

REGULATORY MONITORING IN NATURAL GAS MARKETS (and Petroleum, too)

16 December 2008 Accra, Ghana

Thom Pearce Senior Utilities Specialist Utilities Department, PUCO



1



U.S. NATURAL GAS FACTS

- Natural gas:
 - accounts for 23% of US energy
 - ~22 Tcf of gas
- Domestic fertilizer industry decimated by high cost of natural gas
- Domestic natural gas supply diminishing
- Canadian imports diminishing
- Since 1999, it has more than doubled in price adding \$70 billion in costs annually to U.S. consumers





NATURAL GAS MARKET MONITORING IN OHIO

- 1. Regulatory filings
- 2. Regulatory investigations
- 3. Industry intelligence





1. REGULATORY FILINGS

- Rate case filings
- Gas Cost Recovery (GCR) filings
- Long Term Forecast Report filings
- OPSB Applications
- Annual Reports
- Gas Pipeline Safety reports





1. REGULATORY FILINGS (cont'd)

Other regulatory filings

- PIPP (Percentage of Income Payment Plan: lowincome customers)
- Bad debt tracker
- Transition cost recovery reports (where unbundling)
- Accelerated infrastructure replacement program rider
 - Infrastructure replacement programs
 - Infrastructure enhancement programs
 - Advanced metering technologies





2. REGULATORY INVESTIGATIONS

- Rate cases
 - Rate case Management Audits
- Formal Investigations (Ordered/Dockets)
 - GCR Management/Performance Audits
 - LTFRs (Long-Term Forecast Report Hearings)
 - COIs (Commission-Ordered Investigations)
 - UNCs (Unclassified)
 - ORDs (Administrative Orders)





2. REGULATORY INVESTIGATIONS (cont'd)

- Public Interest Center
 - Consumer complaints & follow-up investigations
 - Trend analysis by category
 - Price
 - Metering
 - Utility
- SMED Service Quality Analysis Division





3. INDUSTRY INTELLIGENCE

- FERC monitoring
 - FERC Listservs
 - <u>Platt's Gas Daily</u>
 - Platt's Energy Daily
 - Foster's Natural Gas Report
- Pipeline monitoring/Electronic Bulletin Boards
- Marketer certification







3. INDUSTRY INTELLIGENCE (cont'd)

- U.S. (federal) government resources
 - U.S. Energy Information Administration (EIA)
 - U.S. Department of Energy (DOE)
 - Situation Reports
 - ISER Net (state regulatory officials EEACs)
 - Federal Energy Regulatory Commission (FERC)



Energy Information Administration Official Energy Statistics from the U.S. Government



Energy Sources

Petroleum

Crude oil, gasoline, heating oil, diesel, propane, jet fuel, and other petroleum products...



Natural Gas Exploration and reserves, storage, imports and exports, production, prices, sales ...



Electricity

Sales, revenue and prices, power plants, fuel use, stocks, generation, trade, demand & emissions...



Coal Reserves, production, prices, employment and productivity, distribution, stocks, imports and exports...



Renewable & Alternative Fuels Includes hydropower, solar, wind, geothermal, biomass and ethanol...



Nuclear

Uranium fuel, nuclear reactors, generation, spent fuel...

Topics

Geography





Features:

Latest U.S. Gasoline Prices

Greenhouse Gases

Comments Released

Latest U.S. Diesel Prices

Email Updates

Forecasts & Analyses

Monthly and yearly energy forecasts, analyses of energy topics, financial analyses, Congressional reports...

Environment

Households, Buildings & Industry

Energy use in homes, commercial buildings, manufacturing and transportation ...

International

Country energy information, detailed and overviews...

State & U.S. Historical Data Overview

Monthly and yearly energy statistics allow for comparison across all fuels and sectors...

Glossary



search

Latest Data

Crude Spot Price - 12/3/2008 \$46.79 /bbl wk chg: -7.41 yr chg: -42.50

Retail Gasoline Price - 12/1/2008 \$1.811 /gal wk chg: -0.081 yr chg: -1.250

Most Requested

Latest Market Updates

- On-Highway Retail Diesel Prices
- Gasoline and Diesel Fuel Update
- Natural Gas Storage Report
- This Week in Petroleum
- Weekly Petroleum Status Report
- Heating Oil and Propane Update

Forecasts

- Annual Energy Outlook
- Short-Term Energy Outlook
- International Energy Outlook

State and Country Information

- Country Energy Profiles
- State Energy Profiles

E List of EIA Reports

EIA Survey Forms

Energy Kid's Page





Greenhouse gas data, voluntary reporting, electric power plant emissions...



U.S. Department of Energy Emergency Support Function 12

Hurricane Ike Situation Report # 24

Situation Report

1

October 9, 2008 (2:00 PM EDT) http://www.oe.netl.doe.gov/emergency_sit_rpt.aspx

Highlights:

• In Texas, Centerpoint reports it has restored electricity to all customers that can receive power. The company is currently addressing individual customer locations and working to restore locations that sustained damage.

