

AOBA Utility Committee

Energy Markets in Tailspin

*Major Economic Recession Continues to Pull Energy
Prices Downward – Where Will It End?*

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Will the Recession Bring an End to Extreme Energy Price Volatility?

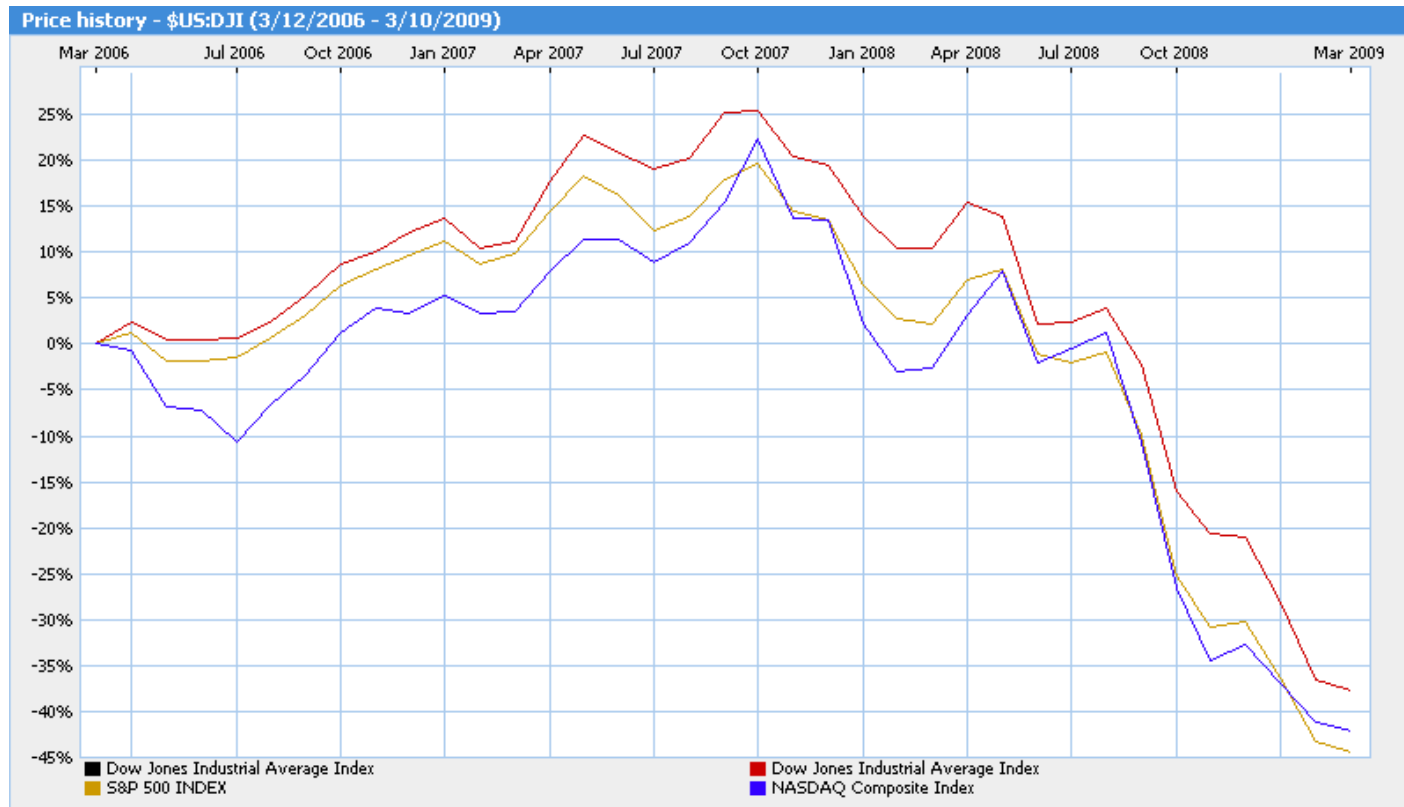
*Sharp Rise in Energy Prices Contributed to Nation's
Economic Slowdown ...*

*But Falling Energy Prices Appear to Have Done
Little to Revive Economic Activity*

Driver's of Current Energy Prices

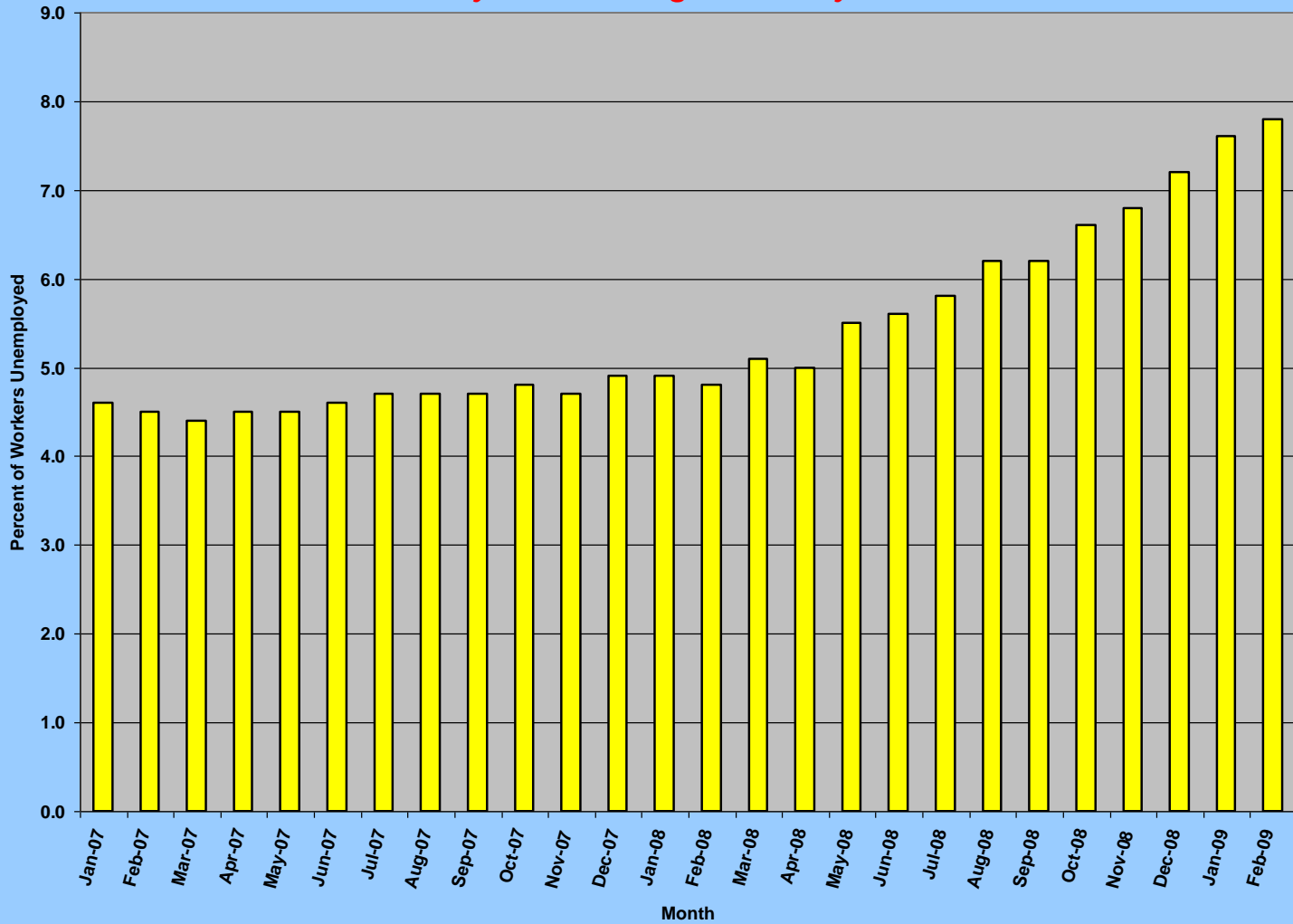
- ✦ Continuing Financing and Credit Issues
- ✦ Weakened U.S. and World Economies
- ✦ Growing Unemployment
- ✦ Record U.S. Natural Gas Production and Rising Natural Gas Inventories

