

## Short-Term Energy Outlook

February 2004

### Winter Heating Fuel and Gasoline Costs (Figures 1 to 3)

A cold January (6 percent colder than normal nationally and 19 percent colder than normal in the Northeast) kept fuel prices and heating demand high, diminishing the likelihood that cumulative heating costs for the winter will fall below last year's high levels. The current estimate for winter 2003-2004 [household heating bills](#) compared to winter 2002-2003 is as follows: natural gas-heated homes: up 11 percent; heating oil users: down 1 percent; propane-heated households: up 7 percent; and homes with electric heat: up about 2 percent. These projections are national average values – actual heating bill changes may vary widely by region due to differences in weather and fuel price developments. Increased efficiency of a home's heating unit, the addition of insulation, or other home improvements also may affect year-to-year changes in household heating bills.

High crude oil prices over the last 2 months pushed gasoline costs and [pump prices](#) up to \$1.57 per gallon in January from \$1.48 per gallon in December. First quarter 2004 national average gasoline prices are now expected to be about \$1.62 per gallon for regular grade. Gasoline prices are expected to average \$1.57 per gallon in 2004, a penny more than the average for 2003. A smooth transition to summer gasoline blends would be required to add confidence to those expectations. Current [gasoline inventories](#) are in the low range, reducing chances for near-term price relief.

### Oil Market Outlook (Figures 4 to 7)

The shift to colder-than-normal temperatures from mid-December through January helped push [average crude oil prices](#) up once again in January. West Texas Intermediate (WTI) prices topped \$34 last month, more than \$2 ahead of the December average. [Inventories remain low](#) but are holding well enough to yield a possible decline toward \$30 per barrel if the market can avoid supply interruptions or additional extraordinary demand surges. Price expectations through 2005 include some modest declines but are still centered near \$30 per

barrel, with potential spikes remaining a danger until stocks rebuild to more normal levels. Increasing world demand and assumed OPEC restraint is expected to keep oil inventories near the low end of the historical range. This *Outlook* was prepared under the assumption that OPEC's February 10, 2004, meeting would yield no change in official production targets.

World oil demand is projected to grow by about 2 percent in 2004 and 2005, after posting an estimated 1.7 percent gain in 2003. Assuming these growth rates, oil demand in 2005 would be 3.1 million barrels per day above the 2003 level.

Non-OPEC oil supply in 2005 is projected at about 2.5 million barrels per day above the 2003 level. Most of the increases are projected to come from Russia and the Caspian Sea Region, with smaller increases expected from Africa, Canada, and Mexico. Total OPEC production (including natural gas liquids), which is estimated at 29.9 million barrels per day for 2003, is expected to grow to an average of 30.8 million barrels per day in 2005, allowing for some modest stock building over the period.

U.S petroleum demand in 2003 grew an estimated 1.1 percent to just under 20 million barrels per day, with relatively weak growth in the transportation being offset by fuel oil demand growth, particularly in the electric power sector. In 2004, demand is expected to climb to 20.4 million barrels per day as transportation- and industrial-related use offset some slowing in fuel oil demand growth. An additional 470,000 barrels per day of demand is anticipated for 2005, bringing the annual average consumption rate to 20.9 million barrels per day.

### **Natural Gas Outlook (Figures 8 to 10)**

Cold weather in late December and all of January pushed up average monthly natural gas spot prices, generating an average price of \$5.90 per million Btu in January. Despite the severe weather and some strong short-term price movements in January, natural gas storage has remained at least slightly above normal, and spot prices in early February have moved down towards \$5.00. For 2004 as a whole, natural gas prices are expected to average about \$4.90 per million Btu, declining moderately from the 2003 average along with oil prices. In 2005, natural gas spot prices are projected to remain strong, averaging near \$5.00 per million Btu under the assumption that domestic and imported supply can continue to grow by about 1 percent per year.

Natural gas demand is estimated to have declined 3.7 percent in 2003 largely due to high prices discouraging demand in the industrial and electric power sectors. However, expected growth in the economy, along with somewhat lower projected annual average natural gas prices, are expected to push 2004 demand up by about 2.2 percent. Demand in 2005 is expected to increase by 1.1 percent as the economy continues to expand and prices ease slightly. Early estimates indicate that natural gas production increased approximately 2.1 percent in 2003. Natural gas production is expected to continue to expand modestly through 2005, as natural gas well completions, which totaled an estimated 20,000 in 2003, continue to grow to between 21,000 and 22,000 wells per year over the next 2 years.

### **Electricity and Coal Outlook (Figures 11 to 13)**

Electricity demand in 2003 is now estimated to have increased by 0.5 percent. In 2004 and 2005, annual electricity demand is projected to grow by 2.5 percent annually, as the economic expansion accelerates.

Electricity supply: Nuclear generation is estimated to have declined 2.8 percent in 2003. However, nuclear generation is likely to increase 3.5 percent in 2004 over 2003 levels as nuclear plants that experienced extended service outages come back online. Nuclear generation is expected to continue to grow in 2005. Hydroelectric generation is also projected to continue to increase in 2004 and 2005 if normal levels of precipitation prevail. Other renewable sources for generation, led principally by wind power, are expected to continue to expand through 2005.

Coal demand in the electric power sector is estimated to have grown by about 2 percent in 2003. Coal demand in that sector is expected to continue growing in 2004 and 2005. While total U.S. coal production is estimated to have declined by 1.7 percent in 2003, expected growth in electric sector coal demand in 2004 and 2005 is projected to lead to increases in total coal production of 3.4 and 2 percent, respectively.

## Figure 1. Winter Heating Bills

Illustrative Consumer Prices and Expenditures for Heating Fuels During the Winter					
	Average 1997-1999	2000-2001 Actual	2001-2002 Actual	2002-2003 Actual	2003-2004 Base Forecast
<b>Natural Gas (Midwest)</b>					
Consumption (mcf)	84	99.1	81.3	95.2	92.5
Avg. Price (\$/mcf)	6.51	9.53	7.38	8.39	9.55
Expenditures (\$)	550	944	600	799	883
<b>Heating Oil (Northeast)</b>					
Consumption (gals)	640	728	577	742	711
Avg. Price (\$/gal)	0.96	1.37	1.10	1.34	1.37
Expenditures (\$)	616	996	635	991	977
<b>Propane (Midwest)</b>					
Consumption (gals)	834	979	803	941	914
Avg. Price (\$/gal)	0.93	1.38	1.11	1.20	1.32
Expenditures (\$)	779	1349	888	1126	1202

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

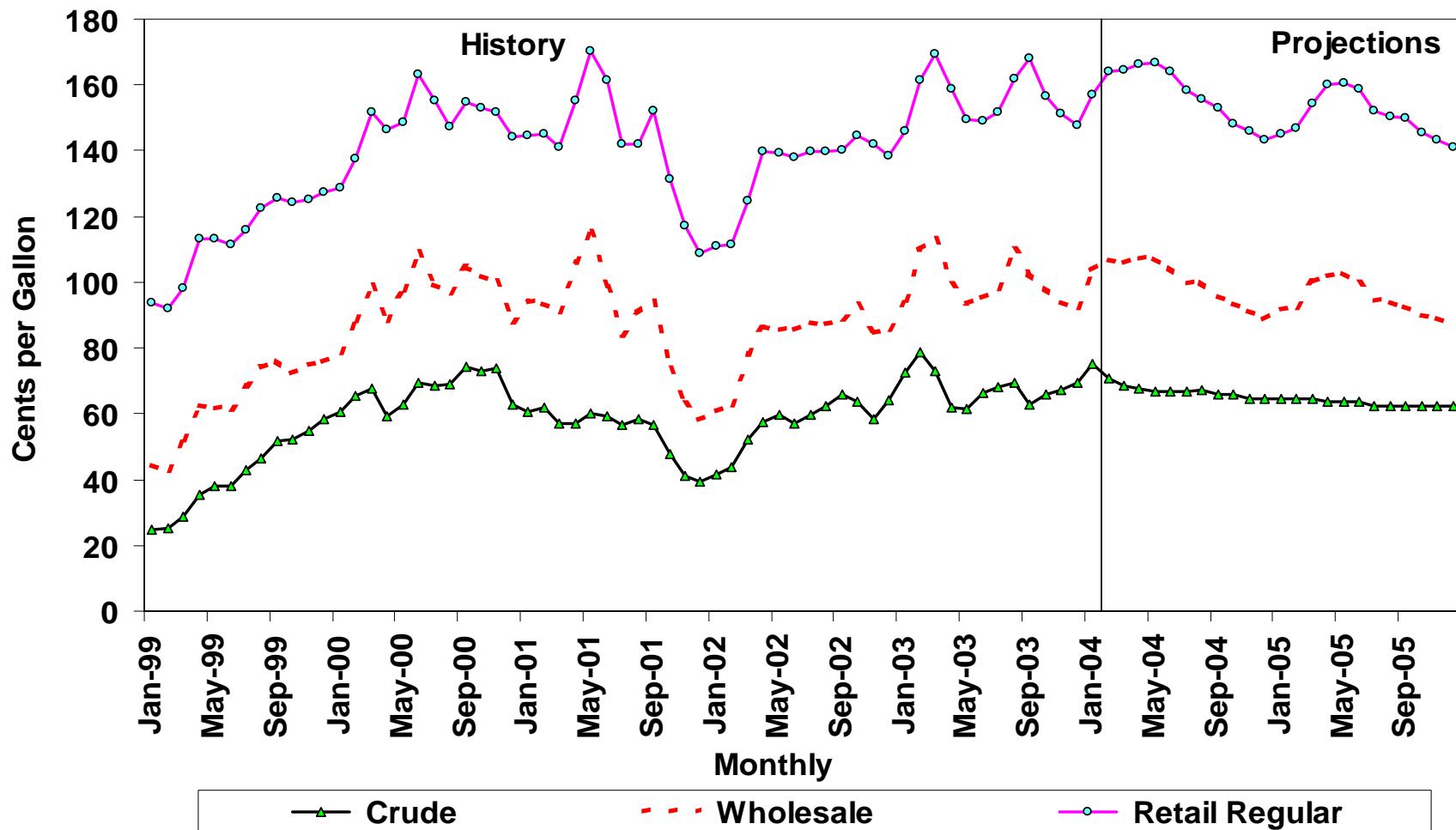
Prices shown are national average delivered-to-household prices.

mcf = thousand cubic feet.

gal = gallon.

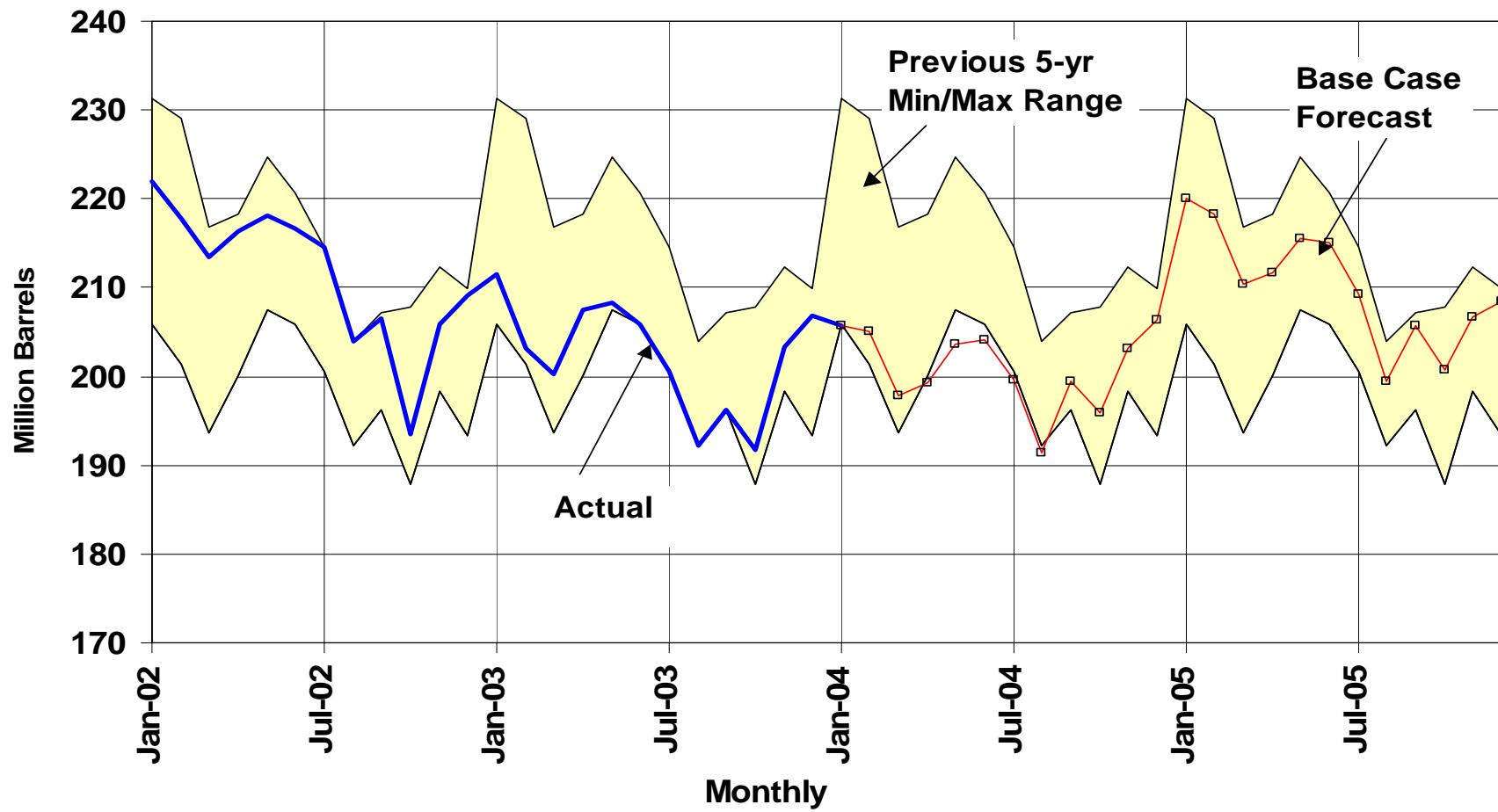


## Figure 2. Gasoline Prices and Crude Oil Costs



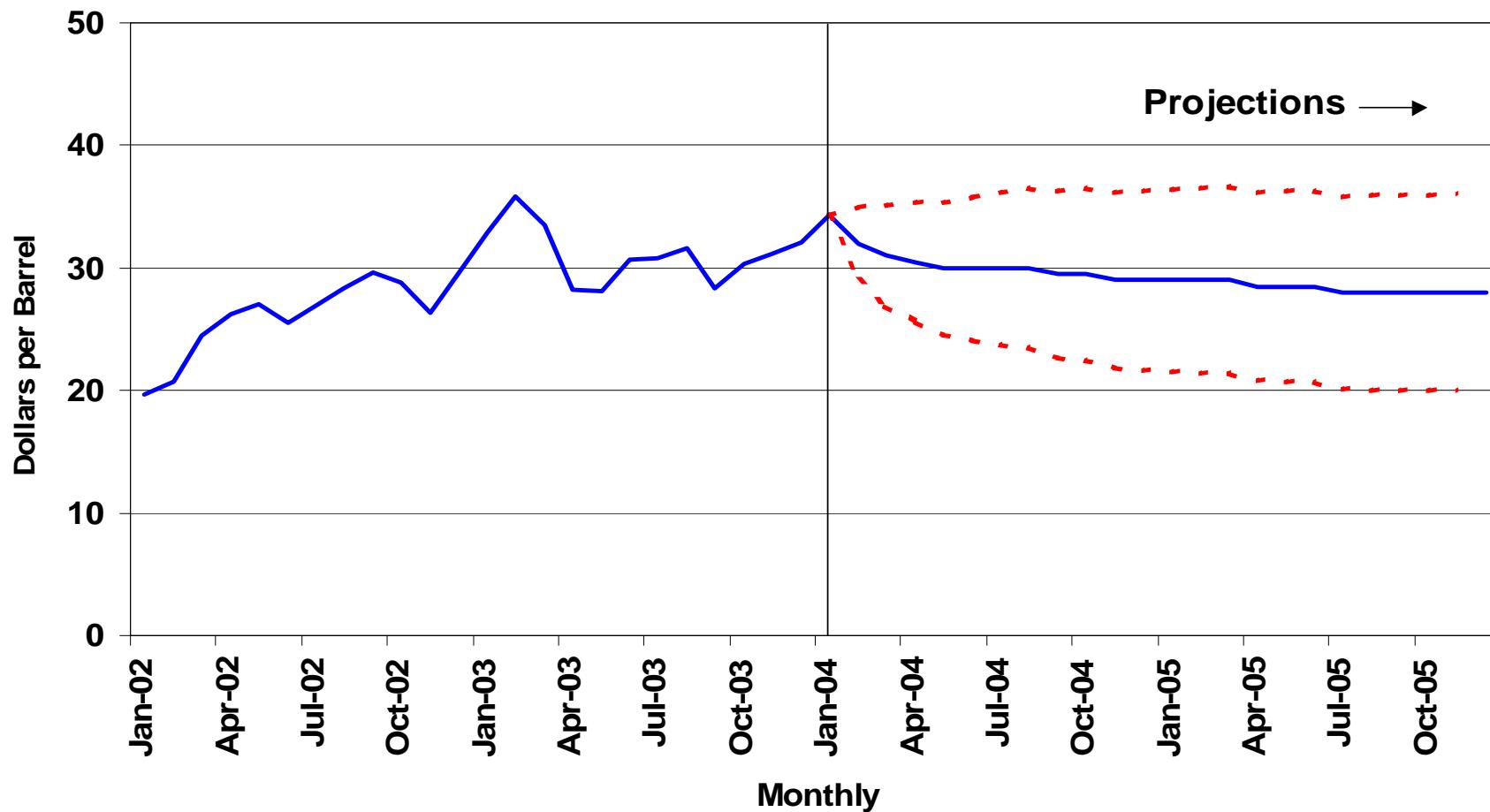
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## Figure 3. U.S. Gasoline Inventories



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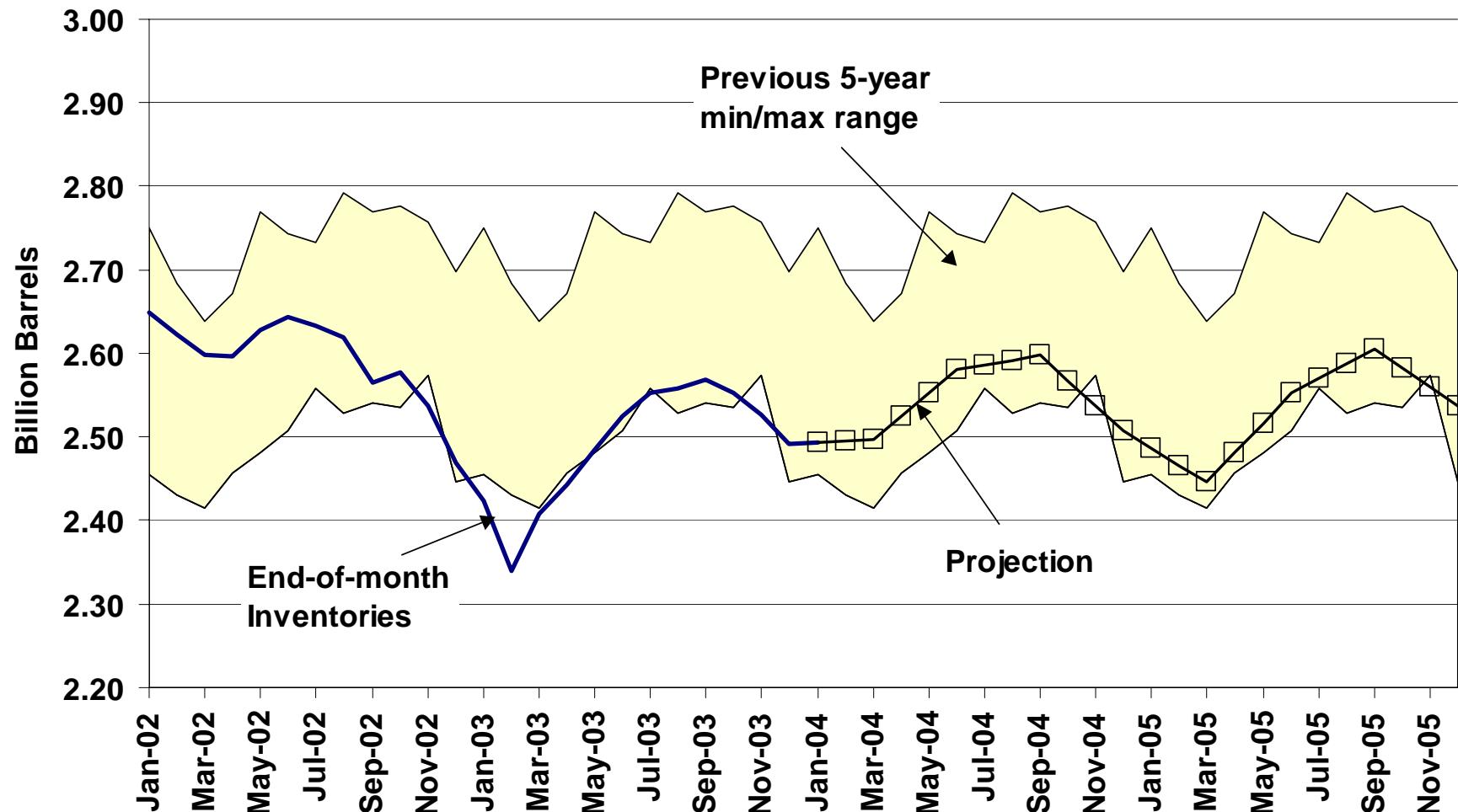
## Figure 4. West Texas Intermediate Crude Oil Price (Base Case and 95% Confidence Interval\*)



\*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.