ESF 12 Actions:

• ESF-12 personnel are deployed to Austin, TX and are currently working with Disaster Housing Operations (DHOPS) at the FEMA Region VI Joint Field Office (JFO) in Austin, TX.

Situation Report Detail

Petroleum & Gas Information

Oil & Gas Offshore Production Shut In Status for Affected Area								
Location Amount Shut In Pre-event Production % Shut In								
Crude Oil (B/D)	563,980	1,300,000	43.4%					
Natural Gas (MMCF/D)	2,853	7,400	38.6%					

Source: Minerals Management Service

- As of October 9, the Minerals Management Service (MMS) reports 2,853 million cubic feet per day (MMcf/d) of the Gulf's natural gas production remains shut-in, equivalent to 38.6 percent of the Gulf production. MMS reports 563,980 barrels per day (b/d) of the Gulf's crude production remains shut-in, equivalent to 43.4 percent of the Gulf's crude production. A total of 85 production platforms, or 12.3 percent of the Gulf's 694 manned platforms, remain evacuated. All of the 116 rigs operating in the region have been manned.
- On October 8, the Louisiana's Department of Natural Resources reports that 88,275 b/d or 57 percent of the normal Louisiana oil production has been restored. Operators in 17 parishes and in-State offshore areas normally produce 155,767 b/d (the numbers are in addition to MMS reports of Federal offshore production). Shut-in oil production is 50,320 b/d and the status of remaining 17,172 b/d is unknown. The estimated amount of restored gas production is 877 MMcf/d or 53 percent of the daily gas production capacity, which is 1,642 MMcf/d. The estimated amount of shut-in gas production is 565 MMcf/d; the status of the remaining 199 MMcf/d has not been confirmed
- As of 8:00 AM EDT October 9, some minor limitations to operations still exist on some critical waterways. These include draft restrictions of 38 feet or less in Galveston/Texas City, TX and Lake Charles, LA waterways.



U.S. DEPARTMENT OF ENERGY Office of Electricity Delivery and Energy Reliability Infrastructure Security and Energy Restoration

ENERGY ASSURANCE DAILY

Tuesday Evening, December 09, 2008

Electricity

Substation Error Cuts Power to 30,000 Jemez Valley Electric Co-op Customers in New Mexico December 9

A transformer failure at the Hernandez Substation in Espanola cut power to 30,000 customers this morning. The company had restored electricity to some customers, and hoped to have all customers online by 12 PM, local time. http://www.krge.com/dpp/news/local/northeast/local_krge_espanola_power_outage_200812090947

Update: Luminant Postpones Restart 593 MW Big Brown Coal-fired Unit 1 in Texas December 9

The company expected to restart the unit by today after performing turbine repairs, according to a filing with state regulators. A spokeswoman, however, said the unit remained down. The filing did note that the restart could stretch longer-than-anticipated "as equipment systems are placed into service following the extended outage." http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=117123 Bloomberg News, 09:39 December 9, 2008

Luminant to Slow 591 MW Sandow Coal-fired Unit 4 in Texas December 9

The company planned to reduce the unit today to replace a gearbox, it said in a filing with state regulators. The curtailment was scheduled to last from 7 AM to 12 PM, local time. Bloomberg News, 07:19 December 9, 2008

AES's 226 MW Huntington Beach Gas-fired Unit 2 in California Reduced by December 8 According to the California Independent System Operator, the unit experienced an unplanned curtailment of 161 MW by December 8. http://www.caiso.com/unitstatus/data/unitstatus200812081515.html

Harbor Cogen's 109 MW Harbor Cogen Gas-fired Unit in California Shut by December 8 According to the California Independent System Operator, the unit shut by December 8. http://www.caiso.com/unitstatus/data/unitstatus200812081515.html

Update: Exelon's 1,154 MW Braidwood Nuke Unit 2 in Illinois at Full Power by December 9

The Nuclear Regulatory Commission reported that on the morning of December 8 the unit was operating at 88 percent.

Information derived from the NRC Power Reactor Status Reports: http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2008/

Update: Luminant to Restart 793 MW Monticello Coal-fired Unit 3 in Texas December 8-9 Luminant planned to restart the unit "following the conclusion of repairs," it said in a filing with state regulators. The restart was scheduled to conclude early this morning. http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=117399

EPCOR/TransAlta's 450 MW Genesee Coal-fired Unit 3 in Alberta Restarts December 8 The unit went offline on December 7. Reuters, 08:19 December 9, 2008

Energy Assurance Daily, December 9, 2008

Apache Plans 40,000 b/d of New Oil Output Offshore Australia

Apache plans to begin 20,000 b/d of production from its Van Gogh development offshore Western Australia in the second quarter of 2009. It expects to begin output its 20,000 b/d Pyrenees development—also offshore Western Australia—in early 2010.

http://www.rigzone.com/news/article.asp?a_id=70419

AESC, MergingDesign to Launch StopOilfieldTheft.com

The Association of Energy Services Companies (AESC) and MergingDesign plan to launch StopOilfieldTheft.com in early January. The website will be the first national database to report, track, and attempt to recover stolen oilfield materials. The Energy Security Council is expected to assist with the website's launch. Local and national law enforcement agencies—including the Federal Bureau of Investigation (FBI)—are expected to cooperate. 'Our biggest problem is when (workers) leave at night or for the weekend, and come back on Monday or the next day, all this equipment is missing,'' one AESC official said. Smaller companies have been particularly hard-hit by thefts of cooper tubing, another source said.

