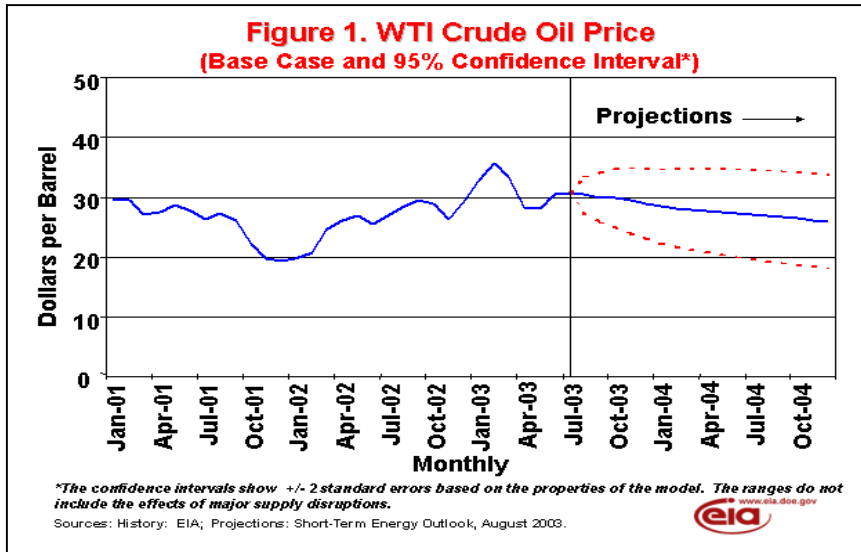


Short-Term Energy Outlook

August 2003



Overview

World Oil Markets. Average crude oil prices for July were little changed from June. The West Texas Intermediate (WTI) spot average for July was \$30.75 per barrel compared to \$30.66 in June. EIA's *Outlook* is for prices to remain firm through the rest of 2003, or at least until autumn, when OECD oil inventories may rebuild above observed 5-year lows. Once inventories have been rebuilt, WTI oil prices may slide gradually to \$26 per barrel during 2004, as Iraqi oil exports

return to near pre-war levels ([Figure 1](#)).

U.S. Natural Gas Markets. At the end of July, working gas in storage is estimated (based on data through July 25) to have been about 17 percent below end-of-July 2002 levels and about 9 percent below the previous 5-year average. This would be a solid gain in storage levels and bolsters the chance that natural gas inventories may return to normal by the start of the heating season. The average wellhead price of natural gas for the third quarter is now projected to be \$4.63 per thousand cubic feet, about 10 cents below the average expected for the July to September period in last month's report. A good chance exists for spot prices for natural gas at the Henry Hub to remain below \$5.00 per million Btu for the remainder of the summer.

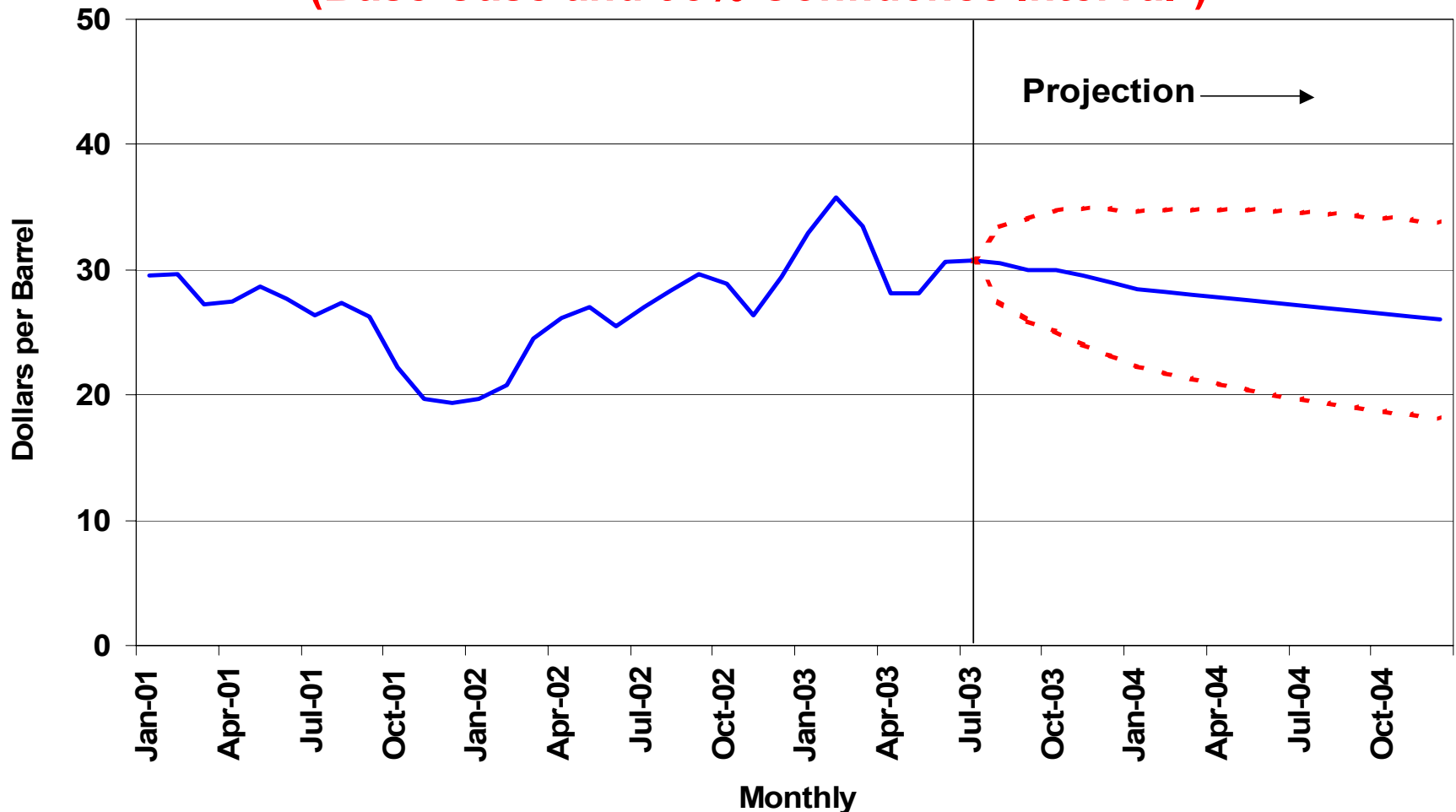
Summer Motor Gasoline Outlook. Motor gasoline prices have been fairly stable this past month, moving up or down by just a few cents per gallon from week to week. This pattern sharply contrasts with the price behavior exhibited earlier in the driving season, when pump prices fell for 10 out of 11 weeks following the March 17 record price (for regular gasoline) of nearly \$1.73 per gallon. By the end of July, gasoline inventories remained just below the 5-year min/max range. Pump prices, which have moved up some lately, are expected to remain near \$1.54 over the next two months, then begin to decline as the driving season ends.

Details

World Oil Markets

International Oil Supply. In July, OPEC 10 oil production (excluding Iraq) stabilized at an estimated 25.6 million barrels per day, 0.1 million barrels per day below June levels and only 0.2 million barrels per day

**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, August 2003.

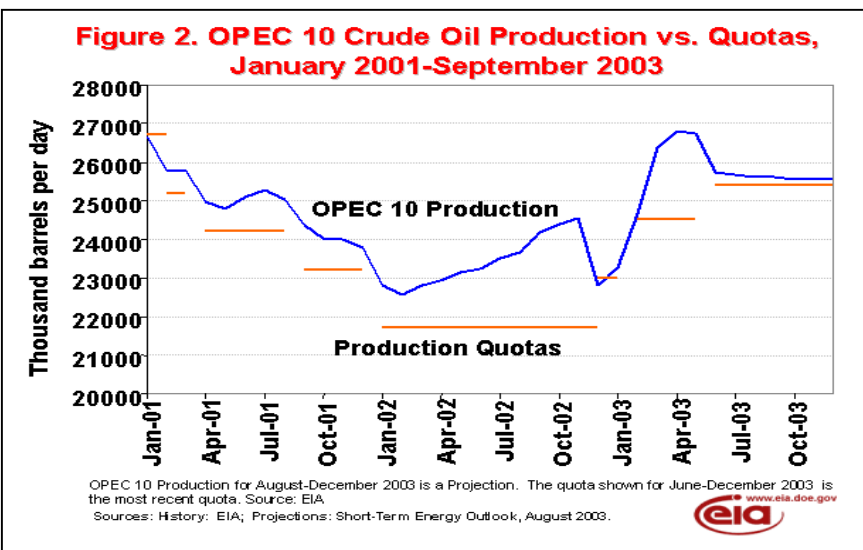


above the OPEC production targets that took effect June 1 (Figure 2). OPEC kept its production targets unchanged at its July 31 meeting, noting that oil prices were within OPEC's target range and that the market was stable and well supplied.

Non-OPEC production is expected to grow by 1-1.3 million barrels per day in 2003 and 2004, exceeding the 0.9 million barrels per day growth seen in 2002. Most of this growth is expected to come from Russia and the Caspian Sea region, with supplies from these countries expected to increase by over 700,000 barrels per day in 2003.

International Oil Demand. World oil demand is projected to grow more than 1 million barrels per day in 2003 (Figure 3). About one-eighth of this growth is projected to come from the U.S., with China and other non-OECD countries projected to provide an additional 0.5 million barrels per day of total demand growth.

Crude Oil Prices. Average crude oil prices for July were little changed from June averages. In July, the West Texas Intermediate (WTI) spot average price was \$30.75 per barrel compared to \$30.66 in June. EIA's *Outlook* projects that prices will remain firm throughout the rest of 2003, even with the expected large



increases in non-OPEC oil supplies, largely because of the tight OECD commercial inventory situation (Figure 4). Until these inventories are rebuilt above observed 5-year lows, which is not expected to occur until autumn, WTI oil futures prices should remain near current levels, then gradually slide to \$26 per barrel during 2004, as Iraqi oil exports return to near pre-war levels next year.