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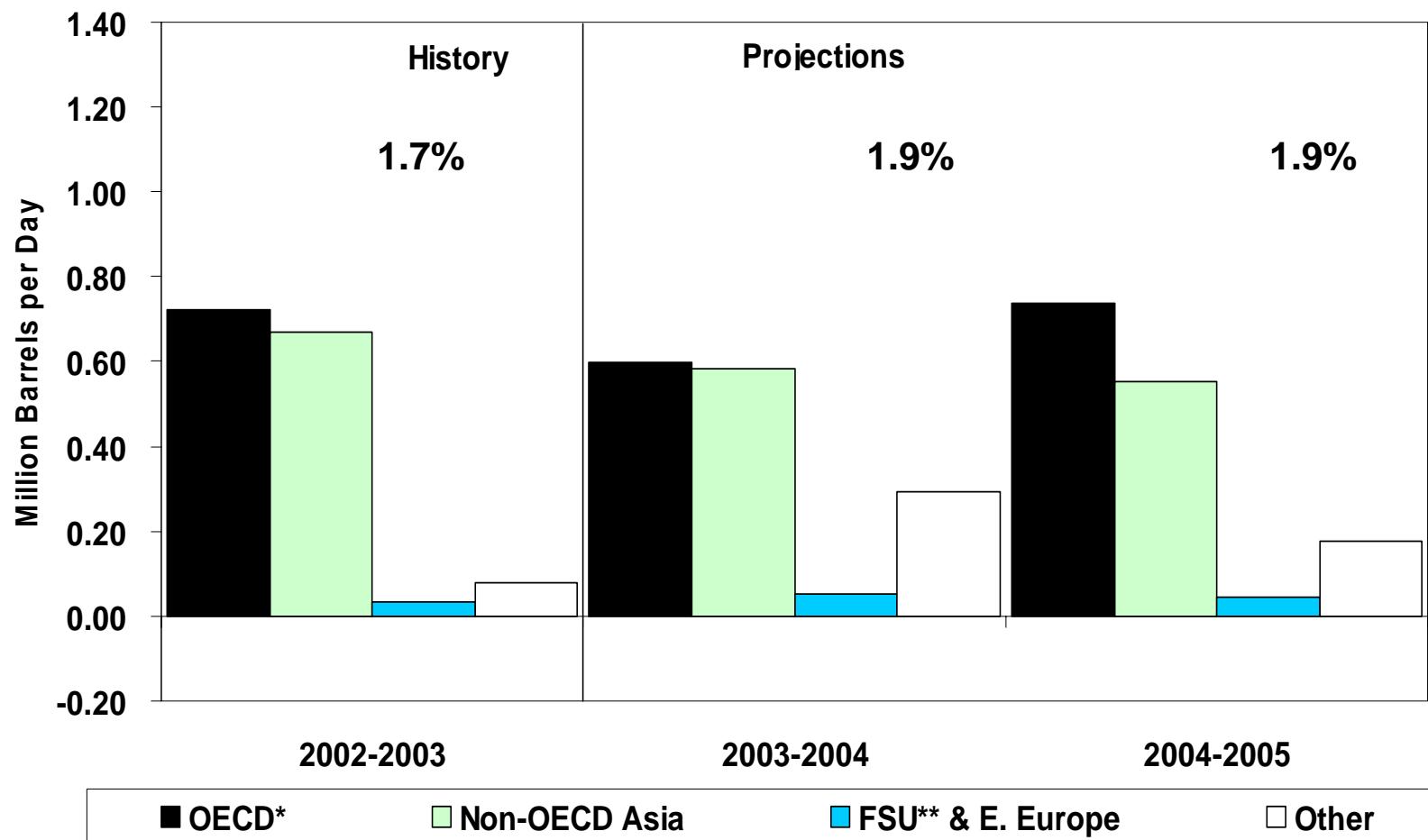
## Figure 5. OECD\* Commercial Oil Stocks



\* Organization for Economic Cooperation and Development

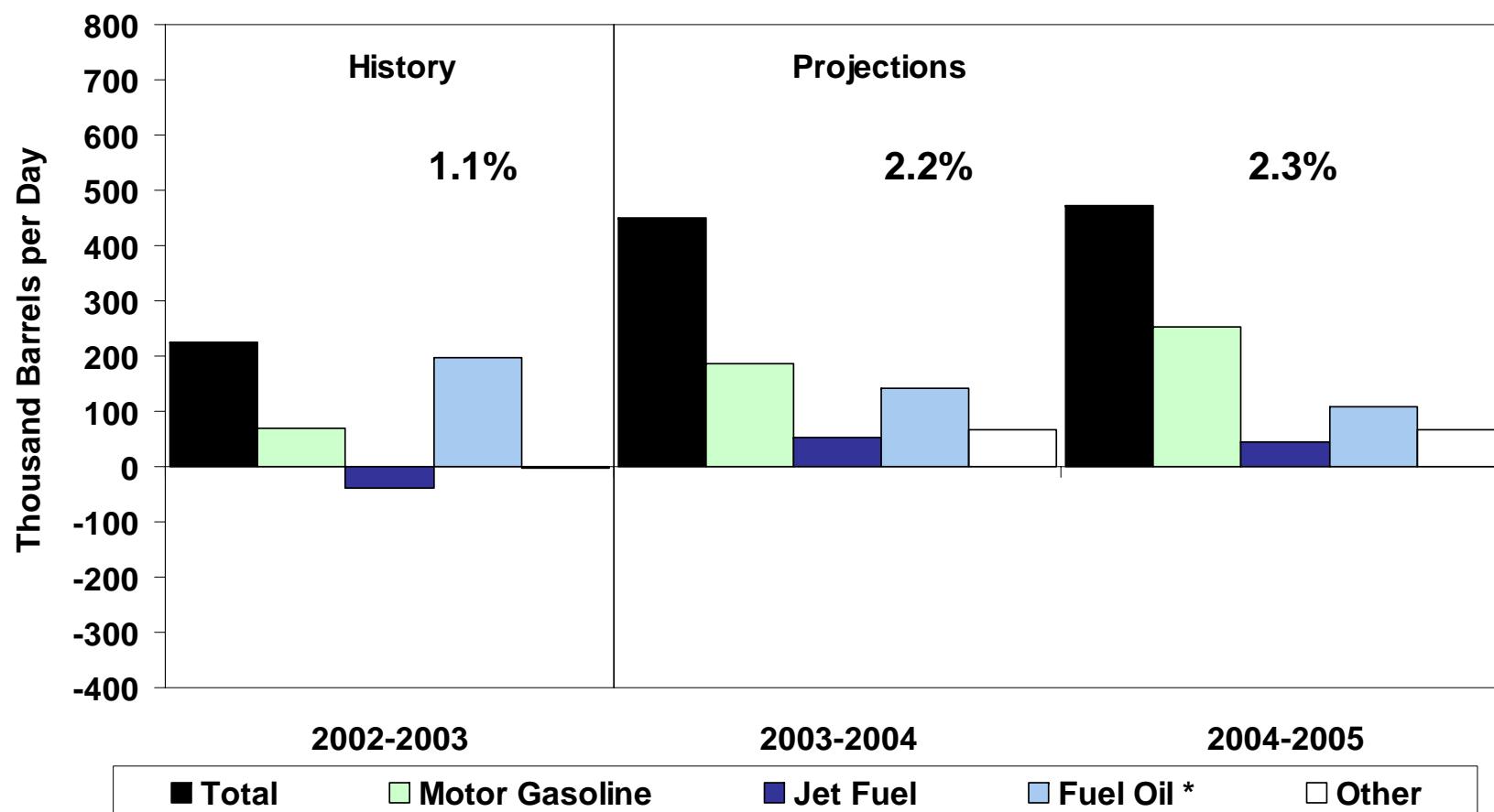
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## Figure 6. World Oil Demand Growth (Change from Year Ago)



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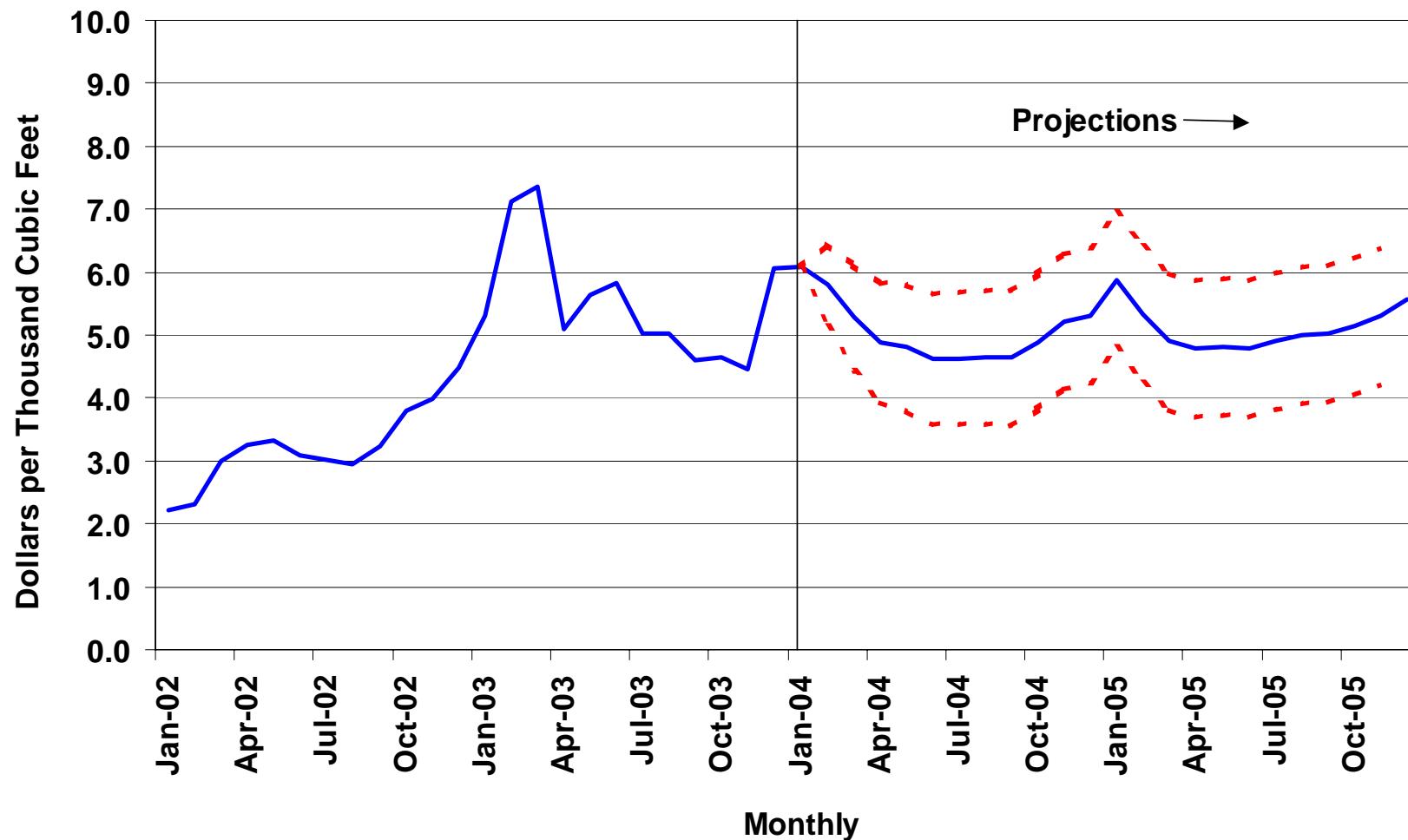
## Figure 7. U.S. Petroleum Products Demand Growth (Change from Year Ago)



\* Sum of distillate and residual fuel.



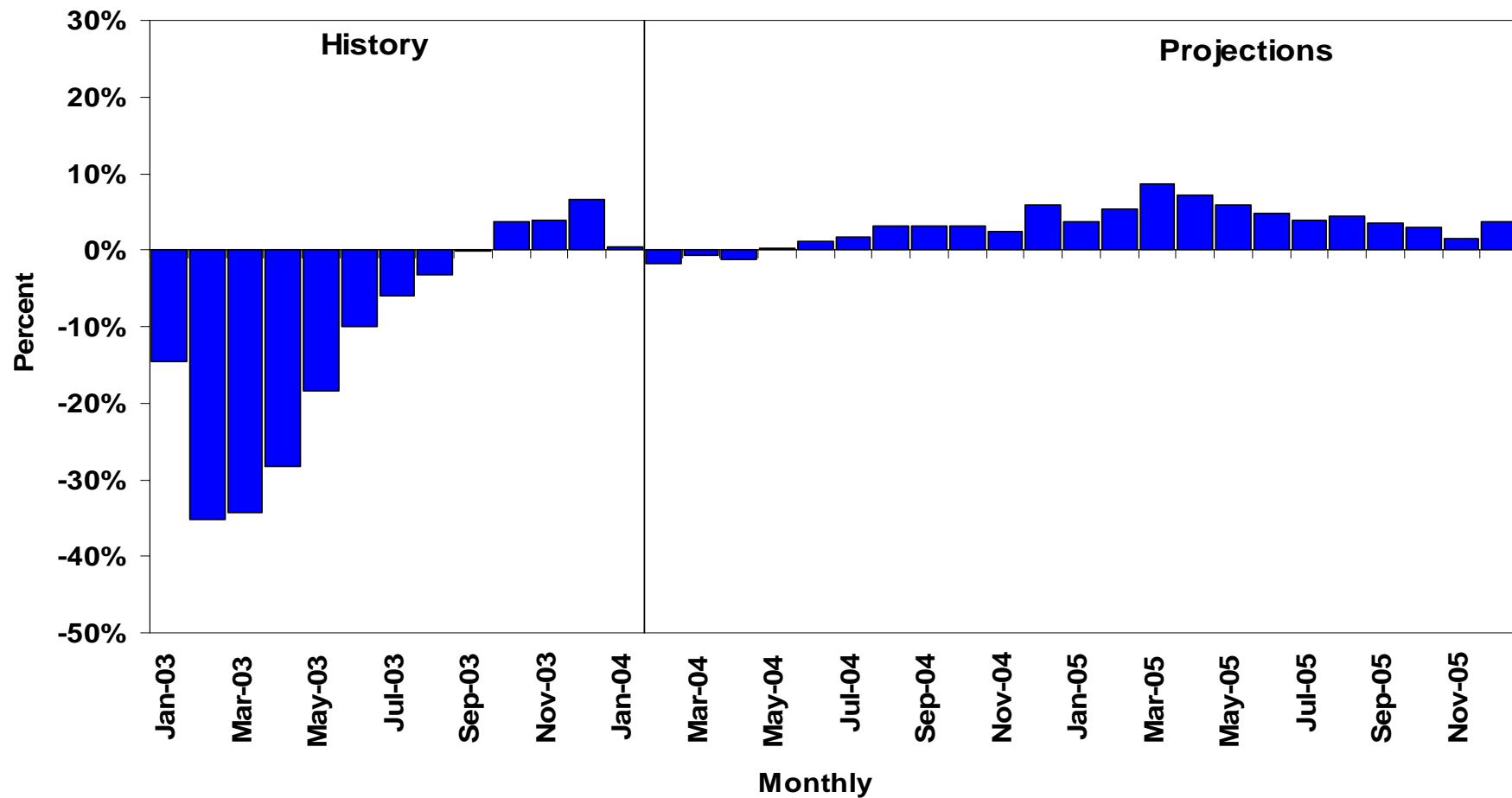
## Figure 8. U.S. Natural Gas Spot Prices (Base Case and 95% Confidence Interval\*)



\*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.

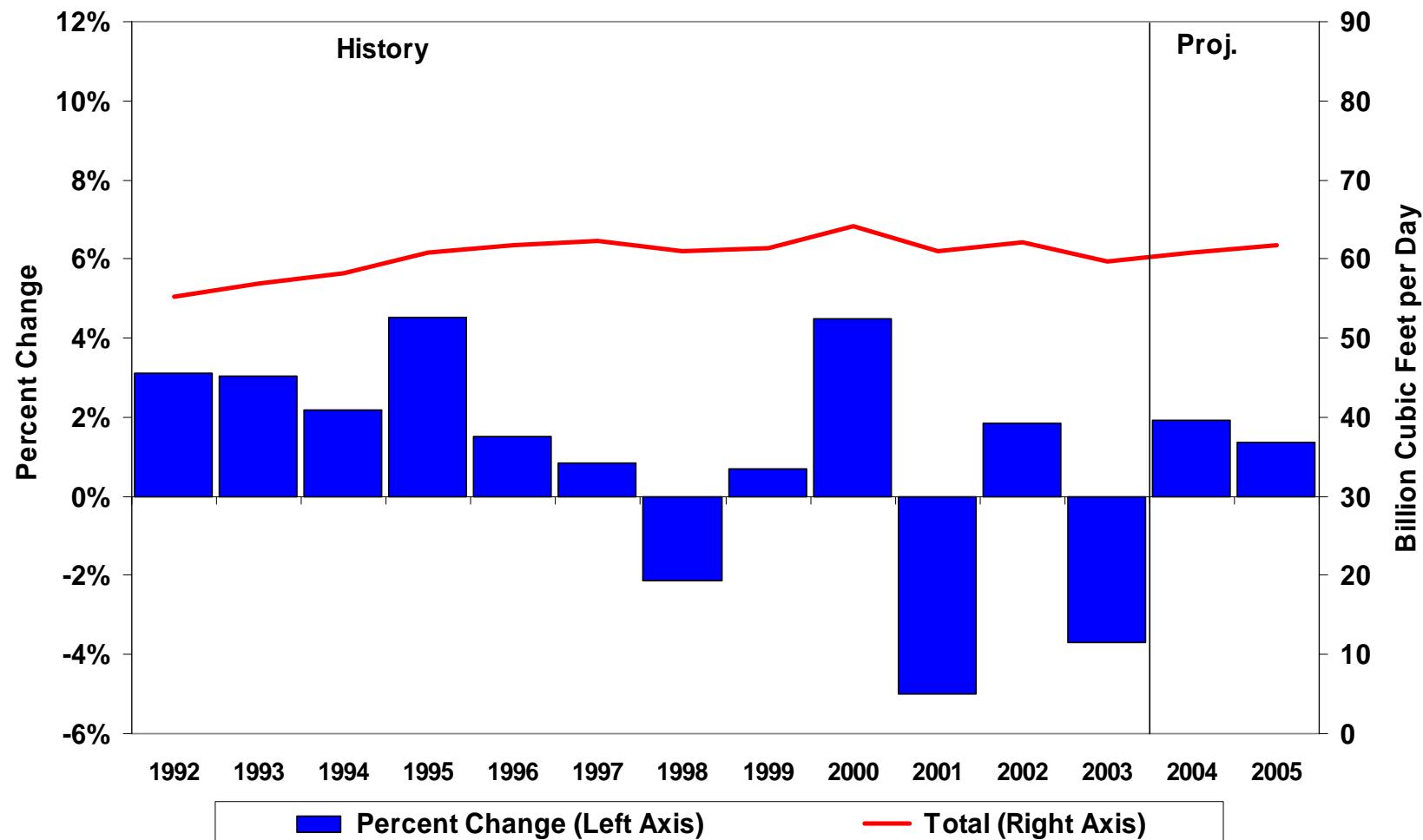
Sources: History: Natural Gas Week; Projections: Short-Term Energy Outlook, February 2004.