http://houston.bizjournals.com/houston/stories/2008/12/08/story1.html?b=1228712400%5e1743201&page=1 http://www.stopoilfieldtheft.com/about.php

Natural Gas

Update: Estimated 277 MMcf/d of Natural Gas Production Remains Shut in Louisiana December 8 after Hurricanes Ike and Gustav

Operators have restored 1,212 MMcf/d of natural gas output among 17 Louisiana parishes and in-State offshore areas, the Louisiana Department of Natural Resources reported December 8. The restored figure accounted for 73.8 percent of the region's estimated 1,642 MMcf/d capacity (the numbers are in addition to MMS reports of Federal offshore production). An estimated 277 MMcf/d, or 16.9 percent of capacity, remained shut. The status of the remaining 153 MMcf/d, or 9.3 percent, was unconfirmed.

http://dnr.louisiana.gov/sec/execdiv/pubinfo/weekly-onshore-prod.ssi

Update: Callon Petroleum Resumes Production at Most Significant Gulf of Mexico Facilities after Hurricanes Gustav and Ike

The company restored its Deepwater Medusa Field to pre-hurricane levels of about 99.6 MMcfe/d, and its Deepwater Habanero Field to pre-hurricane rates of about 50.4 MMcfe/d. It expects to restart its remaining facilities within the next several weeks, which will boost its daily production rate to approximately 38 MMcfe/d. That total equals the company's pre-hurricane level.

http://www.callon.com/

U.S. to Import More LNG in 2009, Produce More Natural Gas-EIA

The United States is expected to import about 400 Bcf of liquefied natural gas (LNG) in 2009, up from 360 Bcf in 2008, according to the Energy Information Administration (EIA). It imported 750 Bcf in 2007, due to higher demand and overseas price factors. In the same report, the EIA revised downward its forecasts for 2008 and 2009 domestic natural gas production. The EIA expects the United States to produce 5.4 percent more natural gas in 2008, compared to 2007, but just 0.9 percent more natural gas in 2009 compared to 2008. Those figures are lower than the group's prior estimations of 6 percent and 2 percent, respectively. DJN, 10:35 December 9, 2008 Reuters, 11:16 December 9, 2008 Bloomberg News, 11:01 December 9, 2008

Other News

Altra Biofuels Shuts 84 Million Gallon/Year Ethanol Plant in Cloverdale, Indiana

The facility opened in May, with an initial production goal of 84 million gallons/year. The company had hoped to boost production to 110 million gallons/year. As already reported, Altra Biofuels earlier shuttered its ethanol plant in Coshocton, Ohio.

http://ethanol-news.newslib.com/story/6938-30353/

Energy Assurance Daily, December 9, 2008

Page 1 of 51

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

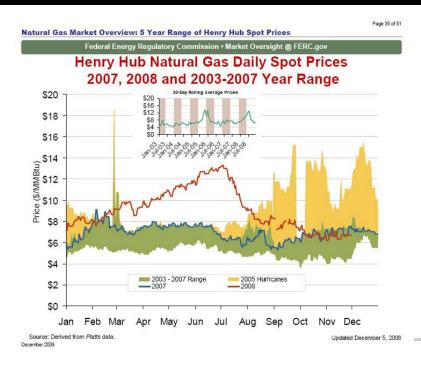
OE ENERGY MARKET SNAPSHOT

Midwest States Version – November 2008 Data

- Special Report
- Electricity Markets
- Natural Gas and Fuel Markets

Office of Enforcement Federal Energy Regulatory Commission December 2008

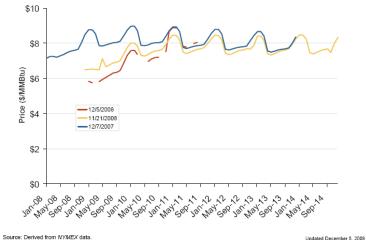
December 2008



Gas Futures Trading: Forward Price Curve

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

NYMEX Natural Gas Forward Price Curve



December 2008

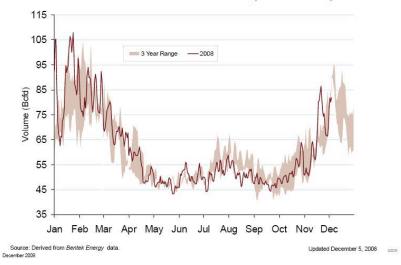
Updated December 5, 2008

Page 37 of 51



Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

Total U.S. Natural Gas Demand (All Sectors)