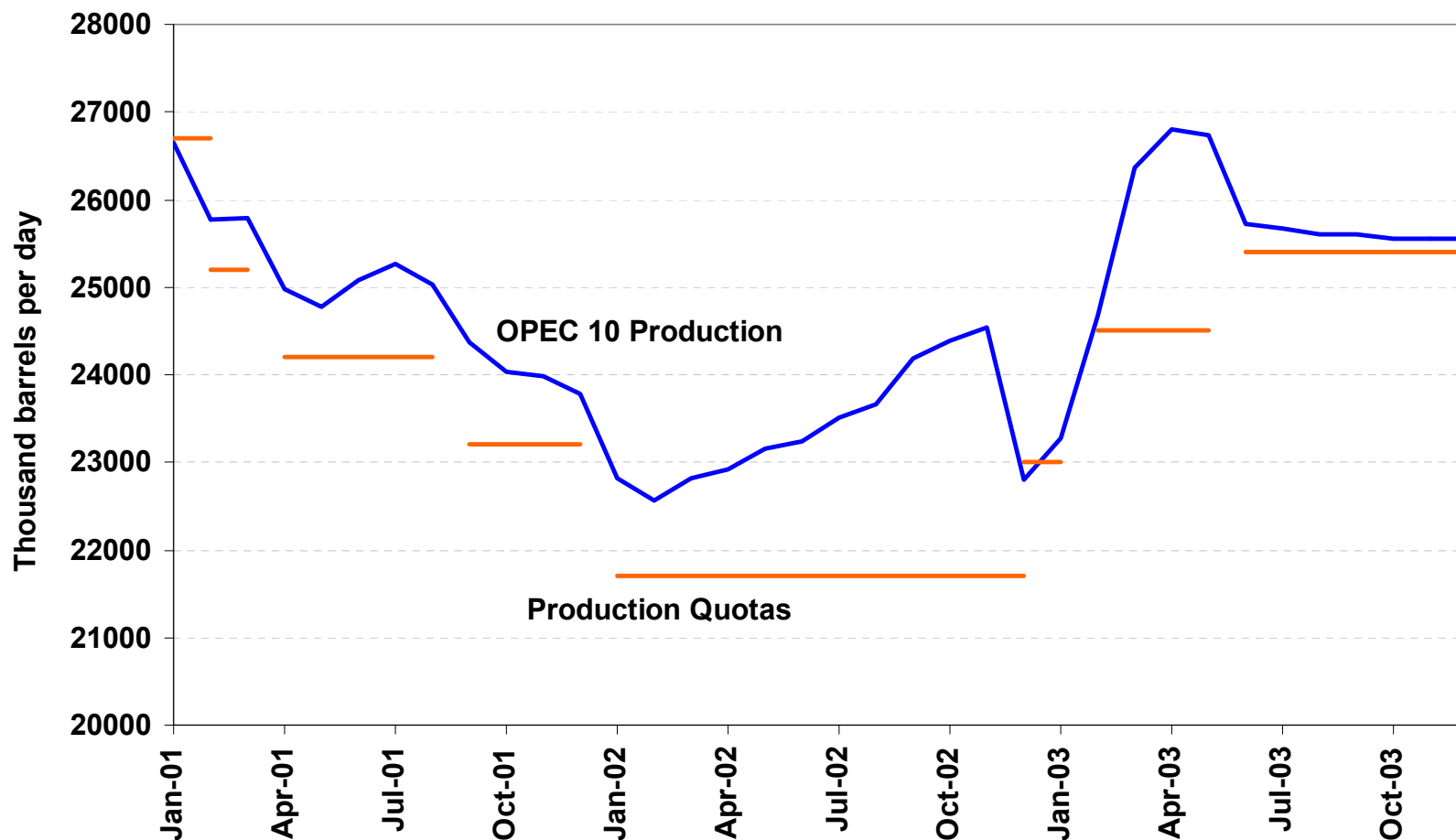
If Iraqi exports do increase at the target rates set by the Iraqi Ministry of Oil, there would be downward pressure on

prices. However, OPEC continues to monitor the situation in Iraq and could reduce its own production at its September 24th meeting. In short, prices are expected to fall only if OPEC fails to cut back its production to accommodate any Iraqi increases, which may not happen unless OPEC members become more interested in obtaining higher quota allocations than in maintaining high crude oil prices. EIA's low price case, where WTI prices fall to between \$15-\$20 per barrel in 2004, also depends on continued high OPEC production through next year.

U. S. Energy Prices

Motor Gasoline: Motor gasoline prices (U.S average regular, self service) have been fairly stable over the past month, moving up or down by just a few cents per gallon from week to week. This pattern contrasts sharply with the price behavior exhibited earlier in the driving season, when pump prices fell for 10 out of 11 weeks after hitting a record price of nearly \$1.73 per gallon on March 17. By the end of July, gasoline inventories were just below the 5-year min/max range (Figure 5). The latest weekly survey by EIA puts the average regular price at \$1.54 per gallon. Pump prices, which have moved up some lately, are expected to remain close to current levels over the next two months, then begin to decline as the driving seasons ends

Figure 2. OPEC 10 Crude Oil Production vs. Quotas, January 2001-September 2003

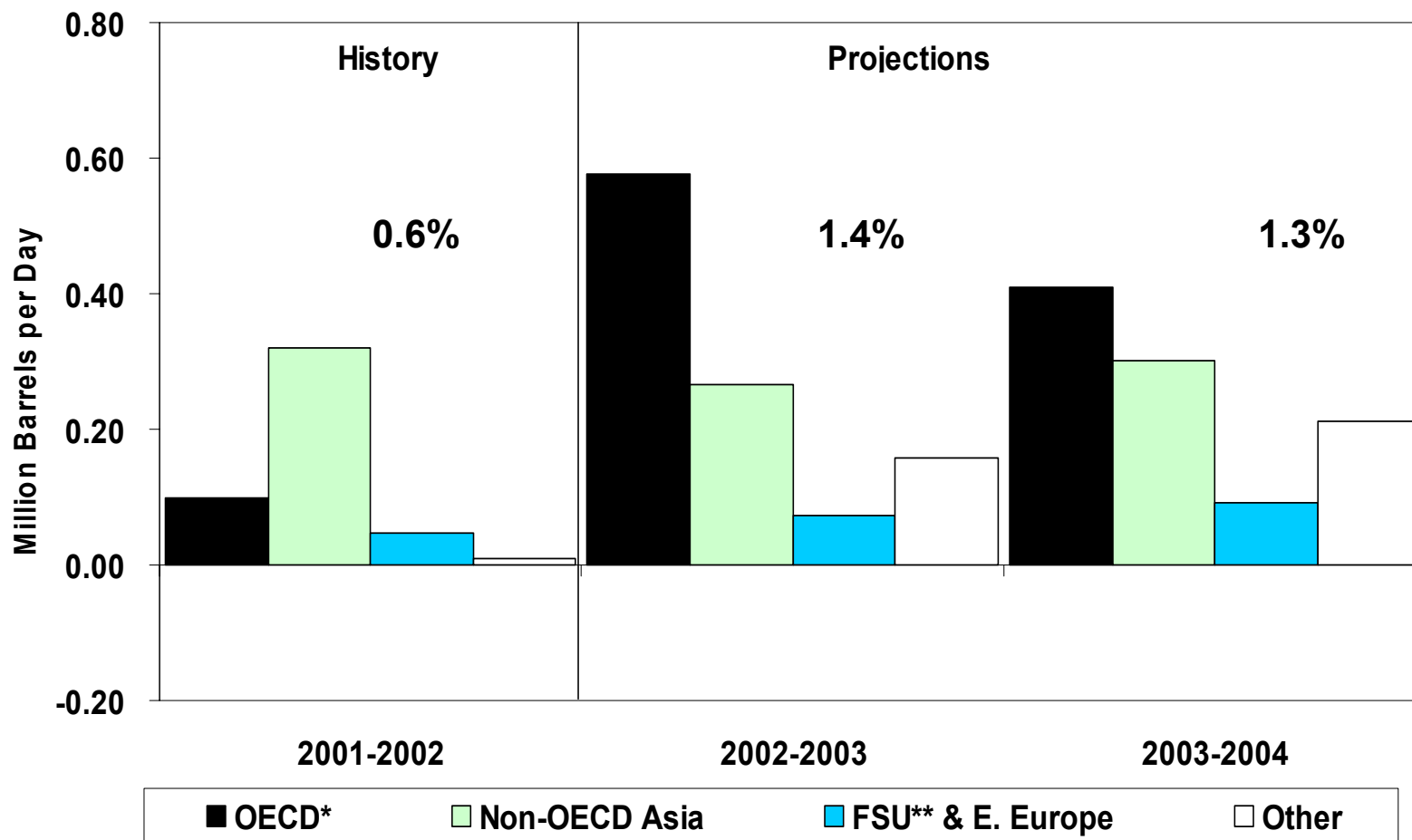


OPEC 10 Production for August-December 2003 is a Projection. The quota shown for June-December 2003 is the most recent quota. Source: EIA

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



Figure 3. World Oil Demand Growth (Change from Year Ago)



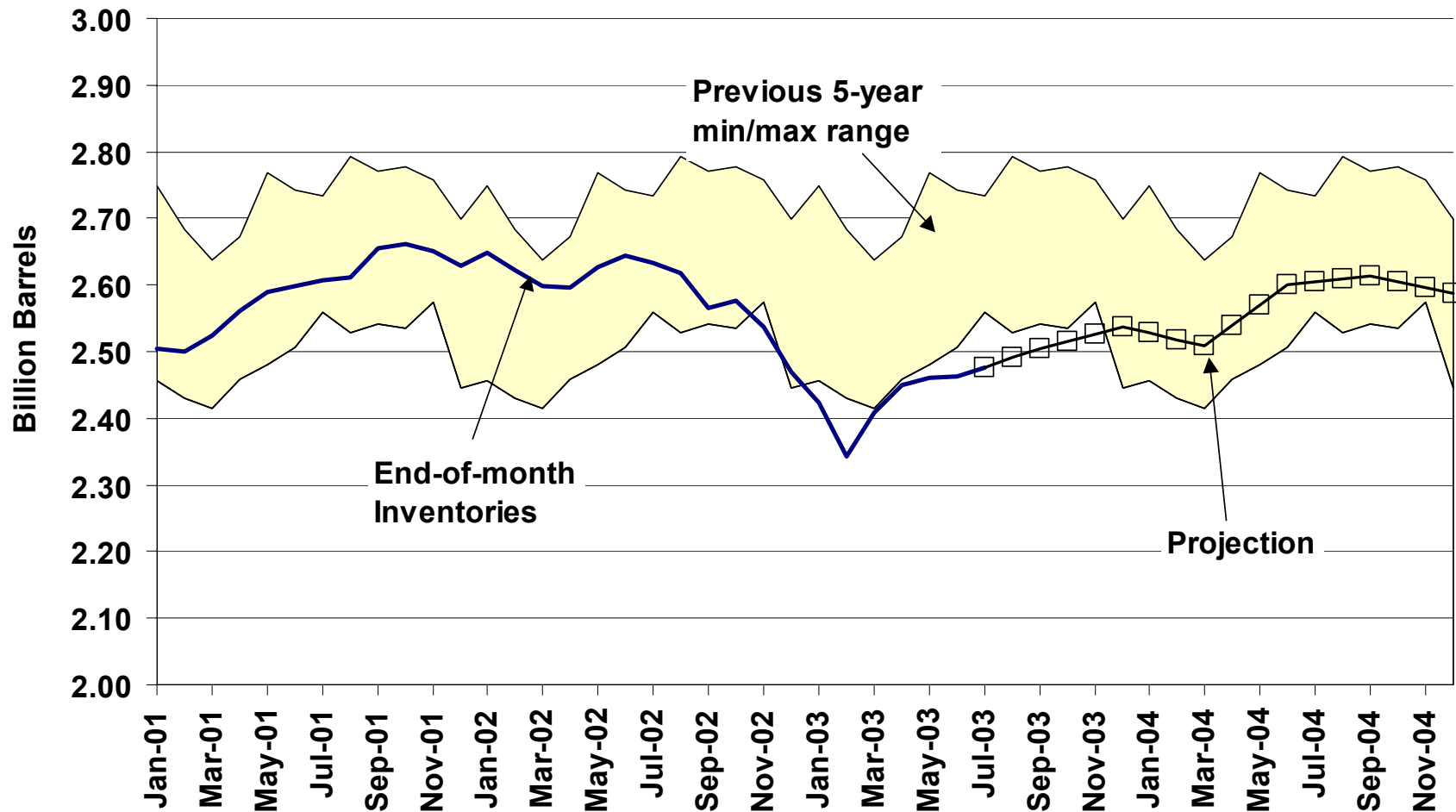
* Note: OECD now defined to include the Czech Republic, Hungary, Mexico, Poland and South Korea in EIA's statistics.

