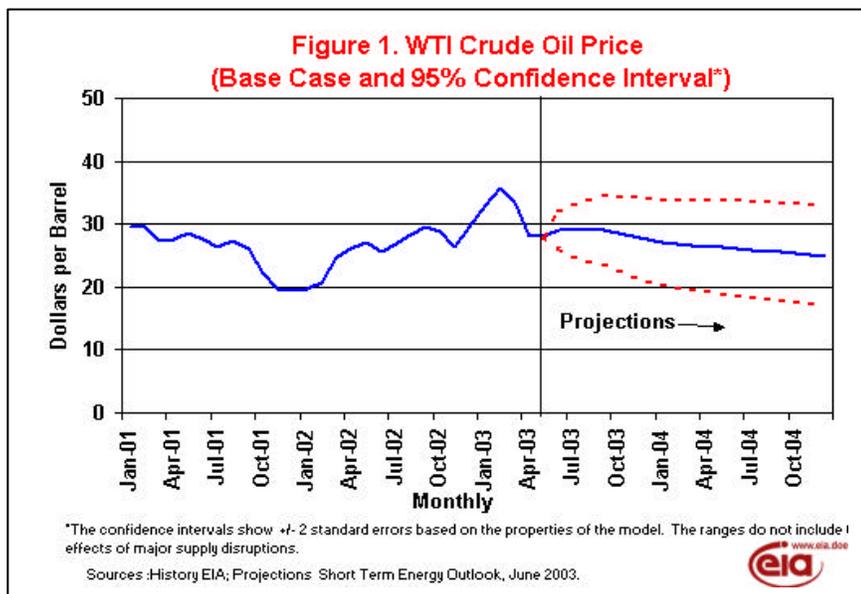


## Short-Term Energy Outlook

June 2003



### Overview

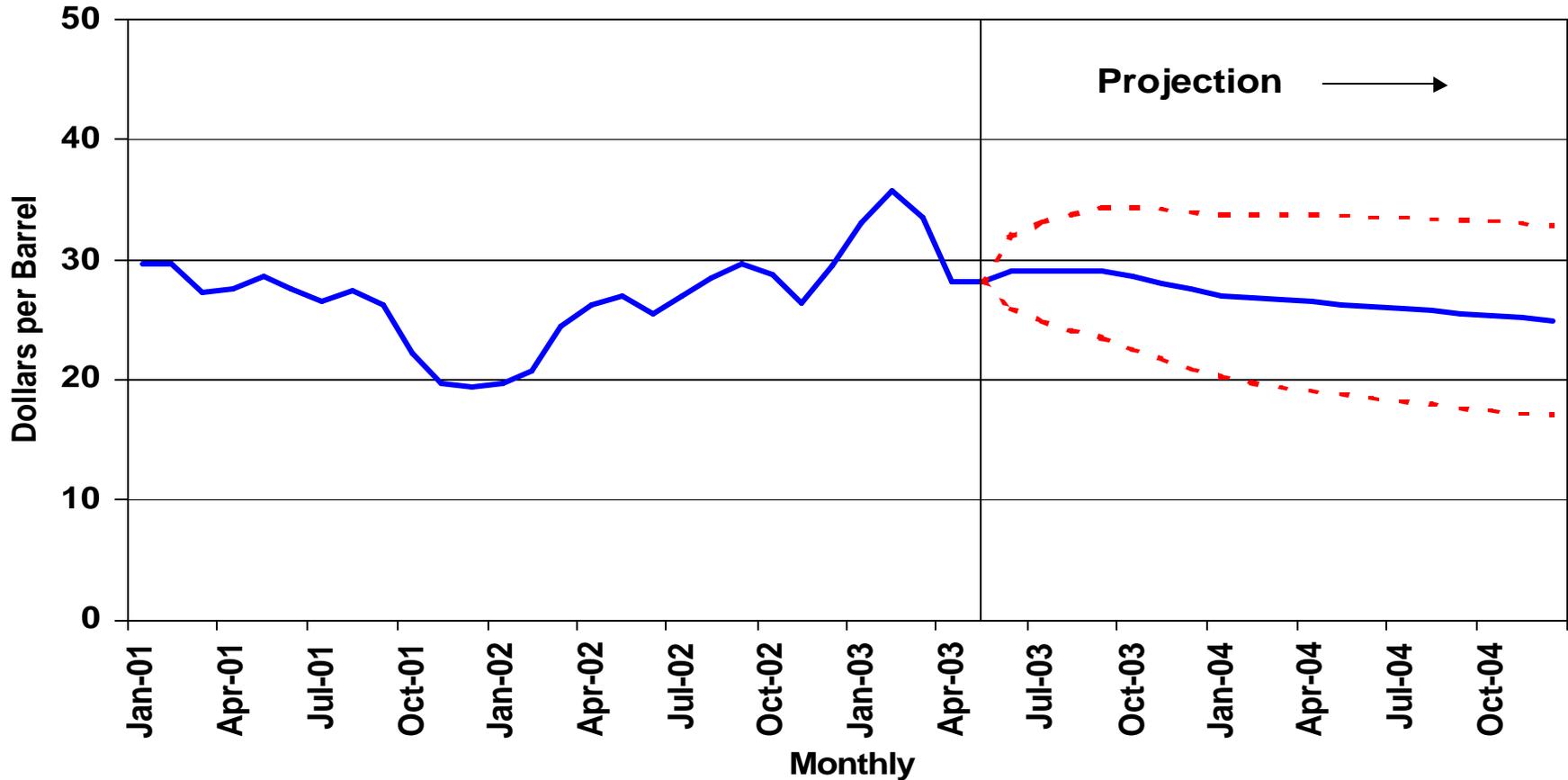
**World Oil Markets.** Average crude oil prices rose in May as continued reports of low oil inventories trumped expectations that Iraqi oil production would quickly return to pre-war levels. Those hopes faded on the news that post-war looting would postpone for some months the return of the Iraqi oil sector to normal operations. In addition, a terrorist attack in Saudi Arabia and estimates of lower production in Saudi Arabia by some analysts combined to push prices upward. By early June, the OPEC basket price had risen to its highest

level in two months, and is now in the upper end of OPEC's target range of \$22-\$28 per barrel (Figure 1).

**U.S. Natural Gas Markets.** The natural gas spot price at the Henry Hub has remained well above \$5 per million btu on a monthly basis since the beginning of the year and is above \$6 in the first week of June. The low level of underground storage is the principal reason for these unseasonably high prices. Natural gas prices will likely remain high as long as above-normal storage injection demand competes with industrial and power sector demand for natural gas. Above average prices and strong gas-directed drilling efforts this year will be needed to ensure that gas in storage reaches at least minimally adequate levels by the beginning of the next heating season. If adverse weather intervenes, the task could be made more difficult and even place additional upward pressure on prices. Moreover, if the summer is unusually hot, particularly in the Western and South Central regions, where natural gas is heavily used for the power generation needed to meet cooling demand, marginal gas prices may experience additional pressure. Indeed, occasional sharp price increases could occur as the difficulty of building adequate storage increases. Assuming normal weather, spot prices in the \$5.50-\$6.00 per million btu range are expected for the rest of 2003.

**Summer Motor Gasoline Outlook.** Pump prices are expected to average about \$1.46 per gallon during the remainder (June-September) of the driving season. The current price of regular motor gasoline in California (\$1.73 per gallon) is about 26 cents per gallon higher than the average price for the nation (\$1.47 per gallon), down from the 45-50 cents per gallon price difference of a month ago. Earlier in the driving season, unplanned refinery shutdowns and the phase-out of MTBE (methyl tertiary butyl ether) created supply problems that impacted the price. (MTBE is being replaced with ethanol in California gasoline). The transition from MTBE to ethanol created two essentially incompatible distribution systems, which exacerbate the tight gasoline market. However, market supply adjustments and improved economies of scale in the refining and blending process have narrowed the price differences between California and other regions.

# Figure 1. WTI 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.*

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

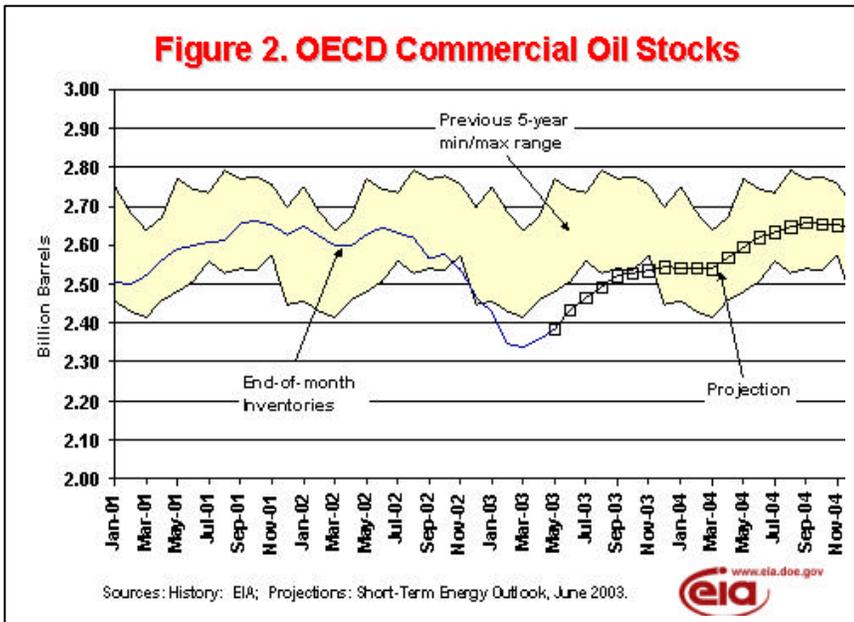


## Details

### International Oil Markets

**Crude Oil Prices.** Average May crude oil prices were slightly above \$28 per barrel. However, it should be noted that May oil prices actually rose about \$3 per barrel through the month, offsetting a comparable decline during the month of April. May prices rose in response to continued low oil inventories and uncertainty about when Iraqi exports would resume. Market expectations never materialized that oil

inventories would rise sharply in response to a “wall of crude” oil supplies from the Middle East (Figure 2). Instead, hopes that Iraqi production would quickly return to pre-war levels faded on the news that post-war looting would postpone for months the return of the Iraqi oil sector to normal operations. In addition, a terrorist attack in Saudi Arabia and estimates of lower production in Saudi Arabia by some analysts combined to push prices upward. By early June, the OPEC basket price had risen to its highest level in two months and is now in the upper end of OPEC’s target range of \$22-\$28 per barrel.

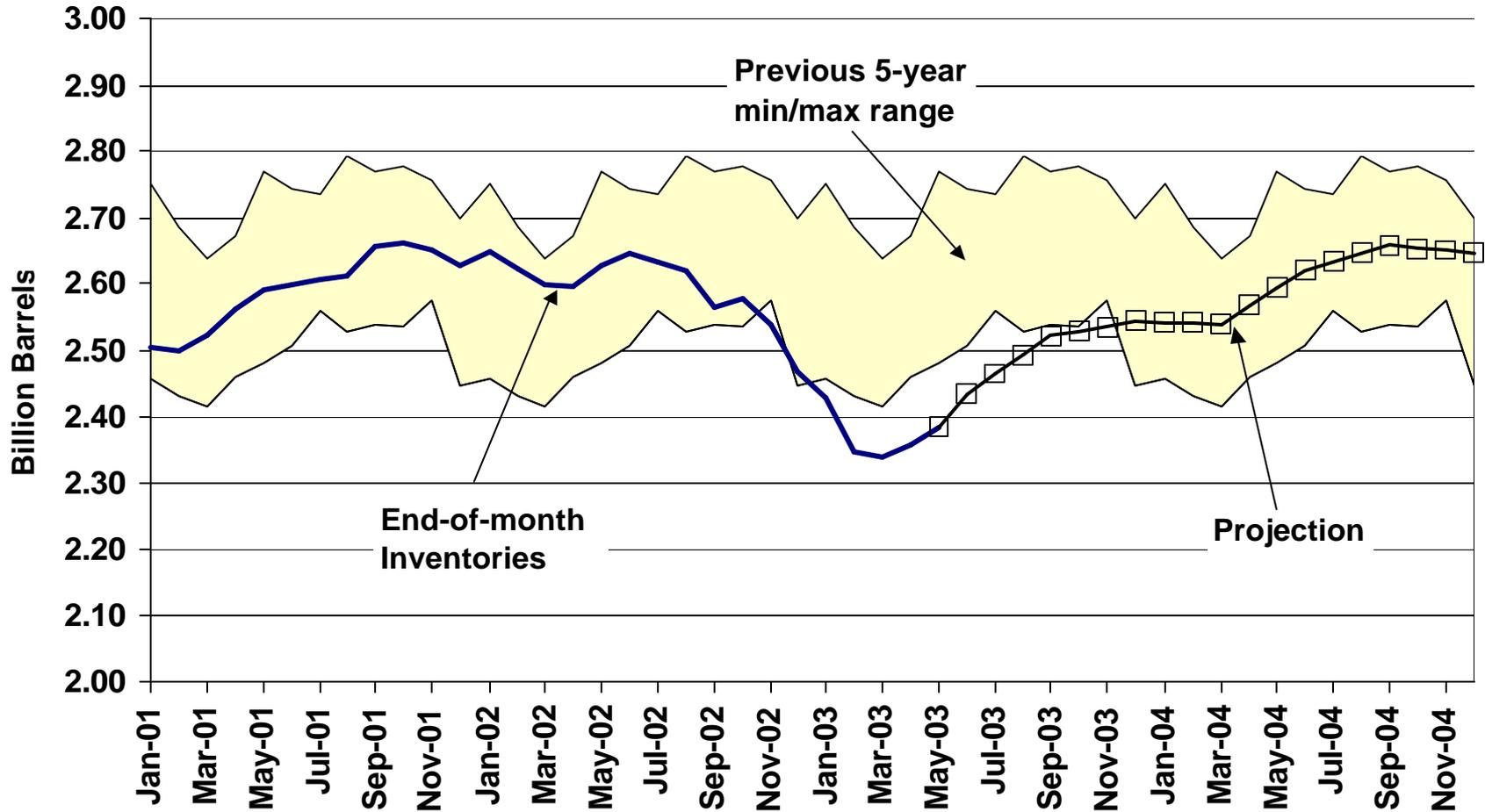


**International Oil Supply.** Prior to the increase in oil prices over the past month, OPEC had openly discussed whether to cut production beyond the reductions that took effect on June 1. OPEC Secretary-General Alvaro Silva had warned that a decline in global oil demand and the return of Iraqi oil to the market could prompt OPEC to cut target output quotas, effective on July 1, to stabilize markets. However, as OPEC draws nearer to its June 11 meeting, talk of cutting production has been eased by the news that world oil inventories remain low (Figure 3), the return of Iraqi production to pre-war levels has been delayed, and the OPEC basket price is near the upper part of its range. In addition, markets remain tight because OPEC spare production capacity remains low by historical levels at 1.4-1.9 million barrels per day.

OPEC 10 oil production (excluding Iraq) in May was an estimated 26.8 million barrels per day, unchanged from April levels, and 1.4 million barrels per day above the new June 1 OPEC production targets. These new targets are projected to lower OPEC 10 production to slightly under 26 million barrels per day. However, when this cutback and the loss of Iraqi production following the war are factored in, total 2003 OPEC crude oil production (including Iraq) is still expected to be 1.5 million barrels per day above 2002 levels. This fact, combined with an expected aggregate increase of a little over 1 million barrels per day from non-OPEC sources in 2003, indicates a total world oil supply increase in 2003 of over 2.5 million barrels per day, which is expected to allow for a global stock build this year. However, until inventories are rebuilt above observed 5-year lows, WTI oil futures prices should remain around current levels, then gradually slide toward \$25 per barrel by the end of 2004 as Iraqi oil exports return.

**International Oil Demand.** World oil demand is still projected to grow by about 1 million barrels per day in 2003, as in EIA’s previous *Outlook*. About one third of the growth in world oil demand in 2003 is projected to come from the United States. China and other non-OECD countries are projected to provide a

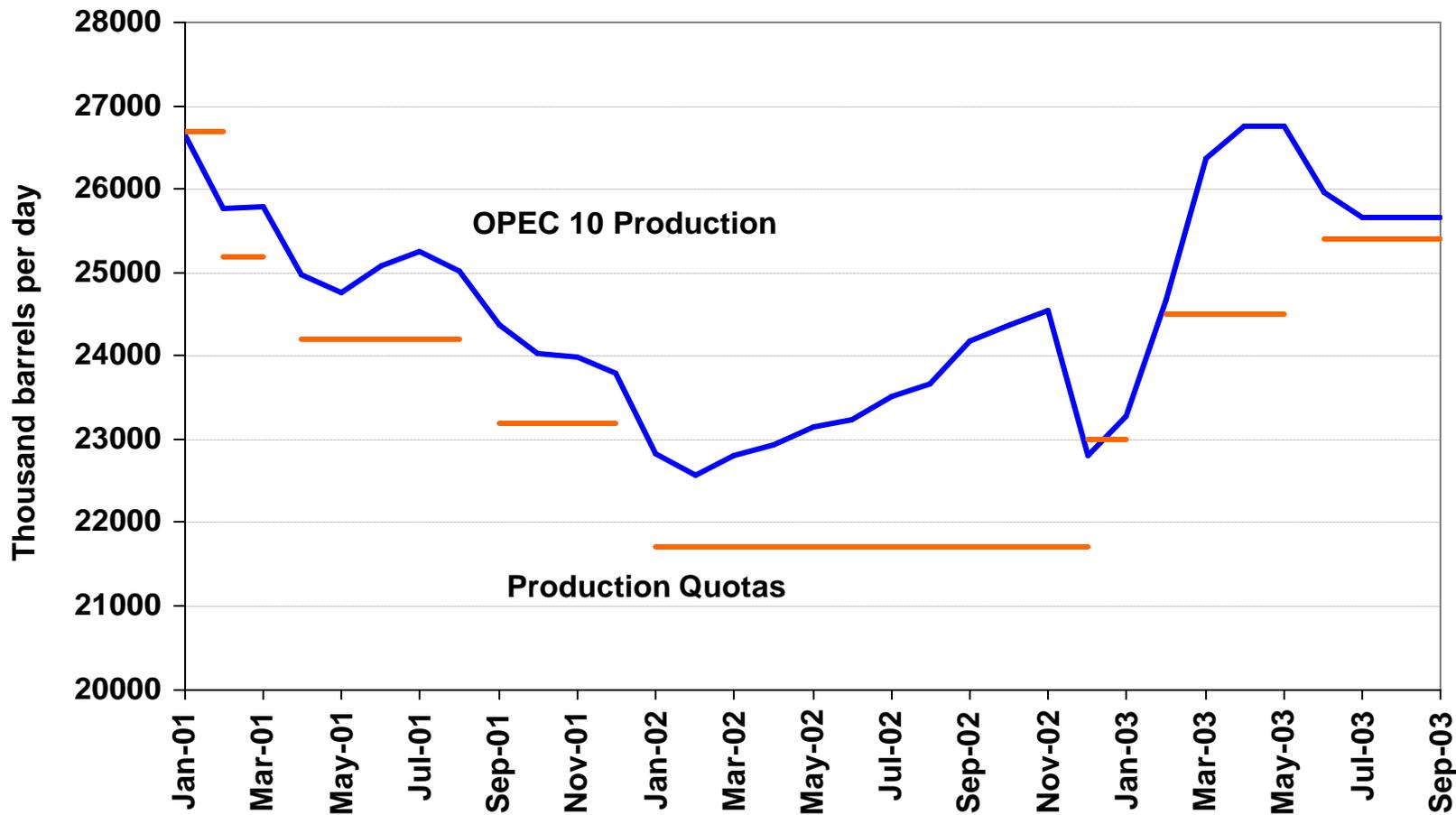
# Figure 2. OECD Commercial Oil Stocks



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



# Figure 3. OPEC 10 Crude Oil Production vs. Quotas, January 2001-September 2003



OPEC 10 Production for June-September 2003 is a Projection. Source: EIA

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



total of another 0.5 million barrels per day of demand growth next year. As world economic growth continues in 2004, led by a projected 4.2 percent per year increase in the U.S. economy, world oil demand growth could increase by as much as 1.2 million barrels per day ([Figure 4](#)).

## U. S. Energy Prices

**Motor Gasoline:** Following their peak on March 17, weekly motor gasoline prices (regular, self service) have declined for 10 out of the last 11 weeks. If crude oil prices remain close to existing levels, motor gasoline prices may fluctuate but average about \$1.46 per gallon during the remainder (June-September) of the driving season ([Figure 5](#)). In 2004, the annual average pump price is projected to be about \$1.40 per gallon (a drop of about 10 cents per gallon from the expected 2003 average), as crude oil prices slide and refiner and retail margins fall slightly. Refiner margins (the difference between the refiner price of gasoline and the refiner acquisition cost of crude oil), which were relatively weak last summer, soared in March and April. They have since receded and may stabilize during the course of the driving season. At the end of May, gasoline inventories stood just below the 5-year min/max range ([Figure 6](#)).

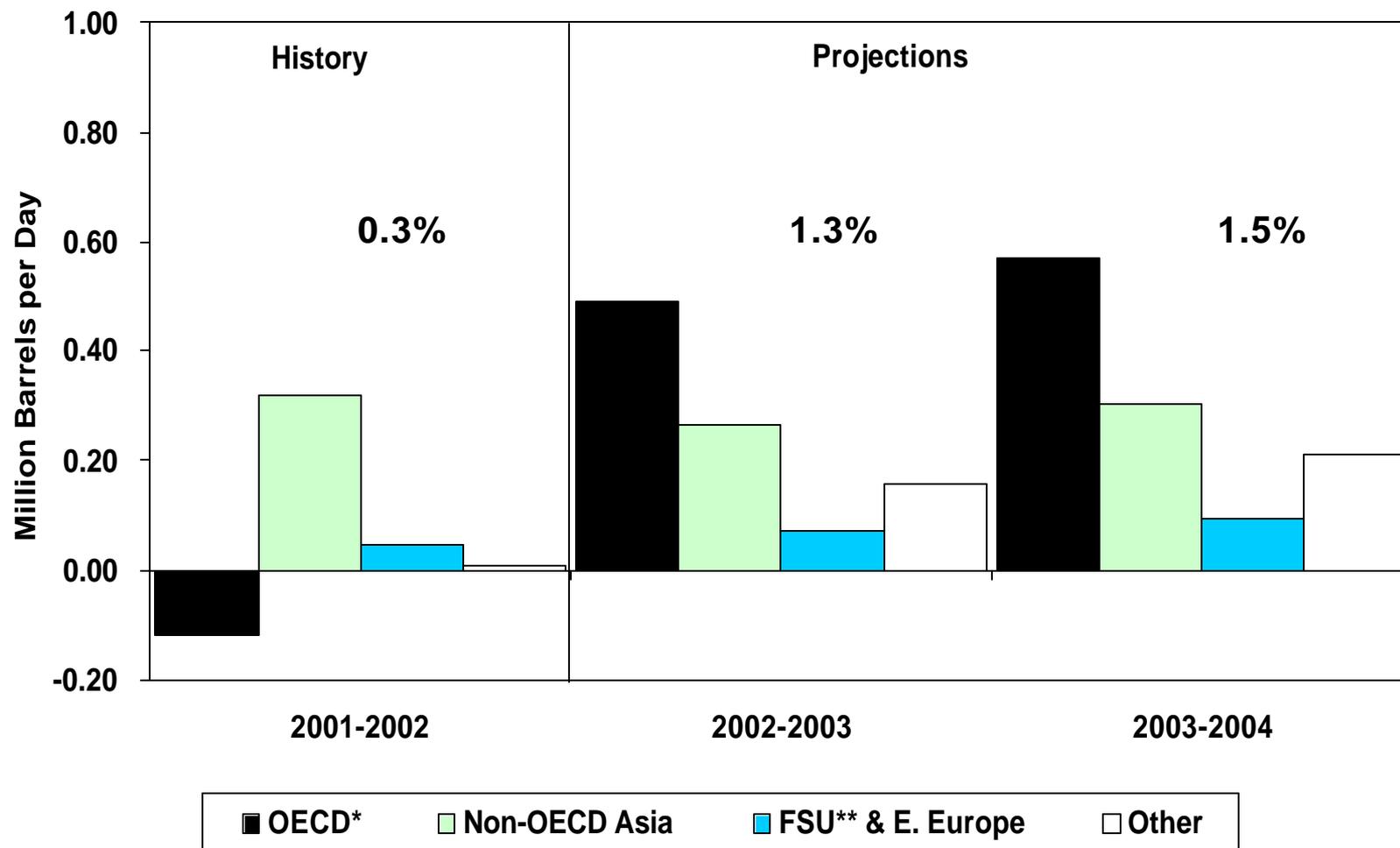
The current price of regular motor gasoline in California of \$1.73 per gallon is about 26 cents per gallon higher than the average price for the nation of \$1.47 per gallon. The California price is thus down from the 45-50 cents per gallon price difference of a month ago. Earlier in the driving season, unplanned refinery shutdowns and the phase-out of MTBE (methyl tertiary butyl ether) created supply problems that impacted the price. (MTBE is being replaced by ethanol in California gasoline). The transition from MTBE to ethanol created two essentially incompatible distribution systems, which exacerbate the tight gasoline market. However, market supply adjustments and improved economies of scale in the refining and blending process have narrowed the price differences.

**Distillate Fuel Oil (Diesel Fuel and Heating Oil):** Like motor gasoline prices, diesel fuel oil prices are expected to maintain stability over the next several months. Retail heating oil prices, on the other hand, should decline through the cooling season (assuming our base case holds) until the next winter begins. Then, we see home heating oil prices heading upward, averaging about \$1.25 per gallon for the 2003/2004 winter ([Figure 7](#)). At the end of May, distillate fuel oil inventories were about 103 million barrels, a level below the lower band (106 million barrels) of the 5-year min/max range ([Figure 8](#)).

