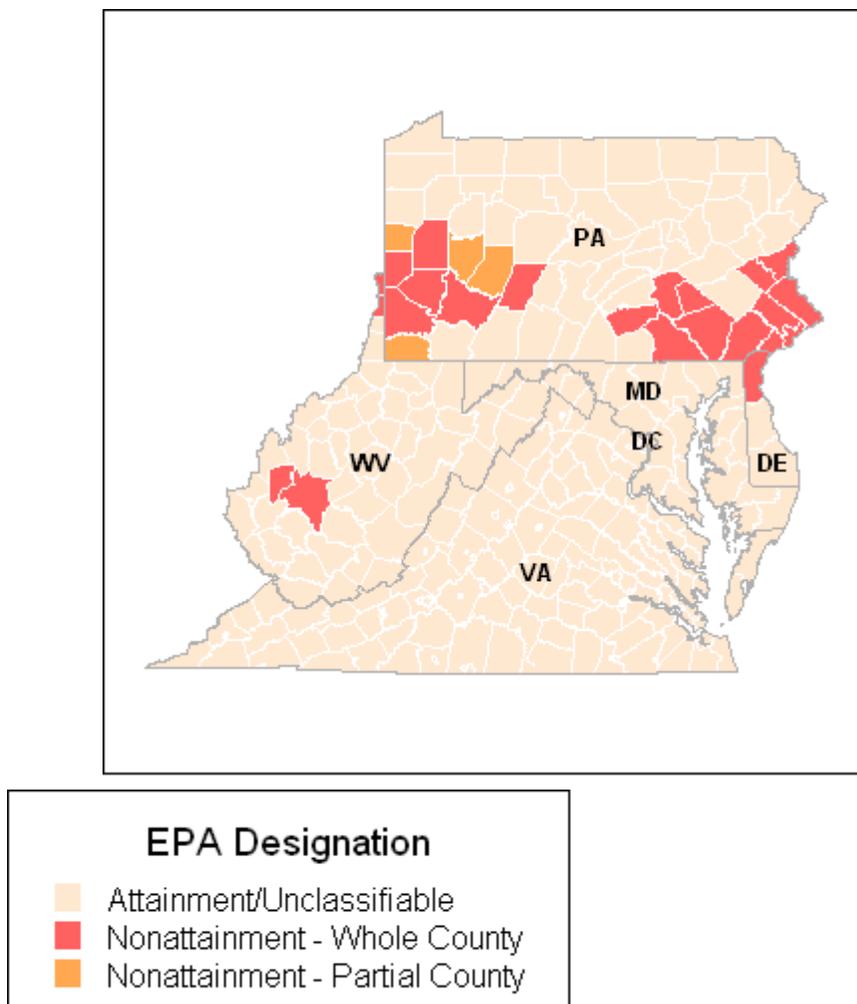
If the carbon dioxide cap and trade bill becomes finalized, natural gas facilities may become even more attractive. Natural gas combustion generates approximately 40% less carbon dioxide emissions per million BTU than coal combustion²⁰. The 2008 PJM State of the Market Report states that older coal-fired steam units in the eastern part of the PJM area may well be replaced by units burning natural gas. Any new gas-fired plants may potentially have significant implications for future congestion and natural gas infrastructure concerns. Siting new plants in the eastern portions of the PJM area and specifically southcentral and eastern portions of Pennsylvania will be further complicated by environmental issues. Several areas of southcentral and southeastern Pennsylvania have been designated by the federal Environmental Protection Agency (EPA) as non-attainment (not meeting the national emission standards) areas for very fine particulate matter (PM2.5). Locating any new generation in these non-attainment areas will require the purchase of emission offsets for combustion product pollutants including PM2.5. The offsets for PM2.5 are extremely

¹⁹ PA PUC En Banc Hearing, Testimony of Andrew Ott, Senior VP, PJM Interconnection, October 23, 2008.

²⁰ EIA: "How much carbon dioxide (CO2) is produced when different fuels are burned?" http://tonto.eia.doe.gov/ask/environment_faqs.asp#CO2_quantity

limited at this time. There is some availability of offsets for other pollutants and these can be used at a higher ratio for PM_{2.5} if they come from the same non-attainment area. Below is a map of the current PM_{2.5} designations for Pennsylvania²¹. Locating new generation in the counties designated as non-attainment below would be very difficult and costly. This environmental issue will impact potential siting and transmission planning decisions for Pennsylvania.

Figure 4 PM_{2.5} Attainment Designations for EPA Region 3, Including PA



²¹ 2006 24-Hour PM_{2.5} Standards – Region 3 Designations
<http://www.epa.gov/pmdesignations/2006standards/final/region3.htm>

One of the proposed natural gas facilities for Pennsylvania is the Tenaska project, to be located in Lebanon County, which is an attainment area for PM2.5. The 950 MW combined cycle turbine facility will be near an existing gas pipeline and will provide electricity to the PJM interconnection²².

²² Tenaska Lebanon County Generation Station, Fact Sheet. www.tenaskalebanonproject.com

III. US Natural Gas Production, Reserves and Prices

The following table shows United States natural gas production, reserves and prices for the period 1975 through 2008. Annual production in the United States in 1990 was 17,810 BCF; in 2008, production was 21,442 BCF. This is a 20 percent increase in annual production.

Proven U.S. gas reserves decreased by 22 percent from 1975 to 2000. Since then, higher prices and increased exploration have increased reserves by 38 percent over the period 2000 to 2008. Proven reserves for 2008 (as of 12/31/2008) are 7.2 percent higher than the 1975 reserves. Proven Pennsylvania reserves as of 12/31/2008 are 3,577 BCF. Pennsylvania storage capacity is at 759,635 MCF²³.

The wellhead price of natural gas rose substantially from 2000 to 2008, almost tripling over the period. This was in response to changes in the supply and demand. Supply remained constant, but demand increased. The Henry Hub, Louisiana wholesale price hit a high of \$13.41 per MCF on July 8, 2008. Henry Hub prices bottomed out at \$1.64 on September 4, 2009 [ICE Market Data Report Center]. Henry Hub spot price averaged \$5.26 per MCF in December 2009. The increase in natural gas prices is difficult to predict, but EIA expects the annual average Henry Hub price to increase from \$4.06 in 2009 to \$5.36 per MCF in 2010 and \$6.12 in 2011. EIA expects natural gas demand in the power generation sector to decrease in the short term as several coal plants that have been under construction come on line and the price of natural gas moves slightly higher²⁴. There are no permit applications for new coal plants in Pennsylvania at DEP for review. An integrated gasification combined cycle (IGCC) plant which converts coal to a synthetic gas is planned for Schuylkill County²⁵.

²³ EIA Natural Gas Navigator

²⁴ EIA Natural Gas Weekly Update for the week ending 9/16/2009.

²⁵ Businesswire, October 12, 2009. "Pennsylvania Lawmakers Support Good Spring IGCC Ultra Low Emissions Power Plant."

http://www.businesswire.com/portal/site/home/permalink/?ndmViewId=news_view&newsId=20091012005781&newsLang=en

Table 3 Historical U.S. Natural Gas Production, Reserves and Prices

U.S. Natural Gas Production, Reserves and Prices: 1975 – 2008			
from EIA Gas Annual			
Year	Production (BCF)	Wellhead Price (\$/MCF)	Reserves (BCF)
1975	19,236	\$0.44	228,200
1976	19,098	\$0.58	216,026
1977	19,163	\$0.79	208,878
1978	19,122	\$0.91	208,033
1979	19,663	\$1.18	200,997
1980	19,403	\$1.59	199,021
1981	19,181	\$1.98	201,730
1982	17,820	\$2.46	201,512
1983	16,094	\$2.59	200,247
1984	17,466	\$2.66	197,463
1985	16,454	\$2.51	193,369
1986	16,059	\$1.94	191,586
1987	16,621	\$1.67	187,211
1988	17,103	\$1.69	168,024
1989	17,311	\$1.69	167,116
1990	17,810	\$1.71	169,346
1991	17,698	\$1.64	167,062
1992	17,840	\$1.74	165,015
1993	18,095	\$2.04	162,415
1994	18,821	\$1.85	163,837
1995	18,599	\$1.55	165,146
1996	19,812	\$2.17	166,474
1997	19,866	\$2.32	167,223
1998	19,961	\$1.96	164,041
1999	19,804	\$2.19	167,406
2000	20,198	\$3.68	177,427
2001	20,570	\$4.00	183,460
2002	19,885	\$2.95	186,946
2003	19,974	\$4.88	189,044
2004	19,517	\$5.46	192,513
2005	18,927	\$7.33	204,385
2006	19,381	\$6.40	211,085
2007	20,151	\$6.39	237,726
2008	21,442	\$8.07	NA

IV. Pennsylvania Deliveries, Gas Transported for Competitive Suppliers and PA Production of Natural Gas

This section presents Pennsylvania specific data. The data includes sales by NGDCs, deliveries by NGDCs for competitive suppliers and Pennsylvania production of natural gas.

Two graphs are provided, one which shows Pennsylvania deliveries of natural gas for competitive suppliers, often called transportation gas. The other graph shows production of natural gas within Pennsylvania in conjunction with the U.S. average wellhead price of natural gas. As much as 37 percent of natural gas supply for the Commonwealth has been extracted from Pennsylvania wells when such production is supported by higher gas prices. As the price for the gas increases, it became economical to extract gas from Pennsylvania gas wells. Higher production costs make Pennsylvania gas less economical to extract when gas prices are low.

Pennsylvania has 52,700 producing gas wells as of 2007. This is an increase of 29 percent from 2002. As of January 27, 2010, Pennsylvania had 66 active rotary drilling rigs, which is a substantial increase from 2004, when there were only 16 active drilling rigs in Pennsylvania²⁶.

The increase in active drilling is due to the activity in the Marcellus Shale area of Pennsylvania. Marcellus Shale is a black, organic rich shale located throughout Western and North-Central Pennsylvania. Geologists have been aware of the formation and its potential for the last 75 years, but only recently with the advent of horizontal drilling, has it become cost effective to drill²⁷. The US Geological Survey estimated the Marcellus Shale reserves at between 821.83 and 3,667 BCF of undiscovered gas. The lower number is denoted as the F95 number and the USGS asserts that there is a 95%

²⁶ Baker Hughes: Rotary Rigs by State, http://investor.shareholder.com/bhi/rig_counts/rc_index.cfm
As of 10/9/2009.

²⁷ Harper, John A. "The Marcellus Shale – An Old "New" Gas Reservoir in Pennsylvania." *Pennsylvania Geology*, Vol. 38, No. 1, Spring 2008.

chance of at least that amount. The higher number or F5 is defined similarly. As of the end of February 2008, more than 350 wells have been permitted in the Marcellus Shale²⁸. Drilling will likely continue and expand unless gas prices fall dramatically.

Henry Hub spot prices are highly uncertain, but EIA expects 2009 Pennsylvania natural gas prices for residential heating to average approximately 12 percent less than last year. Lower prices are due to better weather and adequate supplies. NOAA expects winter 2009-10 to be approximately 1 percent warmer than last year. Natural gas storage inventories are at an all-time high²⁹.

²⁸ USGS Assessment of Undiscovered Oil and Gas Resources of the Appalachian Basin Province, 2002, USGS Fact Sheet FS-009-03.