** FSU = Former Soviet Union

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



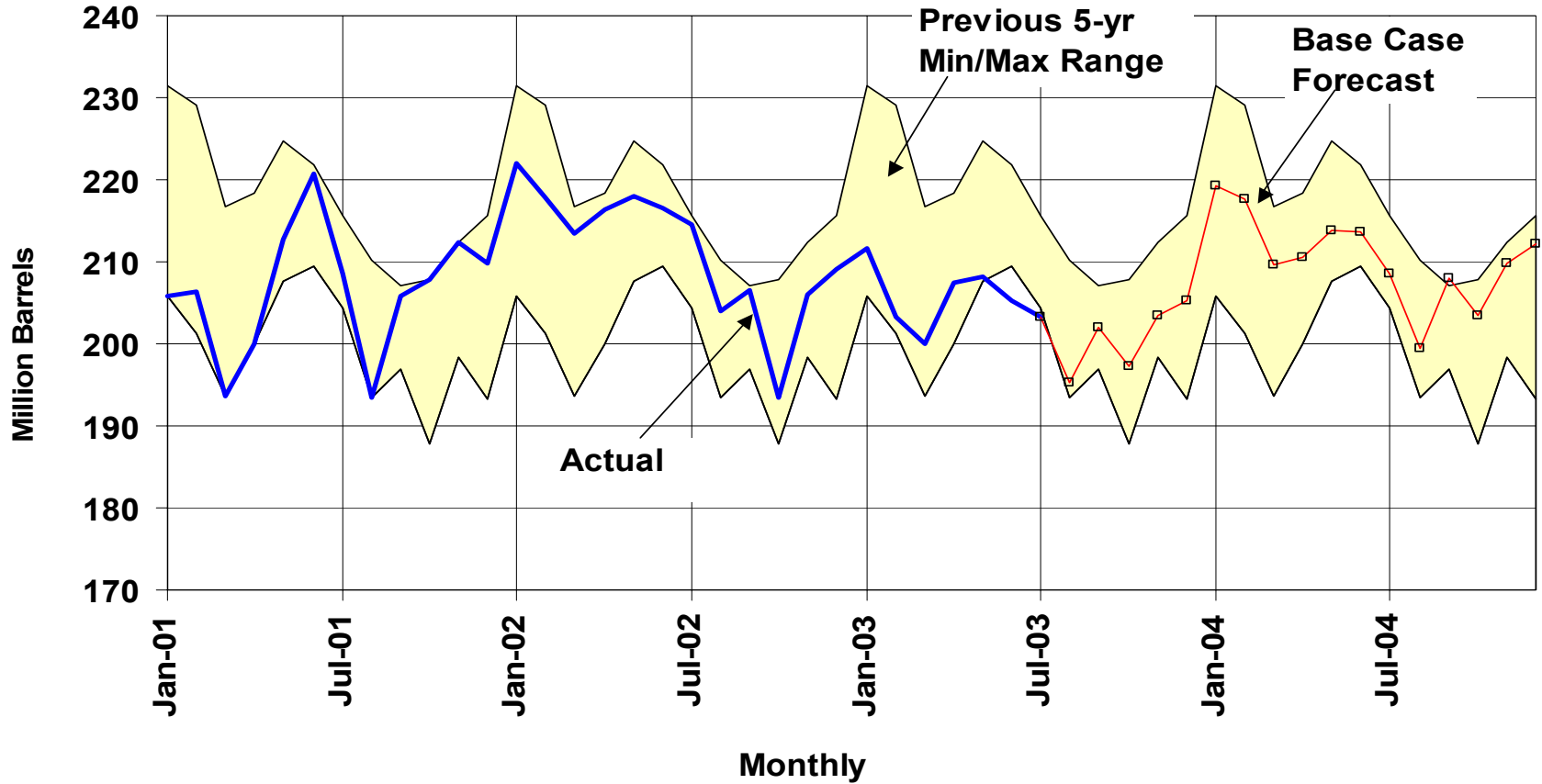
Figure 4. OECD Commercial Oil Stocks



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



Figure 5. U.S. Gasoline Inventories



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



[\(Figure 6\)](#). In 2004, the annual pump price is projected to average \$1.43 per gallon (down nearly 10 cents per gallon from the projected 2003 average), as crude oil prices decline and refiner and retail margins ease slightly.

The current price of regular motor gasoline in California of \$1.71 per gallon is about 20 cents per gallon higher than the national average price of \$1.52 per gallon. The price difference between California and the nation as a whole has narrowed considerably since April, when the disparity reached 45-50 cents per gallon. In the beginning of the driving season, unexpected refinery shutdowns and the phase-out of MTBE, which is being replaced by ethanol in California gasoline, created supply problems and raised prices state-wide. The transition from MTBE to ethanol created two essentially incompatible distribution systems, which exacerbate the tight gasoline market. However, recent market supply adjustments and improved economies of scale in the refining and blending process have narrowed the price differences.

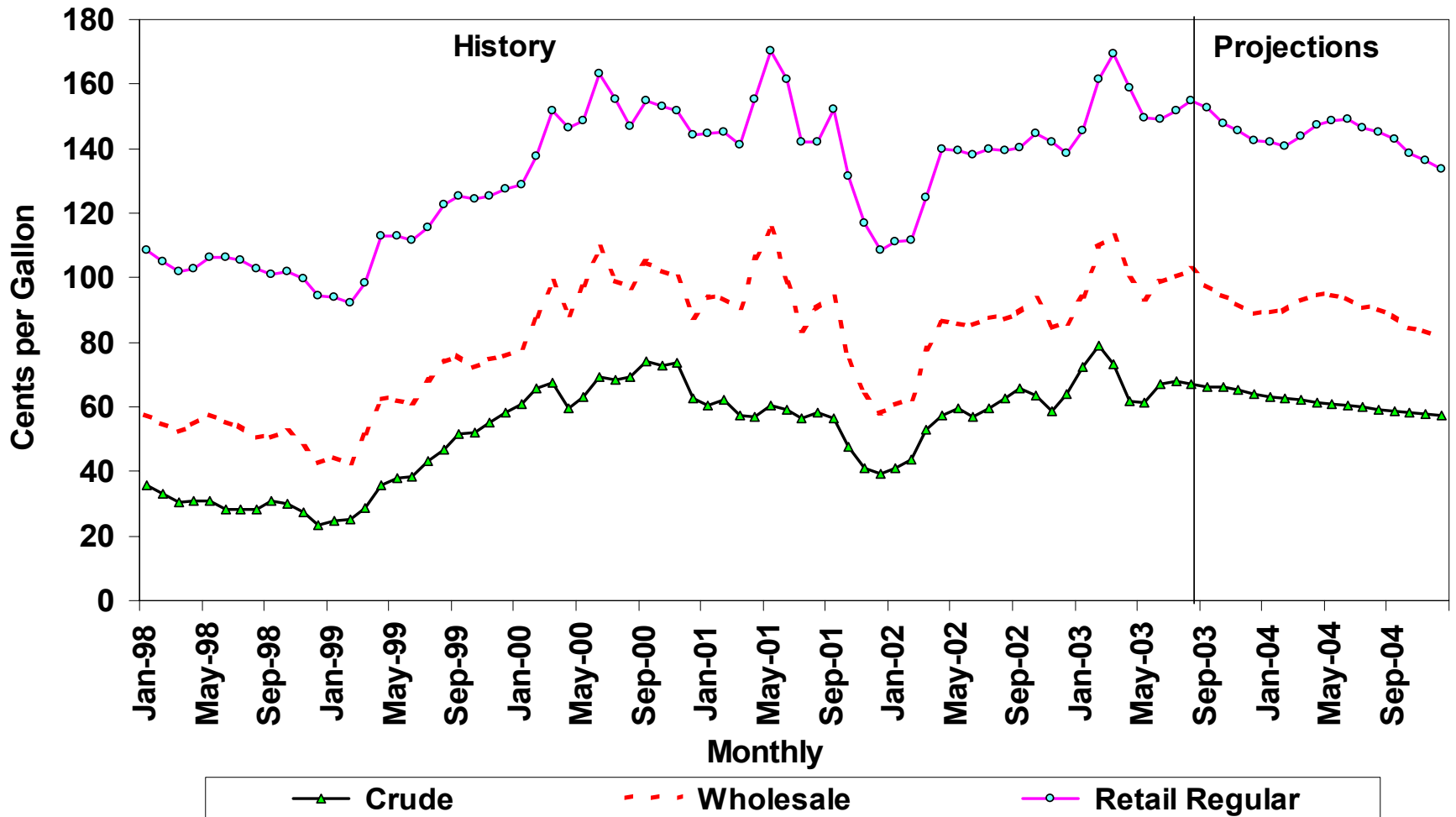
Distillate Fuel Oil (Diesel Fuel and Heating Oil): Diesel fuel oil prices, like motor gasoline prices, have also stabilized over the past month. Prices will likely increase as the heating season approaches, but only by a modest amount. Residential heating oil prices, on the other hand, will be affected by seasonal demand for heating oil. Prices for this fuel should rise at the end of the summer, averaging about \$1.29 per gallon during the 2003/2004 winter, comparable to the \$1.31 price seen last winter [\(Figure 7\)](#). At the end of July, distillate fuel oil inventories reached 119 million barrels, a level slightly over the lower band (117 million barrels) of the 5-year min/max range [\(Figure 8\)](#).

Natural Gas: Two months of relatively mild weather across much of the country has depressed natural gas spot prices. As cooling demand declined, thus reducing the need for natural gas for electricity generation, historically high levels of natural gas were injected into underground storage facilities. Cash prices at the Henry Hub, which had hovered considerably above \$5 per million Btu on a monthly basis since the beginning of the year, fell below \$4.70 per million Btu during the last week in July [\(Figure 9\)](#). Only two months ago that price topped \$6 per million Btu.