**Natural Gas:** The natural gas spot price at the Henry Hub has remained well above \$5 per million btu on a monthly basis since the beginning of the year ([Figure 9](#)) and is above \$6 in the first week of June. The low level of underground storage is the principal reason for these unseasonably high prices. Natural gas prices are likely to stay high as long as above-normal storage injection demand competes with industrial and power sector demand for gas. Above average prices and strong gas-directed drilling efforts this year will be needed to ensure that gas in storage reaches at least minimally adequate levels by the beginning of the next heating season. The task could be made more difficult and an even an even greater risk of higher prices would be expected if adverse weather intervenes. Moreover, if the summer is unusually hot, particularly in the Western and South Central regions where natural gas is heavily used for the power generation needed to meet cooling demand, additional pressure on marginal gas prices could be expected. In fact, occasional sharp price increases might occur as the difficulty of building adequate storage increases. Assuming normal weather, spot prices in the \$5.50-\$6.00 per million btu range are expected for the rest of 2003.

At the end of May, working gas in storage stood about 38 percent below end-of-May 2002 levels and 28 percent below the previous 5-year average. In 2003, wellhead prices are projected to show an increase of about \$2.40 per thousand cubic feet (the largest U.S. annual wellhead price increase on record) over the 2002 annual average, pushing the annual average for the year to over \$5.30 per thousand cubic feet. For 2004, prices are projected to ease only moderately, as supplies are expected to remain tight.

## Figure 4. World Oil Demand Growth (Change from Year Ago)



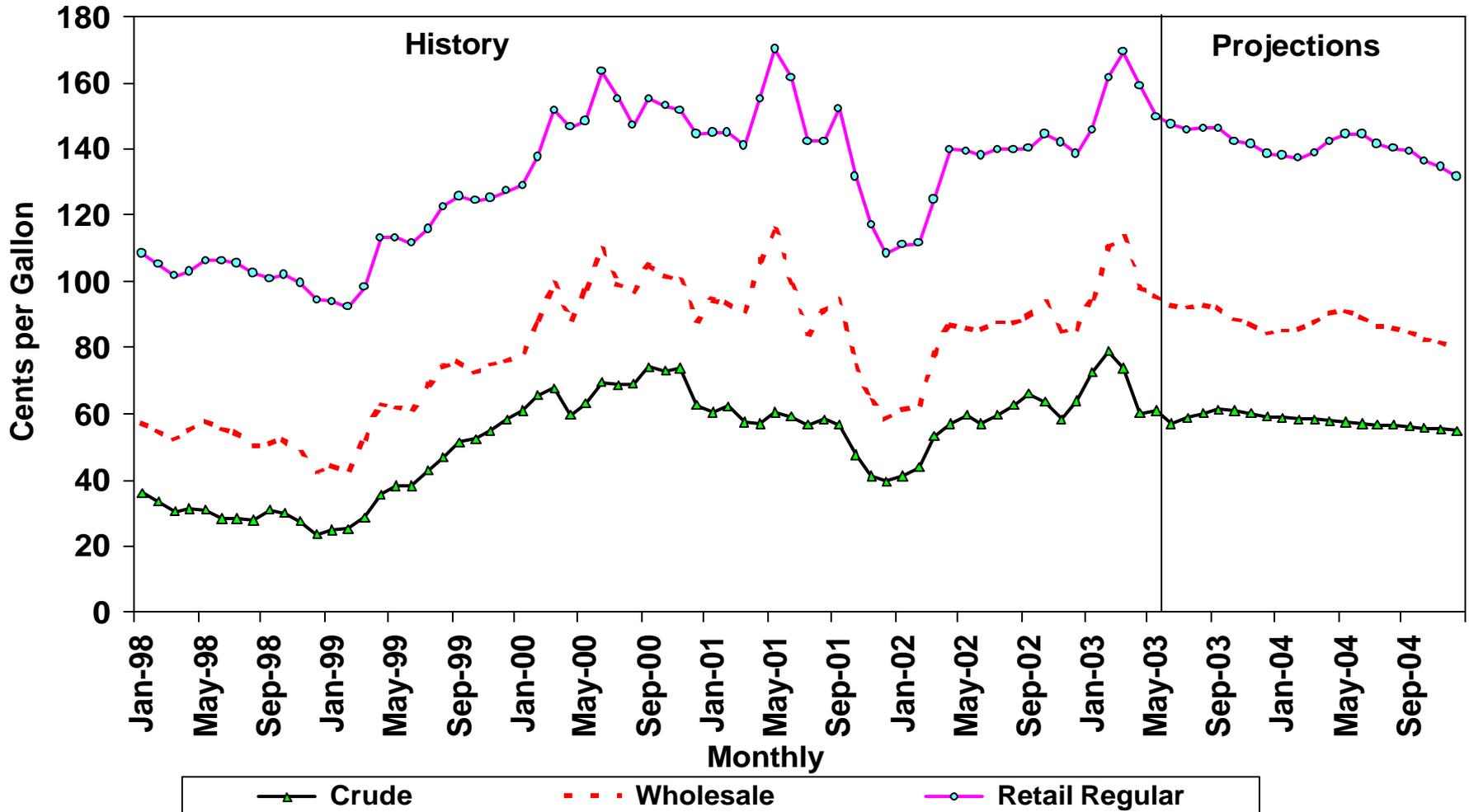
\* Note: OECD now defined to include the Czech Republic, Hungary, Mexico, Poland and South Korea in EIA's statistics.

\*\* FSU = Former Soviet Union

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



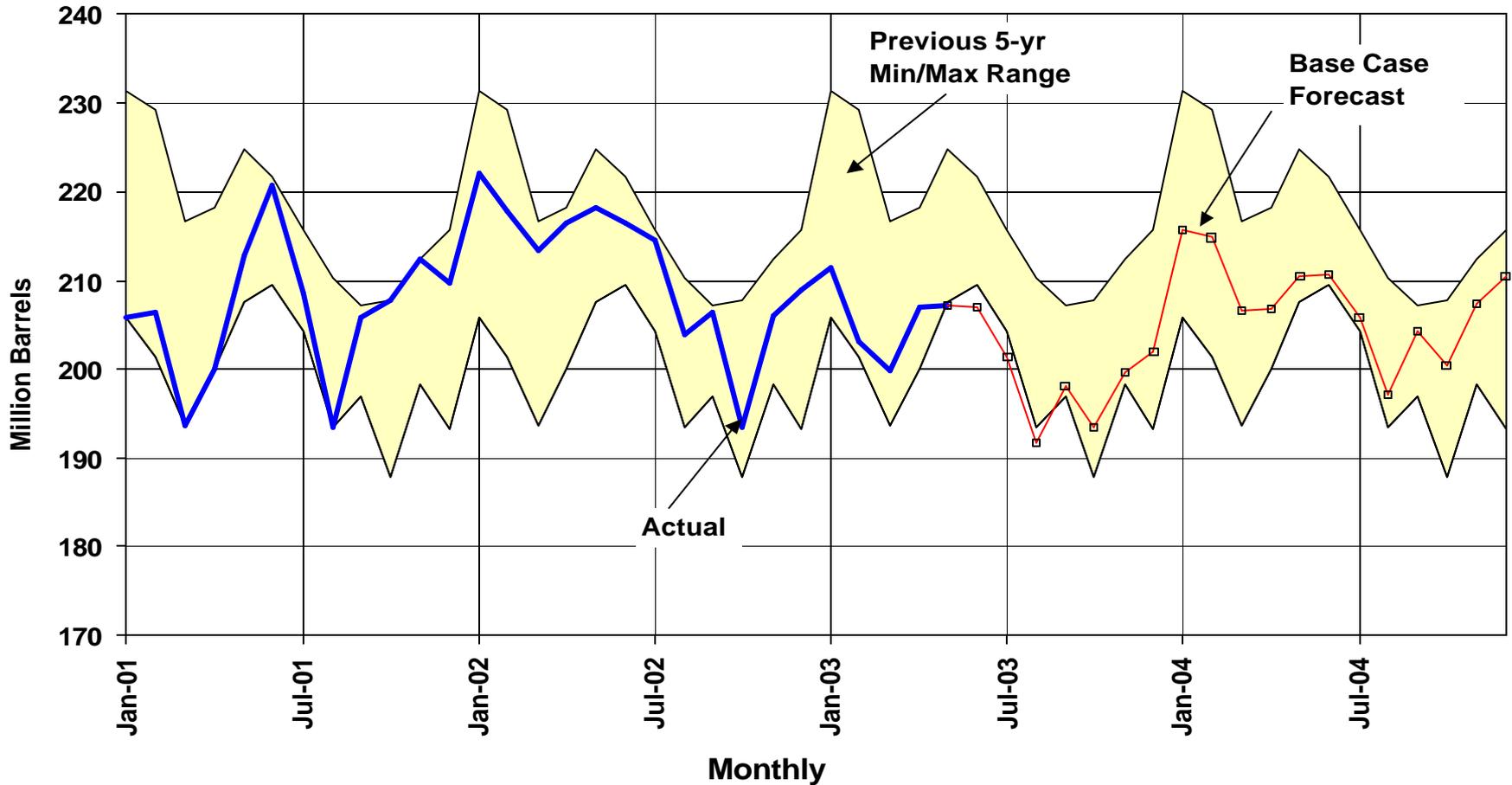
# Figure 5. Gasoline Prices and Crude Oil Costs



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

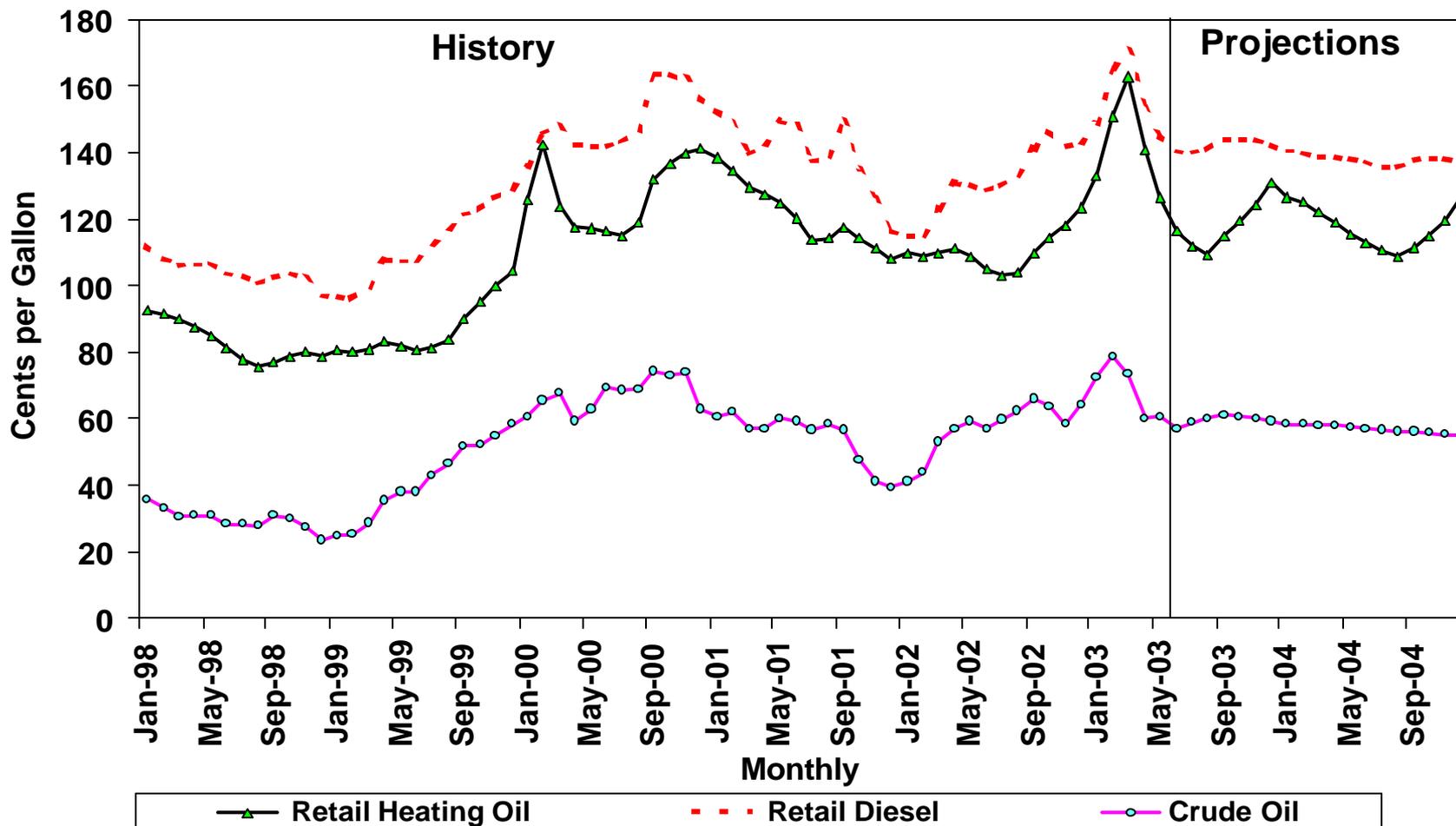


# Figure 6. U.S. Gasoline Inventories



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

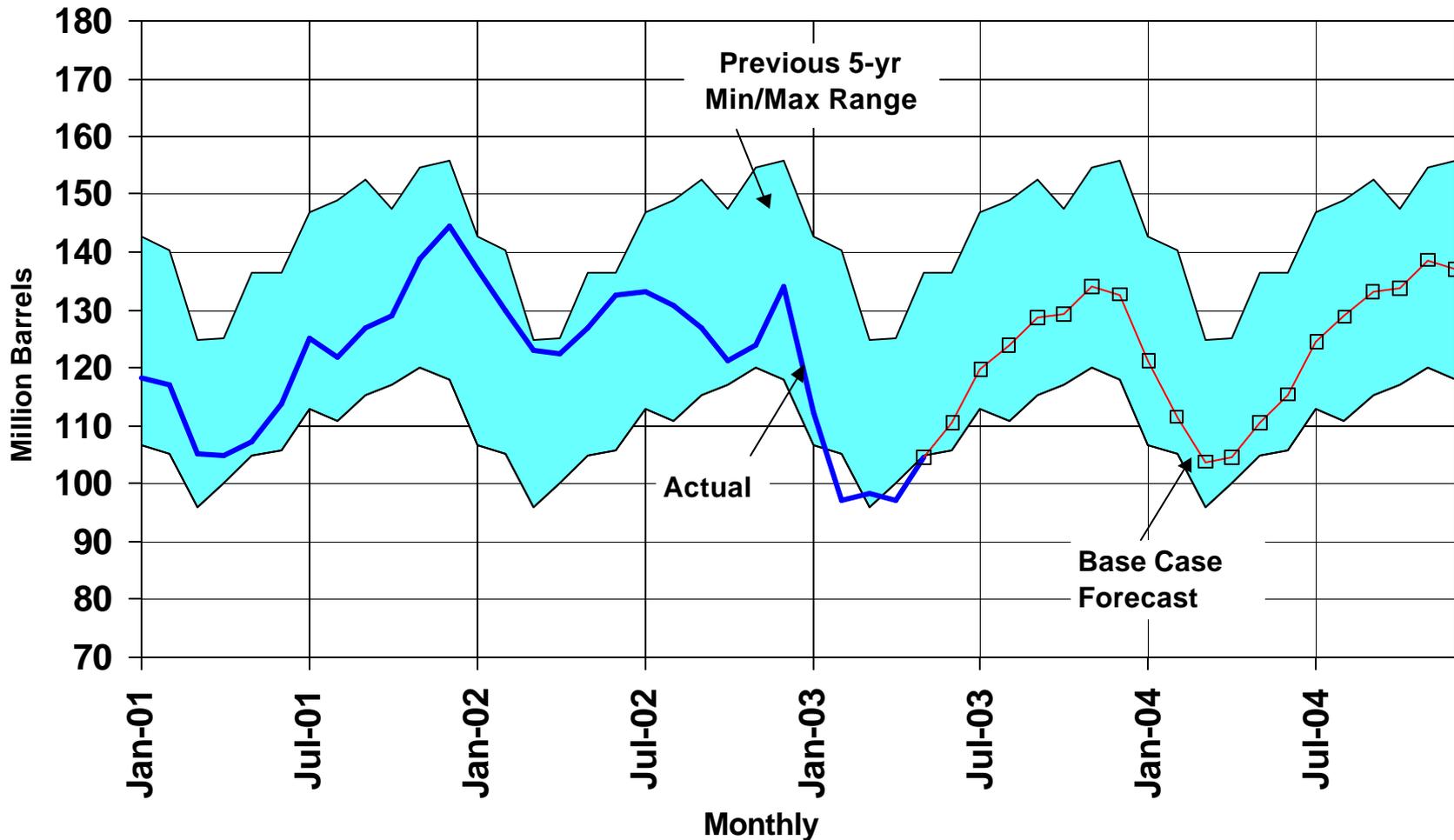
# Figure 7. Distillate Fuel Prices



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



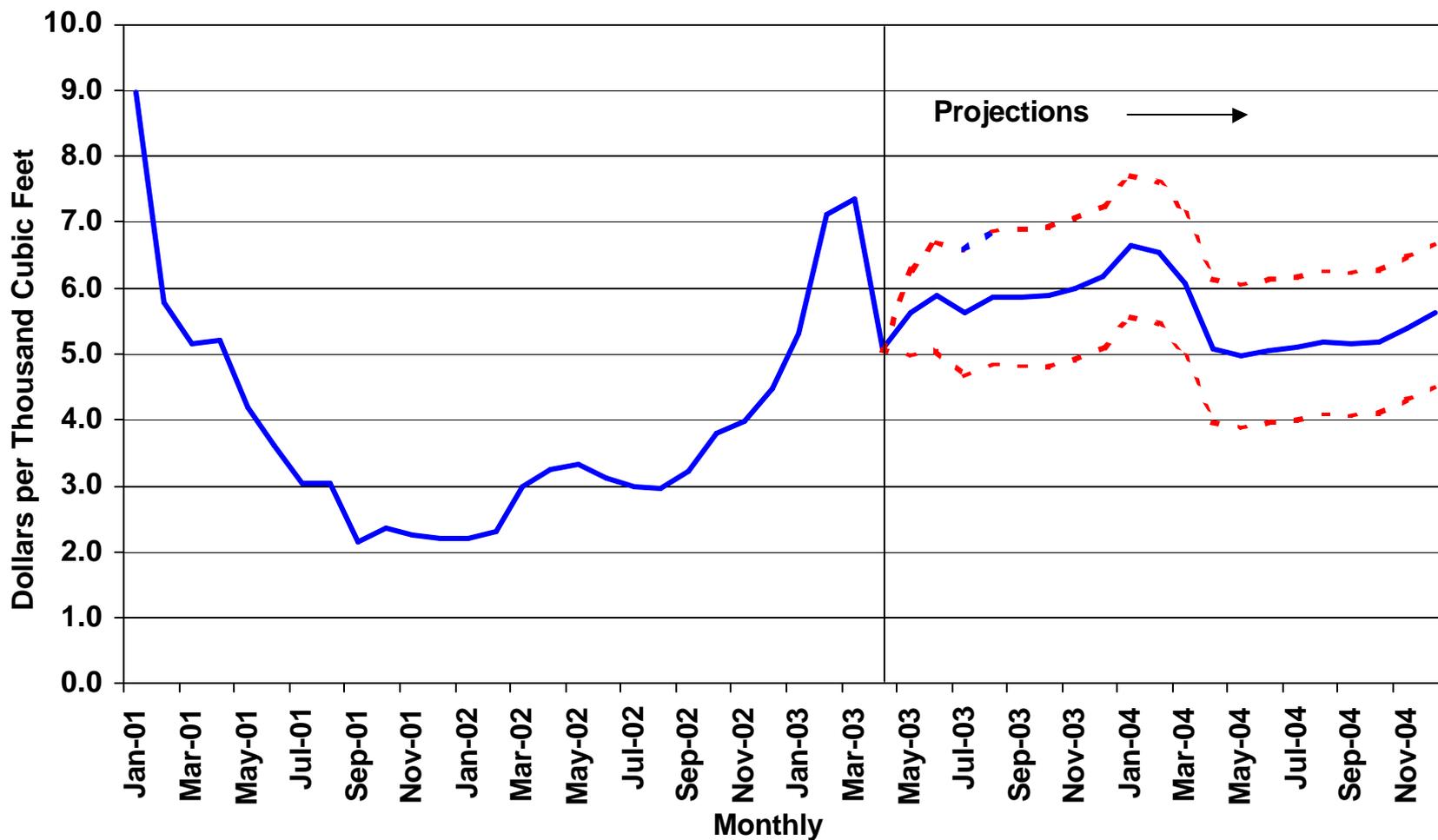
# Figure 8. Distillate Fuel Inventories



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



## Figure 9. 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, June 2003.



## **U. S. Oil Demand**

Total annual U.S. petroleum demand is projected to increase by an average of about 340,000 barrels per day per year, or 1.7 percent, between 2002 and 2003 ([Figure 10](#)). Petroleum consumption is projected to vary widely by product in a manner similar to the contrasting product-specific demand patterns seen in the previous two years. This variability is due to weakness in industrial activity, the effects of the terrorist attacks of 9/11, year-to-year shifts in weather patterns, and substantial shifts in product prices. Nonetheless, continued moderate economic recovery--which is expected to accelerate in 2004--and increasing supply/demand tightness in natural gas markets are expected to contribute to the anticipated rise in petroleum demand, especially toward the end of 2004. The assumption of normal weather patterns is also expected to contribute to the firmness in demand.

Motor gasoline demand has been virtually flat since the beginning of the year. An average 20-percent increase in real per-mile fuel costs has been constraining consumption along with anxieties surrounding the recent conflict in Iraq. The second half of this year, however, is expected to witness a year-to-year demand increase of 1.2 percent. During that period, retail gasoline pump prices are projected to continue to decline from their recent highs. In 2004, motor gasoline demand is expected to increase 3.1 percent, reflecting a projected rise of 3.0 percent in highway travel and some continued erosion of the fleet-wide fuel efficiencies seen during the last several years. Both the 3.9-percent increase in real disposable income and an 8.1-percent decline in real per-mile fuel costs are expected to contribute to the recovery in highway travel growth. Reflecting shifts in travel patterns over the past several years, growth in highway travel is projected to be substantially less than the projected average annual growth in real disposable income.

Commercial jet fuel demand is projected to decline slightly in 2003, reflecting continuing concerns about terrorist attacks, the war in Iraq and the SARS epidemic, all of which are expected to continue to constrain fuel demand through the third quarter. Following the start of the war in Iraq, carriers implemented substantial curtailments of overseas flights (in addition to the capacity reductions resulting from the events of 9/11). In 2004, a modest increase in commercial jet fuel demand of 1.5 percent is expected. Although air traffic activity growth is projected to exceed 5 percent, capacity growth is expected to be less than half of that, as air carriers seek to restore load factors to historical norms.

Distillate fuel oil demand registered growth of more than 7 percent during the first 5 months of the year as a result of substantial year-to-year weather differences and fuel switching due to high natural gas prices. Distillate demand is expected to increase at an annual average rate of 3.4 percent during the forecast interval, boosted by accelerating growth in industrial and transportation output.

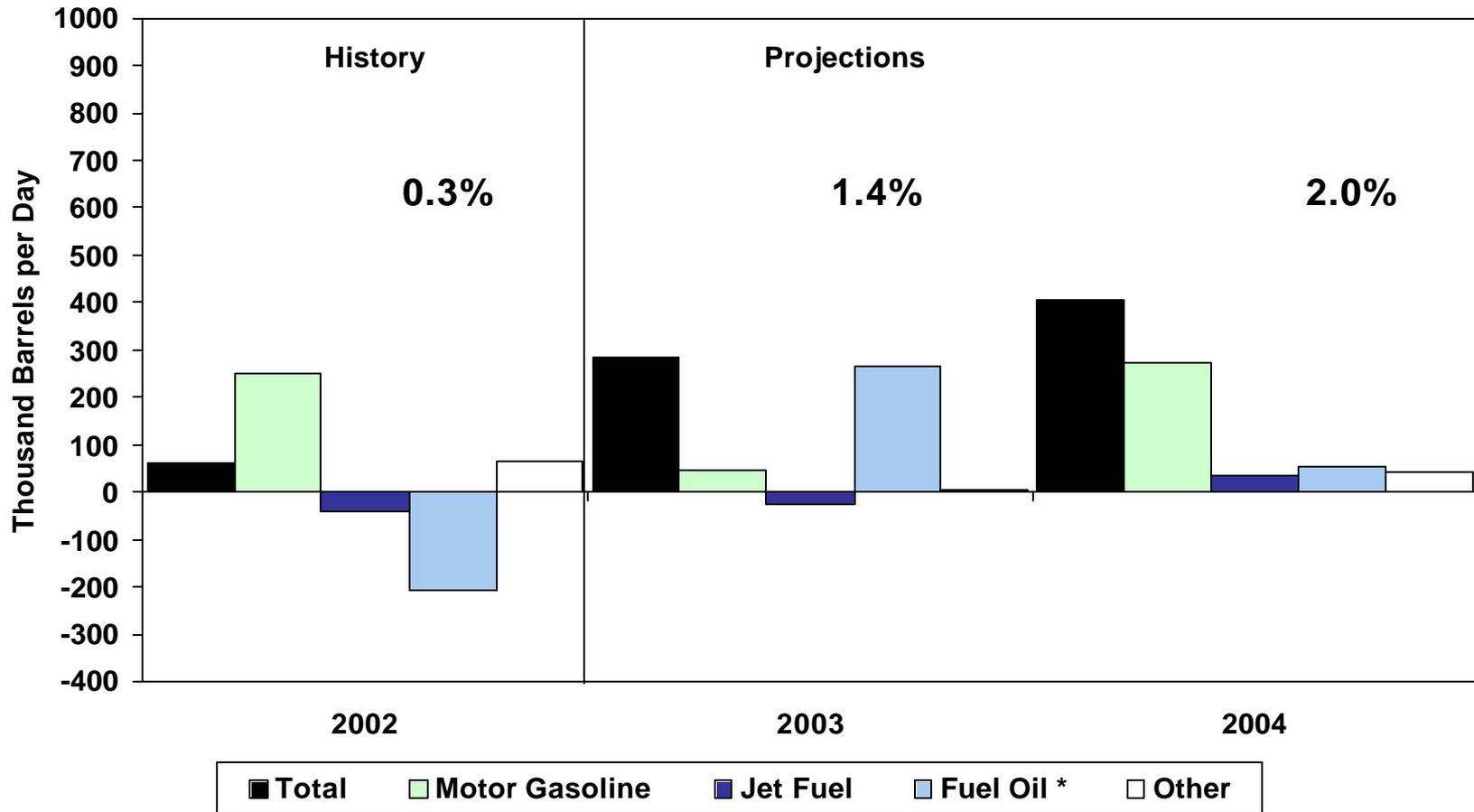
Residual fuel oil deliveries are projected to grow sharply (by about 10 percent) to 740,000 barrels per day in 2003 on the strength of electric power generation demand, then fall below 700,000 barrels per day once again in 2004.