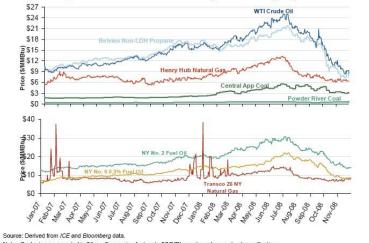


Page 36 of 51



Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

Oil, Coal, Natural Gas and Propane Daily Spot Prices



Note: Coal prices are quoted in \$/ton. Conversion factors to \$/MMBtu are based on contract specifications of 12,000 bitus/pound for Central Appalachian coal and 8800 bitus/pound for Powder River Basin coal. Updated December 5, 2008 December 2008

Oil, Natural Gas and Currency Spot Prices



Source: Derived from *Bioomberg* of December 2008

Page 50 of 51

300

Updated December 5, 2008

Page 48 of 51





Source: Waterborne Energy, Inc. Data in \$US/MMBtu December 2008 Updated December 5, 2008

Page 46 of 51

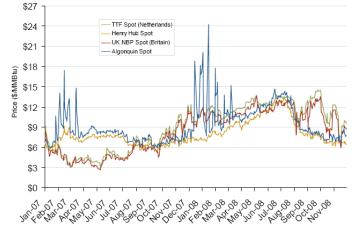
200

Page 49 of 51

LNG Market: European & US Gas Prices

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

Atlantic Basin European and US Spot Natural Gas Prices



Source: Derived from *Bloomberg* and *ICE* data. December 2008



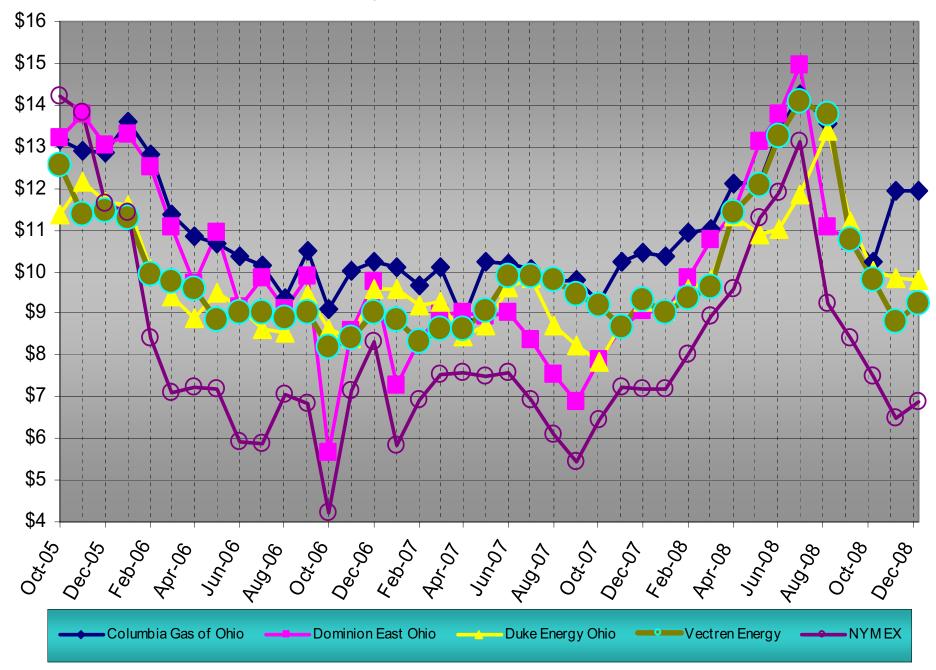
INDUSTRY INTELLIGENCE

- Trade publications & other industry intelligence
 - <u>Foster's Natural Gas</u>
 <u>Report</u>
 - <u>Platt's Gas Daily</u>
 - <u>EnergyCentral.com</u>
 - <u>Wall Street Journal</u> & <u>wsj.com</u>
 - <u>CNN</u> & others

- Price monitoring
 - Cash (daily) market trades (commodity & capacity)
 - NYMEX futures (commodity)
 - Basis differentials (capacity)
- FERC dockets
- Industry studies & presentations
- Pipeline, storage & LNG projects



