

The Current Situation For Natural Gas Markets: A Brief Overview

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FERC

Outline

- Introduction to FERC's OMOI
- Natural Gas Market Background
- Current Situation
- Gas Price Spike Study Highlights
- Conclusion
- Appendix: Brief History

After the chaos of California and Enron, the FERC established a new office to perform expert market monitoring.

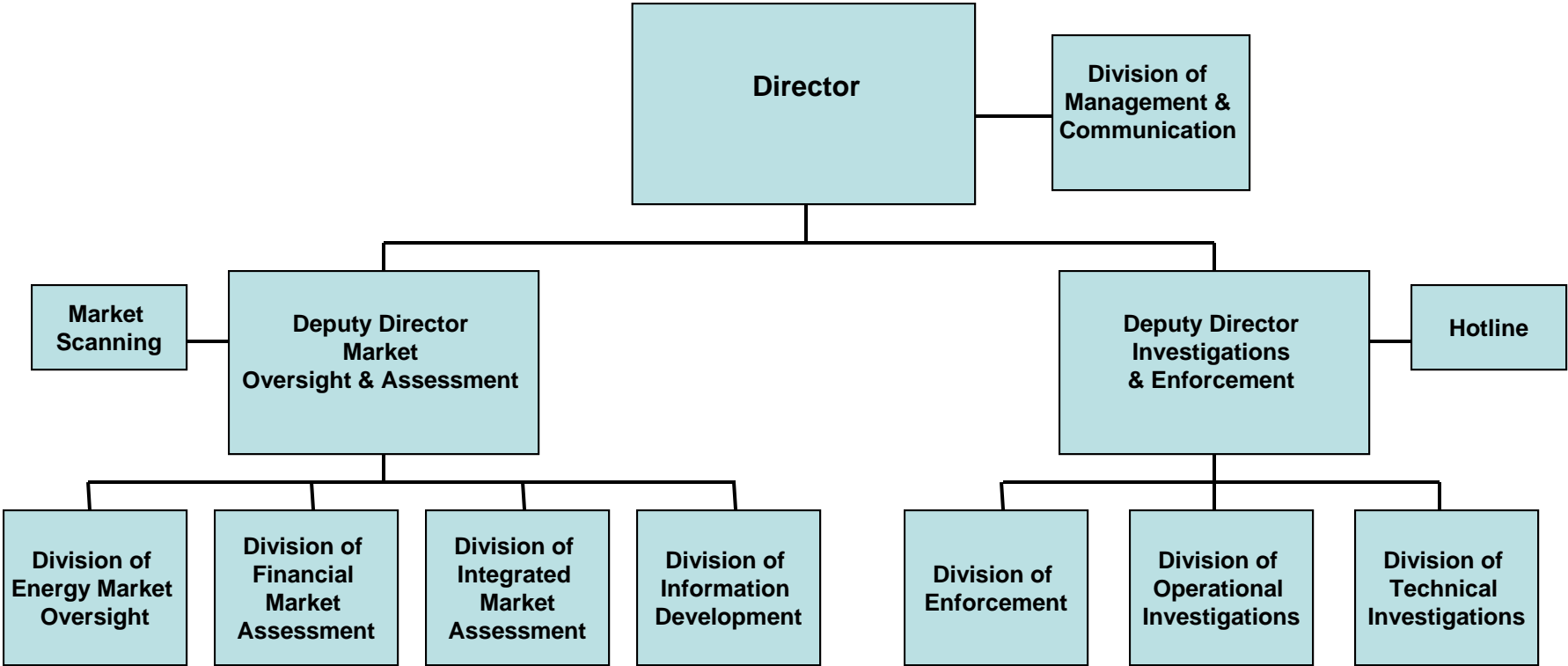
Strategic Goal – Protect customers and other market participants through vigilant and fair oversight of transitioning energy markets.

