

Natural Gas Outlook

Presented to:

23rd North American Conference

**International Association for
Energy Economics**

October 20, 2003

Guy Caruso, Administrator

Energy Information Administration (EIA)

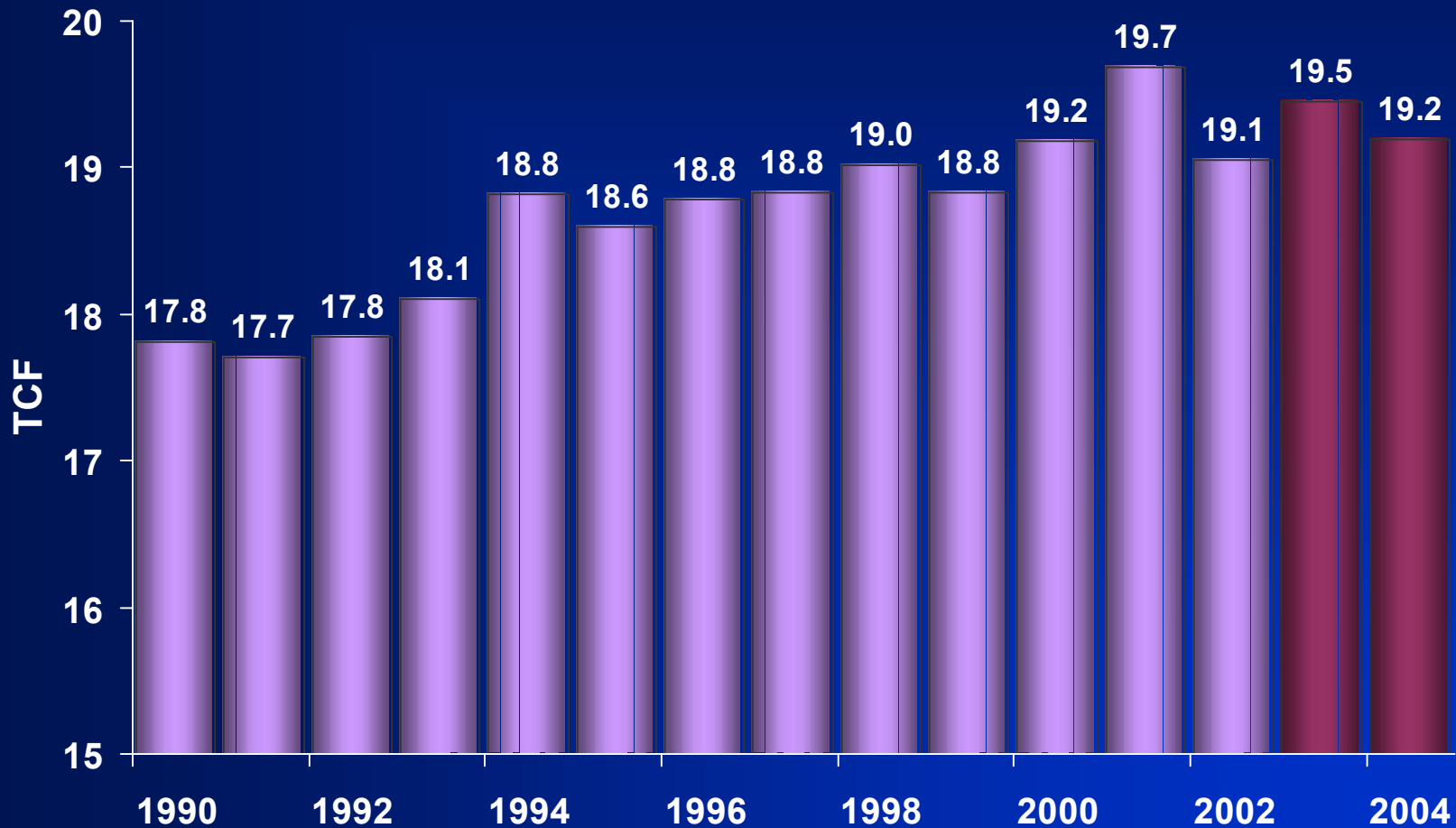
Presentation Coverage

- **Short-term Outlook**
 - **Supply**
 - **Consumption**
 - **Prices**

Short-Term Outlook for Natural Gas

- **SUPPLY** : Cautious Optimism because of the following expectations
 - Production increases in '03 (result of improved drilling activity)
 - Net imports (including LNG) increase in 2004
 - Storage adequate at start winter 2003 (3 Tcf)
- **CONSUMPTION** : Little change in totals for 2003, 2004
- **WELLHEAD PRICE**: \$4.88 per Mcf in 2003, \$3.97 in 2004
- **CONSUMER PRICES**: higher this winter v. last;
expect relief starting in 2Q 2004
- **CAVEAT**: Extremes in market or weather conditions could change this outlook.