GCRs for OHIO's Major Local Distribution Companies



Ohio's Natural Gas Local Distribution Companies

Current Gas Cost Rates

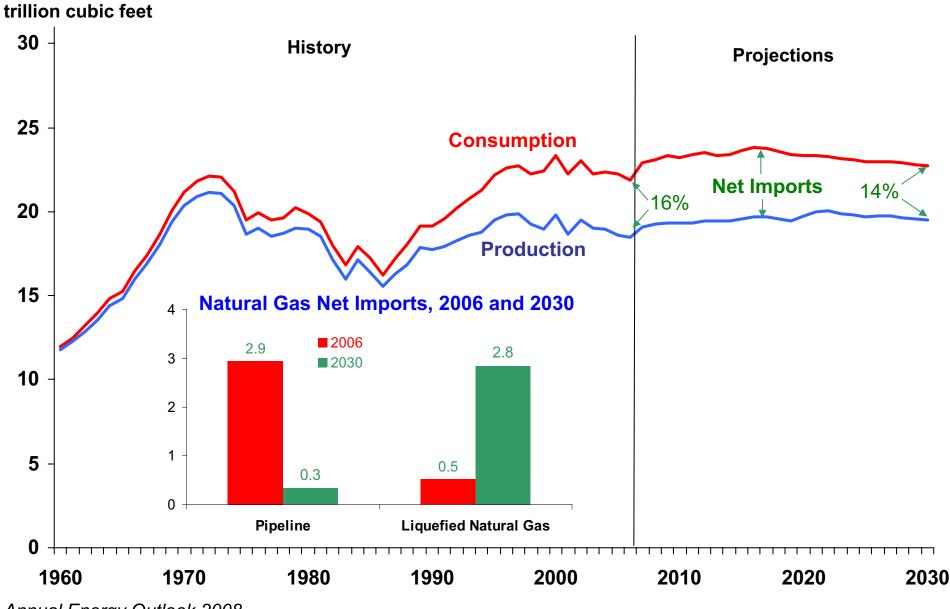
Effective in December, 2008

(Updated 12-8-2008)

		M 4			xpected		Total Gas	
		Month Annual Effective Volumes			Bas Cost	Cost Rate		
				(EGC) 1/		(GCR) 2/		
			Mcf		\$ / Mcf		\$ / Mcf	
1	Suburban Natural Gas	12/1/2008	1,739,030	\$	12.8363	\$	12.7833	
2	Columbia Gas of Ohio	11/28/2008	86,295,000	\$	10.7791	\$	11.9292	
3	Glenwood Energy of Oxford	12/1/2008	413,327	\$	12.0815	\$	11.7638	
4	Eastern Natural Gas	12/1/2008	757,174	\$	11.0500	\$	11.4569	
5	Northeast Ohio Natural Gas	12/1/2008	1,653,787	\$	10.6647	\$	11.1032	
6	Pike Natural Gas (Hillsboro)	12/1/2008	449,089	\$	11.4500	\$	10.9462	
7	Pike Natural Gas (Waverly)	12/1/2008	377,171	\$	11.4829	\$	10.9462	
8	Southeastern Natural Gas	12/1/2008	118,324	\$	11.4500	\$	10.9343	
9	Piedmont Gas	12/1/2008	325,740	\$	7.3040	\$	10.4673	
10	Waterville Gas and Oil	12/1/2008	632,367	\$	10.9808	\$	10.3937	
11	Ohio Gas	12/1/2008	1,232	\$	9.8360	\$	9.8360	
12	Duke Energy Ohio (formerly CG&E)	12/1/2008	41,683,815	\$	8.3230	\$	9.8100	
13	Brainard Gas	12/1/2008	17,493	\$	8.2406	\$	9.2409	
14	Vectren Energy Delivery of Ohio 3/	12/1/2008	28,519,744	\$	9.2380	\$	9.2380	
15	Dominion East Ohio 3/	12/16/2008	69,709,817	\$	9.2180	\$	9.2233	
16	Gasco Distribution Systems	12/1/2008	10,270	\$	9.3821	\$	9.1427	
17	Ohio Cumberland Gas	10/21/2008	202,744	\$	9.0318	\$	9.1183	
18	Orwell Natural Gas	12/1/2008	670,868	\$	9.4807	\$	9.0330	
19	Constitution Gas Transport Co.	12/1/2008	13,269	\$	6.8120	\$	6.8038	

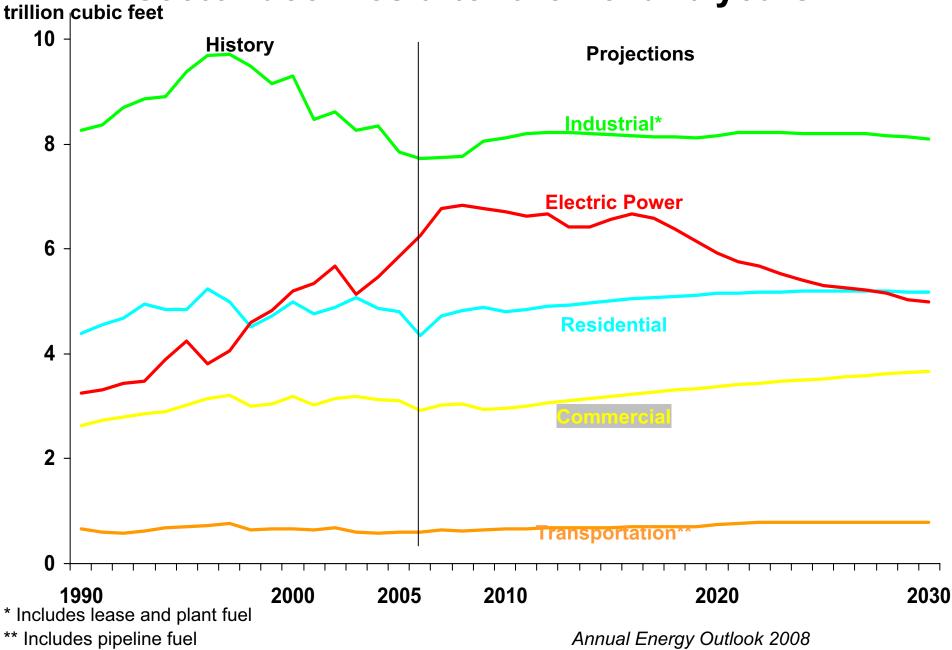
Expected Gas Cost is the average, projected, or anticipated cost of gas to be incurred by the LDC's, 1/