²⁹ EIA Short-Term and Winter Fuels Outlook Presentation, Richard Newell, NASEO Winter Fuels Conference, October 2009 - <http://www.eia.doe.gov/emeu/steo/pub/contents.html>

Table 4 Pennsylvania Deliveries, Transportation and Production

Pennsylvania Deliveries, Transportation, and Production Volume (BCF)			
From EIA Gas Annual			
Year	Total Gas Delivery	Delivered for Competitive Suppliers	PA Gas Production
1975			84.8
1976			90.0
1977			92.3
1978			97.8
1979			96.3
1980			97.4
1981			122.5
1982			121.1
1983	480.2	3.1	118.4
1984	510.0	34.3	166.3
1985	469.1	53.1	150.5
1986	497.5	85.1	159.9
1987	500.2	121.7	163.3
1988	521.8	132.3	167.1
1989	518.1	169.4	191.8
1990	503.7	185.1	177.6
1991	507.3	217.3	141.5
1992	522.6	200.5	138.7
1993	510.5	180.0	132.1
1994	513.4	183.7	115.3
1995	515.7	197.1	126.3
1996	535.8	187.2	123.9
1997	546.2	229.0	110.8
1998	492.9	235.8	130.3
1999	520.2	262.3	174.7
2000	543.6	273.3	200.9
2001	548.1	274.0	145.2
2002	603.4	269.6	140.0
2003	642.0	292.8	149.3
2004	608.2	266.4	156.0
2005	620.0	261.6	176.4
2006	542.9	250.4	181.4
2007	599.3	270.1	NA

Figure 4 Pennsylvania Production vs U.S. Wellhead Price

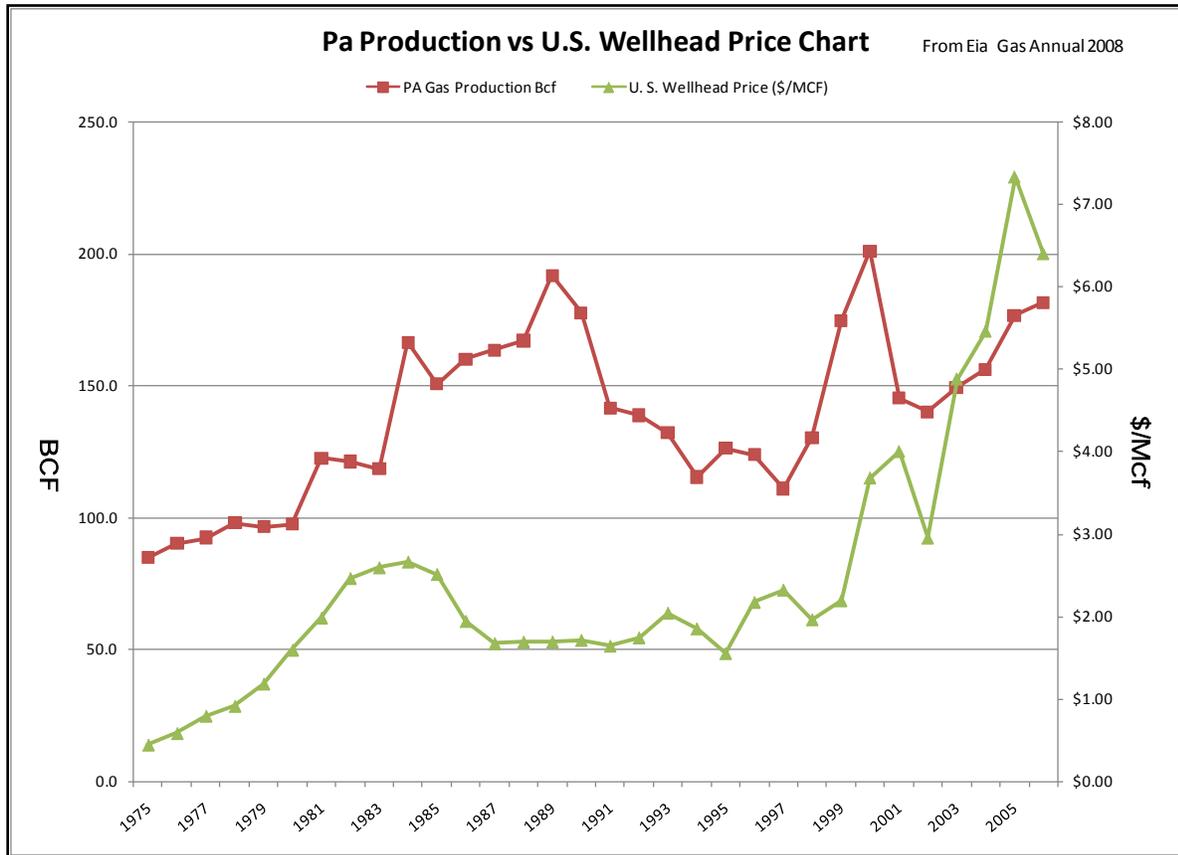
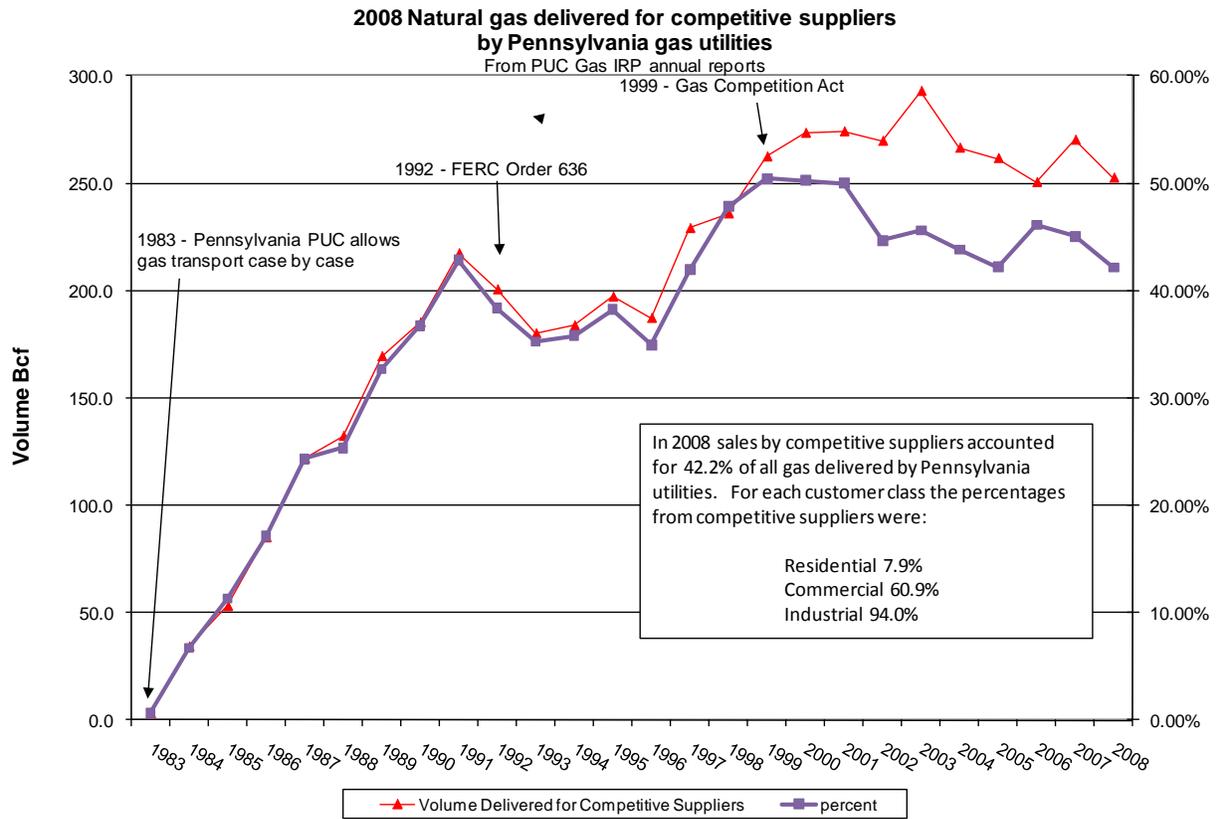


Figure 5 2008 Deliveries by Pennsylvania Gas Utilities



V. Natural Gas Distribution Company (NGDC) Statistical Data

Customer Data

The following information is derived from data contained in the Gas Annual Reports and the Annual Integrated Resource Planning Reports for major gas utilities with greater than 8 BCF of annual sales. 2008 data is included in Table 5. Additional data for 2007 can be found in Appendix A.

Table 5 2008 Customer Statistical Data

2008 CUSTOMER STATISTICAL DATA								
Company	Number of Residential Customers	Average Use Per Customer (mcf)	Number of Commercial Customers	Average Use Per Customer (mcf)	Number of Industrial Customers	Average Use Per Customer (mcf)	Transport Customers	Average Use Transport (mcf)
Columbia	312,120	91	30,844	194	95	3,611	70,030	534
Equitable	208,836	91	14,250	304	35	2,524	35,923	732
NFG	196,123	98	14,293	294	261	52,473	1,634	11,771
PECO	443,453	82	41,113	460	36	639	662	41,175
Penn Natural	144,665	107	15,312	448	117	3,949	451	43,397
PGW	470,663	75	25,147	387	759	867	1,318	14,706
Dominion	237,429	96	20,749	332	38	5,316	114,078	325
TW Phillips	58,349	91	4,339	558	5	546,000	36	372,778
UGI	295,624	70	29,697	379	953	1,227	7,084	7,488
Total	2,367,262		195,744		2,299		231,216	

VI. Pennsylvania NGDC Gas Supply and Demand Balance

The following section provides natural gas supply and demand data for Pennsylvania's Natural Gas Distribution Companies. The data is presented from 2002 to 2008 for annual and 2006 to 2008 for peak day. Data is derived from PUC Annual Resource Planning Reports.

Note: Some large users bypass the local distribution companies, buy gas at the wellhead or from suppliers, and receive the gas directly from the pipelines. Gas fired electric generation stations are usually bypass customers and their gas consumption is not included in the PUC reports. The following chart shows the increase in the use of natural gas for electric generation from 2001 to 2008. Table 6 and Figure 7 have gas supply and demand data for 2008. Table 7 and Figure 8 have 2008 Peak Day Gas supply and demand information. Additional data tables can be found in Appendix A.