- Promote market understanding
 - expert market oversight and investigatory capability
 - follow trends
 - develop market information and disseminate findings to enhance Commission deliberations and public discussion

After the chaos of California and Enron, the FERC established a new office to perform expert market monitoring. (continued)

- Assure pro-competitive market structure/operations.
 - assure conditions and infrastructure with objective benchmarks
 - integrate FERC and other monitors' work
 - identify and remedy market structure/operations problems
 - review market rules
 - ensure M&A is pro-competitive.
- Remedy behavior
 - investigate market dysfunctions
 - use ADR
 - act swiftly on third-party complaints

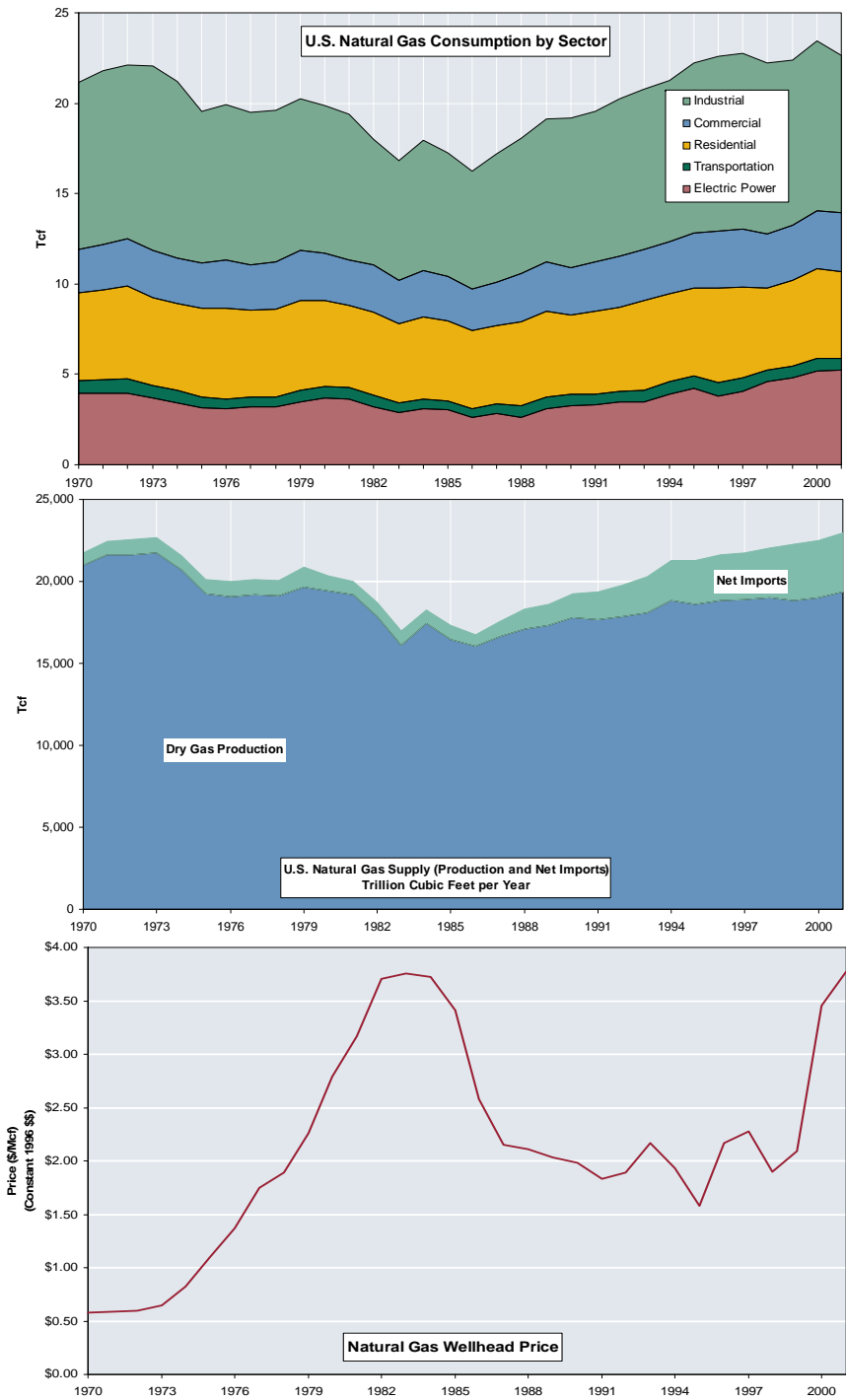
Office of Market Oversight and Investigations (OMOI)



Each component in the natural gas marketplace has different characteristics.