U.S. dependence on natural gas net imports declines slightly



Annual Energy Outlook 2008

Natural gas consumption in the electric power sector declines after the next 10 years





GAS COST RECOVERY (GCR)

- §4901:1-14 O.A.C., Uniform Purchased Gas Adjustment Clause
 - Definitions: measurement, demand & commodity rates, gas costs, jurisdictional sales, refunds, unaccounted-for gas
 - GCR rate calculation
 - Audits
 - Hearings
 - Tariffs





Gas Cost Recovery (continued)

- Cost Recovery Mechanism
 - Pipeline & transportation costs
 - Commodity costs
 - 3rd party storage costs
- Match cost with Revenue
- No Profit dollar for dollar
- Saving Incentives





Gas Cost Recovery (continued)

- GCR calculation filed quarterly with the PUCO
- Monthly updates of commodity costs available
- Other mid-quarter changes upon filed request





What are the GCR components?

- Expected Gas Cost (EGC) estimate
- Adjustments true-up of prior incurred cost
 - Refund and Reconciliation Adjustment (RA)
 - Actual Adjustment (AA)
 - Balance Adjustment (BA)





What is the PUCO's Role?

- Ensure timely and accurate updates
- Regulatory oversight (audits)
- Informational exchange (publicly available)





GCR (continued)

- Financial audits
 - Commission-conducted (staff), if available

OR

- Independent auditor
 - Utility ordered to pay for audit
 - Independent auditor files report to ensure:
 - Gas costs properly incurred, accurately computed, accurately applied to customer bills





GCR (continued)

- Management/performance audits
 - Commission-conducted by Staff (small utilities)

OR

- Independent auditor (large utilities)
 - Utility ordered to pay for audit
 - Independent auditor files report on:
 - Organizational structure
 - Management policies & procedures
 - Rationale of existing/proposed procurement strategy
 - Evaluation of utility's performance during audit period
 - Other specific areas of investigation designated by PUCO





Long-Term Forecast Reports

- §4901:5-1-01 O.A.C., Long-Term Forecasting Reports
 - Definitions: EDU, electric transmission owner, gas distribution line and associated facility, gas gathering line and associated facility, gas or natural gas transmission line and associated facilities, longterm forecast report, major utility facility, substantial change





Long-Term Forecast Reports

- §4901:5-7 O.A.C., Gas and Natural Gas Forecast Reports
 - §4901:5-7-01 O.A.C: Demand forecasts for LDCs >100,000 customers
 - §4901:5-7-02 O.A.C: Supply forecasts for LDCs >100,000 customers
 - §4901:5-7-03 O.A.C: Resource forecasts for LDCs
 >100,000 customers
 - §4901:5-7-04, -05, and -06 O.A.C: Forecasts for LDCs <100,000 but >15,000 customers
 - §4901:5-7-07,O.A.C: Forecasts for LDCs <15,000 customers





Long-Term Forecast Reports

- §4901:5-7 O.A.C., Long-Term Forecasting Reports
 - General guidelines
 - Special topic areas
 - Energy conservation
 - Energy-price relationships
 - Self-help and transported gas
 - Documentation





LTFR Demand Forms

- FG1-1: Historical & Forecast Service Area Demand
- FG1-2: Historical & Forecast Annual Demand by Industrial Sector
- FG1-3: Monthly Ohio Gas Sendout
- FG1-4: Range of Demand Forecasts of Throughput
- FG1-5: Historic Peak and Forecast Design Day
- FG1-6: Supply & Disposition of Transportation Vols.



FORM FG1-1: HISTORICAL AND FORECAST SERVICE AREA ANNUAL GAS DEMAND (PART 1)

UNITS: MMCF/YEAR

COMPANY NAME: Columbia Gas of Ohio

AVG BTU CONTENT: 1.0359

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
					SALES TO	SALES TO	SALES FOR RESALE TO	OTHER	
		RESIDENTIAL	COMMERCIAL	INDUSTRIAL	ELECTRIC	ULTIMATE	MUNICIPALS AND SMALL	SALES FOR	TOTAL
	YEAR	SALES (1)	SALES (1)	SALES (1)	UTILITIES	CONSUMERS	NATURAL GAS COS.	RESALE (2)	SALES
						(1)+(2)+(3)+(4)			(5)+(6)+(7)
-	5 2002	76,373	17,285	595		94,253		37,611	131,864
-	4 2003	77,742	19,210	697		97,649		7,307	104,958
-	3 2004	70,064	18,194	778		89,036		26,213	115,249
-:	2005	74,848	18,824	825		94,497		18,579	113,076
-	2006	66,100	16,329	841		83,270		49,001	132,271
(2007 2	66,557	15,279	122		81,958		-	81,958
· ·	2008	65,714	15,064	124		80,902		-	80,902
;	2009	65,770	15,662	131		81,563		-	81,563
	8 2010	66,277	15,471	139		81,887		-	81,887
	2011	66,496	15,776	144		82,416		-	82,416
1 1	5 2012	66,632	16,063	155		82,850		-	82,850
	3 2013	66,744	16,368	163		83,275		-	83,275
.	2014	66,880	16,703	175		83,758		-	83,758
	8 2015	67,070	17,092	177		84,339		-	84,339
•	2016	67,307	17,520	186		85,013		-	85,013
11	2017	67,517	17,920	196		85,633		-	85,633

