

Short-Term Energy Outlook

March 2004

Gasoline Outlook (Figures 1 to 3)

[Gasoline inventories](#) remained tight and [crude oil prices](#) rose again in February. The prospects for oil prices diminishing significantly prior to the driving season have weakened, and there is a high likelihood of additional gasoline price increases this spring. Even if unexpected significant refinery or pipeline disruptions are avoided, national monthly average regular [gasoline pump prices](#) are projected to reach a peak of about \$1.83 per gallon this spring. Summer (April to September) gasoline prices are now expected to average about \$1.74 per gallon this year. This would be a record in nominal dollar terms and the highest inflation-adjusted summer average since 1985. For 2004 as a whole, national regular gasoline pump prices are now expected to average \$1.67 per gallon, 10 cents higher than our previous projection. About half of the increase reflects higher crude oil prices, with the remainder reflecting the impact of low inventories, robust demand, and uncertain availability of gasoline imports.

Two factors that could reduce the risk of sharply higher pump prices would be a more rapid decline rate for crude oil prices than currently expected and solid improvement in the availability of gasoline import volumes from those seen so far this year.

Home Heating Costs (Figure 4)

This month's estimates for the winter now ending yield the following changes in [residential heating bills](#) relative to the 2002-2003 heating season: up 12 percent for natural gas-heated homes; down 2 percent for oil-heated homes; up 7 percent for houses using propane, and up 2 percent for electric-heated households.

Oil Market Developments (Figures 5 to 7)

West Texas Intermediate (WTI) prices averaged almost \$35 per barrel in February, slightly above the January average. Price expectations through 2004 are still centered near \$30 per barrel for average crude oil prices, with potential

spikes remaining a danger given the uncertainty about OPEC production decisions and the unrest in Venezuela. Modest oil price declines are expected in 2005 as Iraqi oil production continues to increase and inventories are rebuilt to more normal levels.

Petroleum inventories remain low in the countries of the OECD, particularly the United States. They are projected to remain slightly above observed 5-year minimums throughout the 2004-2005 forecast period.

OPEC oil production in February exceeded their announced production quotas by an estimated 1.8 million barrels per day. Our projection reflects the expectation that OPEC members other than Iraq will reduce production by about 1.5 million barrels per day from current levels by May, a smaller cut than implied by a literal reading of their February 10 announcement. Annual OPEC production (including Iraq) is expected to remain fairly constant between 2003-2005, allowing for some modest stock building over the period.

Non-OPEC oil supply is projected to increase by about 1.2 million barrels per day in 2004 and by a similar amount in 2005. Most of the increases are projected to come from Russia and the Caspian Sea Region, with smaller increases expected from Africa, Canada, and Mexico.

World oil demand is projected to continue growing by nearly 2 percent in 2004 and 2005 after posting a similar gain in 2003. Assuming these growth rates, oil demand in 2005 would be almost 3 million barrels per day above the 2003 level.

U.S petroleum demand in 2003 grew an estimated 1.6 percent to just over 20 million barrels per day. In 2004, total demand is expected to climb to 20.3 million barrels per day, up 1.1 percent, as increases in transportation- and industrial-related use offset some slowing in fuel oil demand growth. An additional 2.4-percent growth in domestic demand is anticipated for 2005, bringing the annual average consumption rate to 20.8 million barrels per day.

Natural Gas Outlook (Figures 8 to 10)

Underground storage facilities reported above-average withdrawals for February, leaving natural gas inventories at the beginning of March about 13 percent below the 5-year average. Currently, however, underground storage remains ahead of levels from one year ago by about 34 percent.

Natural gas spot prices are likely to remain close to \$5.00 per thousand cubic feet (mcf) this year. Composite spot prices averaged about \$6.10 per mcf in January and about \$4.90 in February. For 2004 as a whole, natural gas spot prices are expected to average about \$5.20 per mcf, declining almost 6 percent from the 2003 average. The projection for 2005 is marginally lower. As in other recent projections, this outcome depends on domestic and imported supply continuing to grow modestly (about 1 percent per year) in 2004 and 2005.

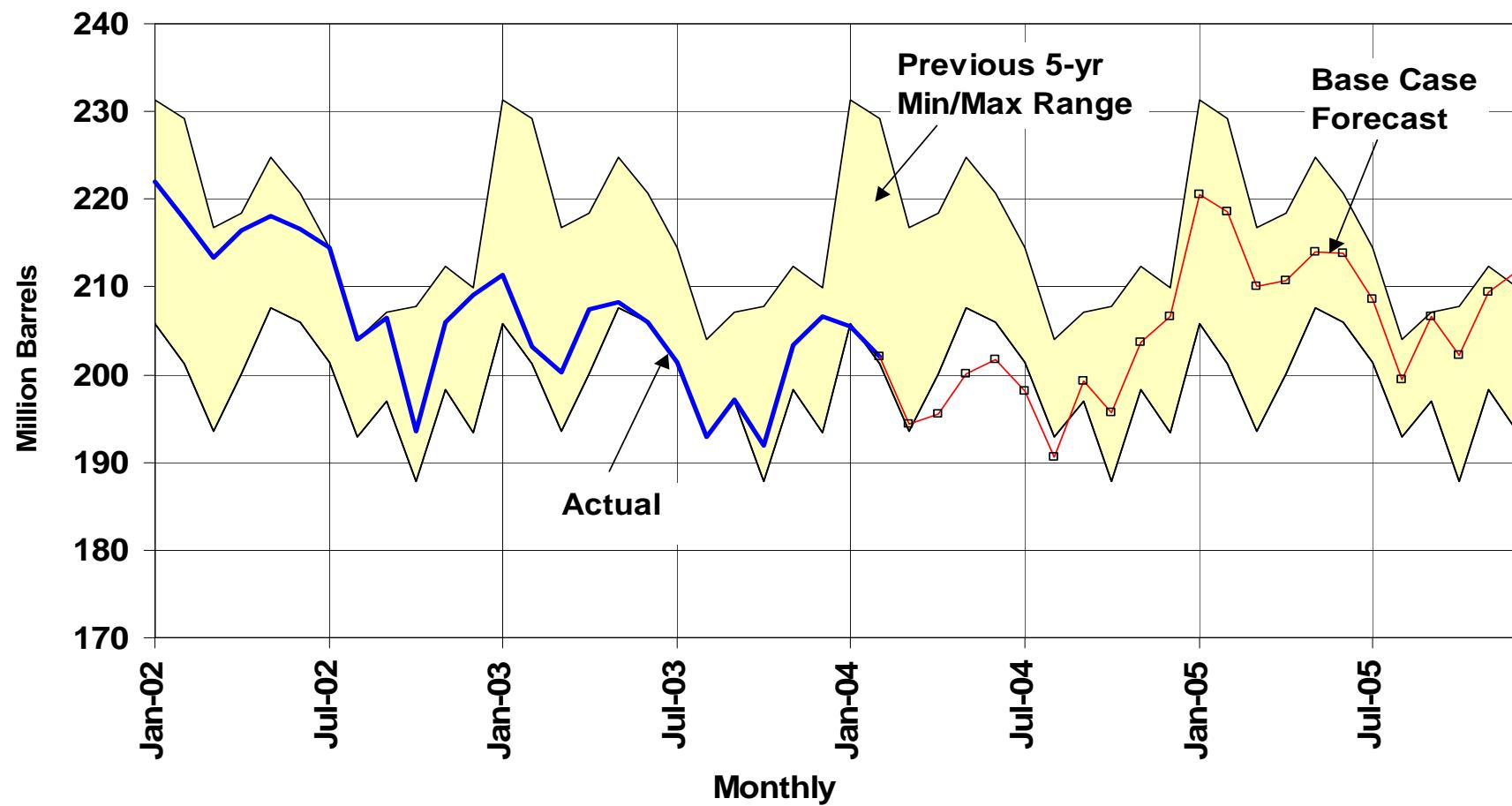
In 2004, natural gas demand is expected to increase by about 2.6 percent due to growth in the economy, along with a somewhat lower projected annual average natural gas price. Demand in 2005 is expected to increase by 0.4 percent as the economy continues to expand, with expected reductions in weather-related demand in the first quarter of 2005 relative to the first quarter of 2004, lessening the overall growth rate next year. Natural gas production is estimated to have increased approximately 2.2 percent in 2003. Natural gas production is expected to continue to expand through 2005 as natural gas well completions, which totaled an estimated 20,000 in 2003, continue to grow to between 22,000 and 23,000 wells per year over the next 2 years.

Electricity and Coal Outlook (Figures 11 to 13)

Electricity demand in 2004 is expected to increase by 2 percent, driven by accelerated growth in the economy and weather-related increases in the first and the fourth quarters. In 2005, annual electricity demand is projected to grow by 1.8 percent, as the economic expansion continues.

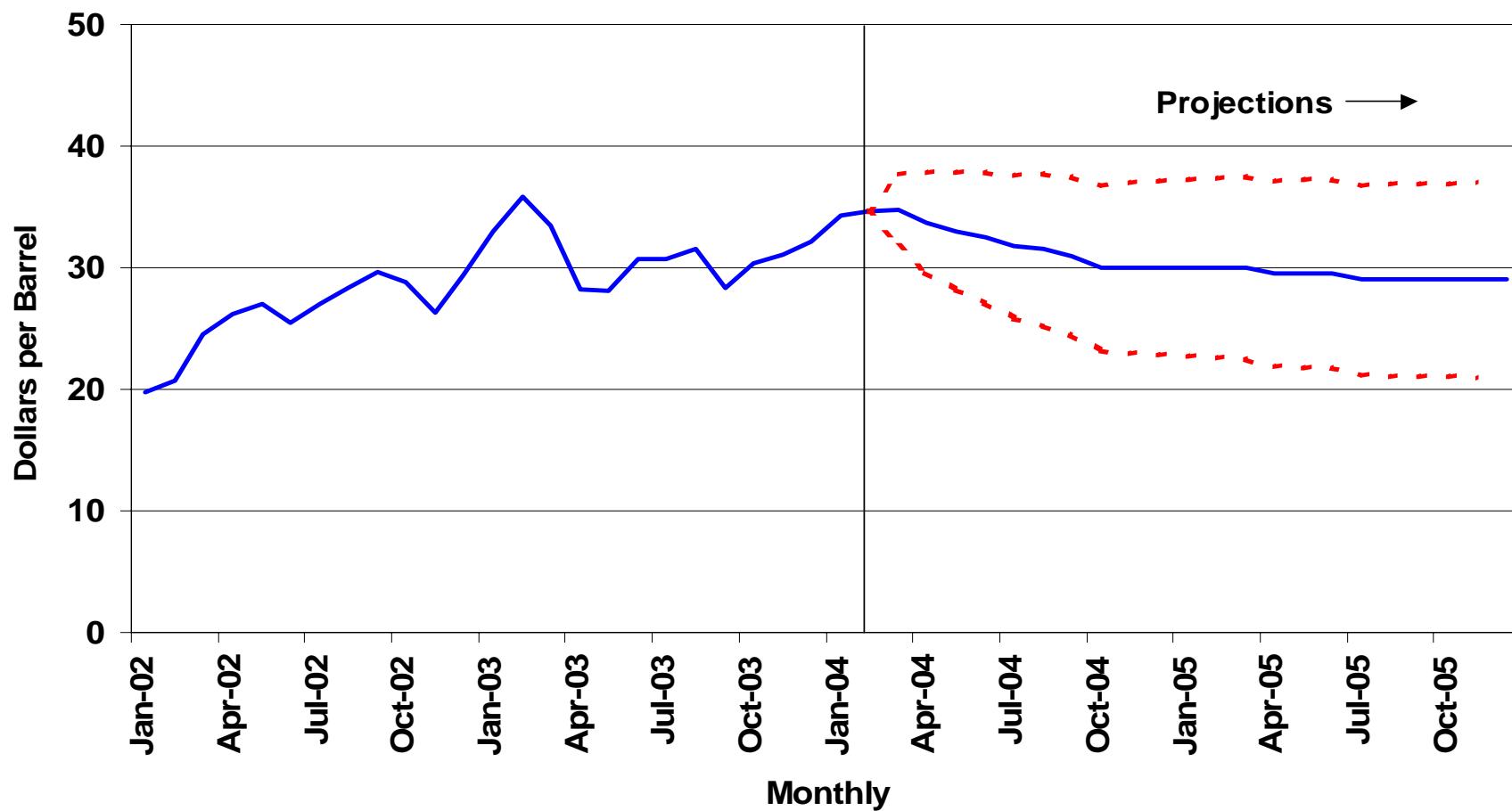
Coal demand in the electric power sector is expected to continue growing in 2004 and 2005. U.S. coal production is expected to increase by 3.6 and 1.3 percent in 2004 and 2005, respectively, as demand for coal increases.

Figure 1. U.S. Gasoline Inventories



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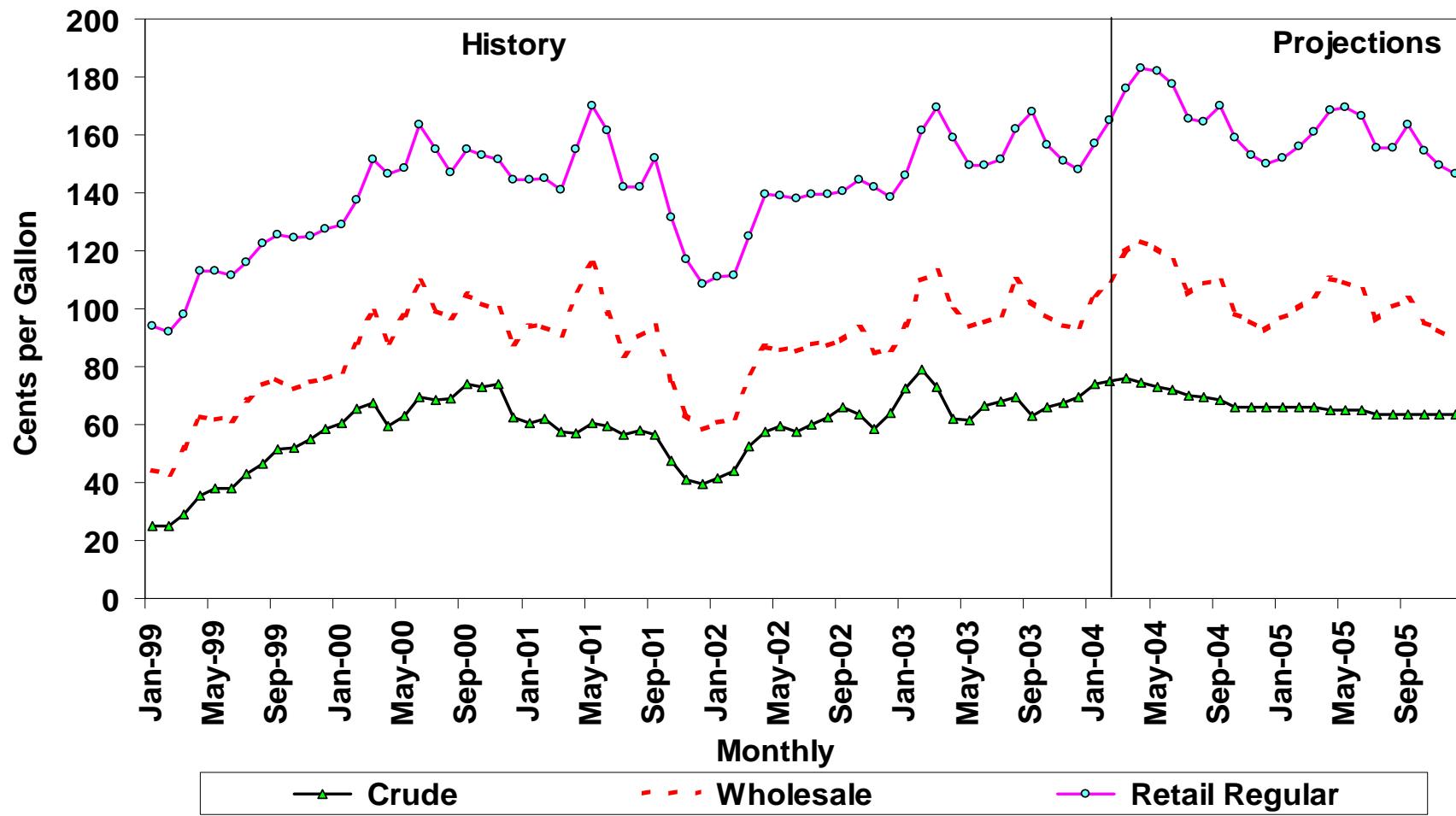
Figure 2. West Texas Intermediate Crude Oil Price (Base Case and 95% Confidence Interval*)