	<u>Supply</u>	<u>Transmission</u>	<u>Distribution</u>	<u>End Use</u>
Physical Step	<ul style="list-style-type: none"> •Exploration & Production •Imports (Pipe/LNG) 	International, Interstate & Inatrastate Pipelines	Private & Municipal LDCs	Residential <ul style="list-style-type: none"> •Commercial •Industrial •Power Generation
Industry Structure	Highly Competitive	Generally competitive in large markets Potentially some market power	Generally regulated franchises	Widely varying sophistication

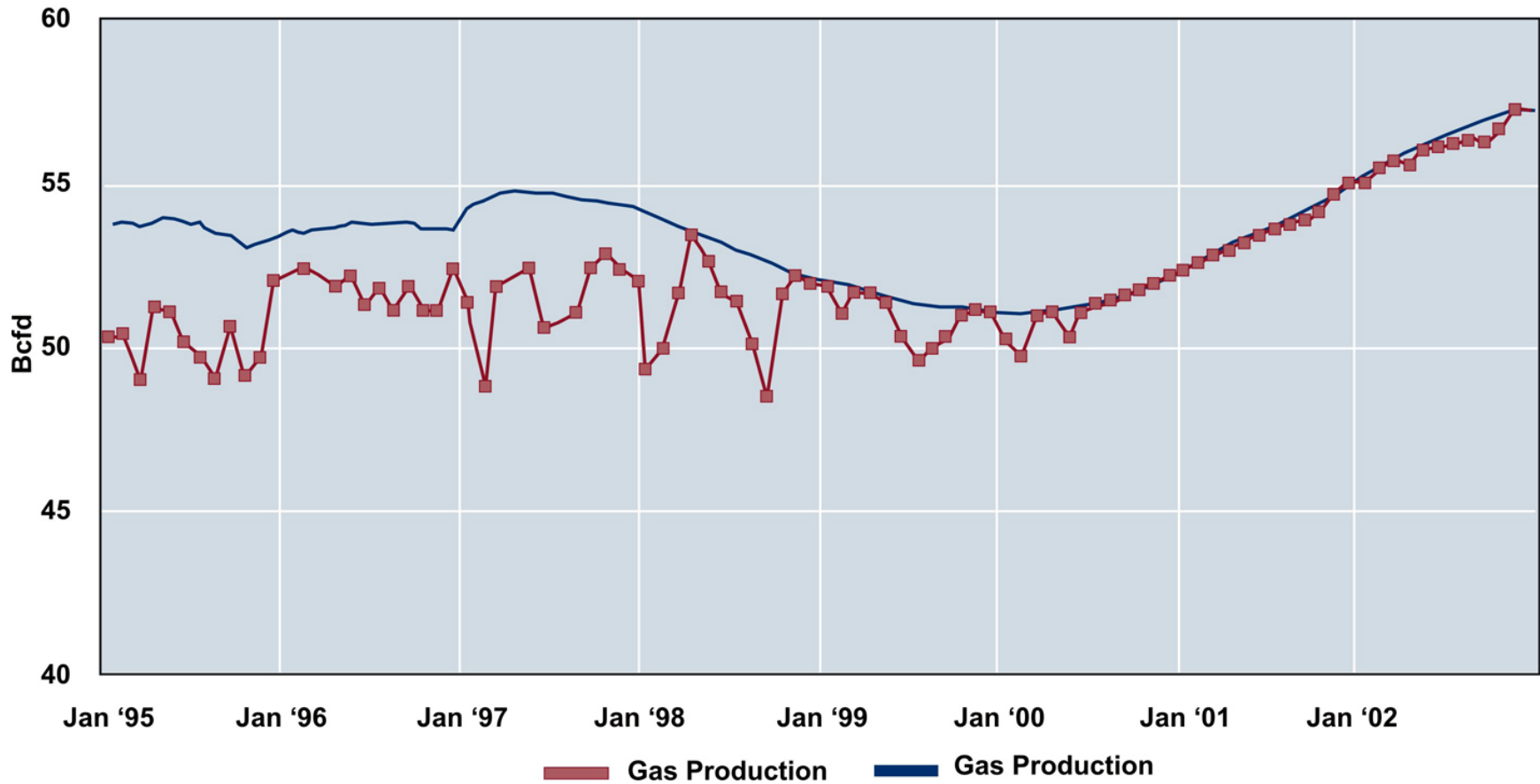
The gas market has experience ups and downs.



Natural gas market flexibility has declined.

- Likely result: greater price volatility
- Key factors
 - production capability
 - storage capacity and deliverability
 - imports
 - Canada
 - LNG
 - access to resources
 - financial health of participants
 - fuel switching
 - trading liquidity

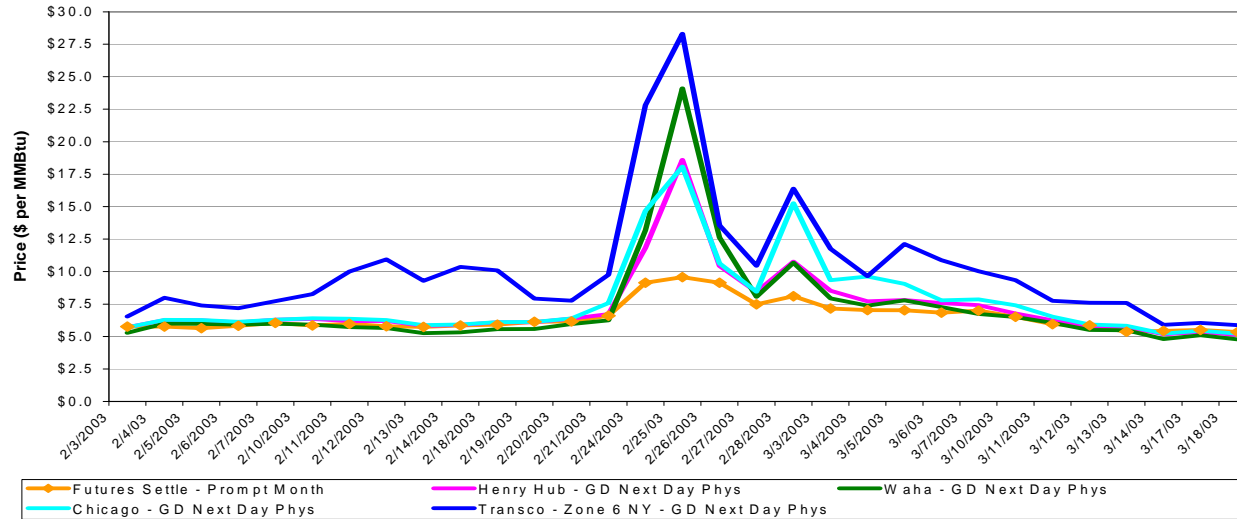
Gas Markets Move Toward Just-in-Time Delivery System for Natural Gas (Gas production compared to capacity from 1995 through 2002).



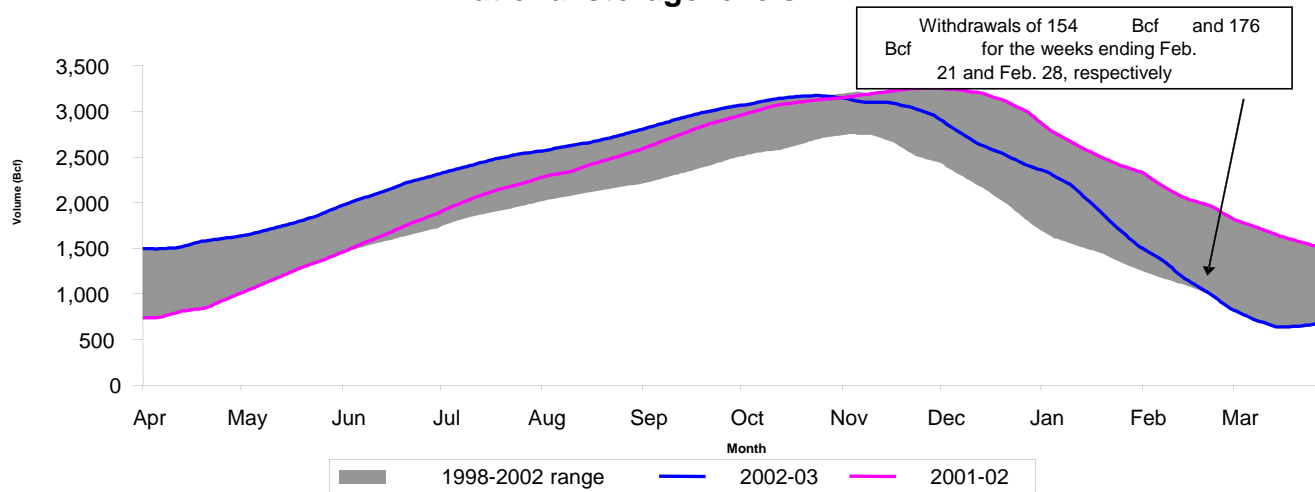
Source: American Gas Association

Re-building confidence in markets: February Gas Price Spike Investigation

Physical Next Day (Gas Daily) & Futures Prompt Prices
February 3, 2003 - March 18, 2003



National storage levels



Source: AGA through 4/26/03; EIA from 5/3/02 through week ending 3/28/03.