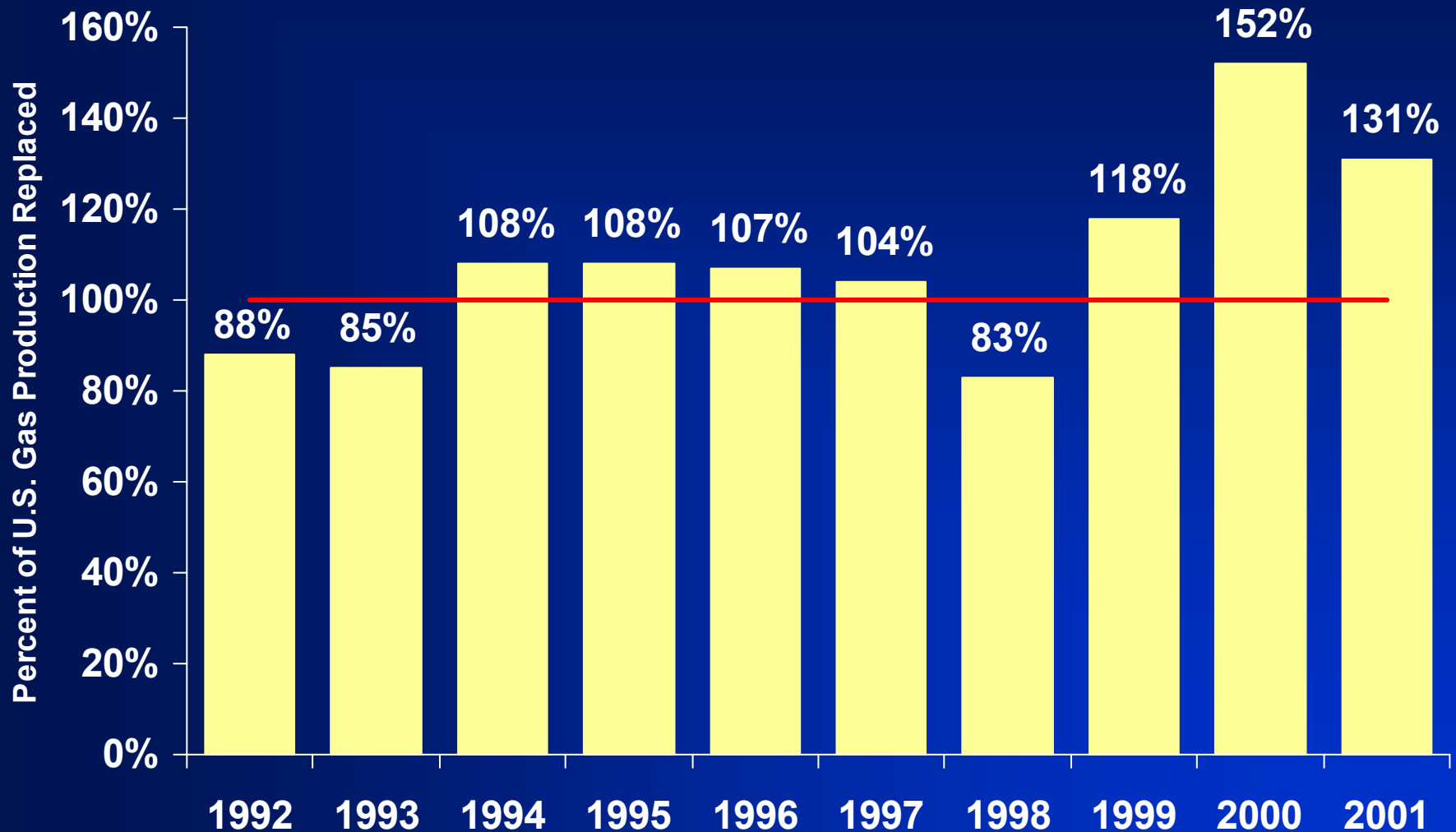
U.S. Gas Production Is Expected to Increase in 2003 and Taper in 2004