## Figure 9. U.S. Working Gas in Storage (Difference from Previous 5-Year Average)



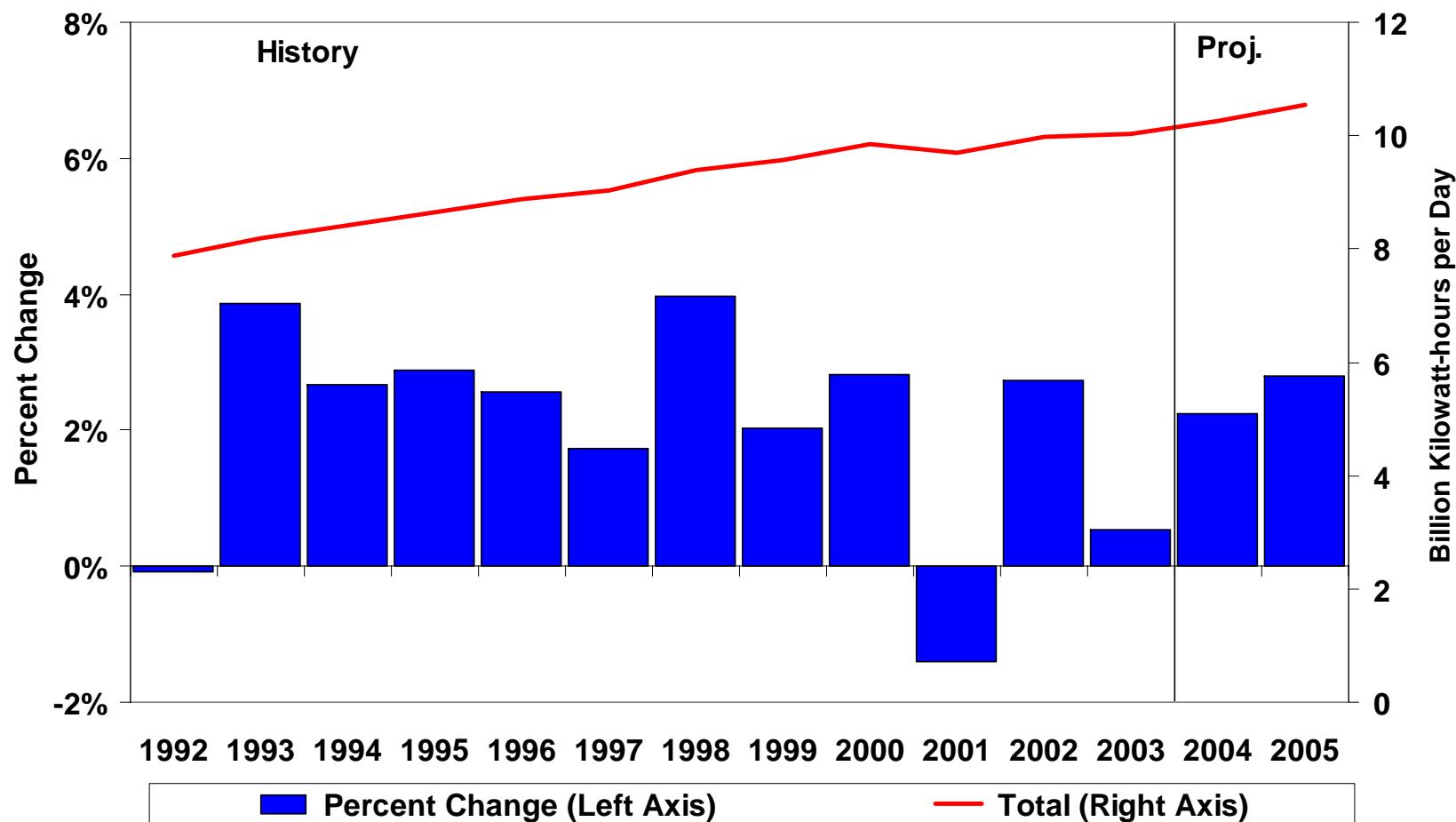
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## Figure 10. Total U.S. Natural Gas Demand Growth Patterns



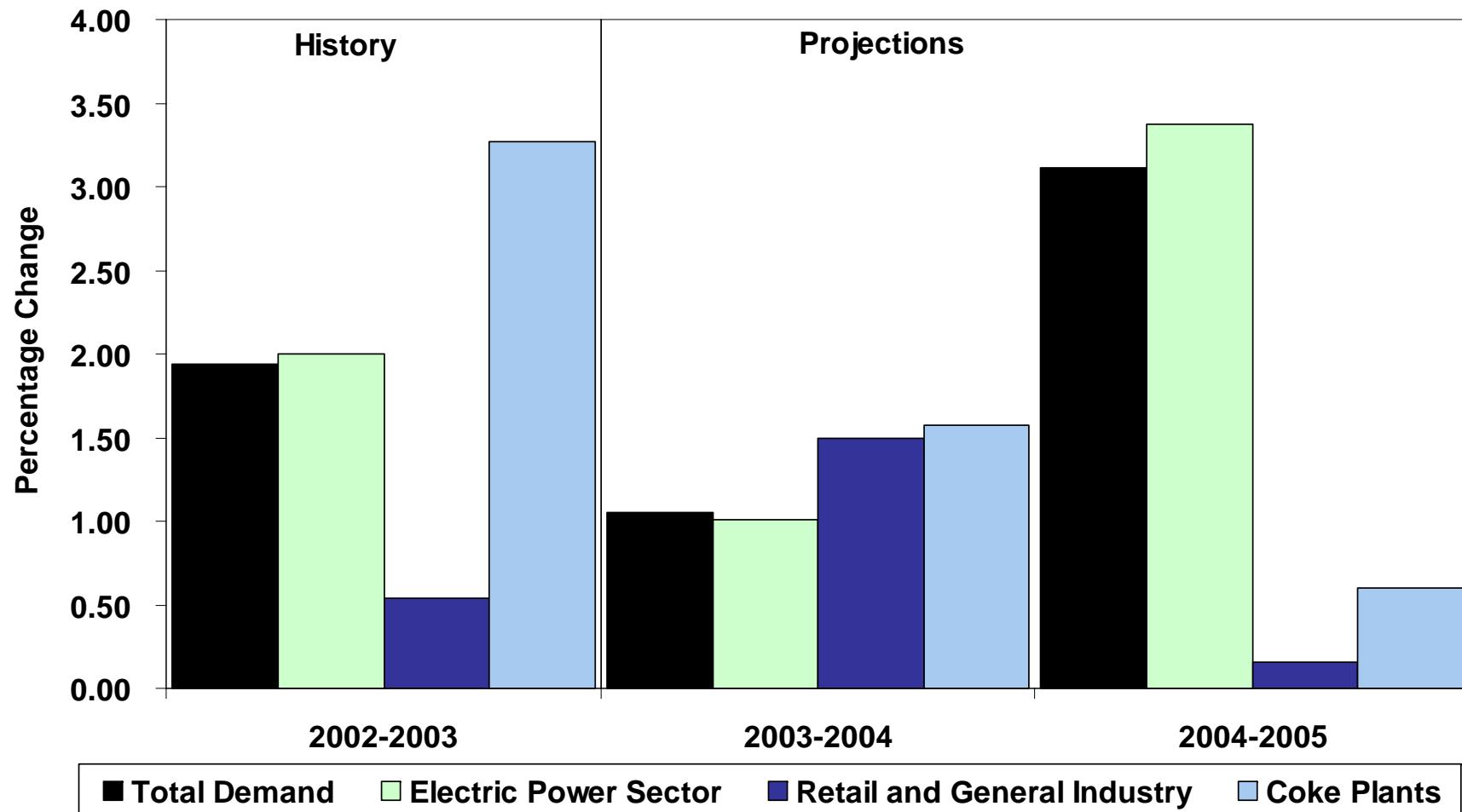
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## Figure 11. Total U.S. Electricity Demand Growth Patterns



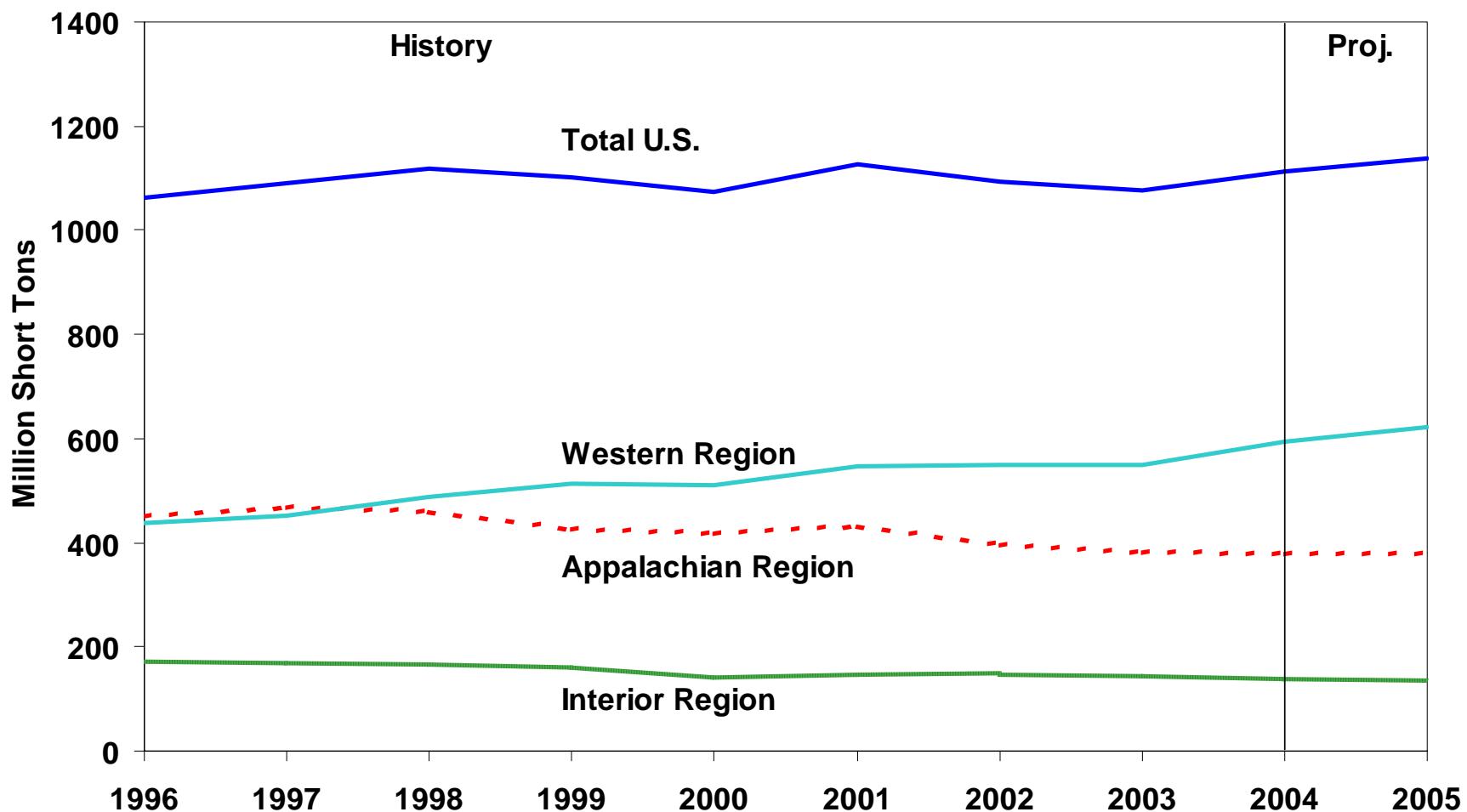
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## Figure 12. U.S. Coal Demand



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## Figure 13. U.S. Coal Production

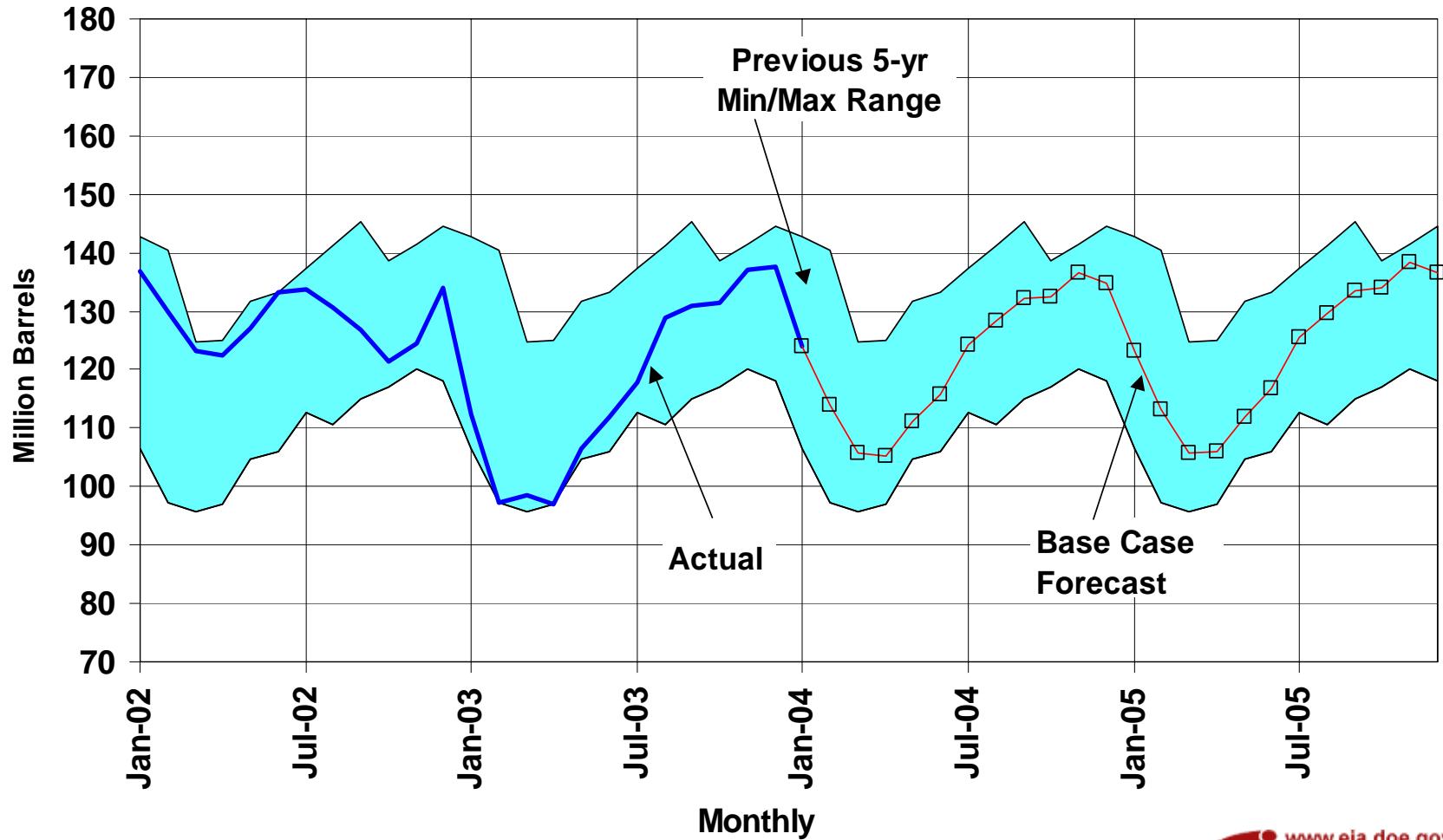


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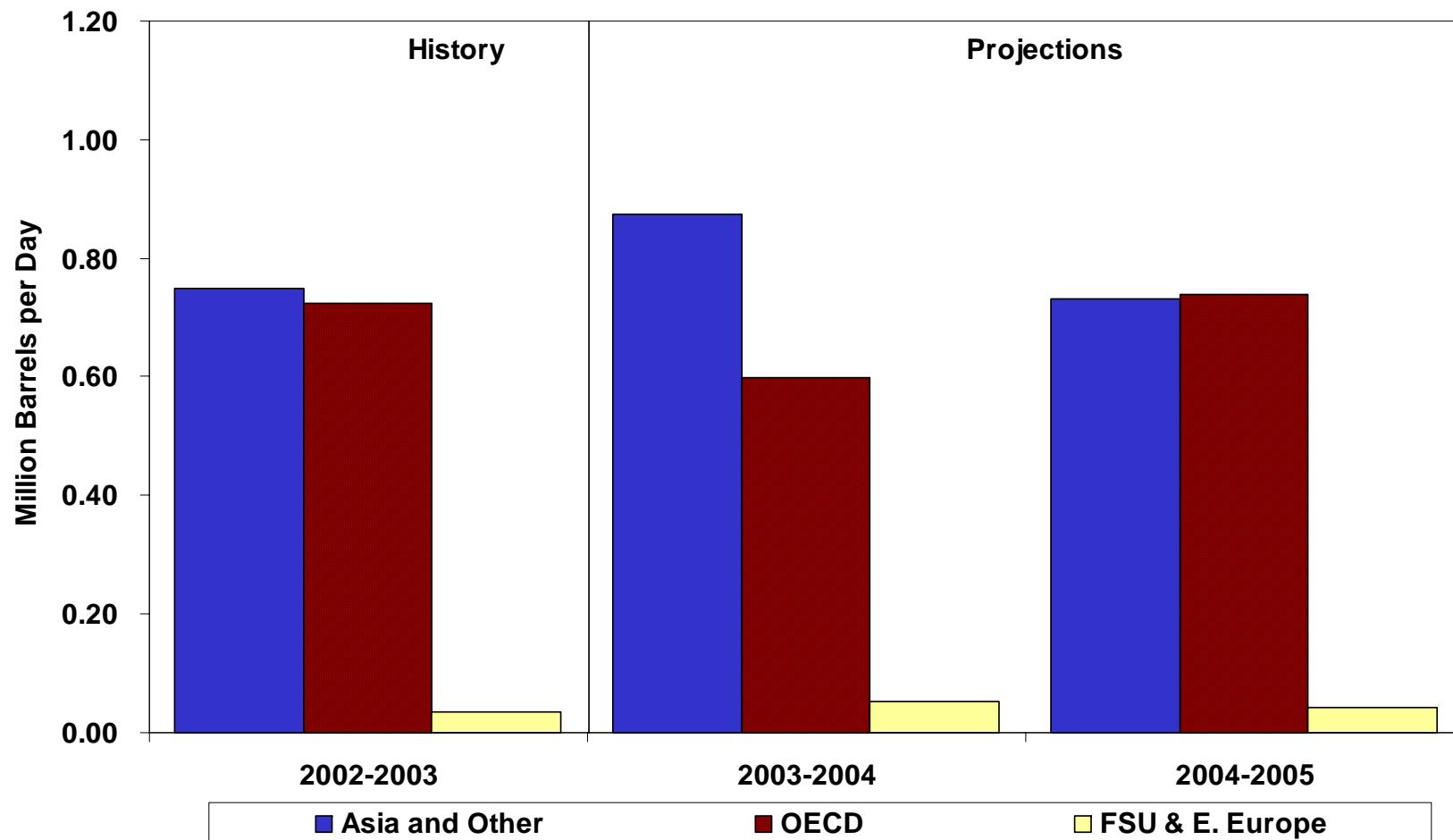
# **Additional Charts**

## Figure 14. U.S. Distillate Fuel Oil Inventories



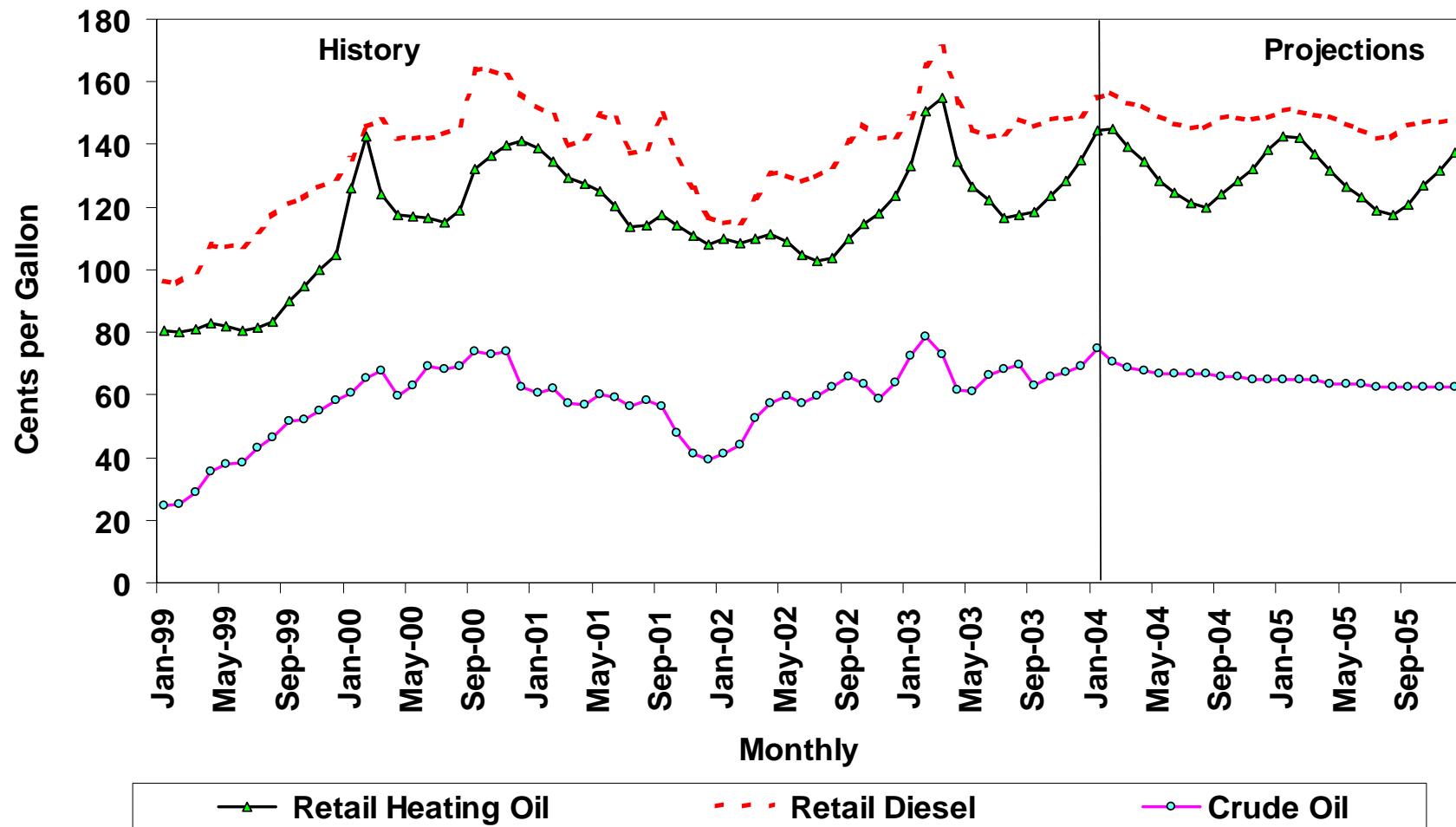
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## Figure 15. World Petroleum Production (Changes from Previous Year)



