



Short-Term Energy Outlook

Winter 2003-2004 Fuels Outlook

Presented by

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Household Winter Heating Fuel Summary

Illustrative Consumer Prices and Expenditures for Heating Fuels During the Winter

	2000-2001 Actual	2001-2002 Actual	2002-2003 Actual	2003-2004 Base Forecast
Natural Gas (Midwest)				
Consumption (mcf)	99.1	81.3	95.2	91.8
Avg. Price (\$/mcf)	9.52	7.38	8.39	9.17
Expenditures (\$)	943	600	799	841
Heating Oil (Northeast)				
Consumption (gals)	731	589	757	696
Avg. Price (\$/gal)	1.37	1.10	1.33	1.33
Expenditures (\$)	999	648	1010	927
Propane (Midwest)				
Consumption (gals)	979	803	941	907
Avg. Price (\$/gal)	1.38	1.11	1.20	1.21
Expenditures (\$)	1348	888	1125	1094

Notes: Consumption based on typical per household use for regions noted.

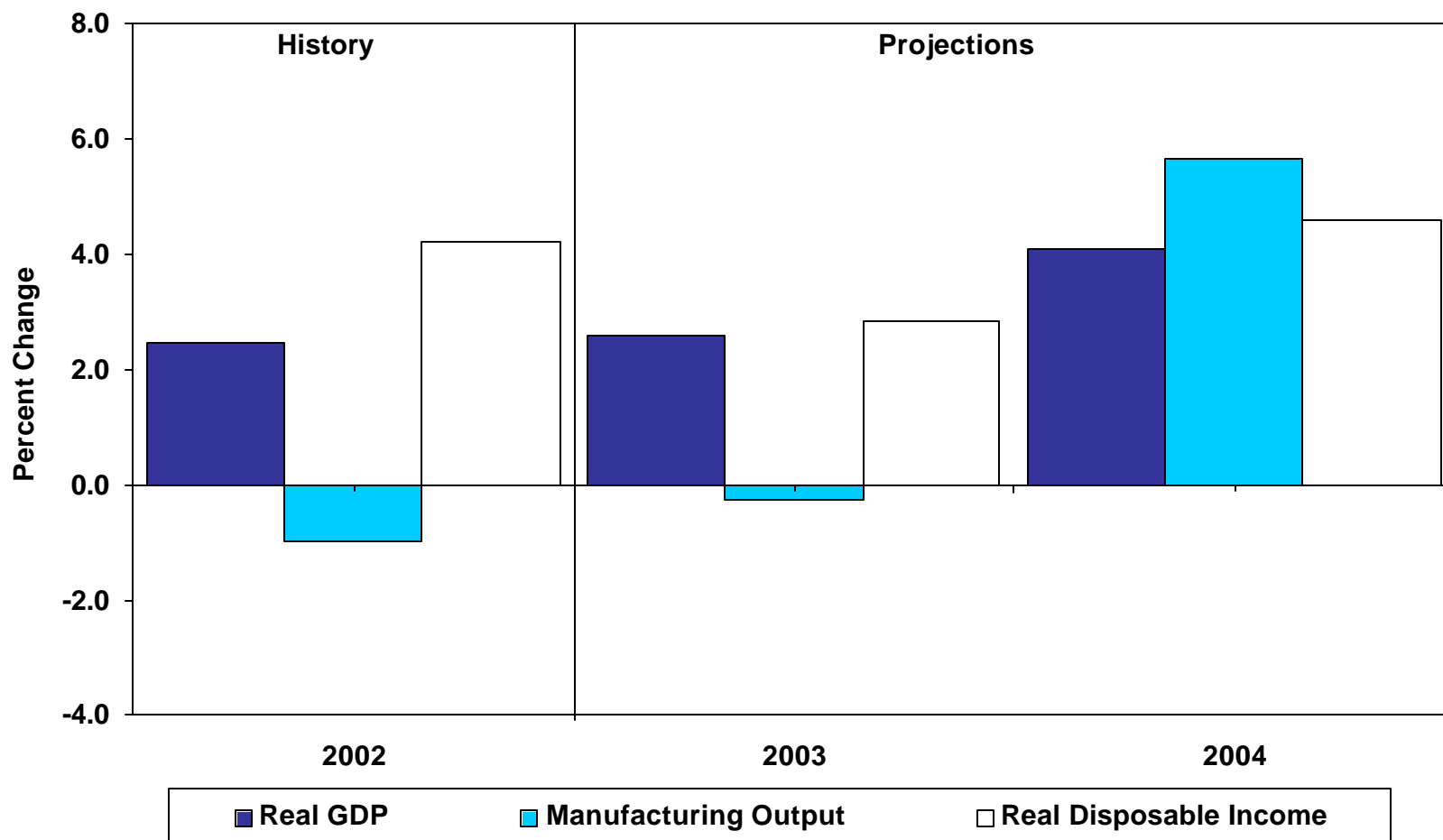
Prices shown are national average delivered-to-household prices.

Base case demand lower; expenditure changes mixed.