Figure 6 Pennsylvania Gas Delivered for Electric Generation

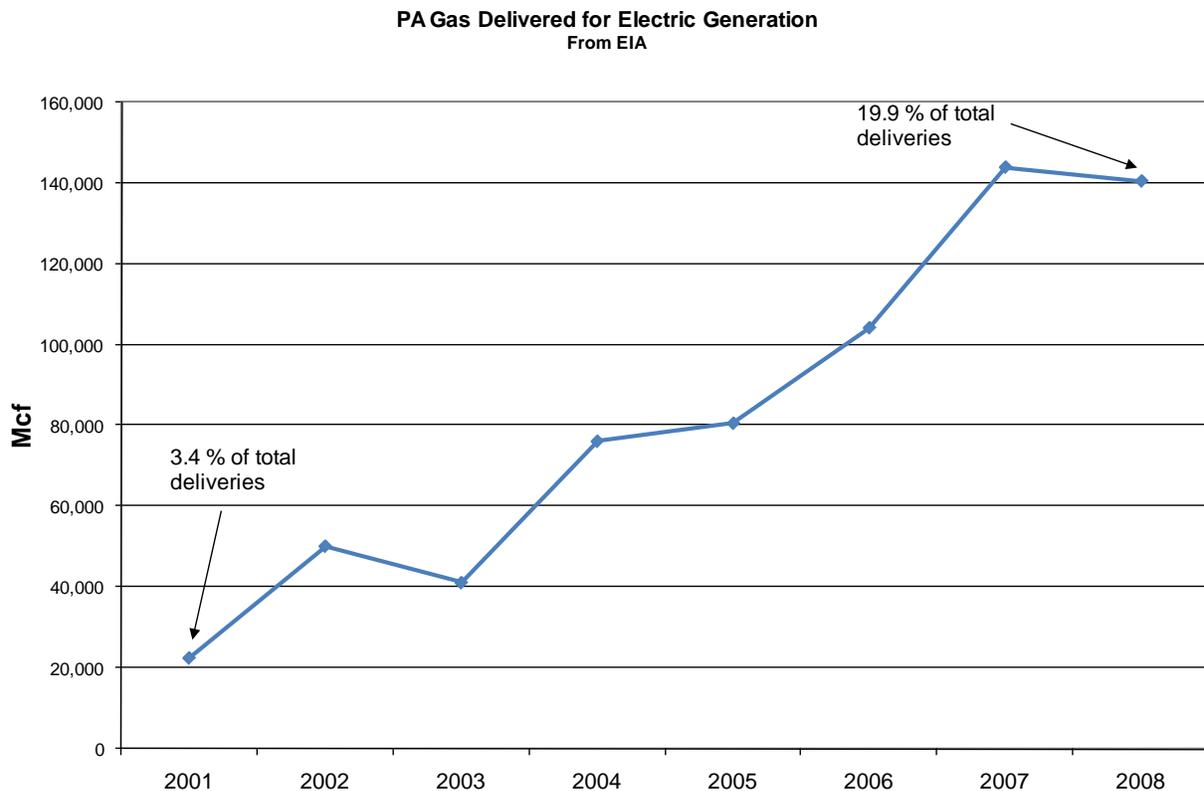


Table 6 2008 Annual Gas Supply and Demand for Major Gas Utilities

2008 Annual Gas Supply and Demand Balance											
(ARPR MMcf)											
Demand	Columbia	Central Penn	Equitable	NFG	Peoples	PECO	PNG	PGW	TW Phillips	UGI	Total
<i>Firm</i>											
Retail Residential	28,312	5,892	21,874	19,131	22,871	36,371	15,453	35,197	5,331	20,669	211,101
Retail Commercial	11,107	3,531	3,895	4,196	6,891	18,902	6,867	9,733	2,456	11,243	78,821
Retail Industrial	343	490	72	248	202	23	462	658	2,730	1,169	6,397
Electric Power	0	0	0	0	0	0	0	0	0	0	0
Exchange Other LDCs	0	0	0	0	1,576	0	0	0	0	0	1,576
Unaccounted for Gas	-278	909	2,578	-380	5,077	3,995	380	1,347	840	379	14,847
Company Use	42	50	63	7	1,904	50	65	717	146	153	3,197
Other	0	0	0	866	-74	10	0	0	0	0	802
Subtotal – Firm	39,526	10,872	28,482	24,068	38,447	59,351	23,227	47,651	11,503	33,612	316,739
<i>Interruptible</i>											
Retail	0	0	0	0	0	827	20	1,776	0	130	2,753
Electric Power	0	0	0	0	0	0	0	14	0	0	14
Company's Own Plant	0	0	0	0	0	0	0	61	0	0	61
Subtotal - Interr'p	0	0	0	0	0	827	20	1,851	0	130	2,828
Firm & Interruptible	39,526	10,872	28,482	24,068	38,447	60,178	23,247	49,502	11,503	33,742	319,567
<i>Transportation</i>											
Firm Residential	5,294	0	3,468	22	9,161	0	0	10	0	196	18,151
Firm Commercial	830	3,824	3,648	5,006	10,041	0	3,258	1,440	777	6,659	35,483
Firm Industrial	0	9,801	606	14,006	17,889	4,841	15,190	222	12,278	14,310	89,143
Interruptible Residential	0	0	0	0	0	0	0	0	0	0	0
Interruptible Commercial	8,473	0	8,668	0	0	0	843	5,144	0	5,160	28,288
Interruptible Industrial	22,378	0	10,598	0	0	19,362	2,465	5,888	0	26,723	87,414
Electric Power	416	0	0	0	0	3,412	524	6,679	365	0	11,396
Subtotal - Trans.	37,391	13,652	26,987	19,234	37,091	27,615	22,281	19,382	13,420	53,048	270,101
Total Requirements	76,917	24,497	55,439	43,302	75,538	87,793	45,528	68,884	24,923	86,790	599,244
<i>Supply for sales</i>											
Major Supply Contracts	22,911	11,818	0	15,978	0	37,418	14,624	0	0	44,796	147,545
Other Supply contracts	0	0	3,732	0	19,739	0	13,960	0	0	2,998	40,429
Spot Purchases	19,439	0	19,378	0	0	19,951	0	55,415	8,718	0	122,901
Storage Withdrawals	22,270	1,885	10,512	9,510	5,328	17,713	9,657	10,957	4,051	8,310	100,193
LNG/SNG/Propane	0	0	0	0	0	616	0	1,280	0	112	2,008
Company Production	0	0	0	0	0	0	0	0	0	0	0
Local Purchases	245	380	6,915	763	15,610	0	0	0	8,249	0	32,162
Exchange Other LDCs	0	0	0	8,046	480	0	0	0	0	0	8,526
Other	0	0	0	0	0	0	0	0	0	0	0
Subtotal	64,865	14,082	40,536	34,297	41,157	75,698	38,240	67,653	21,018	56,017	453,563
<i>Transportation Gas</i>											
Delivered to City Gate	37,391	13,625	32,234	19,234	39,013	27,615	22,281	19,382	13,420	53,048	277,243
Total sales and trans.	102,256	27,707	72,771	53,531	80,170	103,313	60,521	87,035	34,438	109,065	730,807
<i>Deductions</i>											
Curtailments	0	0	0	0	0	0	0	2,857	0	0	2,857
Storage Injections	25,339	2,110	10,512	9,363	4,632	15,024	9,478	13,047	3,982	9,765	103,252
LNG Liquefactions	0	0	0	0	0	496	0	2,112	0	0	2,608
Sales to Other LDCs	0	0	0	0	0	0	0	56	37	0	93
Off-System Sales	0	1,100	0	866	0	0	5,516	0	0	12,510	19,992
Total Deductions	25,339	3,210	10,512	10,229	0	15,520	14,993	18,071	4,019	22,275	124,168
Net Supply	76,917	24,497	62,259	43,302	75,538	87,793	45,528	68,963	30,419	86,790	602,006

Figure 7 Pennsylvania Gas Utility Annual Supply 2008

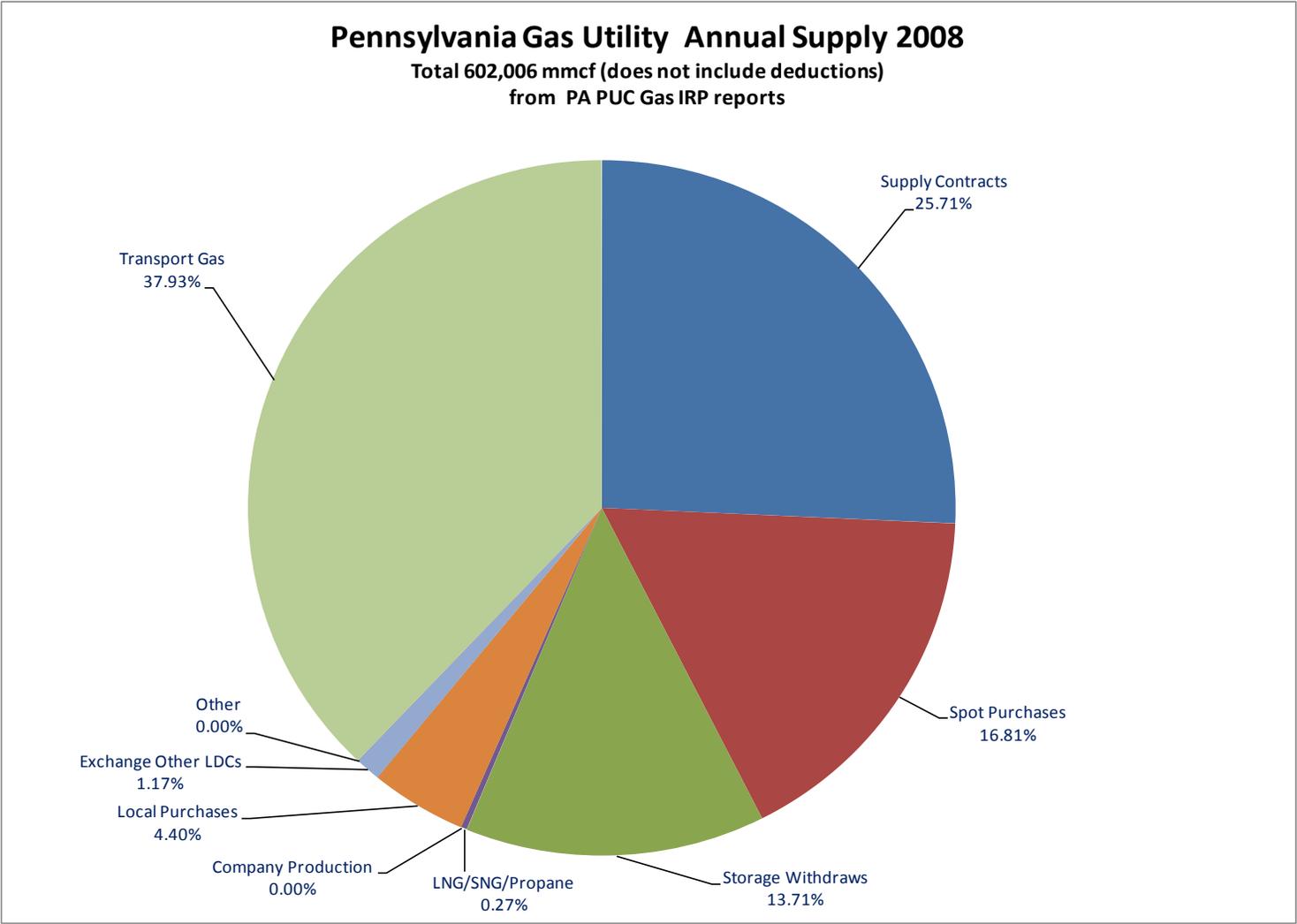


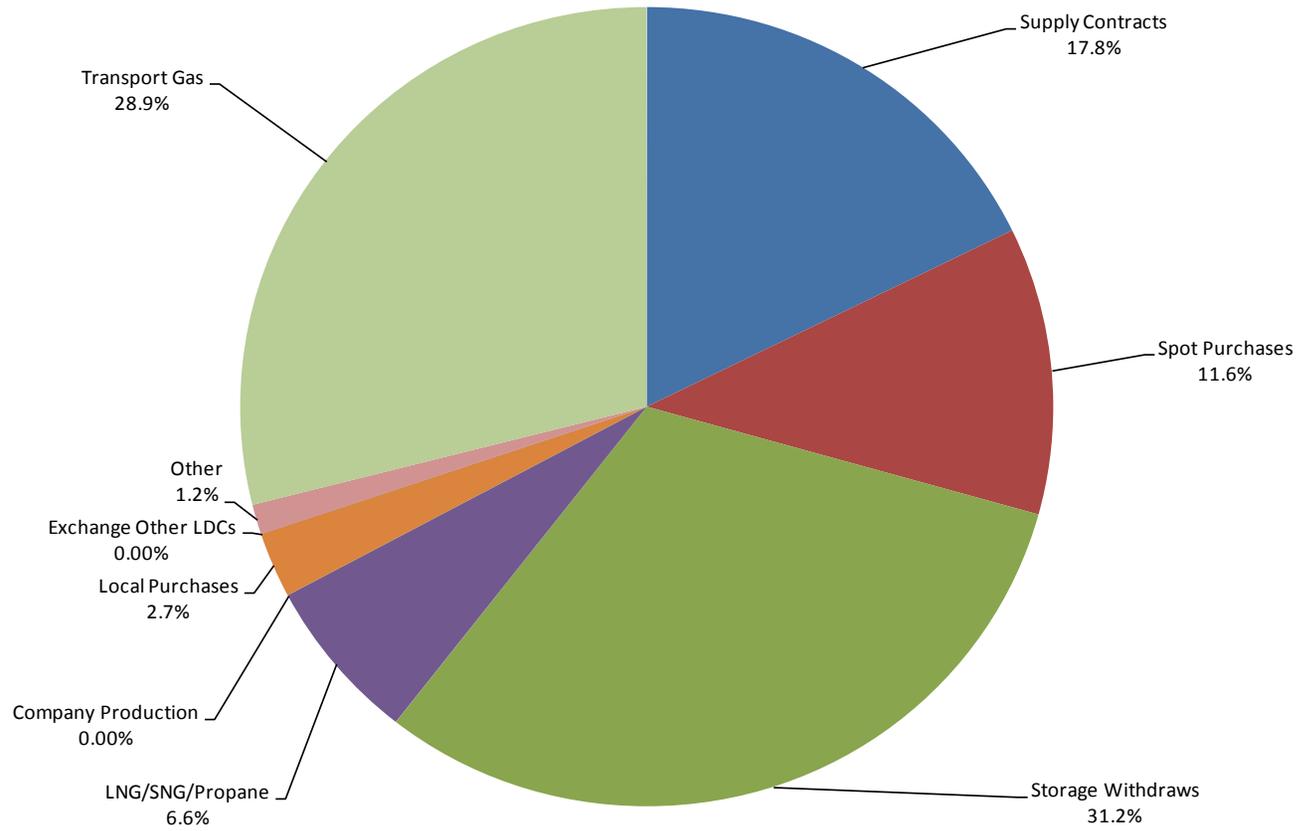
Table 7 2008 Peak Day Gas Supply and Demand Balance for Major Gas Utilities