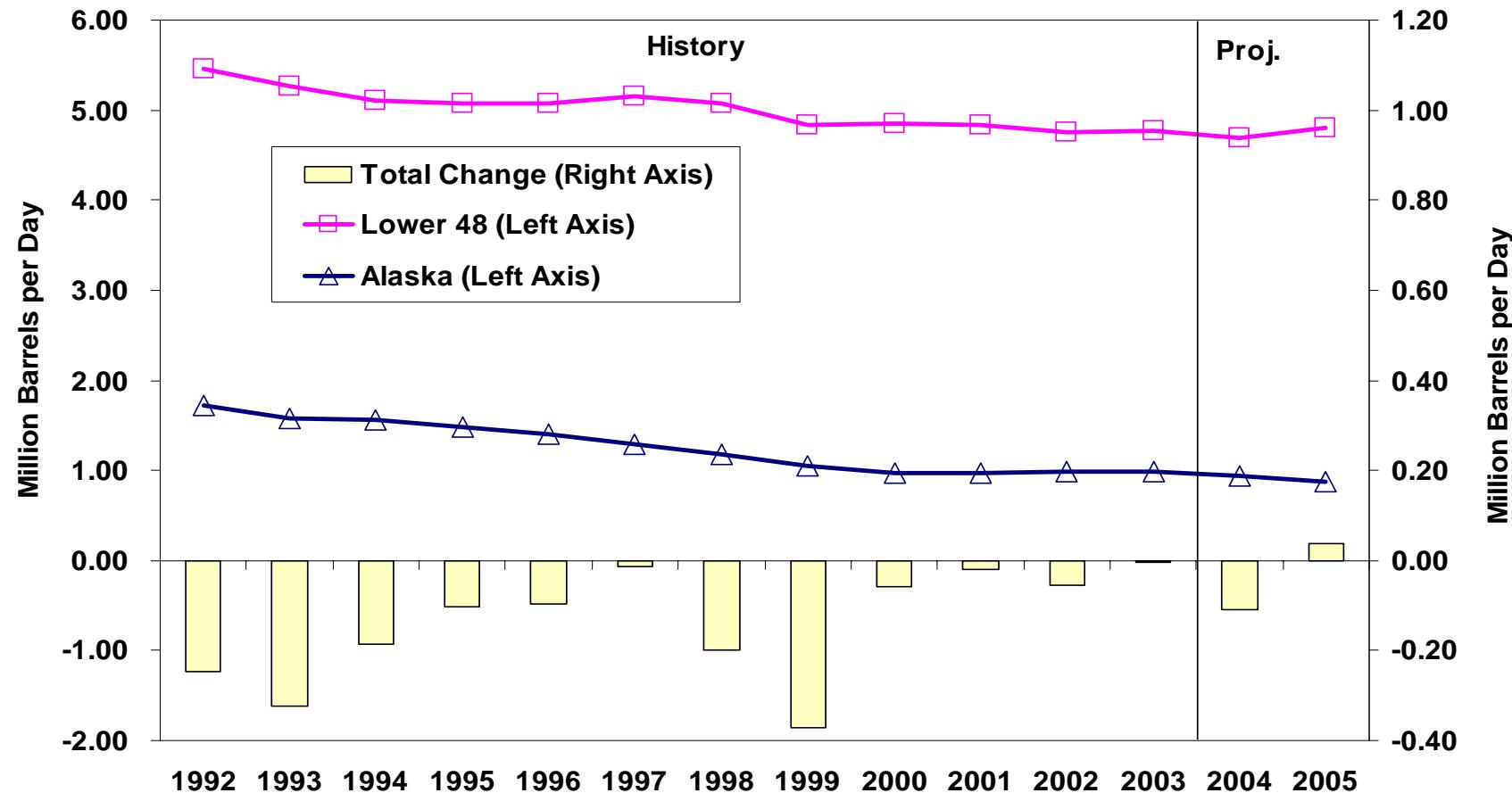
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## Figure 16. U.S. Distillate Fuel Prices



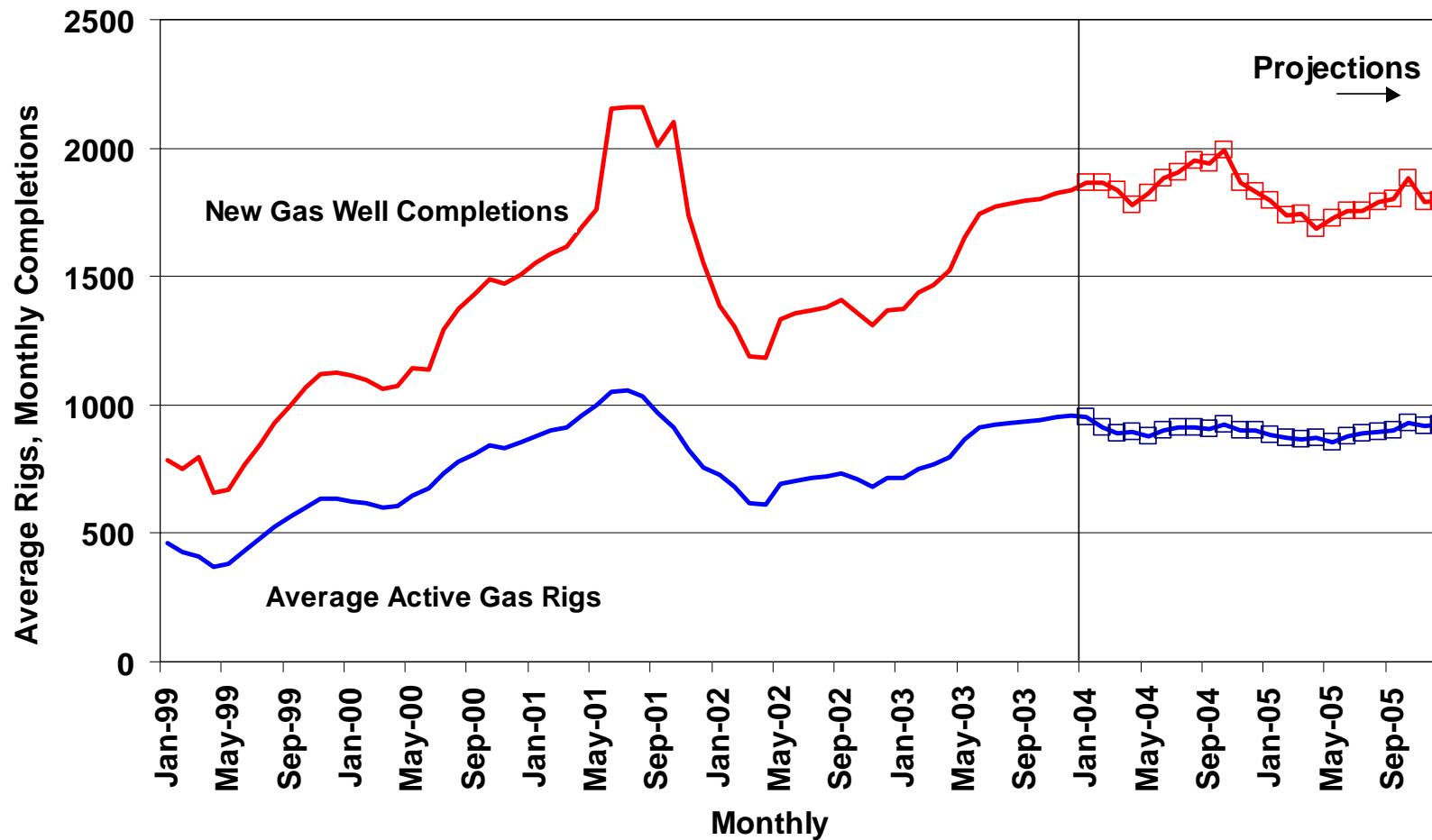
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## Figure 17. U.S. Crude Oil Production Trends



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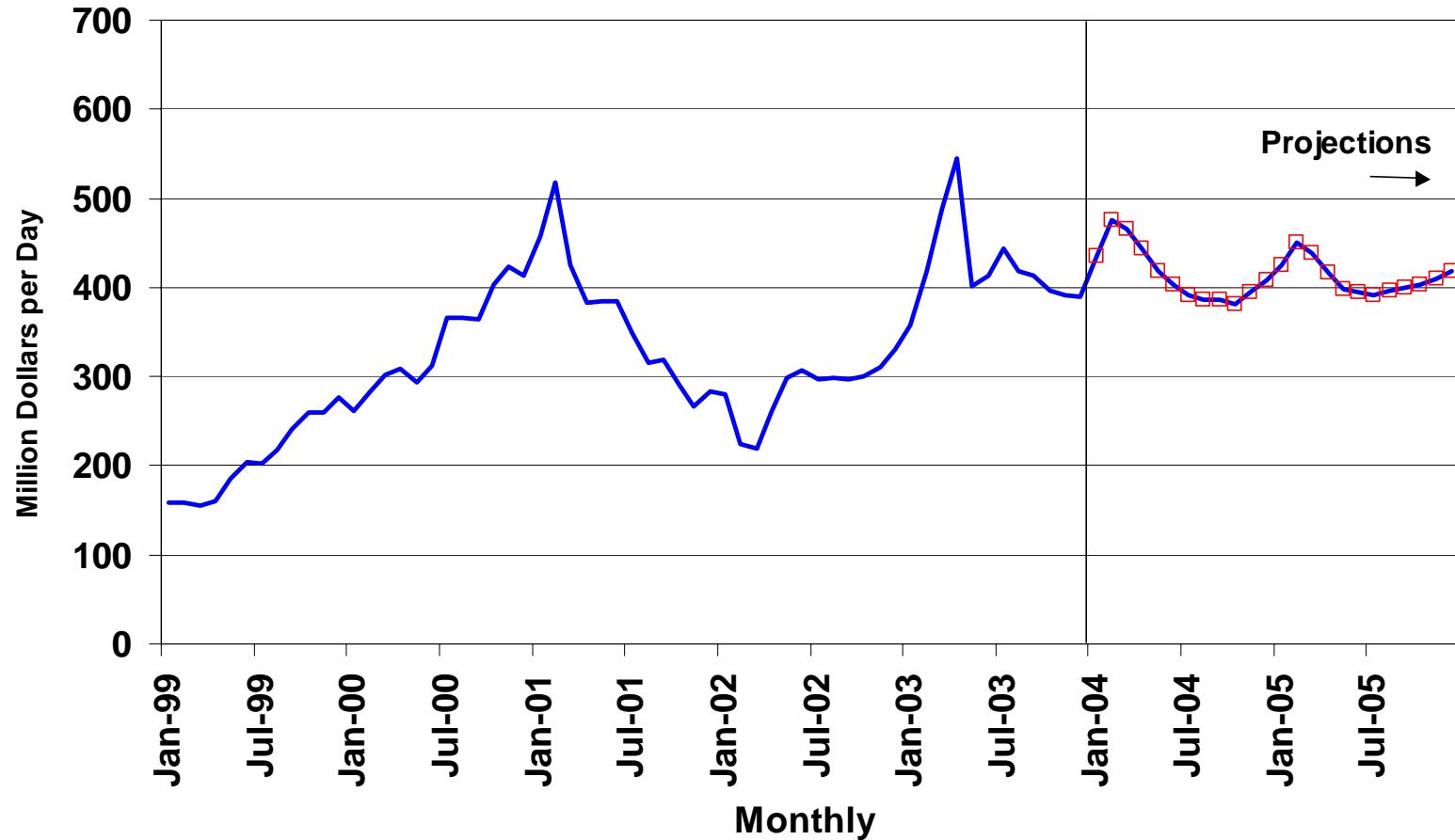
## Figure 18. U.S. Natural Gas-Directed Drilling Activity



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## Figure 19. U.S. Oil and Gas Production Revenues



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**Table HL1. U.S. Energy Supply and Demand: Base Case**

	Year				Annual Percentage Change		
	2002	2003	2004	2005	2002-2003	2003-2004	2004-2005
<b>Real Gross Domestic Product (GDP)</b> (billion chained 2000 dollars) .....	<b>10083</b>	10401	10890	11308	3.2	4.7	3.8
Imported Crude Oil Price <sup>a</sup> (nominal dollars per barrel) .....	<b>23.71</b>	27.74	27.68	25.87	17.0	-0.2	-6.6
<b>Petroleum Supply</b> (million barrels per day) Crude Oil Production <sup>b</sup> .....	<b>5.75</b>	5.74	5.63	5.67	-0.1	-1.9	0.7
Total Petroleum Net Imports (including SPR).....	<b>10.54</b>	11.28	11.65	11.95	7.0	3.3	2.6
<b>Energy Demand</b>							
World Petroleum (million barrels per day).....	<b>77.7</b>	79.0	80.6	82.1	1.7	1.9	1.9
Petroleum (million barrels per day).....	<b>19.76</b>	19.99	20.43	20.91	1.1	2.2	2.3
Natural Gas (trillion cubic feet) .....	<b>22.64</b>	21.80	22.28	22.52	-3.7	2.2	1.1
Coal <sup>c</sup> (million short tons) .....	<b>1066</b>	1087	1098	1133	1.9	1.0	3.1
Electricity (billion kilowatthours) Retail Sales <sup>d</sup> .....	<b>3463</b>	3489	3573	3663	0.8	2.4	2.5
Other Use/Sales <sup>e</sup> .....	<b>177</b>	170	177	182	-3.9	4.4	3.0
Total .....	<b>3639</b>	3658	3751	3845	0.5	2.5	2.5
Total Energy Demand <sup>f</sup> (quadrillion Btu) .....	<b>97.4</b>	97.6	99.7	101.7	0.3	2.1	2.0
Total Energy Demand per Dollar of GDP (thousand Btu per 2000 Dollar) .....	<b>9.65</b>	9.39	9.15	8.99	-2.8	-2.5	-1.7
Renewable Energy as Percent of Total <sup>g</sup> .....	<b>6.4%</b>	6.3%	6.6%	6.7%			

<sup>a</sup>Refers to the refiner acquisition cost (RAC) of imported crude oil.

<sup>b</sup>Includes lease condensate.

<sup>c</sup>Total Demand includes estimated Independent Power Producer (IPP) coal consumption.

<sup>d</sup>Total of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in Energy Information Administration (EIA) *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales for historical periods are reported in EIA's *Electric Sales and Revenue*, Appendix C. Data for 2003 are estimates.

<sup>e</sup>Defined as the sum of facility use of onsite net electricity generation plus direct sales of power by industrial- or commercial-sector generators to third parties, reported annually in Table 7.5 of the *Monthly Energy Review (MER)*. Data for 2003 are estimates.

<sup>f</sup>The conversion from physical units to Btu is calculated by using a subset of conversion factors used in the calculations performed for gross energy consumption in EIA's *MER*. Consequently, the historical data may not precisely match those published in the *MER* or the *Annual Energy Review (AER)*.

<sup>g</sup>Renewable energy includes minor components of non-marketed renewable energy, which is renewable energy that is neither bought nor sold, either directly or indirectly, as inputs to marketed energy. EIA does not estimate or project total consumption of non-marketed renewable energy.

SPR: Strategic Petroleum Reserve.

Notes: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; estimates and forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Latest data available from Bureau of Economic Analysis and Energy Information Administration; latest data available from EIA databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109; *Petroleum Supply Annual*, DOE/EIA-0340/2; *Natural Gas Monthly*, DOE/EIA-0130; *Electric Power Monthly*, DOE/EIA-0226; and *Quarterly Coal Report*, DOE/EIA-0121; *International Petroleum Monthly* DOE/EIA-0520; *Weekly Petroleum Status Report*, DOE/EIA-0208. Macroeconomic projections are based on Global Insight Forecast CONTROL0104.

**Table 1. U.S. Macroeconomic and Weather Assumptions: Base Case**

	2003				2004				2005				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2003	2004	2005
<b>Macroeconomic<sup>a</sup></b>															
Real Gross Domestic Product (billion chained 2000 dollars - SAAR)...	<b>10210</b>	<b>10288</b>	<b>10493</b>	10613	10718	10823	10949	11071	11172	11268	11354	11438	10401	10890	11308
Percentage Change from Prior Year ....	<b>2.1</b>	<b>2.4</b>	<b>3.6</b>	4.5	5.0	5.2	4.3	4.3	4.2	4.1	3.7	3.3	3.2	4.7	3.8
Annualized Percent Change from Prior Quarter .....	<b>2.0</b>	<b>3.1</b>	<b>8.0</b>	4.6	3.9	3.9	4.6	4.5	3.6	3.4	3.1	3.0			
GDP Implicit Price Deflator (Index, 2000=100) .....	<b>105.2</b>	<b>105.4</b>	<b>105.9</b>	106.1	106.5	106.8	107.2	107.6	108.1	108.6	109.0	109.6	105.6	107.0	108.8
Percentage Change from Prior Year ....	<b>1.7</b>	<b>1.6</b>	<b>1.7</b>	1.5	1.3	1.3	1.2	1.4	1.5	1.6	1.7	1.8	1.6	1.3	1.7
Real Disposable Personal Income (billion chained 2000 Dollars - SAAR) ..	<b>7662</b>	<b>7754</b>	<b>7872</b>	7870	7991	8046	8130	8213	8286	8352	8413	8474	7789	8095	8381
Percentage Change from Prior Year ....	<b>1.6</b>	<b>1.7</b>	<b>3.5</b>	3.3	4.3	3.8	3.3	4.4	3.7	3.8	3.5	3.2	2.5	3.9	3.5
Manufacturing Production (Index, 1997=100.0) .....	<b>112.3</b>	<b>111.3</b>	<b>112.5</b>	114.3	116.0	118.0	119.7	121.7	123.7	125.4	126.9	128.4	112.6	118.9	126.1
Percentage Change from Prior Year ....	<b>0.6</b>	<b>-1.3</b>	<b>-0.6</b>	1.8	3.3	6.0	6.4	6.5	6.6	6.3	6.0	5.5	0.1	5.5	6.1
OECD Economic Growth (percent) <sup>b</sup> ...													1.9	2.9	2.8
<b>Weather<sup>c</sup></b>															
Heating Degree-Days															
U.S. ....	<b>2297</b>	<b>607</b>	<b>63</b>	1502	2334	540	109	1630	2245	535	99	1623	4469	4613	4502
New England .....	<b>3504</b>	<b>1144</b>	<b>100</b>	2177	3474	930	195	2275	3223	926	190	2259	6925	6874	6598
Middle Atlantic .....	<b>3207</b>	<b>896</b>	<b>43</b>	1937	3200	743	125	2045	2938	742	126	2050	6083	6113	5856
U.S. Gas-Weighted .....	<b>2464</b>	<b>598</b>	<b>75</b>	1627	2489	590	110	1758	2383	589	110	1758	4764	4947	4840
Cooling Degree-Days (U.S.).....	<b>28</b>	<b>335</b>	<b>821</b>	92	30	351	782	77	34	352	784	76	1276	1240	1247

<sup>a</sup>Macroeconomic projections from Global Insight model forecasts are seasonally adjusted at annual rates and modified as appropriate to the base world oil price case.

<sup>b</sup>OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

<sup>c</sup>Population-weighted degree-days. A degree-day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 2000 population.

SAAR: Seasonally-adjusted annualized rate.

Note: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; estimates and forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, Statistical Release G.17. Projections of OECD growth are based on Global Insight, "World Economic Outlook," Volume 1. Macroeconomic projections are based on Global Insight Forecast CONTROL0104.

**Table 2. U.S. Energy Indicators: Base Case**

	2003				2004				2005				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2003	2004	2005
<b>Macroeconomic<sup>a</sup></b>															
Real Fixed Investment (billion chained 2000 dollars-SAAR) ...	1578	1601	1661	1692	1725	1744	1767	1792	1808	1828	1841	1855	1633	1757	1833
Real Exchange Rate (index) .....	1.050	1.015	1.006	1.005	0.992	0.986	0.979	0.973	0.963	0.955	0.946	0.937	1.019	0.983	0.950
Business Inventory Change (billion chained 2000 dollars-SAAR) ...	-12.2	-15.1	-15.8	-1.5	7.1	11.0	17.7	22.8	23.1	22.0	19.3	17.3	-11.2	14.7	20.5
Producer Price Index (index, 1982=1.000) .....	1.383	1.369	1.377	1.397	1.403	1.398	1.404	1.411	1.418	1.424	1.435	1.445	1.381	1.404	1.430
Consumer Price Index (index, 1982-1984=1.000) .....	1.831	1.834	1.845	1.852	1.860	1.864	1.871	1.880	1.889	1.897	1.906	1.916	1.840	1.869	1.902
Petroleum Product Price Index (index, 1982=1.000) .....	1.074	0.918	0.975	0.893	0.981	0.982	0.934	0.908	0.930	0.942	0.893	0.887	0.965	0.951	0.913
Non-Farm Employment (millions) .....	130.2	130.0	129.9	130.1	130.5	131.5	132.5	133.3	134.2	135.0	135.8	136.3	130.1	132.0	135.3
Commercial Employment (millions) .....	91.5	91.5	91.6	91.9	92.4	93.2	94.1	94.9	95.7	96.4	97.0	97.4	91.7	93.7	96.6
Total Industrial Production (index, 1997=100.0) .....	111.2	110.0	111.1	112.7	114.2	115.9	117.4	119.1	120.7	122.2	123.5	124.8	111.2	116.6	122.8
Housing Stock (millions) .....	116.6	116.9	117.0	117.0	117.2	117.6	117.9	118.3	118.6	118.9	119.3	119.6	116.9	117.8	119.1
<b>Miscellaneous</b>															
Gas Weighted Industrial Production (index, 1997=100.0) .....	100.0	99.0	99.5	101.2	101.7	102.7	103.4	104.4	105.4	106.4	107.1	107.8	99.9	103.1	106.7
Vehicle Miles Traveled <sup>b</sup> (million miles/day) .....	7217	8084	8153	7699	7363	8171	8310	7879	7569	8393	8543	8071	7791	7932	8146
Vehicle Fuel Efficiency (index, 1999=1.000) .....	0.993	1.046	1.037	1.005	0.985	1.037	1.041	1.006	0.967	1.072	1.091	1.031	1.021	1.018	1.040
Real Vehicle Fuel Cost (cents per mile) .....	4.39	4.01	4.22	4.08	4.35	4.29	4.02	3.89	4.02	4.07	3.85	3.77	4.17	4.13	3.92
Air Travel Capacity (mill. available ton-miles/day) .....	454.8	476.0	477.3	488.0	478.5	499.6	513.1	515.7	507.8	520.8	530.8	533.3	474.1	501.8	523.3
Aircraft Utilization (mill. revenue ton-miles/day) .....	244.1	269.4	277.2	266.6	257.8	282.5	294.3	281.8	273.9	295.7	306.2	293.3	264.4	279.1	292.4
Airline Ticket Price Index (index, 1982-1984=1.000) .....	2.252	2.341	2.378	2.281	2.245	2.274	2.292	2.298	2.346	2.369	2.377	2.378	2.313	2.277	2.367
Raw Steel Production (million tons) .....	25.61	25.52	24.29	23.07	22.77	24.99	25.44	24.23	26.52	27.41	27.20	26.24	98.48	97.43	107.37

<sup>a</sup>Macroeconomic projections from Global Insight model forecasts are seasonally adjusted at annual rates and modified as appropriate to the base world oil price case.