Sources: EIA, *Short-Term Energy Outlook*, October 2003



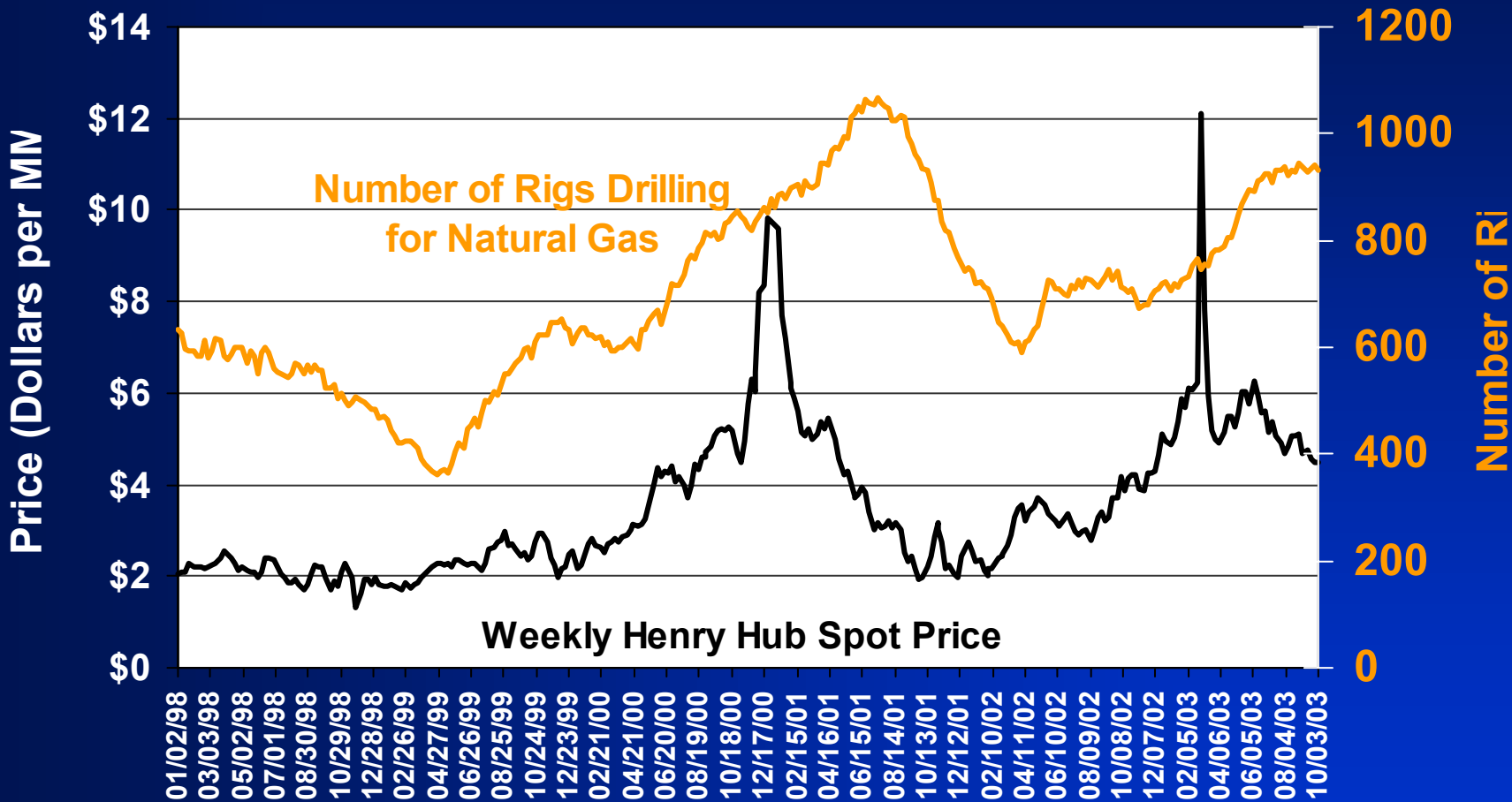
Reserve Additions Outpaced U.S. Dry Natural Gas Production for 7 of Last 8 Years