For the end of July, working gas in storage is estimated (based on data through July 25) to have been about 17 percent below end-of-July 2002 levels and about 9 percent below the previous 5-year average. The chance of reaching a normal level by the beginning of the heating season now looks good. One factor that could slow down progress toward reaching that goal would be a hot remainder of the summer, particularly in the Western and South Central regions, where natural gas is heavily used in the electric utility sector to meet cooling demand. In this case, 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. However, assuming normal weather and taking into account the recent accelerated buildup in storage, spot prices in the \$5.00-\$5.60 per million Btu range are not expected until December or January.

For all of 2003, wellhead prices are projected to average about \$2.00 per thousand cubic feet above the 2002 annual average, or just under \$5.00 per thousand cubic feet. For 2004, average annual wellhead prices are projected to ease by about 16 percent, as supplies are expected to remain sufficiently strong to return storage levels to within normal bounds, assuming normal weather. Although we have revised our wellhead price forecast downward from the previous *Outlook* due to the recent high volumes of injections, it should be noted that a prolonged period of colder-than-normal weather in October and especially November could tighten the market enough to send prices above \$6.00 per thousand cubic feet.

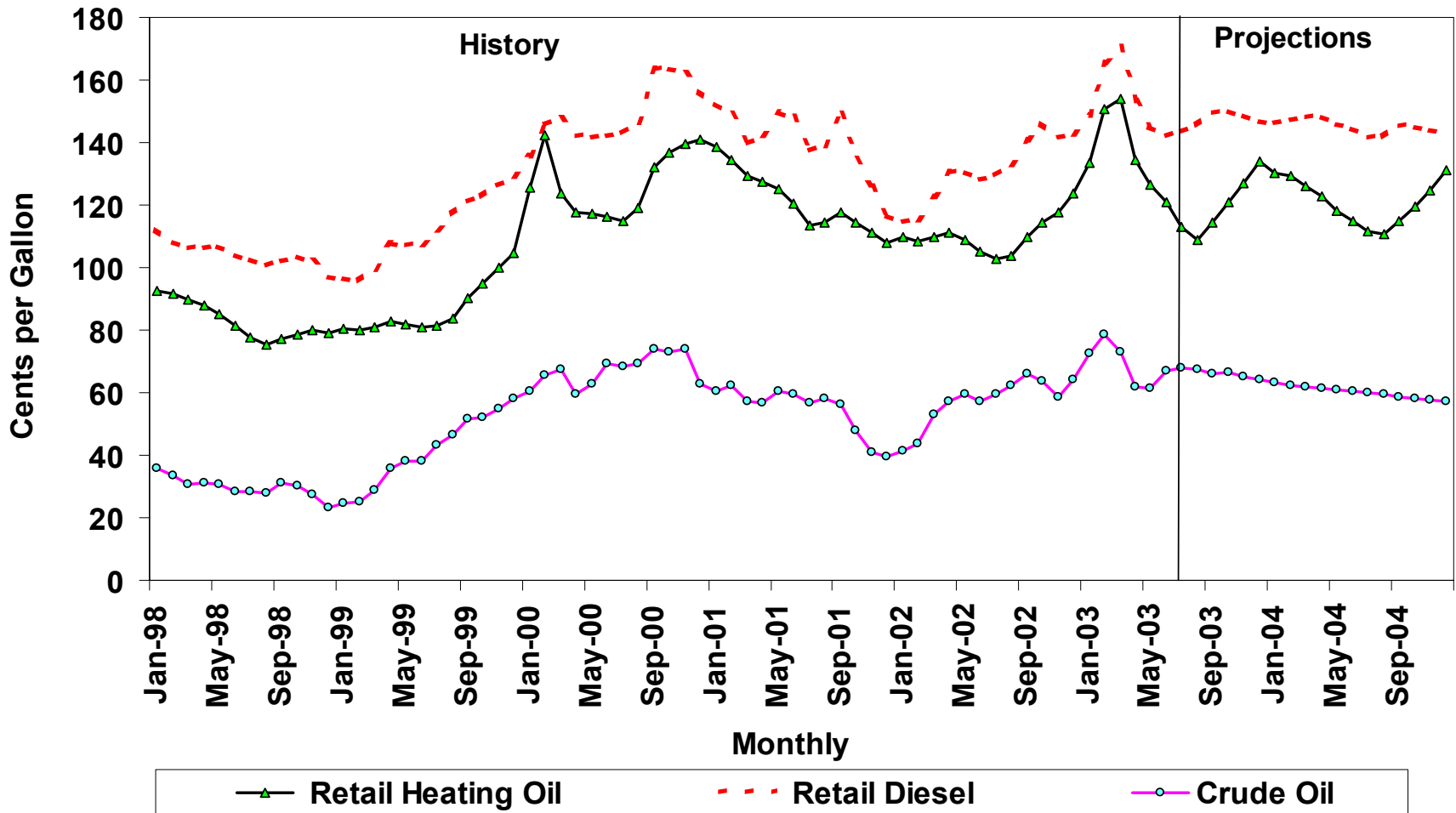
Figure 6. Gasoline Prices and Crude Oil Costs