2008 Peak Day Gas Supply and Demand Balance (ARPR MMcft)											
Demand	Columbia	Central Penn	Equitable	NFG	Peoples	PECO	UG PNG	PGW	TW Phillips	UGI	Total
<i>Firm</i>											
Retail Residential	260.3	45.0	275.0	161.5	208.0	363.0	141.0	336.0	62.0	198.0	2,049.8
Retail Commercial	109.4	41.0	38.0	36.7	58.0	187.0	58.0	93.0	31.0	106.0	758.1
Retail Industrial	0.6	0.0	1.0	1.9	1.0	1.0	4.0	6.0	10.0	14.0	39.5
Electric Power	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exchange/Other LDCs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unaccounted for Gas	1.3	0.0	24.0	0.0	25.0	17.0	0.0	13.0	7.0	11.0	98.3
Company Use	0.3	0.0	2.0	0.0	13.0	1.0	1.0	7.0	1.0	1.0	26.3
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal – Firm	371.9	103.0	340.0	200.1	304.0	569.0	204.0	454.0	111.0	330.0	2,987.0
<i>Interruptible</i>											
Retail	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3	0.0	1.0	12.3
Electric Power	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Company's Own Plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4
Subtotal - Inter'p	0.0	11.8	0.0	1.0	12.8						
Firm & Interruptible	371.9	103.0	340.0	200.1	304.0	569.0	204.0	621.0	111.0	331.0	3,150.0
<i>Transportation</i>											
Firm Residential	70.7	0.0		1.8	78.0	24.0	0.0	0.0	0.0	2.0	176.5
Firm Commercial	7.6	0.0		36.9	81.0	0.0	11.0	13.0	2.0	56.0	207.5
Firm Industrial	0.0	0.0	13.0	68.2	66.0	0.0	66.0	1.9	41.0	61.0	317.1
Interruptible Residential	0.0	0.0		0.0	0.0	63.0	0.0	0.0	0.0	0.0	63.0
Interruptible Commercial	61.2	0.0		0.0	0.0	0.0	4.0	32.7	0.0	0.0	97.9
Interruptible Industrial	81.5	52.0	79.0	0.0	0.0	0.0	10.0	20.6	0.0	0.0	243.1
Electric Power	2.7	0.0	0.0	0.0	0.0	10.0	0.0	35.8	0.0	0.0	48.5
Subtotal - Trans.	223.7	52.0	91.0	106.9	225.0	97.0	90.0	104.0	43.0	176.0	1,208.6
Total Requirements	672.6	155.0	431.0	307.0	529.0	666.0	295.0	570.0	154.0	507.0	1656.6
<i>Supply for sales</i>											
Major Supply Contracts	142.6	52.0	25.0	35.3	0.0	225.0	29.0	0.0	0.0	39.0	547.9
Other Supply contracts	0.0	0.0	91.7	9.1	63.0	0.0	25.0	0.0	0.0	33.0	221.8
Spot Purchases	0.0	0.0	185.1	0.0	0.0	12.0	43.0	193.0	11.0	59.0	503.1
Storage Withdrawals	200.9	43.0	0.0	152.7	125.0	228.0	136.0	163.0	118.0	187.0	1,353.6
LNG/SNG/Propane	27.8	0.0	0.0	0.0	0.0	104.0	0.0	110.0	0.0	45.0	286.8
Company Production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Local Purchases	0.7	1.0	45.6	2.8	46.0	0.0	0.0	0.0	19.0	0.0	115.1
Exchange/Other LDCs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	53.0	0.0	0.0	0.0	0.0	0.0	53.0
Subtotal	371.9	96.0	340.0	199.9	287.0	569.0	233.0	466.0	148.0	371.0	3,081.8
<i>Transportation Gas</i>											
Delivered to City Gate	258.4	55.0	91.4	106.9	242.0	97.0	89.0	104.0	43.0	168.0	1,254.7
Total sales and trans.	595.6	151.0	431.3	306.8	529.0	666.0	322.0	570.0	191.0	539.0	4,301.7
<i>Deductions</i>											
Curtailments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Storage Injections	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LNG/Liquifications	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales to Other LDCs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-System Sales	0.0	0.0	0.0	0.0	0.0	0.0	27.0	0.0	0.0	33.0	60.0
Total Deductions	0.0	0.0	0.0	0.0	0.0	0.0	27.0	0.0	0.0	33.0	60.0
Net Supply	595.6	151.0	431.3	306.8	529.0	666.0	295.0	570.0	191.0	507.0	4,242.7

Figure 8 Pennsylvania Peak Day Supply 2008

Pennsylvania peak day supply 2008

Total 4,243 mmcf



VII. NGDC Financial Statistics

This section presents selected NGDC financial data taken from the Gas Annual Report of the major NGDCs for a seven-year period from 2002 through 2008.

The data includes operating revenues and expenses, net operating income, gross plant in service, administrative and general expense, maintenance expense, depreciation expense and total gas cost, and average cost of gas purchased by the NGDC.

Table 8 Operating Revenue, Operating Expense and Net Operating Income

OPERATING REVENUE (\$ Million)							
LDC	2002	2003	2004	2005	2006	2007	2008
Columbia	392.7	527.3	551.4	652.1	575.4	650.5	781.9
Equitable	330.9	396.2	420.5	471.2	445.3	458.9	628.9
NFG	255.6	317.9	333.2	376.3	363.7	351.8	388.8
PECO	548.8	646.1	747.7	816.8	795.5	838.8	821.7
Dominion	314.4	435.7	462.5	551.5	505.3	469.9	534.8
Penn Natural	0	0	0	312.7	302.6	326.6	348.4
PGW	0	0	812.1	907.2	845.8	871.9	886.0
PPL Gas	0	139.2	156.8	163.5	189.4	187.0	0
TW Phillips	85.9	103.8	109.3	135.5	133.9	134.6	151.9
UGI	379.2	465.4	500.5	586.7	580.6	618.4	626.3
Total	4,310	5,035	6,098	6,979	6,744	6,915	7,177
OPERATING EXPENSE (\$ Million)							
LDC	2002	2003	2004	2005	2006	2007	2008
Columbia	346.7	481.7	506.4	613.5	546.0	619.0	741.7
Equitable	280.8	327.9	357.0	407.6	421.7	448.5	595.3
NFG	0	0	0	360.1	347.4	324.4	359.8
PECO	496.0	578.5	692.7	700.8	614.9	782.2	779.5
Dominion	240.5	358.6	396.5	485.0	462.0	407.0	478.1
Penn Natural	0	0	0	273.9	274.7	299.1	327.8
PGW	0	0	714.0	868.7	777.0	823.5	824.2
PPL Gas	0	123.0	146.7	149.7	183.0	175.6	0
TW Phillips	74.5	92.4	99.0	125.6	124.4	123.2	142.3
UGI	327.7	408.0	448.5	528.4	528.3	552.5	566.0
Total	3,768	4,373	5,365	6,518	6,285	6,562	6,823
NET OPERATING INCOME (\$ Million)							
LDC	2002	2003	2004	2005	2006	2007	2008
Columbia	46.0	45.6	45.0	38.6	29.4	31.5	40.2
Equitable	50.1	68.3	63.5	63.6	23.6	10.4	33.6
NFG	0	0	0	16.2	16.3	27.4	29.0
PECO	52.8	67.6	55.0	116	180.6	56.6	42.2
Dominion	73.9	77.1	66.0	66.5	43.3	62.9	56.7
PG Energy	0	0	0	38.8	27.9	27.5	20.6
PGW	0	0	98.1	38.5	118.8	48.4	61.8
PPL Gas	0	16.2	10.1	13.8	6.4	11.4	0
TW Phillips	11.4	11.4	10.3	9.9	9.5	11.4	9.6
UGI	51.5	57.4	52.0	58.3	52.3	65.9	60.3
Total	2,288	2,347	2,404	2,465	2,514	2,360	2,362

Table 9 Administration & General Expense

ADMINISTRATION & GENERAL EXPENSE (\$ Million)							
LDC	2002	2003	2004	2005	2006	2007	2008
Columbia	39.5	35.7	38.0	47.8	45.5	49.6	39.9
Equitable	45.6	29.2	47.3	45.2	38.4	62.7	37.1
NFG	17.8	18.2	28.6	26.5	26.5	26.3	26.7
PECO	24.8	37.0	40.0	34.8	35.8	33.0	30.4
Dominion	11.9	18.9	17.1	16.8	15.4	8.0	14.9
Penn Natural	0	0	0	13.7	13.9	16.8	20.1
PGW	0	0	78.5	74.8	77.9	101.6	101.9
PPL Gas	0	15.3	17.4	19.8	22.0	23.4	0
TW Phillips	6.8	7.5	7.3	7.3	9.1	9.6	9.9
UGI	28.1	32.7	37.7	37.3	40.3	36.6	35.6
Total	2,177	2,198	2,316	2,329	2,331	2,375	2,325
MAINTENANCE EXPENSE (\$ Million)							
LDC	2002	2003	2004	2005	2006	2007	2008
Columbia	7.43	7.72	9.0	9.3	11.0	12.3	13.8
Equitable	11.2	12.9	11.5	13.3	11.7	11.6	11.4
NFG	0	0	3.57	3.80	3.69	4.1	4.2
PECO	15.8	14.9	13.2	16.5	17.9	21.2	22.5
Dominion	14.6	16.7	16.6	19.1	20.5	20.1	21.6
Penn Natural	0	0	0	4.6	4.4	4.8	6.4
PGW	0	0	0	22.1	18.7	20.1	21.0
PPL Gas	0	2.8	2.8	2.4	2.2	3.6	0
TW Phillips	2.3	2.5	4.2	4.6	4.7	5.8	6.5
UGI	10.2	12.9	10.9	10.0	10.1	9.8	10.6
Total	2,064	2,073	2,076	2,111	2,111	2,120	2,126
DEPRECIATION EXPENSE (\$ Million)							
LDC	2002	2003	2004	2005	2006	2007	2008
Columbia	13.9	14.1	14.2	15.4	15.8	16.9	18.2
Equitable	17.3	18.2	14.8	15.9	16.7	17.5	18.6
NFG	0	0	11.1	11.2	11.3	11.6	11.2
PECO	31.7	32.5	33.7	34.8	29.6	29.0	30.8
Dominion	17.5	17.5	17.8	18.7	19.7	19.7	20.4
Penn Natural	0	0	0	12.3	13.3	15.0	15.2
PGW	0	0	34.5	34.7	35.6	38.1	38.8
PPL Gas	0	6.4	6.7	6.9	7.0	8.3	0
TW Phillips	5.4	5.6	6.0	6.0	6.2	5.8	6.1
UGI	18.1	17.8	19.3	20.3	21.3	20.8	21.0
Total	2,106	2,115	2,162	2,181	2,183	2,190	2,188

Table 10 Total Gas Costs, AVG Cost of Gas Purchased, Gross Plant in Service

TOTAL GAS COSTS (\$ Million)							
LDC	2002	2003	2004	2005	2006	2007	2008
Columbia	152.3	373.5	357.5	436.2	427.3	436.9	621.4
Equitable	105.2	204.8	207.4	249.8	255.4	255.6	436.5
NFG	108.8	178.6	179.8	219.6	236.2	188.4	229.1
PECO	276.9	499.3	502.5	617.3	618.2	569.3	647.5
Dominion	132.9	249.1	268.0	369.7	325.5	281.2	354.4
Penn Natural	0	0	0	0	221.7	230.0	245.9
PGW	0	0	0	659.9	531.2	540.9	587.2
PPL Gas	0	0	89.0	107.3	130.0	122.8	0
TW Phillips	50.2	65.0	73.2	95.8	84.3	85.2	112.2
UGI	209.8	288.8	322.5	450.2	410.2	428.4	428.1
Total	3,038	3,862	4,004	5,211	5,246	5,146	5,670
AVERAGE COST OF GAS PURCHASED (\$/MCF)							
LDC	2002	2003	2004	2005	2006	2007	2008
Columbia	5.01	7.13	7.01	9.86	8.93	8.99	11.32
Equitable	4.01	5.78	6.35	8.08	7.45	8.04	9.02
NFG	4.03	5.50	6.76	8.68	10.83	7.97	7.97
PECO	5.15	7.47	8.67	10.30	11.47	9.85	11.04
Dominion	3.88	6.11	6.98	8.89	10.70	7.92	8.65
Penn Natural	0	0	0	0	0	7.77	8.44
PGW	0	0	0	0	0	0	0
PPL Gas	0	0	6.77	8.10	12.21	8.85	0
TW Phillips	4.61	5.57	6.55	8.95	8.29	8.14	9.41
UGI	6.41	7.71	8.64	11.75	12.72	11.79	12.01
Total	2,035	2,048	2,062	2,080	2,089	2,086	2,086
GROSS PLANT IN SERVICE (\$ Million)							
LDC	2002	2003	2004	2005	2006	2007	2008
Columbia	641.7	658.1	673.7	710.4	748.6	788.6	851.1
Equitable	655.9	692.4	704.8	722.2	746.8	815.3	874.2
NFG	0	0	0	415.8	428.7	441.0	454.6
PECO	76.0	96.5	103.1	102.0	107.3	98.9	104.4
Dominion	739.0	767.6	803.4	846.1	885.8	887.0	917.1
Penn Natural	0	0	0	503.7	515.2	531.9	552.9
PGW	0	0	1315.9	1362.0	1389.8	1421.1	1454.9
PPL Gas	0	229.3	244.2	259.4	280.0	294.6	0
TW Phillips	210.7	217.1	224.6	230.6	204.6	213.7	224.4
UGI	865.6	906.6	943.5	977.4	1027.0	1068.5	1113.2
Total	5,191	5,571	7,017	8,135	8,340	8,568	8,555

VIII. Conclusions

Natural gas delivery to Pennsylvania has remained steady from 2002 to the present at approximately 600 BCF per year. Pennsylvania gas production peaked at 196.6 BCF in 2004 and was at 181.4 BCF in 2007 (the most recent data available)³⁰. Retail and residential sales have increased since 2002 in Pennsylvania, but retail industrial and electric power sales have fallen. Natural gas prices are volatile, but expected to generally increase with economic recovery.

Natural gas usage will be affected by any climate change legislation. Natural gas combustion emits less CO₂ per MW generated than coal, especially with combined cycle natural gas turbines. Any expansion of natural gas combustion will be hampered by air quality permits on existing plants and the lack of emission offsets available for new construction.

Natural gas production and storage in Pennsylvania will be greatly impacted by the Marcellus Shale operations. Pennsylvania must move forward carefully in the use of this resource to avoid negative impacts on the environment.

³⁰ EIA: Natural Gas Summary, Dry Production, http://tonto.eia.doe.gov/dnav/ng/hist/na1160_spa_2a.htm

IX. Appendix A Additional Data Tables

Table A-1 2007 Customer Statistical Data

2007 CUSTOMER STATISTICAL DATA								
Company	Number of Residential Customers	Average Use Per Customer (mcf)	Number of Commercial Customers	Average Use Per Customer (mcf)	Number of Industrial Customers	Average Use Per Customer (mcf)	Transport Customers	Average Use Transport (mcf)
Columbia	319,477	88	33,138	334	328	1,144	61,112	613
Equitable	211,370	90	13,714	208	662	242	32,066	733
NFG	195,707	96	13,417	482	274	55,038	1,293	6,542
PECO	436,931	87	40,823	529	336	67,807	565	42,284
Penn Natural	143,713	112	15,405	454	120	3,358	552	43,397
PGW	468,433	77	25,228	426	804	1,053	670	20,233
Dominion	241,561	93	21,664	332	44	4,409	95,576	387
PPL	66,450	88	9,614	378	184	2,674	421	57,527
TW Phillips	58,123	88	4,432	549	8	247,250	37	380,027
UGI	291,001	73	30,107	398	1,111	1,145	5,579	9,997
Total	2,432,766		207,542		3,871		197,871	

Table A-2 2007 Annual Gas Supply and Demand

2007 Annual Gas Supply and Demand Balance											
(ARPR MMcf)											
Demand	Columbia	Equitable	NFG	PPL Gas	Peoples	PECO	PNG	PGW	TW Phillips	UGI	Total
<i>Firm</i>											
Retail Residential	28,064	21,874	18,981	5,869	22,389	38,413	16,093	36,184	5,136	21,274	214,277
Retail Commercial	10,529	3,895	4,395	3,632	7,202	19,288	6,991	10,757	2,433	11,975	81,097
Retail Industrial	375	72	243	492	194	84	403	847	1,978	1,272	5,960
Electric Power	0	0	0	0	0	0	0	0	0	0	0
Exchange Other LDCs	0	0	0	0	1,969	0	0	0	0	0	1,969
Unaccounted for Gas	630	2,578	-56	1,170	4,821	3,222	71	2,827	1,085	621	16,969
Company Use	43	63	7	54	1,708	100	67	859	108	164	3,172
Other	0	0	595	0	-51	62	0	0	0	0	606
Subtotal – Firm	40,189	38,482	24,165	11,217	38,232	61,169	23,625	51,474	10,740	35,305	334,598
<i>Interruptible</i>											
Retail	0	0	0	0	0	1,185	19	2,692	332	140	4,368
Electric Power	0	0	0	0	0	0	0	12	0	0	12
Company's Own Plant	0	0	0	0	0	0	0	61	0	0	61
Subtotal - Interr'p	0	0	0	0	0	1,185	19	2,908	332	140	4,584
Firm & Interruptible	40,189	38,482	24,165	11,217	38,232	62,354	23,644	54,381	11,072	35,445	339,181
<i>Transportation</i>											
Firm Residential	5,509	3,468	199	0	9,177		0	3	0	204	18,560
Firm Commercial	888	3,648	4,662	81	9,528		3,043	480	708	5,736	28,774
Firm Industrial	0	606	15,301	0	18,313	4,732	16,740	85	12,013	17,139	84,929
Interruptible Residential	0	0	0	0	0		0	0	0	0	0
Interruptible Commercial	8,446	8,668	0	0	0		939	3,710	0	4,577	26,340
Interruptible Industrial	22,593	10,598	0	13,002	0	18,296	2,466	4,481	0	28,120	99,556
Electric Power	377	0	0	0	0	4,594	766	4,798	1,340	0	11,875
Subtotal - Trans.	37,813	26,987	20,162	13,134	37,018	27,622	23,955	13,556	14,061	55,776	270,084
Total Requirements	78002	55469	44327	24300	75250	89976	23,955	67967	25133	91221	599244
<i>Supply for sales</i>											
Major Supply Contracts	26,568	1,360	10,860	23,628	0	46,767	19,945	0	0	1,107	130,235
Other Supply contracts	0	0	0	0	21,815	0	1,040	0	0	51,523	74,378
Spot Purchases	12,945	14,929	0	500	0	12,798	0	54,552	8,718	0	104,442
Storage Withdraws	24,859	10,102	8,386	2,700	5,099	17,713	9,899	14,106	4,293	8,967	106,124
LNG/SNG/Propane	0	0	0	0	0	476	0	1,948	0	111	2,535
Company Production	0	0	0	0	0	140	0	0	0	0	140
Local Purchases	245	8,509	1,370	0	12,879	0	0	0	6,617	0	29,620
Exchange Other LDCs	0	0	0	4	457	0	0	0	0	0	461
Other	0	13,124	12,508	0	0	0	0	0	0	0	25,632
Subtotal	64,617	48,024	33,124	27,206	40,250	77,894	30,883	70,606	19,628	61,708	473,940
<i>Transportation Gas</i>											
Delivered to City Gate	37,813	23,343	20,162	12,945	38,772	27,622	23,995	13,556	13,337	55,776	267,321
Total sales and trans.	102,430	71,367	33,124	40,151	79,022	105,516	54,838	84,162	33,689	117,484	721,783
<i>Deductions</i>											
Curtailments	0	0	0	0	0	0	0	0	0	0	0
Storage Injections	24,428	8,639	8,364	2,600	-3,772	15,044	9,414	14,143	4,581	8,806	92,247
LNG Liquefactions	0	0	0	0	0	496	0	2,058	0	0	2,554
Sales to Other LDCs	0	0	595	0	0	0	0	24	47	0	666
Off-System Sales	0	13,124	0	1,100	0	0	2,175	24	0	17,456	33,879
Total Deductions	24,428	21,783	8,659	3,700	-3,772	15,540	7,239	16,225	4,608	26,263	124,673
Net Supply	78,002	49,604	44,327	36,451	75,250	89,976	47,599	67,937	29,081	91,221	609,448

Figure A-1 Pennsylvania Gas Utility Annual Supply 2007

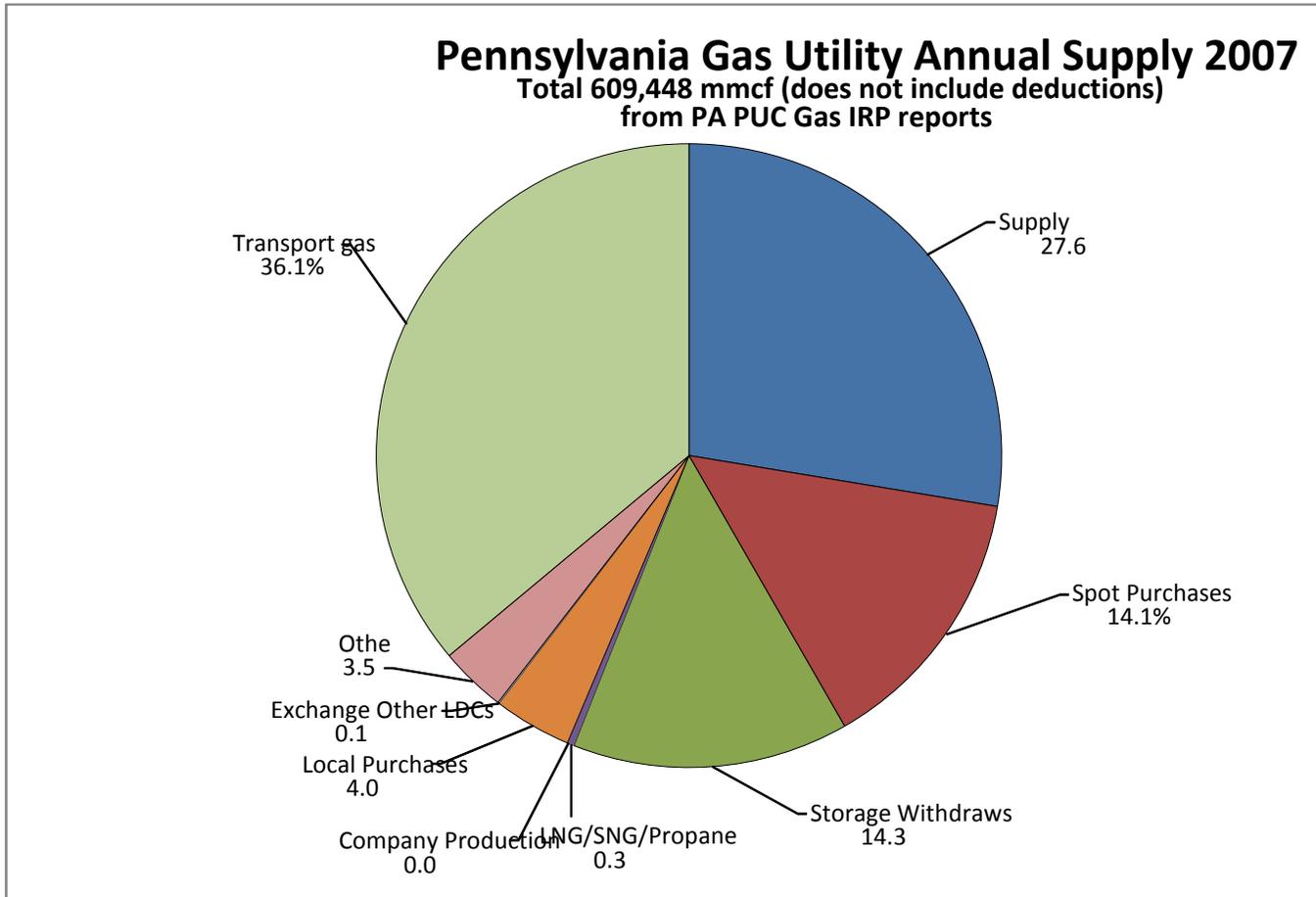


Table A-3 2006 Annual Gas Supply and Demand Balance

2006 Annual Gas Supply and Demand Balance											
(from Annual Resource Planning Reports. MMcf)											
Demand	Columbia	Equitable	NFG	PPL Gas	Peoples	PECO	PNG	PGW	TW Phillips	UGI	Total
<i>Firm</i>											
Retail Residential	24147	20,209	17,288	5,549	21,090	32,444	14,028	34,083	4,898	17,774	191,510
Retail Commercial	10,529	3,982	4,068	3,506	6,611	17,193	5,975	10,697	2,112	10,520	75,193
Retail Industrial	322	58	290	390	204	92	389	904	2,076	1,267	5,992
Electric Power	0	0	0	0	0	0	0	0	0	0	0
Exchange Other LDCs	0	0	0	0	2,046	0	0	0	178	0	2,224
Unaccounted for Gas	-1,598	2,314	-822	460	4,561	1,556	404	2,290	723	375	10,263
Company Use	63	57	7	57	1,695	100	62	681	234	167	3,123
Other	0	0	0	0	(978)	62	0	0	0	0	-916
Subtotal – Firm	33,463	26,620	20,811	9,962	35,229	51,447	20,858	48,624	10,221	30,103	287,338
<i>Interruptible</i>											
Retail	0	0	0	0	0	859	23	2,409	365	150	3,806
Electric Power	0	0	0	0	0	0	0	17	0	0	17
Company's Own Plant	0	0	0	0	0	0	0	62	0	0	62
Subtotal - Interr'p	0	0	0	0	0	859	23	2,717	365	150	4,114
Firm & Interruptible	34,463	26,620	20,811	9,962	35,229	52,306	20,881	51,371	10,586	30,253	292,482
<i>Transportation</i>											
Firm Residential	6,287	3,570	57	0	7,503	0	0	0	0	186	17,603
Firm Commercial	1,052	2,837	3,946	83	8,817	0	2,803	0	777	4,850	25,165
Firm Industrial	0	447	14,774	0	19,578	3,365	16,209	0	11,679	16,981	83,033
Interruptible Residential	0	0	0	0	0	0	0	0	0	0	0
Interruptible Commercial	7,734	6,742	0	0	0	0	12	1,937	0	4,095	20,520
Interruptible Industrial	23,103	9,583	0	12,735	0	19,069	3,279	3,244	0	22,377	93,390
Electric Power	116	0	0	0	0	3,081	388	5,681	1,459	0	10,725
Subtotal - Trans.	38,292	23,180	18,777	12,818	35,898	25,515	22,691	10,861	13,915	48,488	250,435
Total Requirements	72,755	49,800	39,588	22,780	71,127	77,821	43,572	62,233	24,501	78,741	542,918
<i>Supply for sales</i>											
Major Supply Contracts	22,701	5,125	8,239	23,628	0	28,644	19,840	0	0	3,685	
Other Supply contracts	0	0	0	0	16,868	0	0	0	0	38,582	55,450
Spot Purchases	12,702	16,495	0	500	0	22,860	2,710	52,081	8,719	0	116,067
Storage Withdraws	15,375	12,385	6,201	2,700	5,319	15,856	6,750	12,746	4,030	866	82,228
LNG/SNG/Propane	0	0	0	1	0	536	0	1,084	0	135	1,756
Company Production	0	0	0	0	0	0	0	0	439	0	439
Local Purchases	245	5,000	258	585	13,067	0	0	0	5,572	0	24,727
Exchange Other LDCs	0	0	0	4	819	0	0	0	200	0	1,023
Other	0	10,720	12,262	0	0	0	0	0	0	0	22,982
Subtotal	51,023	49,745	26,960	27,418	36,073	67,816	29,300	65,908	18,960	51,070	424,273
<i>Transportation Gas</i>											
Delivered to City Gate	38,292	23,180	18,777	12,945	38,957	25,515	22,692	10,861	13,915	48,488	253,622
Total sales and trans.	89,315	72,925	45,737	40,363	75,030	93,331	51,992	76,771	32,875	99,558	677,897
<i>Deductions</i>											
Curtailments	0	0	0	0	0	0	0	0	0	0	0
Storage Injections	16,560	12,385	6,149	2,300	3,903	15,044	8,112	12,861	4,464	7,455	89,233
LNG Liquefactions	0	0	0	0	0	466	0	1,647	0	0	2,113
Sales to Other LDCs	0	0	0	0	0	0	0	30	42	0	72
Off-System Sales	0	10,740	0	1,400	0	0	308	0	0	13,362	25,810
Total Deductions	16,560	23,318	6,149	3,700	3,903	15,510	8,420	14,538	4,506	20,817	117,421
Net Supply	72,755	49,800	39,588	36,663	71,127	77,821	43,572	62,223	28,369	78,741	560,659

Table A-4 2005 Annual Gas Supply and Demand Balance

2005 Annual Gas Supply and Demand Balance											
(from Annual Resource Planning Reports - MMcf)											
Demand	Columbia	Dominion Peoples	Equitable	NFG	PPL Gas	PECO	PG Energy	PGW	TW Phillips	UGI	Total
<i>Firm</i>											
Retail Residential	25,916	25,753	21,874	21,469	6,590	40,579	16,382	43,514	5,800	22,258	230,135
Retail Commercial	12,481	7,871	3,895	4,960	3,546	20,002	6,661	12,253	2,400	12,537	86,606
Retail Industrial	330	241	72	405	536	52	447	1,115	3,300	1,441	7,939
Electric Power	0	0	0	0	0	0	0	0	0	0	0
Exchange/Other LDCs	0	0	0	0	0	0	0	0	50	0	50
Unaccounted for Gas	279	3,449	2,578	688	489	1,823	252	2,096	764	664	13,082
Company Use	63	1,605	63	8	76	120	74	112	270	125	2,516
Other	0	0	0	0	0	100	0	0	0	0	100
Subtotal - Firm	39,069	38,919	28,482	27,530	11,237	62,676	23,816	59,090	12,584	37,025	340,428
<i>Interruptible</i>											
Retail	0	0	0	0	0	1,210	67	3,781	0	0	5,058
Electric Power	0	0	0	0	0	0	0	41	0	0	41
Company's Own Plant	0	0	0	0	0	0	0	66	0	0	66
Unaccounted for Gas	0	0	0	0	0	0	0	150	0	0	150
Subtotal - Interruptible	0	0	0	0	0	1,210	67	4,038	0	0	5,315
Firm & Interruptible	39,069	38,919	28,482	27,530	11,237	63,886	23,883	63,128	12,584	37,025	345,743
<i>Transportation</i>											
Firm Residential	10,798	8,667	3,468	83	0	3,924	0	0	0	237	27,177
Firm Commercial	1,129	9,569	3,648	4,760	190	0	4,419	0	905	5,124	29,744
Firm Industrial	0	20,459	606	13,737	0	0	16,585	0	10,852	21,423	83,662
Interruptible Residential	0	0	0	0	0	22,241	0	0	0	0	22,241
Interruptible Commercial	8,023	0	8,668	0	0	0	1,849	1,919	0	4,553	25,012
Interruptible Industrial	23,805	0	10,598	0	13,500	0	820	1,154	0	20,004	69,881
Electric Power	695	0	0	0	0	1,061	809	8,024	1,570	0	12,159
Subtotal - Trans.	44,450	38,695	26,988	18,580	13,690	27,226	24,482	11,097	13,327	51,341	269,876
Total Requirements	83,519	77,614	55,470	46,110	24,927	91,112	48,365	74,225	25,911	88,366	615,619
<i>Supply for sales</i>											
Major Supply Contracts	13,422	0	5,125	14,007	23,930	36,091	19,236	14,551	0	7,621	133,983
Other Supply contracts	0	22,376	18,357	0	0	0	0	0	0	1,955	42,688
Spot Purchases	24,851	0	0	0	500	31,571	1,938	51,037	8,719	27,082	145,698
Storage Withdrawals	22,425	6,758	12,385	8,352	4,000	14,205	10,357	15,639	5,289	9,261	108,671
LNG/SNG/Propane	0	0	0	0	1	601	0	1,789	0	369	2,760
Company Production	0	0	0	0	9	0	0	0	1,600	0	1,609
Local Purchases	245	13,891	5,000	1,482	300	0	0	0	5,000	0	25,918
Exchange/Other LDCs	0	0	0	0	4	0	0	0	50	0	54
Other	0	0	10,740	12,042	0	0	0	0	0	0	22,782
Subtotal	60,943	43,025	51,607	35,883	28,744	82,468	31,531	83,016	20,658	46,288	484,163
<i>Transportation Gas</i>											
Delivered to City Gate	44,450	41,169	26,987	18,579	13,690	27,226	27,258	11,097	13,327	51,341	275,124
Total sales and trans.	105,393	84,194	78,594	54,462	42,434	109,694	58,789	94,113	33,985	97,629	759,287
<i>Deductions</i>											
Curtailments	0	0	0	0	0	0	0	0	0	0	0
Storage Injections	21,874	6,580	12,385	8,352	2,500	16,155	10,424	16,714	5,289	9,261	109,534
LNG/Liquidations	0	0	0	0	0	497	0	3,175	0	0	3,672
Sales to Other LDCs	0	0	0	0	0	0	0	0	80	0	80
Off-System Sales	0	0	10,740	0	3,500	0	0	0	0	0	14,240
Total Deductions	21,874	6,580	23,125	8,352	6,000	16,652	10,424	19,889	5,369	9,261	127,526
Net Supply	83,519	77,614	55,469	46,110	36,434	93,042	48,365	74,224	28,616	88,366	631,759

Table A-5 2004 Annual Gas Supply and Demand Balance

2004 Annual Gas Supply and Demand Balance											
(from Annual Resource Planning Reports - MMcf)											
Demand	Columbia	Dominion Peoples	Equitable	NFG	PPL Gas	PECO	PG Energy	PGW	TW Phillips	UGI	Total
<i>Firm</i>											
Retail Residential	26,956	24,702	20,779	21,264	6,525	39,216	16,388	42,433	5,637	20,762	224,662
Retail Commercial	12,042	7,520	4,411	4,967	3,511	20,230	7,035	12,166	2,380	11,884	86,146
Retail Industrial	301	426	82	308	531	52	394	1,119	1,619	1,351	6,183
Electric Power	0	0	0	0	0	0	0	0	0	0	0
Exchange/Other LDCs	0	1,892	0	0	0	0	0	0	254	0	2,146
Unaccounted for Gas	1,264	2,890	2,550	17	881	1,783	336	2,540	854	214	13,329
Company Use	113	1,594	63	8	76	120	74	99	267	159	2,573
Other	0	-63	0	921	0	100	0	0	0	0	958
Subtotal - Firm	40,676	38,961	27,885	27,485	11,524	61,501	24,227	58,357	11,011	34,370	335,997
<i>Interruptible</i>											
Retail	0	0	0	0	0	608	25	4,006	757	388	5,784
Electric Power	0	0	0	0	0	0	0	98	0	0	98
Company's Own Plant	0	0	0	0	0	0	0	61	0	0	61
Unaccounted for Gas	0	0	0	0	0	0	0	183	0	0	183
Subtotal - Inter'n	0	0	0	0	0	608	25	4,348	757	388	6,126
Firm & Interruptible	40,676	38,961	27,885	27,485	11,524	62,109	24,252	62,705	11,768	34,758	342,123
<i>Transportation</i>											
Firm Residential	9,362	9,063	3,468	82	0	3,865	0	0	0	262	26,102
Firm Commercial	1,222	9,696	3,648	4,825	185	0	3,101	0	904	5,183	28,764
Firm Industrial	0	18,260	606	13,863	0	0	17,863	0	10,956	18,318	79,866
Interruptible Residential	0	0	0	0	0	21,905	0	0	0	0	21,905
Interruptible Commercial	8,034	0	8,668	0	0	0	3,483	302	0	3,585	24,072
Interruptible Industrial	25,143	0	10,598	0	12,592	0	0	918	0	20,137	69,388
Electric Power	637	0	0	0	0	1,303	776	7,762	1,508	0	11,986
Subtotal - Trans.	44,398	37,019	26,988	18,770	12,777	27,073	25,223	8,982	13,368	47,485	262,083
Total Requirements	85,074	75,980	54,873	46,255	24,301	89,182	49,475	71,687	25,136	82,243	604,206
<i>Supply for sales</i>											
Major Supply Contracts	23,029	0	5,125	15,496	23,930	44,507	14,113	9,841	0	2,949	138,990
Other Supply contracts	0	20,681	17,862	0	0	0	0	0	0	9,759	48,302
Spot Purchases	15,970	0	0	0	429	28,024	10,684	57,160	8,719	35,385	156,371
Storage Withdraws	19,498	8,039	9,294	9,547	5,587	15,796	9,171	14,082	4,751	8,234	103,999
LNG/SNG/Propane	0	0	0	0	3	759	0	2,609	0	165	3,536
Company Production	0	0	0	0	9	0	0	0	1,931	0	1,940
Local Purchases	245	14,212	5,000	1,030	240	0	0	0	5,789	0	26,516
Exchange/Other LDCs	0	1,156	0	0	3	0	0	0	47	0	1,206
Other	0	0	19,529	10,515	0	0	0	0	0	0	30,044
Subtotal	58,742	44,088	56,810	36,588	30,201	89,086	33,968	83,692	21,237	56,492	510,904
<i>Transportation Gas</i>											
Delivered to City Gate	44,398	38,575	26,987	18,770	12,777	27,073	25,331	8,981	13,368	47,485	263,745
Total sales and trans.	103,140	82,663	83,797	55,358	42,978	116,159	59,299	92,673	34,605	103,977	774,649
<i>Deductions</i>											
Curtailments	0	0	0	0	0	0	0	0	0	0	0
Storage Injections	20,594	6,683	8,183	0	3,670	15,992	9,660	18,290	4,064	10,786	97,922
LNG/Liquifications	0	0	0	0	0	482	0	2,699	0	0	3,181
Sales to Other LDCs	0	0	9,020	0	0	0	163	0	98	0	9,281
Off-System Sales	0	0	0	0	3,557	0	0	0	0	0	114,101
Total Deductions	20,594	6,683	17,203	0	7,227	16,474	9,823	20,989	4,162	10,946	224,485
Net Supply	82,546	75,980	54,872	46,255	35,751	99,685	49,476	71,684	30,443	82,244	628,846

Table A-6 2003 Annual Gas Supply and Demand Balance

2003 Annual Gas Supply and Demand Balance											
(from Annual Resource Planning Reports - MMcf)											
Demand	Columbia	Dominion Peoples	Equitable	NFG	PPL Gas	PECO	PG Energy	PGW	TW Phillips	UGI	Total
<i>Firm</i>											
Retail Residential	27,833	25,818	22,093	23,048	7,109	40,560	18,051	47,656	6,018	21,670	239,856
Retail Commercial	13,054	7,780	4,089	5,305	3,670	19,879	6,841	13,317	2,709	12,128	88,772
Retail Industrial	387	536	86	411	487	59	361	1,337	1,616	1,416	6,696
Electric Power	0	0	0	0	0	0	0	0	0	0	0
Exchange/Other LDCs	0	1,430	0	0	0	0	0	0	196	0	1,626
Unaccounted for Gas	1,559	3,160	2,032	227	437	2,771	58	2,669	850	420	14,183
Company Use	46	1,850	72	8	73	505	72	113	271	159	3,169
Other	0	-30	0	2,649	0	105	0	0	0	0	2,724
Subtotal - Firm	42,879	40,544	28,372	31,648	11,776	63,879	25,383	65,092	11,660	35,793	357,026
<i>Interruptible</i>											
Retail	0	0	0	0	0	1,430	20	5,984	967	454	8,855
Electric Power	0	0	0	0	0	0	0	110	0	0	110
Company's Own Plant	0	0	0	0	0	0	0	64	0	0	64
Unaccounted for Gas	0	0	0	0	0	0	0	420	0	0	420
Subtotal - Interruptible	0	0	0	0	0	1,430	20	6,578	967	454	8,019
Firm & Interruptible	42,879	40,544	28,372	31,648	11,776	65,309	25,286	71,670	12,627	36,247	366,358
<i>Transportation</i>											
Firm Residential	11,501	10,359	3,801	87	0	3,786	0	0	0	362	29,896
Firm Commercial	1,406	10,726	3,768	4,983	198	0	3,294	0	602	5,544	30,521
Firm Industrial	0	16,588	568	13,741	0	0	19,294	0	9,414	17,698	77,303
Interruptible Residential	0	0	0	0	0	21,455	0	0	0	0	21,455
Interruptible Commercial	8,229	0	8,952	0	0	0	3,568	59	0	3,891	24,699
Interruptible Industrial	23,358	0	8,422	0	12,747	0	0	1,614	0	20,531	66,672
Electric Power	934	0	0	0	0	1,828	765	9,315	1,444	113	14,399
Subtotal - Trans.	45,428	37,673	25,511	18,811	12,945	27,069	26,921	10,988	11,460	48,139	264,945
Total Requirements	88,307	78,217	53,883	50,459	24,721	92,378	52,207	82,658	24,087	84,386	631,303
<i>Supply for sales</i>											
Major Supply Contracts	24,027	0	5,125	11,436	23,930	40,303	19,186	19,477	0	2,327	145,811
Other Supply Contracts	0	26,925	17,709	0	0	0	0	0	0	10,380	55,014
Spot Purchases	20,226	0	0	0	1,581	26,885	6,792	50,053	8,719	35,991	150,247
Storage Withdrawals	21,675	5,950	10,669	9,465	10,479	14,778	9,075	16,428	4,428	10,190	113,137
LNG/SNG/Propane	0	0	0	0	0	616	0	3,335	0	126	4,077
Company Production	0	0	0	0	15	0	0	0	1,872	0	1,887
Local Purchases	263	10,929	5,000	726	347	0	0	127	6,709	0	24,101
Exchange/Other LDCs	0	1,049	0	0	4	0	0	0	81	0	1,134
Other	0	0	13,108	22,554	0	0	0	0	0	0	35,662
Subtotal	66,191	44,853	51,611	44,181	36,356	82,582	35,053	89,420	21,809	59,014	531,070
<i>Transportation Gas</i>											
Delivered to City Gate	45,428	39,743	25,512	18,811	12,945	27,069	26,921	10,988	11,460	48,138	267,015
Total sales and trans.	111,619	84,596	77,123	62,992	49,301	109,651	61,974	100,408	33,269	107,152	798,085
<i>Deductions</i>											
Curtailments	0	0	0	0	0	0	0	0	0	0	0
Storage Injections	23,312	6,379	10,130	10,338	13,308	15,584	9,767	14,534	4,673	10,342	118,367
LNG/Liquidifications	0	0	0	0	0	470	0	3,049	0	0	3,519
Sales to Other LDCs	0	0	0	0	0	0	0	169	138	0	307
Off-System Sales	0	0	13,108	2,649	1,396	0	0	0	0	12,423	29,576
Total Deductions	23,312	6,379	23,238	12,987	14,704	16,054	9,767	17,752	4,811	22,765	151,769
Net Supply	88,307	78,217	53,885	50,005	34,597	93,597	52,207	82,657	28,458	84,387	646,317

Table A-7 2002 Annual Gas Supply and Demand Balance

2002 Annual Gas Supply and Demand Balance											
(from Annual Resource Planning Reports, MMcf)											
Demand	Columbia	Dominion Peoples	Equitable	NFG	PPL Gas	PECO	PG energy	PGW	TW Phillips	UGI	Total
<i>Firm</i>											
Retail Residential	23,657	2,2589	20,519	21,563	6,338	35,621	16,854	35,591	5,614	18,531	206,877
Retail Commercial	11,242	6,014	3,579	4,866	3,294	17,877	6,015	10,369	2,355	10,867	76,478
Retail Industrial	380	199	116	1,182	585	10	300	1,098	1,267	1,349	6,486
Electric Power	0	0	0	0	0	0	0	0	0	0	0
Exchange Other LDCs	0	904	0	0	0	0	0	0	215	0	1,119
Unaccounted for Gas	1,211	3,946	1,647	71	201	1,500	259	1,416	865	471	11,587
Company Use	35	1,578	58	9	33	186	86	126	259	146	2,516
Other	0	181	0	1,099	0	104	0	0	0	0	1,384
Subtotal - Firm	36,525	35,411	25,920	28,648	10,451	55,298	23,614	48,599	10,575	31,364	306,405
<i>Interruptible</i>											
Retail	0	0	0	0	0	1,267	23	6,315	1,631	491	9,727
Electric Power	0	0	0	0	0	0	0	114	0	0	114
Company's Own Plant	0	0	0	0	0	0	0	258	0	0	258
Subtotal - Intern'p	0	0	0	0	0	1,267	23	6,872	1,631	491	10,284
Firm & Interruptible	36,525	35,411	25,920	28,648	10,451	56,565	23,537	55,471	12,206	31,855	316,590
<i>Transportation</i>											
Firm Residential	11,251	11,875	3,634	83	0	0	0	0	0	108	26,951
Firm Commercial	1,374	11,519	3,784	4,657	177	0	6,572	0	478	4,564	33,125
Firm Industrial	0	16,137	630	15,383	0	3,962	15,232	0	8,853	14,359	74,556
Interruptible Residential	0	0	0	0	0	0	0	0	0	0	0
Interruptible Commercial	7,445	0	9,613	0	0	0	2,288	0	0	3,933	23,279
Interruptible Industrial	25,663	0	8,042	0	13,111	23,019	1,421	2,416	0	20,047	93,719
Electric Power	1,311	0	0	0	0	3,682	571	9,903	1,736	158	17,361
Subtotal - Trans.	47,044	39,531	25,703	20,123	13,228	30,663	26,084	12,318	11,065	43,169	268,928
Total Requirements	83,569	74,942	51,623	48,771	23,739	87,228	49,621	67,790	23,271	75,072	585,626
<i>Supply for sales</i>											
Major Supply Contracts	19,995	24,795	6,180	11,323	14,277	45,070	16,364	5,401	0	4,220	147,625
Other Supply contracts	0	0	0	0	0	0	0	0	0	29,007	29,007
Spot Purchases	15,391	0	15,537	0	480	13,410	7,186	52,905	9,414	12,387	126,710
Storage Withdrawals	23,623	7,834	10,578	9,703	8,929	16,505	10,376	14,817	4,555	10,751	117,671
LNG/SNG/Propane	0	0	0	0	0	740	0	1,242	0	101	2,083
Company Production	0	0	0	0	18	0	0	0	1,739	0	1,757
Local Purchases	234	8,873	6,083	996	96	0	0	0	5,405	0	21,687
Exchange Other LDCs	0	898	0	0	5	0	0	0	276	0	1,179
Other	0	0	6,220	15,608	0	0	0	0	0	0	21,828
Subtotal	53,242	42,399	44,999	37,630	23,805	75,591	33,896	75,364	21,389	56,466	464,781
<i>Transportation Gas</i>											
Delivered to City Gate	47,044	39,587	24,517	20,123	13,330	30,663	26,084	12,318	11,065	43,335	268,066
Total sales and trans.	106,286	81,986	69,516	57,753	37,105	106,254	59,980	87,683	32,454	99,821	738,838
<i>Deductions</i>											
Curtailments	0	0	0	0	0	0	0	0	0	0	0
Storage Injections	22,717	7,044	11,672	7,781	8,813	15,044	10,359	16,425	4,001	10,650	114,506
LNG Liquefactions	0	0	0	0	0	466	0	1,666	0	0	2,132
Sales to Other LDCs	0	0	0	0	0	0	0	1,802	80	0	1,882
Off-System Sales	0	0	6,220	1,101	4,553	0	0	0	0	14,146	26,020
Total Deductions	22,717	7,044	17,892	8,882	13,366	15,510	10,359	19,893	4,081	24,796	144,540
Net Supply	83,569	74,942	51,623	48,871	23,739	90,744	49,621	67,790	28,373	75,025	594,297

Table A-8 2007 Peak Day Gas Supply and Demand Balance

2007 Peak Day Gas Supply and Demand Balance (ARPR MMcf)											
Demand	Columbia	Equitable	NFG	PPL Gas	Peoples	PECO	PNG	PGW	TW Phillips	UGI	Total
<i>Firm</i>											
Retail Residential	387.0	273.0	182.6	68.0	227.0	387.0	144.0	381.0	69.0	232.0	2350.6
Retail Commercial	155.1	48.0	43.7	38.0	72.0	193.0	69.0	113.0	36.0	124.0	891.8
Retail Industrial	2.6	1.0	2.3	5.0	1.0	1.0	4.0	0.0	5.0	16.0	37.9
Electric Power	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exchange Other LDCs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unaccounted for Gas	1.7	20.0	0.0	4.0	26.0	12.0	0.0	30.0	8.0	12.0	113.7
Company Use	0.4	2.0	0.0	1.0	13.0	1.0	0.0	0.0	1.0	1.0	19.4
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal – Firm	546.8	344	228.6	116.0	339.0	594.0	217.0	524.0	119.0	386.0	3414.4
<i>Interruptible</i>											
Retail	0	0	0	0	0	0	0	15	0	1	16.0
Electric Power	0	0	0	0	0	0	0	0	0	0	0.0
Company's Own Plant	0	0	0	0	0	0	0	0	0	0	0.0
Subtotal - Interr'p	0	15	0	1	16.0						
<i>Transportation</i>											
Firm Residential	67.7		0.8	0.0	98.0	0.0	0.0	0.0	0.0	1.0	99.8
Firm Commercial	11.3		40.7	16.0	85.0	0.0	9.0	4.0	2.0	37.0	205.0
Firm Industrial	0.0	45.0	73.7	0.0	67.0	18.0	51.0	1.0	47.0	74.0	376.7
Interruptible Residential	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interruptible Commercial	79.1		0.0	0.0	0.0	0.0	9.0	21.0	0.0	15.0	124.1
Interruptible Industrial	97.6	57.0	0.0	30.0	0.0	55.0	23.0	7.0	0.0	50.0	319.6
Electric Power	2.7	0.0	0.0	0.0	0.0	7.0	0.0	44.0	0.0	0.0	53.7
Subtotal - Trans.	258.4	102.0	115.2	46.0	250.0	80.0	92.0	78.0	49.0	178.0	1248.6
Total Requirements	805.2	446.0	343.8	162.0	590.0	674.0	309.0	636.0	154.0	565.0	4685.0
<i>Supply for sales</i>											
Supply Contracts	142.6	99.9	84.3	52.0	100.0	213.0	79.0	0.0	11.0	148.0	929.8
Spot Purchases	0.0	65.2	0.0	0.0	0.0	68.0	7.0	248.0	120.0	87.0	595.2
Storage Withdraws	375.8	176.6	138.2	43.0	116.0	131.0	140.0	150.0	0.0	172.0	1442.6
LNG/SNG/Propane	27.8	0.0	0.0	0.0	0.0	157.0	0.0	151.0	0.0	0.0	335.8
Company Production	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	25.0
Local Purchases	0.7	19.1	6.2	1.0	36.0	0.0	0.0	0.0	11.0	0.0	74.0
Exchange Other LDCs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	70.0	0.0	0.0	0.0	0.0	0.0	70.0
Subtotal	546.9	360.8	228.6	96.0	322.0	594.0	226.0	558.0	142.0	407.0	3481.3
<i>Transportation Gas</i>											
Delivered to City Gate	258.4	104.1	115.2	58.0	268.0	80.0	86.0	78.0	49.0	157.0	1253.7
Total sales and trans.	805.2	464.9	343.8	154.0	590.0	674.0	312.0	636.0	191.0	565.0	4735.9
<i>Deductions</i>											
Curtailments	0	0	0	0	0	0	0	0	0	0	0
Storage Injections	0	0	0	0	0	0	0	0	0	0	0
LNG Liquefactions	0	0	0	0	0	0	0	0	0	0	0
Sales to Other LDCs	0	0	0	0	0	0	0	0	0	0	0
Off-System Sales	0	0	0	0	0	0	18	0	0	0	18
Total Deductions	0	0	0	0	0	0	18	0	0	0	18
Net Supply	805.2	464.9	343.8	154.0	590.0	674.0	297.0	636.0	191.0	565.0	4720.9

Figure A-3 Pennsylvania Peak Day Supply 2007

Pennsylvania peak day supply 2007
Total 4,736 mmcf

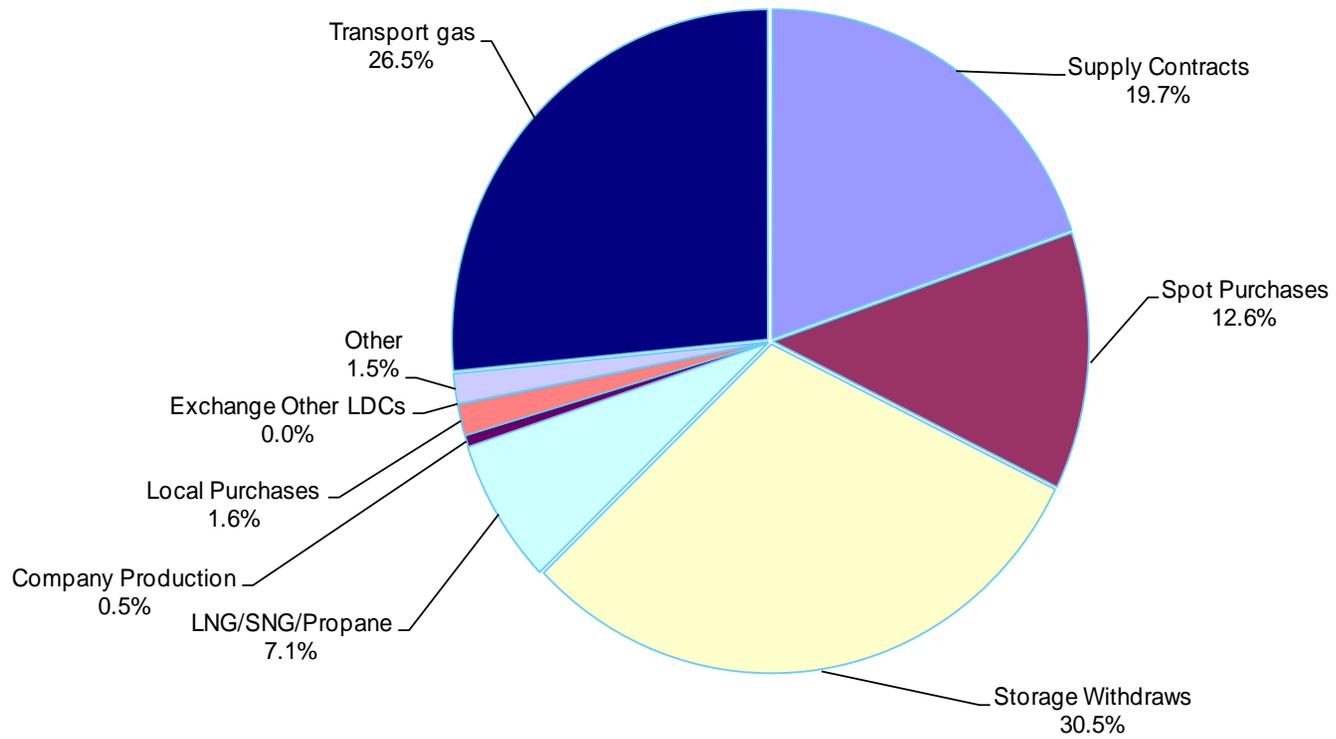


Table A-8 2006 Peak Day Gas Supply and Demand Balance

2006 Peak Day Gas Supply and Demand Balance (ARPR MMcf)											
Demand	Columbia	Equitable	NFG	PPL Gas	Peoples	PECO	PNG	PGW	TW Phillips	UGI	Total
<i>Firm</i>											
Retail Residential	249.2	257.0	151.6	67.0	189.0	276.0	159.0	323.0	42.0	201.0	1914.8
Retail Commercial	100.0	42.0	36.6	38.0	57.0	139.0	48.0	101.0	20.0	115.0	696.6
Retail Industrial	1.3	2.0	2.0	5.0	1.0	1.0	11.0	9.0	12.0	14.0	58.3
Electric Power	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exchange Other LDCs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0
Unaccounted for Gas	1.7	19.0	0.0	4.0	22.0	13.0	0.0	22.0	5.0	10.0	96.7
Company Use	0.4	2.0	0.0	1.0	11.0	1.0	0.0	0.0	1.0	1.0	17.4
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal – Firm	352.8	322	190.5	115.0	280.0	430.0	218.0	461.0	81.0	342.0	2792.3
<i>Interruptible</i>											
Retail	0	0	0	0	0	0	2	13	0	1	16.0
Electric Power	0	0	0	0	0	0	0	0	0	0	0.0
Company's Own Plant	0	0	0	0	0	0	0	1	0	0	1.0
Subtotal - Interr'p	0	0	0	0	0	0	2	14	0	1	17.0
Total Firm & I Sales	352.8	322	190.5	115	280	430	220	475	81	342	2808.3
<i>Transportation</i>											
Firm Residential	46.5		0.6	0.0	58.0		0.0	0.0	0.0	1.0	59.6
Firm Commercial	7.0		33.5	16.0	64.0		20.0	0.0	2.0	27.0	169.5
Firm Industrial	0.0	65.0	60.1	0.0	64.0	24.0	69.0	0.0	39.0	63.0	384.1
Interruptible Residential	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Interruptible Com	51.4		0.0	0.0	0.0		7.0	8.0	0.0	12.0	78.4
Interruptible Industrial	68.4	32.0	0.0	30.0	0.0	71.0	0.0	9.0	0.0	42.0	252.4
Electric Power	2.7	0.0	0.0	0.0	0.0	6.0	9.0	30.0	0.0	0.0	47.7
Subtotal - Trans.	176.9	97.0	94.2	46.0	186.0	101.0	105.0	47.0	41.0	146.0	1040.1
Total Requirements	529.5	419.0	284.7	161.0	465.0	531.0	325.0	522.0	122.0	488.0	3847.2
<i>Supply for sales</i>											
Supply Contracts	152.7	138.0	57.0	52.0	120.0	152.0	70.0	297.0	0.0	60.0	1098.7
Spot Purchases	0.0	114.9	0.0	0.0	0.0	80.0	41.0	139.0	11.0	25.0	410.9
Storage Withdraws	191.5	22.7	129.2	43.0	111.0	141.0	107.0	40.0	120.0	101.0	1006.4
LNG/SNG/Propane	18.2	0.0	0.0	0.0	0.0	57.0	0.0	0.0	0.0	0.0	75.2
Company Production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	10.0
Local Purchases	0.7	62.3	4.3	1.0	35.0	0.0	0.0	0.0	5.0	0.0	108.3
Exchange Other LDCs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	361.2	337.9	190.5	96.0	266.0	430.0	221.0	476.0	146.0	185.0	2709.6
<i>Transportation Gas</i>											
Delivered to City Gate	176.9	81.4	94.2	54.0	200.0	101.0	104.0	47.0	41.0	90.0	989.5
Total sales and trans.	529.5	419.3	284.7	150.0	466.0	531.0	325.0	523.0	187.0	275.0	3690.5
<i>Deductions</i>											
Curtailments	0	0	0	0	0	0	0	0	0	0	0
Storage Injections	0	0	0	0	0	0	0	0	0	0	0
LNG Liquefactions	0	0	0	0	0	0	0	0	0	0	0
Sales to Other LDCs	0	0	0	0	0	0	0	1	0	0	1
Off-System Sales	0	0	0	0	0	0	0	0	1	0	1
Total Deductions	0	1	1	0	2						
Net Supply	529.5	419.3	284.7	150.0	466.0	531.0	325.0	522.0	186.0	275.0	3688.5

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