Source: Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 2001 Annual Report*



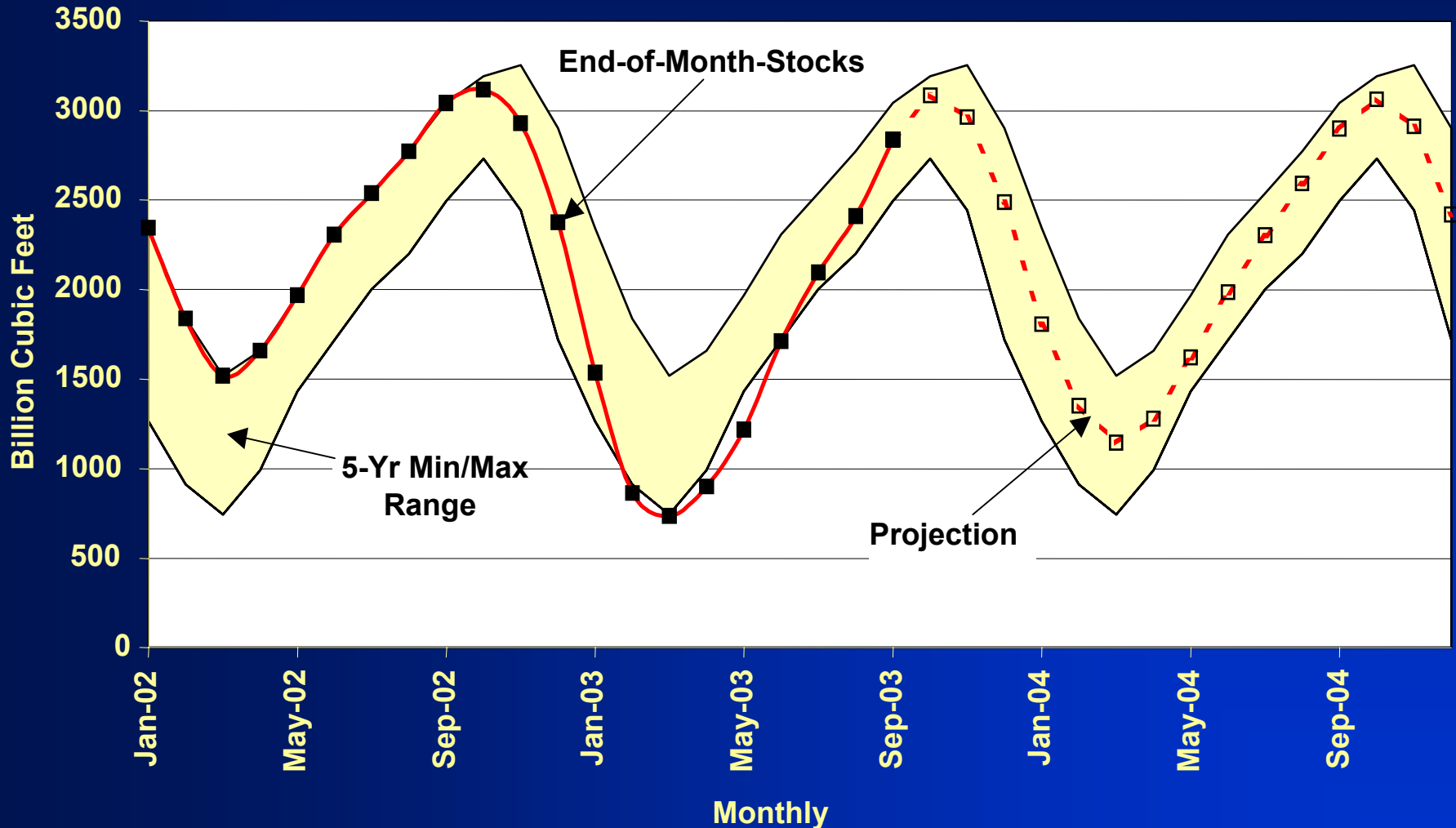
Gas Rigs Tend To Follow Spot Prices With A Lag



Source: Natural Gas Intelligence Weekly Gas Price Index, Baker-Hughes Weekly US Rig Report.