Liquefied petroleum gas demand growth is projected to weaken in 2003 as a result of continued firmness in natural gas prices, then resume moderate growth in 2004 as a result of growth in petrochemical demand and the decline in feedstock prices.

## **U.S. Oil Supply**

Average domestic crude oil production in 2003 is expected to increase slightly (0.3 percent) to a level of 5.83 million barrels of oil per day. For 2004, a 0.4 percent decrease is expected, resulting in a production rate of 5.81 million barrels of oil per day average for the year ([Figure 11](#)).

# Figure 10. Petroleum Products Demand Growth (Change from Year Ago)

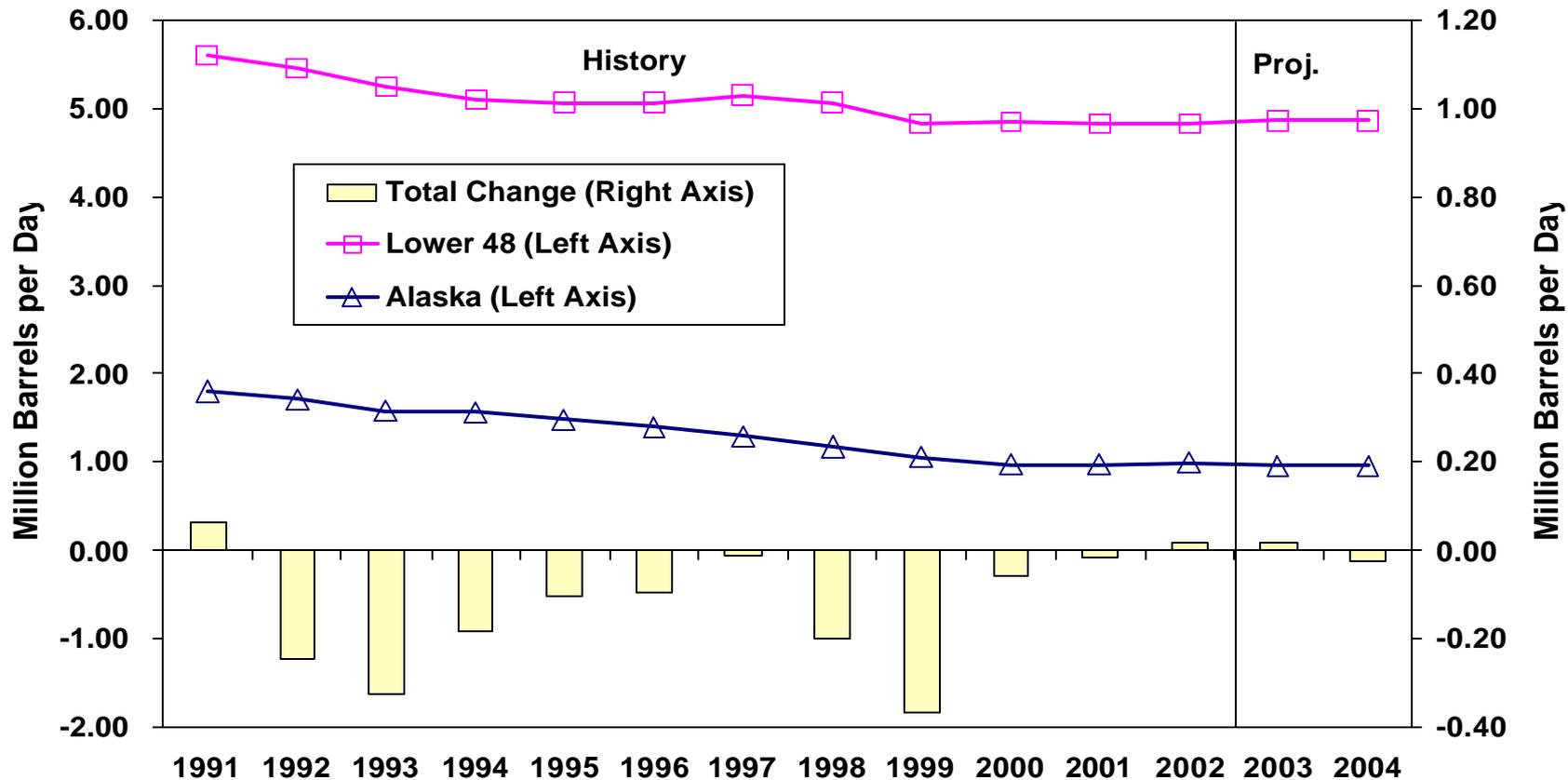


\* Sum of distillate and residual fuel.



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

# Figure 11. U.S. Crude Oil Production Trends



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



Lower-48 States oil production is expected to increase by 44 thousand barrels per day to a rate of 4.88 million barrels per day in 2003, followed by a decrease of 14 thousand barrels per day in 2004. Oil production from the Mars, Mad Dog, Na Kika, Ursa and Dianna-Hoover Federal Offshore fields is expected to account for about 7.9 percent of lower-48 oil production by the 4th quarter of 2004.

Alaska is expected to account for 16.3 percent of total U.S. oil production in 2004. Alaskan oil production is expected to decrease by 2.6 percent in 2003, with a further decrease of 1.1 percent in 2004. The combined production rate from the two significant satellite fields, Alpine and North Star, averaged nearly 170 thousand barrels per day during February 2003. Production from the Kuparuk River field plus like production from West Sak, Tabasco, Tarn and Meltwater fields is expected to stay at an average of 215 thousand barrels per day over the 2003 and 2004 forecast periods.

### **Natural Gas Supply and Demand**

Given current high natural gas prices, natural gas demand is expected to remain flat in 2003 and 2004 compared to 2002 ([Figure 12](#)). Little or no growth this year is likely despite sharply higher weather-related demand during the first quarter of 2003. Weakness in aggregate industrial output and sharply higher prices this year result in stagnant or falling demand in the industrial and electric power sectors.

Demand for natural gas this summer is expected to fall by close to 1 percent from last summer's level, due largely to summer weather effects. Cooling degree-days for the season (Q2 2003 and Q3 2003) under our assumption of normal weather would be about 8 percent below year-ago levels. Summer natural gas wellhead prices are projected to be 44 percent higher than they were last summer. In the event of a hotter than normal summer this year, natural gas prices would go even higher, as expanded natural gas-fired electric generation to meet cooling demand would compete with the need to build storage inventories.

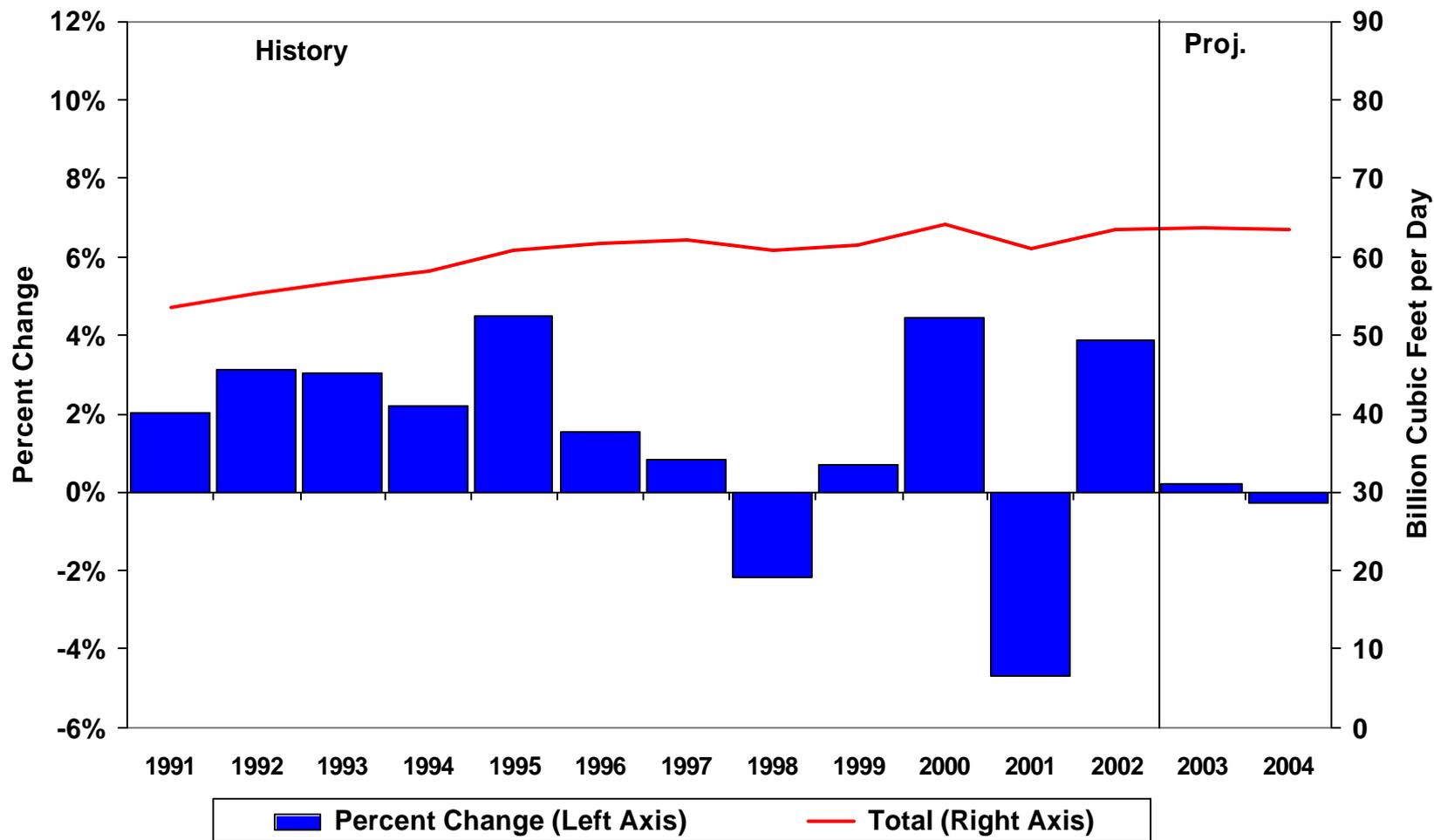
Working natural gas in storage stood at about 1,212 billion cubic feet (bcf) at the end of May, about 38 percent below the year-ago level ([Figure 13](#)). This is the second lowest aggregate inventory level for the end of May recorded by EIA. Eastern and producing regions stocks, in particular, are at low levels. Demand for natural gas to refill working gas storage in 2003 will be higher than average, which means that price volatility can be expected to continue in these tight market conditions.

Natural gas production is expected to increase by 2.2 percent this year. High natural gas prices and sharply higher oil and natural gas field revenues are driving the resurgence in natural gas-directed drilling activity this year following the downturn in 2002 ([Figure 14](#)). Monthly oil and natural gas field revenues are expected to continue to average over \$400 million this year ([Figure 15](#)). Domestic production growth should continue in 2004 but, given recent experience, the extra effort might result in increases of less than 2 percent. The prospects for significant reductions in natural gas wellhead prices over the forecast period from the current high levels could hinge on the productivity of the expected upsurge in drilling in terms of expected output.

### **Electricity Demand and Supply**

Electricity demand is expected to increase by 1.7 percent this year in response to the ongoing recovery in the economy ([Figure 16](#)). If our assumption of normal temperatures for the remainder of the year proves true, little or no net weather-related demand growth is expected. This situation contrasts sharply with the hot weather conditions that prevailed in 2002. In 2004, annual electricity demand is projected to continue to grow, albeit more slowly than the economy.

# Figure 12. Total Natural Gas Demand Growth Patterns

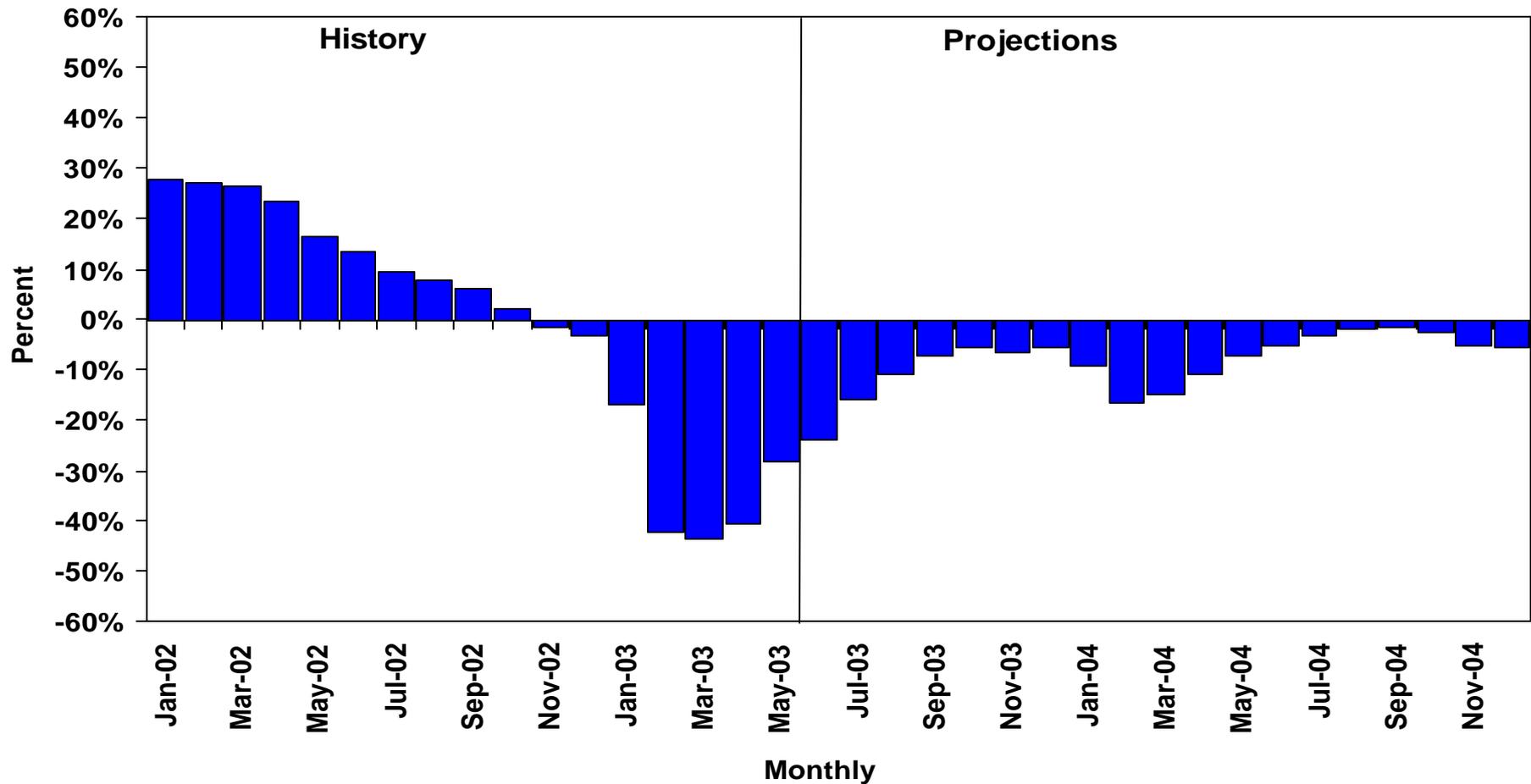


Note: This chart replaces a previous Figure 12 because of revised data for June 2003.

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



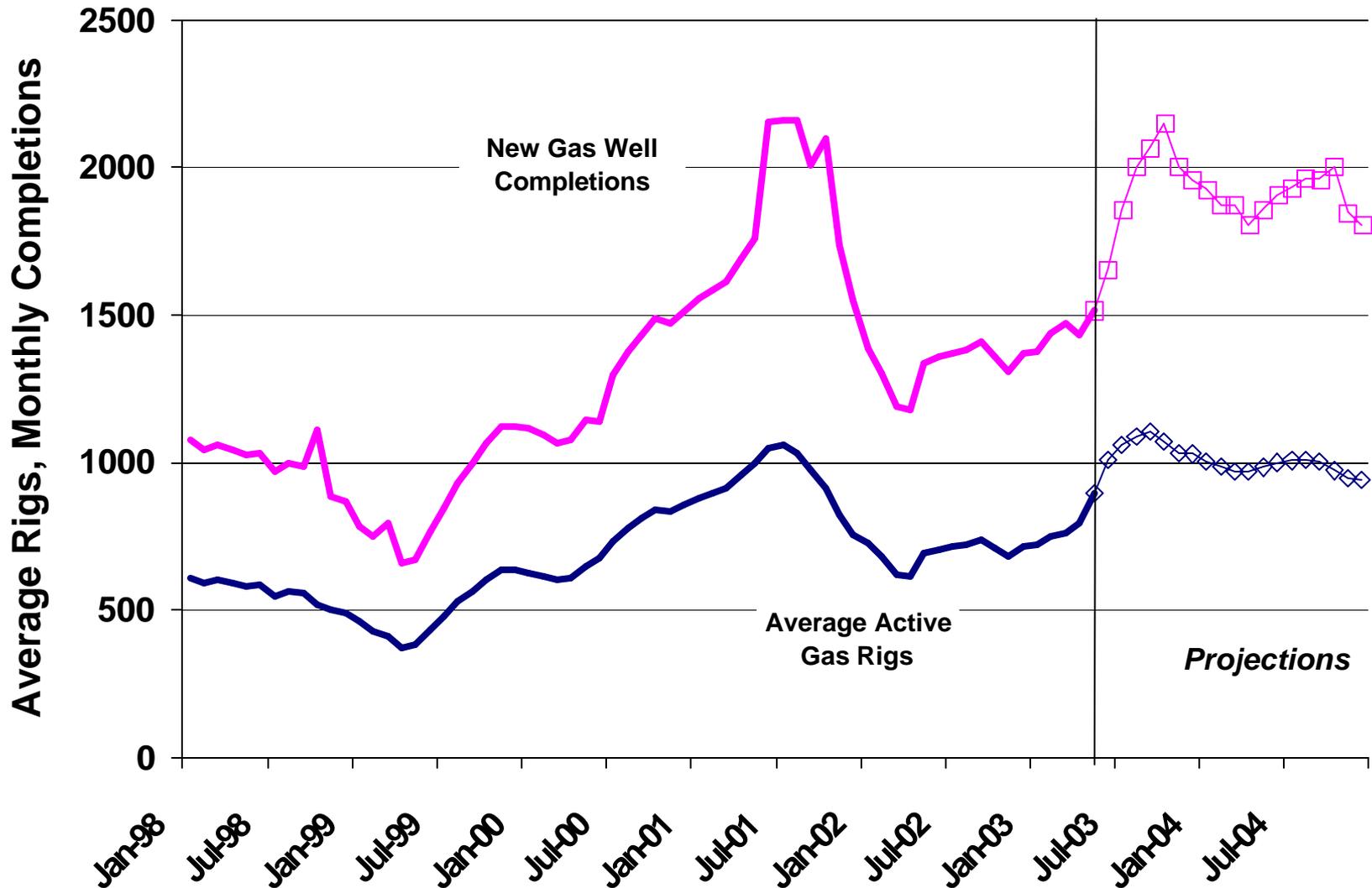
# Figure 13. Working Gas in Storage (Difference from Previous 5-Year Average)



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

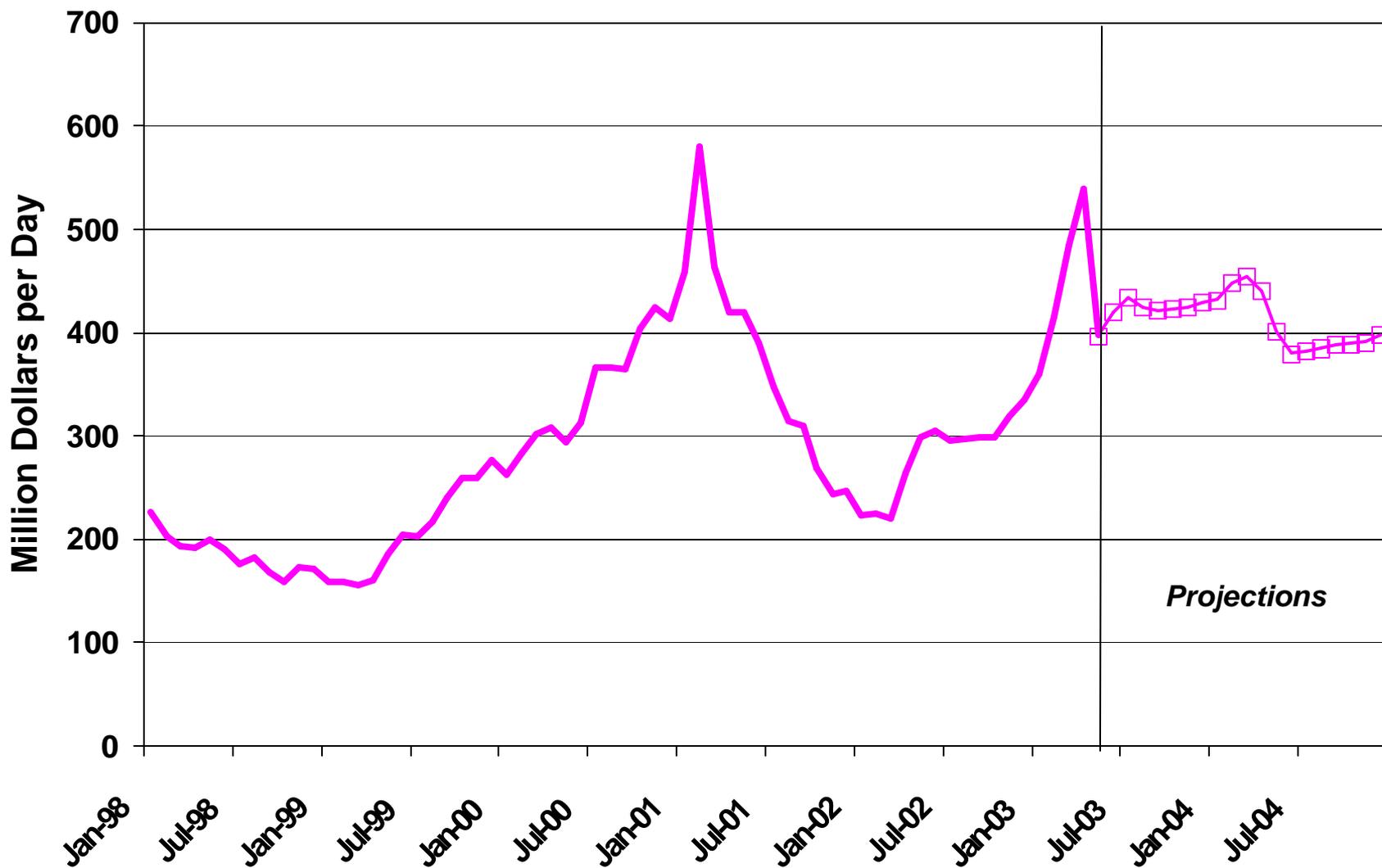


# Figure 14. U.S. Natural Gas-Directed Drilling Activity



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

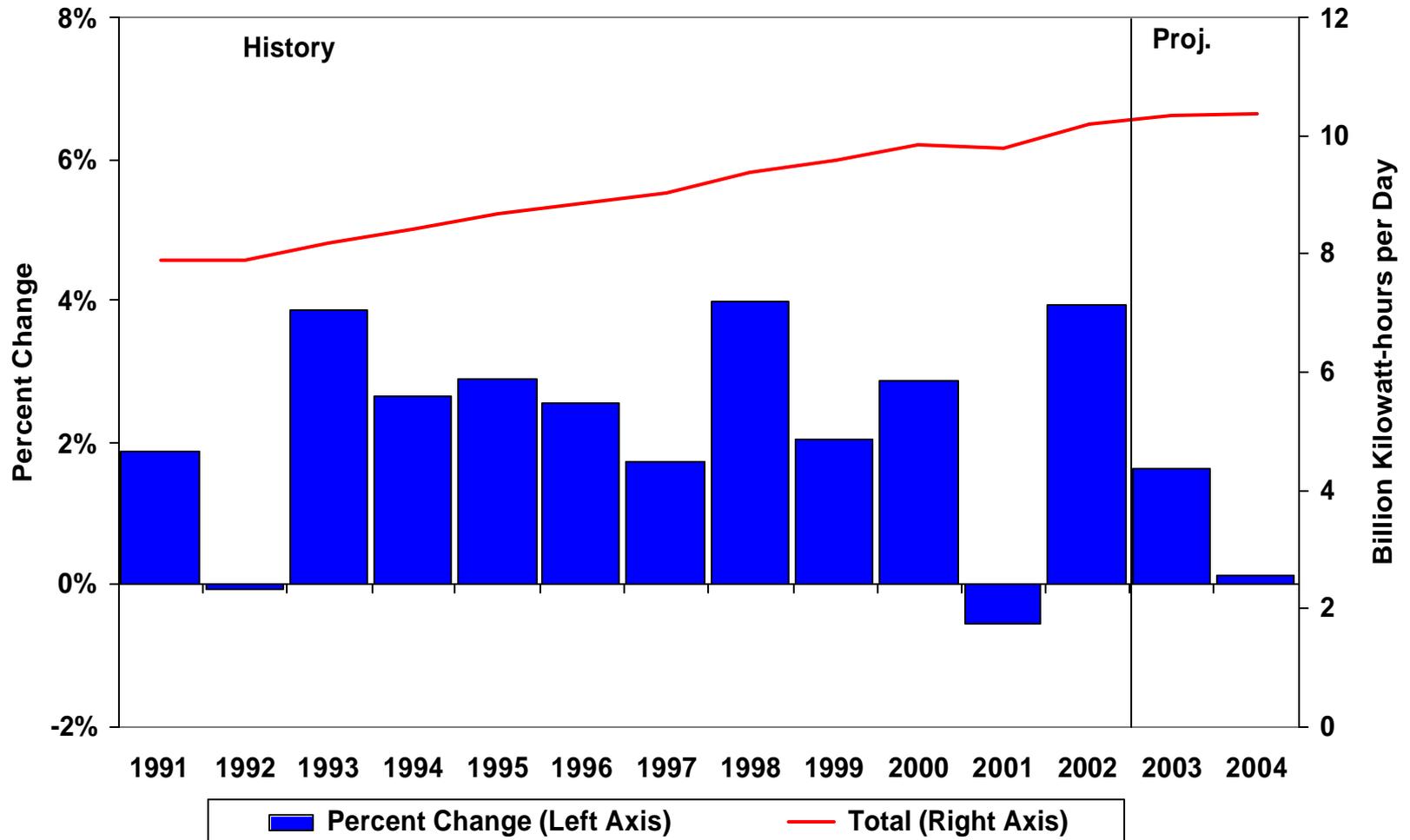
# Figure 15. U.S. Oil and Gas Production Revenues



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



# Figure 16. Total Electricity Demand Growth Patterns



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



Natural gas-generated electricity production is expected to show only little growth in 2003. This is in part due to fuel substitution related to high natural gas prices, increasing oil and coal utilization (where possible) beyond what otherwise would have prevailed. In 2003, petroleum-generated electricity production is expected to increase by about 28 percent. In 2004, petroleum-generated electricity production is projected to fall back but still remain above 2002 levels. Hydroelectric generation, while down in the Pacific Northwest, is up in other parts of the country due to high water levels and is expected to increase by 11 percent overall in 2003. Nuclear generation is about the same as last year.