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



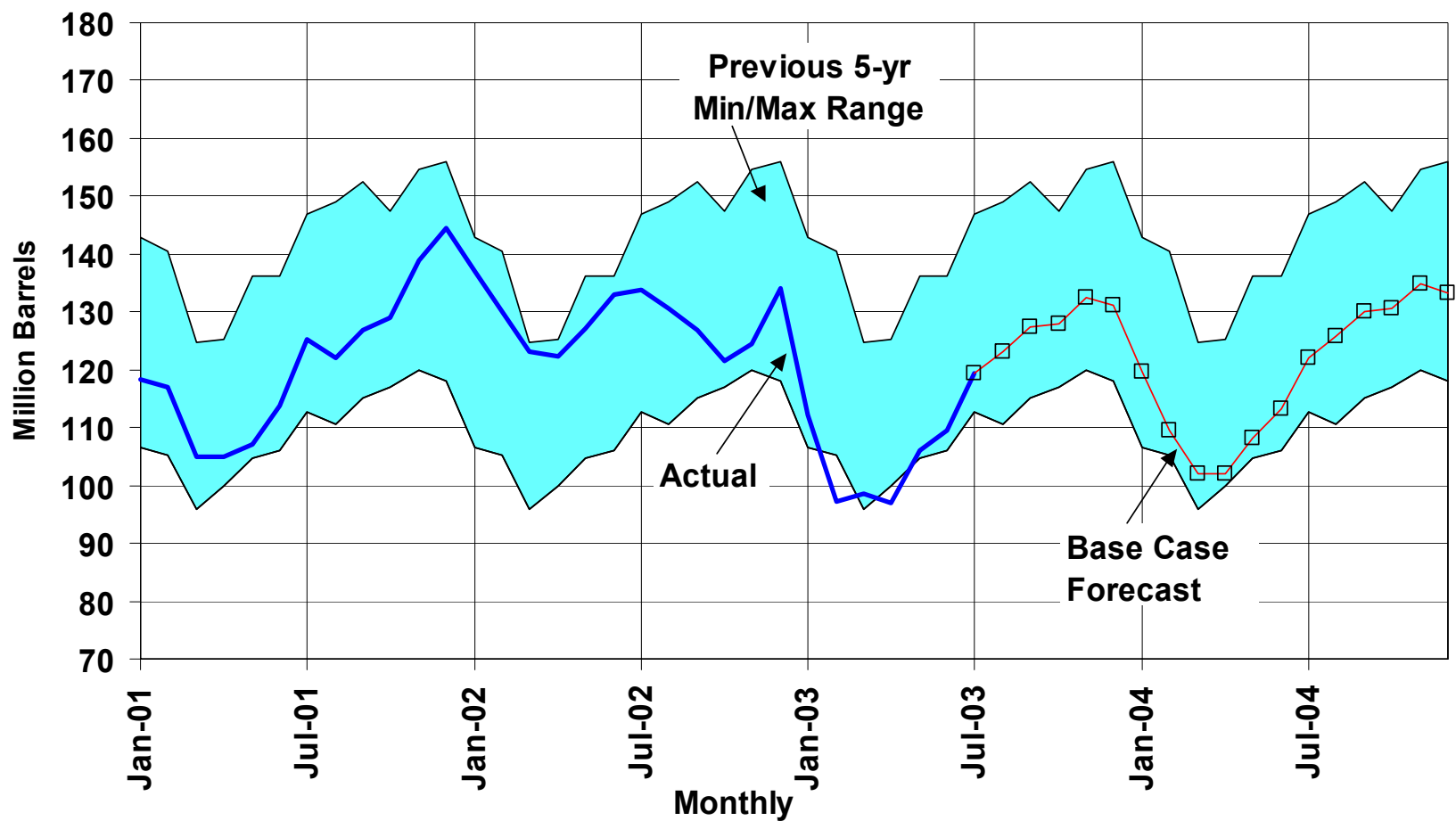
Figure 7. Distillate Fuel Prices



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



Figure 8. Distillate Fuel Inventories

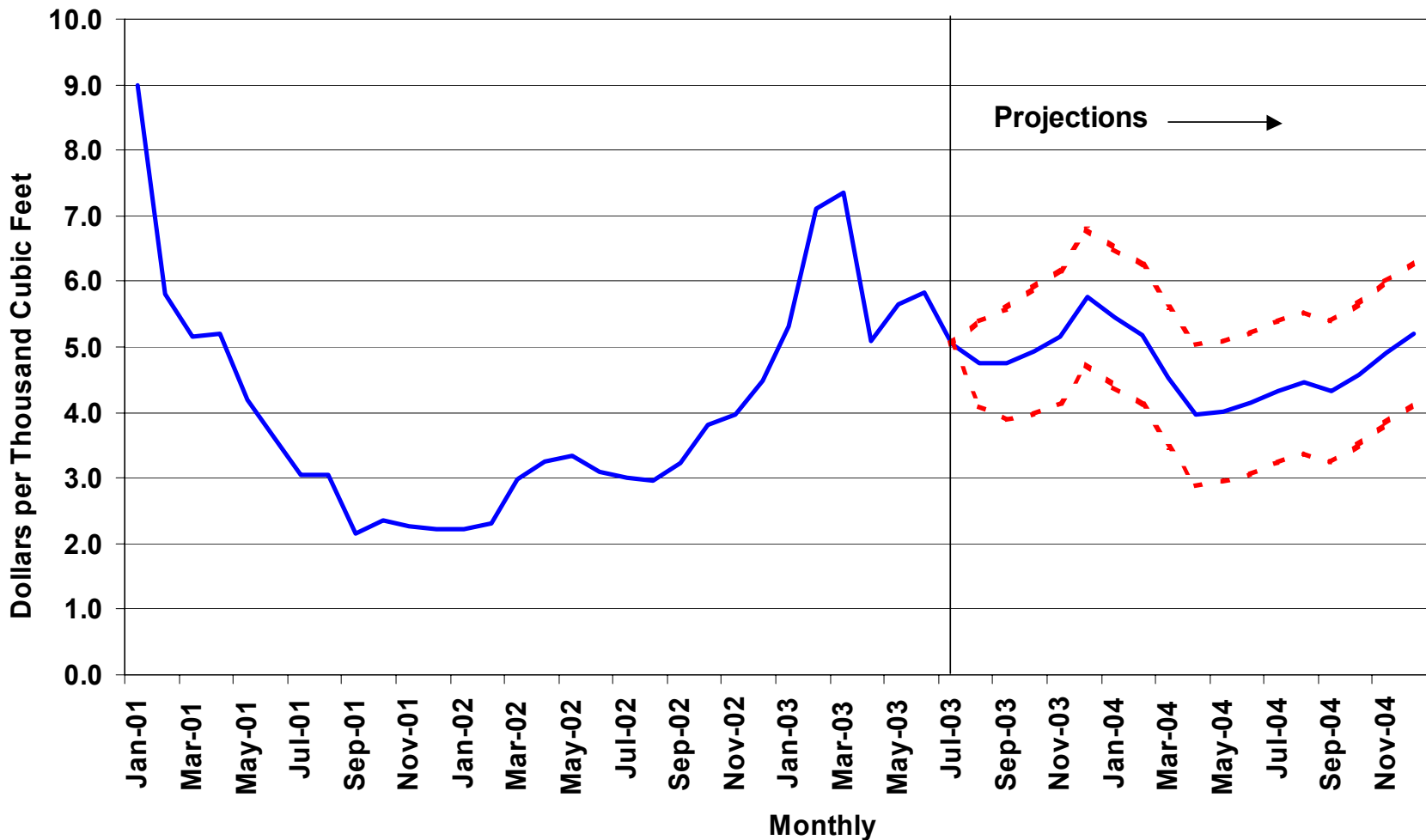


Sources: History: EIA; Projections: Short-Term Energy Outlook, August 2003.



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, August 2003.



U. S. Oil Demand

Total 2003 petroleum demand is projected to increase by close to 150,000 barrels per day, or 0.7 percent, to 19.91 million barrels per day ([Figure 10](#)). Individual product patterns, however, are expected to vary widely. Demand for motor gasoline, the largest oil-based product, is projected to increase by 0.7 percent for the year as a whole. Year-over-year increases in the second half are projected following the year-over-year declines in the first six months. This year-over-year increase in demand in the second half of the year is in response to the economic recovery.

Jet fuel markets, which were negatively affected by both the SARS epidemic and the Iraqi campaign, are likely to remain sluggish for the rest of the year. Available travel and capacity data show no growth thus far, a trend that is expected to continue throughout the rest of the year. On the other hand, distillate fuel oil is projected to increase 3.9 percent this year, buoyed by the harsh weather during the first quarter. Transportation demand, the largest distillate component, is projected to increase 2.9 percent this year. Residual fuel oil demand, bolstered by high space-heating demand during the first quarter and relatively high natural gas prices throughout the year, is projected to register an increase of 7.4 percent. Despite the colder-than-average winter, liquefied petroleum gas demand is projected to decline substantially for the year as a whole, largely as a result of weakness in petrochemical activity and high natural gas prices.

In 2004, growth in total petroleum demand is projected to reach 440,000 barrels per day, or 2.2 percent growth, to average 20.35 million barrels per day. All the major products (except residual fuel oil) are expected to contribute to that growth. The acceleration reflects not only a general improvement in economic conditions but also a belated recovery in jet fuel and liquefied petroleum gas demand from the low levels of 2003. Jet fuel demand, having declined two years in a row, will likely grow at a rate of 1.6 percent to an average 1.58 million barrels per day, which is still below the 2001 average. Distillate demand growth is projected to moderate to 1.9 percent as year-to-year shifts in weather patterns partly counteract the acceleration of demand growth in the transportation sector. Residual fuel oil deliveries, which grew last year, are projected to retrench by more than 12 percent, reflecting the assumptions of normal weather and greater competition from natural gas, whose prices are projected to decline throughout the forecast interval. Liquefied petroleum gas is expected to recover smartly from the weaknesses of the previous year, exhibiting growth of 7.8 percent. Growth in both petrochemical activity and declines in natural gas feedstock prices are both expected to offset the year-to-year decline in weather-related space-heating demand.

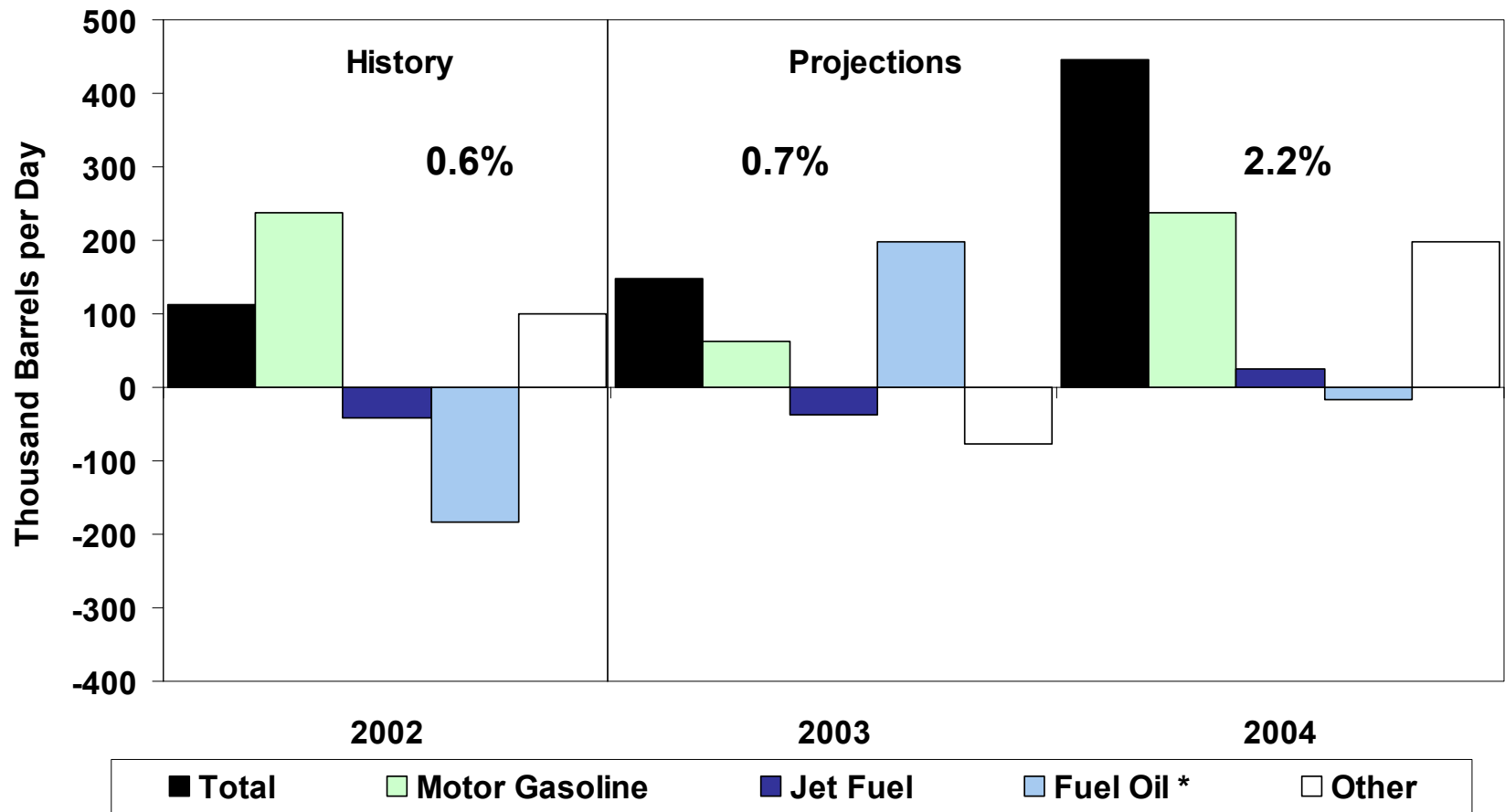
Oil Supply

Average domestic oil production in 2003 is expected to increase by about 62 thousand barrels per day, or 0.9 percent, to a level of 5.80 million barrels of oil per day. For 2004, a 0.4 percent decrease is expected, resulting in an average production rate of 5.77 million barrels of oil per day for the year ([Figure 11](#)).

Lower-48 States oil production will likely increase by 62 thousand barrels per day to a rate of 4.82 million barrels per day in 2003, followed by a slight increase of about 10 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 the lower-48 oil production by the fourth quarter of 2004.

Alaska is expected to account for 16.4 percent of total U.S. oil production in 2004. Alaskan oil production is expected to decrease by 1.0 percent in 2003 and decrease by 2.8 percent in 2004. The combined production

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

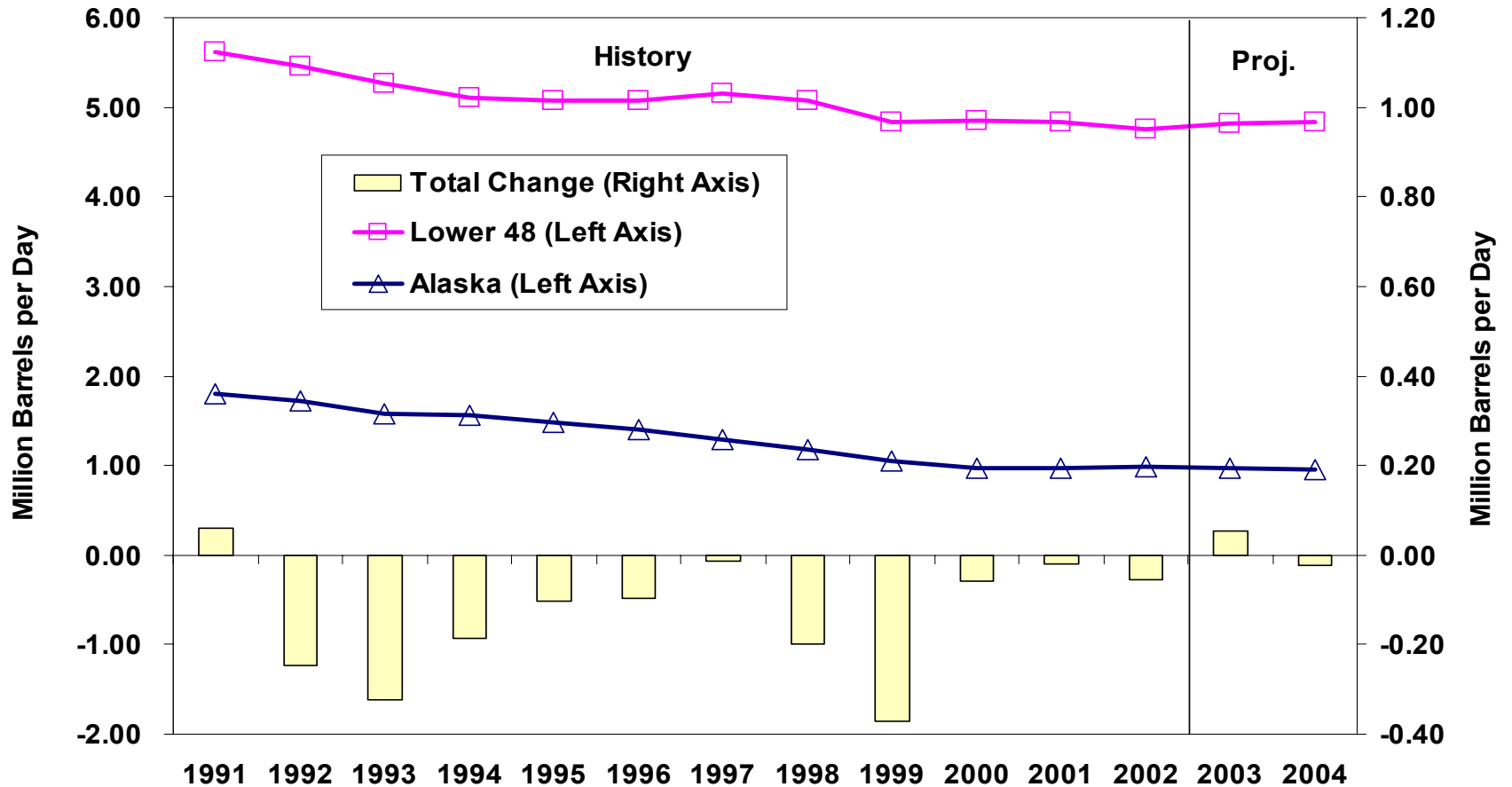


* Sum of distillate and residual fuel.

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



Figure 11. U.S. Crude Oil Production Trends



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



rate from the two significant satellite fields, Alpine and North Star, averaged nearly 170 thousand barrels per day during May 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 210 thousand barrels per day in 2003 and 2004.

Natural Gas Supply and Demand

Natural gas demand is expected to rise by 0.6 percent in 2003 due in part to the sharply higher weather-related demand during the first quarter of 2003 ([Figure 12](#)). The decrease in consumption projected for 2004 due to the reversal of weather effects (under the assumption of normal weather) is offset by a slight increase in industrial consumption in response to the somewhat lower prices and higher industrial output in 2004.

Demand for natural gas this summer is expected to be 1.7 percent lower than last summer's level, due largely to the effect of higher prices on the industrial and electricity-generating sectors. Also, cooling degree-days for the season (Q2 2003 and Q3 2003) under our assumption of normal weather would be about 15 percent below year-ago levels, resulting in slight year-over-year declines in electric power sector demand. Summer natural gas wellhead prices are projected to be 40 percent higher than last summer. In the event of a hotter-than-normal weather for the remainder of the summer, natural gas prices could go higher, as expanded natural gas-fired electric generation to meet cooling demand would compete with the need to build storage inventories.

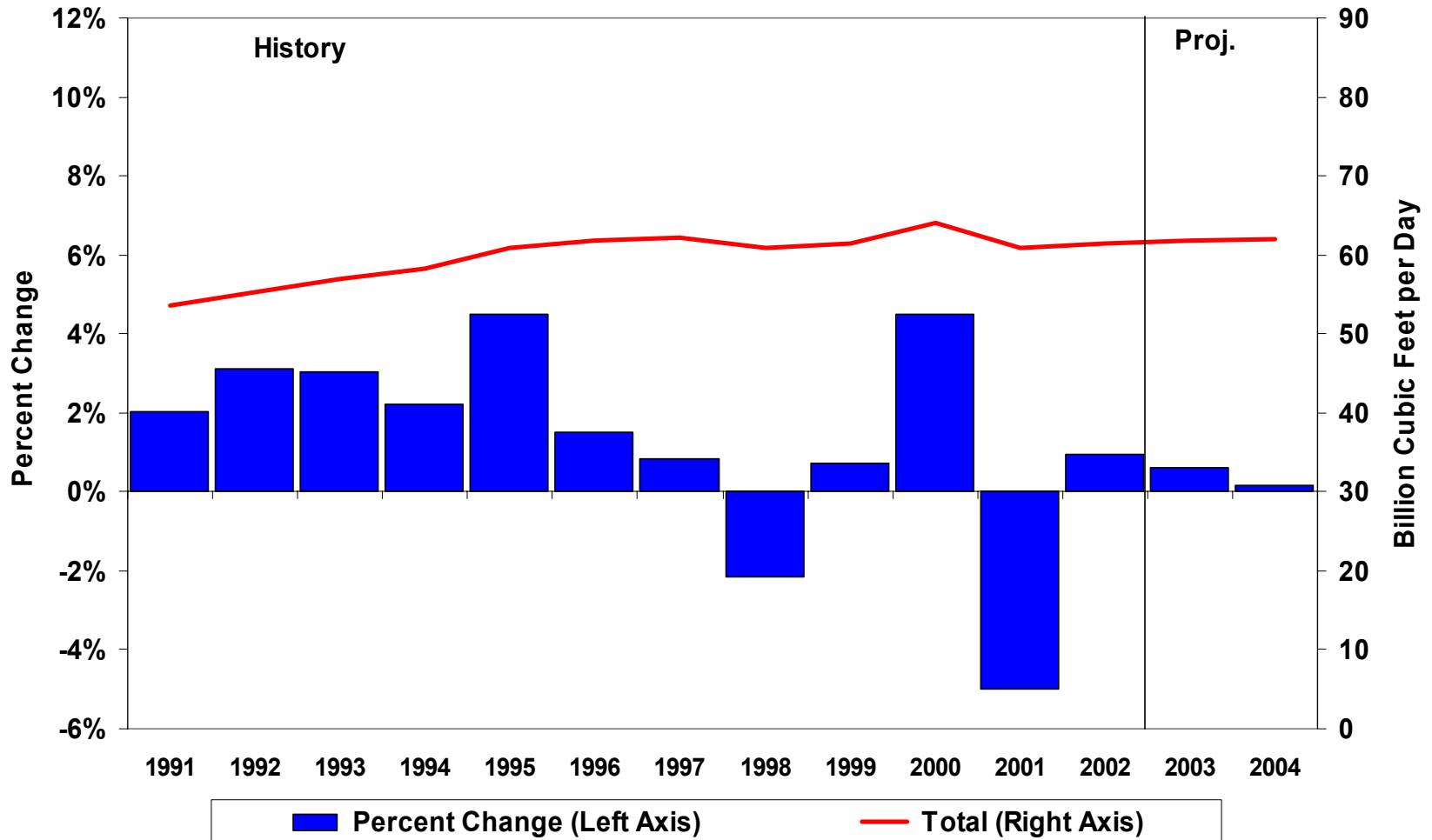
Working natural gas in storage stood at about 2.1 billion cubic feet (Bcf) at the end of July, 17 percent below the year-ago level ([Figure 13](#)). This marks a strong improvement in the storage situation from 2 months ago. Still, the need for relatively large volumes of natural gas to refill working gas storage in 2003 remains, and this means that relatively high price volatility can be expected to continue. Nevertheless, a definite improvement in the supply situation has occurred and the probability of reaching adequate storage levels by November has risen.

Natural gas production is expected to increase by about 3 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](#)). 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. An average natural gas wellhead price of about \$4.07 is projected for 2004, partly based on our belief that natural gas production will rise modestly in 2003 and remain close to improved levels in 2004.

Electricity Demand and Supply

Electricity demand is expected to increase by 1 percent this year ([Figure 16](#)). Most of the 2003 increase occurred in the first quarter, driven largely by weather factors (heating demand) which, with corrections to the degree-day data from the National Oceanographic and Atmospheric Administration (NOAA), were noticeably more important than previously thought. If normal temperatures prevail for the remainder of the year, little or no additional 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 by about 0.6 percent, a slower rate than might be indicated by economic

Figure 12. Total Natural Gas Demand Growth Patterns

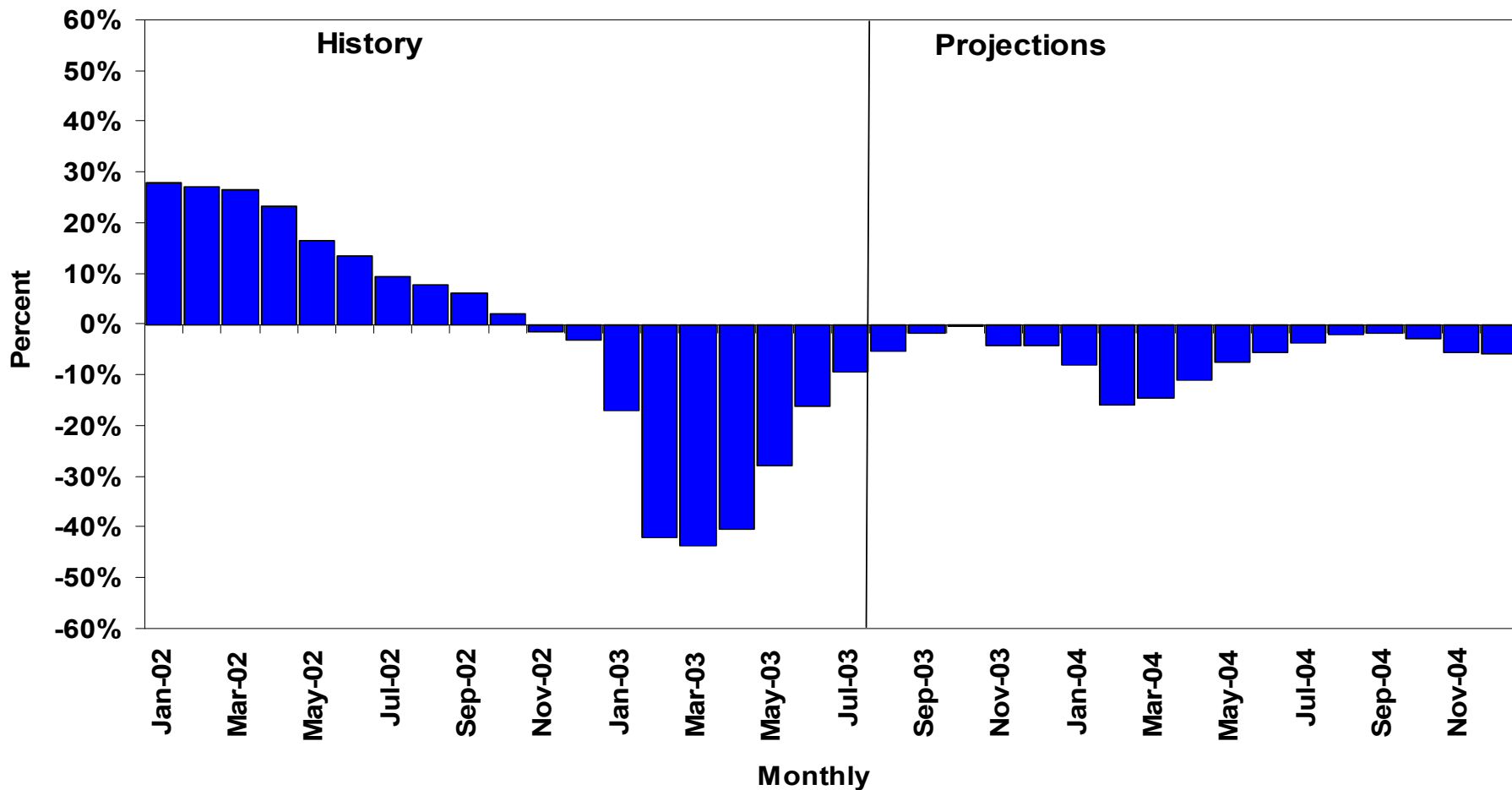


Note: This chart replaces a previous Figure 12 because of revised data for August 2003.

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



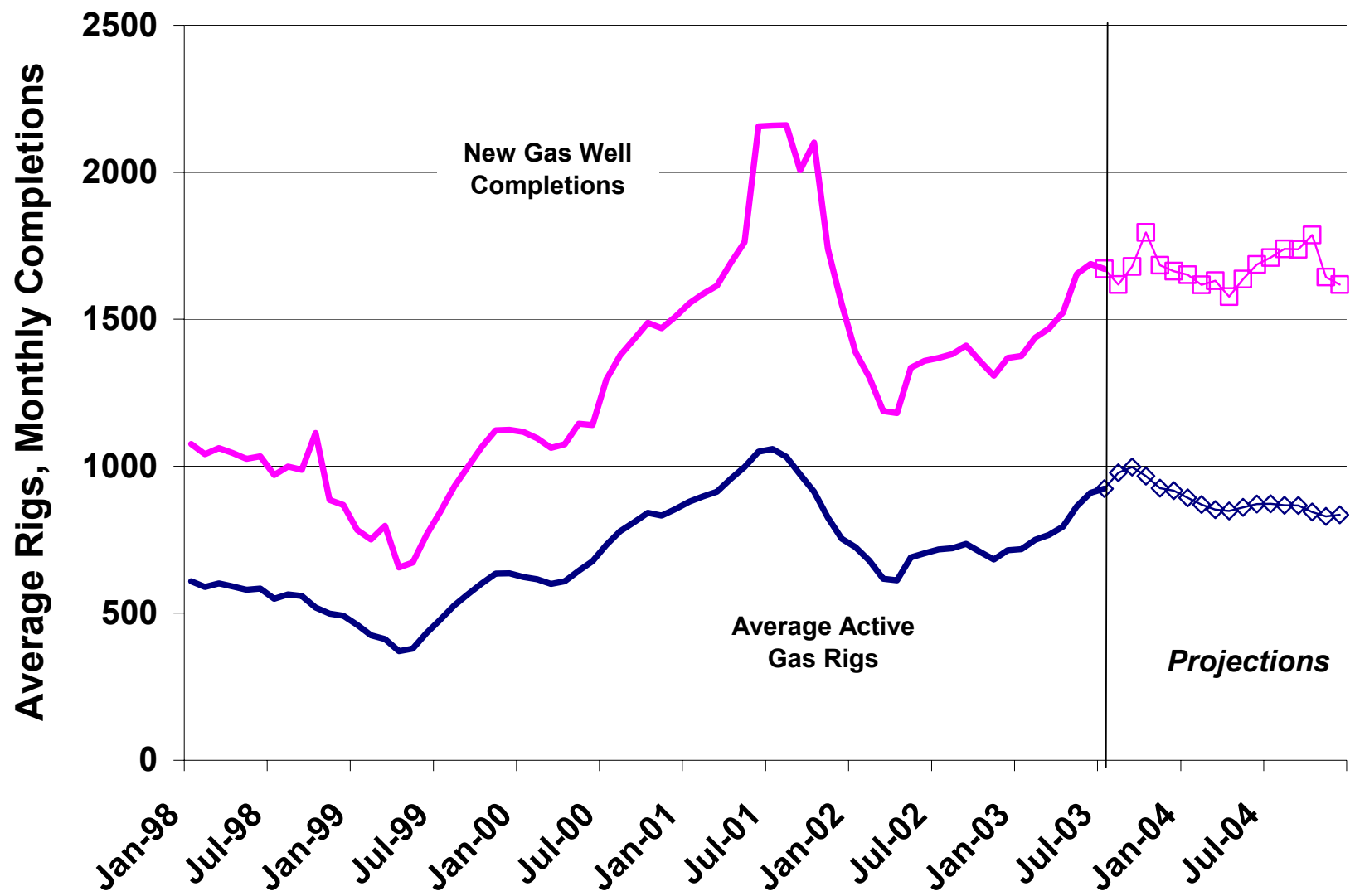
Figure 13. Working Gas in Storage (Difference from Previous 5-Year Average)



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



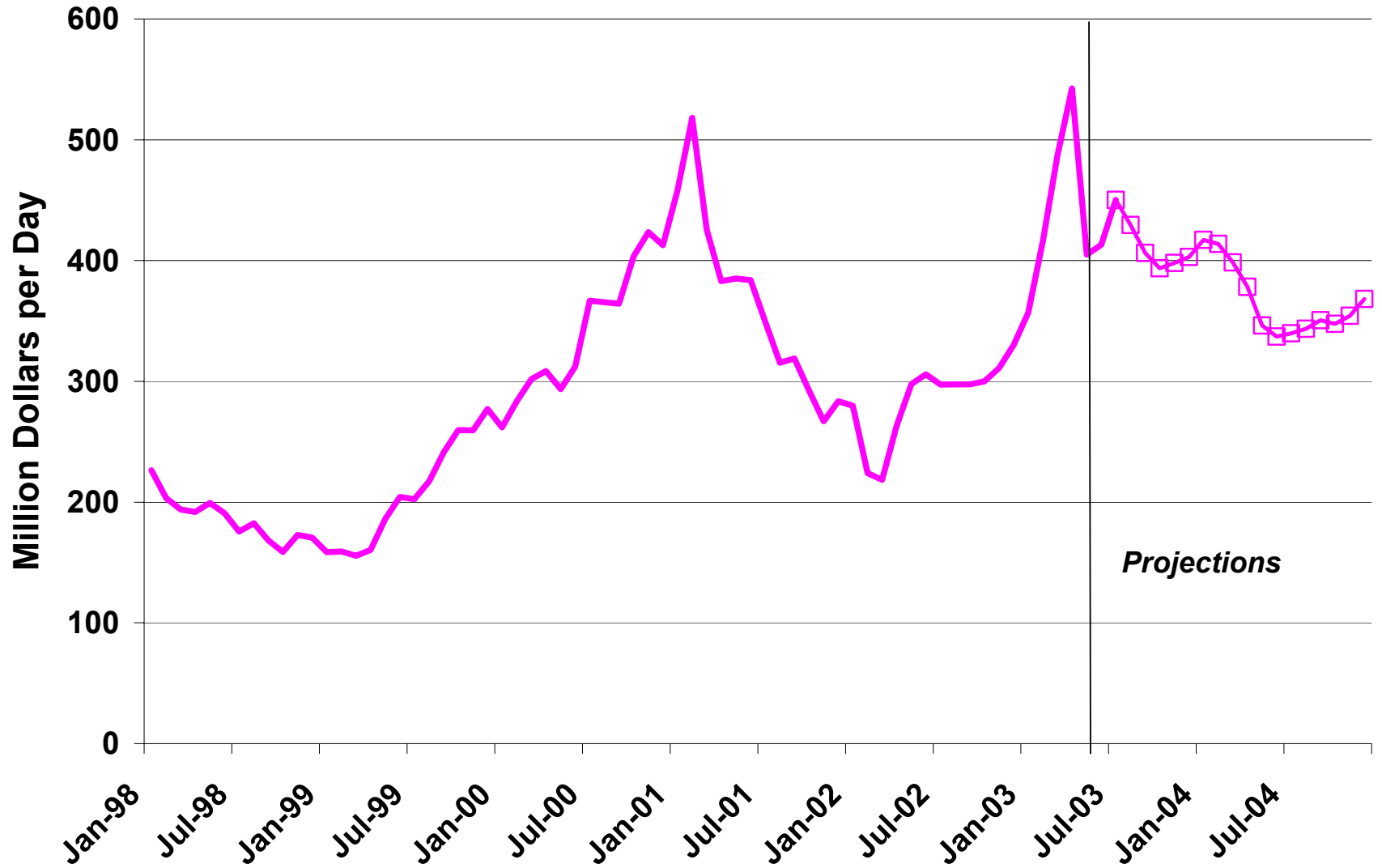
Figure 14. U.S. Natural Gas-Directed Drilling Activity