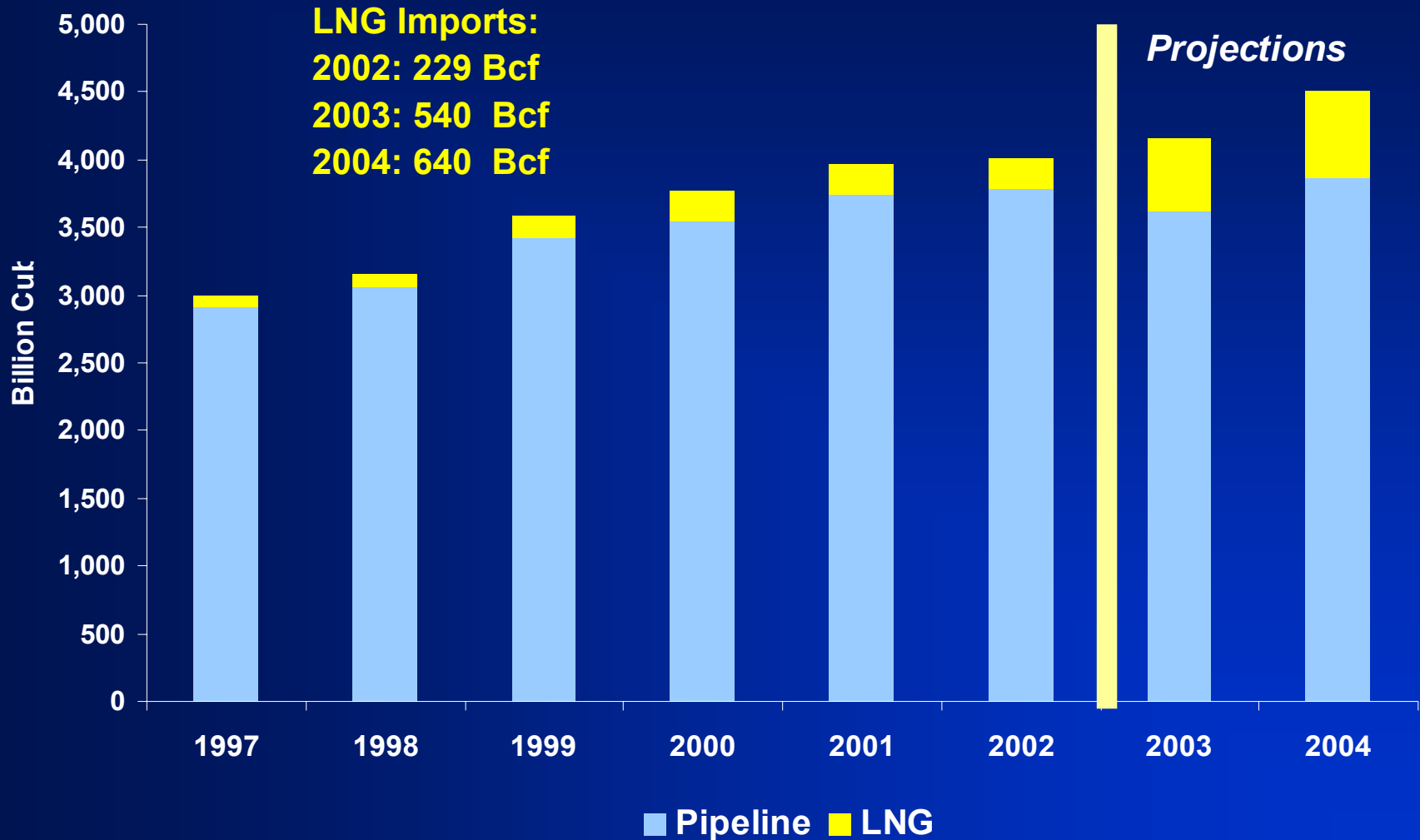
Working Gas in Underground Storage Compared with 5-Year Range



Sources: EIA, *Short-Term Energy Outlook*, October 2003



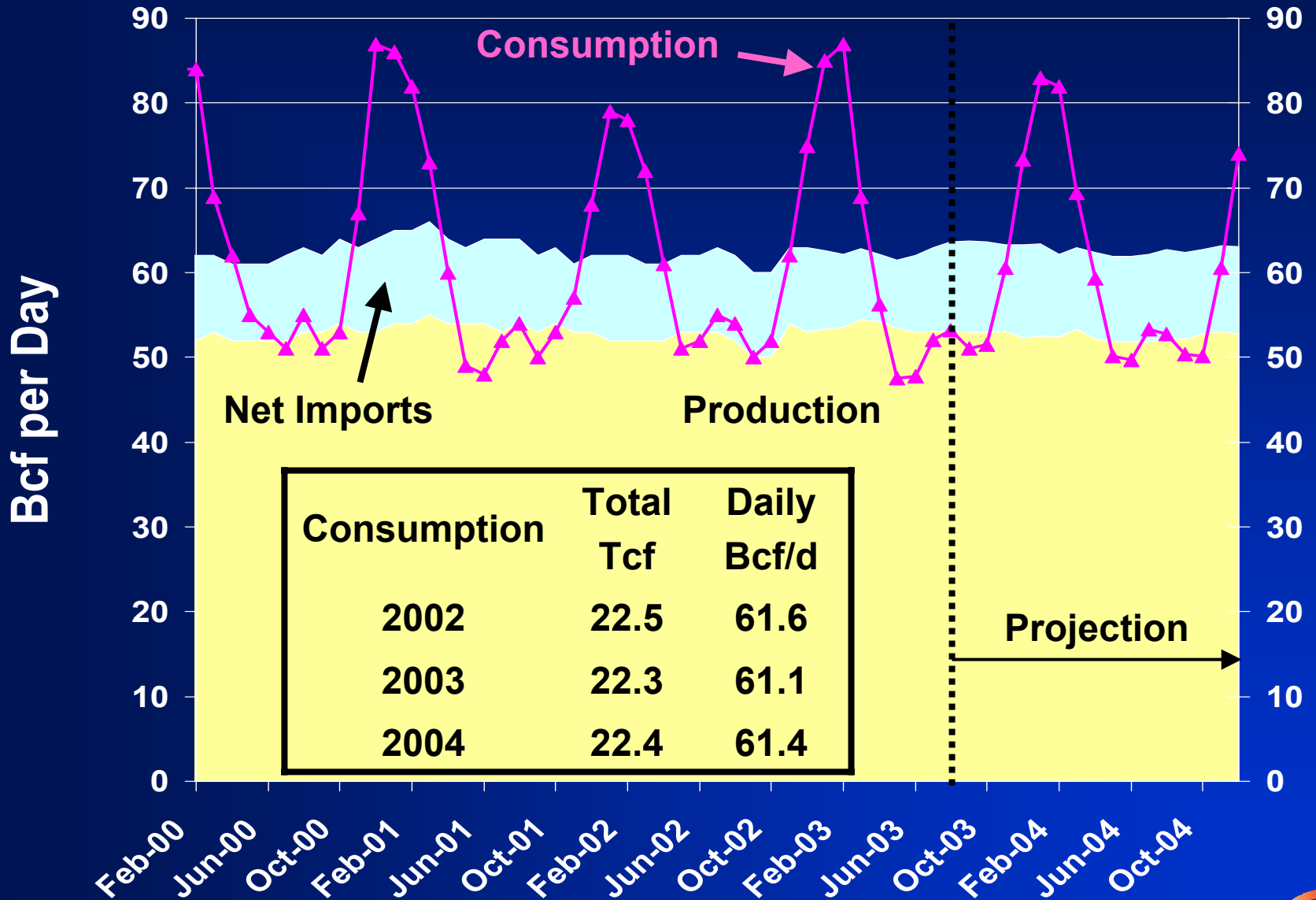
Natural Gas Import Sources



Sources: History: EIA; Projections: *Short-Term Energy Outlook* October, 2003.



Monthly Consumption, Production and Net Imports

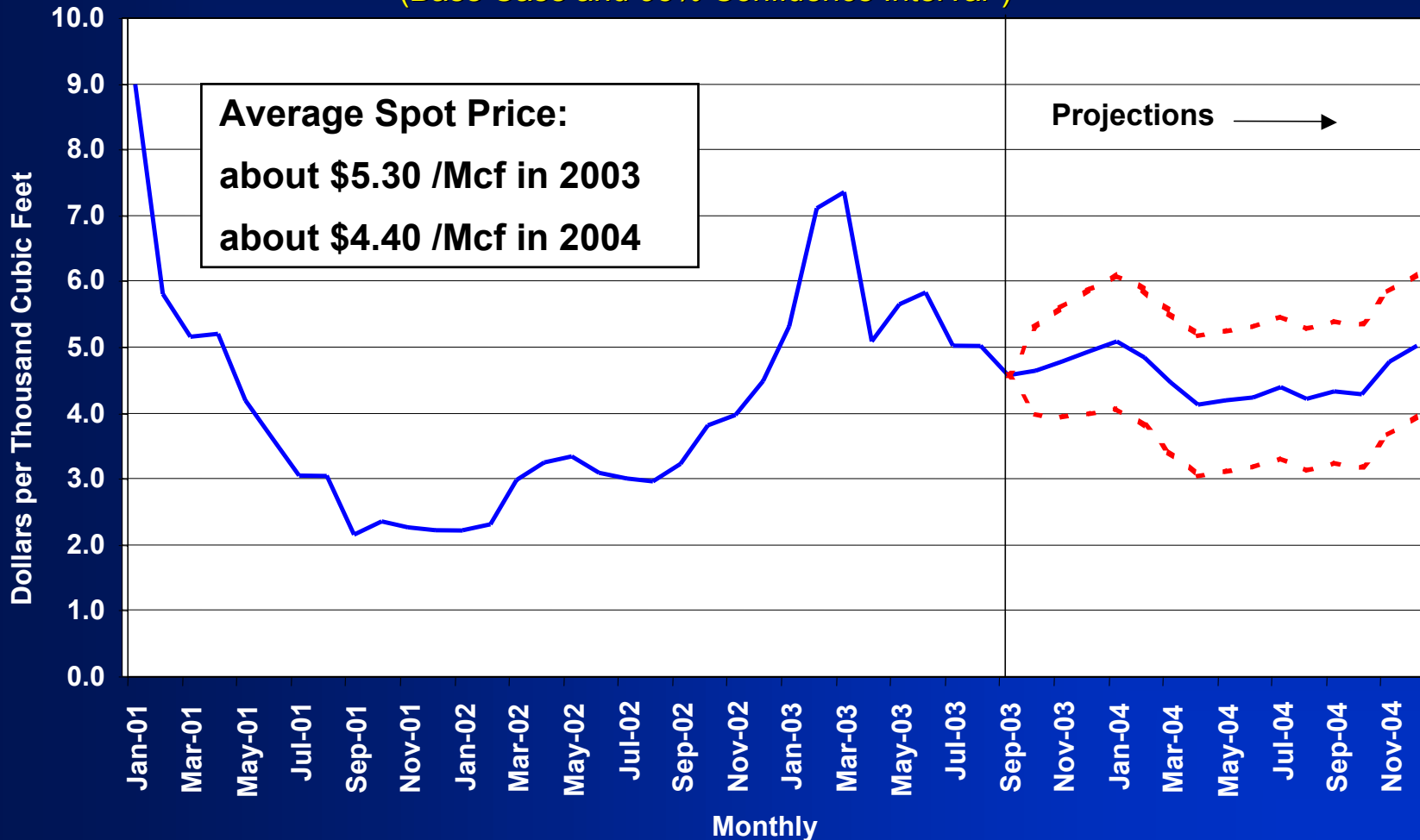


Source: EIA, *Short-Term Energy Outlook*, October 2003



Natural Gas Spot Prices Are Expected to Average \$4.50-\$5.00 This Winter

(Base Case and 95% Confidence Interval*)

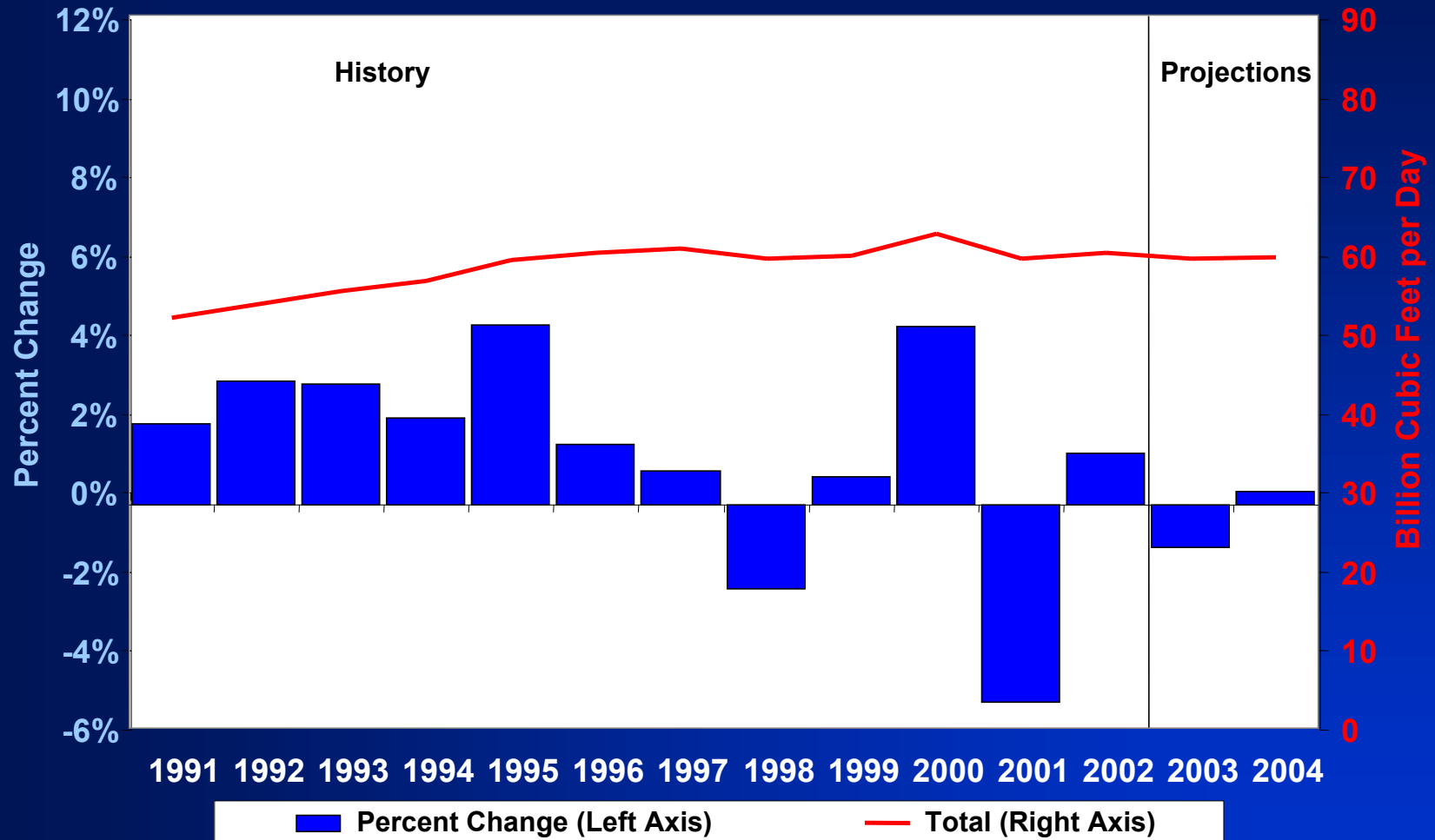


*The confidence intervals show +/- 2 standard errors based on the properties of the model. The ranges do not include the effects of major supply disruptions.

Sources: History: EIA; Projections: Short-Term Energy Outlook, October 2003.



Total Natural Gas Demand Is Expected to Remain Flat For the Next Two Years



Sources: History: EIA; Projections: *Short-Term Energy Outlook*, October 2003.



Households Are Expected to Pay More For Gas Service This Winter

Winter	1999-00	2000-01	2001-02	2002-03	2003-04
Midwest	Actual	Actual	Actual	Actual	Forecast
Consumption (Mcf)	81.7	99.1	81.3	95.2	91.8
Avg. Price (\$/Mcf)	6.69	9.53	7.38	8.39	9.52
Expenditures (\$)	546	943	600	799	841

Notes: Consumption based on typical per household use for the Midwest, and New England & New York.
Sources: History: EIA; Projections: *Short-Term Energy Outlook* October, 2003.



Summary

- Wellhead prices remain high and vulnerable to spikes resulting from developments like severe weather or disruptions in supplies.
- Storage is expected to be near the 5-year average level by Nov 1.
- LNG holds significant potential as a supply source.
- Consumers will pay more for gas this winter v. last. Rate reductions expected in 2004.
- A substantial boost in supplies from production or imports will take time and may require additional infrastructure.

www.eia.doe.gov