History from Financial Statement, page 6

(2) Includes public authorities, non-traditional sales, & free municipal

FORM FG1-5: HISTORIC PEAK AND FORECAST DESIGN DAY REQUIREMENTS (MMCF/DAY) Company: Columbia Gas of Ohio, Inc. Average BTU Content: 1.0359

	Year	Residential	Commercial	Industrial	Electric Power Generation	Other	Company Use	Total Consumption	Unaccounted For	Total
-5	2002	731	136	3	0	0		871	5	876
-4	2003	871	181	5	0	0	1	1,058	4	1,062
-3	2004	856	162	5	0	0	1	1,023	4	1,027
-2	2005	894	150	4	0	0	2	1,050	2	1,052
-1	2006	788	126	. 4	0	0	2	920	2	922
0	2007	1,016	295	6	0	0	2	1,319	2	1,321
1	2008	1,019	302	6	0	0	2	1,329	2	1,331
2	2009	1,024	312	6	0	0	2	1,344	2	1,346
3	2010	1,033	309	6	0	0	2	1,350	2	1,352
4	2011	1,036	316	6	0	0	2	1,360	2	1,362
-5 [2012	1,036	316	6	Õ	0	2	1,360	2	1,362
6 [2013	1,036	316	6	0	0	2	1,360	2	1,362
7 [2014	1,036	316	6	0	Q	2	1,360	2	1,362
8	2015	1,038	316	6	0	0	2	1,360	2	1,362
9	2016	1,036	316	6	0	0	2	1,360	2	1,362
10	2017	1,036	316	6	0	0	2	1,360	2	1,362

Note: Allocation by class reflects firm requirements including "Standby" obligations and excluding customer "Choice" volume. The forecast firm requirements reflected are the 06PDF MDth converted to MMcf.

Historical volumes reflect actual peak day weather conditions. The forecast volumes reflect design weather conditions.



LTFR Supply Forms

- FG2-1: Annual Gas Supply
- FG2-2: Gas Supply Prices
- FG2-3: Historical Peak and Forecast Design Day Supply
- FG2-4: Existing and Proposed Storage Facilities
- FG2-5: Existing and Proposed Propane Facilities
- FG2-6: Other Peaking Facilities



FORM FG2-1: ANNUAL GAS SUPPLY UNITS: MMCF/YEAR COMPANY NAME: Columbia Gas of Ohio, Inc.

PROJECTED BTU CONTENT: 1.0359

		(1)	(2)	(8)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	YEAR	LONG-TERM INTERSTATE SUPPLY	SPOT MARKET INTERSTATE	ALL OTHER INTERSTATE SUPPLY	OHIÓ PRODUCTION	PROPANE	SNG	LNG	OTHER	TOTAL REQUIREMENT	NET WITHDRAWAL FROM STORAGE	total Supplies
			SUPPLY							(1) THRU (8)		(9)+(10)
										(i) is not (ii)		101-1101
-6	2002			94,529	4,534				51,927	150,990		150,990
-4	2003			136,473	4,404				(36,635)	104,241		104,241
-3	2004			109,954	4,843				8,605	123,402	-	123,402
-2	2005			107,193	4,803				1,571	113,567	2,253	115,820
-1	2006			122,890	5,142				(2,414)	125,619	-	125,619
0	2007			77,646	4,695				154	82,495	-	82,495
1	2008			78,444	4,674				-	83,119		83,119
· 2	2009			77,782	4,137				- 1	81,920	582	82,502
3	2010	1		78,837	4,137				-	82,974	-	82,974
4	2011			79,535	4,137					83,673		83,673
5	2012			79,632	4,155				-	83,787	-	83,787
6	2013			80,044	4,178				-	84,220	-	84,220
7	2014			80,512	4,201				-	84,713	-	84,713
8	2015			81,080	4,230				-	85,310		85,310
9	2016			81,726	4,264				-	85,990	-	85,990
10	2017			82,321	4,295				-	86,616	· -	86,616

Notes:

Volumes reflect retail sales assuming continuation of traditional GCR or comparable replacement. Supply changes from 2013 - 2017 were projected based on the forecasted changes in total demand. Column 10: Net Wähdrawal from Storage = Total Withdrawal from Storage (Form FG1-1, Column 16).

minus Total Injections to Storage (Form FG1-1, Column 15)

Volumes are measured at the storage field before retention for transportation to the City-gate.

If net withdrawal is negative, then COH had a net storage injection. Column 10 would be

zero, and the net injection volume would be included in Column 9.