<sup>b</sup>Includes all highway travel.

SAAR: Seasonally-adjusted annualized rate.

Note: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; estimates and forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

**Table 3. International Petroleum Supply and Demand: Base Case**  
 (Million Barrels per Day, Except OECD Commercial Stocks)

	2003				2004				2005				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2003	2004	2005
<b>Demand<sup>a</sup></b>															
OECD															
U.S. (50 States) .....	<b>20.0</b>	<b>19.7</b>	20.3	20.0	20.3	20.2	20.5	20.7	20.8	20.7	21.0	21.1	20.0	20.4	20.9
U.S. Territories.....	<b>0.3</b>	<b>0.3</b>	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.4
Canada .....	<b>2.2</b>	<b>2.1</b>	2.1	2.2	2.1	2.1	2.3	2.2	2.2	2.1	2.3	2.3	2.2	2.2	2.2
Europe .....	<b>15.2</b>	<b>15.0</b>	15.3	15.6	15.6	14.6	15.2	15.9	15.7	14.7	15.3	16.0	15.3	15.3	15.5
Japan .....	<b>6.2</b>	<b>5.0</b>	4.9	5.7	6.0	4.9	5.2	5.6	6.0	4.9	5.2	5.6	5.4	5.4	5.4
Other OECD.....	<b>5.4</b>	<b>5.1</b>	5.1	5.5	5.3	5.0	5.3	5.6	5.4	5.1	5.4	5.7	5.3	5.3	5.4
Total OECD.....	<b>49.3</b>	<b>47.2</b>	48.0	49.2	49.8	47.2	48.8	50.3	50.5	47.9	49.6	51.0	48.4	49.0	49.8
Non-OECD															
Former Soviet Union .....	<b>4.0</b>	<b>3.4</b>	3.7	4.5	4.1	3.5	3.7	4.6	4.1	3.5	3.8	4.6	3.9	4.0	4.0
Europe .....	<b>0.7</b>	<b>0.7</b>	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
China.....	<b>5.5</b>	<b>5.7</b>	5.6	5.7	5.9	6.1	5.9	6.1	6.2	6.4	6.3	6.5	5.6	6.0	6.3
Other Asia.....	<b>7.9</b>	<b>7.9</b>	8.0	8.3	8.1	8.1	8.2	8.5	8.3	8.3	8.4	8.7	8.0	8.2	8.5
Other Non-OECD.....	<b>12.1</b>	<b>12.3</b>	12.4	12.4	12.4	12.6	12.7	12.7	12.6	12.8	12.9	12.9	12.3	12.6	12.8
Total Non-OECD.....	<b>30.3</b>	<b>30.0</b>	30.4	31.8	31.3	31.0	31.3	32.6	32.0	31.8	32.1	33.4	30.6	31.6	32.3
Total World Demand .....	<b>79.7</b>	<b>77.2</b>	78.4	81.0	81.1	78.2	80.1	82.9	82.6	79.7	81.7	84.4	79.0	80.6	82.1
<b>Supply<sup>b</sup></b>															
OECD															
U.S. (50 States) .....	<b>9.0</b>	<b>8.8</b>	8.8	8.8	8.9	8.8	8.7	8.9	8.9	8.8	8.9	9.0	8.8	8.8	8.9
Canada .....	<b>3.0</b>	<b>3.0</b>	3.2	3.3	3.3	3.1	3.2	3.3	3.2	3.2	3.3	3.4	3.1	3.2	3.3
Mexico.....	<b>3.8</b>	<b>3.8</b>	3.9	3.9	3.8	3.9	4.0	3.9	4.0	4.0	4.0	3.9	3.8	3.9	4.0
North Sea <sup>c</sup> .....	<b>6.3</b>	<b>5.8</b>	5.7	6.0	6.0	5.6	5.7	6.0	5.9	5.6	5.7	6.0	5.8	5.8	5.8
Other OECD.....	<b>1.6</b>	<b>1.6</b>	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Total OECD.....	<b>23.6</b>	<b>22.9</b>	23.1	23.6	23.6	23.1	23.2	23.6	23.6	23.2	23.6	23.9	23.3	23.4	23.6
Non-OECD															
OPEC.....	<b>30.1</b>	<b>30.1</b>	30.3	31.1	30.8	30.0	30.2	30.3	30.5	30.7	30.9	30.9	30.4	30.3	30.8
Crude Oil Portion .....	<b>26.9</b>	<b>26.7</b>	26.8	27.8	27.5	26.7	26.8	27.0	27.2	27.4	27.6	27.6	27.0	27.0	27.4
Former Soviet Union .....	<b>9.9</b>	<b>10.1</b>	10.4	10.7	10.8	10.9	11.1	11.2	11.5	11.7	11.9	12.0	10.3	11.0	11.8
China.....	<b>3.4</b>	<b>3.4</b>	3.4	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.4	3.4	3.4	3.4	3.4
Other Non-OECD.....	<b>11.4</b>	<b>11.5</b>	11.6	11.9	12.2	12.0	12.2	12.4	12.2	12.3	12.5	12.7	11.6	12.2	12.4
Total Non-OECD.....	<b>54.8</b>	<b>55.1</b>	55.8	57.2	57.2	56.4	56.9	57.4	57.5	58.0	58.7	58.9	55.7	57.0	58.3
Total World Supply.....	<b>78.4</b>	<b>78.0</b>	78.9	80.8	80.8	79.4	80.1	81.0	81.1	81.3	82.3	82.9	79.0	80.3	81.9
Additional Unaccounted for Supply.....	<b>0.3</b>	<b>0.3</b>	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR).....	<b>0.8</b>	<b>-0.9</b>	-0.4	0.2	0.2	-0.8	-0.3	0.2	0.0	-0.7	-0.1	0.4	-0.1	-0.2	-0.1
Other .....	<b>0.1</b>	<b>-0.2</b>	-0.5	-0.3	-0.3	-0.7	0.0	1.4	1.1	-1.2	-0.8	0.9	-0.2	0.1	0.0
Total Stock Withdrawals .....	<b>1.0</b>	<b>-1.1</b>	-0.9	-0.1	-0.1	-1.5	-0.3	1.6	1.1	-1.9	-0.9	1.3	-0.3	-0.1	-0.1
OECD Comm. Stocks, End (bill. bbls.) ...	<b>2.4</b>	<b>2.5</b>	2.6	2.5	2.5	2.6	2.6	2.5	2.4	2.6	2.6	2.5	2.5	2.5	2.5
Non-OPEC Supply .....	<b>48.3</b>	<b>48.0</b>	48.6	49.7	50.0	49.4	50.0	50.7	50.6	50.6	51.4	51.9	48.6	50.0	51.1

<sup>a</sup>Demand for petroleum by the OECD countries is synonymous with "petroleum product supplied," which is defined in the glossary of the EIA *Petroleum Supply Monthly*, DOE/EIA-0109. Demand for petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel and loss, and bunkering.

<sup>b</sup>Includes production of crude oil (including lease condensates), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gains, alcohol, and liquids produced from coal and other sources.

<sup>c</sup>Includes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

OPEC: Organization of Petroleum Exporting Countries: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

SPR: Strategic Petroleum Reserve

Former Soviet Union: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Notes: Minor discrepancies with other published EIA historical data are due to rounding. Historical data are printed in bold; estimates and forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: EIA: latest data available from EIA databases supporting the following reports: *International Petroleum Monthly*, DOE/EIA-0520; Organization for Economic Cooperation and Development, Annual and Monthly Oil Statistics Database.

**Table 3a. OPEC Oil Production**  
(Thousand Barrels per Day)

	Current	04/01/2004	December 2003	January 2004		
	OPEC 10 Quota	OPEC 10 Quota	Production	Production	Capacity	Surplus Capacity
Algeria .....	782	750	1,200	1,200	1,200	0
Indonesia .....	1,270	1,218	985	980	980	0
Iran .....	3,597	3,450	3,800	3,800	3,800	0
Kuwait .....	1,966	1,886	2,200	2,200	2,200	0
Libya .....	1,312	1,258	1,420	1,420	1,420	0
Nigeria .....	2,018	1,936	2,275	2,300	2,300	0
Qatar .....	635	609	750	750	850	100
Saudi Arabia .....	7,963	7,638	8,600	8,700	10,000 - 10,500	1,300 - 1,800
United Arab Emirates .....	2,138	2,051	2,250	2,250	2,500	250
Venezuela .....	2,819	2,704	2,500	2,450	2,450	0
OPEC 10 .....	24,500	23,500	25,980	26,050	27,700 - 28,200	1,650 - 2,150
Iraq .....			1,950	2,100	2,100	0
<b>Crude Oil Total</b> .....			27,930	28,150	29,800 - 30,300	1,650 - 2,150
<b>Other Liquids</b> .....			3,705	3,730		
<b>Total OPEC Supply</b> .....			31,635	31,880		

Notes: Crude oil does not include lease condensate or natural gas liquids. Quotas are based on crude oil production only. "Capacity" refers to maximum sustainable production capacity, defined as the maximum amount of production that: 1) could be brought online within a period of 30 days; and 2) sustained for at least 90 days. Kuwaiti and Saudi Arabian figures each include half of the production from the Neutral Zone between the two countries. Saudi Arabian production also includes oil produced from its offshore Abu Safa field on behalf of Bahrain. The amount of Saudi Arabian spare capacity that can be brought online is shown as a range, because a short delay may be needed to achieve the higher level. The United Arab Emirates (UAE) is a federation of seven emirates. The quota applies only to the emirate of Abu Dhabi, which controls the vast majority of the UAE's economic and resource wealth. Venezuelan capacity and production numbers exclude extra heavy crude oil used to make Orimulsion. OPEC: Organization of Petroleum Exporting Countries: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. OPEC 10 refers to all OPEC less Iraq. Iraqi production and exports have not been a part of any recent OPEC agreements. Iraq's current production number in this table is net of re-injection and water cut. Latest estimated gross production is about 2.2 to 2.3 million barrels per day, based on a 3-day moving average. Other liquids include lease condensate, natural gas liquids, and other liquids including volume gains from refinery processing.

**Table 4. U.S. Energy Prices: Base Case**  
(Nominal Dollars)

	2003				2004				2005				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2003	2004	2005
<b>Crude Oil Prices</b> (dollars per barrel)															
Imported Average <sup>a</sup> .....	<b>30.58</b>	<b>25.58</b>	<b>27.37</b>	27.80	29.39	27.47	27.29	26.67	26.50	26.00	25.50	25.50	27.74	27.68	25.87
WTI <sup>b</sup> Spot Average .....	<b>34.10</b>	<b>28.98</b>	<b>30.21</b>	31.19	32.44	30.17	29.83	29.17	29.00	28.50	28.00	28.00	31.12	30.40	28.38
<b>Natural Gas</b> (dollars per thousand cubic feet)															
Average Wellhead.....	<b>5.54</b>	<b>5.01</b>	<b>4.74</b>	4.62	5.39	4.54	4.33	4.75	5.13	4.53	4.65	4.96	4.98	4.75	4.82
Composite Spot .....	<b>6.58</b>	<b>5.52</b>	<b>4.88</b>	5.06	5.71	4.77	4.64	5.14	5.37	4.80	4.98	5.34	5.51	5.07	5.12
<b>Petroleum Products</b>															
Gasoline Retail <sup>c</sup> (dollars per gallon)															
All Grades .....	<b>1.63</b>	<b>1.57</b>	<b>1.64</b>	1.56	1.66	1.69	1.59	1.50	1.53	1.63	1.55	1.47	1.60	1.61	1.55
Regular Unleaded .....	<b>1.59</b>	<b>1.52</b>	<b>1.60</b>	1.52	1.62	1.66	1.56	1.46	1.49	1.60	1.51	1.43	1.56	1.57	1.51
No. 2 Diesel Oil, Retail (dollars per gallon) .....	<b>1.62</b>	<b>1.47</b>	<b>1.46</b>	1.48	1.55	1.49	1.47	1.49	1.50	1.47	1.43	1.47	1.51	1.50	1.47
No. 2 Heating Oil, Wholesale (dollars per gallon) .....	<b>1.00</b>	<b>0.78</b>	<b>0.80</b>	0.87	0.91	0.83	0.81	0.85	0.87	0.80	0.78	0.83	0.88	0.86	0.83
No. 2 Heating Oil, Retail (dollars per gallon) .....	<b>1.45</b>	<b>1.28</b>	<b>1.18</b>	1.30	1.43	1.29	1.22	1.34	1.41	1.27	1.19	1.33	1.32	1.33	1.31
No. 6 Residual Fuel Oil, Retail <sup>d</sup> (dollars per barrel).....	<b>33.71</b>	<b>26.66</b>	<b>28.76</b>	28.34	31.83	28.47	27.72	28.04	27.84	25.72	25.40	26.50	29.55	29.16	26.41
<b>Electric Power Sector</b> (dollars per million Btu)															
Coal.....	<b>1.27</b>	<b>1.29</b>	<b>1.27</b>	1.26	1.29	1.30	1.29	1.28	1.31	1.32	1.30	1.30	1.27	1.29	1.31
Heavy Fuel Oil <sup>e</sup> .....	<b>5.05</b>	<b>4.76</b>	<b>4.52</b>	4.16	4.52	4.40	4.39	4.39	4.40	4.28	4.24	4.28	4.63	4.43	4.30
Natural Gas.....	<b>6.13</b>	<b>5.52</b>	<b>5.11</b>	4.78	6.26	5.01	4.83	5.41	5.66	5.00	5.14	5.56	5.34	5.29	5.29
<b>Other Residential</b>															
Natural Gas (dollars per thousand cubic feet).....	<b>8.63</b>	<b>10.52</b>	<b>12.45</b>	9.36	9.66	10.58	11.76	9.61	9.55	10.40	11.80	9.75	9.41	9.95	9.91
Electricity (cents per kilowatthour).....	<b>8.08</b>	<b>9.02</b>	<b>9.09</b>	8.45	8.32	8.99	9.17	8.74	8.46	9.02	9.19	8.77	8.67	8.80	8.86

<sup>a</sup>Refiner acquisition cost (RAC) of imported crude oil.

<sup>b</sup>West Texas Intermediate.

<sup>c</sup>Average self-service cash prices.

<sup>d</sup>Average for all sulfur contents.

<sup>e</sup>Includes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. Minor discrepancies with other published EIA historical data are due to rounding. Historical data are printed in bold; estimates and forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: EIA: latest data available from EIA databases supporting the following reports: *Petroleum Marketing Monthly*, DOE/EIA-0380; *Natural Gas Monthly*, DOE/EIA-0130; *Monthly Energy Review*, DOE/EIA-0035; *Electric Power Monthly*, DOE/EIA-0226.

**Table 5. U.S. Petroleum Supply and Demand: Base Case**  
 (Million Barrels per Day, Except Closing Stocks)

	2003				2004				2005				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2003	2004	2005
<b>Supply</b>															
Crude Oil Supply															
Domestic Production <sup>a</sup>	<b>5.88</b>	<b>5.78</b>	<b>5.65</b>	5.65	5.70	5.63	5.53	5.67	5.66	5.59	5.69	5.73	5.74	5.63	5.67
Alaska	<b>1.01</b>	<b>0.98</b>	<b>0.94</b>	0.98	0.98	0.92	0.87	0.97	0.93	0.86	0.84	0.86	0.98	0.94	0.87
Lower 48	<b>4.87</b>	<b>4.80</b>	<b>4.71</b>	4.67	4.72	4.71	4.66	4.70	4.73	4.73	4.85	4.88	4.76	4.70	4.80
Net Commercial Imports <sup>b</sup>	<b>8.78</b>	<b>10.02</b>	<b>10.23</b>	9.69	9.49	10.20	10.11	9.72	9.71	10.54	10.29	9.89	9.68	9.88	10.11
Net SPR Withdrawals	-0.13	-0.16	-0.14	-0.15	-0.09	-0.15	-0.10	-0.12	-0.12	-0.08	0.00	0.00	-0.14	-0.11	-0.05
Net Commercial Withdrawals	-0.04	-0.02	-0.01	0.17	-0.22	-0.06	0.17	0.01	-0.20	-0.02	0.18	0.01	0.02	-0.02	-0.01
Product Supplied and Losses	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaccounted-for Crude Oil	<b>0.06</b>	<b>0.10</b>	<b>-0.17</b>	0.00	0.03	0.19	0.17	0.12	0.17	0.18	0.16	0.12	-0.01	0.13	0.16
Total Crude Oil Supply	<b>14.56</b>	<b>15.71</b>	<b>15.56</b>	15.35	14.92	15.82	15.88	15.40	15.22	16.22	16.32	15.74	15.30	15.51	15.88
Other Supply															
NGL Production	<b>1.76</b>	<b>1.61</b>	<b>1.71</b>	1.81	1.83	1.83	1.80	1.86	1.92	1.85	1.78	1.85	1.72	1.83	1.85
Other Hydrocarbon and Alcohol Inputs	<b>0.44</b>	<b>0.42</b>	<b>0.44</b>	0.39	0.40	0.40	0.42	0.42	0.41	0.42	0.44	0.44	0.42	0.41	0.42
Crude Oil Product Supplied	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Processing Gain	<b>0.89</b>	<b>0.96</b>	<b>1.00</b>	0.96	0.93	0.95	0.95	0.96	0.95	0.96	0.97	0.97	0.95	0.95	0.96
Net Product Imports <sup>c</sup>	<b>1.50</b>	<b>1.77</b>	<b>1.79</b>	1.33	1.72	1.85	1.78	1.70	1.95	1.83	1.82	1.77	1.60	1.76	1.84
Product Stock Withdrawn or Added (-)	<b>0.86</b>	<b>-0.80</b>	<b>-0.18</b>	0.13	0.54	-0.64	-0.33	0.34	0.37	-0.62	-0.30	0.37	0.00	-0.02	-0.05
Total Supply	<b>20.01</b>	<b>19.67</b>	<b>20.32</b>	19.97	20.35	20.22	20.49	20.69	20.81	20.66	21.03	21.14	19.99	20.44	20.91
<b>Demand</b>															
Motor Gasoline	<b>8.49</b>	<b>9.03</b>	<b>9.18</b>	8.95	8.73	9.20	9.33	9.15	8.94	9.44	9.63	9.41	8.92	9.10	9.36
Jet Fuel	<b>1.54</b>	<b>1.51</b>	<b>1.61</b>	1.62	1.55	1.59	1.66	1.70	1.63	1.63	1.69	1.73	1.57	1.63	1.67
Distillate Fuel Oil	<b>4.22</b>	<b>3.80</b>	<b>3.74</b>	3.91	4.27	3.88	3.83	4.14	4.38	3.98	3.94	4.25	3.92	4.03	4.14
Residual Fuel Oil	<b>0.86</b>	<b>0.72</b>	<b>0.78</b>	0.68	0.91	0.72	0.70	0.81	0.85	0.72	0.76	0.83	0.76	0.78	0.79
Other Oils <sup>d</sup>	<b>4.90</b>	<b>4.60</b>	<b>4.97</b>	4.81	4.88	4.83	4.96	4.88	5.01	4.89	5.00	4.91	4.82	4.89	4.95
Total Demand	<b>20.01</b>	<b>19.67</b>	<b>20.29</b>	19.97	20.35	20.22	20.49	20.69	20.81	20.65	21.02	21.13	19.99	20.43	20.91
<b>Total Petroleum Net Imports</b>	<b>10.28</b>	<b>11.78</b>	<b>12.02</b>	11.02	11.22	12.05	11.89	11.43	11.66	12.38	12.11	11.65	11.28	11.65	11.95
<b>Closing Stocks (million barrels)</b>															
Crude Oil (excluding SPR)	<b>282</b>	<b>284</b>	<b>284</b>	269	289	294	279	278	296	297	281	280	269	278	280
Total Motor Gasoline	<b>200</b>	<b>206</b>	<b>196</b>	207	198	204	199	206	210	215	206	208	207	206	208
Finished Motor Gasoline	<b>145</b>	<b>153</b>	<b>145</b>	148	137	147	144	152	150	158	150	154	148	152	154
Blending Components	<b>55</b>	<b>53</b>	<b>51</b>	59	61	57	56	55	60	57	55	55	59	55	55
Jet Fuel	<b>37</b>	<b>38</b>	<b>39</b>	38	37	40	41	40	38	40	42	41	38	40	41
Distillate Fuel Oil	<b>99</b>	<b>112</b>	<b>131</b>	138	106	116	132	135	106	117	134	137	138	135	137
Residual Fuel Oil	<b>32</b>	<b>36</b>	<b>32</b>	39	35	36	37	37	35	36	38	39	39	37	39
Other Oils <sup>e</sup>	<b>226</b>	<b>275</b>	<b>285</b>	250	246	284	301	260	257	295	312	271	250	260	271
Total Stocks (excluding SPR)	<b>876</b>	<b>950</b>	<b>968</b>	940	910	974	989	957	942	1000	1012	977	940	957	977
Crude Oil in SPR	<b>599</b>	<b>609</b>	<b>624</b>	638	647	661	670	681	692	699	699	699	638	681	699
Heating Oil Reserve	<b>2</b>	<b>2</b>	<b>2</b>	2	2	2	2	2	2	2	2	2	2	2	2
Total Stocks (incl SPR and HOR)	<b>1477</b>	<b>1561</b>	<b>1594</b>	1580	1560	1636	1661	1640	1636	1701	1713	1678	1580	1640	1678

<sup>a</sup>Includes lease condensate.