*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 3. Gasoline Prices and Crude Oil Costs



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Figure 4. 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
Natural Gas (Midwest)					
Consumption (mcf)	84	99.1	81.3	95.2	92.8
Avg. Price (\$/mcf)	6.51	9.53	7.41	8.40	9.68
Expenditures (\$)	550	944	602	800	898
Heating Oil (Northeast)					
Consumption (gals)	640	728	577	743	708
Avg. Price (\$/gal)	0.96	1.37	1.10	1.34	1.38
Expenditures (\$)	616	996	635	993	978
Propane (Midwest)					
Consumption (gals)	834	979	803	941	917
Avg. Price (\$/gal)	0.93	1.38	1.11	1.20	1.31
Expenditures (\$)	779	1349	888	1126	1204

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

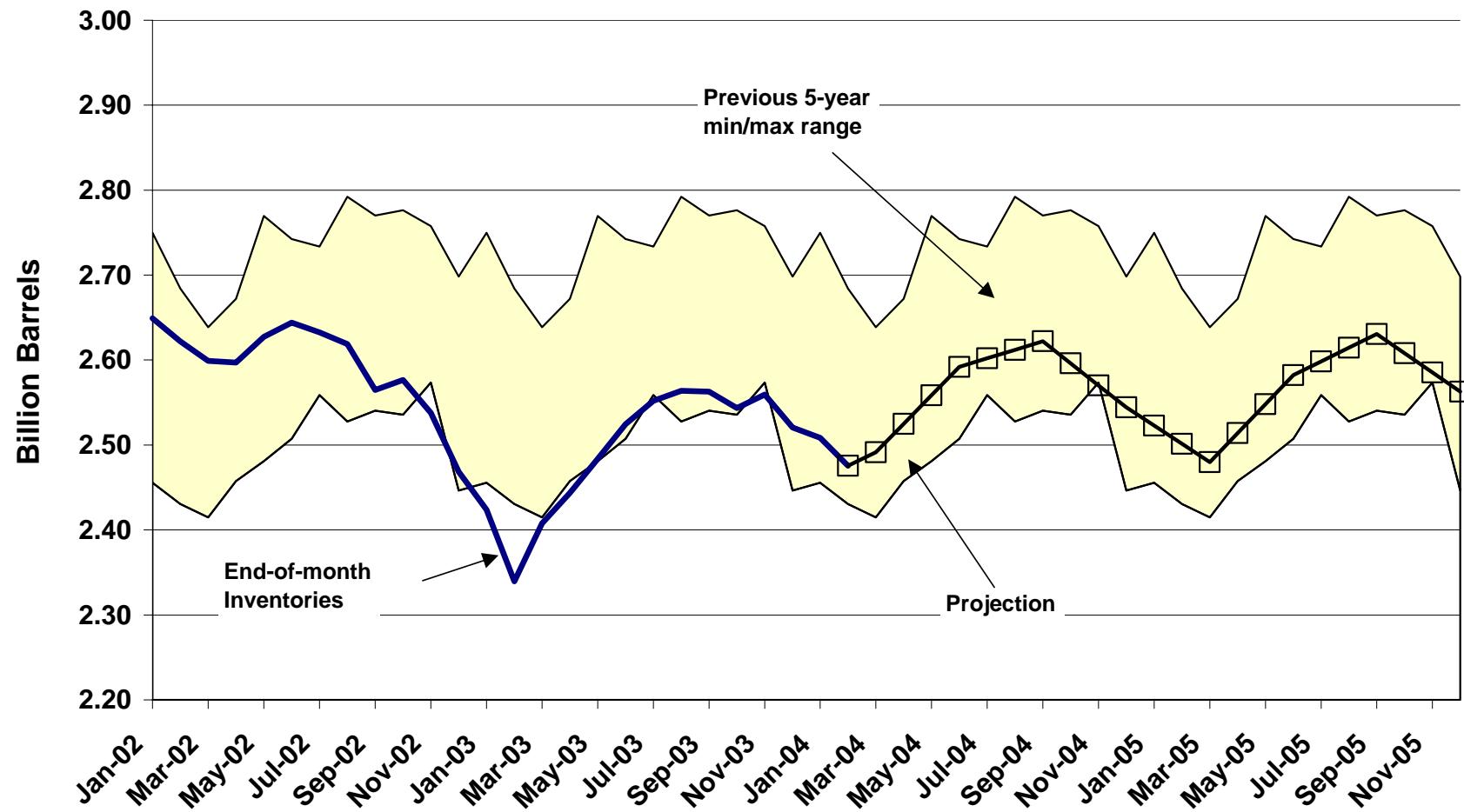
Prices shown are national average delivered-to-household prices.

mcf = thousand cubic feet.

gal = gallon.



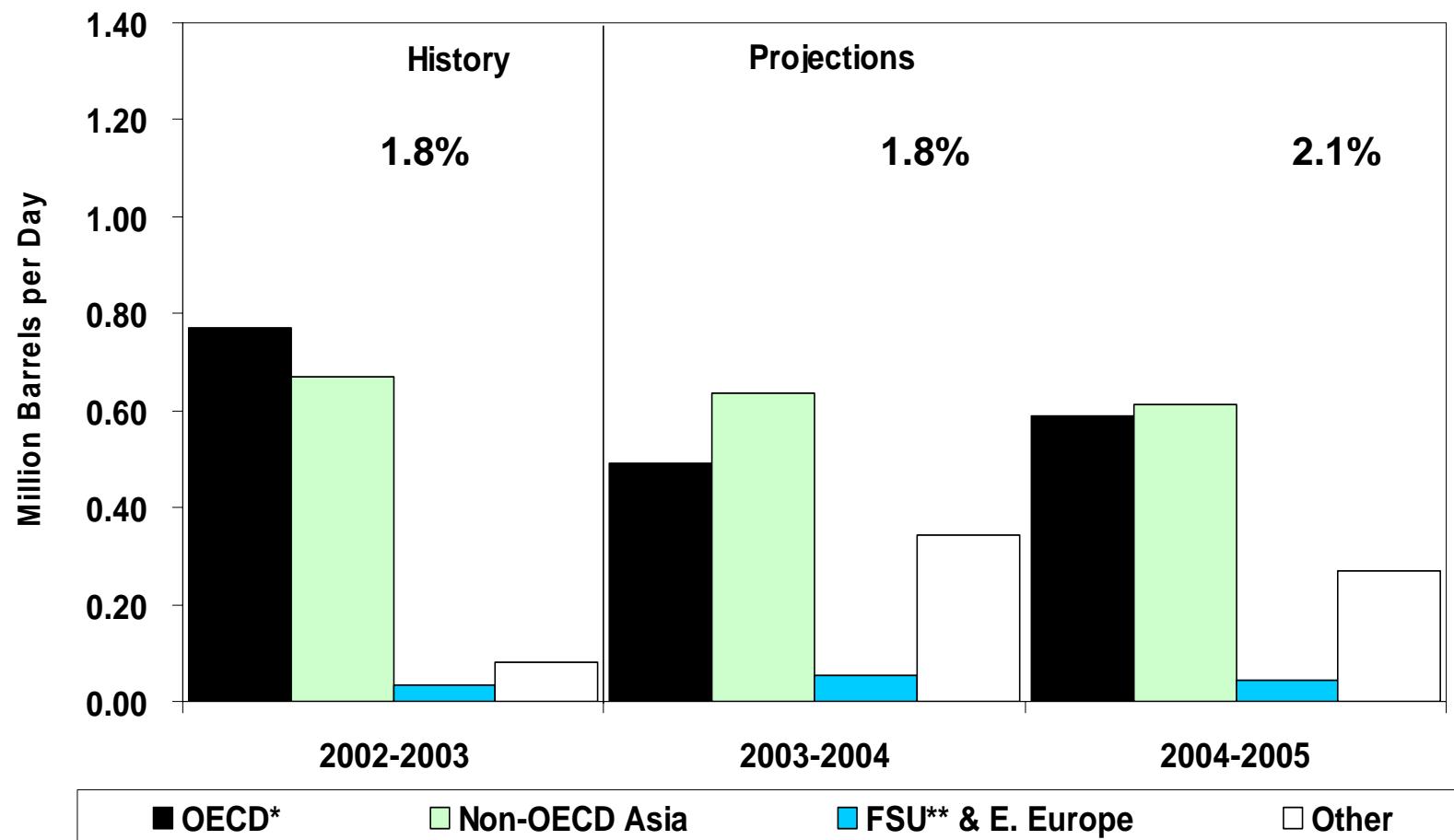
Figure 5. OECD* Commercial Oil Stocks



* Organization for Economic Cooperation and Development

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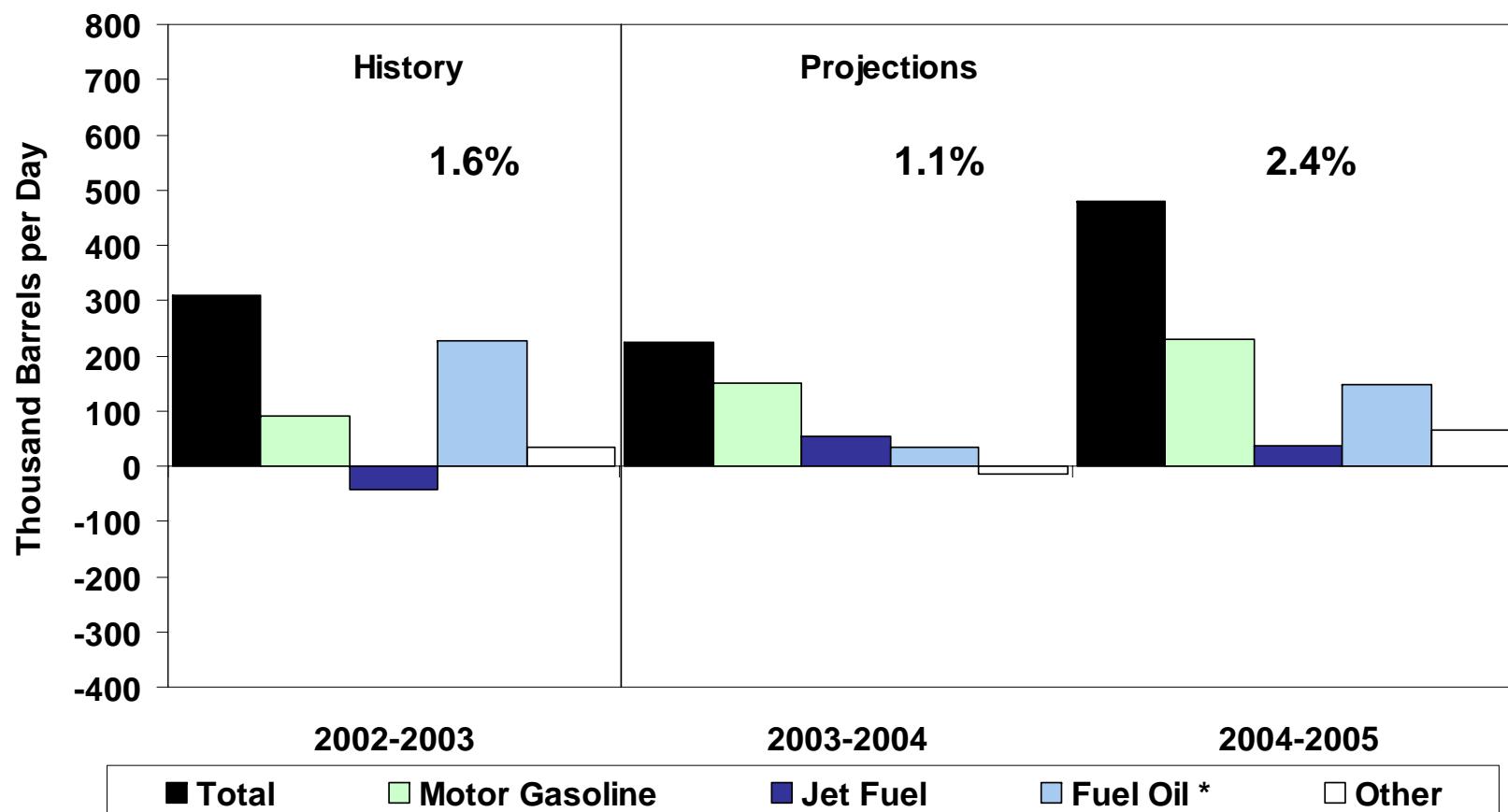
Figure 6. World Oil Demand Growth (Change from Year Ago)



* Note: OECD now defined to include the Czech Republic, Hungary, Mexico, Poland and South Korea in EIA's statistics.

** FSU = Former Soviet Union

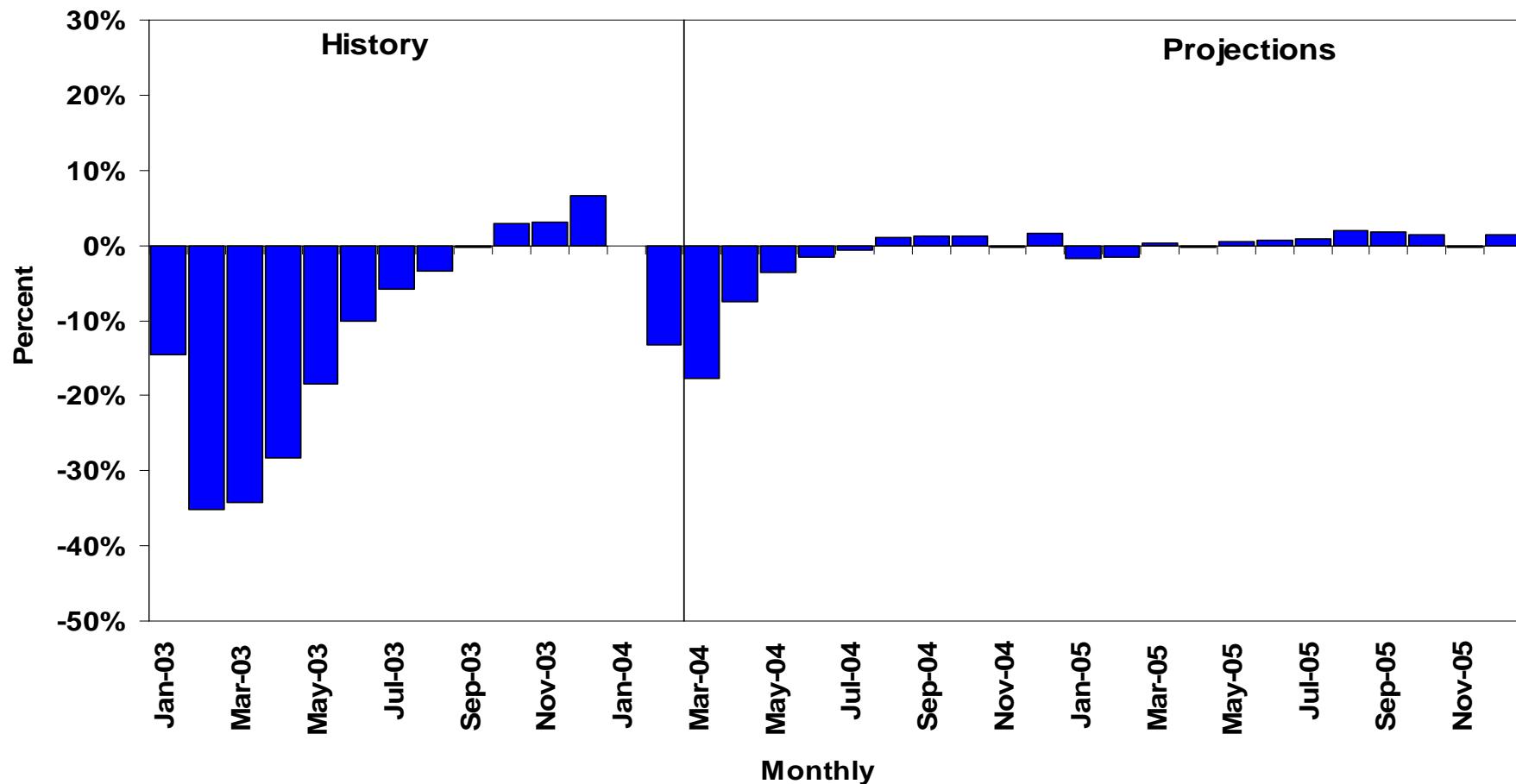
Figure 7. U.S. Petroleum Products Demand Growth (Change from Year Ago)



* Sum of distillate and residual fuel.

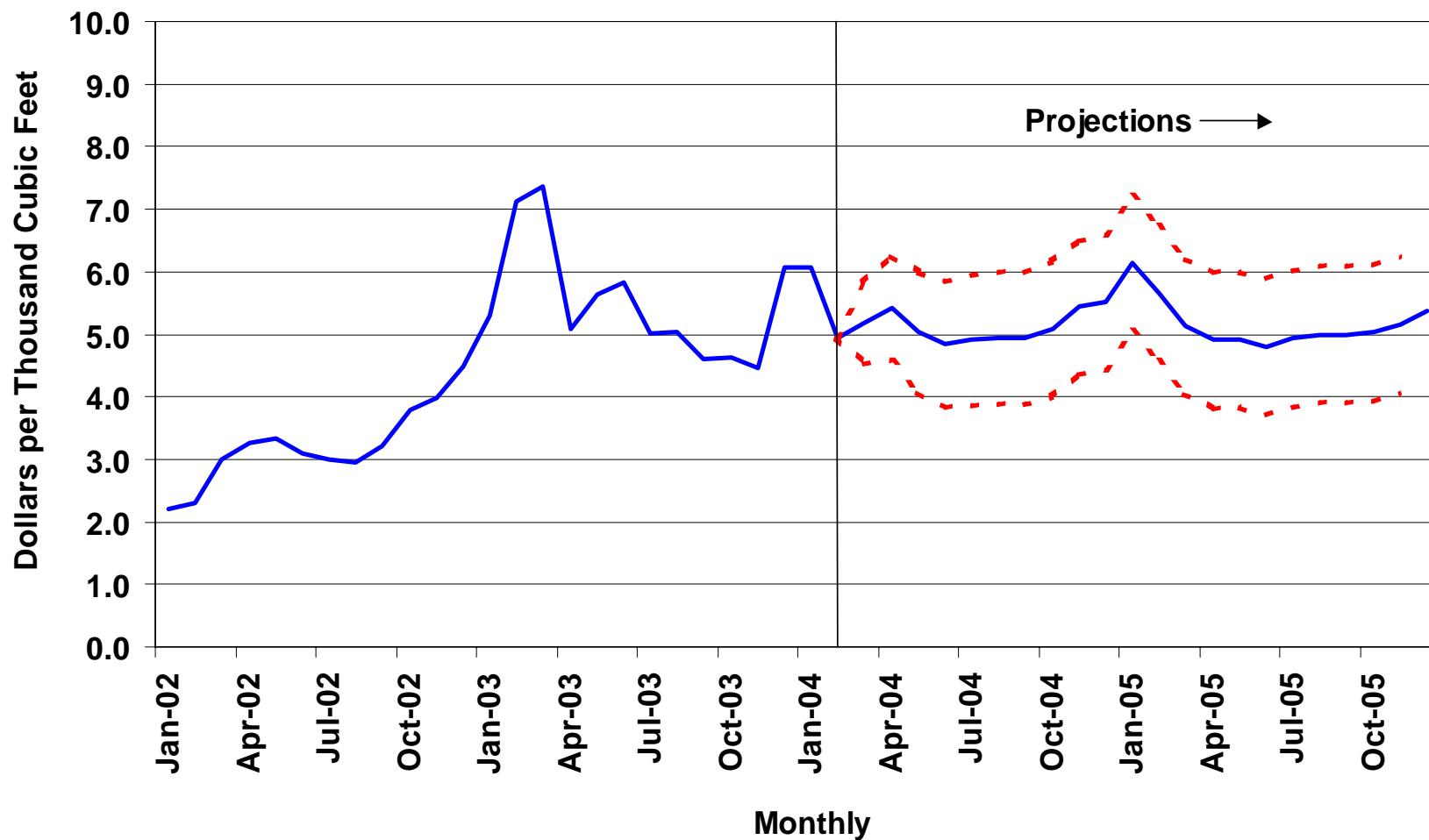


Figure 8. U.S. Working Gas in Storage (Difference from Previous 5-Year Average)



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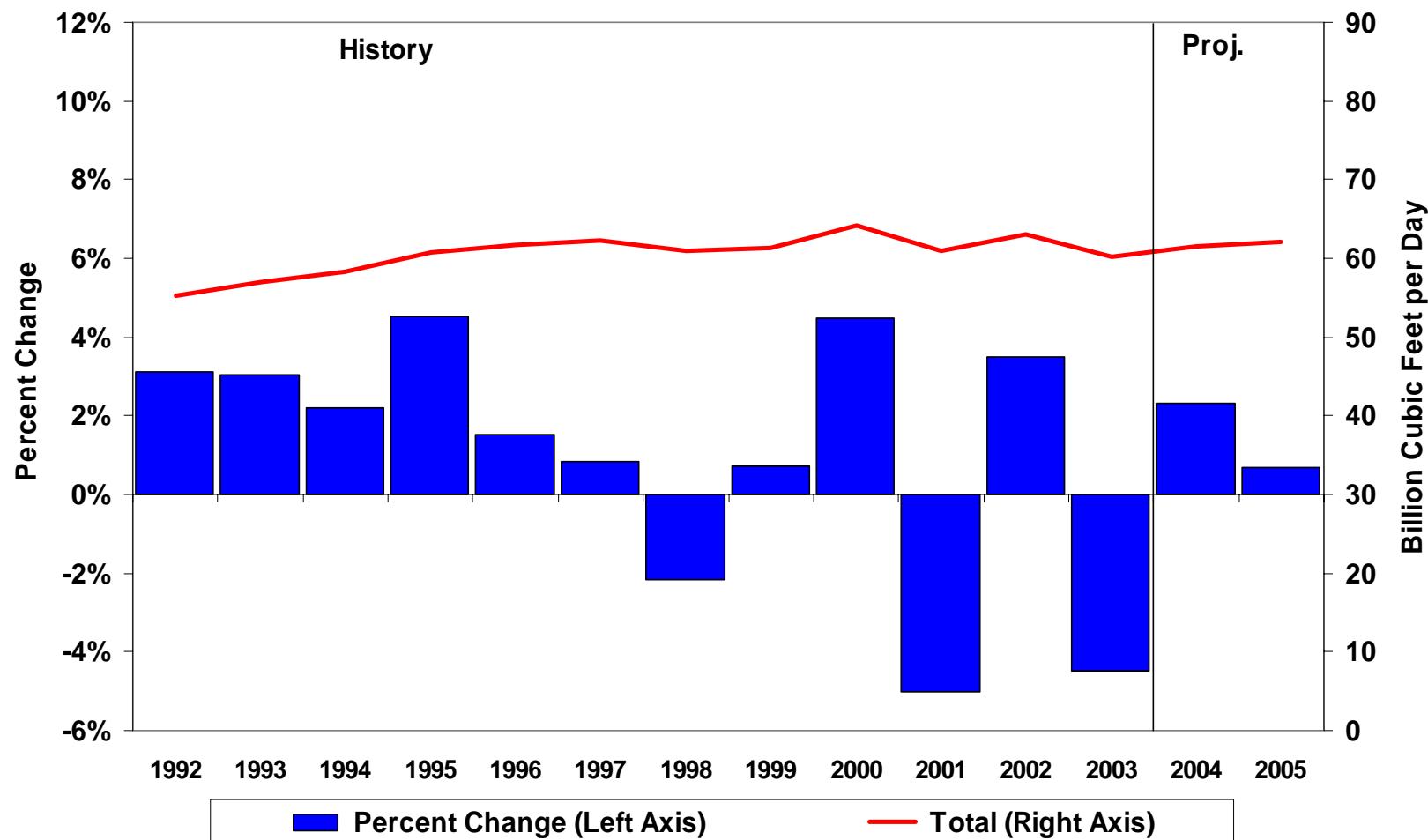
Figure 9. U.S. Natural Gas Spot Prices (Base Case and 95% Confidence Interval*)



*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.

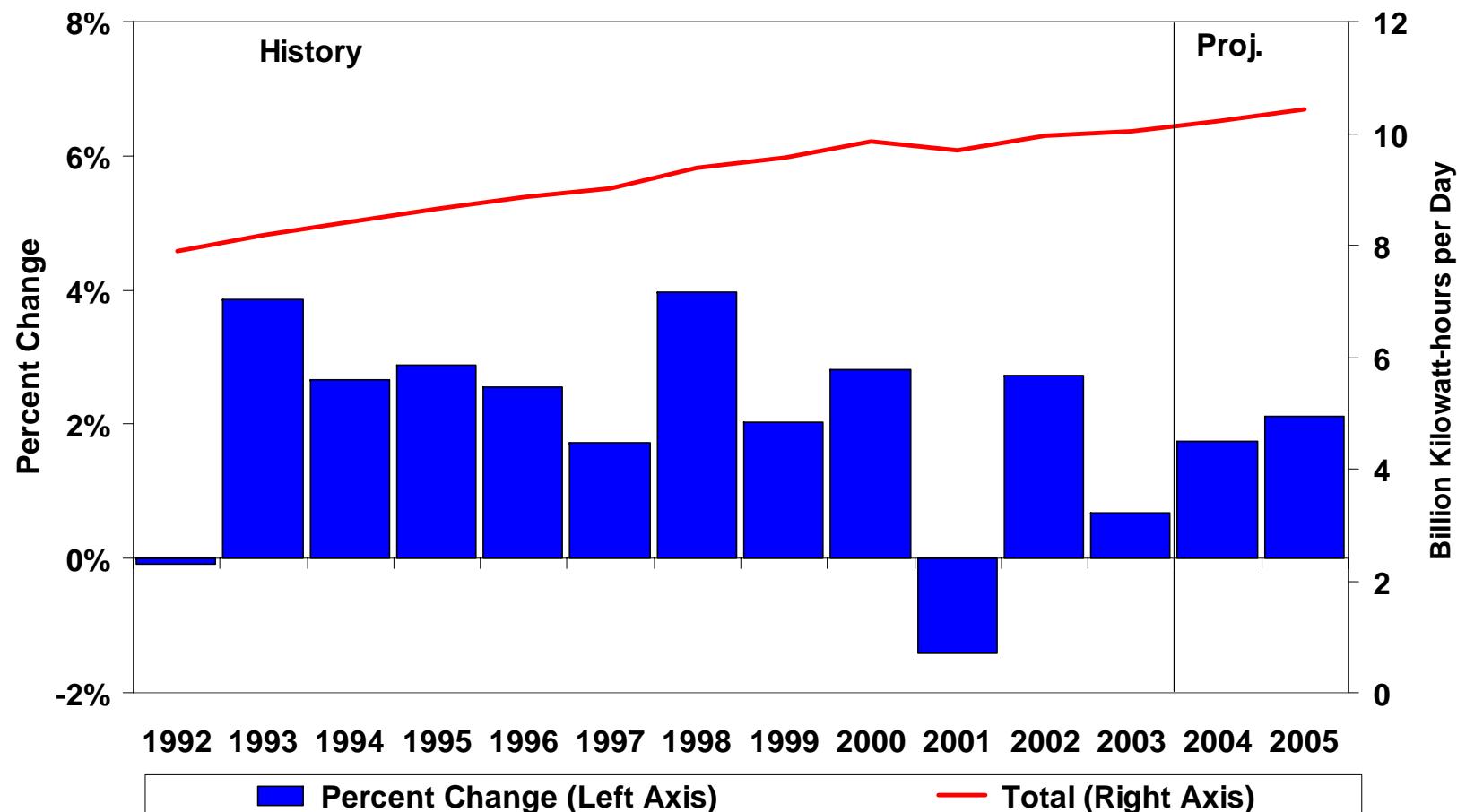
Sources: History: Natural Gas Week; Projections: Short-Term Energy Outlook, March 2004.

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



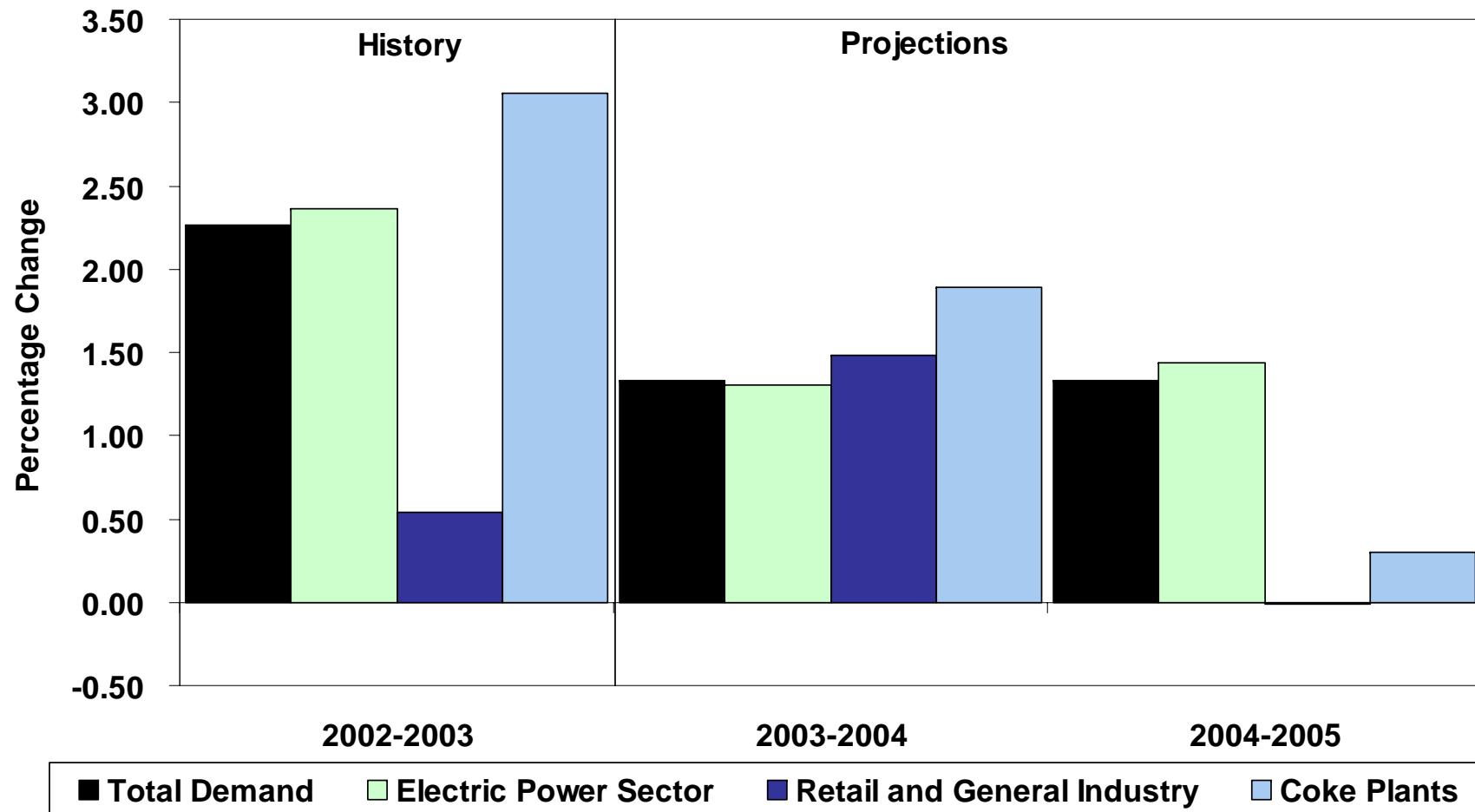
Short-Term Energy Outlook, March 2004

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



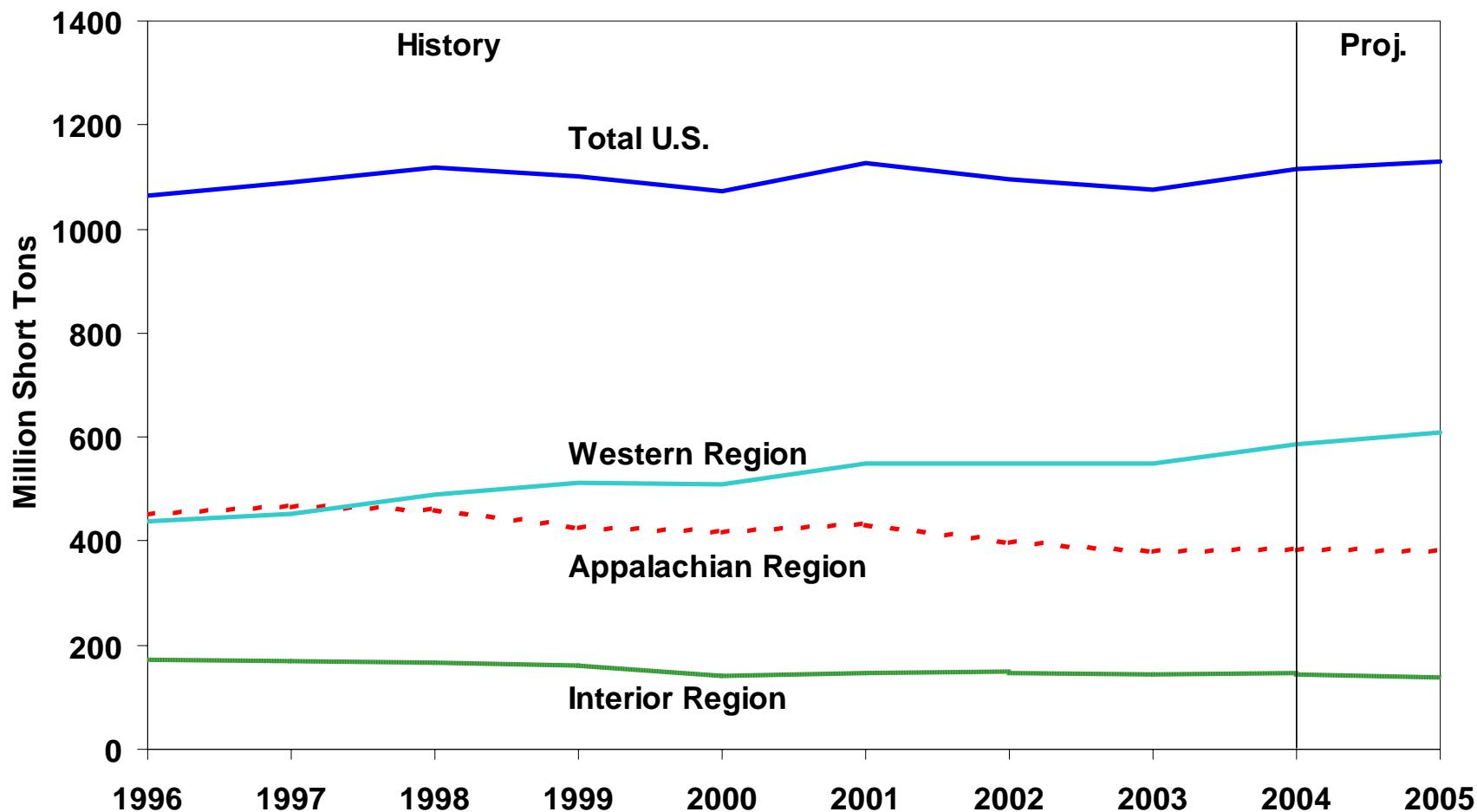
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Figure 12. U.S. Coal Demand



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Figure 13. U.S. Coal Production

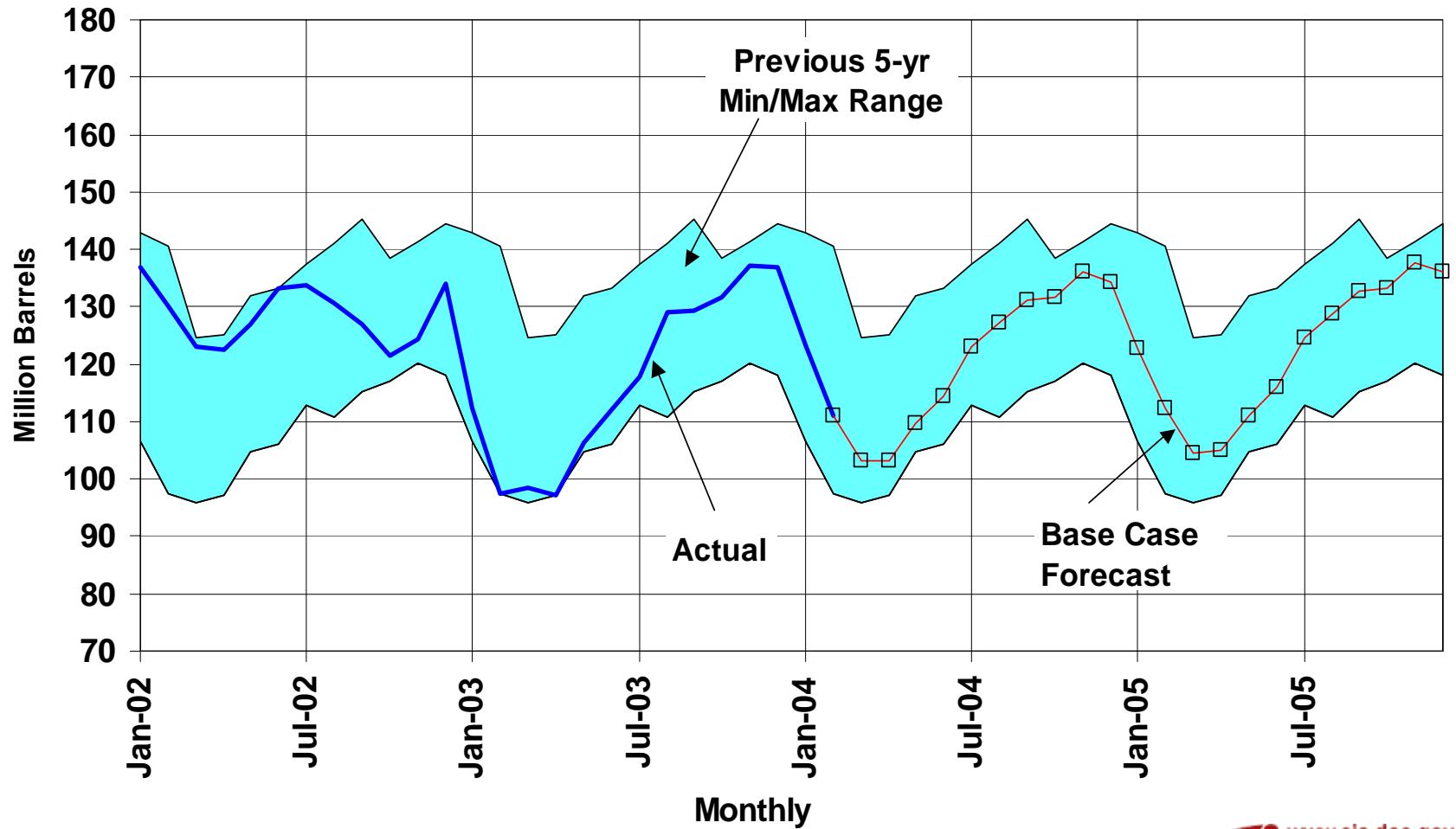


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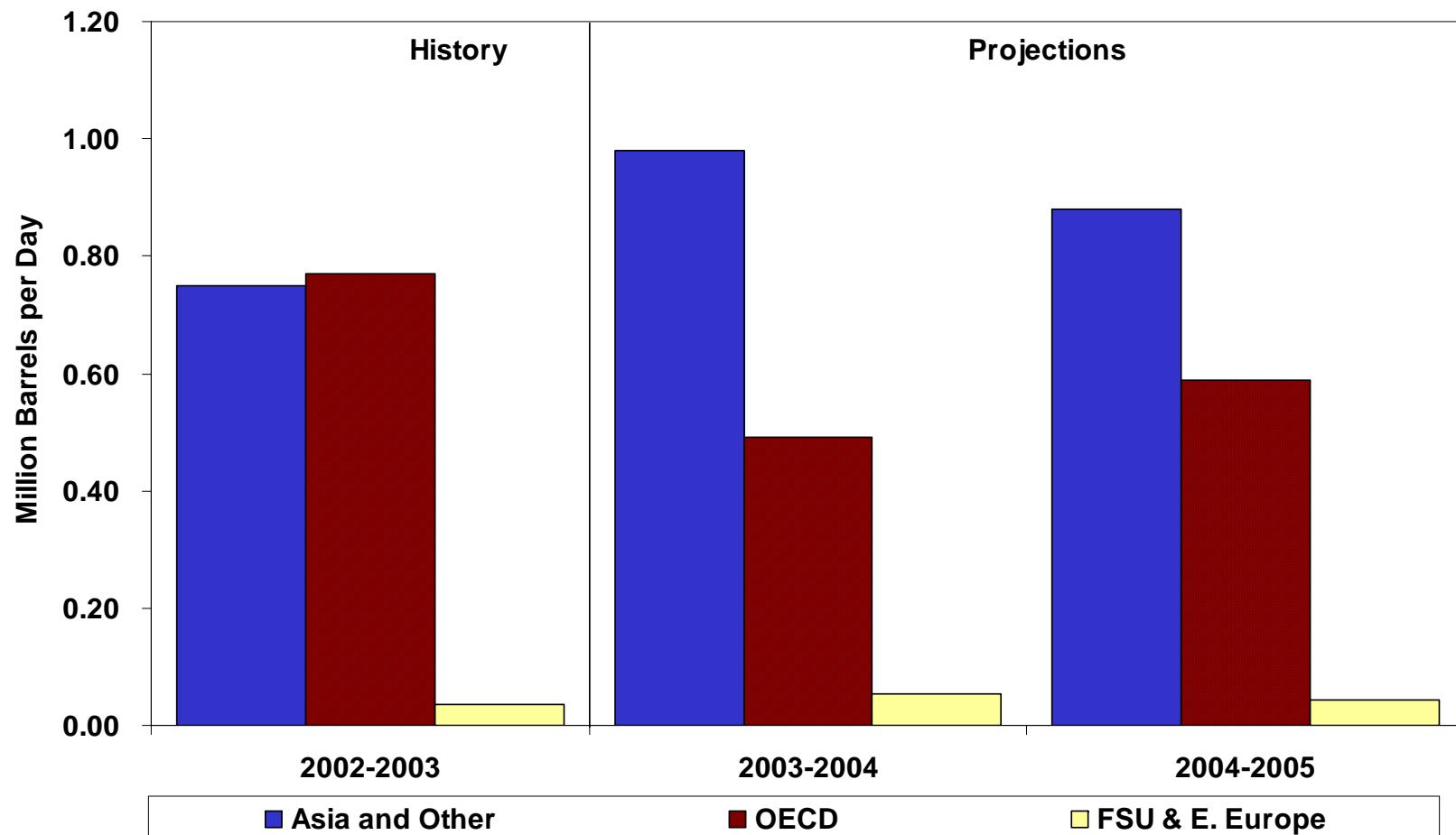
Additional Charts

Figure 14. U.S. Distillate Fuel Oil Inventories



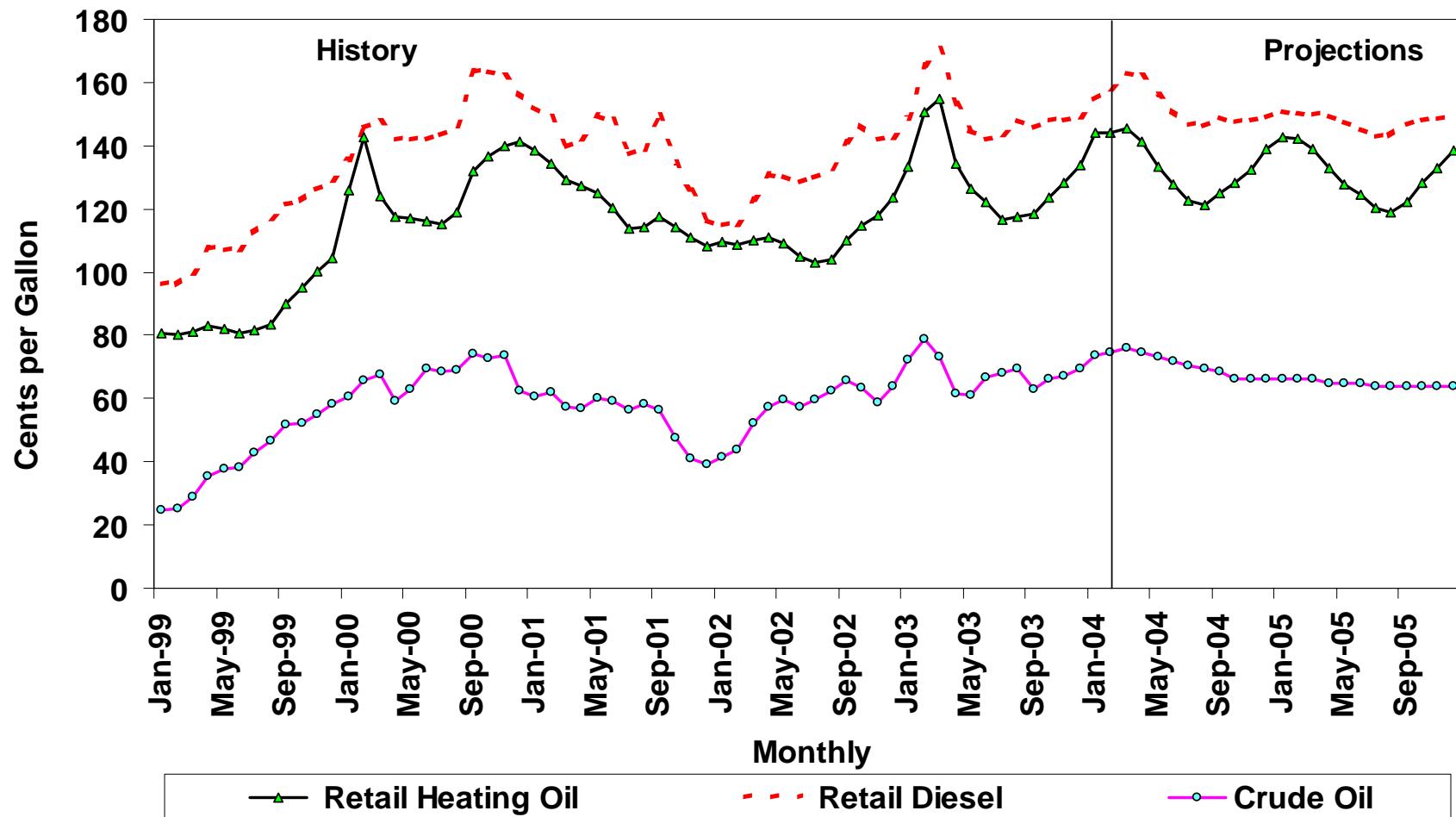
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Figure 15. World Petroleum Production (Changes from Previous Year)



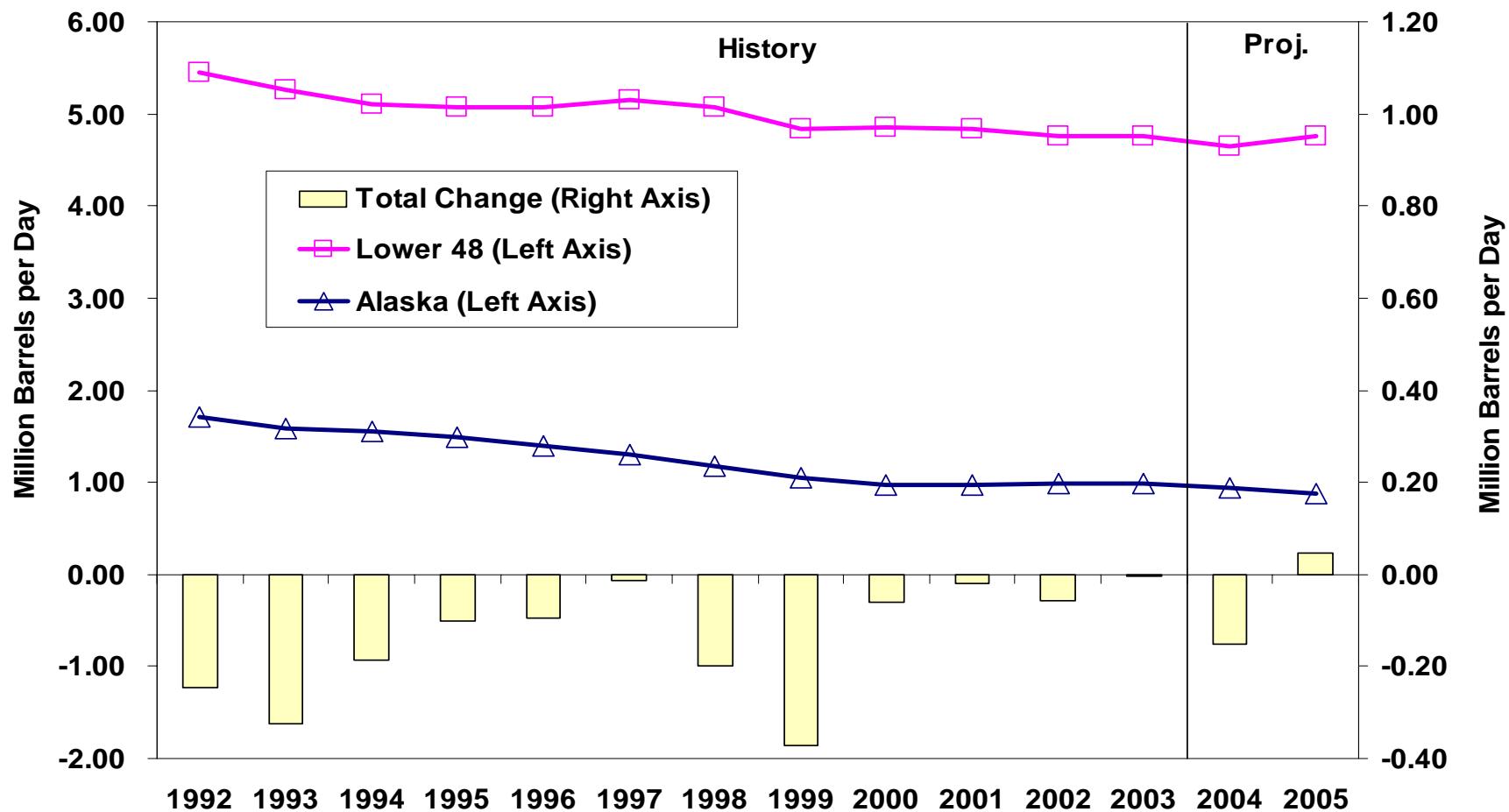
Short-Term Energy Outlook, March 2004

Figure 16. U.S. Distillate Fuel Prices



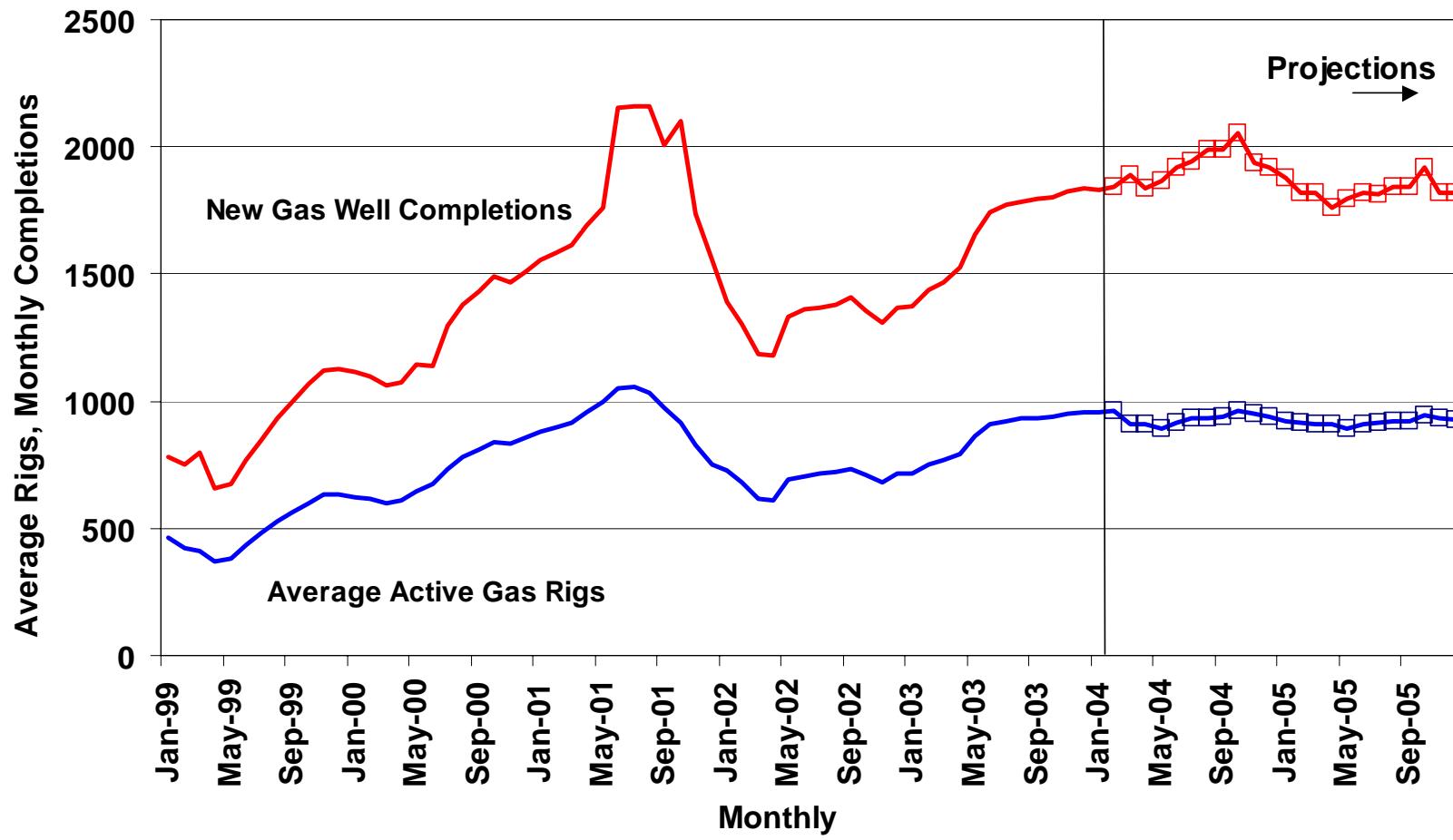
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Figure 17. U.S. Crude Oil Production Trends



Short-Term Energy Outlook, March 2004

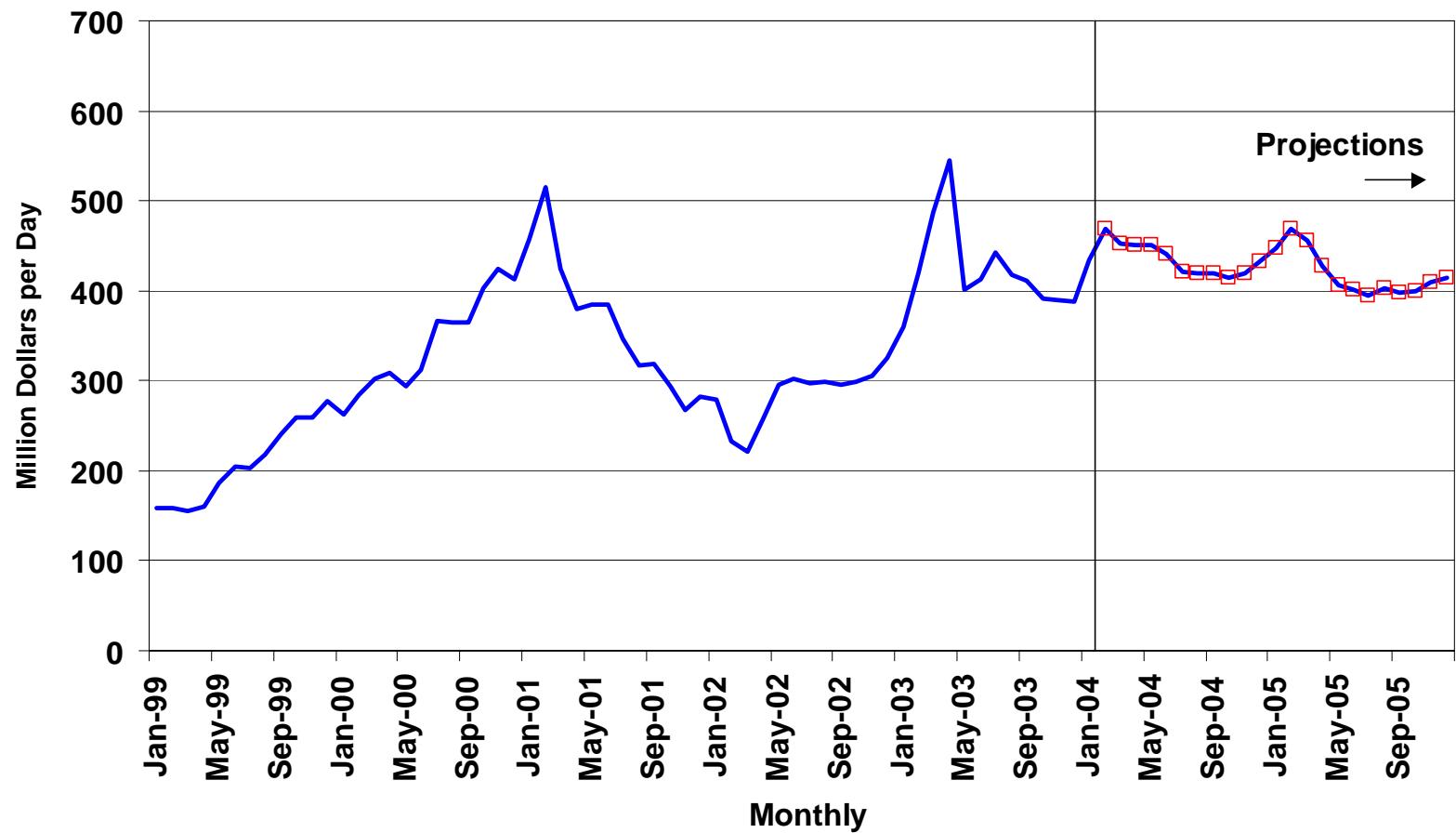
Figure 18. U.S. Natural Gas-Directed Drilling Activity



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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
Real Gross Domestic Product (GDP) (billion chained 2000 dollars)	10083	10397	10889	11273	3.1	4.7	3.5
Imported Crude Oil Price ^a (nominal dollars per barrel)	23.71	27.74	29.07	26.37	17.0	4.8	-9.3
Petroleum Supply (million barrels per day)							
Crude Oil Production ^b	5.75	5.74	5.59	5.64	-0.1	-2.6	0.8
Total Petroleum Net Imports (including SPR)	10.54	11.32	11.66	11.92	7.4	3.1	2.2
Energy Demand							
World Petroleum (million barrels per day)	77.7	79.1	80.5	82.2	1.8	1.8	2.1
Petroleum (million barrels per day)	19.76	20.07	20.30	20.78	1.6	1.1	2.4
Natural Gas (trillion cubic feet)	23.00	21.97	22.54	22.64	-4.5	2.6	0.4
Coal ^c (million short tons)	1066	1091	1105	1120	2.3	1.3	1.3
Electricity (billion kilowatthours)							
Retail Sales ^d	3463	3490	3557	3626	0.8	1.9	1.9
Other Use/Sales ^e	177	174	181	181	-1.4	3.8	0.2
Total	3639	3664	3738	3807	0.7	2.0	1.8
Total Energy Demand ^f (quadrillion Btu)	97.4	97.6	99.4	100.9	0.3	1.8	1.5
Total Energy Demand per Dollar of GDP (thousand Btu per 2000 Dollar)	9.65	9.39	9.13	8.95	-2.7	-2.8	-2.0
Renewable Energy as Percent of Total ^g	6.4%	6.4%	6.7%	6.7%			

^aRefers to the refiner acquisition cost (RAC) of imported crude oil.

^bIncludes lease condensate.

^cTotal Demand includes estimated Independent Power Producer (IPP) coal consumption.

^dTotal 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.

^eDefined 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.

^fThe 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)*.

^gRenewable 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 CONTROL0204.

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
Macroeconomic^a															
Real Gross Domestic Product (billion chained 2000 dollars - SAAR)...	10210	10288	10493	10597	10721	10839	10946	11051	11152	11241	11313	11386	10397	10889	11273
Percentage Change from Prior Year	2.1	2.4	3.6	4.3	5.0	5.4	4.3	4.3	4.0	3.7	3.4	3.0	3.1	4.7	3.5
Annualized Percent Change from Prior Quarter	2.0	3.1	8.0	4.0	4.7	4.4	3.9	3.9	3.6	3.2	2.6	2.6			
GDP Implicit Price Deflator (Index, 2000=100)	105.2	105.4	105.9	106.2	106.8	107.1	107.5	108.0	108.5	108.9	109.4	109.9	105.7	107.4	109.2
Percentage Change from Prior Year	1.7	1.6	1.7	1.5	1.6	1.6	1.6	1.7	1.6	1.7	1.8	1.8	1.6	1.6	1.7
Real Disposable Personal Income (billion chained 2000 Dollars - SAAR) ..	7662	7754	7872	7862	7967	8001	8063	8133	8196	8244	8289	8337	7787	8041	8266
Percentage Change from Prior Year	1.6	1.7	3.5	3.2	4.0	3.2	2.4	3.4	2.9	3.0	2.8	2.5	2.5	3.3	2.8
Manufacturing Production (Index, 1997=100.0)	112.3	111.3	112.5	114.3	116.4	117.9	119.4	121.1	122.7	124.2	125.4	126.7	112.6	118.7	124.8
Percentage Change from Prior Year	0.6	-1.3	-0.6	1.8	3.6	5.9	6.1	5.9	5.4	5.3	5.1	4.7	0.1	5.4	5.1
OECD Economic Growth (percent) ^b ...													1.9	2.9	2.7
Weather^c															
Heating Degree-Days															
U.S.	2326	552	68	1502	2330	542	108	1629	2253	535	99	1623	4448	4609	4510
New England	3523	1045	95	2177	3445	930	195	2275	3237	931	190	2259	6840	6845	6618
Middle Atlantic	3218	844	51	1937	3183	743	125	2045	2959	742	126	2050	6050	6096	5877
U.S. Gas-Weighted	2464	598	75	1627	2504	590	110	1758	2383	589	110	1758	4764	4962	4840
Cooling Degree-Days (U.S.).....	36	327	834	92	27	351	782	77	34	352	784	76	1289	1237	1247

^aMacroeconomic projections from Global Insight model forecasts are seasonally adjusted at annual rates and modified as appropriate to the base world oil price case.

^bOECD: 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.

^cPopulation-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 CONTROL0204.

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
Macroeconomic^a															
Real Fixed Investment (billion chained 2000 dollars-SAAR) ...	1578	1601	1661	1694	1734	1760	1773	1790	1812	1832	1843	1855	1634	1764	1836
Real Exchange Rate (index)	1.049	1.015	1.006	1.004	0.993	0.991	0.989	0.986	0.983	0.981	0.978	0.975	1.018	0.990	0.979
Business Inventory Change (billion chained 2000 dollars-SAAR) ...	-12.2	-15.1	-15.8	-10.8	-1.8	7.0	13.1	19.0	19.3	18.9	16.2	14.6	-13.5	9.3	17.3
Producer Price Index (index, 1982=1.000)	1.383	1.369	1.377	1.397	1.420	1.412	1.416	1.427	1.425	1.429	1.438	1.445	1.381	1.419	1.435
Consumer Price Index (index, 1982-1984=1.000)	1.831	1.834	1.845	1.849	1.861	1.865	1.871	1.880	1.887	1.895	1.903	1.912	1.840	1.869	1.899
Petroleum Product Price Index (index, 1982=1.000)	1.074	0.918	0.975	0.887	0.963	1.071	0.987	0.926	0.962	0.984	0.933	0.908	0.963	0.987	0.947
Non-Farm Employment (millions)	130.0	129.9	129.8	130.0	130.3	130.8	131.7	132.5	133.3	134.0	134.6	135.0	129.9	131.3	134.2
Commercial Employment (millions)	91.5	91.6	91.7	91.9	92.3	92.7	93.5	94.3	95.0	95.7	96.2	96.5	91.7	93.2	95.8
Total Industrial Production (index, 1997=100.0)	111.2	110.0	111.1	112.7	114.4	115.6	116.9	118.4	119.8	121.2	122.2	123.3	111.3	116.3	121.6
Housing Stock (millions)	116.6	116.9	117.0	117.4	117.9	118.2	118.6	118.9	119.3	119.6	119.9	120.2	117.0	118.4	119.7
Miscellaneous															
Gas Weighted Industrial Production (index, 1997=100.0)	100.0	99.0	99.5	101.3	101.9	102.4	102.7	103.3	103.9	104.7	105.2	105.8	100.0	102.6	104.9
Vehicle Miles Traveled ^b (million miles/day)	7217	8084	8153	7695	7345	8138	8255	7807	7490	8312	8459	7982	7790	7887	8063
Vehicle Fuel Efficiency (index, 1999=1.000)	0.992	1.044	1.036	0.998	0.982	1.034	1.036	1.002	0.961	1.067	1.086	1.025	1.018	1.014	1.035
Real Vehicle Fuel Cost (cents per mile)	4.40	4.02	4.22	4.08	4.39	4.70	4.29	4.07	4.20	4.30	4.04	3.93	4.17	4.36	4.12
Air Travel Capacity (mill. available ton-miles/day)	454.8	476.0	477.3	488.1	478.7	497.5	510.8	513.0	504.3	517.1	526.5	528.5	474.1	500.1	519.2
Aircraft Utilization (mill. revenue ton-miles/day)	244.1	269.4	277.2	266.7	257.9	281.5	293.0	280.3	272.1	293.7	303.7	290.5	264.5	278.2	290.1
Airline Ticket Price Index (index, 1982-1984=1.000)	2.252	2.341	2.378	2.281	2.269	2.281	2.295	2.299	2.346	2.369	2.377	2.378	2.313	2.286	2.368
Raw Steel Production (million tons)	25.61	25.52	24.29	22.99	22.74	25.19	25.45	24.15	26.47	27.36	27.12	26.16	98.40	97.53	107.12

^aMacroeconomic projections from Global Insight model forecasts are seasonally adjusted at annual rates and modified as appropriate to the base world oil price case.

^bIncludes 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.

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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
Demand^a															
OECD															
U.S. (50 States)	20.0	19.7	20.3	20.3	20.2	20.1	20.4	20.5	20.7	20.5	20.9	20.9	20.1	20.3	20.8
U.S. Territories.....	0.3	0.3	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	2.2	2.1	2.2	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	15.2	15.0	15.3	15.5	15.6	14.6	15.2	15.9	15.7	14.7	15.3	16.0	15.2	15.3	15.5
Japan	6.2	5.0	4.9	5.6	6.0	4.9	5.1	5.5	6.0	4.9	5.1	5.5	5.4	5.4	5.4
Other OECD.....	5.4	5.1	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.....	49.3	47.2	48.0	49.4	49.7	47.0	48.6	50.1	50.4	47.8	49.4	50.8	48.5	48.8	49.6
Non-OECD															
Former Soviet Union	4.0	3.4	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	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	0.7	0.7
China.....	5.5	5.7	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.....	7.9	7.9	8.0	8.3	8.2	8.2	8.3	8.6	8.4	8.4	8.5	8.9	8.0	8.3	8.6
Other Non-OECD.....	12.1	12.3	12.4	12.4	12.5	12.7	12.8	12.7	12.7	12.9	13.1	13.0	12.3	12.7	12.9
Total Non-OECD.....	30.3	30.0	30.4	31.8	31.4	31.1	31.4	32.7	32.3	32.0	32.4	33.7	30.6	31.7	32.6
Total World Demand	79.7	77.2	78.4	81.1	81.0	78.1	80.1	82.8	82.7	79.8	81.8	84.5	79.1	80.5	82.2
Supply^b															
OECD															
U.S. (50 States)	9.0	8.8	8.8	8.9	8.8	8.7	8.6	8.8	8.9	8.7	8.8	8.9	8.9	8.7	8.8
Canada	3.0	3.0	3.2	3.2	3.3	3.1	3.2	3.3	3.2	3.2	3.3	3.4	3.1	3.2	3.3
Mexico.....	3.8	3.8	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 ^c	6.3	5.8	5.7	6.0	6.0	5.6	5.7	5.9	5.9	5.6	5.7	5.9	6.0	5.8	5.8
Other OECD.....	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	1.6	1.6
Total OECD.....	23.6	22.9	23.1	23.6	23.5	23.0	23.1	23.5	23.5	23.2	23.5	23.9	23.3	23.3	23.5
Non-OECD															
OPEC.....	30.1	30.1	30.3	31.2	31.6	30.5	30.5	30.6	30.6	30.8	31.0	31.0	30.4	30.8	30.8
Crude Oil Portion	26.9	26.7	26.8	27.9	28.2	27.2	27.2	27.2	27.2	27.4	27.6	27.6	27.1	27.5	27.5
Former Soviet Union	9.9	10.1	10.4	10.7	10.9	10.9	11.1	11.2	11.5	11.7	11.9	12.0	10.3	11.0	11.8
China.....	3.4	3.4	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.....	11.4	11.5	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.....	54.8	55.1	55.8	57.3	58.1	56.9	57.3	57.6	57.6	58.1	58.8	59.0	55.8	57.5	58.4
Total World Supply.....	78.4	78.0	79.0	80.9	81.7	79.8	80.4	81.2	81.1	81.3	82.3	82.8	79.1	80.8	81.9
Additional Unaccounted for Supply.....	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	0.3	0.3
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR).....	0.8	-0.9	-0.4	0.3	0.2	-0.9	-0.3	0.2	0.1	-0.7	-0.2	0.4	-0.1	-0.2	-0.1
Other	0.1	-0.2	-0.5	-0.4	-1.1	-1.1	-0.3	1.1	1.2	-1.1	-0.6	1.0	-0.2	-0.4	0.1
Total Stock Withdrawals	1.0	-1.1	-0.8	-0.1	-1.0	-2.0	-0.6	1.3	1.2	-1.8	-0.8	1.3	-0.3	-0.6	0.0
OECD Comm. Stocks, End (bill. bbls.) ...	2.4	2.5	2.6	2.5	2.6	2.6	2.6	2.5	2.5	2.6	2.6	2.6	2.5	2.5	2.6
Non-OPEC Supply	48.3	48.0	48.6	49.7	50.1	49.3	49.9	50.6	50.5	50.5	51.3	51.9	48.7	49.9	51.1

^aDemand 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.

^bIncludes 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.

^cIncludes 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 OPEC 10 Quota	04/01/2004 OPEC 10 Quota	January 2004 Production	February 2004		
				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	3,900	3,900	3,900	0
Kuwait	1,966	1,886	2,300	2,300	2,300	0
Libya	1,312	1,258	1,450	1,450	1,450	0
Nigeria	2,018	1,936	2,300	2,300	2,300	0
Qatar	635	609	750	750	850	100
Saudi Arabia	7,963	7,638	8,700	8,700	10,000 - 10,500	1,300 - 1,800
United Arab Emirates	2,138	2,051	2,300	2,300	2,500	200
Venezuela	2,819	2,704	2,450	2,450	2,450	0
OPEC 10	24,500	23,500	26,335	26,330	27,930 - 28,430	1,600 - 2,100
Iraq			2,100	2,000	2,000	0
Crude Oil Total			28,435	28,330	29,930 - 30,430	1,600 - 2,100
Other Liquids			3,730	3,730		
Total OPEC Supply			32,165	32,060		

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
Crude Oil Prices (dollars per barrel)															
Imported Average ^a	30.58	25.58	27.37	27.80	30.89	30.00	28.42	27.00	27.00	26.50	26.00	26.00	27.74	29.07	26.37
WTI ^b Spot Average	34.10	28.98	30.21	31.19	34.58	33.08	31.42	30.00	30.00	29.50	29.00	29.00	31.12	32.27	29.38
Natural Gas (dollars per thousand cubic feet)															
Average Wellhead.....	5.54	5.01	4.74	4.62	5.24	4.93	4.83	5.17	5.38	4.60	4.61	4.89	4.98	5.04	4.87
Composite Spot	6.58	5.52	4.88	5.06	5.40	5.10	4.92	5.34	5.64	4.88	4.98	5.18	5.51	5.19	5.17
Petroleum Products															
Gasoline Retail ^c (dollars per gallon)															
All Grades	1.63	1.57	1.64	1.56	1.70	1.85	1.69	1.56	1.59	1.71	1.61	1.52	1.60	1.70	1.61
Regular Unleaded	1.59	1.53	1.60	1.52	1.66	1.81	1.67	1.54	1.57	1.68	1.58	1.50	1.56	1.67	1.58
No. 2 Diesel Oil, Retail (dollars per gallon)	1.62	1.47	1.46	1.48	1.59	1.56	1.47	1.48	1.51	1.48	1.44	1.48	1.51	1.53	1.48
No. 2 Heating Oil, Wholesale (dollars per gallon)	1.00	0.78	0.80	0.86	0.88	0.85	0.82	0.85	0.87	0.81	0.79	0.84	0.88	0.85	0.84
No. 2 Heating Oil, Retail (dollars per gallon)	1.45	1.28	1.18	1.29	1.45	1.35	1.23	1.34	1.42	1.29	1.20	1.34	1.32	1.35	1.32
No. 6 Residual Fuel Oil, Retail ^d (dollars per barrel).....	33.71	26.66	28.75	27.83	33.13	30.93	29.80	27.52	29.68	27.36	27.31	26.53	29.40	30.37	27.75
Electric Power Sector (dollars per million Btu)															
Coal.....	1.27	1.29	1.27	1.26	1.29	1.31	1.29	1.28	1.31	1.32	1.30	1.29	1.27	1.29	1.31
Heavy Fuel Oil ^e	5.05	4.76	4.60	4.22	5.01	5.31	4.99	4.77	4.58	4.41	4.35	4.36	4.69	5.01	4.42
Natural Gas.....	6.13	5.52	5.13	4.94	6.09	5.78	5.46	5.86	6.11	5.22	5.25	5.51	5.39	5.75	5.46
Other Residential															
Natural Gas (dollars per thousand cubic feet).....	8.62	10.58	12.47	9.49	9.78	10.85	12.22	10.10	9.92	10.62	11.86	9.71	9.45	10.22	10.12
Electricity (cents per kilowatthour).....	8.08	9.02	9.09	8.52	8.35	8.97	9.12	8.70	8.45	9.06	9.21	8.76	8.68	8.79	8.87

^aRefiner acquisition cost (RAC) of imported crude oil.

^bWest Texas Intermediate.

^cAverage self-service cash prices.

^dAverage for all sulfur contents.

^eIncludes 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
Supply															
Crude Oil Supply															
Domestic Production ^a	5.88	5.78	5.65	5.65	5.65	5.59	5.49	5.63	5.63	5.56	5.66	5.70	5.74	5.59	5.64
Alaska	1.01	0.98	0.94	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	4.87	4.80	4.71	4.67	4.67	4.67	4.62	4.66	4.70	4.69	4.82	4.84	4.76	4.66	4.76
Net Commercial Imports ^b	8.78	10.02	10.23	9.77	9.51	10.17	10.14	9.64	9.71	10.54	10.33	9.82	9.70	9.87	10.10
Net SPR Withdrawals	-0.13	-0.16	-0.12	-0.13	-0.12	-0.15	-0.10	-0.12	-0.12	-0.08	0.00	0.00	-0.13	-0.12	-0.05
Net Commercial Withdrawals	-0.04	-0.02	-0.02	0.19	-0.22	-0.04	0.13	0.00	-0.21	-0.02	0.16	0.02	0.03	-0.03	-0.01
Product Supplied and Losses	0.00	0.00	0.00	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	0.06	0.10	-0.18	-0.12	0.03	0.16	0.14	0.09	0.14	0.15	0.14	0.09	-0.03	0.10	0.13
Total Crude Oil Supply	14.56	15.71	15.56	15.38	14.85	15.73	15.81	15.24	15.15	16.15	16.28	15.63	15.30	15.41	15.80
Other Supply															
NGL Production	1.76	1.61	1.71	1.79	1.81	1.78	1.73	1.80	1.88	1.82	1.76	1.83	1.72	1.78	1.82
Other Hydrocarbon and Alcohol Inputs	0.44	0.42	0.44	0.40	0.40	0.41	0.42	0.42	0.40	0.42	0.44	0.43	0.43	0.41	0.42
Crude Oil Product Supplied	0.00	0.00	0.00	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	0.89	0.97	1.00	1.02	0.94	0.95	0.95	0.96	0.94	0.95	0.96	0.96	0.97	0.95	0.95
Net Product Imports ^c	1.50	1.77	1.79	1.40	1.71	1.89	1.85	1.75	1.93	1.82	1.79	1.73	1.61	1.80	1.82
Product Stock Withdrawn or Added (-)	0.86	-0.80	-0.18	0.25	0.53	-0.67	-0.37	0.32	0.40	-0.61	-0.31	0.35	0.03	-0.05	-0.04
Total Supply	20.01	19.67	20.33	20.23	20.23	20.08	20.39	20.49	20.70	20.55	20.92	20.94	20.06	20.30	20.78
Demand															
Motor Gasoline	8.50	9.04	9.19	9.01	8.74	9.20	9.31	9.10	8.90	9.41	9.60	9.36	8.94	9.09	9.32
Jet Fuel	1.54	1.51	1.61	1.62	1.56	1.58	1.66	1.70	1.62	1.62	1.68	1.72	1.57	1.63	1.66
Distillate Fuel Oil	4.22	3.80	3.79	3.92	4.28	3.87	3.82	4.13	4.39	3.97	3.92	4.21	3.93	4.03	4.12
Residual Fuel Oil	0.86	0.72	0.78	0.74	0.79	0.63	0.68	0.75	0.82	0.70	0.76	0.77	0.78	0.71	0.76
Other Oils ^d	4.90	4.59	4.96	4.98	4.86	4.79	4.92	4.81	4.96	4.85	4.96	4.86	4.86	4.84	4.91
Total Demand	20.02	19.67	20.33	20.27	20.23	20.08	20.39	20.48	20.69	20.55	20.92	20.93	20.07	20.30	20.78
Total Petroleum Net Imports	10.28	11.78	12.02	11.17	11.21	12.06	11.99	11.39	11.64	12.36	12.12	11.54	11.32	11.66	11.92
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	282	284	286	268	288	292	280	280	298	300	285	283	268	280	283
Total Motor Gasoline	200	206	197	207	194	202	199	207	210	214	207	212	207	207	212
Finished Motor Gasoline	145	153	145	147	133	144	143	150	149	156	150	156	147	150	156
Blending Components	55	53	52	60	61	58	56	56	61	58	56	56	60	56	56
Jet Fuel	37	38	40	39	36	39	40	40	38	40	41	40	39	40	40
Distillate Fuel Oil	99	112	129	137	103	114	131	134	105	116	133	136	137	134	136
Residual Fuel Oil	32	36	32	38	38	38	39	40	37	38	39	40	38	40	40
Other Oils ^e	226	275	285	241	241	280	298	258	253	290	307	266	241	258	266
Total Stocks (excluding SPR)	876	951	969	929	901	966	987	957	941	998	1012	977	929	957	977
Crude Oil in SPR	599	609	624	638	649	662	672	683	693	701	701	701	638	683	701
Heating Oil Reserve	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Total Stocks (incl SPR and HOR)	1477	1561	1596	1569	1552	1630	1661	1642	1636	1701	1714	1680	1569	1642	1680

^aIncludes lease condensate.

^bNet imports equals gross imports minus exports.

^cIncludes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

^dIncludes 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.

^eIncludes 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^a for the STIFS^b
 (Percent Deviation Base Case)

Demand Sector	+1% GDP	+ 10% Prices		+ 10% Weather ^e	
		Crude Oil ^c	N.Gas Wellhead ^d	Fall/Winter ^f	Spring/Summer ^f
Petroleum					
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%
Natural Gas					
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%
Coal					
Total.....	0.7%	0.0%	0.0%	1.7%	1.7%
Electric Power.....	0.6%	0.0%	0.0%	1.9%	1.9%
Electricity					
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%

^aPercent change in demand quantity resulting from specified percent changes in model inputs.

^bShort-Term Integrated Forecasting System.

^cRefiner acquisitions cost of imported crude oil.

^dAverage unit value of marketed natural gas production reported by States.

^eRefers to percent changes in degree-days.

^fResponse 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	5.959	5.450	0.508	0.49	0.459
Lower 48 States.....	5.073	4.575	0.498	0.044	0.454
Alaska.....	0.886	0.875	0.010	0.005	0.005

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
Supply															
Total Dry Gas Production.....	4.86	4.83	4.82	4.86	4.86	4.91	4.90	4.92	4.93	4.94	4.96	4.98	19.36	19.59	19.81
Gross Imports	0.99	0.92	0.93	1.01	1.00	0.93	0.96	1.02	1.00	0.97	1.00	1.05	3.84	3.91	4.02
Pipeline	0.91	0.80	0.77	0.86	0.86	0.77	0.80	0.85	0.84	0.78	0.80	0.85	3.33	3.27	3.27
LNG.....	0.08	0.13	0.16	0.15	0.14	0.16	0.17	0.17	0.16	0.19	0.20	0.20	0.51	0.64	0.75
Gross Exports	0.16	0.15	0.15	0.18	0.18	0.17	0.18	0.19	0.20	0.20	0.21	0.23	0.64	0.72	0.84
Net Imports	0.82	0.77	0.78	0.83	0.82	0.77	0.78	0.82	0.80	0.77	0.78	0.82	3.20	3.19	3.18
Supplemental Gaseous Fuels.....	0.01	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.07	0.07	0.07
Total New Supply.....	5.69	5.62	5.62	5.70	5.70	5.69	5.70	5.77	5.75	5.73	5.76	5.82	22.62	22.85	23.06
Working Gas in Storage															
Opening	2.38	0.73	1.77	2.84	2.58	0.91	1.93	2.88	2.46	1.11	1.98	2.90	2.38	2.58	2.46
Closing.....	0.73	1.77	2.84	2.58	0.91	1.93	2.88	2.46	1.11	1.98	2.90	2.45	2.58	2.46	2.45
Net Withdrawals.....	1.65	-1.04	-1.08	0.26	1.67	-1.02	-0.95	0.42	1.35	-0.87	-0.92	0.45	-0.21	0.12	0.01
Total Supply.....	7.34	4.58	4.54	5.96	7.37	4.67	4.75	6.19	7.10	4.86	4.84	6.27	22.42	22.97	23.07
Balancing Item ^a	-0.02	-0.04	0.02	-0.41	0.01	0.14	-0.06	-0.52	0.08	0.07	-0.06	-0.52	-0.45	-0.43	-0.43
Total Primary Supply.....	7.31	4.54	4.56	5.55	7.37	4.81	4.69	5.67	7.18	4.93	4.78	5.75	21.97	22.54	22.64
Demand															
Residential	2.50	0.82	0.37	1.34	2.48	0.82	0.38	1.43	2.37	0.82	0.38	1.43	5.03	5.11	5.01
Commercial.....	1.36	0.57	0.39	0.84	1.37	0.62	0.43	0.91	1.33	0.63	0.45	0.92	3.15	3.33	3.34
Industrial	2.19	1.89	1.97	2.15	2.28	2.03	2.02	2.14	2.28	2.09	2.05	2.16	8.20	8.47	8.58
Lease and Plant Fuel.....	0.29	0.28	0.28	0.29	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.29	1.14	1.12	1.14
Other Industrial	1.91	1.61	1.69	1.86	2.00	1.75	1.74	1.86	2.00	1.81	1.77	1.88	7.06	7.35	7.44
CHP ^b	0.30	0.26	0.29	0.29	0.30	0.28	0.29	0.28	0.30	0.29	0.29	0.29	1.14	1.16	1.17
Non-CHP	1.61	1.35	1.40	1.56	1.69	1.47	1.46	1.58	1.70	1.52	1.47	1.59	5.92	6.19	6.28
Transportation ^c	0.21	0.13	0.13	0.17	0.23	0.14	0.13	0.16	0.21	0.14	0.13	0.16	0.65	0.66	0.64
Electric Power ^d	1.05	1.13	1.70	1.07	1.02	1.21	1.73	1.03	0.98	1.25	1.78	1.07	4.94	4.98	5.07
Total Demand	7.31	4.54	4.56	5.55	7.37	4.81	4.69	5.67	7.18	4.93	4.78	5.75	21.97	22.54	22.64

^aThe balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

^bNatural 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.

^cPipeline fuel use plus natural gas used as vehicle fuel.

^dNatural 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
Supply															
Production.....	264.1	267.2	267.9	276.7	281.9	266.3	283.8	283.0	285.5	268.2	287.4	288.2	1075.9	1115.0	1129.2
Appalachia.....	95.4	95.5	92.2	97.8	99.8	92.9	95.1	97.5	99.0	91.3	93.7	96.8	380.8	385.3	380.8
Interior.....	36.1	37.0	36.1	36.5	36.9	35.5	36.6	35.7	35.8	34.3	35.4	34.7	145.7	144.7	140.2
Western.....	132.5	134.7	139.7	142.4	145.2	137.9	152.1	149.8	150.7	142.6	158.3	156.7	549.4	585.0	608.2
Primary Stock Levels ^a															
Opening	43.3	39.0	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.....	39.0	37.7	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.....	4.3	1.3	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.....	5.0	6.4	7.1	6.6	6.5	6.8	6.3	5.9	6.7	7.0	6.5	6.1	25.0	25.4	26.3
Exports.....	8.5	11.4	12.1	11.0	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	264.8	263.5	265.6	270.6	279.0	262.1	280.6	276.6	280.9	263.5	284.7	281.3	1064.4	1098.3	1110.4
Secondary Stock Levels ^b															
Opening	148.9	136.8	148.8	128.4	128.9	131.1	143.0	129.3	135.6	137.3	146.7	131.9	148.9	128.9	135.6
Closing.....	136.8	148.8	128.4	128.9	131.1	143.0	129.3	135.6	137.3	146.7	131.9	137.9	128.9	135.6	137.9
Net Withdrawals.....	12.0	-11.9	20.4	-0.5	-2.2	-12.0	13.7	-6.2	-1.7	-9.3	14.8	-6.0	20.0	-6.7	-2.3
Waste Coal Supplied to IPPs ^c	2.9	2.9	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	279.7	254.4	288.9	273.0	279.8	253.0	297.1	273.3	282.0	257.0	302.4	278.2	1096.1	1103.2	1119.7
Demand															
Coke Plants.....	6.0	6.1	6.1	6.2	6.3	6.4	6.4	5.8	6.3	6.3	6.5	5.8	24.4	24.8	24.9
Electric Power Sector ^d	248.7	231.4	271.7	248.8	257.7	231.4	274.9	249.6	258.1	235.6	280.1	254.5	1000.6	1013.7	1028.3
Retail and General Industry	16.9	15.6	15.8	17.3	17.6	15.2	15.8	17.8	17.6	15.2	15.8	17.9	65.5	66.5	66.5
Total Demand ^e	271.6	253.0	293.6	272.3	281.6	253.0	297.1	273.3	282.0	257.0	302.4	278.2	1090.5	1105.0	1119.7
Discrepancy ^f	8.1	1.4	-4.7	0.7	-1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	-1.8	0.0

^aPrimary stocks are held at the mines, preparation plants, and distribution points.

^bSecondary stocks are held by users. It includes an estimate of stocks held at utility plants sold to nonutility generators.

^cEstimated independent power producers' (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes.

^dCoal used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

^eTotal Demand includes estimated IPP consumption.

^fThe 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
Net Electricity Generation															
Electric Power Sector ^a															
Coal	485.6	446.7	526.3	482.1	498.5	446.9	531.4	481.8	497.3	453.4	539.2	489.1	1940.7	1958.6	1978.9
Petroleum	31.5	25.8	31.9	22.7	28.4	20.1	29.4	24.5	29.4	23.3	34.2	26.4	111.8	102.3	113.3
Natural Gas	116.9	124.6	190.5	121.4	120.2	135.9	192.5	120.9	117.0	141.6	200.8	127.9	553.4	569.4	587.4
Nuclear	190.1	183.2	202.3	194.5	183.5	203.7	194.7	203.3	185.8	205.5	196.5	204.8	770.0	785.2	792.6
Hydroelectric.....	60.0	80.0	61.9	58.9	73.3	80.8	65.6	66.7	79.2	84.3	66.6	68.7	260.9	286.4	298.8
Other ^b	13.0	13.8	13.9	10.9	14.5	14.9	15.5	15.3	15.0	15.5	16.1	15.9	51.5	60.1	62.4
Subtotal	897.1	874.0	1026.7	890.5	918.2	902.2	1029.0	912.4	923.7	923.6	1053.5	932.6	3688.3	3761.9	3833.4
Other Sectors ^c	40.2	37.3	38.8	41.3	41.2	40.0	42.2	40.4	40.0	40.2	42.8	41.1	157.7	163.7	164.1
Total Generation.....	937.3	911.3	1065.5	931.8	959.5	942.2	1071.2	952.8	963.7	963.8	1096.3	973.8	3846.0	3925.6	3997.5
Net Imports	2.4	1.5	4.4	-3.8	-1.3	0.1	3.3	0.6	0.0	0.4	3.2	0.0	4.5	2.6	3.6
Total Supply.....	939.8	912.8	1069.9	928.0	958.1	942.2	1074.5	953.4	963.6	964.2	1099.5	973.7	3850.5	3928.2	4001.1
Losses and Unaccounted for ^d	30.3	57.3	44.7	54.3	30.7	59.1	44.5	55.9	31.2	60.5	45.5	57.0	186.6	190.1	194.2
Demand															
Retail Sales ^e															
Residential.....	337.5	273.4	377.6	283.9	342.8	287.1	375.0	300.3	344.5	292.8	382.6	306.3	1272.4	1305.2	1326.1
Commercial	265.1	267.8	314.6	269.0	268.8	273.7	316.5	275.3	275.0	285.2	328.8	284.6	1116.4	1134.3	1173.5
Industrial.....	237.2	247.4	259.4	248.0	243.8	251.7	262.0	250.1	242.1	254.3	265.0	252.8	992.0	1007.6	1014.1
Other.....	25.3	25.9	30.7	27.2	26.6	26.6	29.9	27.2	26.8	27.1	30.4	27.6	109.1	110.3	112.0
Subtotal	865.1	814.3	982.4	828.1	881.9	839.0	983.4	853.0	888.3	859.3	1006.8	871.3	3489.8	3557.4	3625.7
Other Use/Sales ^f	44.4	41.2	42.8	45.6	45.5	44.1	46.5	44.6	44.1	44.4	47.3	45.4	174.1	180.7	181.1
Total Demand.....	909.5	855.5	1025.2	873.7	927.5	883.1	1030.0	897.6	932.5	903.7	1054.0	916.7	3663.9	3738.1	3806.9

^aElectric utilities and independent power producers.

^b"Other" includes generation from other gaseous fuels, geothermal, wind, wood, waste, and solar sources.

^cElectricity generation from combined heat and power (CHP) facilities and electricity-only plants in the industrial and commercial sectors.

^dBalancing item, mainly transmission and distribution losses.

^eTotal 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.

^fDefined 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 reports: *Electric Power Annual*, DOE/EIA-0226 and *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
Electricity Generation by Sector															
Electric Power ^a															
Coal.....	485.6	446.7	526.3	482.1	498.5	446.9	531.4	481.8	497.3	453.4	539.2	489.1	1940.7	1958.6	1978.9
Petroleum.....	31.5	25.8	31.9	22.7	28.4	20.1	29.4	24.5	29.4	23.3	34.2	26.4	111.8	102.3	113.3
Natural Gas.....	116.9	124.6	190.5	121.4	120.2	135.9	192.5	120.9	117.0	141.6	200.8	127.9	553.4	569.4	587.4
Other ^b	263.1	276.9	278.0	264.3	271.2	299.4	275.8	285.2	280.0	305.3	279.2	289.3	1082.4	1131.6	1153.9
Subtotal.....	897.1	874.0	1026.7	890.5	918.2	902.2	1029.0	912.4	923.7	923.6	1053.5	932.6	3688.3	3761.9	3833.4
Commercial															
Coal.....	0.3	0.2	0.3	0.3	0.3	0.2	0.4	0.3	0.3	0.2	0.4	0.3	1.0	1.2	1.2
Petroleum.....	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.5	0.6	0.6
Natural Gas.....	1.0	1.2	1.1	1.0	1.2	1.4	1.4	1.2	1.2	1.3	1.4	1.1	4.3	5.1	5.0
Other ^b	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.6	0.6	0.6	2.0	2.3	2.3
Subtotal.....	1.9	2.1	2.0	1.8	2.2	2.3	2.5	2.2	2.2	2.2	2.5	2.1	7.9	9.2	9.1
Industrial															
Coal.....	5.5	5.0	5.4	5.3	5.7	5.2	5.8	5.0	5.4	5.2	5.9	5.1	21.3	21.8	21.6
Petroleum.....	1.5	1.2	1.2	1.3	1.4	1.0	1.2	1.3	1.4	1.1	1.4	1.4	5.2	4.9	5.3
Natural Gas.....	19.9	17.3	18.7	19.0	19.8	18.5	18.7	18.3	19.2	18.8	19.2	18.9	74.9	75.4	76.1
Other ^b	11.3	11.7	11.5	13.9	12.2	12.9	13.9	13.5	11.7	12.8	13.9	13.6	48.4	52.6	52.0
Subtotal.....	38.3	35.2	36.8	39.5	39.1	37.7	39.6	38.2	37.8	38.0	40.3	39.0	149.8	154.5	155.0
Total.....	937.3	911.3	1065.5	931.8	959.5	942.2	1071.2	952.8	963.7	963.8	1096.3	973.8	3846.0	3925.6	3997.5

^aElectric utilities and independent power producers.

^b"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
Fuel Consumption for Electricity Generation by Sector															
(Quadrillion Btu)															
Electric Power^a															
Coal	5.103	4.748	5.578	5.107	5.287	4.749	5.645	5.123	5.296	4.834	5.751	5.223	20.5	20.8	21.1
Petroleum	0.340	0.277	0.340	0.244	0.301	0.211	0.307	0.256	0.308	0.244	0.358	0.276	1.2	1.1	1.2
Natural Gas.....	1.008	1.098	1.679	1.036	0.995	1.183	1.691	1.003	0.960	1.220	1.738	1.048	4.8	4.9	5.0
Other ^b	2.994	3.068	3.100	2.866	2.890	3.181	2.943	3.040	2.982	3.243	2.978	3.083	12.0	12.1	12.3
Subtotal	9.445	9.190	10.696	9.253	9.473	9.323	10.585	9.423	9.546	9.540	10.826	9.630	38.6	38.8	39.5
Commercial															
Coal	0.003	0.003	0.004	0.003	0.004	0.003	0.004	0.004	0.004	0.003	0.004	0.003	0.013	0.014	0.014
Petroleum	0.003	0.001	0.002	0.002	0.003	0.001	0.002	0.002	0.003	0.001	0.002	0.002	0.007	0.007	0.008
Natural Gas.....	0.009	0.010	0.010	0.009	0.010	0.012	0.012	0.010	0.010	0.011	0.012	0.010	0.037	0.044	0.043
Other ^b	0.007	0.010	0.011	0.007	0.008	0.010	0.010	0.009	0.008	0.010	0.010	0.009	0.035	0.038	0.037
Subtotal	0.021	0.024	0.025	0.021	0.024	0.025	0.029	0.025	0.025	0.025	0.028	0.024	0.091	0.103	0.102
Industrial															
Coal	0.070	0.065	0.068	0.068	0.072	0.067	0.074	0.064	0.069	0.067	0.075	0.065	0.272	0.278	0.276
Petroleum	0.018	0.017	0.015	0.018	0.017	0.013	0.014	0.017	0.017	0.014	0.017	0.018	0.068	0.061	0.066
Natural Gas.....	0.176	0.157	0.168	0.174	0.179	0.167	0.169	0.166	0.174	0.170	0.174	0.171	0.674	0.682	0.689
Other ^b	0.150	0.159	0.171	0.156	0.154	0.164	0.171	0.169	0.148	0.162	0.171	0.170	0.635	0.658	0.650
Subtotal	0.415	0.398	0.422	0.414	0.422	0.410	0.429	0.416	0.409	0.412	0.436	0.424	1.649	1.678	1.681
Total	9.882	9.612	11.143	9.688	9.920	9.759	11.043	9.864	9.979	9.977	11.290	10.079	40.325	40.585	41.325
(Physical Units)															
Electric Power^a															
Coal (million short tons)	248.1	230.8	271.2	248.3	257.1	230.9	274.5	249.1	257.5	235.0	279.6	254.0	998.5	1011.6	1026.1
Petroleum (million barrels per day)	0.614	0.494	0.596	0.430	0.537	0.376	0.539	0.452	0.556	0.434	0.628	0.487	0.533	0.476	0.526
Natural Gas (trillion cubic feet).....	0.983	1.071	1.638	1.011	0.971	1.154	1.649	0.979	0.936	1.190	1.696	1.022	4.703	4.753	4.844
Commercial															
Coal (million short tons)	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.5	0.6	0.6
Petroleum (million barrels per day)	0.006	0.002	0.003	0.003	0.005	0.002	0.003	0.004	0.005	0.002	0.003	0.004	0.003	0.003	0.003
Natural Gas (trillion cubic feet).....	0.008	0.010	0.009	0.008	0.010	0.011	0.012	0.010	0.010	0.011	0.011	0.009	0.036	0.042	0.042
Industrial															
Coal (million short tons)	3.0	2.8	2.9	2.9	3.1	2.9	3.2	2.8	3.0	2.8	3.2	2.8	11.6	11.9	11.8
Petroleum (million barrels per day)	0.034	0.032	0.028	0.032	0.032	0.023	0.027	0.030	0.032	0.026	0.031	0.032	0.031	0.028	0.030
Natural Gas (trillion cubic feet).....	0.172	0.153	0.163	0.169	0.174	0.163	0.165	0.162	0.170	0.166	0.169	0.167	0.657	0.665	0.671

^aElectric utilities and independent power producers.

^b"Other" includes other gaseous fuels, 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 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
Electricity Sector							
Hydroelectric Power ^a	2.633	2.725	2.993	3.123	3.5	9.8	4.3
Geothermal, Solar and Wind Energy ^b	0.415	0.388	0.431	0.450	-6.5	11.1	4.4
Biofuels ^c	0.516	0.505	0.532	0.542	-2.1	5.3	1.9
Total	3.563	3.618	3.955	4.115	1.5	9.3	4.0
Other Sectors ^d							
Residential and Commercial ^e	0.539	0.532	0.566	0.584	-1.3	6.4	3.2
Residential	0.418	0.436	0.455	0.474	4.3	4.4	4.2
Commercial	0.121	0.096	0.112	0.110	-20.7	16.7	-1.8
Industrial ^f	1.792	1.795	1.835	1.814	0.2	2.2	-1.1
Transportation ^g	0.175	0.236	0.271	0.275	34.9	14.8	1.5
Total	2.506	2.563	2.671	2.673	2.3	4.2	0.1
Total Renewable Energy Demand.....	6.069	6.181	6.626	6.788	1.8	7.2	2.4

^aConventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.

^bAlso 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.

^cBiofuels are fuelwood, wood byproducts, waste wood, municipal solid waste, manufacturing process waste, and alcohol fuels.

^dRenewable 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.

^eIncludes biofuels and solar energy consumed in the residential and commercial sectors.

^fConsists primarily of biofuels for use other than in electricity cogeneration.

^gEthanol blended into gasoline.

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: 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
Real Gross Domestic Product (GDP) (billion chained 2000 dollars)	7101	7337	7533	7835	8032	8329	8704	9067	9470	9817	9867	10083	10397	10889	11273
Imported Crude Oil Price ^a (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	29.07	26.37
Petroleum Supply															
Crude Oil Production ^b (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	5.59	5.64
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	11.32	11.66	11.92
Energy Demand															
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	20.07	20.30	20.78
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	23.00	21.97	22.54	22.64
Coal (million short tons)	899	908	944	951	962	1006	1030	1037	1039	1084	1060	1066	1091	1105	1120
Electricity (billion kilowatthours)															
Retail Sales ^c	2762	2763	2861	2935	3013	3101	3146	3264	3312	3421	3370	3463	3490	3557	3626
Other Use/Sales ^d	118	122	128	134	144	146	148	161	183	181	173	177	174	181	181
Total	2880	2886	2989	3069	3157	3247	3294	3425	3495	3603	3543	3639	3664	3738	3807
Total Energy Demand ^e (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	99.4	100.9
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	9.13	8.95

^aRefers to the imported cost of crude oil to U.S. refineries.

^bIncludes lease condensate.

^cTotal 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.

^dDefined 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.

^e"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 CONTROL0204.

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
Macroeconomic															
Real Gross Domestic Product (billion chained 2000 dollars).....	7101	7337	7533	7835	8032	8329	8704	9067	9470	9817	9867	10083	10397	10889	11273
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	105.7	107.4	109.2
Real Disposable Personal Income (billion chained 2000 Dollars)	5352	5536	5594	5746	5906	6081	6296	6664	6862	7194	7320	7597	7787	8041	8266
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	118.7	124.8
Real Fixed Investment (billion chained 2000 dollars).....	829	878	953	1042	1110	1209	1321	1455	1576	1679	1626	1566	1634	1764	1836
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	1.018	0.990	0.979
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	-13.5	9.3	17.3
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	1.419	1.435
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	1.899
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	0.963	0.987	0.947
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	130.3	129.9	131.3	134.2
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	93.2	95.8
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	111.3	116.3	121.6
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	117.0	118.4	119.7
Weather ^a															
Heating Degree-Days															
U.S.	4200	4431	4672	4472	4516	4690	4523	3946	4153	4447	4191	4284	4448	4609	4510
New England	6042	6018	5904	6748	6631	5850	6725	5742	6014	6585	6110	6099	6840	6845	6618
Middle Atlantic	5317	6108	6040	6083	5966	6118	5940	4923	5493	5944	5424	5372	6050	6096	5877
U.S. Gas-Weighted.....	4337	4458	4754	4659	4707	4980	4802	4183	4399	4680	4451	4560	4764	4962	4840
Cooling Degree-Days (U.S.).....	1331	1051	1222	1228	1293	1186	1167	1414	1301	1240	1256	1393	1289	1237	1247

^aPopulation-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 CONTROL0204. 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
Production															
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	22.99	23.28
Natural Gas.....	18.23	18.38	18.58	19.35	19.08	19.27	19.32	19.61	19.34	19.66	20.17	19.48	19.90	20.14	20.37
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	12.15	11.87	11.93
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	2.34	2.43	2.49
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	8.00	8.20	8.28
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	2.71	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	3.38	3.54	3.57
Total.....	70.38	69.96	68.29	70.70	71.17	72.42	72.34	72.80	71.67	71.24	71.32	70.89	70.68	72.15	73.03
Net Imports															
Coal	-2.77	-2.59	-1.76	-1.66	-2.08	-2.17	-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	3.28	3.28	3.26
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	20.61	21.01	21.45
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	2.70	3.01	3.07
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	0.02	0.01	0.01
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	15.58	17.47	18.11	17.73	19.29	20.99	23.29	23.77	25.40	24.89	26.16	26.84	27.35
Adjustments ^a	-0.13	2.21	3.72	1.08	1.93	4.07	3.10	1.36	1.81	3.94	-0.40	1.57	0.80	0.42	0.52
Demand															
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	22.49	22.79	23.09
Natural Gas.....	19.72	20.15	20.83	21.35	21.84	22.78	23.20	23.33	22.93	23.01	24.04	24.88	23.77	24.39	24.49
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	39.02	39.53	40.39
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	8.00	8.20	8.28
Other.....	6.54	6.59	6.66	6.62	7.66	7.59	7.22	6.16	6.65	7.09	4.26	4.02	4.35	4.51	4.66
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	97.63	99.42	100.90

^aBalancing 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
Crude Oil Prices (dollars per barrel)															
Imported Average ^a	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	29.07	26.37
WTI ^b 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	32.27	29.38
Natural Gas (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	2.95	4.98	5.04	4.87
Composite Spot	1.41	1.67	2.03	1.77	1.53	2.48	2.45	2.03	2.20	4.21	4.00	3.22	5.51	5.19	5.17
Petroleum Products															
Gasoline Retail ^c (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	1.70	1.61
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	1.67	1.58
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	1.53	1.48
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	0.85	0.84
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	1.35	1.32
No. 6 Residual Fuel Oil, Retail ^d (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	29.40	30.37	27.75
Electric Power Sector (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 ^e	2.48	2.46	2.36	2.40	2.60	3.01	2.79	2.07	2.38	4.27	3.73	3.68	4.69	5.01	4.42
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	5.39	5.75	5.46
Other Residential															
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	8.68	8.79	8.87

^aRefiner acquisition cost (RAC) of imported crude oil.

^bWest Texas Intermediate.

^cAverage self-service cash prices.

^dAverage for all sulfur contents.

^eIncludes 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
Supply															
Crude Oil Supply															
Domestic Production ^a	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	5.59	5.64
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	4.66	4.76
Net Commercial Imports ^b	5.67	5.98	6.67	6.95	7.14	7.40	8.12	8.60	8.60	9.01	9.30	9.12	9.70	9.87	10.10
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	-0.13	-0.12	-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	0.03	-0.03	-0.01
Product Supplied and Losses	-0.02	-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	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	-0.03	0.10	0.13
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	15.41	15.80
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	1.78	1.82
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	0.43	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	0.97	0.95	0.95
Net Product Imports ^c	0.96	0.94	0.93	1.09	0.75	1.10	1.04	1.17	1.30	1.40	1.59	1.42	1.61	1.80	1.82
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	0.03	-0.05	-0.04
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	20.06	20.30	20.78
Demand															
Motor Gasoline ^d	7.23	7.38	7.48	7.60	7.79	7.89	8.02	8.25	8.43	8.47	8.61	8.85	8.94	9.09	9.32
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	1.66
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	3.93	4.03	4.12
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	0.78	0.71	0.76
Other Oils ^e	3.99	4.20	4.17	4.41	4.36	4.63	4.77	4.69	5.01	4.87	4.73	4.82	4.86	4.84	4.91
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	20.07	20.30	20.78
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	11.32	11.66	11.92
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	325	318	335	337	303	284	305	324	284	286	312	278	268	280	283
Total Motor Gasoline	219	216	226	215	202	195	210	216	193	196	210	209	207	207	212
Jet Fuel	49	43	40	47	40	40	44	45	41	45	42	39	39	40	40
Distillate Fuel Oil	144	141	141	145	130	127	138	156	125	118	145	134	137	134	136
Residual Fuel Oil	50	43	44	42	37	46	40	45	36	36	41	31	38	40	40
Other Oils ^f	267	263	273	275	258	250	259	291	246	247	287	258	241	258	266

^aIncludes lease condensate.

^bNet imports equals gross imports plus SPR imports minus exports.

^cIncludes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

^dFor 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.

^eIncludes 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.

^fIncludes 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*, TableC1. 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
Supply															
Total Dry Gas Production	17.70	17.84	18.10	18.82	18.60	18.78	18.83	19.02	18.83	19.18	19.62	18.95	19.36	19.59	19.81
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	3.84	3.91	4.02
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	0.64	0.72	0.84
Net Imports	1.64	1.92	2.21	2.46	2.69	2.78	2.84	2.99	3.42	3.54	3.60	3.50	3.20	3.19	3.18
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	0.07	0.07	0.07	0.07
Total New Supply.....	19.45	19.88	20.42	21.39	21.40	21.68	21.74	22.10	22.34	22.81	23.30	22.51	22.62	22.85	23.06
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	2.46
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	2.46	2.45
Net Withdrawals.....	0.03	0.23	0.28	-0.28	0.45	-0.02	0.00	-0.56	0.21	0.80	-1.19	0.53	-0.21	0.12	0.01
Total Supply.....	19.48	20.11	20.70	21.11	21.85	21.66	21.74	21.54	22.54	23.61	22.12	23.04	22.42	22.97	23.07
Balancing Item ^a	0.08	0.12	0.09	0.13	0.35	0.94	0.98	0.70	-0.15	-0.15	0.11	-0.04	-0.45	-0.43	-0.43
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	23.00	21.97	22.54	22.64
Demand															
Residential.....	4.56	4.69	4.96	4.85	4.85	5.24	4.98	4.52	4.73	4.99	4.77	4.89	5.03	5.11	5.01
Commercial.....	2.73	2.80	2.86	2.90	3.03	3.16	3.21	3.00	3.04	3.22	3.02	3.10	3.15	3.33	3.34
Industrial	8.36	8.70	8.87	8.91	9.38	9.68	9.71	9.49	9.16	9.40	8.47	8.67	8.20	8.47	8.58
Lease and Plant Fuel.....	1.13	1.17	1.17	1.12	1.22	1.25	1.20	1.17	1.08	1.15	1.12	1.11	1.14	1.12	1.14
Other Industrial	7.23	7.53	7.70	7.79	8.16	8.44	8.51	8.32	8.08	8.25	7.35	7.56	7.06	7.35	7.44
CHP ^b	1.06	1.11	1.12	1.18	1.26	1.29	1.28	1.35	1.40	1.39	1.31	1.24	1.14	1.16	1.17
Non-CHP	6.17	6.42	6.58	6.61	6.90	7.15	7.23	6.97	6.68	6.87	6.04	6.32	5.92	6.19	6.28
Transportation ^c	0.60	0.59	0.62	0.69	0.70	0.71	0.75	0.64	0.65	0.64	0.63	0.67	0.65	0.66	0.64
Electric Power ^d	3.32	3.45	3.47	3.90	4.24	3.81	4.06	4.59	4.82	5.21	5.34	5.67	4.94	4.98	5.07
Total Demand	19.56	20.23	20.79	21.24	22.20	22.60	22.72	22.24	22.39	23.47	22.23	23.00	21.97	22.54	22.64

^aThe balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

^bNatural 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.

^cPipeline fuel use plus natural gas used as vehicle fuel.

^dNatural 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
Supply															
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	1115.0	1129.2
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	385.3	380.8
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	144.7	140.2
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	585.0	608.2
Primary Stock Levels ^a															
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	8.2	8.9	9.5	8.1	7.5	8.7	9.1	12.5	19.8	16.9	25.0	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	887.8	963.1	952.7	987.3	1008.5	1045.7	1048.1	1035.2	1094.8	1064.2	1064.4	1098.3	1110.4
Secondary Stock Levels ^b															
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	128.9	135.6
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	128.9	135.6	137.9
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	20.0	-6.7	-2.3
Waste Coal Supplied to IPPs ^c	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	937.9	954.5	962.7	1008.1	1033.9	1031.8	1040.2	1086.0	1067.9	1072.4	1096.1	1103.2	1119.7
Demand															
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	24.9
Electric Power Sector ^d	783.9	795.1	831.6	838.4	850.2	896.9	921.4	936.6	940.9	985.8	964.4	977.5	1000.6	1013.7	1028.3
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	66.5
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	62.1
CHP ^e	27.0	28.2	28.9	29.7	29.4	29.4	29.9	28.6	27.8	28.0	25.8	26.2	26.7	27.4	27.3
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	34.4	34.4	34.8
Total Demand ^f	899.2	907.7	944.1	951.3	962.1	1006.3	1029.5	1037.1	1038.6	1084.1	1060.1	1066.4	1090.5	1105.0	1119.7
Discrepancy ^g	-35.9	-0.5	-6.1	3.2	0.6	1.7	4.3	-5.3	1.6	1.9	7.7	6.1	5.6	-1.8	0.0

^aPrimary stocks are held at the mines, preparation plants, and distribution points.

^bSecondary stocks are held by users. It includes an estimate of stocks held at utility plants sold to nonutility generators.

^cEstimated independent power producers (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes.

^dEstimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, EIA.

^eCoal 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.

^fTotal Demand includes estimated IPP consumption.

^gThe 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
Net Electricity Generation															
Electric Power Sector ^a															
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	1940.7	1958.6	1978.9
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	111.8	102.3	113.3
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	553.4	569.4	587.4
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	770.0	785.2	792.6
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	260.9	286.4	298.8
Other ^b	42.1	45.5	47.0	47.0	44.8	45.8	47.3	48.6	50.0	51.6	49.4	58.6	51.5	60.1	62.4
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	3688.3	3761.9	3833.4
Other Sectors ^c	138.2	149.5	153.3	158.8	159.3	160.0	162.8	162.9	164.8	164.6	156.6	160.0	157.7	163.7	164.1
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	3846.0	3925.6	3997.5
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	4.5	2.6	3.6
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	3850.5	3928.2	4001.1
Losses and Unaccounted for ^d	213.4	223.7	236.0	223.7	235.4	237.4	232.2	221.0	229.2	233.3	216.1	242.2	186.6	190.1	194.2
Demand															
Retail Sales ^f															
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	1272.4	1305.2	1326.1
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	1116.4	1134.3	1173.5
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	992.0	1007.6	1014.1
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	109.1	110.3	112.0
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	3489.8	3557.4	3625.7
Other Use/Sales ^f	118.1	122.3	127.5	134.1	144.1	145.9	148.4	160.9	182.5	181.5	172.8	176.6	174.1	180.7	181.1
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	3663.9	3738.1	3806.9

^aElectric Utilities and independent power producers.

^b"Other" includes generation from other gaseous fuels, geothermal, wind, wood, waste, and solar sources.

^cElectricity generation from combined heat and power facilities and electricity-only plants in the industrial and commercial sectors.

^dBalancing item, mainly transmission and distribution losses.

^eTotal 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.

^fDefined 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.