LTFR Resource Forms

- FG3-1: Characteristics of Existing Transmission Lines (origin/termination, size/capacity, length, associated facilities, year installed)
- FG3-2: Specifications Planned Gas Transmission Lines (origin/termination, size/capacity, right-of-way, construction date, capital investment, other utilities, purpose, consequences of deferment, class description)



FORM FG 3-1: 2007

CHARACTERISTICS OF EXISTING TRANSMISSION LINES

Company: COLUMBIA GAS OF OHIO, INC.

Name and Number	Point of Origin and Terminus	Size and <u>Capacity</u>	Line Length	Associated Facilities	Year <u>Installed</u>	Class Designation of Pipeline (OPS)
System 34100199 South Columbus High Pressure System.	From Columbia Gas Transmission Lines B-93, B-115 and System 34100197 (Franklin County)	Various Sizes 175 PSIG	50.3 mile	Regulator Facilities	Various	
System 34100223 DB-157 & DB-169	From Columbia Gas Transmission Line B-115 (Franklin County) to Delaware, OH.	Various Sizes 240 PSIG	30.3 mile	Regulator Facilities	Purchased from TCO in 1989.	
System 34100241 Pickerington- Mingo Estates HP	From Columbia Gas Transmission Line B-100 to Pickerington, OH	3" & 6" 140 PSIG	1 mile	Regulator Facilities	1980	
System 34100247 DB-157 Ashtey	Part of the DB-157 line from Delaware, OH to Ashley, OH. (Delaware County)	3",4" & 10" 240 PSIG	8 mile	Regulator Facilities	Purchased from TCO in 1989	•
System 34264002 Cadiz Industrial Park	From Columbia Transmission Line V-100 (Harrison County)	3" 225 PSIG	.07 mile	Regulator Facilities	1990	
System 34419001 Dover Township- Brewer - DQ 915	From Columbia Transmission Line Q-250 (Athens County)	1.25" & 4" 140 PSIG	1 mile	Regulator Facilities		•
System 34435002 Weilston – Poore Rd School DR-658	From Columbia Transmission Line R-801 to SR 327	3" 300 PSIG	4 mile	Regulator Facilities	1967	
System 34522005 Johnstown HP	From Columbia Transmission Line B-107 to Johnstown, OH.	4" 135 PSIG	.75 mile	Regulator Facilities	Prior to 1969	•
System 34535002 Buckeye Lake- Leibs Island	From Columbia Transmission Line K-201 to Buckeye Lake (Fairfield County)	2" 200 PSIG	0.06 mile	Regulator Facilities	Prior to 1970	
System 34557012 Circleville - West HP	From Columbia Transmission Line A-116 to Circleville, OH	6* & 8* 285 PSIG	8.6 mile	Regulator Facilities	Various	

2

* All lines are being operated and maintained as Class 4 facilities even though the actual location may be a less restrictive class.



ANNUAL REPORTS TO PUCO

- Important changes during the year
- Board of Directors
- Principal Officers
- Income sheet
- Retained Earnings
- Utility Plant in Service
- Accumulated Depreciation
- Accrued Assets
- Extraordinary Property Losses
- Unrecovered costs
- Deferred debits
- R&D expenditures

- Long-term debt
- Deferred income taxes
- Liabilities
- Operating Revenues
- Employee Compensation
- AFUDC rate used for year
- Number of customers
- Revenue, customers, compensation, and transportation
- Statement of Revenue/ Gross Earnings
- Agent of record



TABLE OF CONTENTS

History	3.1
Facts Pertaining to Control of Respondent	4.1
Important Changes During the Year	
Voting Powers and Elections	6 .
Board of Directors.	7
Principal General Officers	8
Balance Sheet	9.1-9.5
Notes to Balance Sheet	10.1
Income Statement.	11.1-11.2
Notes to Income Statement	12.1
Statement of Retained Earnings	13
Partnership Capital Statement	14
Utility Plant in Service	15.1-15.5
Accumulated Provision for Depreciation	
Special Funds	
Prepayments	
Misc. Current and Accrued Assets	22
Extraordinary Property Losses	23
Unrecovered Plant and Regulatory Study Cost	24
Miscellaneous Deferred Debits	25
Research Development and Demonstration Expenditures (Major Only)	26
Capital Stock	
Long-Term Debt	29-34
Deferred Income Taxes: Account 190 & Account 281	
Deferred Income Taxes: Account 282 & Account 283	
Miscellaneous Current and Accrued Liabilities	
Gas Operating Revenues	40.1
Gas Operating and Maintenance Expense Accounts	41.1-42.3
Taxes Other Than Income Taxes	43
Account 142.XX - PIP Customer Accounts Receivable	44
Account 186.XX/182.3XX - PIP Customer Deferred Accounts Receivable	
General Information - Natural Gas	
Employee Compensation	47
AFUDC Rate Used During Year & Calculation of Rate	48
Number of Customers	49
Revenue, Customers, Consumption, and Gas Transportation	50
Statement of Intrastate Gross Earnings (Revenue)	51 -
Name, Address, and Phone Number of the Company's Contact Persons and to Whom	
Invoice Should be Directed	52
Verification	53



Questions?