The Decline in Stock Market Prices Since Its Peak in October 2007 Now Exceeds 50%

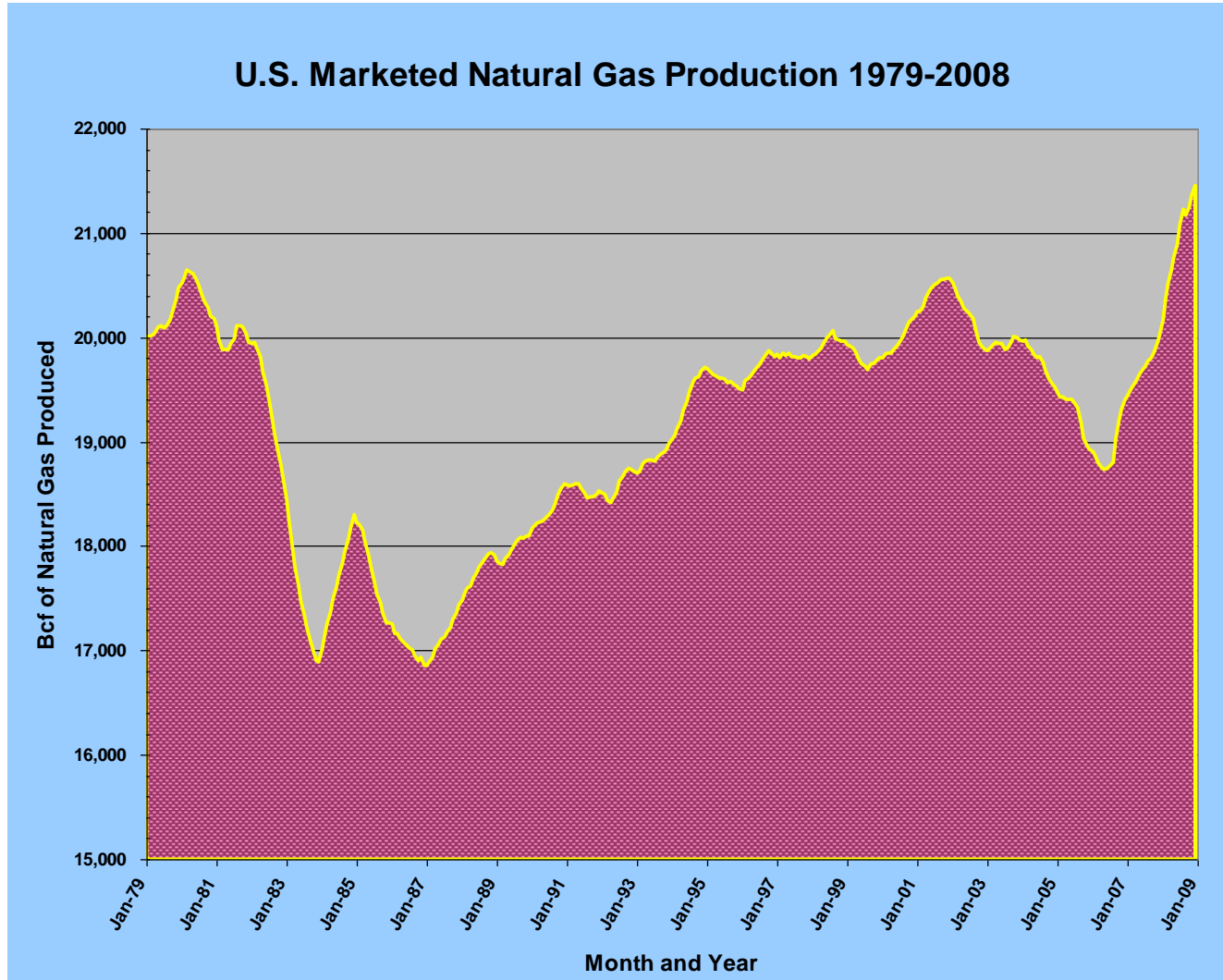


U.S. Civilian Unemployment Rate

January 2007 Through February 2009



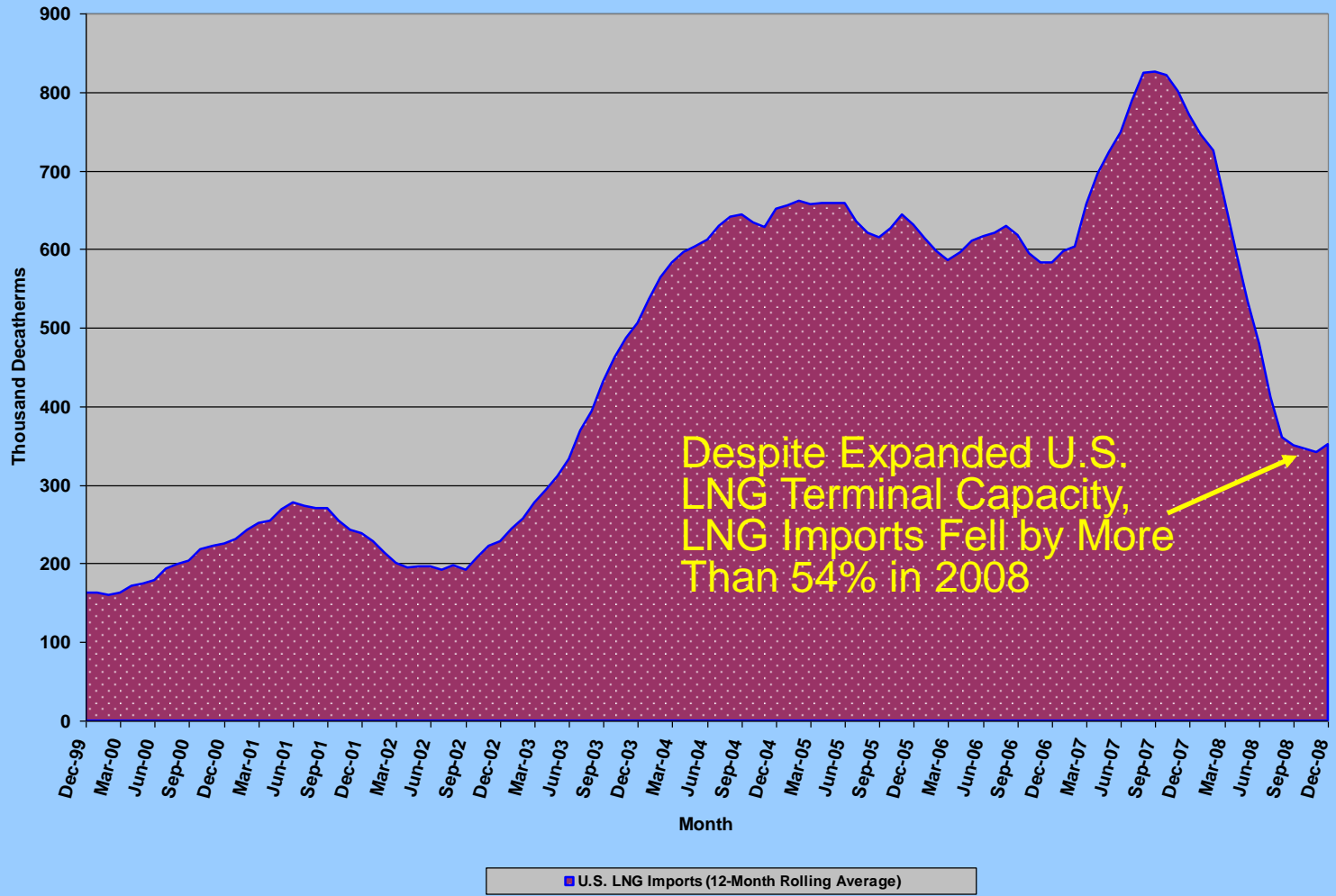
U.S. Natural Gas Production Reaches Its Highest Level in More Than 30 Years