### **Representation of Uncertainty in STEO Using the STIFS Model**

The EIA uses its Short-Term Integrated Forecasting System (STIFS) model to analyze monthly trends in U.S. energy demands and prices, both nationally and by sector, and to generate its monthly *Short-Term Energy Outlook* (STEO). This model consists of approximately 920 endogenous variables, 216 of which are stochastic (i.e., have error distributions associated with them).

Confidence intervals presented in STEO for a selected STIFS variable, such as the crude oil price, gasoline price and natural gas spot price, are analytically calculated using information about the error distribution of the modeled variable and the error distributions of any endogenous variables that may affect the variable of interest. These confidence intervals, based on +/- 2 standard errors within the STIFS model, do not include the impact of major supply disruptions and other phenomena not represented in the model.

To the extent that supply disruptions in world oil markets and/or other phenomena not included in the STIFS model do significantly affect future market developments, confidence intervals presented in STEO likely will be less than the usual 95 percent, all other factors being equal.

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

	Year				Annual Percentage Change		
	2001	2002	2003	2004	2001-2002	2002-2003	2003-2004
<b>Real Gross Domestic Product (GDP)</b> (billion chained 1996 dollars) .....	<b>9215</b>	<b>9440</b>	<i>9658</i>	<i>10040</i>	2.4	2.3	4.0
Imported Crude Oil Price <sup>a</sup> (nominal dollars per barrel).....	<b>22.00</b>	<b>23.68</b>	<i>25.97</i>	<i>23.37</i>	7.6	9.7	-10.0
<b>Petroleum Supply</b> (million barrels per day)							
Crude Oil Production <sup>b</sup> .....	<b>5.80</b>	<b>5.82</b>	<i>5.83</i>	<i>5.81</i>	0.3	0.3	-0.4
Total Petroleum Net Imports (including SPR).....	<b>10.90</b>	<b>10.50</b>	<i>10.95</i>	<i>11.37</i>	-3.6	4.2	3.8
<b>Energy Demand</b>							
World Petroleum (million barrels per day).....	<b>77.1</b>	<b>77.4</b>	<i>78.4</i>	<i>79.6</i>	0.3	1.3	1.5
Petroleum (million barrels per day).....	<b>19.65</b>	<b>19.71</b>	<i>19.99</i>	<i>20.40</i>	0.3	1.4	2.0
Natural Gas (trillion cubic feet) .....	<b>22.30</b>	<b>23.17</b>	<i>23.23</i>	<i>23.23</i>	3.9	0.2	0.0
Coal <sup>c</sup> (million short tons) .....	<b>1060</b>	<b>1065</b>	<i>1076</i>	<i>1088</i>	0.5	1.0	1.1
Electricity (billion kilowatthours)							
Retail Sales <sup>d</sup> .....	<b>3370</b>	<b>3485</b>	<i>3524</i>	<i>3526</i>	3.4	1.1	0.1
Other Use/Sales <sup>e</sup> .....	<b>205</b>	<b>231</b>	<i>253</i>	<i>266</i>	12.3	9.8	5.2
Total .....	<b>3575</b>	<b>3716</b>	<i>3777</i>	<i>3792</i>	3.9	1.7	0.4
Total Energy Demand <sup>f</sup> (quadrillion Btu).....	<b>96.2</b>	<b>97.9</b>	<i>99.4</i>	<i>100.8</i>	1.8	1.5	1.4
Total Energy Demand per Dollar of GDP (thousand Btu per 1996 Dollar).....	<b>10.43</b>	<b>10.37</b>	<i>10.29</i>	<i>10.04</i>	-0.6	-0.8	-2.4
Renewable Energy as Percent of Total <sup>g</sup> .....	<b>5.6%</b>	<b>6.2%</b>	<i>6.5%</i>	<i>6.6%</i>			

<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 EIA's 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 2001 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 2001 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 Energy Information Administration, Monthly Energy Review (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. The Energy Information Administration 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; 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 CONTROL0503.

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

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
<b>Macroeconomic<sup>a</sup></b>															
Real Gross Domestic Product (billion chained 1996 dollars - SAAR)...	<b>9363</b>	<b>9392</b>	<b>9486</b>	<b>9518</b>	<i>9556</i>	<i>9598</i>	<i>9692</i>	<i>9786</i>	<i>9904</i>	<i>9999</i>	<i>10097</i>	<i>10162</i>	<i>9440</i>	<i>9658</i>	<i>10040</i>
Percentage Change from Prior Year....	<b>1.4</b>	<b>2.2</b>	<b>3.3</b>	<b>2.9</b>	<i>2.1</i>	<i>2.2</i>	<i>2.2</i>	<i>2.8</i>	<i>3.6</i>	<i>4.2</i>	<i>4.2</i>	<i>3.8</i>	<i>2.4</i>	<i>2.3</i>	<i>4.0</i>
Annualized Percent Change from Prior Quarter.....	<b>5.0</b>	<b>1.2</b>	<b>4.0</b>	<b>1.4</b>	<i>1.6</i>	<i>1.7</i>	<i>3.9</i>	<i>3.9</i>	<i>4.8</i>	<i>3.8</i>	<i>3.9</i>	<i>2.6</i>			
GDP Implicit Price Deflator (Index, 1996=1.000).....	<b>1.101</b>	<b>1.105</b>	<b>1.108</b>	<b>1.112</b>	<i>1.120</i>	<i>1.123</i>	<i>1.128</i>	<i>1.134</i>	<i>1.140</i>	<i>1.145</i>	<i>1.151</i>	<i>1.158</i>	<i>1.107</i>	<i>1.126</i>	<i>1.149</i>
Percentage Change from Prior Year....	<b>1.4</b>	<b>1.1</b>	<b>0.8</b>	<b>1.3</b>	<i>1.6</i>	<i>1.7</i>	<i>1.9</i>	<i>2.0</i>	<i>1.8</i>	<i>1.9</i>	<i>2.1</i>	<i>2.1</i>	<i>1.1</i>	<i>1.8</i>	<i>2.0</i>
Real Disposable Personal Income (billion chained 1996 Dollars - SAAR)..	<b>6961</b>	<b>7027</b>	<b>7058</b>	<b>7101</b>	<i>7119</i>	<i>7161</i>	<i>7229</i>	<i>7301</i>	<i>7434</i>	<i>7470</i>	<i>7509</i>	<i>7532</i>	<i>7037</i>	<i>7202</i>	<i>7486</i>
Percentage Change from Prior Year....	<b>3.8</b>	<b>5.0</b>	<b>2.8</b>	<b>5.5</b>	<i>2.3</i>	<i>1.9</i>	<i>2.4</i>	<i>2.8</i>	<i>4.4</i>	<i>4.3</i>	<i>3.9</i>	<i>3.2</i>	<i>4.3</i>	<i>2.4</i>	<i>3.9</i>
Manufacturing Production (Index, 1997=100.0).....	<b>110.8</b>	<b>111.8</b>	<b>112.6</b>	<b>111.5</b>	<i>111.2</i>	<i>110.2</i>	<i>112.0</i>	<i>114.0</i>	<i>116.3</i>	<i>118.8</i>	<i>121.1</i>	<i>123.1</i>	<i>111.7</i>	<i>111.9</i>	<i>119.8</i>
Percentage Change from Prior Year....	<b>-4.0</b>	<b>-1.5</b>	<b>0.5</b>	<b>1.2</b>	<i>0.4</i>	<i>-1.4</i>	<i>-0.6</i>	<i>2.2</i>	<i>4.5</i>	<i>7.8</i>	<i>8.2</i>	<i>7.9</i>	<i>-1.0</i>	<i>0.2</i>	<i>7.1</i>
OECD Economic Growth (percent) <sup>b</sup> ...													<i>1.8</i>	<i>2.4</i>	<i>3.0</i>
<b>Weather<sup>c</sup></b>															
Heating Degree-Days															
U.S. ....	<b>2098</b>	<b>498</b>	<b>44</b>	<b>1634</b>	<i>2157</i>	<i>506</i>	<i>86</i>	<i>1622</i>	<i>2254</i>	<i>517</i>	<i>85</i>	<i>1621</i>	<i>4274</i>	<i>4370</i>	<i>4477</i>
New England.....	<b>2796</b>	<b>869</b>	<b>119</b>	<b>2375</b>	<i>3292</i>	<i>964</i>	<i>167</i>	<i>2236</i>	<i>3205</i>	<i>880</i>	<i>167</i>	<i>2235</i>	<i>6159</i>	<i>6659</i>	<i>6488</i>
Middle Atlantic.....	<b>2481</b>	<b>653</b>	<b>36</b>	<b>2169</b>	<i>3117</i>	<i>788</i>	<i>105</i>	<i>2001</i>	<i>2919</i>	<i>697</i>	<i>106</i>	<i>2001</i>	<i>5339</i>	<i>6011</i>	<i>5723</i>
U.S. Gas-Weighted.....	<b>2181</b>	<b>558</b>	<b>43</b>	<b>1736</b>	<i>2317</i>	<i>540</i>	<i>90</i>	<i>1713</i>	<i>2373</i>	<i>554</i>	<i>90</i>	<i>1713</i>	<i>4518</i>	<i>4660</i>	<i>4730</i>
Cooling Degree-Days (U.S.) .....	<b>31</b>	<b>372</b>	<b>882</b>	<b>81</b>	<i>27</i>	<i>369</i>	<i>783</i>	<i>76</i>	<i>33</i>	<i>348</i>	<i>784</i>	<i>76</i>	<i>1366</i>	<i>1254</i>	<i>1240</i>

<sup>a</sup>Macroeconomic projections from DRI/McGraw-Hill 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 1990 population.

SAAR: Seasonally-adjusted annualized rate.

Note: Historical data are printed in bold; forecasts are in italics.

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 (419). Projections of OECD growth are based on Global Insight, "World Economic Outlook," Volume 1. Macroeconomic projections are based on Global Insight Forecast CONTROL0503.

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

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
<b>Macroeconomic <sup>a</sup></b>															
Real Fixed Investment (billion chained 1996 dollars-SAAR) ...	<b>1576</b>	<b>1573</b>	<b>1572</b>	<b>1588</b>	1591	1598	1605	1617	1639	1664	1698	1728	1577	1603	1682
Real Exchange Rate (index).....	<b>1.193</b>	<b>1.152</b>	<b>1.106</b>	<b>1.102</b>	1.048	1.031	1.020	1.017	1.020	1.014	1.007	0.999	1.138	1.029	1.010
Business Inventory Change (billion chained 1996 dollars-SAAR) ...	<b>-31.9</b>	<b>-14.1</b>	<b>-2.6</b>	<b>2.8</b>	-1.5	-2.0	-5.0	-2.5	5.1	14.4	21.9	23.8	-11.5	-2.7	16.3
Producer Price Index (index, 1982=1.000).....	<b>1.291</b>	<b>1.306</b>	<b>1.313</b>	<b>1.335</b>	1.385	1.395	1.403	1.402	1.403	1.402	1.412	1.419	1.311	1.396	1.409
Consumer Price Index (index, 1982-1984=1.000).....	<b>1.780</b>	<b>1.795</b>	<b>1.805</b>	<b>1.814</b>	1.831	1.835	1.842	1.854	1.861	1.870	1.881	1.892	1.799	1.841	1.876
Petroleum Product Price Index (index, 1982=1.000).....	<b>0.656</b>	<b>0.810</b>	<b>0.839</b>	<b>0.877</b>	0.946	0.863	0.884	0.894	0.838	0.809	0.833	0.838	0.795	0.897	0.829
Non-Farm Employment (millions).....	<b>130.8</b>	<b>130.7</b>	<b>130.8</b>	<b>130.8</b>	130.6	130.4	130.6	131.1	131.9	132.6	133.3	133.8	130.8	130.7	132.9
Commercial Employment (millions).....	<b>92.1</b>	<b>92.2</b>	<b>92.3</b>	<b>92.4</b>	92.3	92.2	92.6	93.1	93.9	94.6	95.3	95.7	92.3	92.5	94.9
Total Industrial Production (index, 1997=100.0).....	<b>109.3</b>	<b>110.5</b>	<b>111.4</b>	<b>110.4</b>	110.5	109.6	111.0	112.6	114.6	116.7	118.6	120.2	110.4	110.9	117.5
Housing Stock (millions).....	<b>119.3</b>	<b>119.6</b>	<b>119.8</b>	<b>120.5</b>	121.0	121.3	121.6	121.9	122.2	122.5	122.8	123.0	119.8	121.5	122.6
<b>Miscellaneous</b>															
Gas Weighted Industrial Production (index, 1997=100.0).....	<b>100.4</b>	<b>101.0</b>	<b>101.6</b>	<b>100.8</b>	100.3	100.8	101.8	102.9	104.0	105.2	106.4	107.5	100.9	101.5	105.8
Vehicle Miles Traveled <sup>b</sup> (million miles/day).....	<b>7266</b>	<b>8027</b>	<b>8052</b>	<b>7642</b>	7231	7935	8181	7747	7505	8215	8379	7921	7748	7776	8006
Vehicle Fuel Efficiency (index, 1999=1.000).....	<b>0.997</b>	<b>1.040</b>	<b>1.034</b>	<b>1.002</b>	0.986	1.038	1.042	1.000	0.983	1.037	1.044	0.998	1.019	1.017	1.016
Real Vehicle Fuel Cost (cents per mile).....	<b>3.31</b>	<b>3.75</b>	<b>3.77</b>	<b>3.92</b>	4.30	3.99	3.83	3.82	3.81	3.73	3.61	3.58	3.70	3.97	3.68
Air Travel Capacity (mill. available ton-miles/day).....	<b>435.0</b>	<b>475.3</b>	<b>457.5</b>	<b>452.4</b>	460.1	465.0	465.9	463.6	457.9	470.7	480.1	484.1	455.1	463.7	473.3
Aircraft Utilization (mill. revenue ton-miles/day).....	<b>237.6</b>	<b>268.7</b>	<b>270.6</b>	<b>255.2</b>	247.1	257.3	273.3	257.4	253.0	275.5	288.4	276.9	258.1	258.8	273.5
Airline Ticket Price Index (index, 1982-1984=1.000).....	<b>2.317</b>	<b>2.377</b>	<b>2.334</b>	<b>2.235</b>	2.252	2.346	2.460	2.431	2.345	2.276	2.252	2.245	2.316	2.372	2.279
Raw Steel Production (million tons).....	<b>23.92</b>	<b>25.03</b>	<b>26.34</b>	<b>25.68</b>	24.69	23.04	23.14	22.73	25.11	26.03	26.66	25.65	100.98	93.59	103.46

<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: Historical data are printed in bold; forecasts are in italics.

**Table 3. International Petroleum Supply and Demand: Base Case**

(Million Barrels per Day, Except OECD Commercial Stocks)

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
<b>Demand<sup>a</sup></b>															
OECD															
U.S. (50 States).....	<b>19.4</b>	<b>19.6</b>	<b>19.8</b>	<b>19.8</b>	<i>20.0</i>	<i>19.6</i>	<i>20.2</i>	<i>20.2</i>	<i>20.4</i>	<i>20.1</i>	<i>20.5</i>	<i>20.6</i>	<i>19.7</i>	<i>20.0</i>	<i>20.4</i>
U.S. Territories .....	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<i>0.3</i>										
Canada.....	<b>2.0</b>	<b>1.9</b>	<b>2.0</b>	<b>2.1</b>	<i>2.0</i>	<i>1.9</i>	<i>2.1</i>	<i>2.1</i>	<i>2.0</i>	<i>2.0</i>	<i>2.2</i>	<i>2.1</i>	<i>2.0</i>	<i>2.0</i>	<i>2.1</i>
Europe.....	<b>15.2</b>	<b>14.6</b>	<b>15.2</b>	<b>15.4</b>	<i>15.1</i>	<i>14.4</i>	<i>15.0</i>	<i>15.7</i>	<i>15.5</i>	<i>14.5</i>	<i>15.1</i>	<i>15.8</i>	<i>15.1</i>	<i>15.0</i>	<i>15.2</i>
Japan .....	<b>5.7</b>	<b>4.6</b>	<b>5.0</b>	<b>5.9</b>	<i>6.2</i>	<i>4.8</i>	<i>5.0</i>	<i>5.5</i>	<i>5.9</i>	<i>4.9</i>	<i>5.1</i>	<i>5.5</i>	<i>5.3</i>	<i>5.4</i>	<i>5.3</i>
Other OECD .....	<b>5.3</b>	<b>4.9</b>	<b>4.9</b>	<b>5.4</b>	<i>5.4</i>	<i>5.0</i>	<i>5.3</i>	<i>5.3</i>	<i>5.1</i>	<i>5.1</i>	<i>5.3</i>	<i>5.4</i>	<i>5.1</i>	<i>5.2</i>	<i>5.2</i>
Total OECD .....	<b>47.9</b>	<b>46.1</b>	<b>47.4</b>	<b>48.8</b>	<i>49.1</i>	<i>46.0</i>	<i>47.9</i>	<i>49.1</i>	<i>49.3</i>	<i>46.8</i>	<i>48.5</i>	<i>49.7</i>	<i>47.5</i>	<i>48.0</i>	<i>48.6</i>
Non-OECD															
Former Soviet Union .....	<b>4.1</b>	<b>3.9</b>	<b>3.9</b>	<b>3.9</b>	<i>4.1</i>	<i>3.9</i>	<i>3.9</i>	<i>4.0</i>	<i>4.2</i>	<i>4.0</i>	<i>4.0</i>	<i>4.0</i>	<i>3.9</i>	<i>4.0</i>	<i>4.1</i>
Europe.....	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<i>0.8</i>	<i>0.7</i>	<i>0.8</i>	<i>0.8</i>							
China.....	<b>5.3</b>	<b>5.3</b>	<b>5.2</b>	<b>5.3</b>	<i>5.5</i>	<i>5.4</i>	<i>5.4</i>	<i>5.4</i>	<i>5.7</i>	<i>5.6</i>	<i>5.5</i>	<i>5.6</i>	<i>5.3</i>	<i>5.4</i>	<i>5.6</i>
Other Asia.....	<b>7.7</b>	<b>7.7</b>	<b>7.5</b>	<b>7.8</b>	<i>7.8</i>	<i>7.8</i>	<i>7.6</i>	<i>8.0</i>	<i>8.0</i>	<i>8.0</i>	<i>7.7</i>	<i>8.1</i>	<i>7.7</i>	<i>7.8</i>	<i>7.9</i>
Other Non-OECD .....	<b>12.1</b>	<b>12.3</b>	<b>12.4</b>	<b>12.3</b>	<i>12.2</i>	<i>12.4</i>	<i>12.5</i>	<i>12.5</i>	<i>12.4</i>	<i>12.7</i>	<i>12.8</i>	<i>12.6</i>	<i>12.3</i>	<i>12.4</i>	<i>12.6</i>
Total Non-OECD .....	<b>29.9</b>	<b>29.9</b>	<b>29.7</b>	<b>30.0</b>	<i>30.4</i>	<i>30.3</i>	<i>30.2</i>	<i>30.6</i>	<i>31.0</i>	<i>31.0</i>	<i>30.8</i>	<i>31.1</i>	<i>29.9</i>	<i>30.4</i>	<i>31.0</i>
Total World Demand .....	<b>77.8</b>	<b>76.0</b>	<b>77.0</b>	<b>78.8</b>	<i>79.5</i>	<i>76.4</i>	<i>78.1</i>	<i>79.6</i>	<i>80.3</i>	<i>77.8</i>	<i>79.3</i>	<i>80.8</i>	<i>77.4</i>	<i>78.4</i>	<i>79.6</i>
<b>Supply<sup>b</sup></b>															
OECD															
U.S. (50 States).....	<b>9.1</b>	<b>9.2</b>	<b>8.9</b>	<b>9.0</b>	<i>9.0</i>	<i>9.0</i>	<i>8.9</i>	<i>9.1</i>	<i>9.1</i>	<i>9.0</i>	<i>9.0</i>	<i>9.1</i>	<i>9.1</i>	<i>9.0</i>	<i>9.0</i>
Canada.....	<b>2.9</b>	<b>2.9</b>	<b>2.9</b>	<b>3.0</b>	<i>3.0</i>	<i>3.0</i>	<i>3.1</i>	<i>3.2</i>	<i>3.1</i>	<i>3.1</i>	<i>3.2</i>	<i>3.3</i>	<i>2.9</i>	<i>3.1</i>	<i>3.2</i>
Mexico.....	<b>3.6</b>	<b>3.6</b>	<b>3.6</b>	<b>3.6</b>	<i>3.8</i>	<i>3.8</i>	<i>3.8</i>	<i>3.7</i>	<i>3.9</i>	<i>3.9</i>	<i>4.0</i>	<i>3.9</i>	<i>3.6</i>	<i>3.8</i>	<i>3.9</i>
North Sea <sup>c</sup> .....	<b>6.3</b>	<b>6.3</b>	<b>5.8</b>	<b>6.4</b>	<i>6.4</i>	<i>6.2</i>	<i>6.1</i>	<i>6.4</i>	<i>6.3</i>	<i>6.0</i>	<i>6.1</i>	<i>6.4</i>	<i>6.2</i>	<i>6.3</i>	<i>6.2</i>
Other OECD .....	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<i>1.6</i>	<i>1.5</i>	<i>1.6</i>								
Total OECD .....	<b>23.6</b>	<b>23.6</b>	<b>22.9</b>	<b>23.7</b>	<i>23.7</i>	<i>23.5</i>	<i>23.6</i>	<i>24.0</i>	<i>24.0</i>	<i>23.6</i>	<i>23.8</i>	<i>24.2</i>	<i>23.5</i>	<i>23.7</i>	<i>23.9</i>
Non-OECD															
OPEC.....	<b>28.5</b>	<b>27.9</b>	<b>28.8</b>	<b>29.5</b>	<i>30.1</i>	<i>30.3</i>	<i>30.4</i>	<i>30.1</i>	<i>30.3</i>	<i>29.5</i>	<i>29.5</i>	<i>29.5</i>	<i>28.7</i>	<i>30.2</i>	<i>29.7</i>
Crude Oil Portion.....	<b>25.2</b>	<b>24.6</b>	<b>25.5</b>	<b>26.3</b>	<i>26.9</i>	<i>26.9</i>	<i>27.0</i>	<i>26.7</i>	<i>26.9</i>	<i>26.1</i>	<i>26.1</i>	<i>26.1</i>	<i>25.4</i>	<i>26.9</i>	<i>26.3</i>
Former Soviet Union .....	<b>9.0</b>	<b>9.2</b>	<b>9.6</b>	<b>9.8</b>	<i>9.9</i>	<i>10.0</i>	<i>10.3</i>	<i>10.3</i>	<i>10.4</i>	<i>10.5</i>	<i>10.7</i>	<i>10.8</i>	<i>9.4</i>	<i>10.1</i>	<i>10.6</i>
China.....	<b>3.3</b>	<b>3.4</b>	<b>3.4</b>	<b>3.4</b>	<i>3.4</i>	<i>3.4</i>	<i>3.4</i>	<i>3.4</i>	<i>3.3</i>	<i>3.4</i>	<i>3.4</i>	<i>3.4</i>	<i>3.4</i>	<i>3.4</i>	<i>3.4</i>
Other Non-OECD .....	<b>-13.7</b>	<b>-13.2</b>	<b>-14.1</b>	<b>-14.9</b>	<i>-15.5</i>	<i>-15.3</i>	<i>-15.4</i>	<i>-15.0</i>	<i>-15.1</i>	<i>-14.2</i>	<i>-14.0</i>	<i>-13.8</i>	<i>-14.0</i>	<i>-15.3</i>	<i>-14.3</i>
Total Non-OECD .....	<b>52.3</b>	<b>52.0</b>	<b>53.2</b>	<b>54.1</b>	<i>54.7</i>	<i>55.2</i>	<i>55.6</i>	<i>55.6</i>	<i>55.8</i>	<i>55.3</i>	<i>55.7</i>	<i>56.0</i>	<i>52.9</i>	<i>55.3</i>	<i>55.7</i>
Total World Supply .....	<b>75.9</b>	<b>75.6</b>	<b>76.2</b>	<b>77.8</b>	<i>78.4</i>	<i>78.7</i>	<i>79.2</i>	<i>79.6</i>	<i>79.8</i>	<i>78.9</i>	<i>79.6</i>	<i>80.2</i>	<i>76.4</i>	<i>79.0</i>	<i>79.6</i>
Additional unaccounted for supply.....	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<i>0.4</i>										
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR) .....	<b>0.2</b>	<b>-0.5</b>	<b>0.4</b>	<b>0.3</b>	<i>0.8</i>	<i>-0.8</i>	<i>-0.3</i>	<i>0.1</i>	<i>0.0</i>	<i>-0.7</i>	<i>-0.2</i>	<i>0.2</i>	<i>0.1</i>	<i>0.0</i>	<i>-0.2</i>
Other .....	<b>1.3</b>	<b>0.4</b>	<b>0.0</b>	<b>0.4</b>	<i>-0.2</i>	<i>-1.9</i>	<i>-1.2</i>	<i>-0.5</i>	<i>0.0</i>	<i>-0.8</i>	<i>-0.4</i>	<i>0.0</i>	<i>0.5</i>	<i>-1.0</i>	<i>-0.3</i>
Total Stock Withdrawals .....	<b>1.4</b>	<b>0.0</b>	<b>0.4</b>	<b>0.6</b>	<i>0.6</i>	<i>-2.8</i>	<i>-1.5</i>	<i>-0.4</i>	<i>0.0</i>	<i>-1.5</i>	<i>-0.7</i>	<i>0.2</i>	<i>0.6</i>	<i>-1.0</i>	<i>-0.5</i>
OECD Comm. Stocks, End (bill. bbls.).....	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.5</b>	<i>2.3</i>	<i>2.5</i>	<i>2.6</i>	<i>2.6</i>	<i>2.6</i>	<i>2.7</i>	<i>2.7</i>	<i>2.7</i>	<i>2.5</i>	<i>2.6</i>	<i>2.7</i>
Non-OPEC Supply .....	<b>47.4</b>	<b>47.7</b>	<b>47.4</b>	<b>48.2</b>	<i>48.4</i>	<i>48.5</i>	<i>48.9</i>	<i>49.5</i>	<i>49.5</i>	<i>49.4</i>	<i>50.1</i>	<i>50.7</i>	<i>47.7</i>	<i>48.8</i>	<i>49.9</i>