<sup>b</sup>Net imports equals gross imports minus exports.

<sup>c</sup>Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

<sup>d</sup>Includes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.

<sup>e</sup>Includes stocks of all other oils, such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

SPR: Strategic Petroleum Reserve

HOR: Heating Oil Reserve

NGL: Natural Gas Liquids

Notes: Minor discrepancies with other EIA published historical data are due to rounding, with the following exception: recent petroleum demand and supply data displayed here reflect the incorporation of resubmissions of the data as reported in EIA's *Petroleum Supply Monthly*, Table C1. Historical data are printed in bold; estimates and forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System model.

Sources: Historical data: EIA: latest data available from EIA databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109, and *Weekly Petroleum Status Report*, DOE/EIA-0208.

**Table 6. Approximate Energy Demand Sensitivities<sup>a</sup> for the STIFS<sup>b</sup>**  
 (Percent Deviation Base Case)

Demand Sector	+1% GDP	+ 10% Prices		+ 10% Weather <sup>e</sup>	
		Crude Oil <sup>c</sup>	N.Gas Wellhead <sup>d</sup>	Fall/Winter <sup>f</sup>	Spring/Summer <sup>f</sup>
<b>Petroleum</b>					
Total.....	0.6%	-0.3%	0.1%	1.1%	0.1%
Motor Gasoline .....	0.1%	-0.3%	0.0%	0.0%	0.0%
Distillate Fuel .....	0.8%	-0.2%	0.0%	2.7%	0.1%
Residual Fuel.....	1.6%	-3.4%	2.6%	2.0%	2.7%
<b>Natural Gas</b>					
Total.....	1.1%	0.3%	-0.4%	4.4%	1.0%
Residential .....	0.1%	0.0%	0.0%	8.2%	0.0%
Commercial.....	0.9%	0.0%	0.0%	7.3%	0.0%
Industrial .....	1.7%	0.2%	-0.5%	1.3%	0.0%
Electric Power.....	1.8%	1.6%	-1.5%	1.0%	4.0%
<b>Coal</b>					
Total.....	0.7%	0.0%	0.0%	1.7%	1.7%
Electric Power.....	0.6%	0.0%	0.0%	1.9%	1.9%
<b>Electricity</b>					
Total.....	0.6%	0.0%	0.0%	1.5%	1.7%
Residential .....	0.1%	0.0%	0.0%	3.2%	3.6%
Commercial.....	0.9%	0.0%	0.0%	1.0%	1.4%
Industrial .....	0.8%	0.0%	0.0%	0.3%	0.2%

<sup>a</sup>Percent change in demand quantity resulting from specified percent changes in model inputs.

<sup>b</sup>Short-Term Integrated Forecasting System.

<sup>c</sup>Refiner acquisitions cost of imported crude oil.

<sup>d</sup>Average unit value of marketed natural gas production reported by States.

<sup>e</sup>Refers to percent changes in degree-days.

<sup>f</sup>Response during fall/winter period(first and fourth calendar quarters) refers to change in heating degree-days. Response during the spring/summer period (second and third calendar quarters) refers to change in cooling degree-days.

**Table 7. Forecast Components for U.S. Crude Oil Production**  
 (Million Barrels per Day)

	High Price Case	Low Price Case	Difference		
			Total	Uncertainty	Price Impact
United States .....	6.487	4.993	0.748	0.064	0.684
Lower 48 States.....	5.546	4.214	0.666	0.044	0.622
Alaska.....	0.941	0.779	0.081	0.020	0.061

Note: Components provided are for the fourth quarter 2005.

Source: EIA, Office of Oil and Gas, Reserves and Production Division.

**Table 8. U.S. Natural Gas Supply and Demand: Base Case**  
(Trillion Cubic Feet)

	2003				2004				2005				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2003	2004	2005
<b>Supply</b>															
Total Dry Gas Production.....	<b>4.86</b>	<b>4.84</b>	4.87	4.88	4.90	4.92	4.88	4.92	4.93	4.93	4.96	5.00	19.45	19.63	19.82
Gross Imports .....	<b>0.99</b>	<b>0.92</b>	0.93	1.05	1.05	1.00	0.96	1.04	1.07	1.04	1.00	1.08	3.88	4.05	4.19
Pipeline .....	<b>0.91</b>	<b>0.80</b>	0.77	0.90	0.91	0.83	0.79	0.87	0.91	0.85	0.80	0.88	3.37	3.40	3.44
LNG.....	<b>0.08</b>	<b>0.13</b>	0.16	0.14	0.14	0.17	0.17	0.17	0.16	0.19	0.20	0.20	0.51	0.65	0.75
Gross Exports .....	<b>0.16</b>	<b>0.15</b>	0.15	0.16	0.16	0.16	0.17	0.19	0.19	0.20	0.21	0.22	0.62	0.68	0.81
Net Imports .....	<b>0.82</b>	<b>0.77</b>	0.78	0.89	0.88	0.84	0.78	0.86	0.88	0.84	0.79	0.86	3.26	3.36	3.37
Supplemental Gaseous Fuels.....	<b>0.02</b>	<b>0.02</b>	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.08	0.08	0.08
Total New Supply.....	<b>5.71</b>	<b>5.63</b>	5.66	5.79	5.81	5.78	5.68	5.80	5.83	5.79	5.77	5.89	22.79	23.07	23.27
Working Gas in Storage															
Opening .....	<b>2.38</b>	<b>0.73</b>	1.77	2.84	2.58	1.10	1.99	2.94	2.56	1.21	2.06	2.95	2.38	2.58	2.56
Closing.....	<b>0.73</b>	<b>1.77</b>	2.84	2.58	1.10	1.99	2.94	2.56	1.21	2.06	2.95	2.51	2.58	2.56	2.51
Net Withdrawals.....	<b>1.65</b>	<b>-1.04</b>	-1.07	0.26	1.48	-0.89	-0.95	0.38	1.36	-0.85	-0.89	0.44	-0.21	0.02	0.05
Total Supply.....	<b>7.35</b>	<b>4.59</b>	4.59	6.05	7.29	4.89	4.73	6.17	7.18	4.94	4.88	6.33	22.58	23.08	23.33
Balancing Item <sup>a</sup> .....	<b>-0.10</b>	<b>-0.10</b>	-0.09	-0.48	-0.05	-0.12	-0.16	-0.47	-0.07	-0.04	-0.17	-0.52	-0.78	-0.80	-0.81
Total Primary Supply.....	<b>7.25</b>	<b>4.49</b>	4.50	5.57	7.23	4.78	4.57	5.70	7.11	4.90	4.71	5.80	21.80	22.28	22.52
<b>Demand</b>															
Residential .....	<b>2.52</b>	<b>0.83</b>	0.37	1.33	2.48	0.82	0.38	1.44	2.39	0.83	0.38	1.43	5.06	5.11	5.02
Commercial.....	<b>1.34</b>	<b>0.57</b>	0.39	0.84	1.36	0.61	0.43	0.91	1.34	0.63	0.44	0.92	3.14	3.31	3.32
Industrial .....	<b>2.14</b>	<b>1.84</b>	1.91	2.10	2.15	1.94	1.94	2.09	2.19	2.01	2.01	2.15	7.99	8.12	8.35
Lease and Plant Fuel.....	<b>0.27</b>	<b>0.27</b>	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.28	1.08	1.08	1.09
Other Industrial .....	<b>1.87</b>	<b>1.58</b>	1.64	1.82	1.89	1.67	1.67	1.81	1.92	1.74	1.74	1.87	6.91	7.04	7.26
CHP <sup>b</sup> .....	<b>0.30</b>	<b>0.26</b>	0.29	0.27	0.28	0.27	0.29	0.29	0.30	0.29	0.30	0.30	1.12	1.13	1.19
Non-CHP .....	<b>1.57</b>	<b>1.31</b>	1.36	1.55	1.60	1.40	1.39	1.52	1.62	1.45	1.44	1.57	5.79	5.91	6.08
Transportation <sup>c</sup> .....	<b>0.20</b>	<b>0.13</b>	0.13	0.17	0.22	0.14	0.13	0.16	0.21	0.14	0.13	0.16	0.62	0.64	0.63
Electric Power <sup>d</sup> .....	<b>1.05</b>	<b>1.13</b>	1.70	1.13	1.03	1.26	1.70	1.10	0.99	1.30	1.76	1.14	5.00	5.09	5.19
Total Demand .....	<b>7.25</b>	<b>4.49</b>	4.50	5.57	7.23	4.78	4.57	5.70	7.11	4.90	4.71	5.80	21.80	22.28	22.52

<sup>a</sup>The balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

<sup>b</sup>Natural gas used for electricity generation and production of useful thermal output by combined heat and power (CHP) plants at industrial facilities. Includes a small amount of natural gas consumption at electricity-only plants in the industrial sector.

<sup>c</sup>Pipeline fuel use plus natural gas used as vehicle fuel.

<sup>d</sup>Natural gas used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; estimates and forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: EIA: latest data available from EIA databases supporting the following reports: *Natural Gas Monthly*, DOE/EIA-0130; *Electric Power Monthly*, DOE/EIA-0226; Projections: EIA, Short-Term Integrated Forecasting System database, and Office of Oil and Gas, Reserves and Production Division.

**Table 9. U.S. Coal Supply and Demand: Base Case**  
(Million Short Tons)

	2003				2004				2005				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2003	2004	2005
<b>Supply</b>															
Production.....	<b>264.1</b>	<b>267.2</b>	267.9	276.7	278.2	266.6	279.2	288.9	280.5	273.5	287.7	295.8	1075.9	1112.9	1137.6
Appalachia.....	<b>95.4</b>	<b>95.5</b>	92.2	97.8	97.6	93.0	92.8	95.3	97.3	93.1	93.1	95.0	380.8	378.6	378.4
Interior.....	<b>36.1</b>	<b>37.0</b>	36.1	36.5	36.2	35.5	34.5	34.2	35.1	35.0	33.9	33.2	145.7	140.5	137.2
Western.....	<b>132.5</b>	<b>134.7</b>	139.7	142.4	144.4	138.1	151.9	159.4	148.1	145.4	160.8	167.6	549.4	593.7	621.9
Primary Stock Levels <sup>a</sup>															
Opening .....	<b>43.3</b>	<b>39.0</b>	37.7	35.0	36.8	35.4	35.0	33.4	34.7	35.1	35.3	33.2	43.3	36.8	34.7
Closing.....	<b>39.0</b>	<b>37.7</b>	35.0	36.8	35.4	35.0	33.4	34.7	35.1	35.3	33.2	35.1	36.8	34.7	35.1
Net Withdrawals.....	<b>4.3</b>	<b>1.3</b>	2.7	-1.8	1.4	0.3	1.7	-1.4	-0.4	-0.2	2.1	-1.9	6.5	2.1	-0.3
Imports.....	<b>5.0</b>	<b>6.4</b>	7.1	6.7	6.5	6.8	6.3	5.9	6.7	7.0	6.5	6.1	25.1	25.4	26.3
Exports.....	<b>8.5</b>	<b>11.4</b>	12.1	10.9	10.7	11.4	11.2	10.9	10.9	11.5	11.3	11.1	43.0	44.1	44.8
Total Net Domestic Supply .....	<b>264.8</b>	<b>263.5</b>	265.6	270.6	275.4	262.3	276.0	282.6	275.9	268.8	285.0	289.0	1064.5	1096.2	1118.8
Secondary Stock Levels <sup>b</sup>															
Opening .....	<b>148.9</b>	<b>136.8</b>	148.8	128.4	143.7	151.1	161.9	147.5	153.1	152.5	160.7	146.4	148.9	143.7	153.1
Closing.....	<b>136.8</b>	<b>148.8</b>	128.4	143.7	151.1	161.9	147.5	153.1	152.5	160.7	146.4	150.8	143.7	153.1	150.8
Net Withdrawals.....	<b>12.0</b>	<b>-11.9</b>	20.4	-15.4	-7.3	-10.9	14.4	-5.6	0.6	-8.2	14.3	-4.4	5.1	-9.4	2.3
Waste Coal Supplied to IPPs <sup>c</sup> .....	<b>2.9</b>	<b>2.9</b>	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	11.6	11.6	11.6
Total Supply .....	<b>279.7</b>	<b>254.4</b>	288.9	258.2	271.0	254.3	293.3	279.9	279.5	263.4	302.2	287.5	1081.2	1098.5	1132.7
<b>Demand</b>															
Coke Plants.....	<b>6.0</b>	<b>6.1</b>	6.1	6.3	6.3	6.3	6.4	5.8	6.3	6.3	6.5	5.8	24.4	24.8	25.0
Electric Power Sector <sup>d</sup> .....	<b>248.7</b>	<b>231.4</b>	271.7	245.3	247.1	232.8	271.1	256.2	255.5	241.9	279.9	263.7	997.1	1007.1	1041.1
Retail and General Industry .....	<b>16.9</b>	<b>15.6</b>	15.8	17.3	17.6	15.2	15.8	17.9	17.7	15.2	15.8	18.0	65.5	66.5	66.6
Total Demand <sup>e</sup> .....	<b>271.6</b>	<b>253.0</b>	293.6	268.9	271.0	254.3	293.3	279.9	279.5	263.4	302.2	287.5	1087.1	1098.5	1132.7
Discrepancy <sup>f</sup> .....	<b>8.1</b>	<b>1.4</b>	-4.7	-10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.9	0.0	0.0

<sup>a</sup>Primary stocks are held at the mines, preparation plants, and distribution points.

<sup>b</sup>Secondary stocks are held by users. It includes an estimate of stocks held at utility plants sold to nonutility generators.

<sup>c</sup>Estimated independent power producers' (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes.

<sup>d</sup>Coal used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

<sup>e</sup>Total Demand includes estimated IPP consumption.

<sup>f</sup>The discrepancy reflects an unaccounted-for shipper and receiver reporting difference, assumed to be zero in the forecast period.

Notes: Totals may not add due to independent rounding. Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; estimates and forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: EIA: latest data available from EIA databases supporting the following reports: *Quarterly Coal Report*, DOE/EIA-0121, and *Electric Power Monthly*, DOE/EIA-0226. Projections: EIA, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels (coal production).

**Table 10a. U.S. Electricity Supply and Demand: Base Case**  
(Billion Kilowatthours)

	2003				2004				2005				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2003	2004	2005
<b>Net Electricity Generation</b>															
Electric Power Sector <sup>a</sup>															
Coal .....	<b>485.6</b>	<b>446.7</b>	526.3	475.8	478.0	449.7	524.2	494.7	492.5	465.9	539.1	507.0	1934.4	1946.7	2004.6
Petroleum .....	31.5	<b>25.8</b>	31.9	28.2	37.3	24.0	29.1	27.3	30.0	24.1	32.5	29.2	117.3	117.7	115.7
Natural Gas .....	<b>116.9</b>	<b>124.6</b>	190.5	130.4	121.7	142.5	191.0	129.9	118.3	148.6	200.2	136.4	562.3	585.1	603.5
Nuclear .....	<b>190.1</b>	<b>183.2</b>	202.3	182.5	195.1	191.4	206.3	191.5	197.0	193.3	208.1	193.2	758.0	784.3	791.6
Hydroelectric.....	<b>60.0</b>	<b>80.0</b>	61.9	60.8	73.3	80.8	65.6	66.7	79.2	84.3	66.6	68.7	262.8	286.4	298.8
Other <sup>b</sup> .....	<b>13.0</b>	<b>13.8</b>	13.9	14.0	14.2	14.7	15.4	15.1	14.9	15.5	16.1	15.8	54.7	59.4	62.2
Subtotal .....	<b>897.1</b>	<b>874.0</b>	1026.7	891.7	919.6	903.2	1031.5	925.3	932.0	931.7	1062.7	950.2	3689.5	3779.6	3876.5
Other Sectors <sup>c</sup> .....	<b>40.2</b>	<b>37.3</b>	38.8	37.4	39.1	39.1	42.0	40.3	40.2	40.6	43.2	41.2	153.7	160.4	165.2
Total Generation.....	<b>937.3</b>	<b>911.3</b>	1065.5	929.1	958.6	942.3	1073.5	965.6	972.2	972.2	1105.9	991.4	3843.2	3940.0	4041.8
Net Imports .....	<b>2.4</b>	<b>1.5</b>	4.4	-0.9	0.4	1.3	4.2	1.6	0.7	1.0	3.8	0.7	7.5	7.5	6.1
Total Supply.....	<b>939.8</b>	<b>912.8</b>	1069.9	928.2	959.1	943.6	1077.7	967.2	972.9	973.2	1109.6	992.1	3850.7	3947.6	4047.9
Losses and Unaccounted for <sup>d</sup> .....	<b>30.3</b>	<b>57.3</b>	44.7	59.9	30.7	59.2	44.6	62.5	31.5	61.0	45.9	64.1	192.2	197.0	202.5
<b>Demand</b>															
Retail Sales <sup>e</sup>															
Residential.....	<b>337.5</b>	<b>273.4</b>	377.6	286.8	346.9	286.1	373.2	304.5	348.4	293.6	382.3	311.9	1275.3	1310.6	1336.2
Commercial .....	<b>265.1</b>	<b>267.8</b>	314.6	264.8	268.2	274.5	318.0	274.9	274.9	286.0	330.6	283.9	1112.2	1135.6	1175.4
Industrial.....	<b>237.2</b>	<b>247.4</b>	259.4	249.3	244.0	253.9	265.1	254.1	247.4	260.3	271.9	259.5	993.2	1017.0	1039.1
Other.....	<b>25.3</b>	<b>25.9</b>	30.7	26.0	26.1	26.8	30.6	26.7	26.4	27.4	31.2	27.2	108.0	110.3	112.2
Subtotal .....	<b>865.1</b>	<b>814.3</b>	982.4	827.0	885.2	841.3	986.8	860.2	897.1	867.4	1016.0	882.5	3488.7	3573.5	3663.0
Other Use/Sales <sup>f</sup> .....	<b>44.4</b>	<b>41.2</b>	42.8	41.3	43.1	43.1	46.3	44.5	44.4	44.8	47.7	45.5	169.7	177.1	182.4
Total Demand.....	<b>909.5</b>	<b>855.5</b>	1025.2	868.2	928.4	884.5	1033.1	904.7	941.5	912.2	1063.7	928.0	3658.4	3750.6	3845.4

<sup>a</sup>Electric utilities and independent power producers.

<sup>b</sup>"Other" includes generation from other gaseous fuels, geothermal, wind, wood, waste, and solar sources.

<sup>c</sup>Electricity generation from combined heat and power (CHP) facilities and electricity-only plants in the industrial and commercial sectors.

<sup>d</sup>Balancing item, mainly transmission and distribution losses.

<sup>e</sup>Total of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA's *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales are reported annually in Appendix C of EIA's *Electric Sales and Revenue*. Quarterly data for power marketers (thus retail sales totals) are imputed.

<sup>f</sup>Defined as the sum of facility use of onsite net electricity generation plus direct sales of power by industrial- or commercial-sector generators to third parties, reported annually in Table 7.5 of the *Monthly Energy Review (MER)*. Data for 2003 are estimates.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; estimates and forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: EIA: latest data available from EIA databases supporting the following report: *Electric Power Monthly*, DOE/EIA-0226.

Projections: EIA, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels (hydroelectric and nuclear).

**Table 10b. U.S. Electricity Generation by Sector: Base Case**  
 (Billion Kilowatthours)

	2003				2004				2005				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2003	2004	2005
<b>Electricity Generation by Sector</b>															
Electric Power <sup>a</sup>															
Coal.....	<b>485.6</b>	<b>446.7</b>	526.3	475.8	478.0	<b>449.7</b>	524.2	494.7	492.5	465.9	539.1	507.0	1934.4	1946.7	2004.6
Petroleum.....	31.5	<b>25.8</b>	31.9	28.2	37.3	24.0	29.1	27.3	30.0	24.1	32.5	29.2	117.3	117.7	115.7
Natural Gas.....	<b>116.9</b>	<b>124.6</b>	190.5	130.4	121.7	<b>142.5</b>	191.0	129.9	118.3	148.6	200.2	136.4	562.3	585.1	603.5
Other <sup>b</sup> .....	<b>263.1</b>	<b>276.9</b>	278.0	257.3	282.5	287.0	287.3	273.3	291.2	293.1	290.8	277.6	1075.4	1130.1	1152.7
Subtotal.....	<b>897.1</b>	<b>874.0</b>	1026.7	891.7	919.6	903.2	1031.5	925.3	932.0	931.7	1062.7	950.2	3689.5	3779.6	3876.5
Commercial															
Coal.....	<b>0.3</b>	<b>0.2</b>	0.3	0.2	0.3	0.2	0.4	0.3	0.3	0.2	0.4	0.3	1.0	1.1	1.1
Petroleum.....	<b>0.2</b>	<b>0.1</b>	0.1	0.2	0.3	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.6	0.7	0.6
Natural Gas.....	<b>1.0</b>	<b>1.2</b>	1.1	0.9	1.1	1.3	1.4	1.1	1.1	1.3	1.3	1.1	4.3	4.9	4.8
Other <sup>b</sup> .....	<b>0.4</b>	<b>0.5</b>	0.5	0.4	0.5	0.6	0.6	0.5	0.5	0.6	0.6	0.5	1.9	2.2	2.2
Subtotal.....	<b>1.9</b>	<b>2.1</b>	2.0	1.8	2.1	2.2	2.5	2.0	2.1	2.2	2.4	2.0	7.8	8.9	8.7
Industrial															
Coal.....	<b>5.5</b>	<b>5.0</b>	5.4	5.2	5.1	5.1	5.7	5.6	5.4	5.4	5.9	5.7	21.1	21.6	22.3
Petroleum.....	1.5	<b>1.2</b>	1.2	1.6	1.7	1.2	1.2	1.6	1.4	1.2	1.3	1.7	5.5	5.6	5.6
Natural Gas.....	<b>19.9</b>	<b>17.3</b>	18.7	17.5	18.6	17.9	18.8	19.1	19.6	19.0	19.6	19.8	73.5	74.4	78.0
Other <sup>b</sup> .....	<b>11.3</b>	<b>11.7</b>	11.5	11.3	11.5	12.7	13.8	12.0	11.7	12.9	13.9	12.1	45.8	50.0	50.6
Subtotal.....	<b>38.3</b>	<b>35.2</b>	36.8	35.6	37.0	36.9	39.5	38.3	38.1	38.4	40.8	39.2	146.0	151.6	156.5
Total.....	<b>937.3</b>	<b>911.3</b>	1065.5	929.1	958.6	942.3	1073.5	965.6	972.2	972.2	1105.9	991.4	3843.2	3940.0	4041.8

<sup>a</sup>Electric utilities and independent power producers.