Market Response to Falling Energy Prices

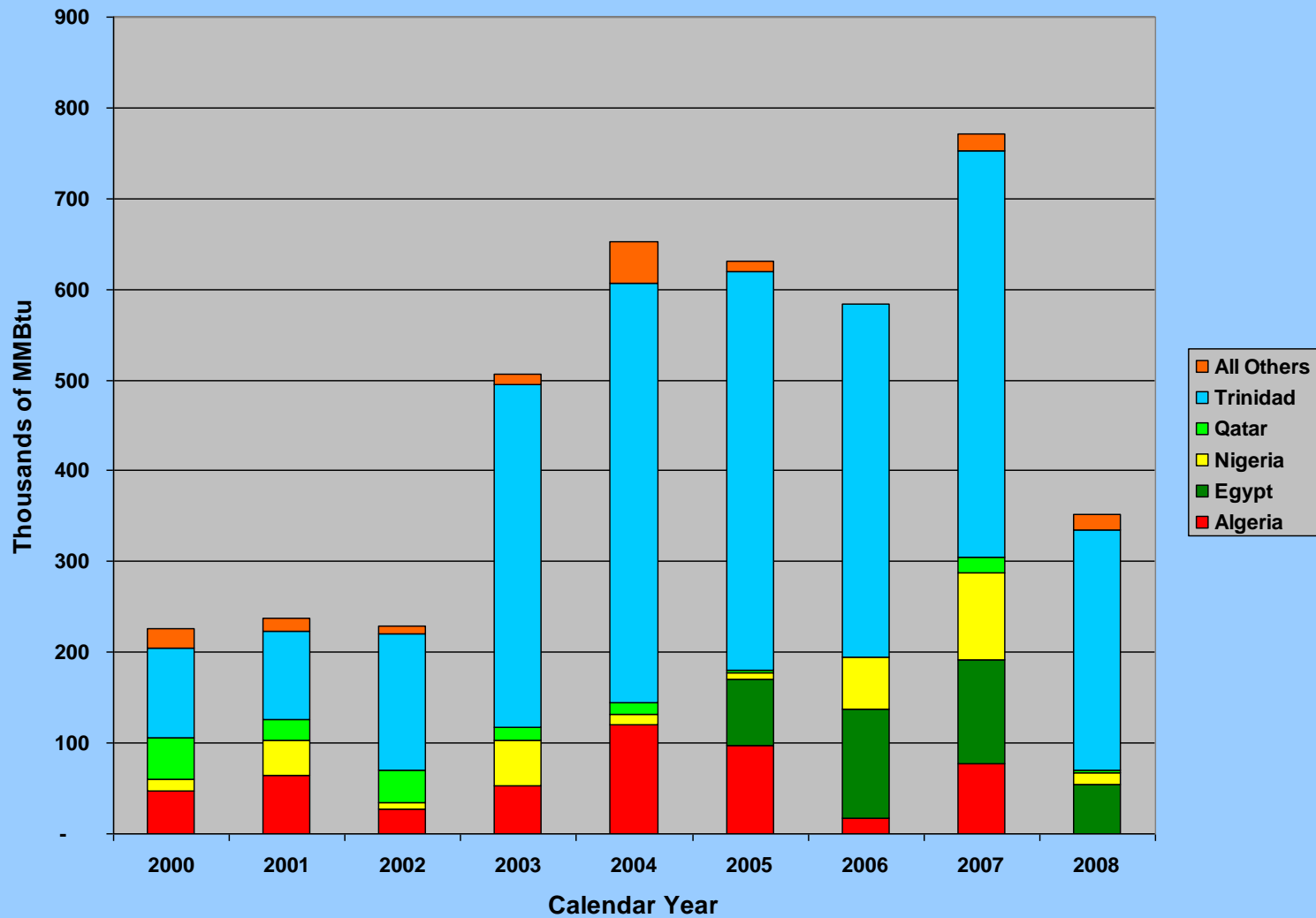
March 11, 2009

U.S. LNG Imports December 1999 Through December 2008 (12-Month Rolling Averages)

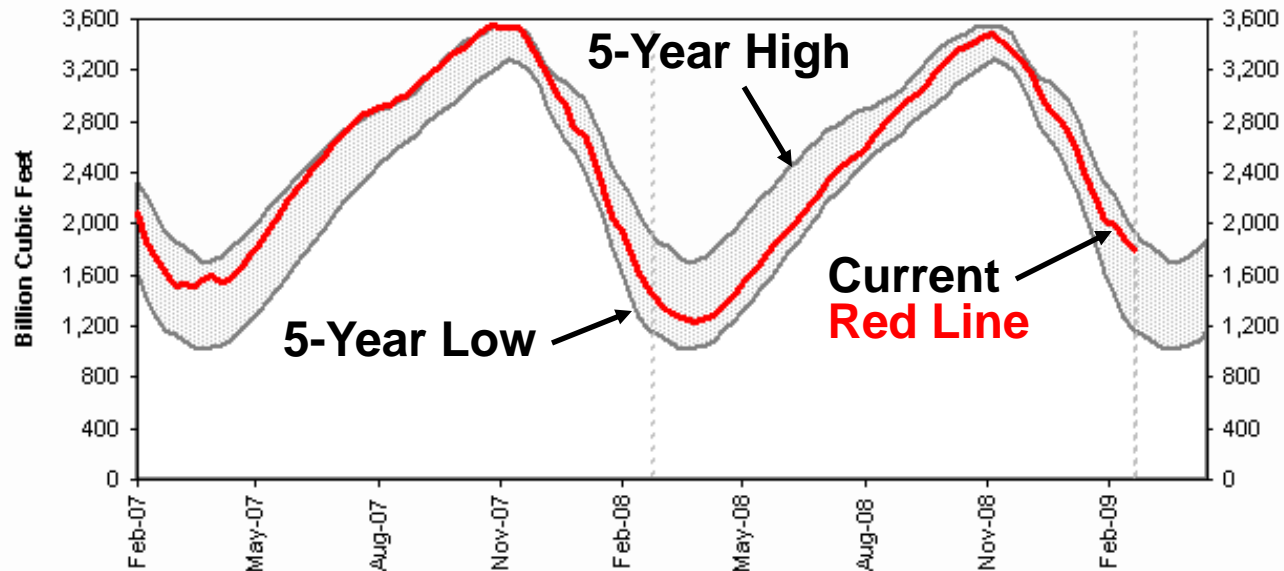


U.S. LNG Imports By Country

2000 - 2008



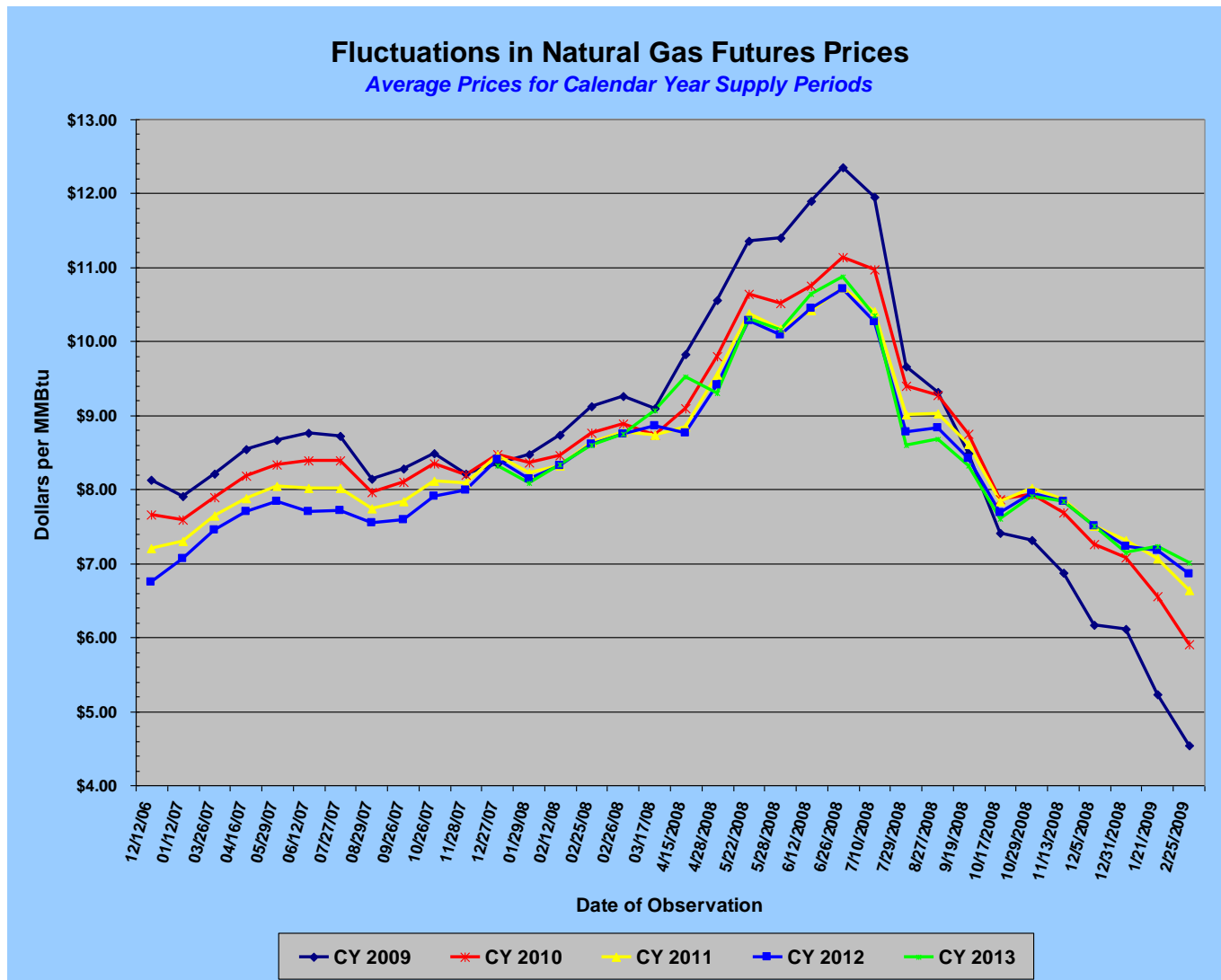
Natural Gas Storage Inventories Are Now Well Above Five-Year Average Levels



EIA: Working Gas in Underground Storage, Lower 48 States

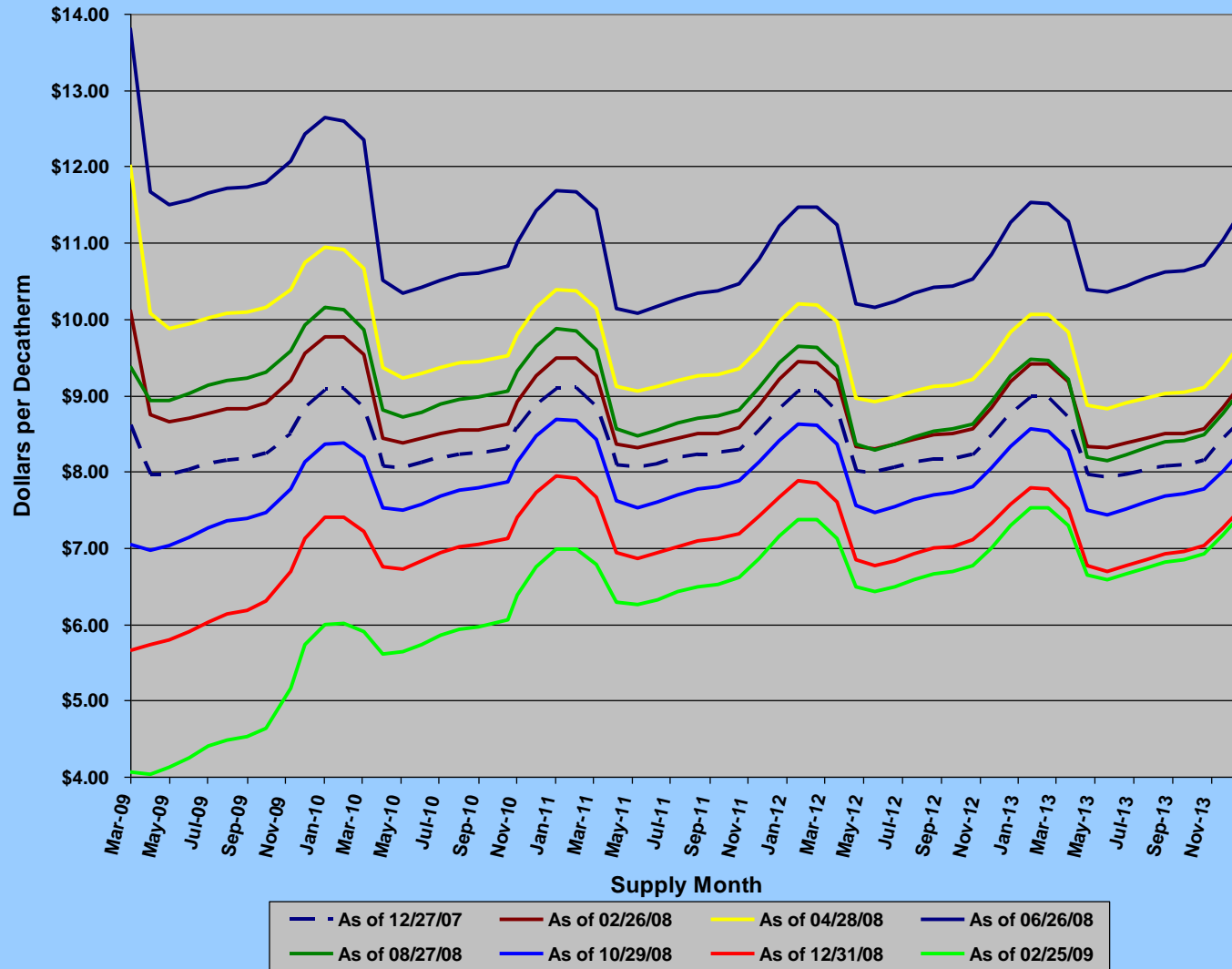
Region	Stocks in billion cubic feet (Bcf)			Historical Comparisons			
	02/27/09	02/20/09	Change	Year Ago (02/27/08)		5-Year (2004-2008) Avg	
				Stocks (Bcf)	% Change	Stocks (Bcf)	% Change
East	793	876	-83	786	0.9%	825	-3.9%
West	292	296	-4	191	52.9%	215	35.8%
Producing	708	723	-15	545	29.9%	536	32.1%
Total	1,793	1,895	-102	1,523	17.7%	1,575	13.8%