<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; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Energy Information Administration: 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 4. U.S. Energy Prices: Base Case**  
(Nominal Dollars)

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
<b>Crude Oil Prices</b> (dollars per barrel)															
Imported Average <sup>a</sup> .....	19.34	23.84	25.88	25.39	30.61	24.40	24.71	24.73	24.02	23.64	23.18	22.66	23.68	25.97	23.37
WTI <sup>b</sup> Spot Average.....	21.66	26.25	28.34	28.22	34.10	28.43	29.00	28.00	26.82	26.27	25.73	25.18	26.12	29.88	26.00
<b>Natural Gas Wellhead</b>															
(dollars per thousand cubic feet) .....	2.34	2.99	2.88	3.60	5.54	5.14	5.32	5.38	5.76	4.70	4.66	4.84	2.96	5.34	4.99
<b>Petroleum Products</b>															
Gasoline Retail <sup>c</sup> (dollars per gallon)															
All Grades .....	1.20	1.43	1.44	1.46	1.63	1.56	1.50	1.45	1.42	1.48	1.45	1.38	1.39	1.53	1.43
Regular Unleaded .....	1.16	1.39	1.40	1.42	1.59	1.52	1.46	1.41	1.38	1.44	1.40	1.34	1.34	1.49	1.39
No. 2 Diesel Oil, Retail															
(dollars per gallon).....	1.18	1.30	1.35	1.44	1.62	1.46	1.42	1.44	1.40	1.38	1.37	1.38	1.32	1.48	1.38
No. 2 Heating Oil, Wholesale															
(dollars per gallon).....	0.60	0.68	0.73	0.79	1.01	0.84	0.77	0.81	0.81	0.77	0.76	0.77	0.69	0.87	0.78
No. 2 Heating Oil, Retail															
(dollars per gallon).....	1.09	1.09	1.06	1.19	1.46	1.32	1.12	1.27	1.25	1.17	1.10	1.22	1.11	1.35	1.22
No. 6 Residual Fuel Oil, Retail <sup>d</sup>															
(dollars per barrel).....	19.31	24.12	25.76	26.17	34.11	31.98	31.56	31.43	30.68	27.92	27.15	26.97	23.73	32.28	28.27
<b>Electric Utility Fuels</b>															
Coal															
(dollars per million Btu).....	1.22	1.21	1.22	1.22	1.23	1.25	1.22	1.21	1.21	1.21	1.19	1.17	1.22	1.23	1.19
Heavy Fuel Oil <sup>e</sup>															
(dollars per million Btu).....	2.73	3.58	3.67	4.01	4.76	5.39	5.15	4.91	4.75	4.72	4.44	4.21	3.54	5.08	4.53
Natural Gas															
(dollars per million Btu).....	3.22	3.71	3.49	4.47	6.22	6.78	6.27	6.27	6.63	5.35	5.29	5.58	3.68	6.40	5.63
<b>Other Residential</b>															
Natural Gas															
(dollars per thousand cubic feet) .....	7.13	8.18	10.11	8.09	8.62	9.50	11.83	10.04	9.92	10.82	11.69	9.68	7.83	9.37	10.12
Electricity															
(cents per kilowatt-hour).....	8.08	8.56	8.72	8.32	8.09	8.73	9.02	8.63	8.21	8.84	9.06	8.63	8.43	8.63	8.69

<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: Data are estimated for the fourth quarter of 2001. Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: 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)

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
<b>Supply</b>															
Crude Oil Supply															
Domestic Production <sup>a</sup> .....	<b>5.93</b>	<b>5.89</b>	<b>5.66</b>	<b>5.79</b>	<i>5.88</i>	<i>5.82</i>	<i>5.76</i>	<i>5.88</i>	<i>5.88</i>	<i>5.81</i>	<i>5.76</i>	<i>5.78</i>	<i>5.82</i>	<i>5.83</i>	<i>5.81</i>
Alaska .....	<b>1.03</b>	<b>1.01</b>	<b>0.93</b>	<b>0.97</b>	<i>1.01</i>	<i>0.95</i>	<i>0.88</i>	<i>1.00</i>	<i>1.00</i>	<i>0.95</i>	<i>0.91</i>	<i>0.93</i>	<i>0.98</i>	<i>0.96</i>	<i>0.95</i>
Lower 48 .....	<b>4.89</b>	<b>4.88</b>	<b>4.73</b>	<b>4.82</b>	<i>4.87</i>	<i>4.87</i>	<i>4.87</i>	<i>4.88</i>	<i>4.88</i>	<i>4.86</i>	<i>4.85</i>	<i>4.86</i>	<i>4.83</i>	<i>4.88</i>	<i>4.86</i>
Net Commercial Imports <sup>b</sup> .....	<b>8.73</b>	<b>9.31</b>	<b>9.16</b>	<b>9.19</b>	<i>8.64</i>	<i>9.86</i>	<i>9.77</i>	<i>9.28</i>	<i>9.34</i>	<i>9.82</i>	<i>9.91</i>	<i>9.58</i>	<i>9.10</i>	<i>9.39</i>	<i>9.66</i>
Net SPR Withdrawals .....	<b>-0.13</b>	<b>-0.16</b>	<b>-0.12</b>	<b>-0.13</b>	<i>0.00</i>	<i>-0.07</i>	<i>-0.11</i>	<i>-0.11</i>	<i>-0.13</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>-0.13</i>	<i>-0.07</i>	<i>-0.03</i>
Net Commercial Withdrawals .....	<b>-0.24</b>	<b>0.19</b>	<b>0.50</b>	<b>-0.08</b>	<i>-0.03</i>	<i>-0.05</i>	<i>0.10</i>	<i>-0.07</i>	<i>-0.24</i>	<i>-0.05</i>	<i>0.13</i>	<i>-0.04</i>	<i>0.09</i>	<i>-0.01</i>	<i>-0.05</i>
Product Supplied and Losses.....	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<i>0.00</i>										
Unaccounted-for Crude Oil.....	<b>0.11</b>	<b>0.08</b>	<b>-0.04</b>	<b>0.01</b>	<i>0.07</i>	<i>0.12</i>	<i>0.17</i>	<i>0.12</i>	<i>0.17</i>	<i>0.19</i>	<i>0.17</i>	<i>0.12</i>	<i>0.04</i>	<i>0.12</i>	<i>0.16</i>
Total Crude Oil Supply .....	<b>14.41</b>	<b>15.30</b>	<b>15.17</b>	<b>14.78</b>	<i>14.55</i>	<i>15.68</i>	<i>15.69</i>	<i>15.10</i>	<i>15.02</i>	<i>15.77</i>	<i>15.97</i>	<i>15.45</i>	<i>14.92</i>	<i>15.26</i>	<i>15.55</i>
Other Supply															
NGL Production.....	<b>1.86</b>	<b>1.91</b>	<b>1.89</b>	<b>1.84</b>	<i>1.76</i>	<i>1.87</i>	<i>1.85</i>	<i>1.84</i>	<i>1.86</i>	<i>1.89</i>	<i>1.88</i>	<i>1.93</i>	<i>1.88</i>	<i>1.83</i>	<i>1.89</i>
Other Hydrocarbon and Alcohol															
Inputs .....	<b>0.38</b>	<b>0.44</b>	<b>0.45</b>	<b>0.43</b>	<i>0.44</i>	<i>0.39</i>	<i>0.41</i>	<i>0.41</i>	<i>0.38</i>	<i>0.38</i>	<i>0.40</i>	<i>0.41</i>	<i>0.43</i>	<i>0.41</i>	<i>0.39</i>
Crude Oil Product Supplied.....	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<i>0.00</i>										
Processing Gain.....	<b>0.95</b>	<b>0.95</b>	<b>0.93</b>	<b>0.96</b>	<i>0.91</i>	<i>0.93</i>	<i>0.93</i>	<i>0.94</i>	<i>0.93</i>	<i>0.94</i>	<i>0.94</i>	<i>0.96</i>	<i>0.95</i>	<i>0.93</i>	<i>0.94</i>
Net Product Imports <sup>c</sup> .....	<b>1.35</b>	<b>1.54</b>	<b>1.34</b>	<b>1.35</b>	<i>1.50</i>	<i>1.49</i>	<i>1.66</i>	<i>1.58</i>	<i>1.79</i>	<i>1.70</i>	<i>1.70</i>	<i>1.62</i>	<i>1.39</i>	<i>1.56</i>	<i>1.70</i>
Product Stock Withdrawn or Added (-)	<b>0.51</b>	<b>-0.48</b>	<b>0.06</b>	<b>0.49</b>	<i>0.84</i>	<i>-0.74</i>	<i>-0.37</i>	<i>0.29</i>	<i>0.34</i>	<i>-0.63</i>	<i>-0.35</i>	<i>0.30</i>	<i>0.15</i>	<i>0.00</i>	<i>-0.08</i>
Total Supply .....	<b>19.47</b>	<b>19.66</b>	<b>19.84</b>	<b>19.86</b>	<i>20.02</i>	<i>19.62</i>	<i>20.16</i>	<i>20.16</i>	<i>20.33</i>	<i>20.05</i>	<i>20.55</i>	<i>20.66</i>	<i>19.71</i>	<i>19.99</i>	<i>20.40</i>
<b>Demand</b>															
Motor Gasoline.....	<b>8.49</b>	<b>8.99</b>	<b>9.07</b>	<b>8.88</b>	<i>8.54</i>	<i>8.90</i>	<i>9.14</i>	<i>9.02</i>	<i>8.89</i>	<i>9.23</i>	<i>9.35</i>	<i>9.24</i>	<i>8.86</i>	<i>8.90</i>	<i>9.18</i>
Jet Fuel .....	<b>1.57</b>	<b>1.61</b>	<b>1.63</b>	<b>1.64</b>	<i>1.55</i>	<i>1.50</i>	<i>1.62</i>	<i>1.66</i>	<i>1.56</i>	<i>1.59</i>	<i>1.65</i>	<i>1.68</i>	<i>1.61</i>	<i>1.58</i>	<i>1.62</i>
Distillate Fuel Oil .....	<b>3.79</b>	<b>3.70</b>	<b>3.71</b>	<b>3.89</b>	<i>4.22</i>	<i>3.78</i>	<i>3.83</i>	<i>4.05</i>	<i>4.28</i>	<i>3.93</i>	<i>3.95</i>	<i>4.17</i>	<i>3.77</i>	<i>3.97</i>	<i>4.08</i>
Residual Fuel Oil .....	<b>0.74</b>	<b>0.65</b>	<b>0.59</b>	<b>0.72</b>	<i>0.75</i>	<i>0.79</i>	<i>0.73</i>	<i>0.68</i>	<i>0.78</i>	<i>0.59</i>	<i>0.69</i>	<i>0.67</i>	<i>0.67</i>	<i>0.74</i>	<i>0.68</i>
Other Oils <sup>d</sup> .....	<b>4.88</b>	<b>4.71</b>	<b>4.86</b>	<b>4.72</b>	<i>4.97</i>	<i>4.64</i>	<i>4.83</i>	<i>4.74</i>	<i>4.81</i>	<i>4.71</i>	<i>4.92</i>	<i>4.90</i>	<i>4.79</i>	<i>4.79</i>	<i>4.83</i>
Total Demand.....	<b>19.47</b>	<b>19.66</b>	<b>19.84</b>	<b>19.86</b>	<i>20.03</i>	<i>19.61</i>	<i>20.16</i>	<i>20.16</i>	<i>20.32</i>	<i>20.05</i>	<i>20.54</i>	<i>20.66</i>	<i>19.71</i>	<i>19.99</i>	<i>20.40</i>
Total Petroleum Net Imports.....	<b>10.12</b>	<b>10.86</b>	<b>10.50</b>	<b>10.54</b>	<i>10.14</i>	<i>11.35</i>	<i>11.43</i>	<i>10.86</i>	<i>11.13</i>	<i>11.52</i>	<i>11.61</i>	<i>11.20</i>	<i>10.50</i>	<i>10.95</i>	<i>11.37</i>
<b>Closing Stocks (million barrels)</b>															
Crude Oil (excluding SPR) .....	<b>333</b>	<b>316</b>	<b>270</b>	<b>278</b>	<i>280</i>	<i>285</i>	<i>276</i>	<i>282</i>	<i>304</i>	<i>308</i>	<i>296</i>	<i>299</i>	<i>278</i>	<i>282</i>	<i>299</i>
Total Motor Gasoline .....	<b>213</b>	<b>217</b>	<b>206</b>	<b>209</b>	<i>200</i>	<i>207</i>	<i>198</i>	<i>202</i>	<i>207</i>	<i>211</i>	<i>204</i>	<i>210</i>	<i>209</i>	<i>202</i>	<i>210</i>
Finished Motor Gasoline.....	<b>160</b>	<b>168</b>	<b>157</b>	<b>162</b>	<i>145</i>	<i>154</i>	<i>147</i>	<i>150</i>	<i>150</i>	<i>157</i>	<i>151</i>	<i>157</i>	<i>162</i>	<i>150</i>	<i>157</i>
Blending Components .....	<b>54</b>	<b>49</b>	<b>49</b>	<b>47</b>	<i>55</i>	<i>52</i>	<i>51</i>	<i>51</i>	<i>57</i>	<i>54</i>	<i>53</i>	<i>53</i>	<i>47</i>	<i>51</i>	<i>53</i>
Jet Fuel .....	<b>42</b>	<b>39</b>	<b>41</b>	<b>39</b>	<i>37</i>	<i>41</i>	<i>43</i>	<i>42</i>	<i>40</i>	<i>42</i>	<i>44</i>	<i>43</i>	<i>39</i>	<i>42</i>	<i>43</i>
Distillate Fuel Oil .....	<b>123</b>	<b>133</b>	<b>127</b>	<b>134</b>	<i>99</i>	<i>111</i>	<i>129</i>	<i>133</i>	<i>104</i>	<i>116</i>	<i>133</i>	<i>137</i>	<i>134</i>	<i>133</i>	<i>137</i>
Residual Fuel Oil .....	<b>34</b>	<b>33</b>	<b>33</b>	<b>31</b>	<i>32</i>	<i>37</i>	<i>38</i>	<i>38</i>	<i>36</i>	<i>37</i>	<i>39</i>	<i>40</i>	<i>31</i>	<i>38</i>	<i>40</i>
Other Oils <sup>e</sup> .....	<b>265</b>	<b>301</b>	<b>309</b>	<b>257</b>	<i>228</i>	<i>267</i>	<i>290</i>	<i>256</i>	<i>252</i>	<i>291</i>	<i>308</i>	<i>270</i>	<i>257</i>	<i>256</i>	<i>270</i>
Total Stocks (excluding SPR).....	<b>1011</b>	<b>1038</b>	<b>986</b>	<b>949</b>	<i>876</i>	<i>948</i>	<i>973</i>	<i>952</i>	<i>943</i>	<i>1004</i>	<i>1024</i>	<i>1000</i>	<i>949</i>	<i>952</i>	<i>1000</i>
Crude Oil in SPR.....	<b>561</b>	<b>576</b>	<b>587</b>	<b>599</b>	<i>599</i>	<i>606</i>	<i>616</i>	<i>626</i>	<i>638</i>	<i>638</i>	<i>638</i>	<i>638</i>	<i>599</i>	<i>626</i>	<i>638</i>
Heating Oil Reserve.....	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<i>2</i>										
Total Stocks (incl SPR and HOR).....	<b>1575</b>	<b>1616</b>	<b>1575</b>	<b>1550</b>	<i>1477</i>	<i>1555</i>	<i>1591</i>	<i>1581</i>	<i>1583</i>	<i>1644</i>	<i>1664</i>	<i>1640</i>	<i>1550</i>	<i>1581</i>	<i>1640</i>

<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>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

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 model.

Sources: Historical data: Energy Information Administration: 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 Utility.....	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 Utility.....	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 .....	5.69	5.34	0.34	0.07	0.27
Lower 48 States .....	4.75	4.43	0.32	0.05	0.26
Alaska.....	0.95	0.92	0.03	0.02	0.01

Note: Components provided are for the fourth quarter 2004. Totals may not add to sum of components due to independent rounding.  
Source: Energy Information Administration, Office of Oil and Gas, Reserves and Natural Gas Division.

**Table 8. U.S. Natural Gas Supply and Demand: Base Case**

(Trillion Cubic Feet)

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
<b>Supply</b>															
Total Dry Gas Production.....	<b>4.69</b>	<b>4.77</b>	<b>4.78</b>	<b>4.79</b>	<i>4.78</i>	<i>4.83</i>	<i>4.91</i>	<i>4.93</i>	<i>4.91</i>	<i>4.88</i>	<i>4.92</i>	<i>4.94</i>	<i>19.03</i>	<i>19.44</i>	<i>19.65</i>
Net Imports.....	<b>0.88</b>	<b>0.83</b>	<b>0.90</b>	<b>0.89</b>	<i>0.90</i>	<i>0.90</i>	<i>0.89</i>	<i>0.88</i>	<i>0.91</i>	<i>0.85</i>	<i>0.87</i>	<i>0.89</i>	<i>3.49</i>	<i>3.57</i>	<i>3.52</i>
Supplemental Gaseous Fuels .....	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.08</i>	<i>0.07</i>	<i>0.08</i>
Total New Supply .....	<b>5.59</b>	<b>5.61</b>	<b>5.70</b>	<b>5.70</b>	<i>5.70</i>	<i>5.74</i>	<i>5.81</i>	<i>5.84</i>	<i>5.85</i>	<i>5.75</i>	<i>5.82</i>	<i>5.85</i>	<i>22.60</i>	<i>23.08</i>	<i>23.26</i>
Working Gas in Storage															
Opening.....	<b>2.90</b>	<b>1.52</b>	<b>2.31</b>	<b>3.04</b>	<i>2.38</i>	<i>0.68</i>	<i>1.55</i>	<i>2.66</i>	<i>2.31</i>	<i>1.02</i>	<i>1.93</i>	<i>2.82</i>	<i>2.90</i>	<i>2.38</i>	<i>2.31</i>
Closing .....	<b>1.52</b>	<b>2.31</b>	<b>3.04</b>	<b>2.38</b>	<i>0.68</i>	<i>1.55</i>	<i>2.66</i>	<i>2.31</i>	<i>1.02</i>	<i>1.93</i>	<i>2.82</i>	<i>2.32</i>	<i>2.38</i>	<i>2.31</i>	<i>2.32</i>
Net Withdrawals .....	<b>1.39</b>	<b>-0.79</b>	<b>-0.73</b>	<b>0.67</b>	<i>1.70</i>	<i>-0.87</i>	<i>-1.11</i>	<i>0.35</i>	<i>1.29</i>	<i>-0.90</i>	<i>-0.90</i>	<i>0.51</i>	<i>0.53</i>	<i>0.06</i>	<i>-0.01</i>
Total Supply .....	<b>6.97</b>	<b>4.82</b>	<b>4.96</b>	<b>6.37</b>	<i>7.40</i>	<i>4.86</i>	<i>4.70</i>	<i>6.18</i>	<i>7.13</i>	<i>4.84</i>	<i>4.92</i>	<i>6.35</i>	<i>23.13</i>	<i>23.15</i>	<i>23.25</i>
Balancing Item <sup>a</sup> .....	<b>0.06</b>	<b>0.29</b>	<b>0.09</b>	<b>-0.40</b>	<i>-0.04</i>	<i>0.37</i>	<i>0.15</i>	<i>-0.40</i>	<i>0.26</i>	<i>0.24</i>	<i>-0.05</i>	<i>-0.47</i>	<i>0.05</i>	<i>0.08</i>	<i>-0.02</i>
Total Primary Supply.....	<b>7.04</b>	<b>5.11</b>	<b>5.05</b>	<b>5.97</b>	<i>7.37</i>	<i>5.23</i>	<i>4.84</i>	<i>5.78</i>	<i>7.40</i>	<i>5.08</i>	<i>4.87</i>	<i>5.88</i>	<i>23.17</i>	<i>23.23</i>	<i>23.23</i>
<b>Demand</b>															
Residential .....	<b>2.19</b>	<b>0.84</b>	<b>0.37</b>	<b>1.51</b>	<i>2.38</i>	<i>0.78</i>	<i>0.33</i>	<i>1.33</i>	<i>2.41</i>	<i>0.80</i>	<i>0.34</i>	<i>1.35</i>	<i>4.92</i>	<i>4.83</i>	<i>4.89</i>
Commercial .....	<b>1.20</b>	<b>0.61</b>	<b>0.42</b>	<b>0.91</b>	<i>1.27</i>	<i>0.58</i>	<i>0.40</i>	<i>0.83</i>	<i>1.28</i>	<i>0.62</i>	<i>0.45</i>	<i>0.88</i>	<i>3.15</i>	<i>3.08</i>	<i>3.23</i>
Industrial.....	<b>2.34</b>	<b>2.18</b>	<b>2.17</b>	<b>2.29</b>	<i>2.40</i>	<i>2.22</i>	<i>2.14</i>	<i>2.33</i>	<i>2.44</i>	<i>2.22</i>	<i>2.15</i>	<i>2.35</i>	<i>8.98</i>	<i>9.10</i>	<i>9.15</i>
Lease and Plant Fuel .....	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.29</b>	<i>0.29</i>	<i>0.31</i>	<i>0.32</i>	<i>0.32</i>	<i>0.31</i>	<i>0.30</i>	<i>0.30</i>	<i>0.31</i>	<i>1.13</i>	<i>1.23</i>	<i>1.22</i>
Other Industrial.....	<b>2.06</b>	<b>1.89</b>	<b>1.89</b>	<b>2.00</b>	<i>2.11</i>	<i>1.91</i>	<i>1.83</i>	<i>2.01</i>	<i>2.13</i>	<i>1.91</i>	<i>1.84</i>	<i>2.05</i>	<i>7.85</i>	<i>7.86</i>	<i>7.93</i>
CHP <sup>b</sup> .....	<b>0.32</b>	<b>0.31</b>	<b>0.35</b>	<b>0.29</b>	<i>0.30</i>	<i>0.32</i>	<i>0.32</i>	<i>0.29</i>	<i>0.33</i>	<i>0.33</i>	<i>0.34</i>	<i>0.30</i>	<i>1.28</i>	<i>1.23</i>	<i>1.29</i>
Non-CHP .....	<b>1.74</b>	<b>1.58</b>	<b>1.54</b>	<b>1.71</b>	<i>1.81</i>	<i>1.60</i>	<i>1.50</i>	<i>1.72</i>	<i>1.80</i>	<i>1.59</i>	<i>1.51</i>	<i>1.75</i>	<i>6.57</i>	<i>6.63</i>	<i>6.64</i>
Transportation <sup>c</sup> .....	<b>0.19</b>	<b>0.13</b>	<b>0.12</b>	<b>0.16</b>	<i>0.17</i>	<i>0.11</i>	<i>0.11</i>	<i>0.15</i>	<i>0.20</i>	<i>0.13</i>	<i>0.12</i>	<i>0.15</i>	<i>0.59</i>	<i>0.55</i>	<i>0.60</i>
Electric Power <sup>d</sup> .....	<b>1.12</b>	<b>1.35</b>	<b>1.97</b>	<b>1.11</b>	<i>1.09</i>	<i>1.53</i>	<i>1.85</i>	<i>1.13</i>	<i>1.07</i>	<i>1.32</i>	<i>1.82</i>	<i>1.14</i>	<i>5.55</i>	<i>5.61</i>	<i>5.35</i>
Total Demand.....	<b>7.04</b>	<b>5.11</b>	<b>5.05</b>	<b>5.97</b>	<i>7.37</i>	<i>5.23</i>	<i>4.84</i>	<i>5.78</i>	<i>7.40</i>	<i>5.08</i>	<i>4.87</i>	<i>5.88</i>	<i>23.17</i>	<i>23.23</i>	<i>23.23</i>

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

**Table 9. U.S. Coal Supply and Demand: Base Case**

(Million Short Tons)

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
<b>Supply</b>															
Production.....	<b>282.6</b>	<b>267.6</b>	<b>270.8</b>	<b>272.8</b>	<i>260.3</i>	<i>262.9</i>	<i>274.6</i>	<i>285.0</i>	<i>281.2</i>	<i>263.2</i>	<i>275.3</i>	<i>277.5</i>	<i>1093.8</i>	<i>1082.7</i>	<i>1097.3</i>
Appalachia.....	<b>108.3</b>	<b>99.1</b>	<b>95.2</b>	<b>94.2</b>	<i>93.9</i>	<i>95.5</i>	<i>98.2</i>	<i>101.7</i>	<i>103.3</i>	<i>93.0</i>	<i>96.1</i>	<i>96.9</i>	<i>396.8</i>	<i>389.3</i>	<i>389.3</i>
Interior.....	<b>36.8</b>	<b>37.3</b>	<b>36.6</b>	<b>35.6</b>	<i>33.7</i>	<i>34.8</i>	<i>33.5</i>	<i>31.6</i>	<i>33.1</i>	<i>33.6</i>	<i>31.9</i>	<i>29.0</i>	<i>146.2</i>	<i>133.6</i>	<i>127.6</i>
Western.....	<b>137.6</b>	<b>131.2</b>	<b>138.9</b>	<b>143.1</b>	<i>132.7</i>	<i>132.8</i>	<i>142.8</i>	<i>151.6</i>	<i>144.8</i>	<i>136.6</i>	<i>147.2</i>	<i>151.6</i>	<i>550.8</i>	<i>559.9</i>	<i>580.3</i>
Primary Stock Levels <sup>a</sup>															
Opening.....	<b>35.9</b>	<b>40.3</b>	<b>41.3</b>	<b>35.7</b>	<i>32.0</i>	<i>31.3</i>	<i>31.1</i>	<i>29.7</i>	<i>32.0</i>	<i>31.2</i>	<i>31.6</i>	<i>29.5</i>	<i>35.9</i>	<i>32.0</i>	<i>32.0</i>
Closing.....	<b>40.3</b>	<b>41.3</b>	<b>35.7</b>	<b>32.0</b>	<i>31.3</i>	<i>31.1</i>	<i>29.7</i>	<i>32.0</i>	<i>31.2</i>	<i>31.6</i>	<i>29.5</i>	<i>32.2</i>	<i>32.0</i>	<i>32.0</i>	<i>32.2</i>
Net Withdrawals.....	<b>-4.4</b>	<b>-1.0</b>	<b>5.6</b>	<b>3.7</b>	<i>0.7</i>	<i>0.2</i>	<i>1.4</i>	<i>-2.3</i>	<i>0.8</i>	<i>-0.4</i>	<i>2.0</i>	<i>-2.7</i>	<i>3.9</i>	<i>(S)</i>	<i>-0.2</i>
Imports.....	<b>4.0</b>	<b>3.9</b>	<b>4.7</b>	<b>4.4</b>	<i>5.0</i>	<i>3.7</i>	<i>4.7</i>	<i>4.5</i>	<i>4.2</i>	<i>3.9</i>	<i>5.0</i>	<i>4.8</i>	<i>16.9</i>	<i>17.8</i>	<i>17.9</i>
Exports.....	<b>9.3</b>	<b>11.0</b>	<b>9.3</b>	<b>10.0</b>	<i>8.5</i>	<i>11.3</i>	<i>11.1</i>	<i>10.8</i>	<i>9.4</i>	<i>10.0</i>	<i>9.8</i>	<i>9.6</i>	<i>39.6</i>	<i>41.7</i>	<i>38.8</i>
Total Net Domestic Supply.....	<b>273.0</b>	<b>259.4</b>	<b>271.8</b>	<b>270.8</b>	<i>257.4</i>	<i>255.5</i>	<i>269.5</i>	<i>276.4</i>	<i>276.9</i>	<i>256.7</i>	<i>272.5</i>	<i>270.1</i>	<i>1075.0</i>	<i>1058.8</i>	<i>1076.1</i>
Secondary Stock Levels <sup>b</sup>															
Opening.....	<b>146.0</b>	<b>152.9</b>	<b>158.0</b>	<b>142.7</b>	<i>148.9</i>	<i>142.7</i>	<i>153.5</i>	<i>143.4</i>	<i>158.1</i>	<i>161.3</i>	<i>170.7</i>	<i>156.2</i>	<i>146.0</i>	<i>148.9</i>	<i>158.1</i>
Closing.....	<b>152.9</b>	<b>158.0</b>	<b>142.7</b>	<b>148.9</b>	<i>142.7</i>	<i>153.5</i>	<i>143.4</i>	<i>158.1</i>	<i>161.3</i>	<i>170.7</i>	<i>156.2</i>	<i>160.7</i>	<i>148.9</i>	<i>158.1</i>	<i>160.7</i>
Net Withdrawals.....	<b>-6.9</b>	<b>-5.1</b>	<b>15.3</b>	<b>-6.2</b>	<i>6.2</i>	<i>-10.8</i>	<i>10.1</i>	<i>-14.7</i>	<i>-3.2</i>	<i>-9.4</i>	<i>14.5</i>	<i>-4.5</i>	<i>-2.9</i>	<i>-9.2</i>	<i>-2.6</i>
Waste Coal Supplied to IPPs <sup>c</sup> .....	<b>2.8</b>	<b>2.8</b>	<b>2.8</b>	<b>2.8</b>	<i>2.9</i>	<i>2.9</i>	<i>2.9</i>	<i>2.9</i>	<i>3.7</i>	<i>3.7</i>	<i>3.7</i>	<i>3.7</i>	<i>11.1</i>	<i>11.6</i>	<i>14.8</i>
Total Supply.....	<b>268.8</b>	<b>257.1</b>	<b>289.9</b>	<b>267.4</b>	<i>266.6</i>	<i>247.6</i>	<i>282.5</i>	<i>264.6</i>	<i>277.4</i>	<i>251.0</i>	<i>290.6</i>	<i>269.3</i>	<i>1083.2</i>	<i>1061.2</i>	<i>1088.3</i>
<b>Demand</b>															
Coke Plants.....	<b>5.4</b>	<b>5.6</b>	<b>5.6</b>	<b>5.9</b>	<i>6.8</i>	<i>6.4</i>	<i>6.4</i>	<i>5.6</i>	<i>5.9</i>	<i>5.7</i>	<i>6.1</i>	<i>5.5</i>	<i>22.5</i>	<i>25.2</i>	<i>23.2</i>
Electric Power Sector <sup>d</sup> .....	<b>231.6</b>	<b>231.1</b>	<b>267.0</b>	<b>245.6</b>	<i>251.0</i>	<i>234.3</i>	<i>261.8</i>	<i>242.5</i>	<i>255.3</i>	<i>231.4</i>	<i>270.5</i>	<i>247.6</i>	<i>975.4</i>	<i>989.5</i>	<i>1004.8</i>
Retail and General Industry.....	<b>17.6</b>	<b>16.0</b>	<b>16.1</b>	<b>17.7</b>	<i>16.3</i>	<i>14.3</i>	<i>14.3</i>	<i>16.5</i>	<i>16.2</i>	<i>13.9</i>	<i>14.0</i>	<i>16.2</i>	<i>67.4</i>	<i>61.3</i>	<i>60.3</i>
Total Demand <sup>e</sup> .....	<b>254.6</b>	<b>252.8</b>	<b>288.7</b>	<b>269.2</b>	<i>274.1</i>	<i>254.9</i>	<i>282.5</i>	<i>264.6</i>	<i>277.4</i>	<i>251.0</i>	<i>290.6</i>	<i>269.3</i>	<i>1065.4</i>	<i>1076.1</i>	<i>1088.3</i>
Discrepancy <sup>f</sup> .....	<b>14.2</b>	<b>4.2</b>	<b>1.1</b>	<b>-1.8</b>	<i>-7.5</i>	<i>-7.3</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>17.8</i>	<i>-14.8</i>	<i>0.0</i>

<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: Rows and columns may not add 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: Energy Information Administration: latest data available from EIA databases supporting the following reports: Quarterly Coal Report, DOE/EIA-0121, and Electric Power Monthly, DOE/EIA-0226. Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels.

**Table 10a. U.S. Electricity Supply and Demand: Base Case**

(Billion Kilowatt-hours)

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Net Electricity Generation															
Electric Power Sector <sup>a</sup>															
Coal .....	<b>453.8</b>	<b>451.8</b>	<b>519.0</b>	<b>478.9</b>	<i>490.5</i>	<i>456.8</i>	<i>510.4</i>	<i>473.2</i>	<i>498.1</i>	<i>451.3</i>	<i>527.7</i>	<i>483.0</i>	<i>1903.4</i>	<i>1930.9</i>	<i>1960.1</i>
Petroleum .....	<b>18.0</b>	<b>21.5</b>	<b>24.3</b>	<b>19.7</b>	<i>26.8</i>	<i>29.1</i>	<i>32.3</i>	<i>20.0</i>	<i>26.4</i>	<i>17.5</i>	<i>28.9</i>	<i>18.8</i>	<i>83.6</i>	<i>108.2</i>	<i>91.6</i>
Natural Gas .....	<b>121.9</b>	<b>143.9</b>	<b>211.3</b>	<b>123.4</b>	<i>119.0</i>	<i>166.1</i>	<i>201.9</i>	<i>123.8</i>	<i>116.4</i>	<i>144.0</i>	<i>198.4</i>	<i>123.9</i>	<i>600.5</i>	<i>610.8</i>	<i>582.7</i>
Nuclear .....	<b>195.6</b>	<b>187.8</b>	<b>205.7</b>	<b>190.9</b>	<i>194.6</i>	<i>190.8</i>	<i>205.3</i>	<i>190.4</i>	<i>195.1</i>	<i>191.4</i>	<i>206.2</i>	<i>191.5</i>	<i>780.1</i>	<i>781.1</i>	<i>784.2</i>
Hydroelectric.....	<b>59.9</b>	<b>76.8</b>	<b>59.4</b>	<b>54.7</b>	<i>67.2</i>	<i>81.3</i>	<i>65.6</i>	<i>64.6</i>	<i>71.1</i>	<i>81.2</i>	<i>64.7</i>	<i>65.1</i>	<i>250.8</i>	<i>278.7</i>	<i>282.1</i>
Geothermal and Other <sup>b</sup> .....	<b>13.4</b>	<b>14.2</b>	<b>14.3</b>	<b>13.1</b>	<i>16.2</i>	<i>8.6</i>	<i>9.5</i>	<i>9.5</i>	<i>10.6</i>	<i>9.8</i>	<i>10.4</i>	<i>10.3</i>	<i>55.0</i>	<i>43.8</i>	<i>41.1</i>
Subtotal .....	<b>862.5</b>	<b>896.1</b>	<b>1034.0</b>	<b>880.8</b>	<i>914.4</i>	<i>932.6</i>	<i>1024.9</i>	<i>881.6</i>	<i>917.6</i>	<i>895.3</i>	<i>1036.3</i>	<i>892.5</i>	<i>3673.4</i>	<i>3753.5</i>	<i>3741.7</i>
Other Sectors <sup>c</sup> .....	<b>40.6</b>	<b>39.7</b>	<b>43.9</b>	<b>38.2</b>	<i>38.2</i>	<i>38.9</i>	<i>41.7</i>	<i>39.9</i>	<i>40.3</i>	<i>40.3</i>	<i>43.2</i>	<i>41.2</i>	<i>162.4</i>	<i>158.8</i>	<i>165.1</i>
Total Generation.....	<b>903.1</b>	<b>935.7</b>	<b>1077.9</b>	<b>919.0</b>	<i>952.6</i>	<i>971.5</i>	<i>1066.7</i>	<i>921.5</i>	<i>958.0</i>	<i>935.7</i>	<i>1079.4</i>	<i>933.8</i>	<i>3835.7</i>	<i>3912.3</i>	<i>3906.8</i>
Net Imports <sup>d</sup> .....	<b>5.9</b>	<b>4.3</b>	<b>8.1</b>	<b>2.8</b>	<i>6.1</i>	<i>7.7</i>	<i>11.1</i>	<i>6.6</i>	<i>10.5</i>	<i>12.1</i>	<i>15.5</i>	<i>11.0</i>	<i>21.1</i>	<i>31.4</i>	<i>49.2</i>
Total Supply.....	<b>909.0</b>	<b>940.0</b>	<b>1086.0</b>	<b>921.9</b>	<i>958.7</i>	<i>979.3</i>	<i>1077.8</i>	<i>928.0</i>	<i>968.5</i>	<i>947.8</i>	<i>1095.0</i>	<i>944.8</i>	<i>3856.9</i>	<i>3943.8</i>	<i>3956.0</i>
Losses and Unaccounted for <sup>e</sup> .....	<b>23.9</b>	<b>50.5</b>	<b>36.5</b>	<b>30.2</b>	<i>29.0</i>	<i>61.7</i>	<i>35.6</i>	<i>40.3</i>	<i>28.4</i>	<i>57.5</i>	<i>35.7</i>	<i>42.2</i>	<i>141.1</i>	<i>166.7</i>	<i>163.8</i>
Demand															
Retail Sales <sup>f</sup>															
Residential.....	<b>311.3</b>	<b>281.7</b>	<b>382.7</b>	<b>292.5</b>	<i>337.1</i>	<i>295.0</i>	<i>380.5</i>	<i>286.3</i>	<i>339.9</i>	<i>270.5</i>	<i>386.2</i>	<i>290.1</i>	<i>1268.2</i>	<i>1298.8</i>	<i>1286.8</i>
Commercial .....	<b>256.8</b>	<b>275.9</b>	<b>316.6</b>	<b>268.9</b>	<i>265.6</i>	<i>281.6</i>	<i>314.2</i>	<i>263.7</i>	<i>265.1</i>	<i>276.5</i>	<i>320.8</i>	<i>270.7</i>	<i>1118.1</i>	<i>1125.2</i>	<i>1133.0</i>
Industrial.....	<b>236.3</b>	<b>249.1</b>	<b>262.3</b>	<b>246.1</b>	<i>238.4</i>	<i>248.8</i>	<i>256.9</i>	<i>245.1</i>	<i>240.8</i>	<i>248.7</i>	<i>258.5</i>	<i>246.0</i>	<i>993.8</i>	<i>989.2</i>	<i>994.1</i>
Other .....	<b>23.9</b>	<b>25.3</b>	<b>29.9</b>	<b>26.0</b>	<i>25.8</i>	<i>27.7</i>	<i>30.3</i>	<i>27.0</i>	<i>27.3</i>	<i>26.9</i>	<i>30.6</i>	<i>27.3</i>	<i>105.1</i>	<i>110.9</i>	<i>112.1</i>
Subtotal .....	<b>828.3</b>	<b>832.0</b>	<b>991.5</b>	<b>833.5</b>	<i>866.9</i>	<i>853.2</i>	<i>981.9</i>	<i>822.1</i>	<i>873.2</i>	<i>822.6</i>	<i>996.1</i>	<i>834.2</i>	<i>3485.2</i>	<i>3524.0</i>	<i>3526.0</i>
Other Use/Sales <sup>g</sup> .....	<b>56.8</b>	<b>57.5</b>	<b>58.1</b>	<b>58.1</b>	<i>62.8</i>	<i>64.3</i>	<i>60.3</i>	<i>65.6</i>	<i>67.0</i>	<i>67.7</i>	<i>63.1</i>	<i>68.4</i>	<i>230.6</i>	<i>253.1</i>	<i>266.2</i>
Total Demand .....	<b>885.1</b>	<b>889.5</b>	<b>1049.6</b>	<b>891.6</b>	<i>929.7</i>	<i>917.5</i>	<i>1042.2</i>	<i>887.7</i>	<i>940.1</i>	<i>890.3</i>	<i>1059.3</i>	<i>902.6</i>	<i>3715.8</i>	<i>3777.1</i>	<i>3792.2</i>

<sup>a</sup>Electric Utilities and independent power producers.<sup>b</sup>"Other" includes generation from other gaseous fuels, 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>Data for 2001 are estimates.<sup>e</sup>Balancing item, mainly transmission and distribution losses.<sup>f</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 2001 are estimated.<sup>g</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 2001 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.

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

**Table 10b. U.S. Electricity Generation by Sector: Base Case**

(Billion Kilowatt-hours)

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Electricity Generation by Sector															
Electric Power <sup>a</sup>															
Coal .....	453.8	451.8	519.0	478.9	490.5	456.8	510.4	473.2	498.1	451.3	527.7	483.0	1903.4	1930.9	1960.1
Petroleum .....	18.0	21.5	24.3	19.7	26.8	29.1	32.3	20.0	26.4	17.5	28.9	18.8	83.6	108.2	91.6
Natural Gas .....	121.9	143.9	211.3	123.4	119.0	166.1	201.9	123.8	116.4	144.0	198.4	123.9	600.5	610.8	582.7
Other <sup>b</sup> .....	268.9	278.8	279.4	258.7	278.1	280.7	280.3	264.6	276.8	282.4	281.3	266.8	1085.8	1103.6	1107.3
Subtotal .....	862.5	896.1	1034.0	880.8	914.4	932.6	1024.9	881.6	917.6	895.3	1036.3	892.5	3673.4	3753.5	3741.7
Commercial															
Coal .....	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	1.0	0.9	1.0
Petroleum .....	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.4	0.5	0.5
Natural Gas .....	1.1	1.0	2.4	1.0	0.9	1.0	1.6	1.0	1.1	1.2	1.8	1.1	5.4	4.4	5.1
Other <sup>b</sup> .....	0.4	0.5	0.5	0.5	0.3	0.5	0.3	0.5	0.3	0.5	0.4	0.5	1.9	1.5	1.8
Subtotal .....	1.8	1.8	3.3	1.8	1.5	1.7	2.2	1.8	2.0	2.0	2.4	2.0	8.7	7.3	8.4
Industrial															
Coal .....	4.9	4.8	5.1	5.0	4.8	4.6	4.9	5.1	5.1	4.9	5.2	5.3	19.8	19.5	20.5
Petroleum .....	1.2	1.2	1.2	1.3	1.5	1.5	1.6	1.4	1.6	1.0	1.4	1.3	4.9	6.0	5.3
Natural Gas .....	21.0	19.5	21.4	17.9	19.1	19.8	20.2	17.8	20.6	20.4	21.0	18.6	79.9	76.9	80.5
Other <sup>b</sup> .....	11.7	12.3	12.8	12.3	11.2	11.3	12.8	13.8	11.1	12.1	13.1	14.1	49.2	49.2	50.4
Subtotal .....	38.8	37.8	40.6	36.4	36.7	37.2	39.5	38.1	38.4	38.4	40.7	39.3	153.6	151.5	156.7
Total .....	903.1	935.7	1077.9	919.0	952.6	971.5	1066.7	921.5	958.0	935.7	1079.4	933.8	3835.7	3912.3	3906.8

<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 CHP facilities and some electric-only plants.

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

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Fuel Consumption for Electricity Generation by Sector													(Quadrillion Btu)		
Electric Power <sup>a</sup>															
Coal .....	4.752	4.744	5.479	5.040	5.433	4.894	5.420	5.040	5.358	4.853	5.610	5.138	20.0	20.8	21.0
Petroleum.....	0.191	0.223	0.259	0.212	0.283	0.316	0.344	0.214	0.286	0.190	0.307	0.200	0.9	1.2	1.0
Natural Gas .....	1.173	1.319	1.959	1.080	1.089	1.519	1.814	1.109	1.059	1.311	1.781	1.114	5.5	5.5	5.3
Other <sup>b</sup> .....	2.749	2.790	2.700	2.318	2.769	3.071	3.044	2.882	3.052	3.100	3.060	2.909	10.6	11.8	12.1
Subtotal.....	8.865	9.076	10.398	8.651	9.573	9.800	10.622	9.245	9.755	9.455	10.758	9.361	37.0	39.2	39.3
Commercial															
Coal .....	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.013	0.011	0.013
Petroleum.....	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.005	0.006	0.006
Natural Gas .....	0.009	0.009	0.019	0.009	0.008	0.008	0.014	0.008	0.009	0.010	0.015	0.009	0.046	0.038	0.043
Other <sup>b</sup> .....	0.006	0.007	0.007	0.007	0.004	0.007	0.005	0.007	0.005	0.008	0.005	0.008	0.028	0.023	0.026
Subtotal.....	0.019	0.020	0.031	0.020	0.016	0.019	0.022	0.020	0.020	0.022	0.025	0.022	0.091	0.078	0.088
Industrial															
Coal .....	0.057	0.056	0.058	0.057	0.056	0.053	0.057	0.059	0.059	0.056	0.061	0.061	0.229	0.225	0.237
Petroleum.....	0.014	0.013	0.014	0.015	0.016	0.017	0.019	0.016	0.018	0.011	0.017	0.016	0.057	0.069	0.063
Natural Gas .....	0.183	0.175	0.196	0.157	0.174	0.176	0.181	0.161	0.184	0.181	0.189	0.168	0.711	0.692	0.721
Other <sup>b</sup> .....	0.157	0.161	0.167	0.160	0.154	0.144	0.165	0.175	0.144	0.155	0.169	0.178	0.645	0.639	0.645
Subtotal.....	0.411	0.405	0.436	0.390	0.400	0.390	0.423	0.411	0.404	0.403	0.436	0.422	1.641	1.625	1.665
Total .....	9.295	9.501	10.865	9.061	9.990	10.208	11.068	9.676	10.179	9.879	11.219	9.806	38.723	40.943	41.083
(Physical Units)															
Electric Power <sup>a</sup>															
Coal (Million Short Tons).....	231.1	230.7	266.4	245.1	258.1	235.7	263.9	245.2	257.9	233.5	273.2	250.1	973.3	1002.9	1014.7
Petroleum (Million Barrels per Day)...	0.348	0.399	0.459	0.375	0.524	0.562	0.611	0.384	0.507	0.341	0.545	0.359	0.396	0.520	0.438
Natural Gas (Trillion Cubic Feet).....	1.059	1.294	1.909	1.058	1.032	1.468	1.773	1.082	1.022	1.265	1.740	1.087	5.319	5.355	5.115
Commercial															
Coal (Million Short Tons).....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.5	0.5
Petroleum (Million Barrels per Day)...	0.002	0.002	0.002	0.002	0.004	0.002	0.002	0.003	0.005	0.002	0.002	0.003	0.002	0.003	0.003
Natural Gas (Trillion Cubic Feet).....	0.009	0.009	0.019	0.008	0.008	0.008	0.013	0.008	0.010	0.010	0.015	0.009	0.045	0.038	0.044
Industrial															
Coal (Million Short Tons).....	2.6	2.6	2.7	2.7	2.6	2.5	2.7	2.8	2.7	2.6	2.8	2.9	10.6	10.5	11.0
Petroleum (Million Barrels per Day)...	0.027	0.025	0.026	0.028	0.035	0.033	0.035	0.030	0.035	0.021	0.032	0.029	0.026	0.033	0.029
Natural Gas (Trillion Cubic Feet).....	0.179	0.174	0.192	0.153	0.170	0.175	0.178	0.157	0.182	0.180	0.185	0.164	0.698	0.680	0.710

<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 CHP facilities and some electric-only plants.

**Table 11. U.S. Renewable Energy Use by Sector: Base Case**

(Quadrillion Btu)

	Year				Annual Percentage Change		
	2001	2002	2003	2004	2001-2002	2002-2003	2003-2004
<b>Electricity Sector</b>							
Hydroelectric Power <sup>a</sup> .....	<b>2.165</b>	<b>2.623</b>	<i>2.998</i>	<i>3.028</i>	<b>21.2</b>	<i>14.3</i>	<i>1.0</i>
Geothermal, Solar and Wind Energy <sup>b</sup> .....	<b>0.363</b>	<b>0.397</b>	<i>0.413</i>	<i>0.489</i>	<b>9.4</b>	<i>4.0</i>	<i>18.4</i>
Biofuels <sup>c</sup> .....	<b>0.452</b>	<b>0.461</b>	<i>0.471</i>	<i>0.480</i>	<b>2.0</b>	<i>2.2</i>	<i>1.9</i>
Total .....	<b>2.979</b>	<b>3.481</b>	<i>3.882</i>	<i>3.997</i>	<b>16.9</b>	<i>11.5</i>	<i>3.0</i>
<b>Other Sectors <sup>d</sup></b>							
Residential and Commercial <sup>e</sup> .....	<b>0.567</b>	<b>0.515</b>	<i>0.517</i>	<i>0.547</i>	<b>-9.2</b>	<i>0.4</i>	<i>5.8</i>
Residential .....	<b>0.475</b>	<b>0.418</b>	<i>0.436</i>	<i>0.455</i>	<b>-12.0</b>	<i>4.3</i>	<i>4.4</i>
Commercial .....	<b>0.091</b>	<b>0.098</b>	<i>0.081</i>	<i>0.092</i>	<b>7.7</b>	<i>-17.3</i>	<i>13.6</i>
Industrial <sup>f</sup> .....	<b>1.633</b>	<b>1.723</b>	<i>1.714</i>	<i>1.753</i>	<b>5.5</b>	<i>-0.5</i>	<i>2.3</i>
Transportation <sup>g</sup> .....	<b>0.147</b>	<b>0.175</b>	<i>0.205</i>	<i>0.205</i>	<b>19.0</b>	<i>17.1</i>	<i>0.0</i>
Total .....	<b>2.346</b>	<b>2.413</b>	<i>2.436</i>	<i>2.505</i>	<b>2.9</b>	<i>1.0</i>	<i>2.8</i>
Total Renewable Energy Demand.....	<b>5.325</b>	<b>5.894</b>	<i>6.318</i>	<i>6.502</i>	<b>10.7</b>	<i>7.2</i>	<i>2.9</i>

<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. The Energy Information Administration 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 are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

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

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Real Gross Domestic Product (GDP)</b> (billion chained 1996 dollars).....	<b>6708</b>	<b>6676</b>	<b>6880</b>	<b>7063</b>	<b>7348</b>	<b>7544</b>	<b>7813</b>	<b>8159</b>	<b>8509</b>	<b>8859</b>	<b>9191</b>	<b>9215</b>	<i>9440</i>	<i>9658</i>	<i>10040</i>
Imported Crude Oil Price <sup>a</sup> (nominal dollars per barrel) .....	<b>21.79</b>	<b>18.74</b>	<b>18.20</b>	<b>16.13</b>	<b>15.53</b>	<b>17.14</b>	<b>20.62</b>	<b>18.49</b>	<b>12.07</b>	<b>17.26</b>	<b>27.72</b>	<b>22.00</b>	<i>23.68</i>	<i>25.97</i>	<i>23.37</i>
<b>Petroleum Supply</b>															
Crude Oil Production <sup>b</sup> (million barrels per day).....	<b>7.36</b>	<b>7.42</b>	<b>7.17</b>	<b>6.85</b>	<b>6.66</b>	<b>6.56</b>	<b>6.46</b>	<b>6.45</b>	<b>6.25</b>	<b>5.88</b>	<b>5.82</b>	<b>5.80</b>	<i>5.82</i>	<i>5.83</i>	<i>5.81</i>
Total Petroleum Net Imports (including SPR) (million barrels per day).....	<b>7.16</b>	<b>6.42</b>	<b>6.94</b>	<b>7.62</b>	<b>8.05</b>	<b>7.89</b>	<b>8.50</b>	<b>9.16</b>	<b>9.76</b>	<b>9.91</b>	<b>10.42</b>	<b>10.90</b>	<i>10.50</i>	<i>10.95</i>	<i>11.37</i>
<b>Energy Demand</b>															
World Petroleum (million barrels per day).....	<b>66.0</b>	<b>63.3</b>	<b>63.1</b>	<b>63.1</b>	<b>64.1</b>	<b>65.7</b>	<b>67.0</b>	<b>73.1</b>	<b>73.9</b>	<b>75.7</b>	<b>76.9</b>	<b>77.1</b>	<i>77.4</i>	<i>78.4</i>	<i>79.6</i>
U.S. Petroleum (million barrels per day).....	<b>17.04</b>	<b>16.77</b>	<b>17.10</b>	<b>17.24</b>	<b>17.72</b>	<b>17.72</b>	<b>18.31</b>	<b>18.62</b>	<b>18.92</b>	<b>19.52</b>	<b>19.70</b>	<b>19.65</b>	<i>19.71</i>	<i>19.99</i>	<i>20.40</i>
Natural Gas (trillion cubic feet).....	<b>19.17</b>	<b>19.56</b>	<b>20.23</b>	<b>20.79</b>	<b>21.24</b>	<b>22.20</b>	<b>22.60</b>	<b>22.73</b>	<b>22.24</b>	<b>22.39</b>	<b>23.46</b>	<b>22.30</b>	<i>23.17</i>	<i>23.23</i>	<i>23.23</i>
Coal (million short tons).....	<b>904</b>	<b>899</b>	<b>908</b>	<b>944</b>	<b>951</b>	<b>962</b>	<b>1006</b>	<b>1030</b>	<b>1037</b>	<b>1039</b>	<b>1084</b>	<b>1060</b>	<i>1065</i>	<i>1076</i>	<i>1088</i>
Electricity (billion kilowatthours)															
Retail Sales <sup>c</sup> .....	<b>2713</b>	<b>2762</b>	<b>2763</b>	<b>2861</b>	<b>2935</b>	<b>3013</b>	<b>3101</b>	<b>3146</b>	<b>3264</b>	<b>3312</b>	<b>3421</b>	<b>3370</b>	<i>3485</i>	<i>3524</i>	<i>3526</i>
Other Use/Sales <sup>d</sup> .....	<b>115</b>	<b>118</b>	<b>122</b>	<b>128</b>	<b>134</b>	<b>144</b>	<b>146</b>	<b>148</b>	<b>161</b>	<b>183</b>	<b>183</b>	<b>205</b>	<i>231</i>	<i>253</i>	<i>266</i>
Total .....	<b>2827</b>	<b>2880</b>	<b>2886</b>	<b>2989</b>	<b>3069</b>	<b>3157</b>	<b>3247</b>	<b>3294</b>	<b>3425</b>	<b>3495</b>	<b>3605</b>	<b>3575</b>	<i>3716</i>	<i>3777</i>	<i>3792</i>
Total Energy Demand <sup>e</sup> (quadrillion Btu) .....	<b>84.6</b>	<b>84.5</b>	<b>85.9</b>	<b>87.6</b>	<b>89.2</b>	<b>91.2</b>	<b>94.2</b>	<b>94.7</b>	<b>95.1</b>	<b>96.8</b>	<b>99.0</b>	<b>96.2</b>	<i>97.9</i>	<i>99.4</i>	<i>100.8</i>
Total Energy Demand per Dollar of GDP (thousand Btu per 1996 Dollar).....	<b>12.62</b>	<b>12.66</b>	<b>12.48</b>	<b>12.40</b>	<b>12.15</b>	<b>12.09</b>	<b>12.06</b>	<b>11.63</b>	<b>11.18</b>	<b>10.92</b>	<b>10.78</b>	<b>10.43</b>	<i>10.37</i>	<i>10.29</i>	<i>10.04</i>

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

<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 EIA's 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 2001 are estimates.

<sup>e</sup>"Total Energy Demand" refers to the aggregate energy concept presented in Energy Information Administration, Annual Energy Review, 2001, DOE/EIA-0384(01) (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 Energy Information Administration, 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; Energy Information Administration; latest data available from EIA databases supporting the following reports: Petroleum Supply Monthly, DOE/EA-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 CONTROL0503.

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

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Macroeconomic</b>															
Real Gross Domestic Product (billion chained 1996 dollars).....	<b>6708</b>	<b>6676</b>	<b>6880</b>	<b>7063</b>	<b>7348</b>	<b>7544</b>	<b>7813</b>	<b>8159</b>	<b>8509</b>	<b>8859</b>	<b>9191</b>	<b>9215</b>	<i>9440</i>	<i>9658</i>	<i>10040</i>
GDP Implicit Price Deflator (Index, 1996=1.000).....	<b>0.865</b>	<b>0.897</b>	<b>0.918</b>	<b>0.941</b>	<b>0.960</b>	<b>0.981</b>	<b>1.000</b>	<b>1.019</b>	<b>1.032</b>	<b>1.047</b>	<b>1.069</b>	<b>1.094</b>	<i>1.107</i>	<i>1.126</i>	<i>1.149</i>
Real Disposable Personal Income (billion chained 1996 Dollars).....	<b>5014</b>	<b>5033</b>	<b>5189</b>	<b>5261</b>	<b>5397</b>	<b>5539</b>	<b>5678</b>	<b>5854</b>	<b>6169</b>	<b>6328</b>	<b>6630</b>	<b>6748</b>	<i>7037</i>	<i>7202</i>	<i>7486</i>
Manufacturing Production (Index, 1996=1.000).....	<b>74.156</b>	<b>72.721</b>	<b>75.516</b>	<b>78.214</b>	<b>83.212</b>	<b>87.846</b>	<b>92.157</b>	<b>100.000</b>	<b>106.518</b>	<b>111.872</b>	<b>117.672</b>	<b>112.800</b>	<i>111.691</i>	<i>111.866</i>	<i>119.819</i>
Real Fixed Investment (billion chained 1996 dollars).....	<b>895</b>	<b>833</b>	<b>886</b>	<b>958</b>	<b>1046</b>	<b>1109</b>	<b>1213</b>	<b>1329</b>	<b>1480</b>	<b>1595</b>	<b>1692</b>	<b>1627</b>	<i>1577</i>	<i>1603</i>	<i>1682</i>
Real Exchange Rate (Index, 1996=1.000).....	<b>0.918</b>	<b>0.920</b>	<b>0.926</b>	<b>0.956</b>	<b>0.933</b>	<b>0.869</b>	<b>0.918</b>	<b>0.992</b>	<b>1.044</b>	<b>1.047</b>	<b>1.083</b>	<b>1.141</b>	<i>1.138</i>	<i>1.029</i>	<i>1.010</i>
Business Inventory Change (billion chained 1996 dollars).....	<b>8.7</b>	<b>-6.6</b>	<b>-4.7</b>	<b>3.6</b>	<b>11.9</b>	<b>13.8</b>	<b>9.9</b>	<b>14.8</b>	<b>27.1</b>	<b>14.4</b>	<b>17.5</b>	<b>-36.2</b>	<i>-11.5</i>	<i>-2.7</i>	<i>16.3</i>
Producer Price Index (index, 1982=1.000).....	<b>1.163</b>	<b>1.165</b>	<b>1.172</b>	<b>1.189</b>	<b>1.205</b>	<b>1.248</b>	<b>1.277</b>	<b>1.276</b>	<b>1.244</b>	<b>1.255</b>	<b>1.328</b>	<b>1.342</b>	<i>1.311</i>	<i>1.396</i>	<i>1.409</i>
Consumer Price Index (index, 1982-1984=1.000).....	<b>1.307</b>	<b>1.362</b>	<b>1.403</b>	<b>1.445</b>	<b>1.482</b>	<b>1.524</b>	<b>1.569</b>	<b>1.605</b>	<b>1.630</b>	<b>1.666</b>	<b>1.722</b>	<b>1.771</b>	<i>1.799</i>	<i>1.841</i>	<i>1.876</i>
Petroleum Product Price Index (index, 1982=1.000).....	<b>0.748</b>	<b>0.671</b>	<b>0.647</b>	<b>0.620</b>	<b>0.591</b>	<b>0.608</b>	<b>0.701</b>	<b>0.680</b>	<b>0.513</b>	<b>0.609</b>	<b>0.913</b>	<b>0.853</b>	<i>0.795</i>	<i>0.897</i>	<i>0.829</i>
Non-Farm Employment (millions).....	<b>109.4</b>	<b>108.3</b>	<b>108.6</b>	<b>110.7</b>	<b>114.1</b>	<b>117.2</b>	<b>119.6</b>	<b>122.7</b>	<b>125.9</b>	<b>128.9</b>	<b>131.7</b>	<b>131.9</b>	<i>130.8</i>	<i>130.7</i>	<i>132.9</i>
Commercial Employment (millions).....	<b>71.3</b>	<b>70.8</b>	<b>71.2</b>	<b>73.2</b>	<b>76.1</b>	<b>78.8</b>	<b>81.1</b>	<b>83.9</b>	<b>86.6</b>	<b>89.6</b>	<b>92.0</b>	<b>92.7</b>	<i>92.3</i>	<i>92.5</i>	<i>94.9</i>
Total Industrial Production (index, 1997=100.0).....	<b>77.6</b>	<b>76.3</b>	<b>78.3</b>	<b>80.9</b>	<b>85.2</b>	<b>89.3</b>	<b>93.2</b>	<b>100.0</b>	<b>105.6</b>	<b>110.1</b>	<b>115.3</b>	<b>111.2</b>	<i>110.4</i>	<i>110.9</i>	<i>117.5</i>
Housing Stock (millions).....	<b>103.4</b>	<b>104.4</b>	<b>105.4</b>	<b>106.7</b>	<b>108.0</b>	<b>109.6</b>	<b>110.9</b>	<b>112.3</b>	<b>114.1</b>	<b>115.7</b>	<b>116.2</b>	<b>118.0</b>	<i>119.8</i>	<i>121.5</i>	<i>122.6</i>
<b>Weather <sup>a</sup></b>															
Heating Degree-Days															
U.S. ....	<b>4016</b>	<b>4200</b>	<b>4441</b>	<b>4700</b>	<b>4483</b>	<b>4531</b>	<b>4713</b>	<b>4542</b>	<b>3951</b>	<b>4169</b>	<b>4460</b>	<b>4223</b>	<i>4274</i>	<i>4370</i>	<i>4477</i>
New England.....	<b>5848</b>	<b>5960</b>	<b>6844</b>	<b>6728</b>	<b>6672</b>	<b>6559</b>	<b>6679</b>	<b>6662</b>	<b>5680</b>	<b>5952</b>	<b>6489</b>	<b>6059</b>	<i>6159</i>	<i>6659</i>	<i>6488</i>
Middle Atlantic.....	<b>4998</b>	<b>5177</b>	<b>5964</b>	<b>5948</b>	<b>5934</b>	<b>5831</b>	<b>5986</b>	<b>5809</b>	<b>4812</b>	<b>5351</b>	<b>5774</b>	<b>5297</b>	<i>5339</i>	<i>6011</i>	<i>5723</i>
U.S. Gas-Weighted.....	<b>4139</b>	<b>4337</b>	<b>4458</b>	<b>4754</b>	<b>4659</b>	<b>4707</b>	<b>4980</b>	<b>4802</b>	<b>4183</b>	<b>4399</b>	<b>4680</b>	<b>4451</b>	<i>4518</i>	<i>4660</i>	<i>4730</i>
Cooling Degree-Days (U.S.).....	<b>1260</b>	<b>1331</b>	<b>1040</b>	<b>1218</b>	<b>1220</b>	<b>1293</b>	<b>1180</b>	<b>1156</b>	<b>1410</b>	<b>1297</b>	<b>1229</b>	<b>1256</b>	<i>1366</i>	<i>1254</i>	<i>1240</i>

<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 1990 population.

Notes: Historical data are printed in bold; forecasts are in italics.

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(419); U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on Global Insight Forecast CONTROL0503.

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

(Quadrillion Btu except where noted)

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Production</b>															
Coal .....	22.46	21.59	21.63	20.25	22.11	22.03	22.68	23.21	23.94	23.19	22.62	23.05	22.55	22.33	22.63
Natural Gas .....	18.33	18.23	18.38	18.58	19.35	19.08	19.34	19.39	19.61	19.34	19.69	19.92	19.56	19.99	20.20
Crude Oil .....	15.57	15.70	15.22	14.49	14.10	13.89	13.72	13.66	13.24	12.45	12.36	12.28	12.31	12.35	12.33
Natural Gas Liquids .....	2.17	2.31	2.36	2.41	2.39	2.44	2.53	2.50	2.42	2.53	2.61	2.55	2.56	2.49	2.58
Nuclear .....	6.10	6.42	6.48	6.41	6.69	7.08	7.09	6.60	7.07	7.61	7.86	8.03	8.15	8.22	8.22
Hydroelectric.....	3.01	2.97	2.57	2.85	2.65	3.18	3.56	3.60	3.25	3.21	2.75	2.11	2.58	2.95	2.92
Other Renewables .....	3.08	3.14	3.29	3.27	3.38	3.46	3.55	3.43	3.26	3.33	3.35	3.13	3.23	3.27	3.42
Total .....	70.73	70.36	69.94	68.26	70.68	71.16	72.47	72.39	72.79	71.65	71.25	71.06	70.94	71.60	72.31
<b>Net Imports</b>															
Coal .....	-2.70	-2.77	-2.59	-1.78	-1.69	-2.14	-2.19	-2.01	-1.87	-1.30	-1.21	-0.77	-0.61	-0.64	-0.56
Natural Gas .....	1.46	1.67	1.94	2.25	2.52	2.74	2.85	2.90	3.06	3.50	3.62	3.69	3.58	3.66	3.61
Crude Oil .....	12.50	12.60	13.00	14.43	15.07	15.36	16.20	17.88	18.96	19.06	19.94	20.58	20.14	20.76	21.42
Petroleum Products.....	2.79	1.62	1.96	1.97	2.19	1.53	2.02	1.76	1.98	2.12	2.44	2.72	2.41	2.79	2.94
Electricity .....	0.01	0.07	0.09	0.09	0.15	0.13	0.14	0.12	0.09	0.10	0.12	0.07	0.07	0.11	0.17
Coal Coke.....	0.00	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	0.05
Total .....	14.06	13.19	14.44	16.99	18.30	17.69	19.04	20.70	22.28	23.54	24.97	26.32	25.65	26.72	27.63
<b>Adjustments <sup>a</sup></b> .....	-0.23	1.08	1.68	2.53	0.60	2.65	3.01	1.88	0.27	1.78	3.10	-1.22	1.31	1.10	0.90
<b>Consumption</b>															
Coal .....	19.19	18.99	19.12	19.84	19.91	20.09	21.00	21.45	21.66	21.62	22.58	21.66	21.98	22.36	22.51
Natural Gas .....	19.72	20.15	20.83	21.35	21.84	22.78	23.20	23.33	22.93	23.01	24.04	22.93	23.82	23.89	23.88
Petroleum.....	33.55	32.85	33.53	33.84	34.67	34.55	35.76	36.27	36.93	37.96	38.40	38.33	38.18	38.66	39.69
Nuclear.....	6.10	6.42	6.48	6.41	6.69	7.08	7.09	6.60	7.07	7.61	7.86	8.03	8.15	8.22	8.22
Other .....	6.00	6.23	6.09	6.34	6.46	7.00	7.48	7.33	6.75	6.77	6.43	5.21	5.78	6.29	6.53
Total .....	84.57	84.64	86.05	87.78	89.57	91.50	94.52	94.97	95.34	96.97	99.32	96.15	97.91	99.42	100.84

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

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

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Crude Oil Prices</b> (dollars per barrel)															
Imported Average <sup>a</sup> .....	21.79	18.74	18.20	16.13	15.53	17.14	20.62	18.49	12.07	17.26	27.72	22.00	23.68	25.97	23.37
WTI <sup>b</sup> Spot Average.....	24.48	21.60	20.54	18.49	17.16	18.41	22.11	20.61	14.45	19.25	30.29	25.95	26.12	29.88	26.00
<b>Natural Gas Wellhead</b>															
(dollars per thousand cubic feet) .....	1.71	1.64	1.74	2.04	1.85	1.55	2.17	2.32	1.96	2.19	3.70	4.12	2.96	5.34	4.99
<b>Petroleum Products</b>															
Gasoline Retail <sup>b</sup> (dollars per gallon)															
All Grades .....	1.17	1.15	1.14	1.13	1.13	1.16	1.25	1.24	1.07	1.18	1.53	1.47	1.39	1.53	1.43
Regular Unleaded .....	1.13	1.10	1.09	1.07	1.08	1.11	1.20	1.20	1.03	1.14	1.49	1.43	1.34	1.49	1.39
No. 2 Diesel Oil, Retail (dollars per gallon).....	1.17	1.13	1.11	1.11	1.11	1.11	1.24	1.19	1.04	1.12	1.49	1.40	1.32	1.48	1.38
No. 2 Heating Oil, Wholesale (dollars per gallon).....	0.70	0.62	0.58	0.54	0.51	0.51	0.64	0.59	0.42	0.49	0.89	0.76	0.69	0.87	0.78
No. 2 Heating Oil, Retail (dollars per gallon).....	1.04	0.98	0.93	0.90	0.87	0.86	0.98	0.97	0.84	0.87	1.29	1.23	1.11	1.35	1.22
No. 6 Residual Fuel Oil, Retail <sup>c</sup> (dollars per barrel).....	18.66	14.32	14.21	14.00	14.79	16.49	19.01	17.82	12.83	16.02	25.34	22.28	23.73	32.28	28.27
<b>Electric Utility Fuels</b>															
Coal															
(dollars per million Btu).....	1.45	1.45	1.41	1.38	1.36	1.32	1.29	1.27	1.25	1.22	1.20	1.23	1.22	1.23	1.19
Heavy Fuel Oil <sup>d</sup>															
(dollars per million Btu).....	3.22	2.48	2.46	2.36	2.40	2.60	3.01	2.79	2.07	2.38	4.27	3.73	3.54	5.08	4.53
Natural Gas															
(dollars per million Btu).....	2.32	2.15	2.33	2.56	2.23	1.98	2.64	2.76	2.38	2.57	4.34	4.44	3.68	6.40	5.63
<b>Other Residential</b>															
Natural Gas															
(dollars per thousand cubic feet) .....	5.80	5.82	5.89	6.17	6.41	6.06	6.35	6.95	6.83	6.69	7.77	9.63	7.83	9.37	10.12
Electricity															
(cents per kilowatthour).....	7.85	8.05	8.23	8.34	8.40	8.40	8.36	8.43	8.26	8.16	8.24	8.48	8.43	8.63	8.69

<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. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: 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														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Supply</b>															
Crude Oil Supply															
Domestic Production <sup>a</sup>	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	5.82	5.80	5.82	5.83	5.81
Alaska.....	1.77	1.80	1.71	1.58	1.56	1.48	1.39	1.30	1.17	1.05	0.97	0.96	0.98	0.96	0.95
Lower 48.....	5.58	5.62	5.46	5.26	5.10	5.08	5.07	5.16	5.08	4.83	4.85	4.84	4.83	4.88	4.86
Net Commercial Imports <sup>b</sup>	5.76	5.67	5.98	6.67	6.95	7.14	7.40	8.12	8.60	8.60	9.01	9.30	9.10	9.39	9.66
Net SPR Withdrawals.....	0.06	0.05	-0.01	-0.02	0.00	0.00	0.07	0.01	-0.02	0.02	0.08	-0.02	-0.13	-0.07	-0.03
Net Commercial Withdrawals.....	0.00	-0.01	0.02	-0.05	-0.01	0.09	0.05	-0.06	-0.05	0.11	0.00	-0.07	0.09	-0.01	-0.05
Product Supplied and Losses.....	-0.02	-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
Unaccounted-for Crude Oil.....	0.26	0.20	0.26	0.17	0.27	0.19	0.22	0.14	0.11	0.19	0.15	0.12	0.04	0.12	0.16
<b>Total Crude Oil Supply</b> .....	<b>13.41</b>	<b>13.30</b>	<b>13.41</b>	<b>13.61</b>	<b>13.87</b>	<b>13.97</b>	<b>14.19</b>	<b>14.66</b>	<b>14.89</b>	<b>14.80</b>	<b>15.07</b>	<b>15.13</b>	<b>14.92</b>	<b>15.26</b>	<b>15.55</b>
Other Supply															
NGL Production.....	1.56	1.66	1.70	1.74	1.73	1.76	1.83	1.82	1.76	1.85	1.91	1.87	1.88	1.83	1.89
Other Hydrocarbon and Alcohol Inputs.....	0.13	0.15	0.20	0.25	0.26	0.30	0.31	0.34	0.38	0.38	0.38	0.38	0.43	0.41	0.39
Crude Oil Product Supplied.....	0.02	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
Processing Gain.....	0.68	0.71	0.77	0.77	0.77	0.77	0.84	0.85	0.89	0.89	0.95	0.90	0.95	0.93	0.94
Net Product Imports <sup>c</sup> .....	1.38	0.76	0.94	0.93	1.09	0.75	1.10	1.04	1.17	1.30	1.40	1.59	1.39	1.56	1.70
Product Stock Withdrawn.....	-0.14	-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	-0.08
<b>Total Supply</b> .....	<b>17.04</b>	<b>16.56</b>	<b>17.10</b>	<b>17.26</b>	<b>17.72</b>	<b>17.72</b>	<b>18.31</b>	<b>18.62</b>	<b>18.92</b>	<b>19.52</b>	<b>19.70</b>	<b>19.65</b>	<b>19.71</b>	<b>19.99</b>	<b>20.40</b>
<b>Demand</b>															
Motor Gasoline <sup>d</sup> .....	7.31	7.23	7.38	7.48	7.60	7.79	7.89	8.02	8.25	8.43	8.47	8.61	8.86	8.90	9.18
Jet Fuel.....	1.52	1.47	1.45	1.47	1.53	1.51	1.58	1.60	1.62	1.67	1.73	1.66	1.61	1.58	1.62
Distillate Fuel Oil.....	3.02	2.92	2.98	3.04	3.16	3.21	3.37	3.44	3.46	3.57	3.72	3.85	3.77	3.97	4.08
Residual Fuel Oil.....	1.23	1.16	1.09	1.08	1.02	0.85	0.85	0.80	0.89	0.83	0.91	0.81	0.67	0.74	0.68
Other Oils <sup>e</sup> .....	3.95	3.99	4.20	4.17	4.41	4.36	4.63	4.77	4.69	5.01	4.87	4.73	4.79	4.79	4.83
<b>Total Demand</b> .....	<b>17.04</b>	<b>16.77</b>	<b>17.10</b>	<b>17.24</b>	<b>17.72</b>	<b>17.72</b>	<b>18.31</b>	<b>18.62</b>	<b>18.92</b>	<b>19.52</b>	<b>19.70</b>	<b>19.65</b>	<b>19.71</b>	<b>19.99</b>	<b>20.40</b>
<b>Total Petroleum Net Imports</b> .....	<b>7.16</b>	<b>6.42</b>	<b>6.94</b>	<b>7.62</b>	<b>8.05</b>	<b>7.89</b>	<b>8.50</b>	<b>9.16</b>	<b>9.76</b>	<b>9.91</b>	<b>10.42</b>	<b>10.90</b>	<b>10.50</b>	<b>10.95</b>	<b>11.37</b>
<b>Closing Stocks (million barrels)</b>															
Crude Oil (excluding SPR).....	323	325	318	335	337	303	284	305	324	284	286	312	278	282	299
Total Motor Gasoline.....	220	219	216	226	215	202	195	210	216	193	196	210	209	202	210
Jet Fuel.....	52	49	43	40	47	40	40	44	45	41	45	42	39	42	43
Distillate Fuel Oil.....	132	144	141	141	145	130	127	138	156	125	118	145	134	133	137
Residual Fuel Oil.....	49	50	43	44	42	37	46	40	45	36	36	41	31	38	40
Other Oils <sup>f</sup> .....	227	251	292	237	274	348	280	204	212	396	246	178	345	252	223

<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 Energy Information Administration, 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, 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: Energy Information Administration; 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														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Supply</b>															
Total Dry Gas Production .....	<b>17.81</b>	<b>17.70</b>	<b>17.84</b>	<b>18.10</b>	<b>18.82</b>	<b>18.60</b>	<b>18.85</b>	<b>18.90</b>	<b>19.02</b>	<b>18.83</b>	<b>19.21</b>	<b>19.37</b>	<i>19.03</i>	<i>19.44</i>	<i>19.65</i>
Net Imports .....	<b>1.45</b>	<b>1.64</b>	<b>1.92</b>	<b>2.21</b>	<b>2.46</b>	<b>2.69</b>	<b>2.78</b>	<b>2.84</b>	<b>2.99</b>	<b>3.42</b>	<b>3.54</b>	<b>3.60</b>	<i>3.49</i>	<i>3.57</i>	<i>3.52</i>
Supplemental Gaseous Fuels.....	<b>0.12</b>	<b>0.11</b>	<b>0.12</b>	<b>0.12</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.10</b>	<b>0.10</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<i>0.08</i>	<i>0.07</i>	<i>0.08</i>
Total New Supply.....	<b>19.38</b>	<b>19.45</b>	<b>19.88</b>	<b>20.42</b>	<b>21.39</b>	<b>21.40</b>	<b>21.75</b>	<b>21.84</b>	<b>22.12</b>	<b>22.34</b>	<b>22.83</b>	<b>23.06</b>	<i>22.60</i>	<i>23.08</i>	<i>23.26</i>
Working Gas in Storage															
Opening.....	<b>2.85</b>	<b>3.07</b>	<b>2.82</b>	<b>2.60</b>	<b>2.32</b>	<b>2.61</b>	<b>2.15</b>	<b>2.17</b>	<b>2.17</b>	<b>2.73</b>	<b>2.52</b>	<b>1.72</b>	<i>2.90</i>	<i>2.38</i>	<i>2.31</i>
Closing.....	<b>3.07</b>	<b>2.82</b>	<b>2.60</b>	<b>2.32</b>	<b>2.61</b>	<b>2.15</b>	<b>2.17</b>	<b>2.17</b>	<b>2.73</b>	<b>2.52</b>	<b>1.72</b>	<b>2.90</b>	<i>2.38</i>	<i>2.31</i>	<i>2.32</i>
Net Withdrawals.....	<b>-0.22</b>	<b>0.24</b>	<b>0.23</b>	<b>0.28</b>	<b>-0.28</b>	<b>0.45</b>	<b>-0.02</b>	<b>0.00</b>	<b>-0.56</b>	<b>0.21</b>	<b>0.80</b>	<b>-1.18</b>	<i>0.53</i>	<i>0.06</i>	<i>-0.01</i>
Total Supply.....	<b>19.16</b>	<b>19.70</b>	<b>20.11</b>	<b>20.70</b>	<b>21.11</b>	<b>21.85</b>	<b>21.73</b>	<b>21.84</b>	<b>21.56</b>	<b>22.54</b>	<b>23.64</b>	<b>21.87</b>	<i>23.13</i>	<i>23.15</i>	<i>23.25</i>
Balancing Item <sup>a</sup> .....	<b>0.01</b>	<b>-0.14</b>	<b>0.12</b>	<b>0.09</b>	<b>0.13</b>	<b>0.35</b>	<b>0.87</b>	<b>0.89</b>	<b>0.67</b>	<b>-0.15</b>	<b>-0.18</b>	<b>0.43</b>	<i>0.05</i>	<i>0.08</i>	<i>-0.02</i>
Total Primary Supply .....	<b>19.17</b>	<b>19.56</b>	<b>20.23</b>	<b>20.79</b>	<b>21.24</b>	<b>22.20</b>	<b>22.60</b>	<b>22.73</b>	<b>22.24</b>	<b>22.39</b>	<b>23.46</b>	<b>22.30</b>	<i>23.17</i>	<i>23.23</i>	<i>23.23</i>
<b>Demand</b>															
Residential.....	<b>4.39</b>	<b>4.56</b>	<b>4.69</b>	<b>4.96</b>	<b>4.85</b>	<b>4.85</b>	<b>5.24</b>	<b>4.98</b>	<b>4.52</b>	<b>4.73</b>	<b>4.99</b>	<b>4.81</b>	<i>4.92</i>	<i>4.83</i>	<i>4.89</i>
Commercial .....	<b>2.62</b>	<b>2.73</b>	<b>2.80</b>	<b>2.86</b>	<b>2.90</b>	<b>3.03</b>	<b>3.16</b>	<b>3.21</b>	<b>3.00</b>	<b>3.04</b>	<b>3.22</b>	<b>3.04</b>	<i>3.15</i>	<i>3.08</i>	<i>3.23</i>
Industrial .....	<b>8.25</b>	<b>8.36</b>	<b>8.70</b>	<b>8.87</b>	<b>8.91</b>	<b>9.38</b>	<b>9.69</b>	<b>9.71</b>	<b>9.49</b>	<b>9.16</b>	<b>9.40</b>	<b>8.52</b>	<i>8.98</i>	<i>9.10</i>	<i>9.15</i>
Lease and Plant Fuel.....	<b>1.24</b>	<b>1.13</b>	<b>1.17</b>	<b>1.17</b>	<b>1.12</b>	<b>1.22</b>	<b>1.25</b>	<b>1.20</b>	<b>1.17</b>	<b>1.08</b>	<b>1.14</b>	<b>1.15</b>	<i>1.13</i>	<i>1.23</i>	<i>1.22</i>
Other Industrial .....	<b>7.02</b>	<b>7.23</b>	<b>7.53</b>	<b>7.70</b>	<b>7.79</b>	<b>8.16</b>	<b>8.44</b>	<b>8.51</b>	<b>8.32</b>	<b>8.08</b>	<b>8.25</b>	<b>7.36</b>	<i>7.85</i>	<i>7.86</i>	<i>7.93</i>
CHP <sup>b</sup> .....	<b>1.06</b>	<b>1.06</b>	<b>1.11</b>	<b>1.12</b>	<b>1.18</b>	<b>1.26</b>	<b>1.29</b>	<b>1.28</b>	<b>1.35</b>	<b>1.40</b>	<b>1.39</b>	<b>1.31</b>	<i>1.28</i>	<i>1.23</i>	<i>1.29</i>
Non-CHP .....	<b>5.96</b>	<b>6.17</b>	<b>6.42</b>	<b>6.58</b>	<b>6.61</b>	<b>6.90</b>	<b>7.15</b>	<b>7.23</b>	<b>6.97</b>	<b>6.68</b>	<b>6.87</b>	<b>6.05</b>	<i>6.57</i>	<i>6.63</i>	<i>6.64</i>
Transportation <sup>c</sup> .....	<b>0.66</b>	<b>0.60</b>	<b>0.59</b>	<b>0.63</b>	<b>0.69</b>	<b>0.70</b>	<b>0.72</b>	<b>0.76</b>	<b>0.64</b>	<b>0.66</b>	<b>0.66</b>	<b>0.61</b>	<i>0.59</i>	<i>0.55</i>	<i>0.60</i>
Electric Power <sup>d</sup> .....	<b>3.24</b>	<b>3.32</b>	<b>3.45</b>	<b>3.47</b>	<b>3.90</b>	<b>4.24</b>	<b>3.81</b>	<b>4.06</b>	<b>4.59</b>	<b>4.82</b>	<b>5.21</b>	<b>5.34</b>	<i>5.55</i>	<i>5.61</i>	<i>5.35</i>
Total Demand.....	<b>19.17</b>	<b>19.56</b>	<b>20.23</b>	<b>20.79</b>	<b>21.24</b>	<b>22.20</b>	<b>22.60</b>	<b>22.73</b>	<b>22.24</b>	<b>22.39</b>	<b>23.46</b>	<b>22.30</b>	<i>23.17</i>	<i>23.23</i>	<i>23.23</i>

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

**Table A7. Annual U.S. Coal Supply and Demand: Base Case**

(Million Short Tons)

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Supply</b>															
Production.....	<b>1029.1</b>	<b>996.0</b>	<b>997.5</b>	<b>945.4</b>	<b>1033.5</b>	<b>1033.0</b>	<b>1063.9</b>	<b>1089.9</b>	<b>1117.5</b>	<b>1100.4</b>	<b>1073.6</b>	<b>1127.7</b>	<i>1093.8</i>	<i>1082.7</i>	<i>1097.3</i>
Appalachia.....	<b>489.0</b>	<b>457.8</b>	<b>456.6</b>	<b>409.7</b>	<b>445.4</b>	<b>434.9</b>	<b>451.9</b>	<b>467.8</b>	<b>460.4</b>	<b>425.6</b>	<b>419.4</b>	<b>432.8</b>	<i>396.8</i>	<i>389.3</i>	<i>389.3</i>
Interior.....	<b>205.8</b>	<b>195.4</b>	<b>195.7</b>	<b>167.2</b>	<b>179.9</b>	<b>168.5</b>	<b>172.8</b>	<b>170.9</b>	<b>168.4</b>	<b>162.5</b>	<b>143.5</b>	<b>147.0</b>	<i>146.2</i>	<i>133.6</i>	<i>127.6</i>
Western.....	<b>334.3</b>	<b>342.8</b>	<b>345.3</b>	<b>368.5</b>	<b>408.3</b>	<b>429.6</b>	<b>439.1</b>	<b>451.3</b>	<b>488.8</b>	<b>512.3</b>	<b>510.7</b>	<b>547.9</b>	<i>550.8</i>	<i>559.9</i>	<i>580.3</i>
Primary Stock Levels <sup>a</sup>															
Opening.....	<b>29.0</b>	<b>33.4</b>	<b>33.0</b>	<b>34.0</b>	<b>25.3</b>	<b>33.2</b>	<b>34.4</b>	<b>28.6</b>	<b>34.0</b>	<b>36.5</b>	<b>39.5</b>	<b>31.9</b>	<i>35.9</i>	<i>32.0</i>	<i>32.0</i>
Closing.....	<b>33.4</b>	<b>33.0</b>	<b>34.0</b>	<b>25.3</b>	<b>33.2</b>	<b>34.4</b>	<b>28.6</b>	<b>34.0</b>	<b>36.5</b>	<b>39.5</b>	<b>31.9</b>	<b>35.9</b>	<i>32.0</i>	<i>32.0</i>	<i>32.2</i>
Net Withdrawals.....	<b>-4.4</b>	<b>0.4</b>	<b>-1.0</b>	<b>8.7</b>	<b>-7.9</b>	<b>-1.2</b>	<b>5.8</b>	<b>-5.3</b>	<b>-2.6</b>	<b>-2.9</b>	<b>7.6</b>	<b>-4.0</b>	<i>3.9</i>	<i>S</i>	<i>-0.2</i>
Imports.....	<b>2.7</b>	<b>3.4</b>	<b>3.8</b>	<b>7.3</b>	<b>7.6</b>	<b>7.2</b>	<b>7.1</b>	<b>7.5</b>	<b>8.7</b>	<b>9.1</b>	<b>12.5</b>	<b>19.8</b>	<i>16.9</i>	<i>17.8</i>	<i>17.9</i>
Exports.....	<b>105.8</b>	<b>109.0</b>	<b>102.5</b>	<b>74.5</b>	<b>71.4</b>	<b>88.5</b>	<b>90.5</b>	<b>83.5</b>	<b>78.0</b>	<b>58.5</b>	<b>58.5</b>	<b>48.7</b>	<i>39.6</i>	<i>41.7</i>	<i>38.8</i>
Total Net Domestic Supply.....	<b>921.6</b>	<b>890.9</b>	<b>897.8</b>	<b>886.9</b>	<b>961.8</b>	<b>950.4</b>	<b>986.3</b>	<b>1008.5</b>	<b>1045.7</b>	<b>1048.1</b>	<b>1035.2</b>	<b>1094.8</b>	<i>1075.0</i>	<i>1058.8</i>	<i>1076.1</i>
Secondary Stock Levels <sup>b</sup>															
Opening.....	<b>147.1</b>	<b>170.1</b>	<b>170.2</b>	<b>166.8</b>	<b>123.1</b>	<b>139.6</b>	<b>138.0</b>	<b>126.0</b>	<b>108.8</b>	<b>131.6</b>	<b>149.1</b>	<b>108.5</b>	<i>146.0</i>	<i>148.9</i>	<i>158.1</i>
Closing.....	<b>170.1</b>	<b>170.2</b>	<b>166.8</b>	<b>123.1</b>	<b>139.6</b>	<b>138.0</b>	<b>126.0</b>	<b>108.8</b>	<b>131.6</b>	<b>149.1</b>	<b>108.5</b>	<b>146.0</b>	<i>148.9</i>	<i>158.1</i>	<i>160.7</i>
Net Withdrawals.....	<b>-23.0</b>	<b>-0.1</b>	<b>3.3</b>	<b>43.8</b>	<b>-16.5</b>	<b>1.5</b>	<b>12.0</b>	<b>17.2</b>	<b>-22.8</b>	<b>-17.5</b>	<b>40.7</b>	<b>-37.6</b>	<i>-2.9</i>	<i>-9.2</i>	<i>-2.6</i>
Waste Coal Supplied to IPPs <sup>c</sup> .....	<b>0.0</b>	<b>0.0</b>	<b>6.0</b>	<b>6.4</b>	<b>7.9</b>	<b>8.5</b>	<b>8.8</b>	<b>8.1</b>	<b>9.0</b>	<b>9.6</b>	<b>10.1</b>	<b>10.6</b>	<i>11.1</i>	<i>11.6</i>	<i>14.8</i>
Total Supply.....	<b>898.5</b>	<b>890.8</b>	<b>907.2</b>	<b>937.1</b>	<b>953.2</b>	<b>960.4</b>	<b>1007.1</b>	<b>1033.9</b>	<b>1031.8</b>	<b>1040.2</b>	<b>1086.0</b>	<b>1067.9</b>	<i>1083.2</i>	<i>1061.2</i>	<i>1088.3</i>
<b>Demand</b>															
Coke Plants.....	<b>38.9</b>	<b>33.9</b>	<b>32.4</b>	<b>31.3</b>	<b>31.7</b>	<b>33.0</b>	<b>31.7</b>	<b>30.2</b>	<b>28.2</b>	<b>28.1</b>	<b>28.9</b>	<b>26.1</b>	<i>22.5</i>	<i>25.2</i>	<i>23.2</i>
Electric Power Sector <sup>d</sup> .....	<b>782.6</b>	<b>783.9</b>	<b>795.1</b>	<b>831.6</b>	<b>838.4</b>	<b>850.2</b>	<b>896.9</b>	<b>921.4</b>	<b>936.6</b>	<b>940.9</b>	<b>985.8</b>	<b>964.5</b>	<i>975.4</i>	<i>989.5</i>	<i>1004.8</i>
Retail and General Industry.....	<b>83.1</b>	<b>81.5</b>	<b>80.2</b>	<b>81.1</b>	<b>81.2</b>	<b>78.9</b>	<b>77.7</b>	<b>78.0</b>	<b>72.3</b>	<b>69.6</b>	<b>69.3</b>	<b>69.6</b>	<i>67.4</i>	<i>61.3</i>	<i>60.3</i>
Residential and Commercial.....	<b>6.7</b>	<b>6.1</b>	<b>6.2</b>	<b>6.2</b>	<b>6.0</b>	<b>5.8</b>	<b>6.0</b>	<b>6.5</b>	<b>4.9</b>	<b>4.9</b>	<b>4.1</b>	<b>4.4</b>	<i>4.4</i>	<i>4.2</i>	<i>4.0</i>
Industrial.....	<b>76.3</b>	<b>75.4</b>	<b>74.0</b>	<b>74.9</b>	<b>75.2</b>	<b>73.1</b>	<b>71.7</b>	<b>71.5</b>	<b>67.4</b>	<b>64.7</b>	<b>65.2</b>	<b>65.3</b>	<i>63.1</i>	<i>57.1</i>	<i>56.3</i>
CHP <sup>e</sup> .....	<b>27.8</b>	<b>27.0</b>	<b>28.2</b>	<b>28.9</b>	<b>29.7</b>	<b>29.4</b>	<b>29.4</b>	<b>29.9</b>	<b>28.6</b>	<b>27.8</b>	<b>28.0</b>	<b>25.8</b>	<i>25.6</i>	<i>25.2</i>	<i>26.6</i>
Non-CHP.....	<b>48.5</b>	<b>48.4</b>	<b>45.8</b>	<b>46.0</b>	<b>45.5</b>	<b>43.7</b>	<b>42.3</b>	<b>41.7</b>	<b>38.9</b>	<b>37.0</b>	<b>37.2</b>	<b>39.4</b>	<i>37.5</i>	<i>31.8</i>	<i>29.7</i>
Total Demand <sup>f</sup> .....	<b>904.5</b>	<b>899.2</b>	<b>907.7</b>	<b>944.1</b>	<b>951.3</b>	<b>962.1</b>	<b>1006.3</b>	<b>1029.5</b>	<b>1037.1</b>	<b>1038.6</b>	<b>1084.1</b>	<b>1060.2</b>	<i>1065.4</i>	<i>1076.1</i>	<i>1088.3</i>
Discrepancy <sup>g</sup> .....	<b>-6.0</b>	<b>-8.5</b>	<b>-0.5</b>	<b>-7.0</b>	<b>1.9</b>	<b>-1.7</b>	<b>0.8</b>	<b>4.3</b>	<b>-5.3</b>	<b>1.6</b>	<b>1.9</b>	<b>7.7</b>	<i>17.8</i>	<i>-14.8</i>	<i>0.0</i>

<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, Energy Information Administration (EIA). Quarterly coal consumption estimates for 2001 and projections for 2002 and 2003 are based on (1) estimated consumption by utility power plants sold to nonutility generators during 1999, and (2) annual coal-fired generation at nonutilities from Form EIA-867 (Annual Nonutility Power Producer Report).

<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. 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: Energy Information Administration: latest data available from EIA databases supporting the following reports: Quarterly Coal Report, DOE/EIA-0121, and Electric Power Monthly, DOE/EIA-0226.

Projections: Energy Information Administration, 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 Kilowatt-hours)

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Net Electricity Generation</b>															
Electric Power Sector <sup>a</sup>															
Coal .....	<b>1572.1</b>	<b>1568.8</b>	<b>1597.7</b>	<b>1665.5</b>	<b>1666.3</b>	<b>1686.1</b>	<b>1772.0</b>	<b>1820.8</b>	<b>1850.2</b>	<b>1858.6</b>	<b>1943.1</b>	<b>1882.8</b>	<i>1903.4</i>	<i>1930.9</i>	<i>1960.1</i>
Petroleum .....	<b>118.9</b>	<b>112.8</b>	<b>92.2</b>	<b>105.4</b>	<b>98.7</b>	<b>68.1</b>	<b>74.8</b>	<b>86.5</b>	<b>122.2</b>	<b>111.5</b>	<b>105.2</b>	<b>119.1</b>	<i>83.6</i>	<i>108.2</i>	<i>91.6</i>
Natural Gas .....	<b>309.5</b>	<b>317.8</b>	<b>334.3</b>	<b>342.2</b>	<b>385.7</b>	<b>419.2</b>	<b>378.8</b>	<b>399.6</b>	<b>449.3</b>	<b>473.0</b>	<b>518.0</b>	<b>554.9</b>	<i>600.5</i>	<i>610.8</i>	<i>582.7</i>
Nuclear .....	<b>576.9</b>	<b>612.6</b>	<b>618.8</b>	<b>610.3</b>	<b>640.4</b>	<b>673.4</b>	<b>674.7</b>	<b>628.6</b>	<b>673.7</b>	<b>728.3</b>	<b>753.9</b>	<b>768.8</b>	<i>780.1</i>	<i>781.1</i>	<i>784.2</i>
Hydroelectric.....	<b>286.2</b>	<b>281.5</b>	<b>245.8</b>	<b>273.5</b>	<b>250.6</b>	<b>302.7</b>	<b>338.1</b>	<b>346.6</b>	<b>313.4</b>	<b>308.6</b>	<b>265.8</b>	<b>204.9</b>	<i>250.8</i>	<i>278.7</i>	<i>282.1</i>
Geothermal and Other <sup>b</sup> .....	<b>36.5</b>	<b>40.8</b>	<b>44.3</b>	<b>45.9</b>	<b>45.8</b>	<b>43.7</b>	<b>44.7</b>	<b>46.0</b>	<b>47.3</b>	<b>48.7</b>	<b>50.2</b>	<b>49.4</b>	<i>55.0</i>	<i>43.8</i>	<i>41.1</i>
Subtotal .....	<b>2900.1</b>	<b>2934.2</b>	<b>2933.1</b>	<b>3042.8</b>	<b>3087.5</b>	<b>3193.2</b>	<b>3283.0</b>	<b>3328.1</b>	<b>3456.1</b>	<b>3528.7</b>	<b>3636.2</b>	<b>3580.0</b>	<i>3673.4</i>	<i>3753.5</i>	<i>3741.7</i>
Other Sectors <sup>c</sup> .....	<b>136.7</b>	<b>138.2</b>	<b>149.5</b>	<b>153.3</b>	<b>158.8</b>	<b>159.3</b>	<b>160.0</b>	<b>162.8</b>	<b>162.9</b>	<b>164.8</b>	<b>164.6</b>	<b>156.6</b>	<i>162.4</i>	<i>158.8</i>	<i>165.1</i>
Total .....	<b>3036.7</b>	<b>3072.5</b>	<b>3082.6</b>	<b>3196.1</b>	<b>3246.3</b>	<b>3352.5</b>	<b>3443.0</b>	<b>3490.9</b>	<b>3619.0</b>	<b>3693.5</b>	<b>3800.8</b>	<b>3736.6</b>	<i>3835.7</i>	<i>3912.3</i>	<i>3906.8</i>
Net Imports <sup>d</sup> .....	<b>2.3</b>	<b>19.6</b>	<b>25.4</b>	<b>27.8</b>	<b>44.8</b>	<b>39.2</b>	<b>40.2</b>	<b>34.1</b>	<b>26.3</b>	<b>28.9</b>	<b>34.0</b>	<b>20.3</b>	<i>21.1</i>	<i>31.4</i>	<i>49.2</i>
Total Supply .....	<b>3039.0</b>	<b>3092.1</b>	<b>3108.0</b>	<b>3223.9</b>	<b>3291.1</b>	<b>3391.7</b>	<b>3483.2</b>	<b>3525.0</b>	<b>3645.3</b>	<b>3722.4</b>	<b>3834.8</b>	<b>3756.9</b>	<i>3856.9</i>	<i>3943.8</i>	<i>3956.0</i>
Losses and Unaccounted for <sup>e</sup> .....	<b>211.9</b>	<b>212.0</b>	<b>222.4</b>	<b>234.9</b>	<b>222.4</b>	<b>234.4</b>	<b>236.2</b>	<b>230.9</b>	<b>220.1</b>	<b>227.8</b>	<b>230.0</b>	<b>181.8</b>	<i>141.1</i>	<i>166.7</i>	<i>163.8</i>
<b>Demand</b>															
Retail Sales <sup>f</sup>															
Residential.....	<b>924.0</b>	<b>955.4</b>	<b>935.9</b>	<b>994.8</b>	<b>1008.5</b>	<b>1042.5</b>	<b>1082.5</b>	<b>1075.9</b>	<b>1130.1</b>	<b>1144.9</b>	<b>1192.4</b>	<b>1202.6</b>	<i>1268.2</i>	<i>1298.8</i>	<i>1286.8</i>
Commercial .....	<b>751.0</b>	<b>765.7</b>	<b>761.3</b>	<b>794.6</b>	<b>820.3</b>	<b>862.7</b>	<b>887.4</b>	<b>928.6</b>	<b>979.4</b>	<b>1002.0</b>	<b>1055.2</b>	<b>1089.2</b>	<i>1118.1</i>	<i>1125.2</i>	<i>1133.0</i>
Industrial.....	<b>945.5</b>	<b>946.6</b>	<b>972.7</b>	<b>977.2</b>	<b>1008.0</b>	<b>1012.7</b>	<b>1033.6</b>	<b>1038.2</b>	<b>1051.2</b>	<b>1058.2</b>	<b>1064.2</b>	<b>964.2</b>	<i>993.8</i>	<i>989.2</i>	<i>994.1</i>
Other .....	<b>92.0</b>	<b>94.3</b>	<b>93.4</b>	<b>94.9</b>	<b>97.8</b>	<b>95.4</b>	<b>97.5</b>	<b>102.9</b>	<b>103.5</b>	<b>107.0</b>	<b>109.5</b>	<b>113.8</b>	<i>105.1</i>	<i>110.9</i>	<i>112.1</i>
Subtotal .....	<b>2712.6</b>	<b>2762.0</b>	<b>2763.4</b>	<b>2861.5</b>	<b>2934.6</b>	<b>3013.3</b>	<b>3101.1</b>	<b>3145.6</b>	<b>3264.2</b>	<b>3312.1</b>	<b>3421.4</b>	<b>3369.8</b>	<i>3485.2</i>	<i>3524.0</i>	<i>3526.0</i>
Other Use/Sales <sup>g</sup> .....	<b>114.6</b>	<b>118.1</b>	<b>122.3</b>	<b>127.5</b>	<b>134.1</b>	<b>144.1</b>	<b>145.9</b>	<b>148.4</b>	<b>160.9</b>	<b>182.5</b>	<b>183.4</b>	<b>205.4</b>	<i>230.6</i>	<i>253.1</i>	<i>266.2</i>
Total Demand .....	<b>2827.1</b>	<b>2880.1</b>	<b>2885.6</b>	<b>2989.0</b>	<b>3068.7</b>	<b>3157.3</b>	<b>3247.0</b>	<b>3294.0</b>	<b>3425.1</b>	<b>3494.6</b>	<b>3604.8</b>	<b>3575.2</b>	<i>3715.8</i>	<i>3777.1</i>	<i>3792.2</i>

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

<sup>b</sup>"Other" includes generation from other gaseous fuels, 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>Data for 2001 are estimates.

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

<sup>f</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 2001 are estimated.

<sup>g</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 2001 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.

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