<sup>b</sup>"Other" includes nuclear, hydroelectric, geothermal, wood, waste, wind and solar power sources.

Note: Commercial and industrial categories include electricity output from combined heat and power (CHP) facilities and some electric-only plants.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; estimates and forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: EIA: latest data available from EIA databases supporting the following report: *Electric Power Monthly*, DOE/EIA-0226.

Projections: EIA, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels (hydroelectric and nuclear).

**Table 10c. U.S. Fuel Consumption for Electricity Generation by Sector: Base Case**

	2003				2004				2005				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2003	2004	2005
<b>Fuel Consumption for Electricity Generation by Sector</b>															
(Quadrillion Btu)															
Electric Power <sup>a</sup>															
Coal	<b>5.103</b>	<b>4.748</b>	5.578	5.035	5.070	4.777	5.566	5.257	5.243	4.964	5.747	5.412	20.5	20.7	21.4
Petroleum	<b>0.340</b>	<b>0.277</b>	0.340	0.308	0.404	0.261	0.316	0.297	0.326	0.262	0.352	0.317	1.3	1.3	1.3
Natural Gas	<b>1.008</b>	<b>1.098</b>	1.679	1.102	1.006	1.236	1.671	1.076	0.967	1.275	1.727	1.116	4.9	5.0	5.1
Other <sup>b</sup>	<b>2.975</b>	<b>3.089</b>	3.095	2.746	3.006	3.050	3.061	2.914	3.098	3.114	3.099	2.959	11.9	12.0	12.3
Subtotal	<b>9.427</b>	<b>9.212</b>	10.691	9.190	9.485	9.323	10.614	9.544	9.633	9.615	10.925	9.804	38.5	39.0	40.0
Commercial															
Coal	<b>0.003</b>	<b>0.003</b>	0.004	0.003	0.003	0.003	0.004	0.003	0.003	0.003	0.004	0.003	0.013	0.014	0.014
Petroleum	<b>0.003</b>	<b>0.001</b>	0.002	0.002	0.004	0.001	0.002	0.003	0.003	0.001	0.002	0.003	0.008	0.009	0.008
Natural Gas	<b>0.009</b>	<b>0.010</b>	0.010	0.008	0.009	0.011	0.012	0.009	0.009	0.011	0.011	0.009	0.036	0.040	0.040
Other <sup>b</sup>	<b>0.007</b>	<b>0.010</b>	0.010	0.007	0.008	0.009	0.010	0.008	0.008	0.009	0.010	0.008	0.034	0.036	0.035
Subtotal	<b>0.021</b>	<b>0.024</b>	0.025	0.020	0.024	0.024	0.028	0.023	0.023	0.024	0.027	0.023	0.090	0.099	0.098
Industrial															
Coal	<b>0.070</b>	<b>0.065</b>	0.068	0.067	0.066	0.066	0.074	0.072	0.069	0.069	0.076	0.073	0.271	0.277	0.288
Petroleum	<b>0.018</b>	<b>0.017</b>	0.015	0.022	0.022	0.016	0.015	0.021	0.019	0.016	0.017	0.023	0.072	0.075	0.075
Natural Gas	<b>0.176</b>	<b>0.157</b>	0.168	0.156	0.167	0.161	0.168	0.171	0.176	0.170	0.176	0.177	0.657	0.667	0.699
Other <sup>b</sup>	<b>0.150</b>	<b>0.157</b>	0.169	0.149	0.147	0.163	0.174	0.155	0.151	0.166	0.175	0.155	0.626	0.638	0.646
Subtotal	<b>0.415</b>	<b>0.397</b>	0.421	0.393	0.402	0.405	0.431	0.419	0.414	0.421	0.444	0.428	1.626	1.657	1.707
Total	<b>9.863</b>	<b>9.632</b>	11.137	9.603	9.911	9.753	11.073	9.986	10.071	10.059	11.396	10.255	40.236	40.723	41.782

**Table 11. U.S. Renewable Energy Use by Sector: Base Case**  
 (Quadrillion Btu)

	Year				Annual Percentage Change		
	2002	2003	2004	2005	2002-2003	2003-2004	2004-2005
<b>Electricity Sector</b>							
Hydroelectric Power <sup>a</sup> .....	<b>2.633</b>	2.745	2.993	3.123	4.3	9.0	4.3
Geothermal, Solar and Wind Energy <sup>b</sup> .....	<b>0.415</b>	0.391	0.433	0.451	-5.8	10.7	4.2
Biofuels <sup>c</sup> .....	<b>0.516</b>	0.493	0.514	0.533	-4.5	4.3	3.7
Total .....	<b>3.563</b>	3.629	3.940	4.107	1.9	8.6	4.2
<b>Other Sectors <sup>d</sup></b>							
Residential and Commercial <sup>e</sup> .....	<b>0.539</b>	0.530	0.561	0.579	-1.7	5.8	3.2
Residential .....	<b>0.418</b>	0.436	0.455	0.474	4.3	4.4	4.2
Commercial .....	<b>0.121</b>	0.094	0.107	0.104	-22.3	13.8	-2.8
Industrial <sup>f</sup> .....	<b>1.792</b>	1.711	1.787	1.810	-4.5	4.4	1.3
Transportation <sup>g</sup> .....	<b>0.175</b>	0.232	0.268	0.275	32.6	15.5	2.6
Total .....	<b>2.506</b>	2.474	2.616	2.663	-1.3	5.7	1.8
Total Renewable Energy Demand.....	<b>6.069</b>	6.103	6.556	6.770	0.6	7.4	3.3

<sup>a</sup>Conventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.

<sup>b</sup>Also includes photovoltaic and solar thermal energy. Sharp declines since 1998 in the electric utility sector and corresponding increases in the nonutility sector for this category mostly reflect sale of geothermal facilities to the nonutility sector.

<sup>c</sup>Biofuels are fuelwood, wood byproducts, waste wood, municipal solid waste, manufacturing process waste, and alcohol fuels.

<sup>d</sup>Renewable energy includes minor components of non-marketed renewable energy, which is renewable energy that is neither bought nor sold, either directly or indirectly as inputs to marketed energy. EIA does not estimate or project total consumption of non-marketed renewable energy.

<sup>e</sup>Includes biofuels and solar energy consumed in the residential and commercial sectors.

<sup>f</sup>Consists primarily of biofuels for use other than in electricity cogeneration.

<sup>g</sup>Ethanol blended into gasoline.

Notes: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data and estimates are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: EIA: latest data available from EIA databases supporting the following reports: *Electric Power Monthly*, DOE/EIA-0226, and *Renewable Energy Annual*, DOE/EIA-0603. Projections: EIA, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels.

**Table A1. Annual U.S. Energy Supply and Demand: Base Case**

	Year														
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Real Gross Domestic Product (GDP)</b> (billion chained 2000 dollars) .....	7101	7337	7533	7835	8032	8329	8704	9067	9470	9817	9867	10083	10401	10890	11308
Imported Crude Oil Price <sup>a</sup> (nominal dollars per barrel) .....	18.74	18.20	16.13	15.53	17.14	20.62	18.49	12.07	17.26	27.72	22.00	23.71	27.74	27.68	25.87
<b>Petroleum Supply</b>															
Crude Oil Production <sup>b</sup> (million barrels per day) .....	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	5.82	5.80	5.75	5.74	5.63	5.67
Total Petroleum Net Imports (including SPR) (million barrels per day) .....	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	10.42	10.90	10.54	11.28	11.65	11.95
<b>Energy Demand</b>															
U.S. Petroleum (million barrels per day) .....	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	19.70	19.65	19.76	19.99	20.43	20.91
Natural Gas (trillion cubic feet) .....	19.56	20.23	20.79	21.24	22.20	22.60	22.72	22.24	22.39	23.47	22.23	22.64	21.80	22.28	22.52
Coal (million short tons) .....	899	908	944	951	962	1006	1030	1037	1039	1084	1060	1066	1087	1098	1133
Electricity (billion kilowatthours)															
Retail Sales <sup>c</sup> .....	2762	2763	2861	2935	3013	3101	3146	3264	3312	3421	3370	3463	3489	3573	3663
Other Use/Sales <sup>d</sup> .....	118	122	128	134	144	146	148	161	183	181	173	177	170	177	182
Total .....	2880	2886	2989	3069	3157	3247	3294	3425	3495	3603	3543	3639	3658	3751	3845
Total Energy Demand <sup>e</sup> (quadrillion Btu) .....	84.5	85.9	87.6	89.2	91.2	94.2	94.7	95.1	96.8	98.9	96.3	97.4	97.6	99.7	101.7
Total Energy Demand per Dollar of GDP (thousand Btu per 1996 Dollar) .....	11.90	11.70	11.63	11.39	11.36	11.31	10.88	10.51	10.22	10.08	9.76	9.65	9.39	9.15	8.99

<sup>a</sup>Refers to the imported cost of crude oil to U.S. refineries.

<sup>b</sup>Includes lease condensate.

<sup>c</sup>Total of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in Energy Information Administration (EIA) *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales for historical periods are reported in EIA's *Electric Sales and Revenue*, Appendix C.

<sup>d</sup>Defined as the sum of facility use of onsite net electricity generation plus direct sales of power by industrial- or commercial-sector generators to third parties, reported annually in Table 7.5 of the *Monthly Energy Review (MER)*. Data for 2003 are estimates.

<sup>e</sup>"Total Energy Demand" refers to the aggregate energy concept presented in EIA's *Annual Energy Review*, DOE/EIA-0384 (AER), Table 1.1. The conversion from physical units to Btu is calculated using a subset of conversion factors used in the calculations performed for gross energy consumption in EIA, *Monthly Energy Review (MER)*. Consequently, the historical data may not precisely match those published in the *MER* or the *AER*.

Notes: SPR: Strategic Petroleum Reserve. Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Latest data available from Bureau of Economic Analysis; EIA; latest data available from EIA databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109; *Petroleum Supply Annual*, DOE/EIA-0340/2; *Natural Gas Monthly*, DOE/EIA-0130; *Electric Power Monthly*, DOE/EIA-0226; *Quarterly Coal Report*, DOE/EIA-0121; *International Petroleum Monthly*, DOE/EIA-520, and *Weekly Petroleum Status Report* DOE/EIA-0208. Macroeconomic projections are based on Global Insight Forecast CONTROL0104.

**Table A2. Annual U.S. Macroeconomic and Weather Indicators: Base Case**

	Year														
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Macroeconomic</b>															
Real Gross Domestic Product (billion chained 2000 dollars).....	7101	7337	7533	7835	8032	8329	8704	9067	9470	9817	9867	10083	10401	10890	11308
GDP Implicit Price Deflator (Index, 2000=100) .....	84.5	86.4	88.4	90.3	92.1	93.9	95.4	96.5	97.9	100.0	102.4	103.9	105.6	107.0	108.8
Real Disposable Personal Income (billion chained 2000 Dollars) .....	5352	5536	5594	5746	5906	6081	6296	6664	6862	7194	7320	7597	7789	8095	8381
Manufacturing Production (Index, 1997=100) .....	72.4	75.3	78.1	83.1	87.8	92.1	100.0	106.8	112.3	117.7	113.1	112.5	112.6	118.9	126.1
Real Fixed Investment (billion chained 2000 dollars).....	829	878	953	1042	1110	1209	1321	1455	1576	1679	1626	1566	1633	1757	1833
Real Exchange Rate (Index, 2000=1.000) .....	1.026	1.025	1.026	1.025	0.974	0.930	0.927	1.042	1.031	1.000	1.023	1.042	1.019	0.983	0.950
Business Inventory Change (billion chained 2000 dollars).....	-6.4	-4.5	3.4	11.5	13.4	9.7	20.7	18.6	17.0	7.9	-23.4	-7.5	-11.2	14.7	20.5
Producer Price Index (index, 1982=1.000).....	1.165	1.172	1.189	1.205	1.248	1.277	1.276	1.244	1.255	1.328	1.342	1.311	1.381	1.404	1.430
Consumer Price Index (index, 1982-1984=1.000) .....	1.362	1.403	1.445	1.482	1.524	1.569	1.605	1.630	1.666	1.722	1.771	1.799	1.840	1.869	1.902
Petroleum Product Price Index (index, 1982=1.000).....	0.671	0.647	0.620	0.591	0.608	0.701	0.680	0.513	0.609	0.913	0.853	0.795	0.965	0.951	0.913
Non-Farm Employment (millions) .....	108.4	108.7	110.8	114.3	117.3	119.7	122.8	125.9	129.0	131.8	131.8	130.4	130.1	132.0	135.3
Commercial Employment (millions) .....	70.5	70.9	72.9	75.7	78.4	80.7	83.4	86.1	89.1	91.4	92.0	91.4	91.7	93.7	96.6
Total Industrial Production (index, 1997=100.0).....	76.1	78.2	80.8	85.2	89.3	93.1	100.0	105.9	110.6	115.4	111.5	110.9	111.2	116.6	122.8
Housing Stock (millions) .....	101.8	102.6	103.8	105.1	106.7	108.0	109.4	111.1	112.7	113.3	114.7	115.7	116.9	117.8	119.1
<b>Weather <sup>a</sup></b>															
Heating Degree-Days															
U.S. ....	4200	4431	4672	4472	4516	4690	4523	3946	4153	4447	4191	4284	4469	4613	4502
New England .....	6042	6018	5904	6748	6631	5850	6725	5742	6014	6585	6110	6099	6925	6874	6598
Middle Atlantic .....	5317	6108	6040	6083	5966	6118	5940	4923	5493	5944	5424	5372	6083	6113	5856
U.S. Gas-Weighted.....	4337	4458	4754	4659	4707	4980	4802	4183	4399	4680	4451	4560	4764	4947	4840
Cooling Degree-Days (U.S.).....	1331	1051	1222	1228	1293	1186	1167	1414	1301	1240	1256	1393	1276	1240	1247

<sup>a</sup>Population-weighted degree-days. A degree-day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 2000 population.

Notes: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA); Federal Reserve System, Statistical Release G.17; U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on Global Insight Forecast CONTROL0104. Degree-day projections are from NOAA's Climate Prediction Center.

**Table A3. U.S. Energy Supply and Demand: Base Case**

(Quadrillion Btu except where noted)

	Year														
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Production</b>															
Coal .....	21.59	21.63	20.25	22.11	22.03	22.68	23.21	23.94	23.19	22.62	23.05	22.56	22.19	22.95	23.46
Natural Gas.....	18.23	18.38	18.58	19.35	19.08	19.27	19.32	19.61	19.34	19.66	20.23	19.58	19.99	20.17	20.38
Crude Oil.....	15.70	15.22	14.49	14.10	13.89	13.72	13.66	13.24	12.45	12.36	12.28	12.16	12.16	11.96	12.01
Natural Gas Liquids.....	2.31	2.36	2.41	2.39	2.44	2.53	2.50	2.42	2.53	2.61	2.55	2.56	2.35	2.50	2.52
Nuclear .....	6.42	6.48	6.41	6.69	7.08	7.09	6.60	7.07	7.61	7.86	8.03	8.15	7.91	8.19	8.27
Hydroelectric.....	2.99	2.60	2.87	2.67	3.20	3.58	3.62	3.27	3.23	2.78	2.12	2.60	2.73	2.98	3.11
Other Renewables.....	3.14	3.29	3.27	3.38	3.46	3.55	3.43	3.26	3.33	3.35	3.12	3.38	3.28	3.48	3.56
Total.....	70.38	69.96	68.29	70.70	71.17	72.42	72.34	72.80	71.67	71.24	71.38	71.00	70.61	72.23	73.30
<b>Net Imports</b>															
Coal .....	-2.77	-2.59	-1.78	-1.69	-2.14	-2.19	-2.01	-1.87	-1.30	-1.21	-0.77	-0.61	-0.49	-0.51	-0.51
Natural Gas.....	1.67	1.94	2.25	2.52	2.74	2.85	2.90	3.06	3.50	3.62	3.69	3.58	3.34	3.45	3.46
Crude Oil.....	13.14	12.36	13.16	14.32	15.69	15.02	16.59	17.79	18.84	18.87	19.77	19.38	20.56	21.05	21.47
Petroleum Products .....	2.15	1.86	1.80	2.08	1.56	1.87	1.64	1.85	2.10	2.31	2.61	2.40	2.69	2.98	3.09
Electricity .....	0.07	0.09	0.09	0.15	0.13	0.14	0.12	0.09	0.10	0.12	0.08	0.08	0.03	0.03	0.02
Coal Coke .....	0.01	0.03	0.03	0.06	0.06	0.02	0.05	0.07	0.06	0.07	0.03	0.06	0.05	0.06	0.06
Total.....	14.27	13.70	15.56	17.44	18.06	17.71	19.29	20.99	23.29	23.77	25.40	24.88	26.17	27.04	27.59
<b>Adjustments <sup>a</sup></b> .....	-0.13	2.21	3.74	1.12	1.99	4.10	3.10	1.36	1.81	3.94	-0.46	1.47	0.87	0.38	0.78
<b>Demand</b>															
Coal .....	18.99	19.12	19.84	19.91	20.09	21.00	21.45	21.66	21.62	22.58	21.66	22.00	22.42	22.66	23.36
Natural Gas.....	19.72	20.15	20.83	21.35	21.84	22.78	23.20	23.33	22.93	23.01	24.04	24.49	23.58	24.10	24.36
Petroleum .....	32.85	33.53	33.84	34.67	34.55	35.76	36.27	36.93	37.96	38.40	38.33	38.30	38.94	39.85	40.65
Nuclear .....	6.42	6.48	6.41	6.69	7.08	7.09	6.60	7.07	7.61	7.86	8.03	8.15	7.91	8.19	8.27
Other.....	6.54	6.59	6.66	6.62	7.66	7.59	7.22	6.16	6.65	7.09	4.26	4.42	4.79	4.86	5.04
Total.....	84.52	85.87	87.58	89.25	91.22	94.22	94.73	95.15	96.77	98.94	96.32	97.35	97.65	99.66	101.67

<sup>a</sup>Balancing item. Includes stock changes, losses, gains, miscellaneous blending components, and unaccounted-for supply.

Sources: Historical data: *Annual Energy Review*, DOE/EIA-0384; projections generated by simulation of the Short-Term Integrated Forecasting System.

**Table A4. Annual Average U.S. Energy Prices: Base Case**  
 (Nominal Dollars)

	Year														
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Crude Oil Prices</b> (dollars per barrel)															
Imported Average <sup>a</sup> .....	18.74	18.20	16.13	15.53	17.14	20.62	18.49	12.07	17.26	27.72	22.00	23.71	27.74	27.68	25.87
WTI <sup>b</sup> Spot Average.....	21.60	20.54	18.49	17.16	18.41	22.11	20.61	14.45	19.25	30.29	25.95	26.12	31.12	30.40	28.38
<b>Natural Gas</b> (dollars per thousand cubic feet)															
Average Wellhead.....	1.64	1.74	2.04	1.85	1.55	2.17	2.32	1.96	2.19	3.70	4.02	2.96	4.98	4.75	4.82
Composite Spot .....	1.41	1.67	2.03	1.77	1.53	2.48	2.45	2.03	2.20	4.21	4.01	3.23	5.51	5.07	5.12
<b>Petroleum Products</b>															
Gasoline Retail <sup>c</sup> (dollars per gallon)															
All Grades .....	1.15	1.14	1.13	1.13	1.16	1.25	1.24	1.07	1.18	1.53	1.47	1.39	1.60	1.61	1.55
Regular Unleaded.....	1.10	1.09	1.07	1.08	1.11	1.20	1.20	1.03	1.14	1.49	1.43	1.34	1.56	1.57	1.51
No. 2 Diesel Oil, Retail (dollars per gallon) .....	1.13	1.11	1.11	1.11	1.11	1.24	1.19	1.04	1.12	1.49	1.40	1.32	1.51	1.50	1.47
No. 2 Heating Oil, Wholesale (dollars per gallon) .....	0.62	0.58	0.54	0.51	0.51	0.64	0.59	0.42	0.49	0.89	0.76	0.69	0.88	0.86	0.83
No. 2 Heating Oil, Retail (dollars per gallon) .....	0.98	0.93	0.90	0.87	0.86	0.98	0.97	0.84	0.87	1.29	1.23	1.11	1.32	1.33	1.31
No. 6 Residual Fuel Oil, Retail <sup>d</sup> (dollars per barrel).....	14.32	14.21	14.00	14.79	16.49	19.01	17.82	12.83	16.02	25.34	22.24	23.81	29.55	29.16	26.41
<b>Electric Power Sector</b> (dollars per million Btu)															
Coal.....	1.45	1.41	1.38	1.36	1.32	1.29	1.27	1.25	1.22	1.20	1.23	1.25	1.27	1.29	1.31
Heavy Fuel Oil <sup>e</sup> .....	2.48	2.46	2.36	2.40	2.60	3.01	2.79	2.07	2.38	4.27	3.73	3.68	4.63	4.43	4.30
Natural Gas.....	2.15	2.33	2.56	2.23	1.98	2.64	2.76	2.38	2.57	4.34	4.44	3.54	5.34	5.29	5.29
<b>Other Residential</b>															
Natural Gas (dollars per thousand cubic feet).....															
Electricity (cents per kilowatthour).....	8.05	8.23	8.34	8.40	8.40	8.36	8.43	8.26	8.16	8.24	8.62	8.45	8.67	8.80	8.86

<sup>a</sup>Refiner acquisition cost (RAC) of imported crude oil.