Re-building confidence in markets: February Gas Price Spike Investigation (continued)

- FERC OMOI/CFTC subpoenaed information from exchanges and brokerages
- FERC OMOI/CFTC team examined more than 16,000 transactions, 130,000 bids/offers
- Findings:
 - relatively few active buyers and sellers at the time (liquidity problem)
 - weather influence (cold front + sustained cold earlier + well freeze-offs)
 - low storage levels
 - tight production capacity
 - markets related to one another effectively
 - no evidence of manipulation from data, hotline, or trader interviews
- Trade Press response: “the size, speed, and depth of the (FERC OMOI/CFTC team) would have made an SEC ‘tiger team’ proud.” (The Desk, July 25, 2003, page 5.)

The natural gas marketplace has improved since last year.

2003 Winter Assessment

Deteriorating financial conditions

Managing credit exposure

Shaken confidence in price discovery

Continuing potential for manipulation

October 2004 Status



- \$60 billion of market cap gained by major market participants in 2003
- credit deratings have slowed
- More than \$30 billion of stressed debt re-financed (only one company's debt defaulted)
- credit clearing initiatives are progressing (reduced capital requirements)
- FERC policy statement (June 2003)
- Revised trade press procedures
- ICE agreements
- A "work-in-progress"
- Only isolated incidents recently

Conclusion

The natural gas marketplace is fundamentally sound.

The current tightness of markets will challenge industry, customers, and policymakers.

The natural gas and electricity markets are growing ever-closer.



Appendix:
Evolution of the U.S.
Natural Gas Industry

U.S. Engineering History

- 1700s – George Washington reportedly buys land with a “burning stream” on it
- 1821 – First gas well discovered – Fredonia, NY
- 1859 – First gas pipeline, Titusville, PA
 - 2-inch, 5.5 mile pipe from well to village
- Late 1800’s – gas used as source of light
- Early 1900s – gas a byproduct of oil production used regionally
 - Poor quality of piping, inability to join sections of pipe retard development of industry

U.S. Engineering History (continued)

- World War II – technology breakthrough
 - Advances in metallurgy, welding techniques and pipe rolling
 - Pipeline construction boom begins
 - Lasts into the 1960s, creates much of the natural gas pipeline network that exists today
 - Field & Gathering pipe 45,000 miles
 - Transmission pipe 253,900 miles
 - Distribution pipe 980,800 miles
 - TOTAL pipe 1,279,700 miles

U.S. Policy History

- Unregulated local monopolies
- Monopoly regulation
 - Public Utility Holding Company Act of 1935
 - Natural Gas Act of 1938
 - Regulates natural gas transportation in interstate commerce
 - Did not regulate local distribution of gas, production of gas, gas gathering, intrastate pipe
 - Phillips Decision of 1954
 - Natural gas prices subject to regulation at wellhead
 - Price regulation now existed wellhead to burner tip
 - Attempt to legislate change fails due to scandal

U.S. Policy History (continued)

- 1970's – energy crisis
 - Oil Embargos
 - Gas Crisis 1976-77 – gas rationed
- Unleashing of competitive forces
 - Natural Gas Policy Act of 1978
 - Partially deregulates price controls on gas
 - Maryland People's Counsel of Maryland v. FERC
 - Sets stage for open access to pipeline system
 - Natural Gas Wellhead Decontrol Act of 1989
 - Removes all gas price control
 - FERC Order 436 of 1985/Order 500 of 1987
 - Removes all barriers to open access to pipeline system

U.S. Policy History (continued)

- 1900s
 - FERC Order 636 (1992)
 - Unbundling of pipeline transportation sources
 - Pipeline competition
 - Natural gas for power
 - Explicitly prohibited before by Fuel Use Act of 1978