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



Economic Growth Assumptions for the Forecast

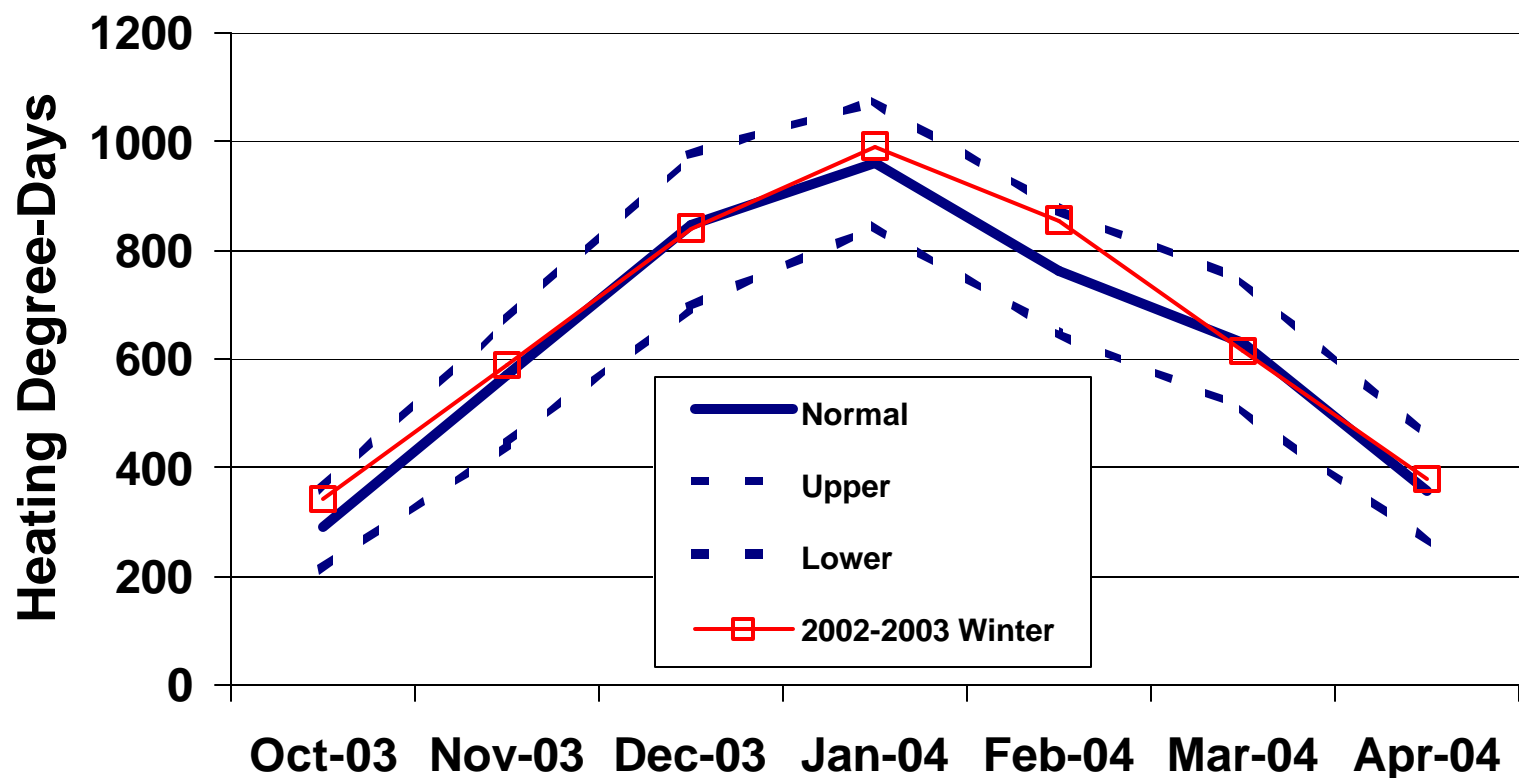


Solid economic recovery projected for 2004

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



Heating Demand Indicators: Probability Ranges for Degree-Days* This Winter



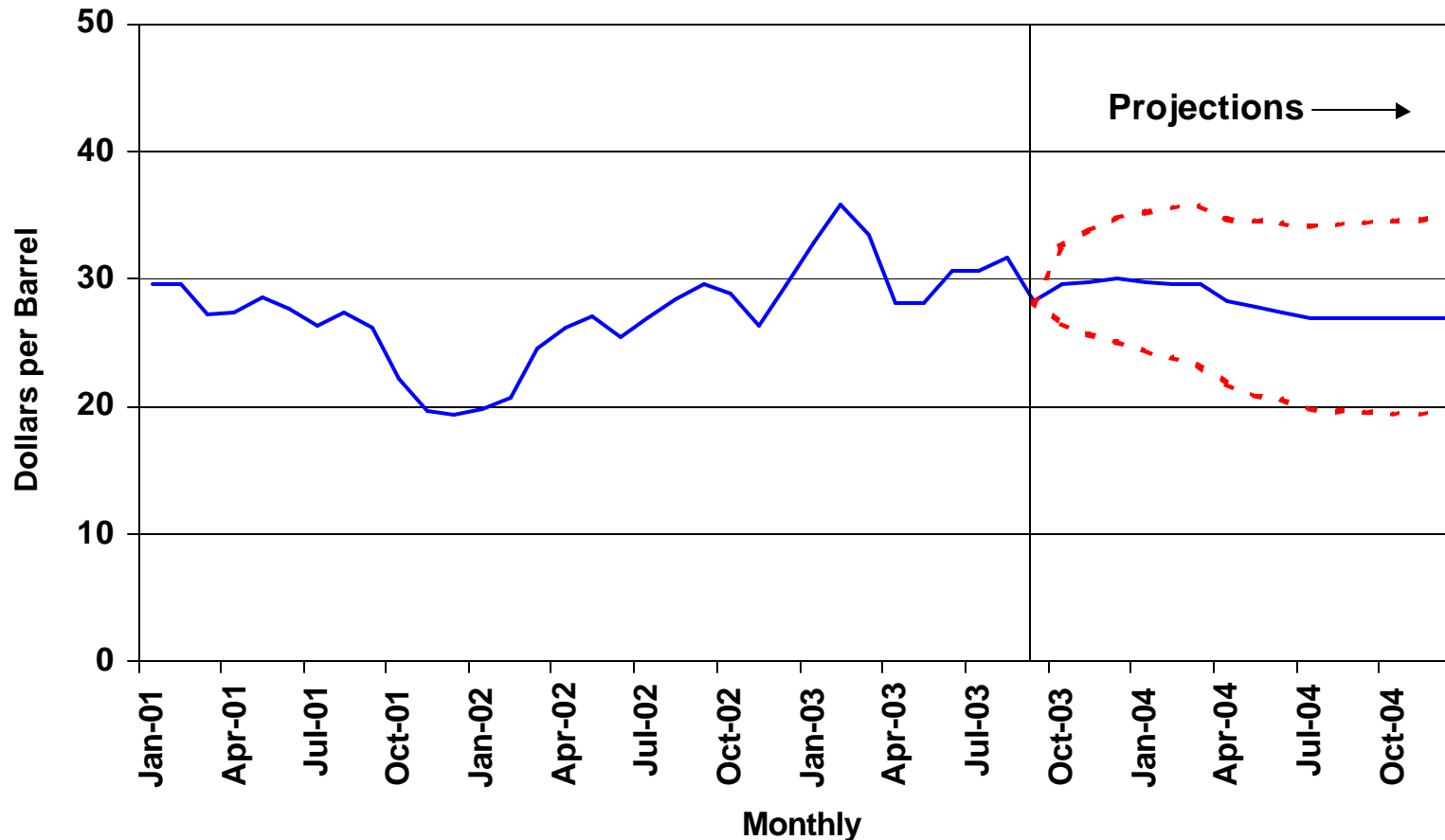
Winter weather was colder than normal last year.

*Gas-weighted heating degree-days

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



WTI Crude Oil Price: Potential for Volatility Around Base Case

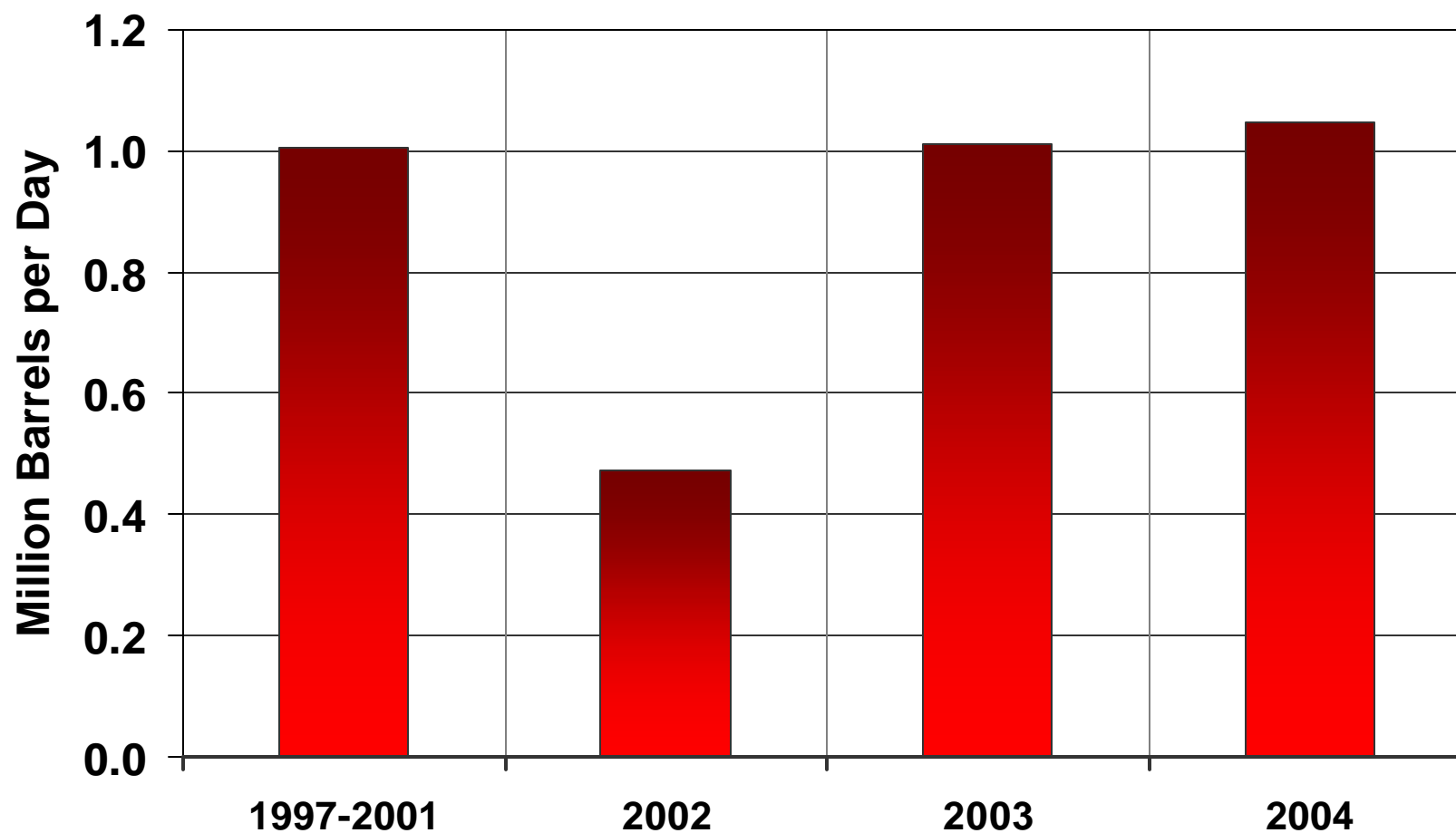


Average winter WTI prices, while high, lower than last year.

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



Annual World Oil Demand Growth 1997-2004

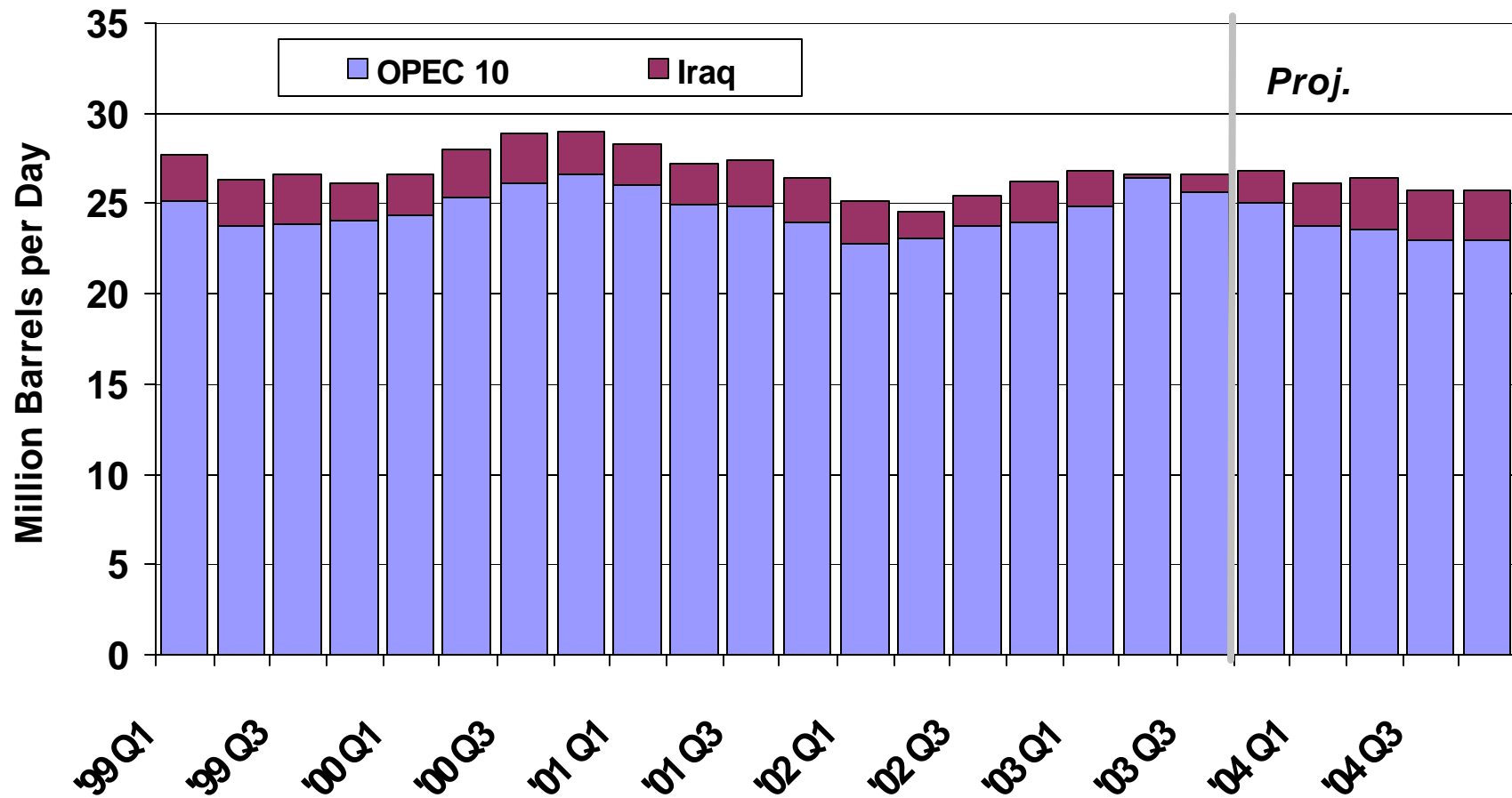


World oil demand growth to continue recovery from 2002 lows in 2004

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



OPEC Crude Oil Production and Capacity

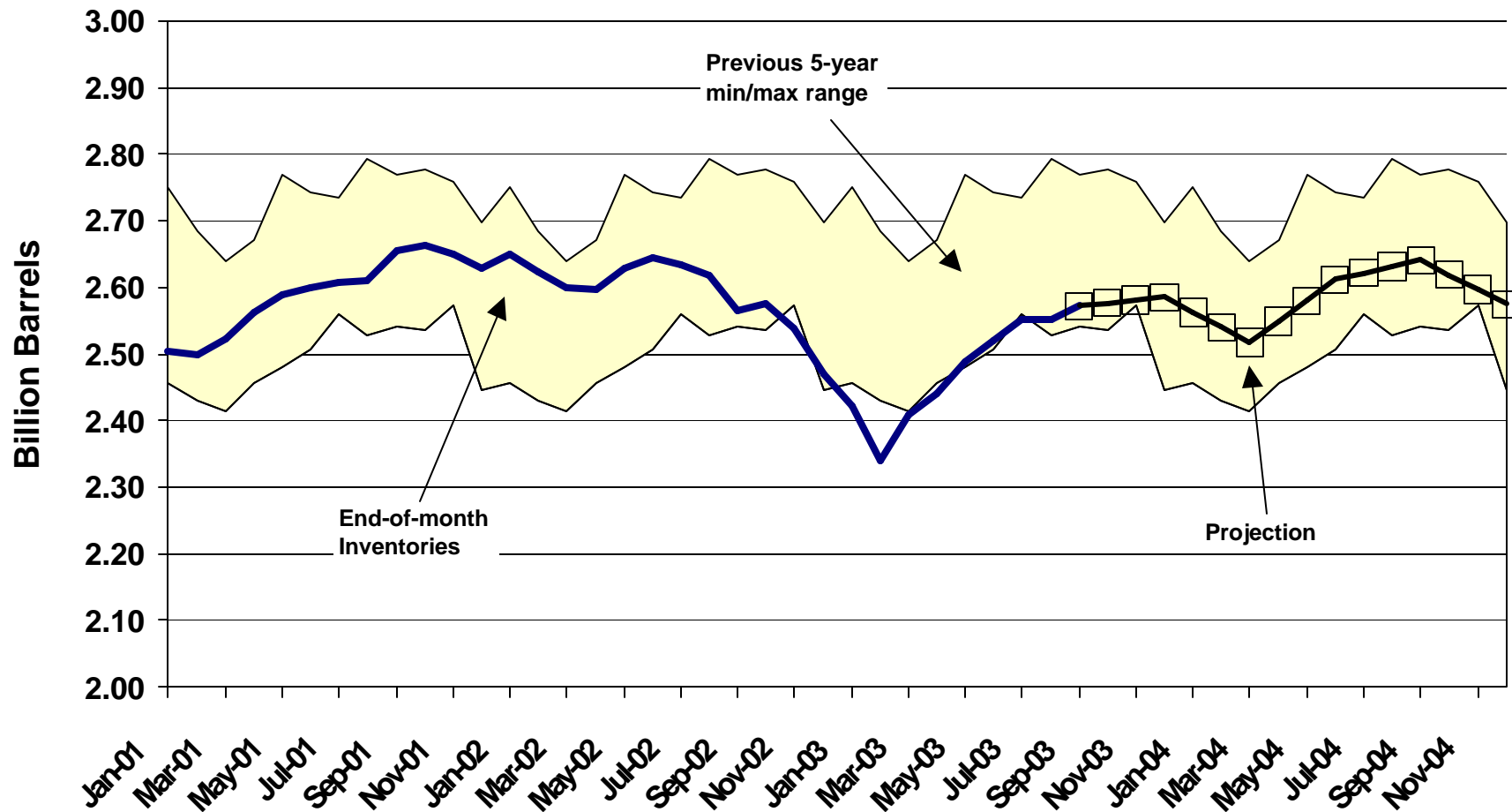


OPEC 10: balancing the return of Iraqi production

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



OECD Commercial Oil Stocks

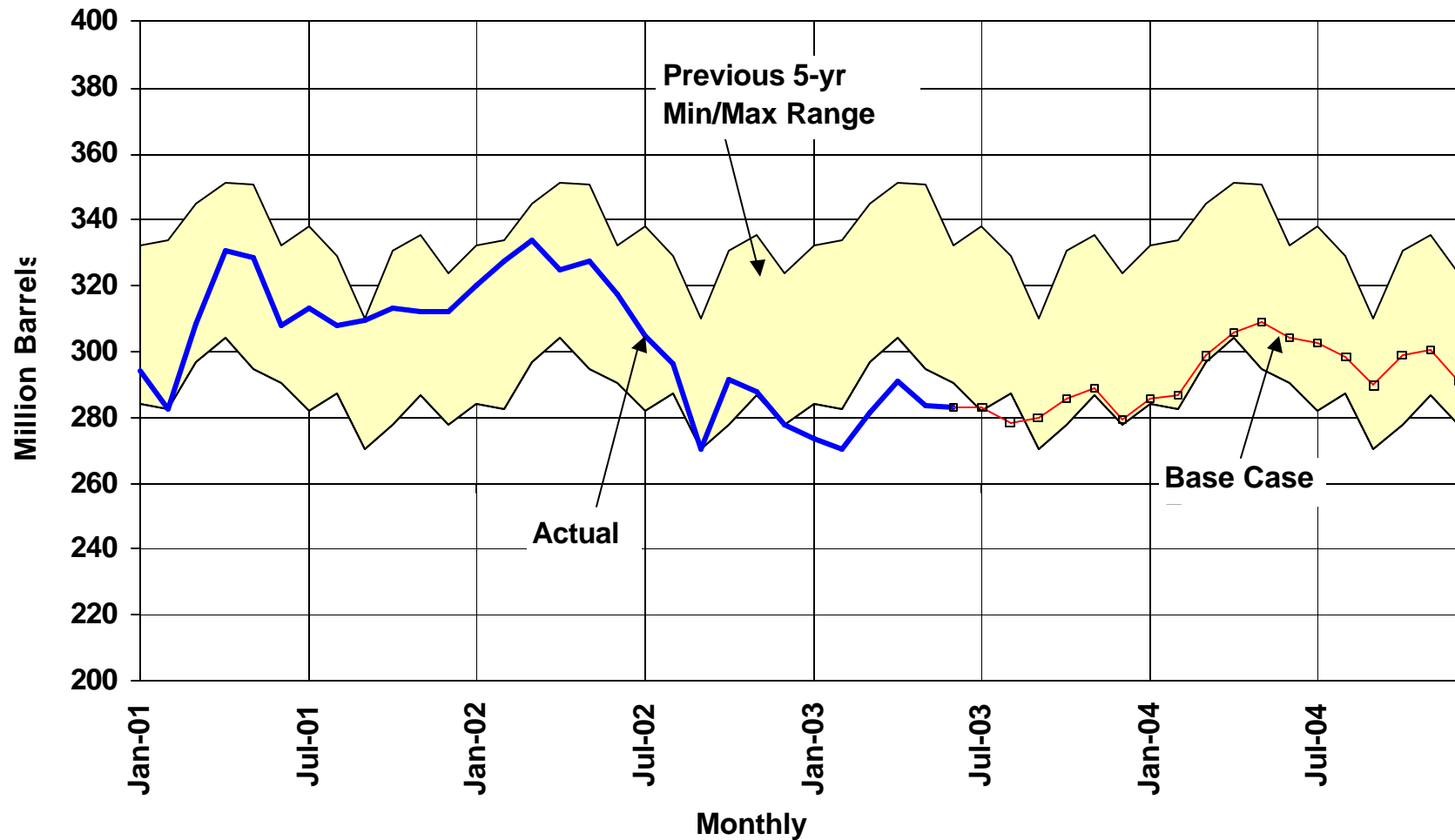


OECD oil stocks to rise to more normal levels in 2004

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



U.S. Commercial Crude Oil Stocks

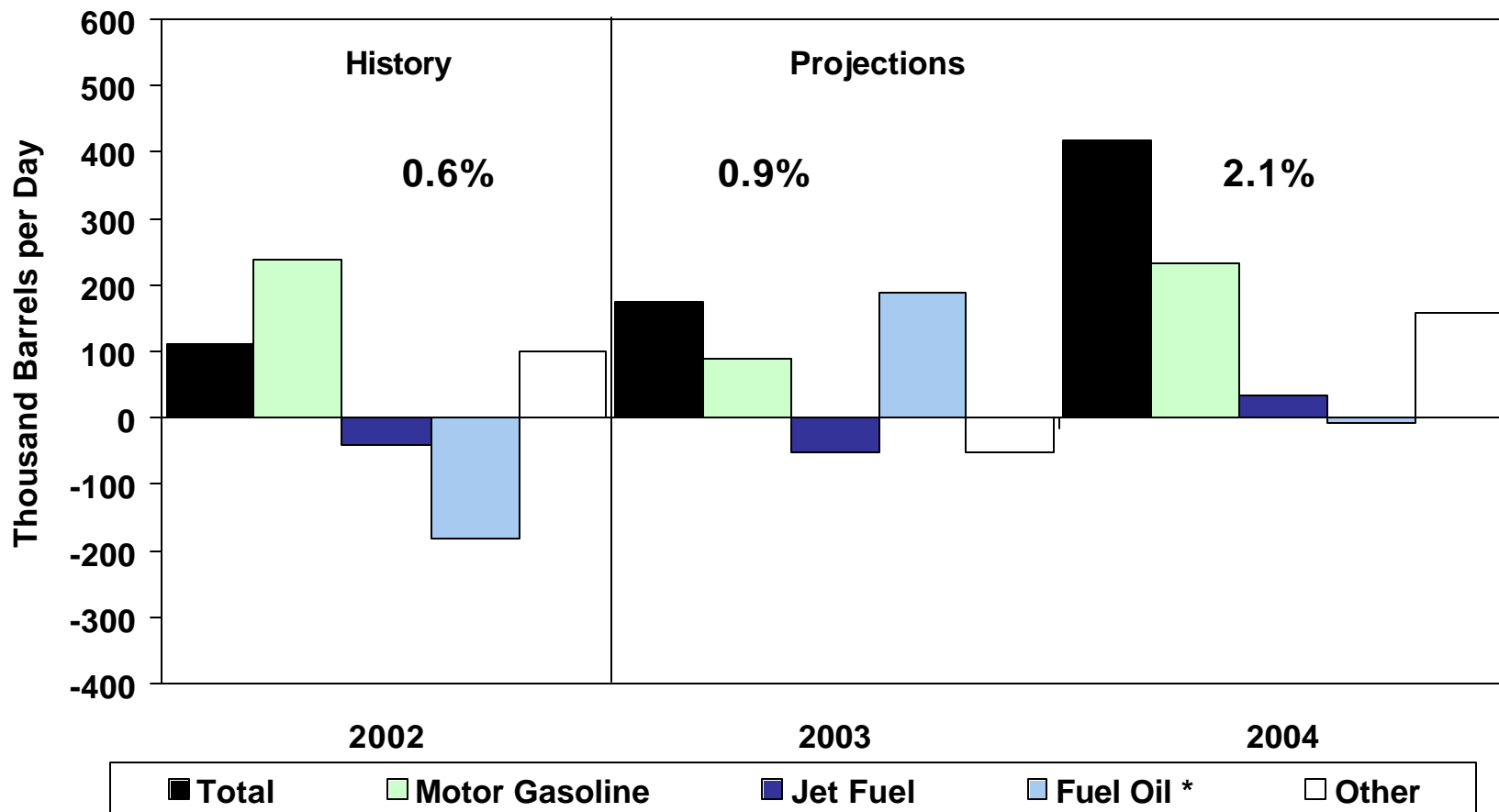


US crude oil stocks likely to remain tight this winter

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



U.S. Petroleum Demand Growth by Fuel



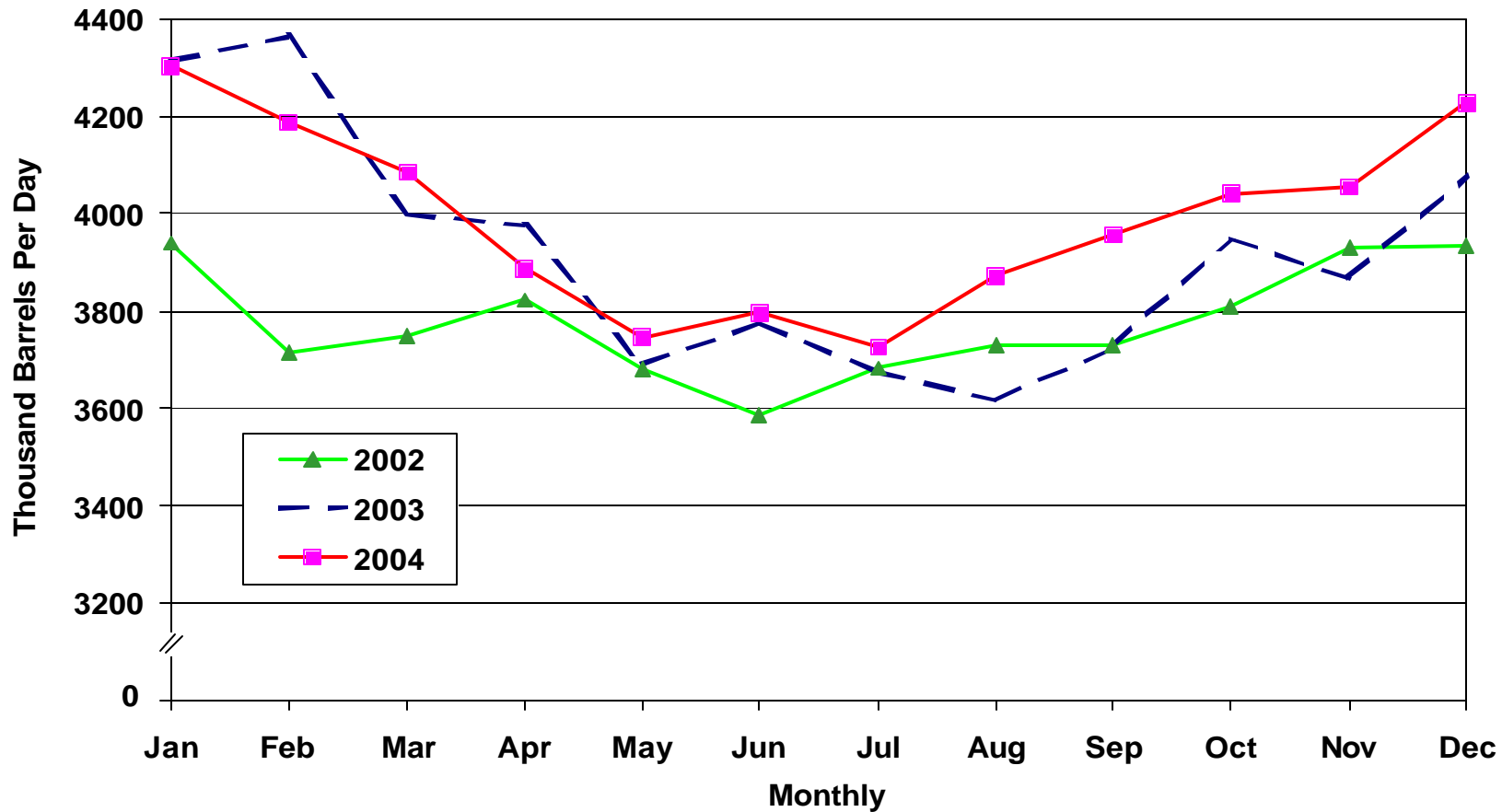
* Sum of distillate and residual fuel.

2004 to see recovery in petroleum products demand

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



Winter Distillate Demand Should About Be the Same as Last Winter If Weather Is Normal

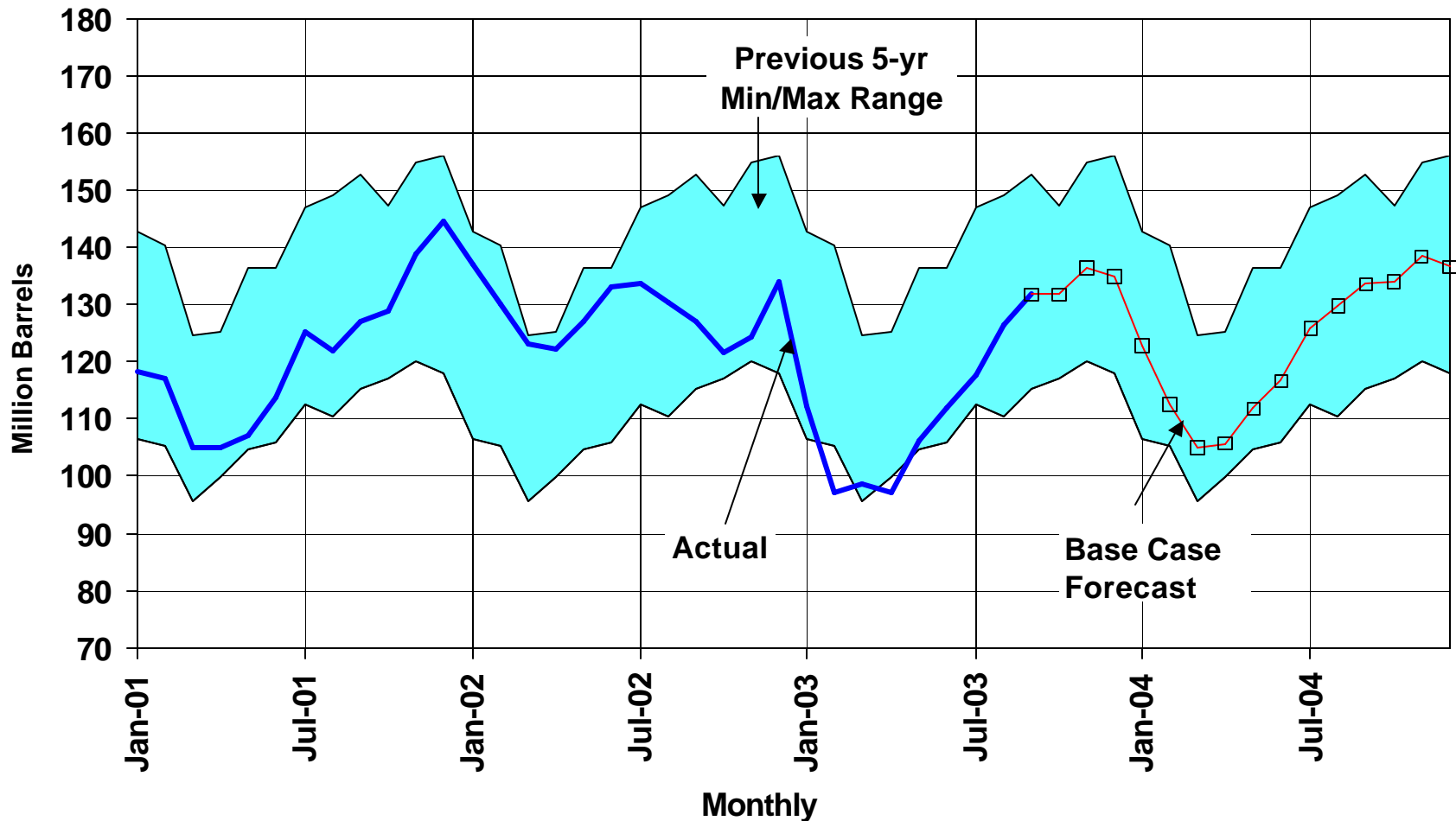


No winter growth in distillate demand expected

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



U.S. Total Distillate Fuel Inventories

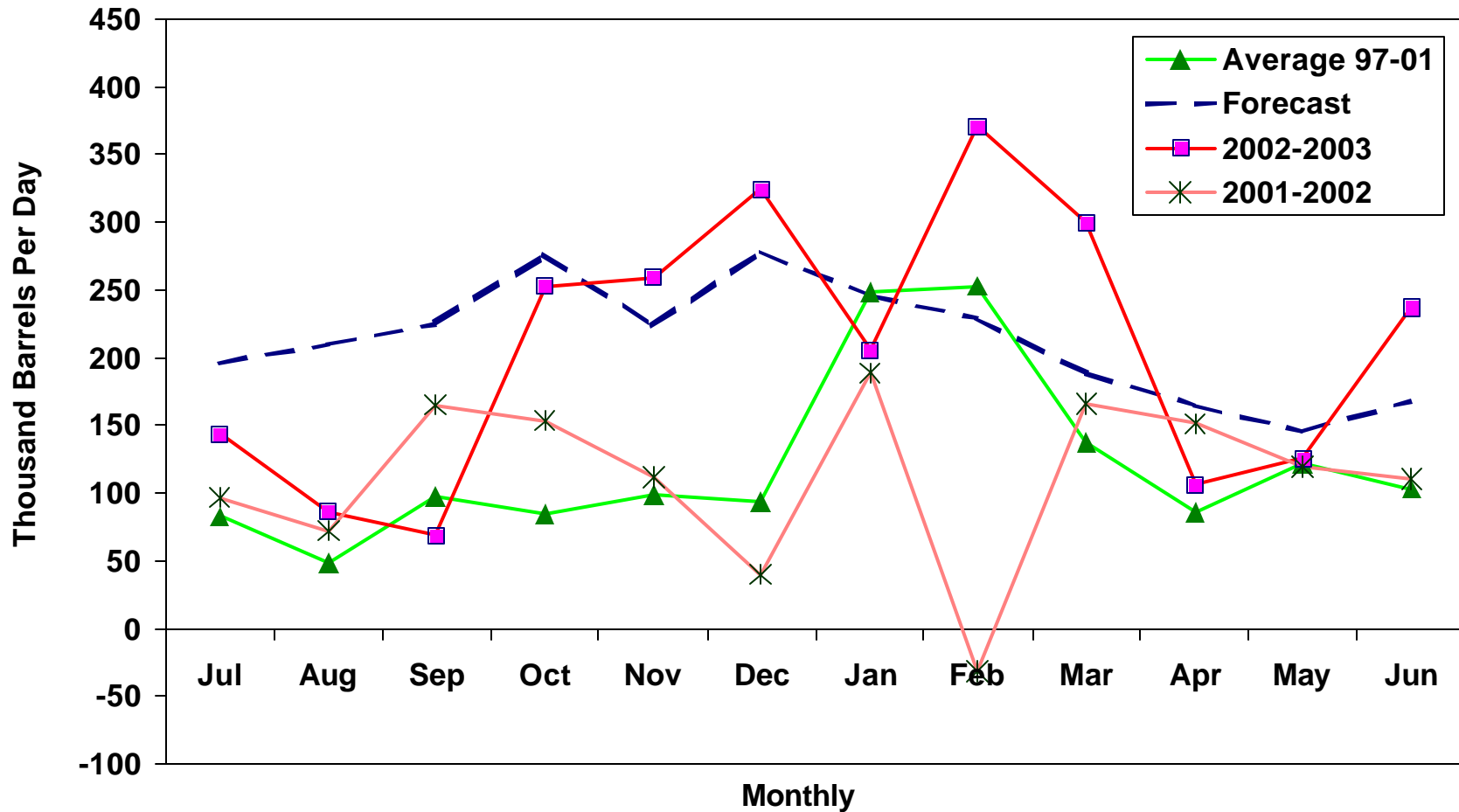


US distillate fuel stocks near middle of 5-year average (for now)

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



Distillate Fuel Oil Imports Likely to Be Lower This Winter

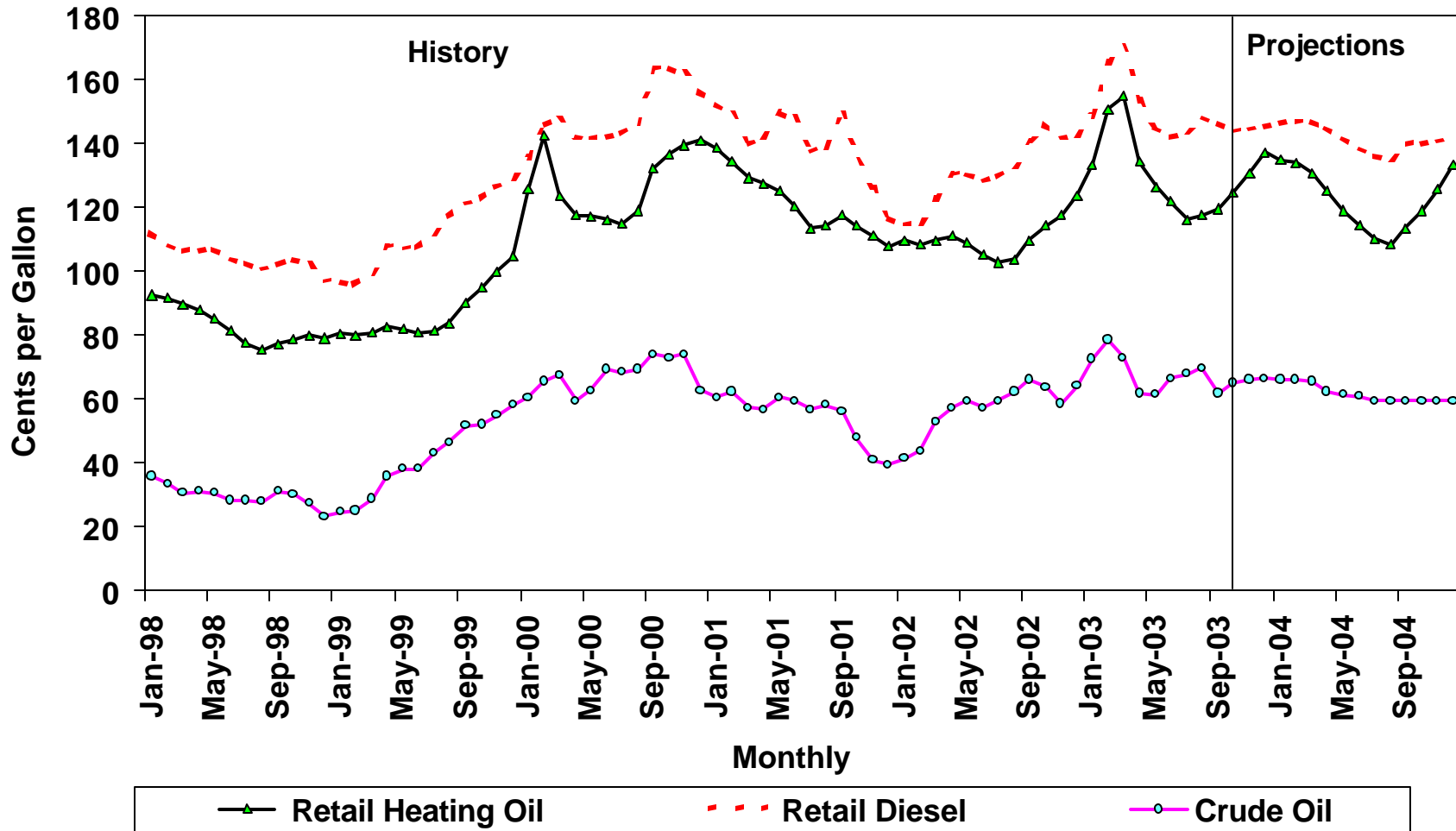


Distillate imports dependent on weather-related demand

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



Distillate Fuel Price Outlook

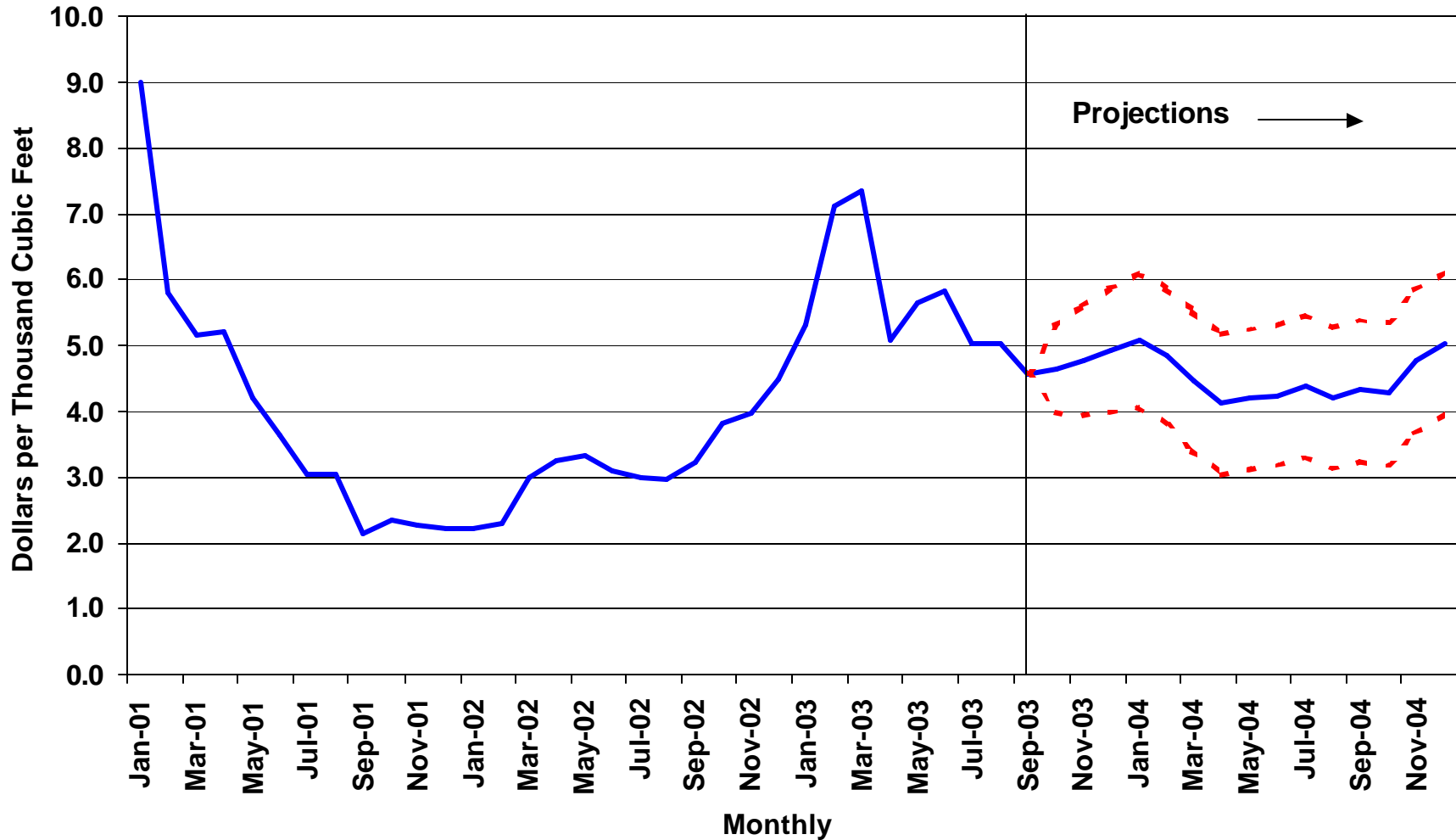


Heating oil winter price to average to match last winter

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



U.S. Natural Gas Spot Price Outlook

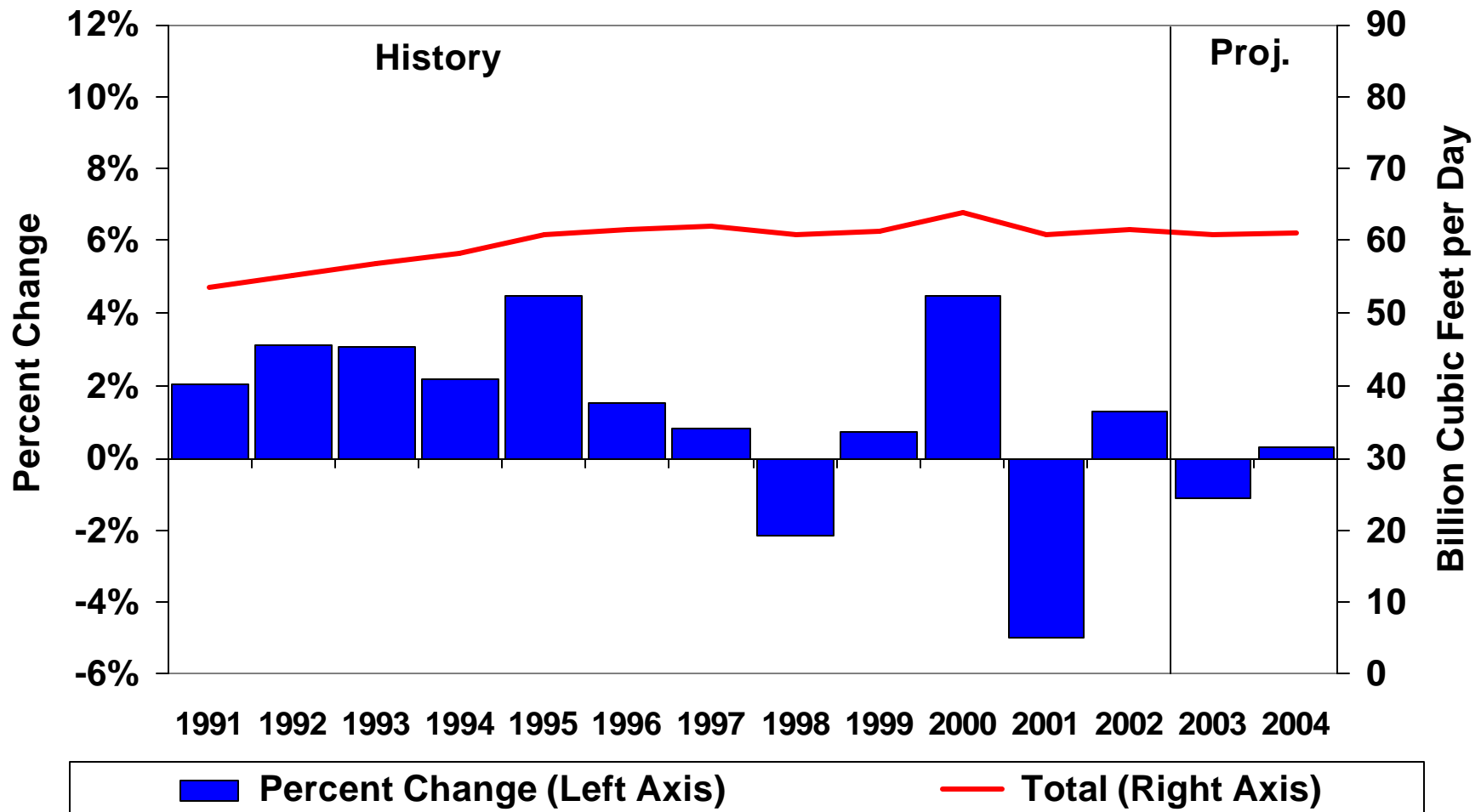


Winter wellhead prices: still high but slightly below last winter on average.

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



U.S. Natural Gas Demand Growth Patterns

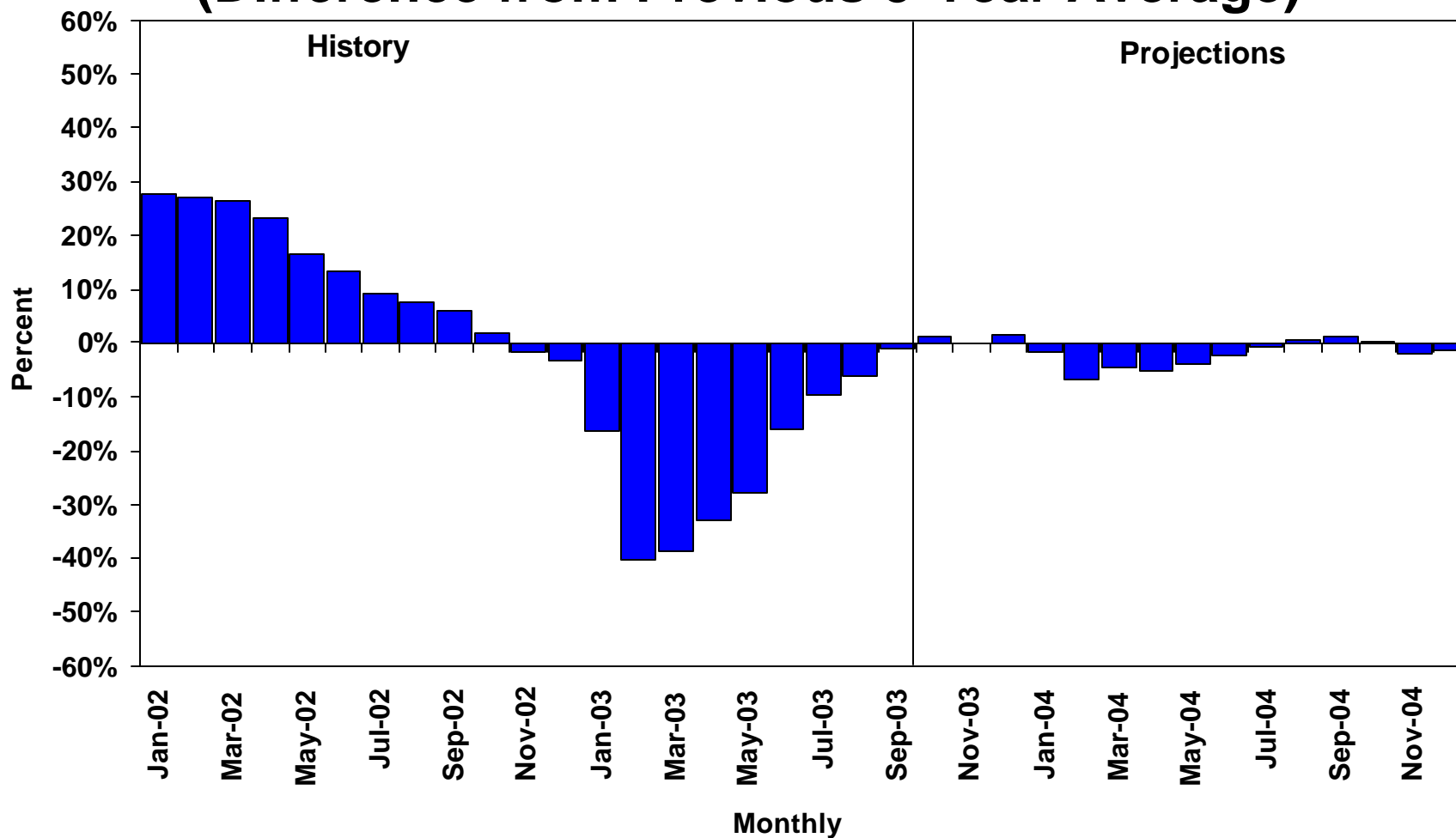


Natural gas demand falls by 1.1 percent in 2003, growth minimal next year

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



Working Gas in Storage (Difference from Previous 5-Year Average)

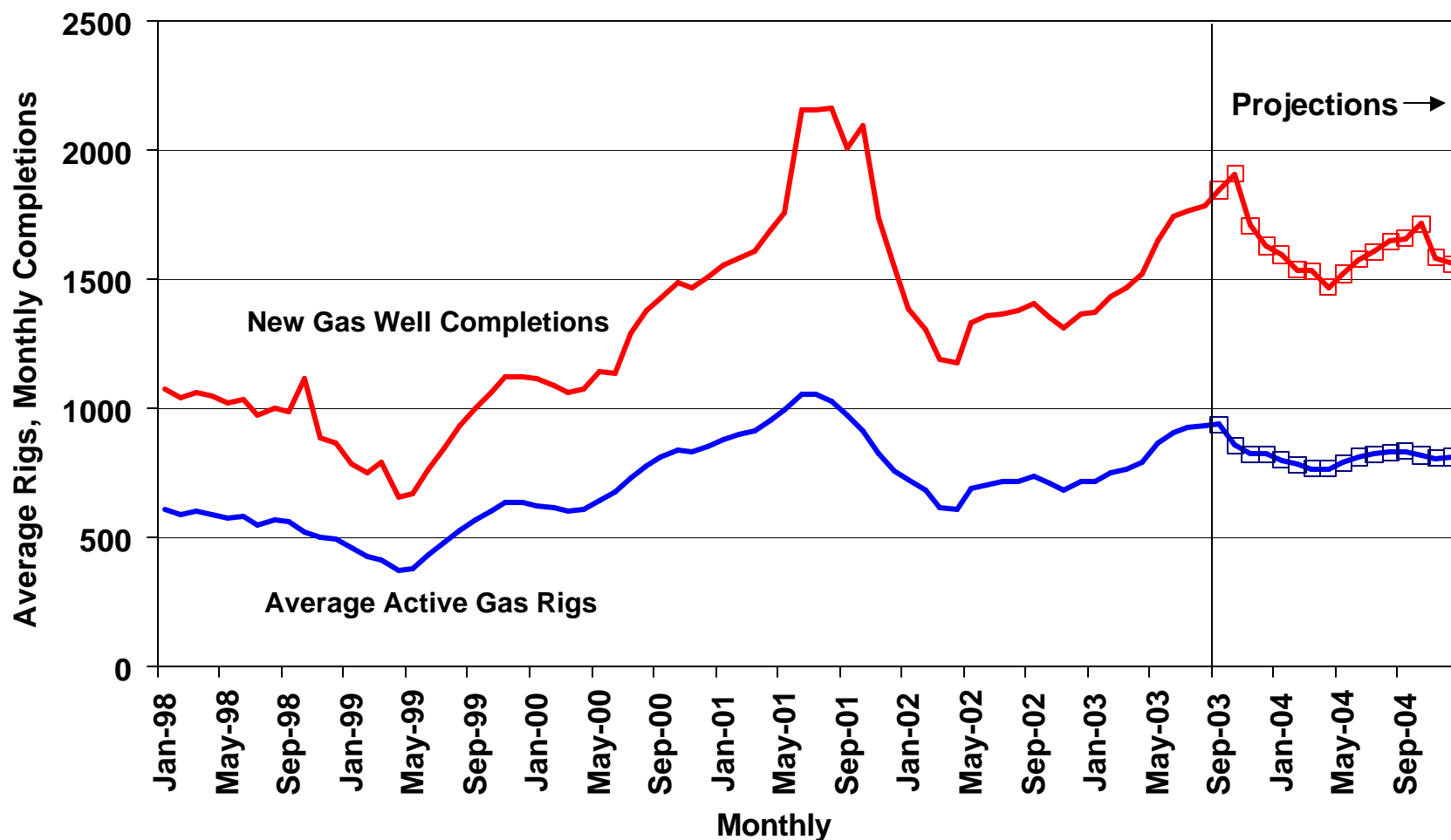


Natural gas stocks: Back to normal, for now.

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



U.S. Natural Gas-Directed Drilling Activity

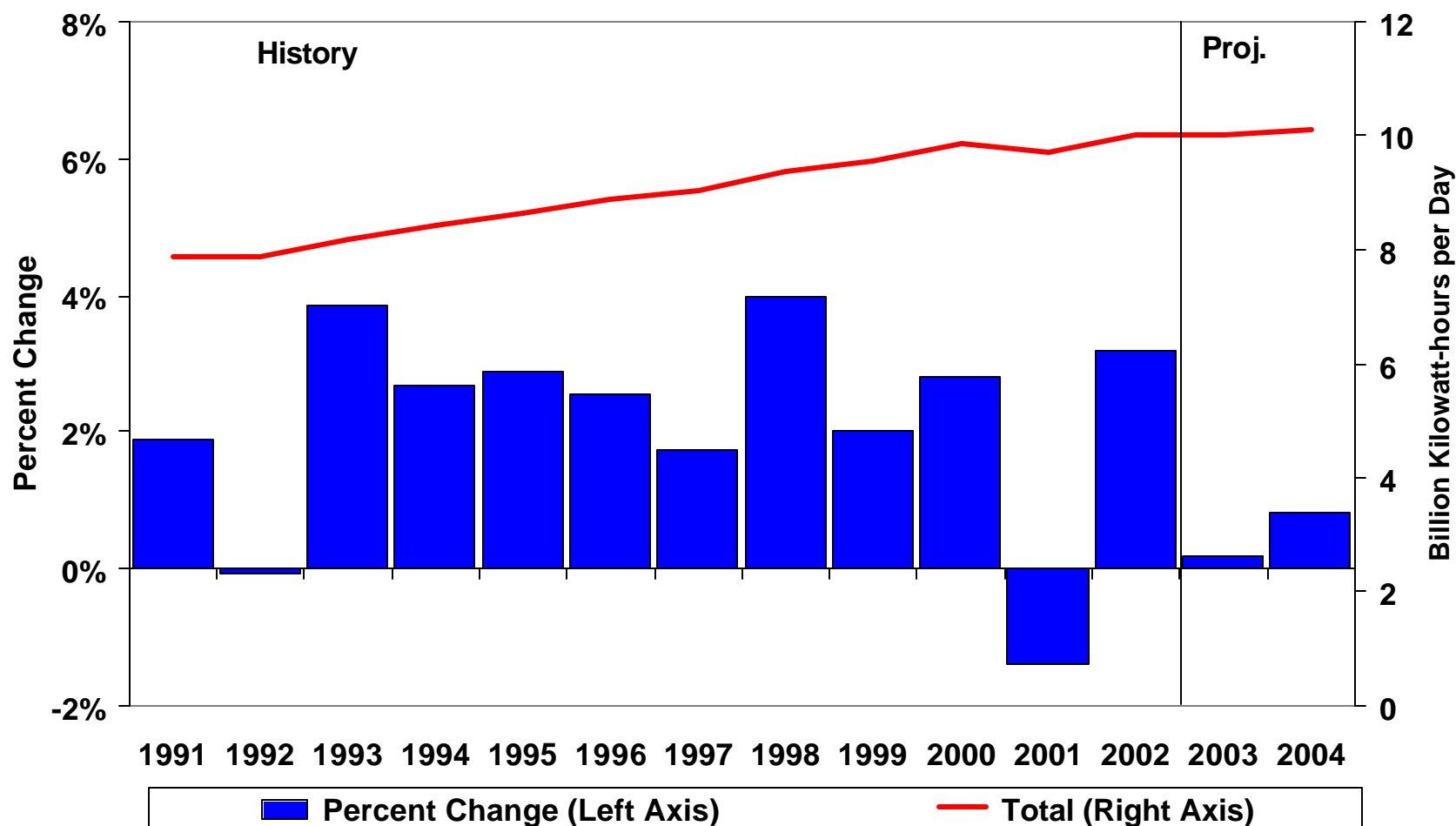


Natural gas drilling recovers in 2003.

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



U.S. Electricity Demand Growth Patterns



Electricity demand weak in 2003, picks up slightly in 2004

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



Weather Impacts by Heating Fuel

Winter Weather Scenarios: Warm (Mild), Normal (Base) and Cold (Severe) Cases

(Illustrative Household Heating Demand and Costs)

	Winter 2002-2003	Winter of 2003-2004			% Diff. From Base	
		Mild	Normal	Severe	Mild	Severe
Natural Gas (Midwest)						
Consumption (mcf)	95.2	82.6	91.8	101.0	-10.0%	10.0%
Avg. Price (\$/mcf)	8.39	8.77	9.17	9.67	-4.3%	5.5%
Expenditures (\$)	799	724	841	977	-13.9%	16.1%
Heating Oil (Northeast)						
Consumption (gals)	757	626	696	766	-10.0%	10.0%
Avg. Price (\$/gal)	1.33	1.25	1.33	1.42	-6.0%	6.3%
Expenditures (\$)	1010	785	927	1084	-15.4%	16.9%
Propane (Midwest)						
Consumption (gals)	941	816	907	998	-10.0%	10.0%
Avg. Price (\$/gal)	1.20	1.13	1.21	1.30	-6.6%	8.1%
Expenditures (\$)	1125	920	1094	1301	-15.9%	19.0%

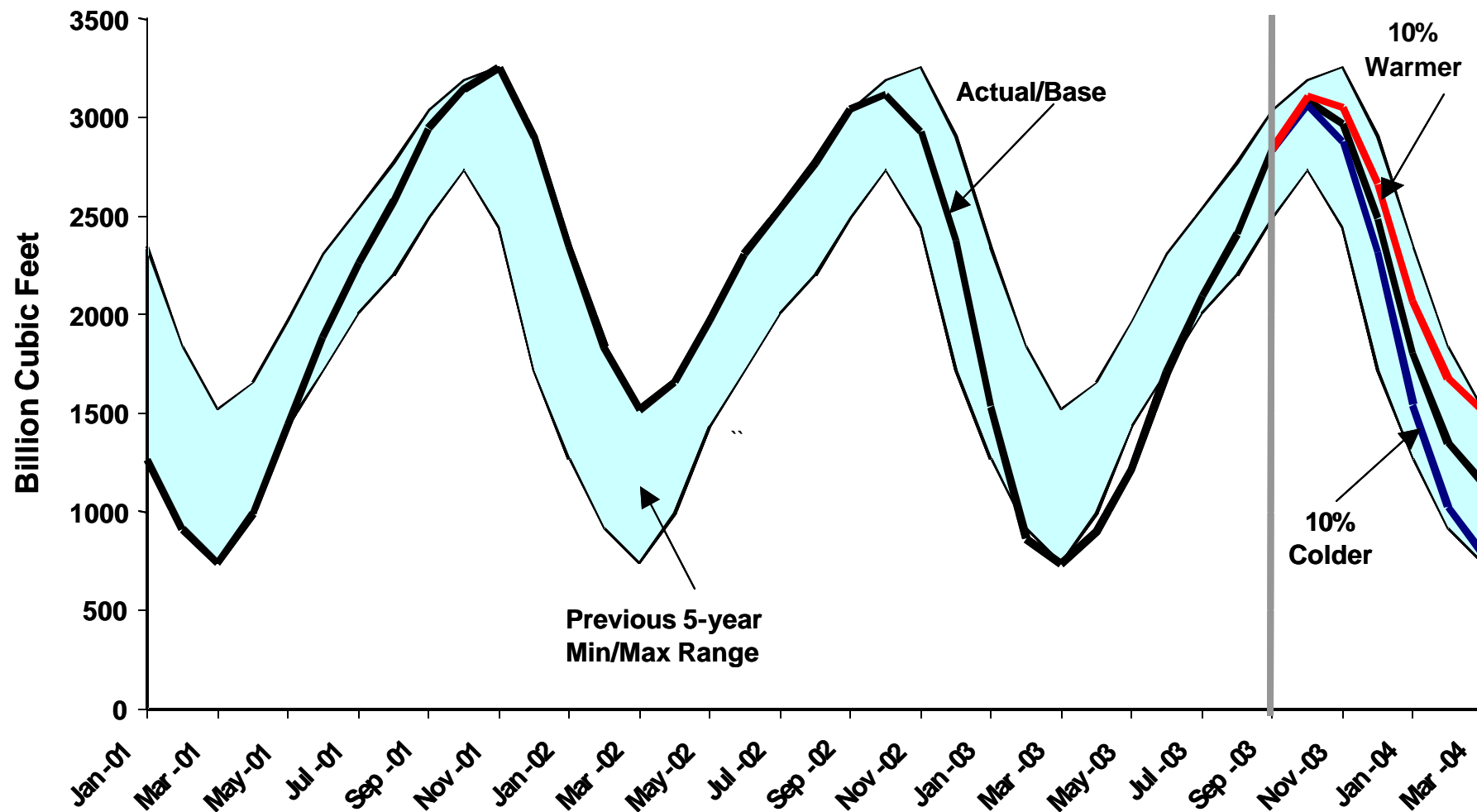
Note: Scenarios involve assumptions of 10% greater and 10% lower heating degree-days in all regions.

Severe weather = +16% to +19% cost increase for heating

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



U.S. Working Gas in Storage Cases

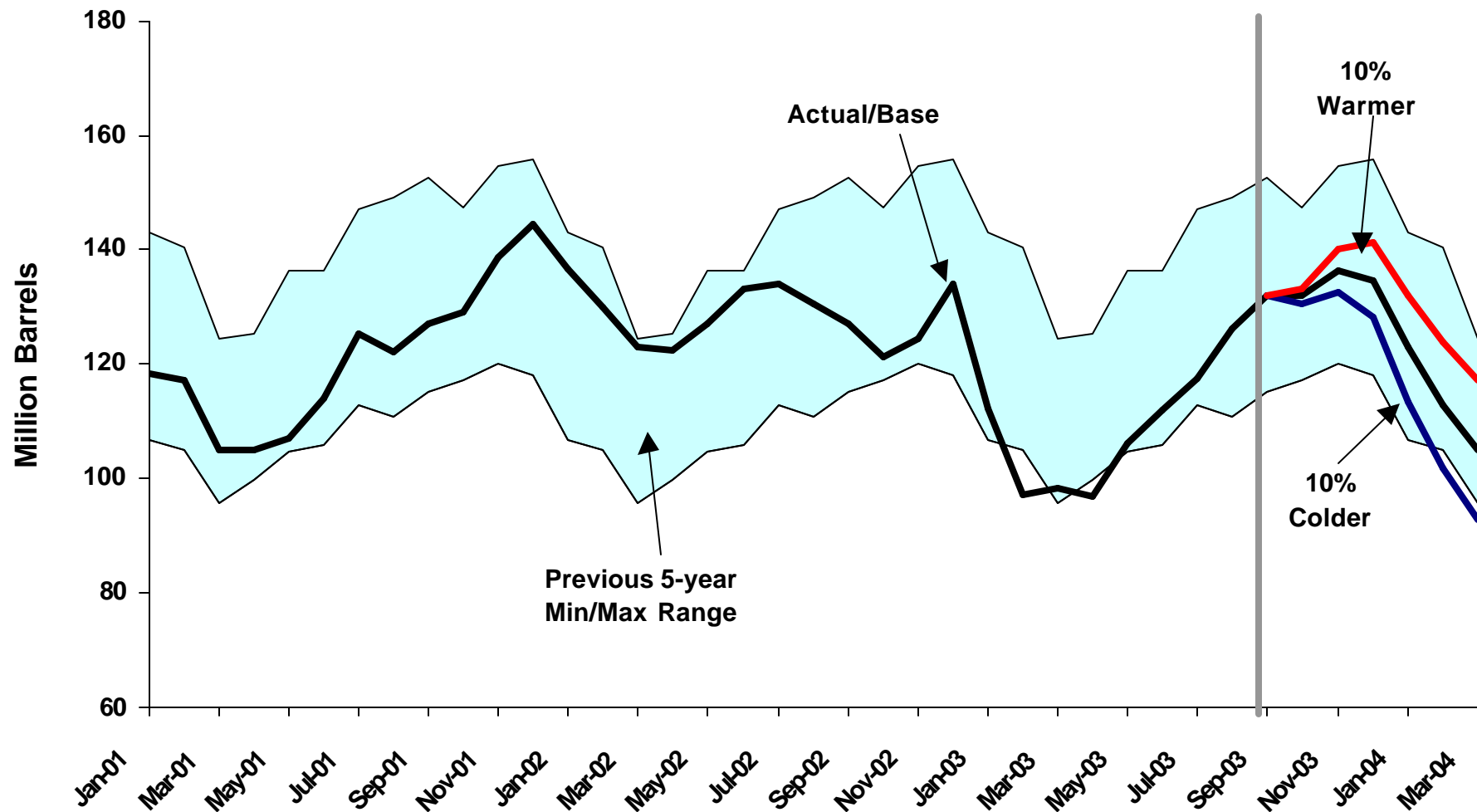


Natural gas stocks are within historical ranges following record builds

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



U.S. Total Distillate Fuel Inventory Cases

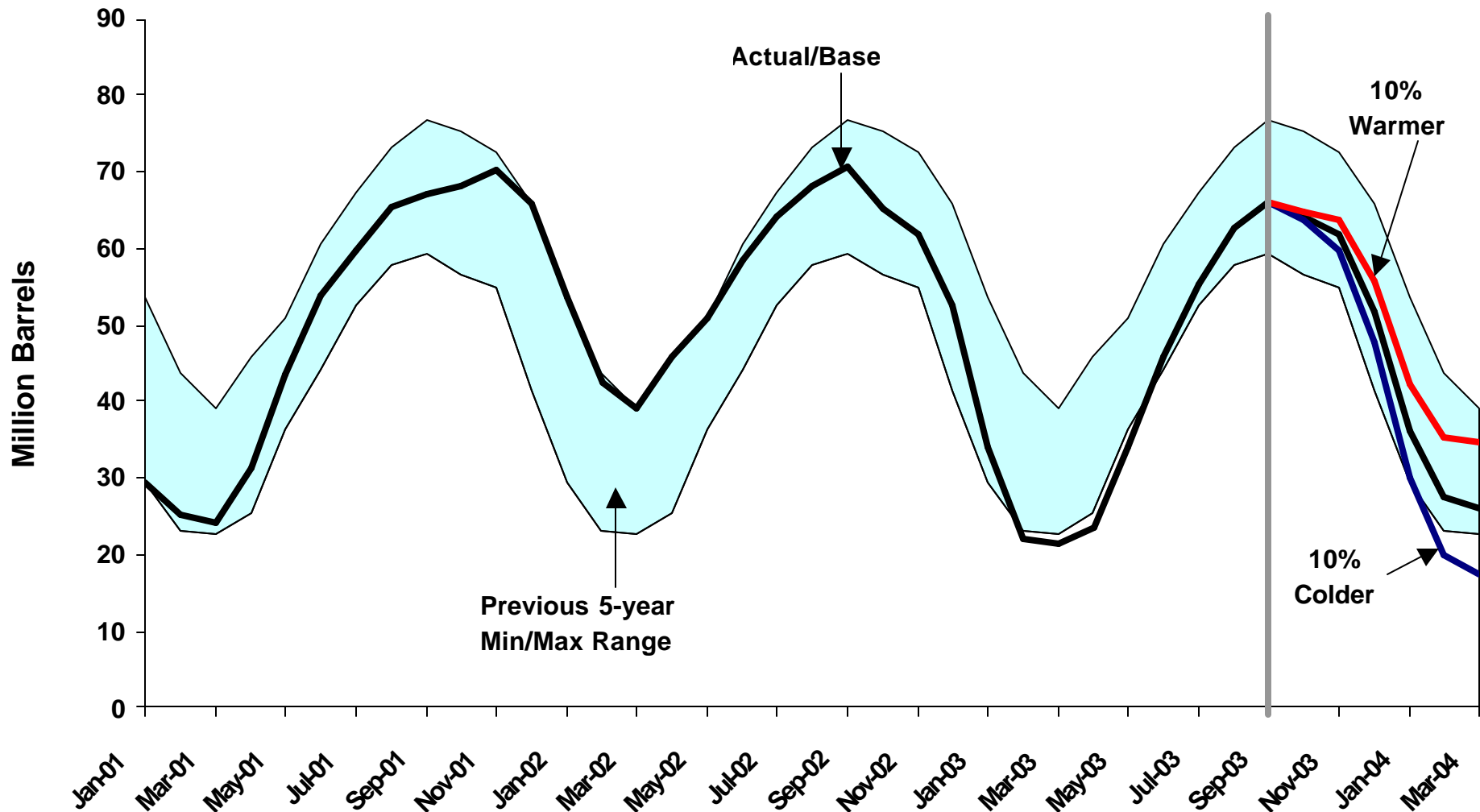


If cold winter, stocks could drop below historical range

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



U.S. Total Propane Inventory Cases



Propane stocks are within the historical range

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



Summary

✍ Recent trends in oil and gas markets are positive

but markets remain vulnerable to surprises in supply and demand this winter.

✍ Net changes in residential heating expenditures this winter:

- minus 8 percent for heating oil;
- plus 5 percent for natural gas;
- plus 2 percent for electricity;
- minus 3 percent for propane.

✍ Uncertainties:

- Weather
- Pace, timing magnitude of resumption in Iraqi exports
- OPEC production decisions
- Unexpected supply disruptions