<sup>b</sup>West Texas Intermediate.

<sup>c</sup>Average self-service cash prices.

<sup>d</sup>Average for all sulfur contents.

<sup>e</sup>Includes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System. Sources: Historical data: EIA: latest data available from EIA databases supporting the following reports: *Petroleum Marketing Monthly*, DOE/EIA-0380; *Natural Gas Monthly*, DOE/EIA-0130; *Monthly Energy Review*, DOE/EIA-0035; *Electric Power Monthly*, DOE/EIA-0226.

**Table A5. Annual U.S. Petroleum Supply and Demand: Base Case**  
 (Million Barrels per Day, Except Closing Stocks)

	Year														
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Supply</b>															
Crude Oil Supply															
Domestic Production <sup>a</sup>	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	5.82	5.80	5.75	5.74	5.63	5.67
Alaska	1.80	1.71	1.58	1.56	1.48	1.39	1.30	1.17	1.05	0.97	0.96	0.98	0.98	0.94	0.87
Lower 48	5.62	5.46	5.26	5.10	5.08	5.07	5.16	5.08	4.83	4.85	4.84	4.76	4.76	4.70	4.80
Net Commercial Imports <sup>b</sup>	5.67	5.98	6.67	6.95	7.14	7.40	8.12	8.60	8.60	9.01	9.30	9.12	9.68	9.88	10.11
Net SPR Withdrawals	0.04	-0.01	-0.02	0.00	0.00	0.07	0.01	-0.02	0.02	0.08	-0.02	-0.12	-0.14	-0.11	-0.05
Net Commercial Withdrawals	0.00	0.02	-0.05	-0.01	0.09	0.05	-0.06	-0.05	0.11	0.00	-0.07	0.09	0.02	-0.02	-0.01
Product Supplied and Losses	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaccounted-for Crude Oil	0.20	0.26	0.17	0.27	0.19	0.22	0.14	0.11	0.19	0.15	0.12	0.11	-0.01	0.13	0.16
Total Crude Oil Supply	13.30	13.41	13.61	13.87	13.97	14.19	14.66	14.89	14.80	15.07	15.13	14.95	15.30	15.51	15.88
Other Supply															
NGL Production	1.66	1.70	1.74	1.73	1.76	1.83	1.82	1.76	1.85	1.91	1.87	1.88	1.72	1.83	1.85
Other Hydrocarbon and Alcohol Inputs	0.15	0.20	0.25	0.26	0.30	0.31	0.34	0.38	0.38	0.38	0.38	0.42	0.42	0.41	0.42
Crude Oil Product Supplied	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Processing Gain	0.71	0.77	0.77	0.77	0.77	0.84	0.85	0.89	0.89	0.95	0.90	0.96	0.95	0.95	0.96
Net Product Imports <sup>c</sup>	0.96	0.94	0.93	1.09	0.75	1.10	1.04	1.17	1.30	1.40	1.59	1.42	1.60	1.76	1.84
Product Stock Withdrawn	-0.04	0.06	-0.05	0.00	0.15	0.03	-0.09	-0.17	0.30	0.00	-0.23	0.15	0.00	-0.02	-0.05
Total Supply	16.76	17.10	17.26	17.72	17.72	18.31	18.62	18.92	19.52	19.70	19.65	19.76	19.99	20.44	20.91
<b>Demand</b>															
Motor Gasoline <sup>d</sup>	7.23	7.38	7.48	7.60	7.79	7.89	8.02	8.25	8.43	8.47	8.61	8.85	8.92	9.10	9.36
Jet Fuel	1.47	1.45	1.47	1.53	1.51	1.58	1.60	1.62	1.67	1.73	1.66	1.61	1.57	1.63	1.67
Distillate Fuel Oil	2.92	2.98	3.04	3.16	3.21	3.37	3.44	3.46	3.57	3.72	3.85	3.78	3.92	4.03	4.14
Residual Fuel Oil	1.16	1.09	1.08	1.02	0.85	0.85	0.80	0.89	0.83	0.91	0.81	0.70	0.76	0.78	0.79
Other Oils <sup>e</sup>	3.99	4.20	4.17	4.41	4.36	4.63	4.77	4.69	5.01	4.87	4.73	4.82	4.82	4.89	4.95
Total Demand	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	19.70	19.65	19.76	19.99	20.43	20.91
Total Petroleum Net Imports	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	10.42	10.90	10.54	11.28	11.65	11.95
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	325	318	335	337	303	284	305	324	284	286	312	278	269	278	280
Total Motor Gasoline	219	216	226	215	202	195	210	216	193	196	210	209	207	206	208
Jet Fuel	49	43	40	47	40	40	44	45	41	45	42	39	38	40	41
Distillate Fuel Oil	144	141	141	145	130	127	138	156	125	118	145	134	138	135	137
Residual Fuel Oil	50	43	44	42	37	46	40	45	36	36	41	31	39	37	39
Other Oils <sup>f</sup>	267	263	273	275	258	250	259	291	246	247	287	258	250	260	271

<sup>a</sup>Includes lease condensate.

<sup>b</sup>Net imports equals gross imports plus SPR imports minus exports.

<sup>c</sup>Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

<sup>d</sup>For years prior to 1993, motor gasoline includes an estimate of fuel ethanol blended into gasoline and certain product reclassifications, not reported elsewhere in EIA. See Appendix B in EIA, *Short-Term Energy Outlook*, EIA/DOE-0202(93/3Q), for details on this adjustment.

<sup>e</sup>Includes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.

<sup>f</sup>Includes stocks of all other oils, such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

SPR: Strategic Petroleum Reserve. NGL: Natural Gas Liquids

Notes: Minor discrepancies with other EIA published historical data are due to rounding, with the following exception: recent petroleum demand and supply data displayed here reflect the incorporation of resubmissions of the data as reported in EIA's *Petroleum Supply Monthly*, Table C1. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.  
 Sources: Historical data: EIA: latest data available from EIA databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109, and *Weekly Petroleum Status Report*, DOE/EIA-0208.

**Table A6. Annual U.S. Natural Gas Supply and Demand: Base Case**  
 (Trillion Cubic Feet)

	Year														
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Supply</b>															
Total Dry Gas Production .....	17.70	17.84	18.10	18.82	18.60	18.78	18.83	19.02	18.83	19.18	19.68	19.05	19.45	19.63	19.82
Gross Imports .....	1.77	2.14	2.35	2.62	2.84	2.94	2.99	3.15	3.59	3.78	3.98	4.01	3.88	4.05	4.19
Gross Exports .....	0.13	0.22	0.14	0.16	0.15	0.15	0.16	0.16	0.16	0.24	0.37	0.52	0.62	0.68	0.81
Net Imports .....	1.64	1.92	2.21	2.46	2.69	2.78	2.84	2.99	3.42	3.54	3.60	3.49	3.26	3.36	3.37
Supplemental Gaseous Fuels.....	0.11	0.12	0.12	0.11	0.11	0.11	0.08	0.08	0.08	0.09	0.09	0.08	0.08	0.08	0.08
Total New Supply.....	19.45	19.88	20.42	21.39	21.40	21.68	21.74	22.10	22.34	22.81	23.37	22.62	22.79	23.07	23.27
Working Gas in Storage															
Opening .....	2.85	2.82	2.60	2.32	2.61	2.15	2.17	2.17	2.73	2.52	1.72	2.90	2.38	2.58	2.56
Closing.....	2.82	2.60	2.32	2.61	2.15	2.17	2.17	2.73	2.52	1.72	2.90	2.38	2.58	2.56	2.51
Net Withdrawals.....	0.03	0.23	0.28	-0.28	0.45	-0.02	0.00	-0.56	0.21	0.80	-1.18	0.53	-0.21	0.02	0.05
Total Supply.....	19.48	20.11	20.70	21.11	21.85	21.66	21.74	21.54	22.54	23.61	22.18	23.15	22.58	23.08	23.33
Balancing Item <sup>a</sup> .....	0.08	0.12	0.09	0.13	0.35	0.94	0.98	0.70	-0.15	-0.15	0.05	-0.50	-0.78	-0.80	-0.81
Total Primary Supply .....	19.56	20.23	20.79	21.24	22.20	22.60	22.72	22.24	22.39	23.47	22.23	22.64	21.80	22.28	22.52
<b>Demand</b>															
Residential.....	4.56	4.69	4.96	4.85	4.85	5.24	4.98	4.52	4.73	4.99	4.78	4.91	5.06	5.11	5.02
Commercial.....	2.73	2.80	2.86	2.90	3.03	3.16	3.21	3.00	3.04	3.22	3.04	3.15	3.14	3.31	3.32
Industrial .....	8.36	8.70	8.87	8.91	9.38	9.68	9.71	9.49	9.16	9.40	8.45	8.27	7.99	8.12	8.35
Lease and Plant Fuel.....	1.13	1.17	1.17	1.12	1.22	1.25	1.20	1.17	1.08	1.15	1.09	1.05	1.08	1.08	1.09
Other Industrial .....	7.23	7.53	7.70	7.79	8.16	8.44	8.51	8.32	8.08	8.25	7.36	7.22	6.91	7.04	7.26
CHP <sup>b</sup> .....	1.06	1.11	1.12	1.18	1.26	1.29	1.28	1.35	1.40	1.39	1.31	1.24	1.12	1.13	1.19
Non-CHP .....	6.17	6.42	6.58	6.61	6.90	7.15	7.23	6.97	6.68	6.87	6.05	5.98	5.79	5.91	6.08
Transportation <sup>c</sup> .....	0.60	0.59	0.62	0.69	0.70	0.71	0.75	0.64	0.65	0.64	0.62	0.64	0.62	0.64	0.63
Electric Power <sup>d</sup> .....	3.32	3.45	3.47	3.90	4.24	3.81	4.06	4.59	4.82	5.21	5.34	5.67	5.00	5.09	5.19
Total Demand .....	19.56	20.23	20.79	21.24	22.20	22.60	22.72	22.24	22.39	23.47	22.23	22.64	21.80	22.28	22.52

<sup>a</sup>The balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

<sup>b</sup>Natural gas used for electricity generation and production of useful thermal output by combined heat and power plants at industrial facilities. Includes a small amount of natural gas consumption at electricity-only plants in the industrial sector.

<sup>c</sup>Pipeline fuel use plus natural gas used as vehicle fuel.

<sup>d</sup>Natural gas used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: EIA: latest data available from EIA databases supporting the following reports: *Natural Gas Monthly*, DOE/EIA-0130; *Electric Power Monthly*, DOE/EIA-0226; Projections: EIA, Short-Term Integrated Forecasting System database, and Office of Oil and Gas, Reserves and Production Division.

**Table A7. Annual U.S. Coal Supply and Demand: Base Case**  
 (Million Short Tons)

	Year														
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Supply</b>															
Production.....	996.0	997.5	945.4	1033.5	1033.0	1063.9	1089.9	1117.5	1100.4	1073.6	1127.7	1094.3	1075.9	1112.9	1137.6
Appalachia.....	457.8	456.6	409.7	445.4	434.9	451.9	467.8	460.4	425.6	419.4	432.8	397.0	380.8	378.6	378.4
Interior.....	195.4	195.7	167.2	179.9	168.5	172.8	170.9	168.4	162.5	143.5	147.0	146.9	145.7	140.5	137.2
Western .....	342.8	345.3	368.5	408.3	429.6	439.1	451.3	488.8	512.3	510.7	547.9	550.4	549.4	593.7	621.9
Primary Stock Levels <sup>a</sup>															
Opening .....	29.0	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	39.5	31.9	35.9	43.3	36.8	34.7
Closing.....	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	39.5	31.9	35.9	43.3	36.8	34.7	35.1
Net Withdrawals.....	-4.0	-1.0	8.7	-7.9	-1.2	5.8	-5.3	-2.6	-2.9	7.6	-4.0	-7.4	6.5	2.1	-0.3
Imports.....	3.4	3.8	7.3	7.6	7.2	7.1	7.5	8.7	9.1	12.5	19.8	16.9	25.1	25.4	26.3
Exports.....	109.0	102.5	74.5	71.4	88.5	90.5	83.5	78.0	58.5	58.5	48.7	39.6	43.0	44.1	44.8
Total Net Domestic Supply .....	886.4	897.8	886.9	961.8	950.4	986.3	1008.5	1045.7	1048.1	1035.2	1094.8	1064.2	1064.5	1096.2	1118.8
Secondary Stock Levels <sup>b</sup>															
Opening .....	147.1	170.2	166.8	123.1	139.6	138.0	126.0	108.8	131.6	149.1	108.5	146.0	148.9	143.7	153.1
Closing.....	170.2	166.8	123.1	139.6	138.0	126.0	108.8	131.6	149.1	108.5	146.0	148.9	143.7	153.1	150.8
Net Withdrawals.....	-23.1	3.3	43.8	-16.5	1.5	12.0	17.2	-22.8	-17.5	40.7	-37.6	-2.9	5.1	-9.4	2.3
Waste Coal Supplied to IPPs <sup>c</sup> .....	0.0	6.0	6.4	7.9	8.5	8.8	8.1	9.0	9.6	10.1	10.6	11.1	11.6	11.6	11.6
Total Supply.....	863.3	907.2	937.1	953.2	960.4	1007.1	1033.9	1031.8	1040.2	1086.0	1067.9	1072.4	1081.2	1098.5	1132.7
<b>Demand</b>															
Coke Plants .....	33.9	32.4	31.3	31.7	33.0	31.7	30.2	28.2	28.1	28.9	26.1	23.7	24.4	24.8	25.0
Electric Power Sector <sup>d</sup> .....	783.9	795.1	831.6	838.4	850.2	896.9	921.4	936.6	940.9	985.8	964.4	977.5	997.1	1007.1	1041.1
Retail and General Industry.....	81.5	80.2	81.1	81.2	78.9	77.7	78.0	72.3	69.6	69.3	69.6	65.2	65.5	66.5	66.6
Residential and Commercial .....	6.1	6.2	6.2	6.0	5.8	6.0	6.5	4.9	4.9	4.1	4.4	4.4	4.5	4.6	4.4
Industrial .....	75.4	74.0	74.9	75.2	73.1	71.7	71.5	67.4	64.7	65.2	65.3	60.7	61.1	61.9	62.2
CHP <sup>e</sup> .....	27.0	28.2	28.9	29.7	29.4	29.4	29.9	28.6	27.8	28.0	25.8	26.2	26.3	26.8	27.8
Non-CHP .....	48.4	45.8	46.0	45.5	43.7	42.3	41.7	38.9	37.0	37.2	39.5	34.5	34.8	35.0	34.4
Total Demand <sup>f</sup> .....	899.2	907.7	944.1	951.3	962.1	1006.3	1029.5	1037.1	1038.6	1084.1	1060.1	1066.4	1087.1	1098.5	1132.7
Discrepancy <sup>g</sup> .....	-35.9	-0.5	-7.0	1.9	-1.7	0.8	4.3	-5.3	1.6	1.9	7.7	6.1	-5.9	0.0	0.0

<sup>a</sup>Primary stocks are held at the mines, preparation plants, and distribution points.

<sup>b</sup>Secondary stocks are held by users. It includes an estimate of stocks held at utility plants sold to nonutility generators.

<sup>c</sup>Estimated independent power producers (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes.

<sup>d</sup>Estimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, EIA.

<sup>e</sup>Coal used for electricity generation and production of useful thermal output by combined heat and power plants at industrial facilities. Includes a small amount of coal consumption at electricity-only plants in the industrial sector.

<sup>f</sup>Total Demand includes estimated IPP consumption.

<sup>g</sup>The discrepancy reflects an unaccounted-for shipper and receiver reporting difference, assumed to be zero in the forecast period. Prior to 1994, discrepancy may include some waste coal supplied to IPPs that has not been specifically identified.

Notes: Rows and columns may not add due to independent rounding. Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System or by EIA's office of Coal, Nuclear, Electric and Alternate Fuels (coal production).

Sources: Historical data: EIA: latest data available from EIA databases supporting the following reports: *Quarterly Coal Report*, DOE/EIA-0121, and *Electric Power Monthly*, DOE/EIA-0226. Projections: EIA, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels.

**Table A8. Annual U.S. Electricity Supply and Demand: Base Case**  
 (Billion Kilowatthours)

	Year														
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Net Electricity Generation</b>															
Electric Power Sector <sup>a</sup>															
Coal.....	1568.8	1597.7	1665.5	1666.3	1686.1	1772.0	1820.8	1850.2	1858.6	1943.1	1882.8	1910.6	1934.4	1946.7	2004.6
Petroleum.....	112.8	92.2	105.4	98.7	68.1	74.8	86.5	122.2	111.5	105.2	119.1	89.7	117.3	117.7	115.7
Natural Gas.....	317.8	334.3	342.2	385.7	419.2	378.8	399.6	449.3	473.0	518.0	554.9	607.7	562.3	585.1	603.5
Nuclear.....	612.6	618.8	610.3	640.4	673.4	674.7	628.6	673.7	728.3	753.9	768.8	780.1	758.0	784.3	791.6
Hydroelectric.....	281.5	245.8	273.5	250.6	302.7	338.1	346.6	313.4	308.6	265.8	204.9	251.7	262.8	286.4	298.8
Other <sup>b</sup> .....	42.1	45.5	47.0	47.0	44.8	45.8	47.3	48.6	50.0	51.6	49.4	58.6	54.7	59.4	62.2
Subtotal.....	2935.6	2934.4	3043.9	3088.7	3194.2	3284.1	3329.4	3457.4	3530.0	3637.5	3580.1	3698.5	3689.5	3779.6	3876.5
Other Sectors <sup>c</sup> .....	138.2	149.5	153.3	158.8	159.3	160.0	162.8	162.9	164.8	164.6	156.6	160.0	153.7	160.4	165.2
Total .....	3073.8	3083.9	3197.2	3247.5	3353.5	3444.2	3492.2	3620.3	3694.8	3802.1	3736.6	3858.5	3843.2	3940.0	4041.8
Net Imports.....	19.6	25.4	27.8	44.8	39.2	40.2	34.1	25.8	29.0	34.0	22.0	22.9	7.5	7.5	6.1
Total Supply .....	3093.4	3109.3	3225.0	3292.3	3392.7	3484.4	3526.2	3646.1	3723.8	3836.2	3758.7	3881.3	3850.7	3947.6	4047.9
Losses and Unaccounted for <sup>d</sup> .....	213.4	223.7	236.0	223.7	235.4	237.4	232.2	221.0	229.2	233.3	216.1	242.2	192.2	197.0	202.5
<b>Demand</b>															
Retail Sales <sup>f</sup>															
Residential.....	955.4	935.9	994.8	1008.5	1042.5	1082.5	1075.9	1130.1	1144.9	1192.4	1202.6	1267.0	1275.3	1310.6	1336.2
Commercial.....	765.7	761.3	794.6	820.3	862.7	887.4	928.6	979.4	1002.0	1055.2	1089.2	1116.2	1112.2	1135.6	1175.4
Industrial.....	946.6	972.7	977.2	1008.0	1012.7	1033.6	1038.2	1051.2	1058.2	1064.2	964.2	972.2	993.2	1017.0	1039.1
Other .....	94.3	93.4	94.9	97.8	95.4	97.5	102.9	103.5	107.0	109.5	113.8	107.1	108.0	110.3	112.2
Subtotal.....	2762.0	2763.4	2861.5	2934.6	3013.3	3101.1	3145.6	3264.2	3312.1	3421.4	3369.8	3462.5	3488.7	3573.5	3663.0
Other Use/Sales <sup>f</sup> .....	118.1	122.3	127.5	134.1	144.1	145.9	148.4	160.9	182.5	181.5	172.8	176.6	169.7	177.1	182.4
Total Demand.....	2880.1	2885.6	2989.0	3068.7	3157.3	3247.0	3294.0	3425.1	3494.6	3602.9	3542.6	3639.1	3658.4	3750.6	3845.4

<sup>a</sup>Electric Utilities and independent power producers.

<sup>b</sup>"Other" includes generation from other gaseous fuels, geothermal, wind, wood, waste, and solar sources.

<sup>c</sup>Electricity generation from combined heat and power facilities and electricity-only plants in the industrial and commercial sectors.

<sup>d</sup>Balancing item, mainly transmission and distribution losses.

<sup>e</sup>Total of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA's *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales are reported annually in Appendix C of EIA's *Electric Sales and Revenue*. Quarterly data for power marketers (and thus retail sales totals) are imputed. Data for 2003 are estimated.

<sup>f</sup>Defined as the sum of facility use of onsite net electricity generation plus direct sales of power by industrial- or commercial-sector generators to third parties, reported annually in Table 7.5 of the *Monthly Energy Review* (MER). Data for 2002 are estimates.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System and by EIA's office of Coal, Nuclear, Electric and Alternate Fuels (hydroelectric and nuclear).

Sources: Historical data: EIA: latest data available from EIA databases supporting the following report: *Electric Power Monthly*, DOE/EIA-0226. Projections: EIA, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels.