



BPA financial information is provided for discussion purposes during this pre-rate case process.

Pre-Decisional

WP-07 Power Rate Case Workshop

Date of Workshop:

June 29, 2005

Topic(s):

Natural Gas Price Forecast



Natural Gas Price Forecast, Overview

- Results
 - BPA price forecast and comparison with other forecasts
- Assumptions
 - Supply and demand fundamentals for the short / medium / long-term
- Methodology
 - Henry Hub forecast with basis estimates for western hubs
- Appendix
 - Background on supply / demand fundamentals and geographic summary



Natural Gas Price Forecast, Results

	Natural Gas Price Forecast Comparison										
	Henry Hub, Nominal \$/MMBtu										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
BPA	6.66	7.06	6.76	5.65	5.24	5.20	5.51	5.77	6.09	6.56	6.72
NYMEX, 6/2/05	6.95	7.49	7.13	6.77	6.46	6.23	-	-	-	-	-
NYMEX, 6/27/05	7.11	8.06	7.66	7.21	6.82	6.48	-	-	-	-	-
External Min	6.41	5.85	4.99	4.65	4.64	4.27	4.74	4.98	5.26	5.63	5.97
External Avg	6.73	6.75	6.22	5.65	5.54	5.62	5.83	6.02	6.30	6.49	6.54
External Max	6.95	7.76	7.37	6.77	6.46	7.10	7.10	7.10	7.20	7.20	7.20

Notes:

2005 represent actuals from Jan-May and forecasts from Jun-Dec

NYMEX of June 2, 2005 was lastest available at time of initial proposal forecast

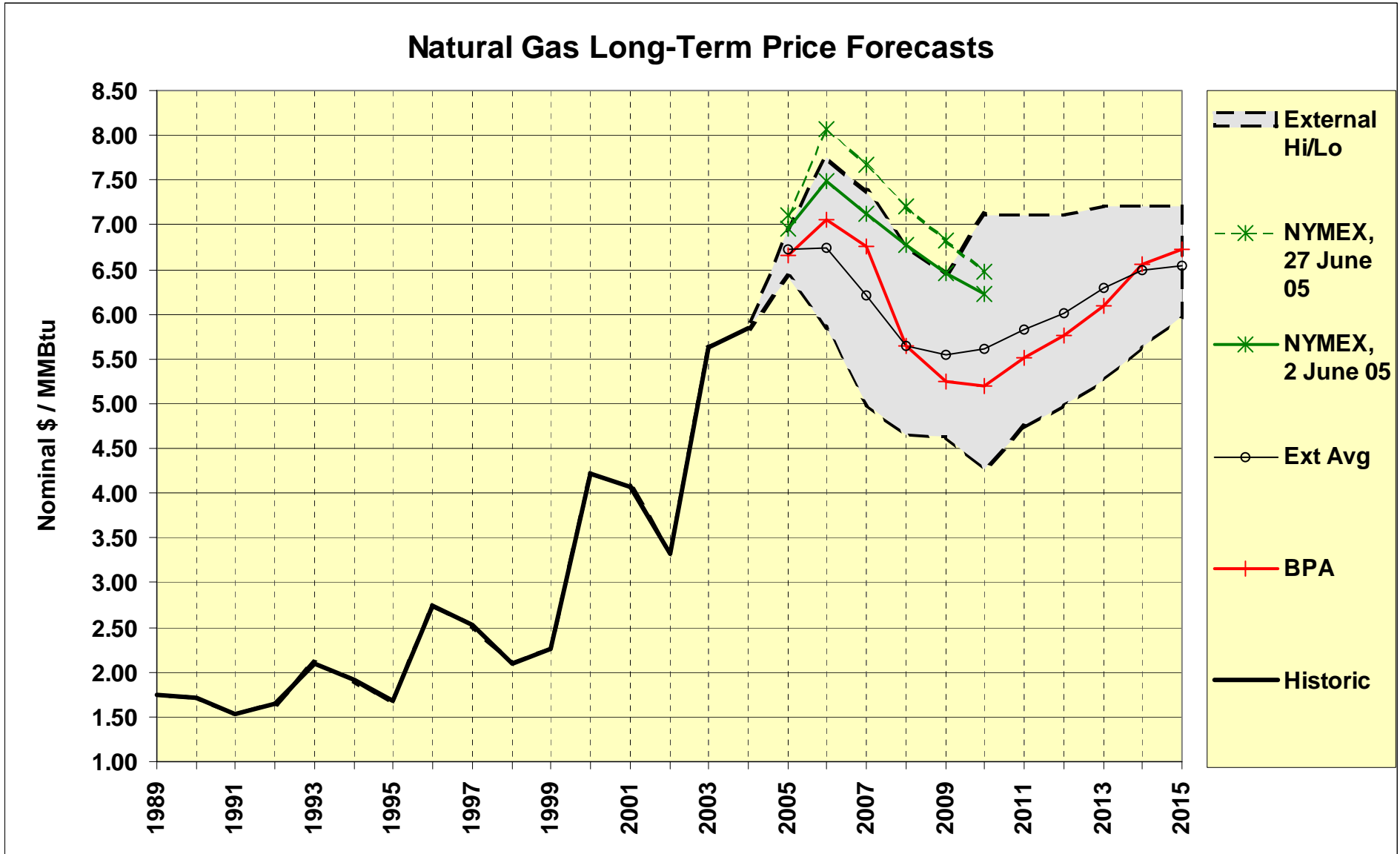
NYMEX 2010 includes extrapolation for Dec

Externals include NYMEX, EIA, JS Herold, CERA, PIRA, WoodMackenzie



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Natural Gas Price Forecast, Results





Natural Gas Price Forecast, Assumptions

Short-Term: 2005-2006

- Supply from mature basins will be strained to maintain production levels; North American production will continue at high capacity and high cost levels.
- Demand has proven resilient to high prices. Absent a strong and persistent economic downturn, demand will continue to exert price pressure.

Mid-Term: 2007-2010

- Oil prices could be a key driver on downward pressure if the risk premium abates.
- LNG supplies will mitigate prices more substantially after 2007. However, upstream constraints will limit the impact.
- Conventional supplies will be increasingly difficult to maintain, but some unconventional supplies (CBM, shale gas) will pick up some of the slack.
- Easing of restrictions on Rocky Mountain and Outer Continental Shelf areas, along with streamlined permitting will contribute to North American supply.

Long-Term: post 2010

- Mackenzie Delta supplies becomes available around 2010.
- Alaskan gas becomes available around 2015.
- Natural gas remains an important fuel source for end-use applications. Still a significant part of portfolio for new electric generation.
- Prices increase at about the rate of inflation.



Natural Gas Price Forecast, Methodology

Henry Hub forecast

Basis forecast for western hubs: Sumas, Rockies (Opal) and San Juan

Basis declines from current levels to \$0.70 in 2006, and \$0.60 after 2006

AURORA area forecasts derived from Western Hubs

OR/WA = Sumas + \$0.23

Northern California = Sumas + \$0.31

Southern California = San Juan + \$0.47

Western Canada = Sumas + \$0.20

Idaho = Opal + \$0.35

Montana = Opal + \$0.33

Wyoming = Opal + \$0.40

Utah = Opal + \$0.35

Colorado = San Juan + \$0.36

New Mexico = San Juan + \$0.33

Arizona = San Juan + \$0.31

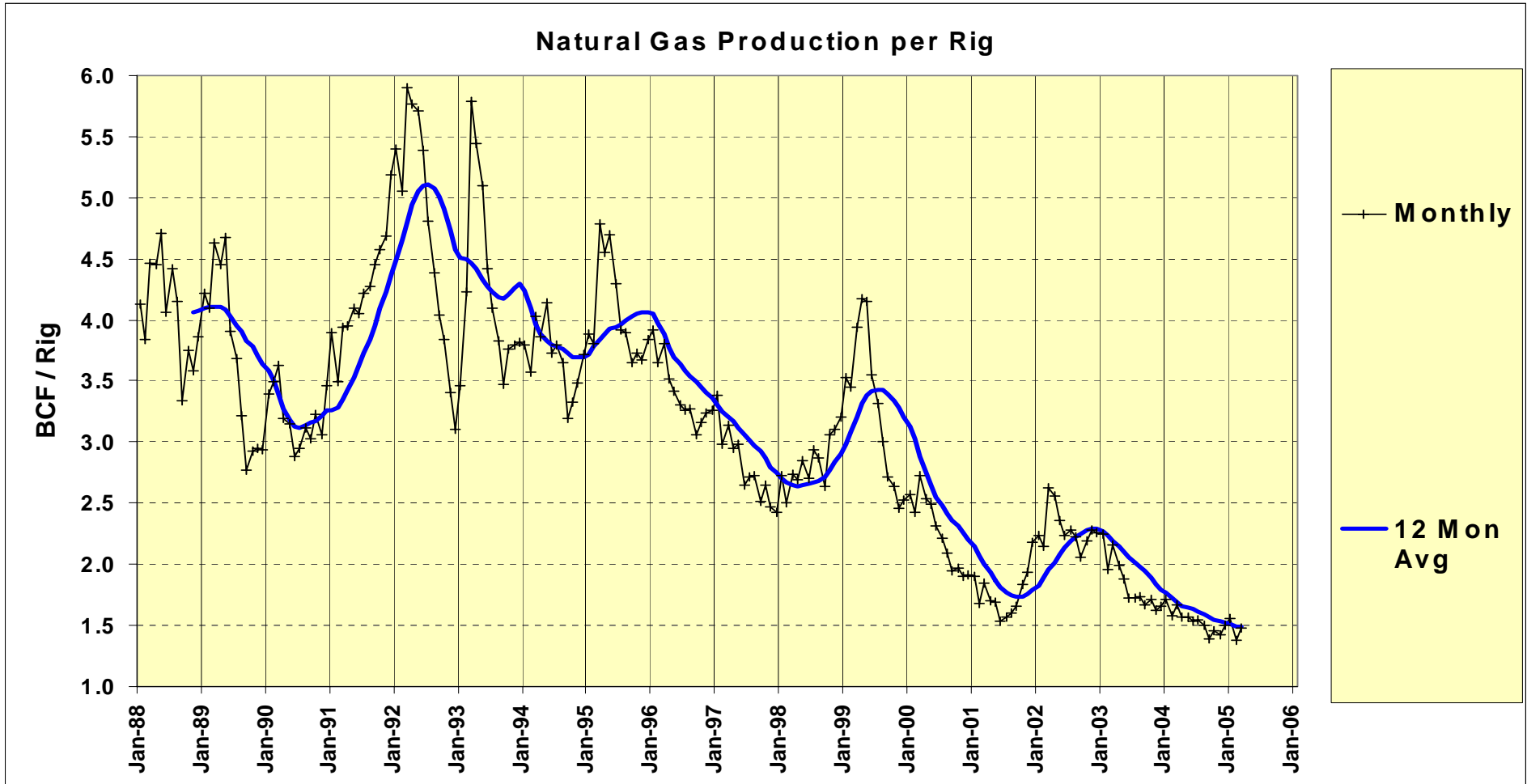
Nevada = San Juan + \$0.46

All values on this page are Real 2000 Dollars



Natural Gas Price Forecast, Appendix

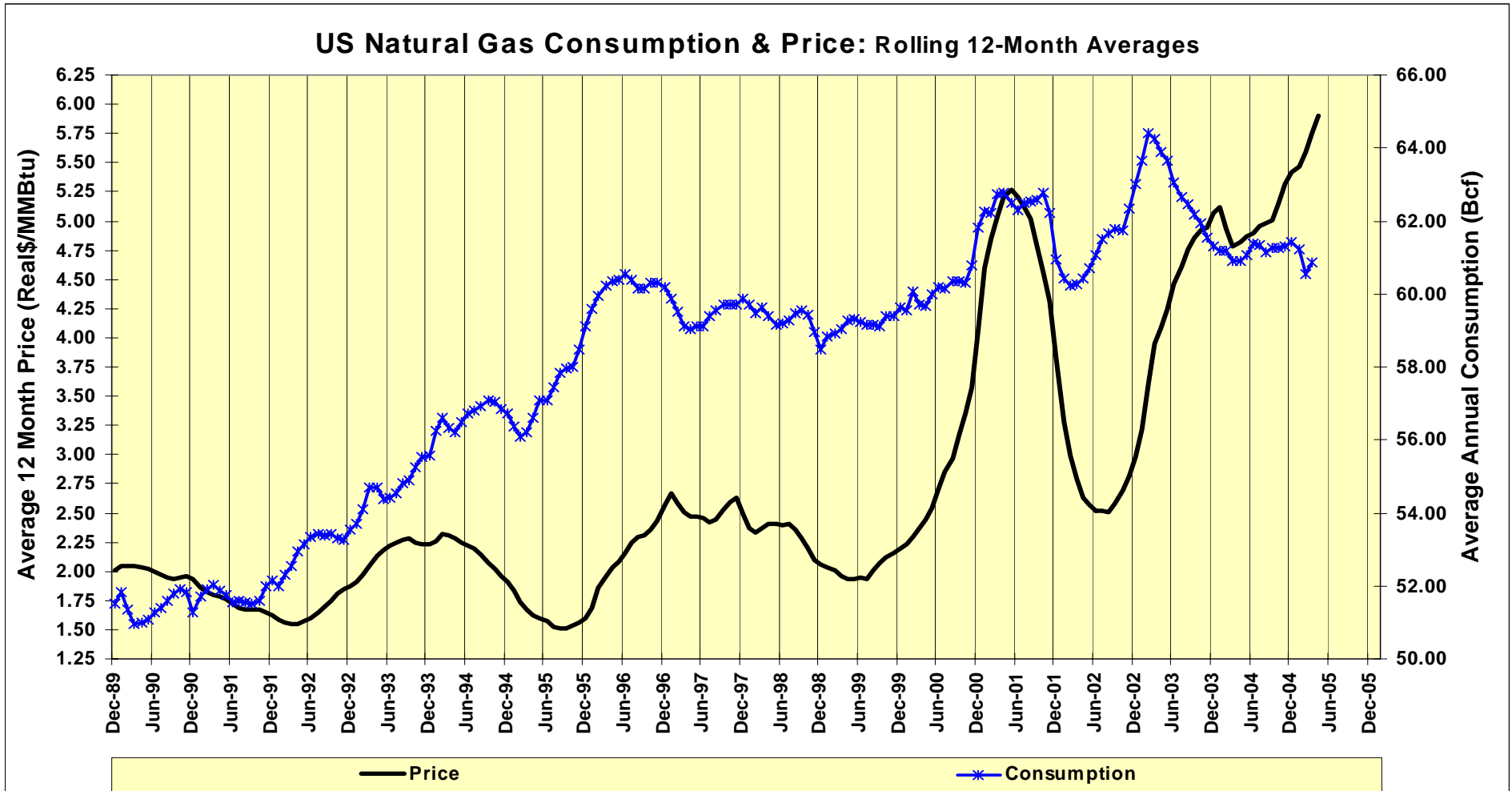
Natural Gas Productivity (production per rig) has been declining since 1992, indicating maturing basins and rising marginal costs





Natural Gas Price Forecast, Appendix

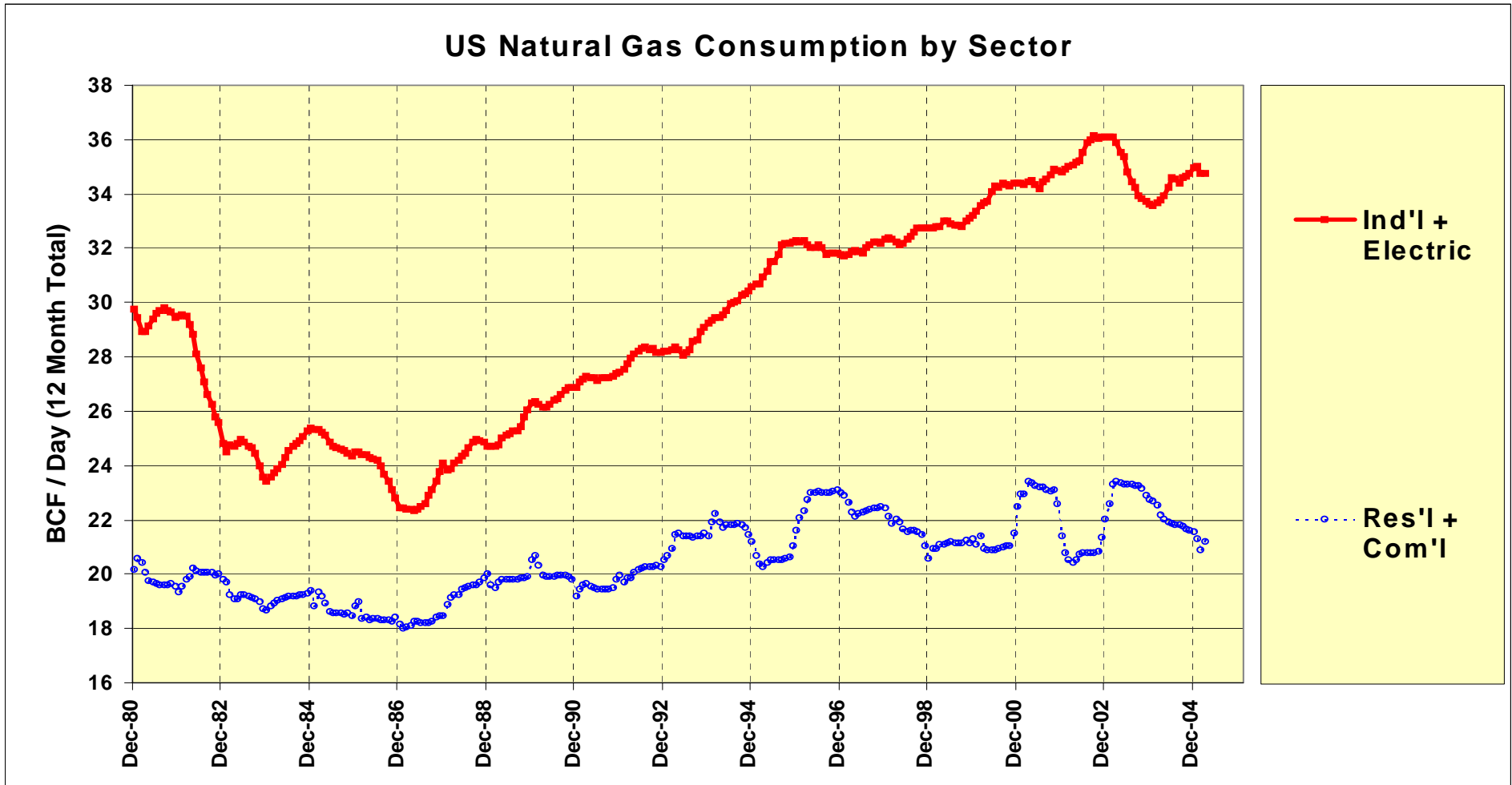
Demand has stabilized (at least temporarily) in response to the price escalation beginning in 2002





Natural Gas Price Forecast, Appendix

The industrial and electric generation sectors are the most price responsive and these sectors have increased consumption recently





Natural Gas Price Forecast, Appendix

The short-term forecast is slightly lower than NYMEX and therefore did not include all of the most current speculative activity

Price Trend for December 2005 Contract





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Natural Gas Price Forecast, Appendix