The Sharp Decline in Natural Gas Prices Continues . . .



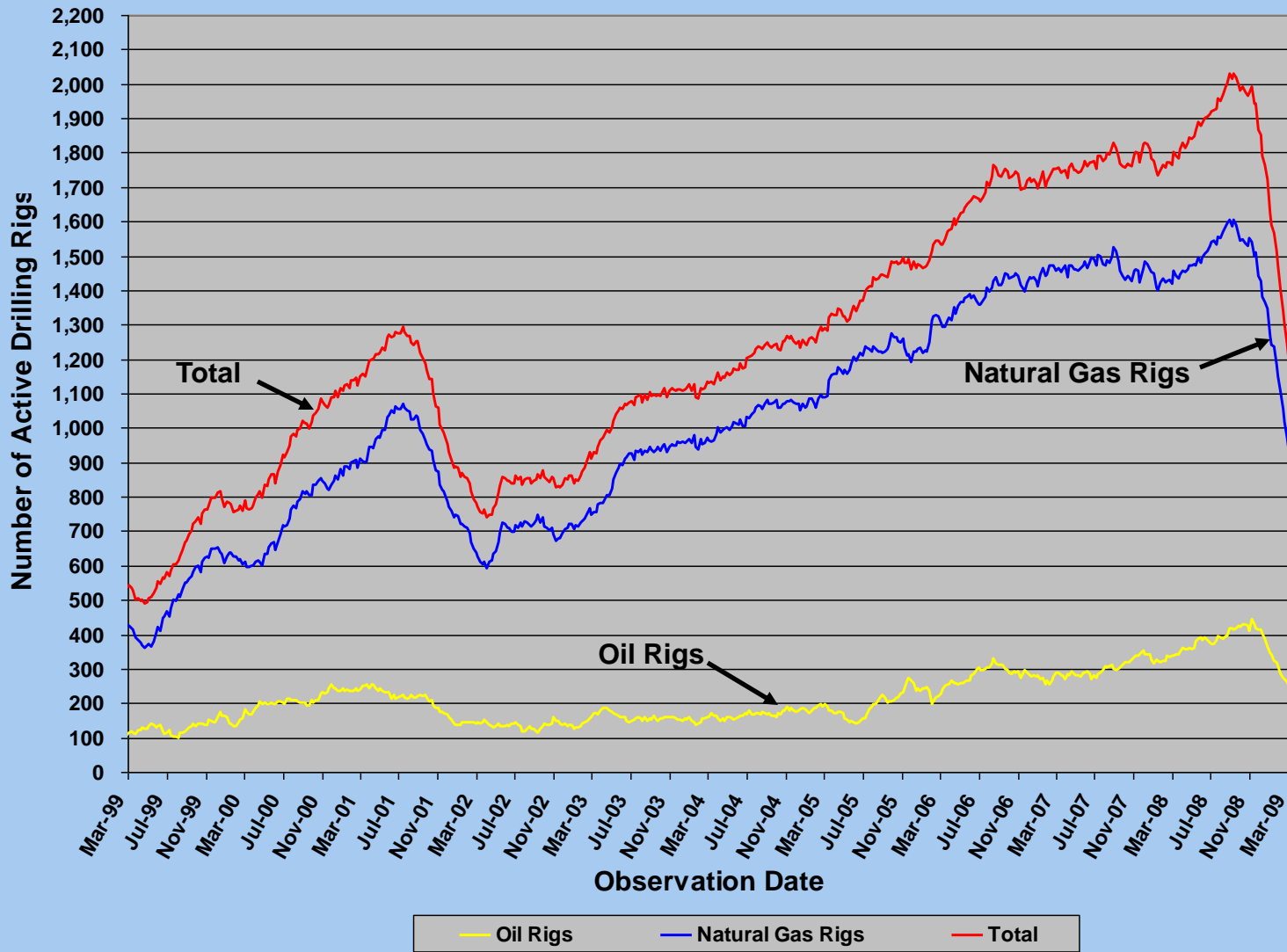
Changes in Forward Looking Natural Gas Prices

Based on Prices for NYMEX Natural Gas Commodity Futures



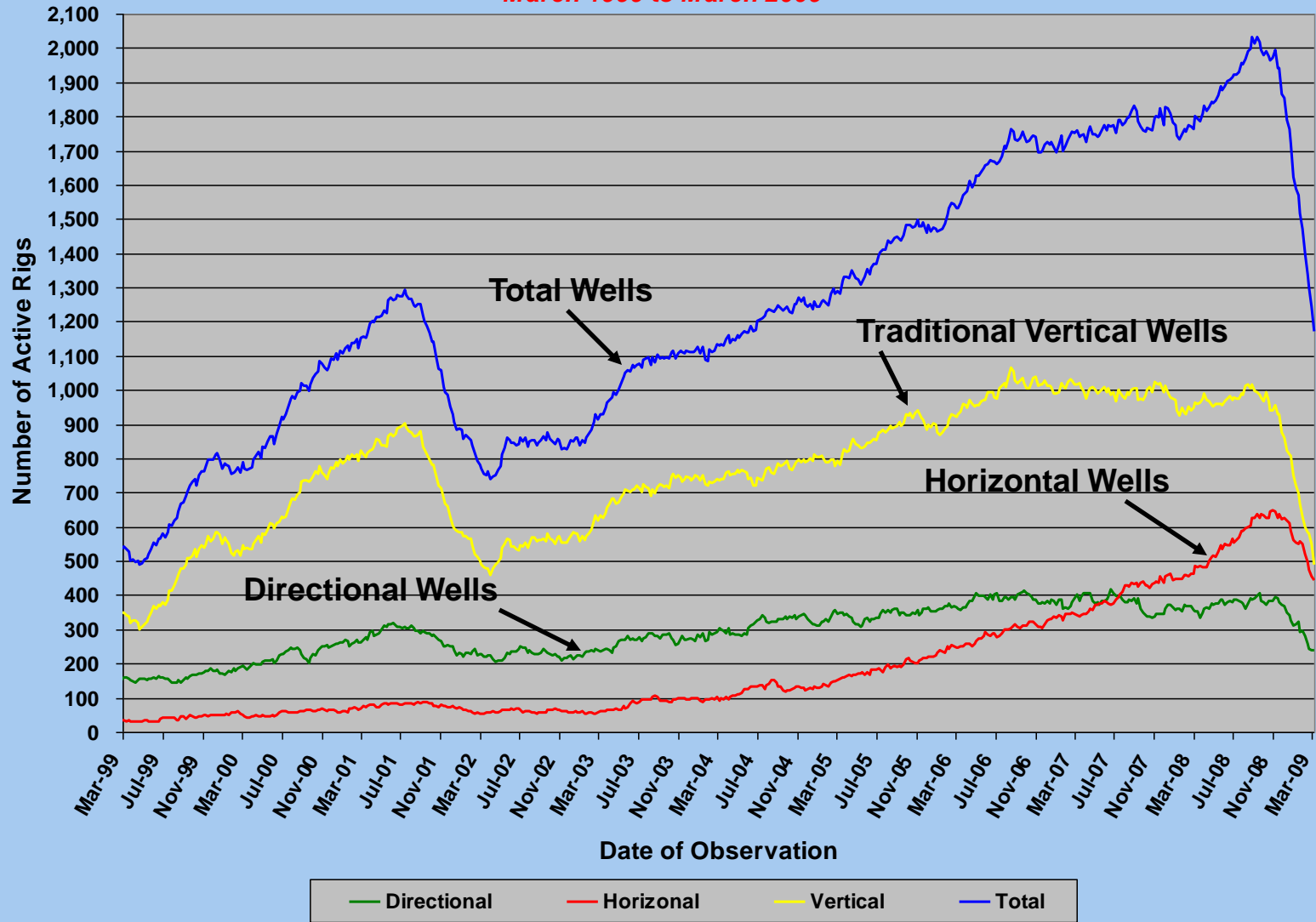
U.S. Oil and Natural Gas Drilling Activity

March 1999 to March 2009



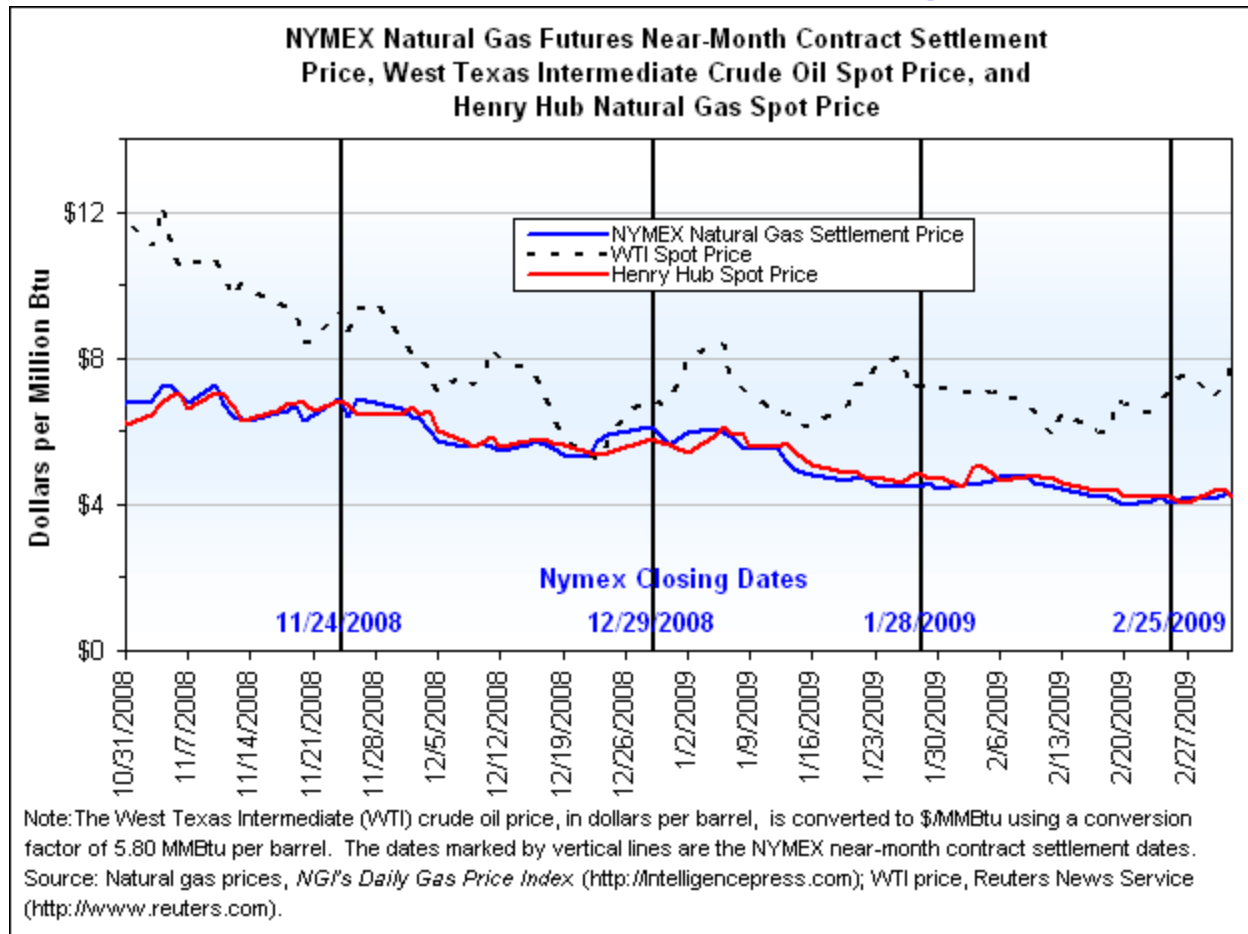
US. Active Drilling Rigs By Type

March 1999 to March 2009



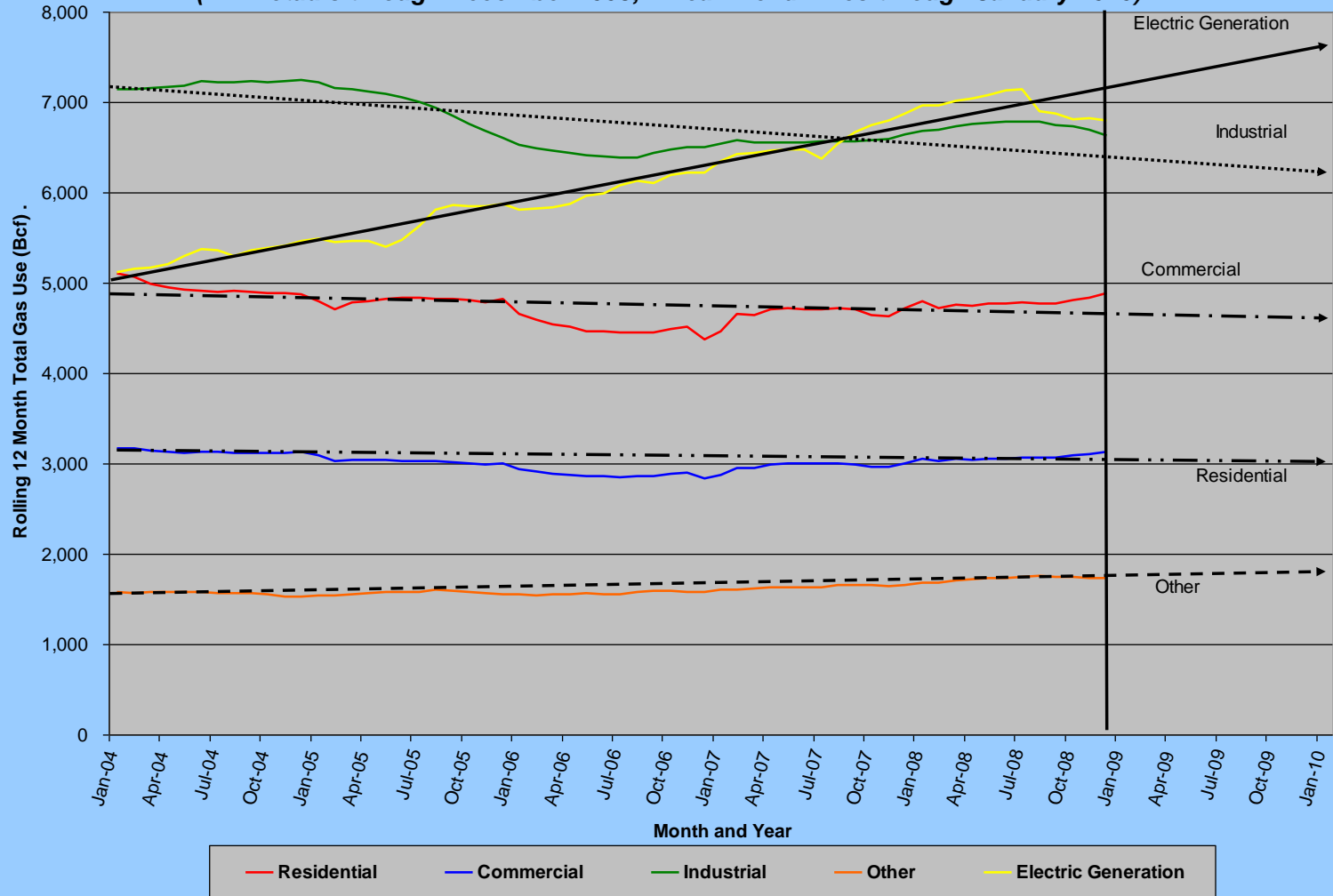
Near-Term Natural Gas Prices Continue Their Decline

While Crude Oil Prices Show Some Upward Movement

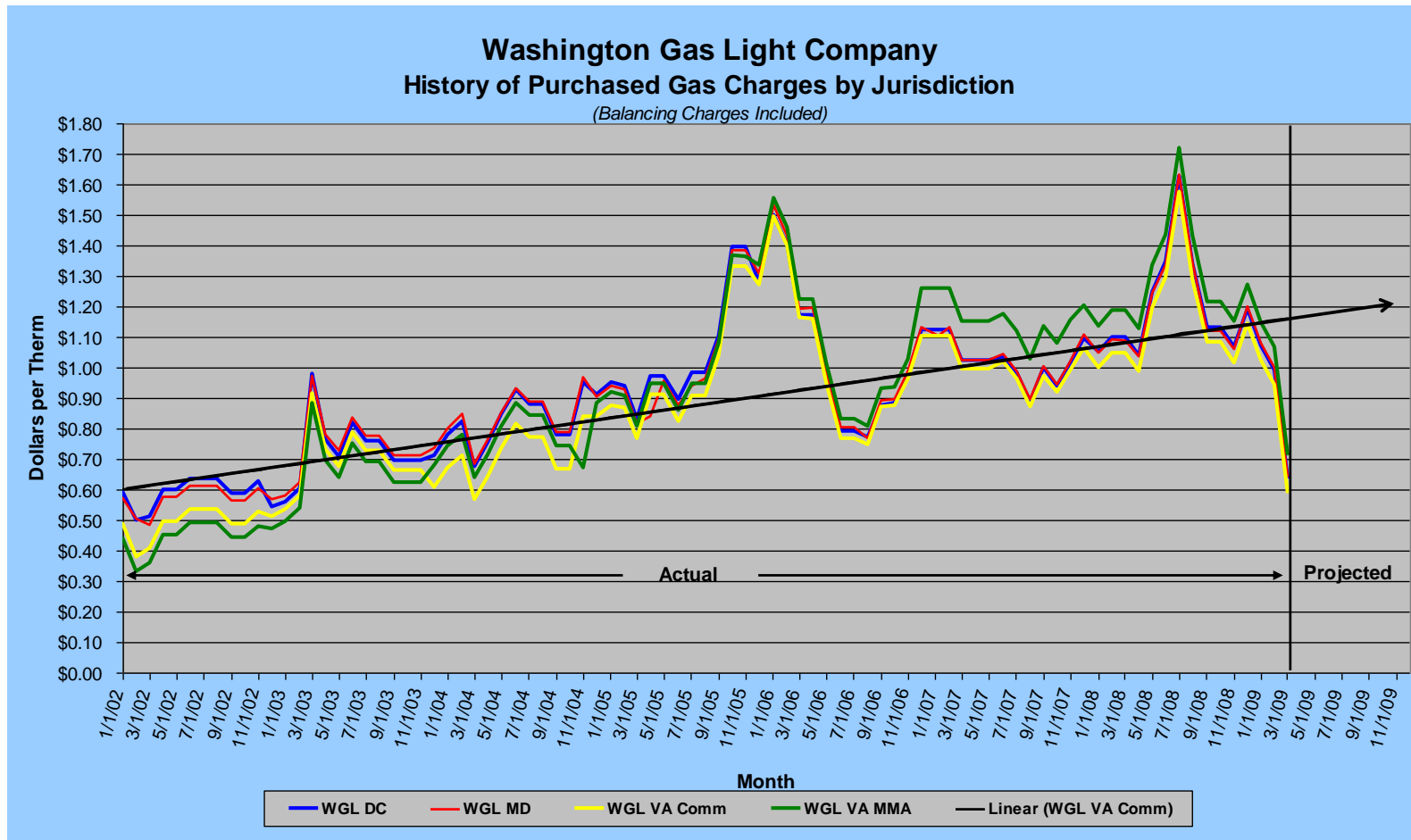


US Natural Gas Use by Sector

(EIA Actuals through December 2008; Linear Trend Lines through January 2010)



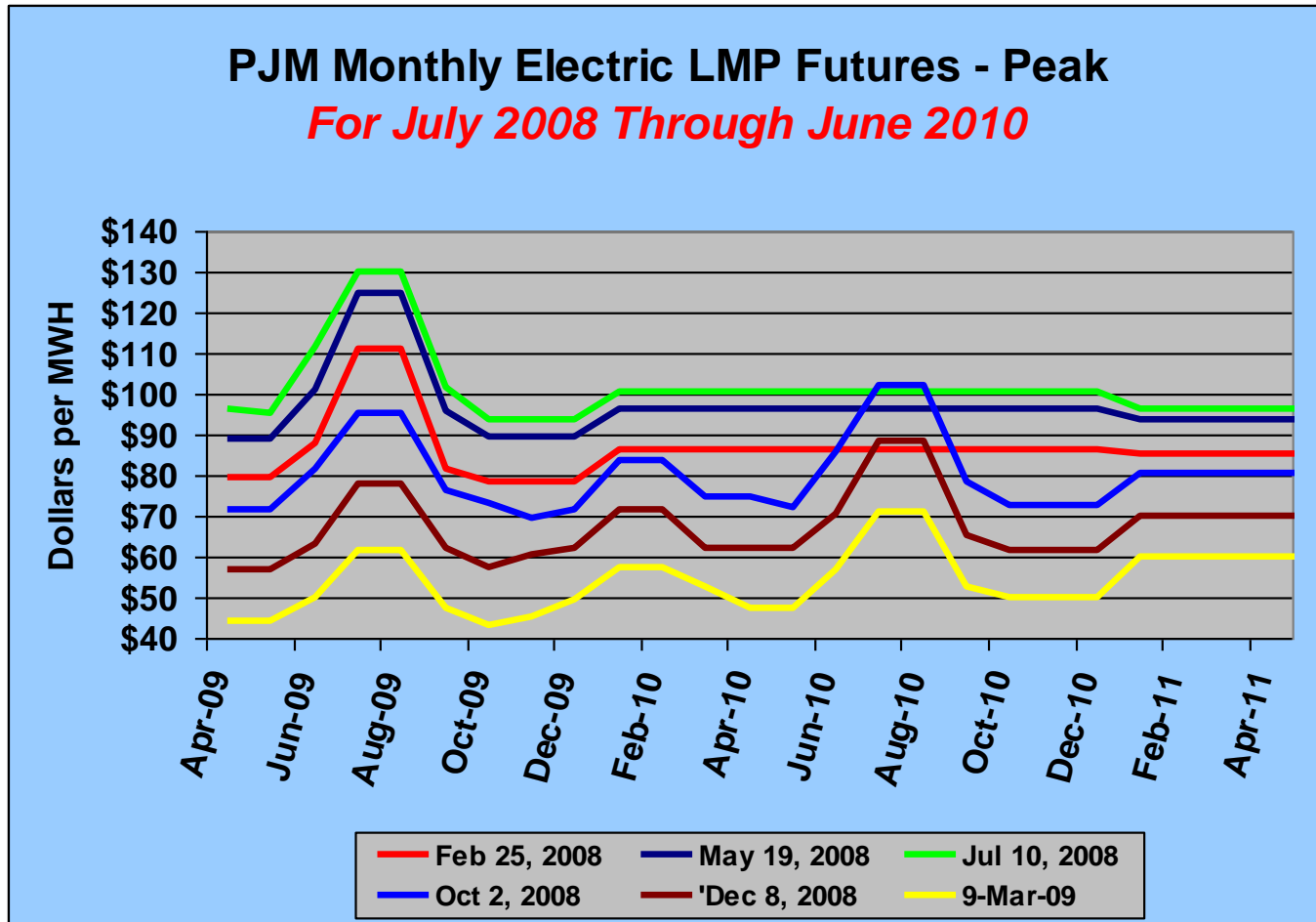
Retail Natural Gas Prices Turn Sharply Downward ... For Now



Electric Markets

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Impacts of Energy Price Fluctuations on Wholesale Electric Commodity Prices



Illustrative Forward Looking Retail Electricity Supply Prices by Cost Component

(for DC Electric Market)

	06/09 – 5/10 As of Mar 2008	06/09 – 5/11 As of Mar 2008
	Cents per kWh	
* Estimated Electric Energy Cost	5.46	5.95
* Locational Capacity Costs	1.50	1.12
* Congestion Charges	0.72	0.67
* Transmission Costs	0.33	0.35
* Ancillaries	0.18	0.21
* Marketer Costs ¹	1.16	1.28
* Distribution Losses	<u>0.45</u>	<u>0.65</u>
* Estimated Total Retail Supply Cost	9.80	10.23

¹ *Includes administrative, marketing, collateral and billing costs as well as marketer risk and profit.*

What to Look For In U.S. Energy Markets Over the Next Few Years?

- ✧ Either a Carbon Tax or a Cap and Trade Program on carbon emissions will weigh heavily on the coal industry and on coal-fired electric generation.
- ✧ Renewable energy development will not be sufficiently rapid to displace substantial coal-fired electric generation.
- ✧ Increased Natural Gas supplies will be required to displace coal-fired electric generation.
- ✧ Unexpected large demands for natural gas supplies will push up natural gas prices even if there is little or no economic recovery.

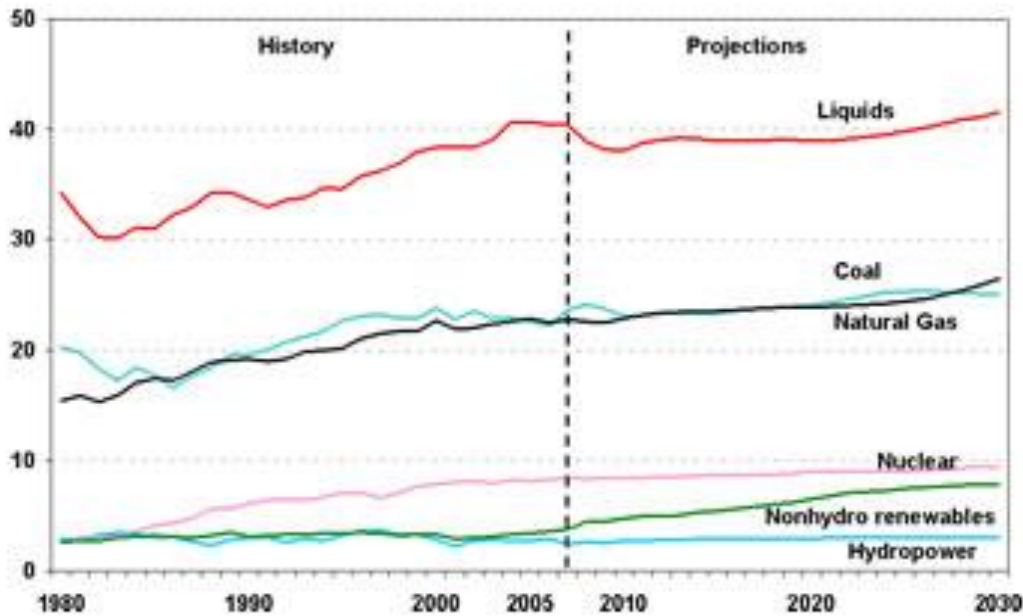
What to Look For In U.S. Energy Markets Over the Next Few Years? *(continued)*

- ✧ Re-regulated electric service will be used to obtain greater subsidies of residential electric customers by commercial energy users.
- ✧ The Nuclear industry will continue to languish unless more economic and smaller-sized generating units can be developed without sacrificing safety.
- ✧ Although approximately 40 permits for the construction of new nuclear generators are presently before the Nuclear Regulatory Commission, none have been approved to date; and few will be constructed over the next decade.
- ✧ Substantially increased imports of LNG may ultimately be a key element of U.S. efforts to provide for economic growth while meeting carbon reduction goals, but that will once again be at the expense of U.S. energy security.

Longer-Term Considerations

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EIA Long-Term Energy Use Projections



Year	Quads	10-Yr Growth
1980	78.1	
1990	84.6	8.3%
2000	98.8	16.8%
2008	100.9	6.1%
2010	100.0	1.2%
2020	105.4	5.4%
2030	113.6	7.8%

Energy Use in Quadrillion Btus Annually