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



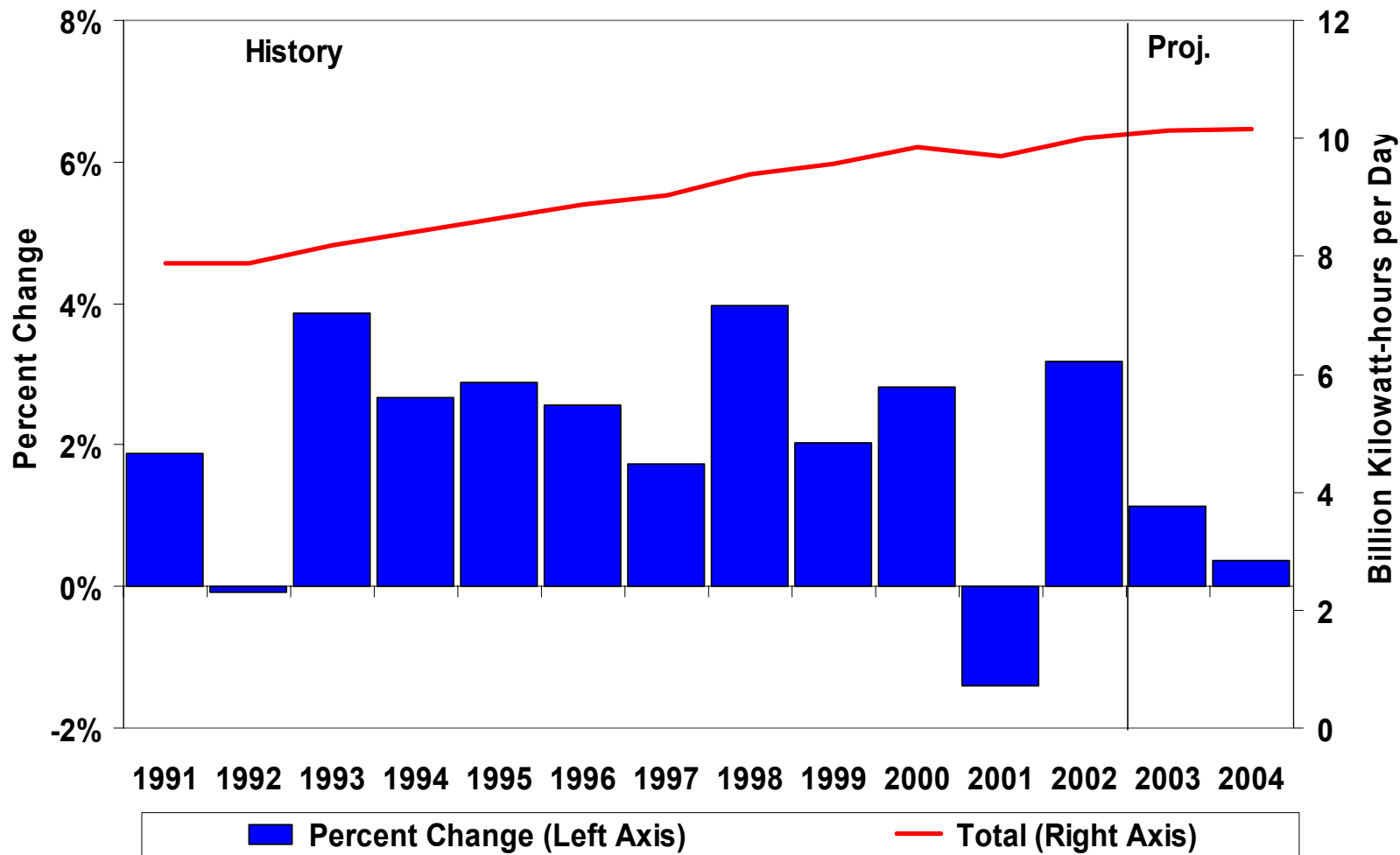
Figure 15. U.S. Oil and Gas Production Revenues



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



Figure 16. Total Electricity Demand Growth Patterns



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



growth, due to relatively weak heating market increases in the first and second quarters compared with those quarters in 2003.

Natural gas-generated electricity production is expected to increase slightly in 2003. A higher growth rate would be expected except for fuel substitution related to high natural gas prices, increasing oil-fired plant utilization (where possible) beyond what otherwise might have been projected. For all of 2003, petroleum-generated electricity production is expected to increase by about 40 percent. In 2004, petroleum-generated electricity production is projected to fall back to close to 2002 levels. Hydroelectric generation in 2003, 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 5 percent overall. Nuclear generation is expected to be somewhat lower than last year, as first-half statistics from EIA and the Nuclear Regulatory Commission indicate a decline of about 3 percent from the first half of 2002. Part (at least) of the reason for the lower nuclear generation is that two nuclear plants have been in extended shutdown state. One of the South Texas units has been shut down for several months (NRC has recently allowed it to resume operations) and the Davis-Besse plant has been shut down for many months. With the nuclear industry electrical generating capacity factors now exceeding 90%, these extended shutdowns (which are longer than, and in addition to, normal refueling shutdowns) have a direct impact on generation.

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 the *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 the *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
Real Gross Domestic Product (GDP) (billion chained 1996 dollars)	9215	9440	9629	9987	2.4	2.0	3.7
Imported Crude Oil Price ^a (nominal dollars per barrel)	22.00	23.69	27.64	24.74	7.7	16.7	-10.5
Petroleum Supply (million barrels per day)							
Crude Oil Production ^b	5.80	5.75	5.80	5.77	-1.0	0.9	-0.4
Total Petroleum Net Imports (including SPR).....	10.90	10.54	10.95	11.31	-3.3	3.8	3.3
Energy Demand							
World Petroleum (million barrels per day).....	77.1	77.6	78.7	79.7	0.6	1.4	1.3
Petroleum (million barrels per day).....	19.65	19.76	19.91	20.35	0.6	0.7	2.2
Natural Gas (trillion cubic feet)	22.23	22.44	22.57	22.68	0.9	0.6	0.5
Coal ^c (million short tons)	1060	1065	1072	1073	0.5	0.6	0.1
Electricity (billion kilowatthours)							
Retail Sales ^d	3370	3475	3523	3541	3.1	1.4	0.5
Other Use/Sales ^e	173	180	174	179	4.2	-3.3	2.9
Total	3543	3655	3697	3721	3.2	1.1	0.6
Total Energy Demand ^f (quadrillion Btu)	96.3	97.6	98.4	99.8	1.3	0.8	1.5
Total Energy Demand per Dollar of GDP (thousand Btu per 1996 Dollar)	10.45	10.34	10.22	10.00	-1.1	-1.2	-2.1
Renewable Energy as Percent of Total ^g	5.6%	6.2%	6.2%	6.5%			

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

^bIncludes lease condensate.

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

^dTotal of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in 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.

^eDefined as the sum of facility use of onsite net electricity generation plus direct sales of power by industrial- or commercial-sector generators to third parties, reported annually in Table 7.5 of the Monthly Energy Review (MER). Data for 2001 are estimates.

^fThe conversion from physical units to Btu is calculated by using a subset of conversion factors used in the calculations performed for gross energy consumption in 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).

^gRenewable energy includes minor components of non-marketed renewable energy, which is renewable energy that is neither bought nor sold, either directly or indirectly, as inputs to marketed energy. 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 CONTROL0703.

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
Macroeconomic ^a															
Real Gross Domestic Product (billion chained 1996 dollars - SAAR)...	9363	9392	9486	9518	<i>9552</i>	<i>9571</i>	<i>9647</i>	<i>9745</i>	<i>9855</i>	<i>9937</i>	<i>10037</i>	<i>10117</i>	9440	<i>9629</i>	<i>9987</i>
Percentage Change from Prior Year	1.4	2.2	3.3	2.9	<i>2.0</i>	<i>1.9</i>	<i>1.7</i>	<i>2.4</i>	<i>3.2</i>	<i>3.8</i>	<i>4.0</i>	<i>3.8</i>	2.4	<i>2.0</i>	<i>3.7</i>
Annualized Percent Change from Prior Quarter	5.0	1.2	4.0	1.4	<i>1.4</i>	<i>0.8</i>	<i>3.2</i>	<i>4.1</i>	<i>4.5</i>	<i>3.4</i>	<i>4.0</i>	<i>3.2</i>			
GDP Implicit Price Deflator (Index, 1996=1.000)	1.101	1.105	1.108	1.112	<i>1.119</i>	<i>1.121</i>	<i>1.126</i>	<i>1.130</i>	<i>1.135</i>	<i>1.140</i>	<i>1.146</i>	<i>1.152</i>	1.107	<i>1.124</i>	<i>1.143</i>
Percentage Change from Prior Year	1.4	1.1	0.8	1.3	<i>1.6</i>	<i>1.5</i>	<i>1.6</i>	<i>1.6</i>	<i>1.4</i>	<i>1.7</i>	<i>1.8</i>	<i>2.0</i>	1.1	<i>1.6</i>	<i>1.7</i>
Real Disposable Personal Income (billion chained 1996 Dollars - SAAR) ..	6961	7027	7058	7082	<i>7119</i>	<i>7169</i>	<i>7296</i>	<i>7317</i>	<i>7430</i>	<i>7462</i>	<i>7499</i>	<i>7542</i>	7032	<i>7225</i>	<i>7483</i>
Percentage Change from Prior Year	3.8	5.0	2.8	5.2	<i>2.3</i>	<i>2.0</i>	<i>3.4</i>	<i>3.3</i>	<i>4.4</i>	<i>4.1</i>	<i>2.8</i>	<i>3.1</i>	4.2	<i>2.8</i>	<i>3.6</i>
Manufacturing Production (Index, 1997=100.0)	110.8	111.8	112.6	111.5	<i>111.3</i>	<i>109.8</i>	<i>110.9</i>	<i>112.4</i>	<i>114.3</i>	<i>116.7</i>	<i>119.2</i>	<i>121.4</i>	111.7	<i>111.1</i>	<i>117.9</i>
Percentage Change from Prior Year	-4.0	-1.5	0.5	1.2	<i>0.4</i>	<i>-1.8</i>	<i>-1.5</i>	<i>0.8</i>	<i>2.7</i>	<i>6.3</i>	<i>7.4</i>	<i>8.0</i>	-1.0	<i>-0.5</i>	<i>6.1</i>
OECD Economic Growth (percent) ^b ...													1.8	<i>2.2</i>	<i>2.8</i>
Weather ^c															
Heating Degree-Days															
U.S.	2072	490	49	1673	<i>2297</i>	<i>607</i>	<i>82</i>	<i>1622</i>	<i>2254</i>	<i>517</i>	<i>85</i>	<i>1621</i>	4284	<i>4607</i>	<i>4477</i>
New England	2791	865	71	2372	<i>3504</i>	<i>1144</i>	<i>167</i>	<i>2236</i>	<i>3205</i>	<i>880</i>	<i>167</i>	<i>2235</i>	6099	<i>7050</i>	<i>6488</i>
Middle Atlantic	2505	664	45	2158	<i>3207</i>	<i>896</i>	<i>101</i>	<i>2001</i>	<i>2919</i>	<i>697</i>	<i>106</i>	<i>2001</i>	5372	<i>6206</i>	<i>5723</i>
U.S. Gas-Weighted	2181	558	48	1773	<i>2464</i>	<i>598</i>	<i>87</i>	<i>1713</i>	<i>2373</i>	<i>554</i>	<i>90</i>	<i>1713</i>	4560	<i>4862</i>	<i>4730</i>
Cooling Degree-Days (U.S.)	31	387	902	73	<i>28</i>	<i>335</i>	<i>789</i>	<i>76</i>	<i>33</i>	<i>348</i>	<i>784</i>	<i>76</i>	1393	<i>1228</i>	<i>1240</i>

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

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

^cPopulation-weighted degree days. A degree day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 2000 population.

SAAR: Seasonally-adjusted annualized rate.

Note: 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 CONTROL0703.

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
Macroeconomic^a															
Real Fixed Investment (billion chained 1996 dollars-SAAR) ...	1576	1573	1572	1588	<i>1588</i>	<i>1588</i>	<i>1595</i>	<i>1609</i>	<i>1627</i>	<i>1638</i>	<i>1660</i>	<i>1684</i>	1577	<i>1595</i>	<i>1652</i>
Real Exchange Rate (index)	1.193	1.152	1.105	1.102	<i>1.049</i>	<i>1.000</i>	<i>1.013</i>	<i>1.014</i>	<i>1.013</i>	<i>1.006</i>	<i>0.997</i>	<i>0.988</i>	1.138	<i>1.019</i>	<i>1.001</i>
Business Inventory Change (billion chained 1996 dollars-SAAR) ...	-31.9	-14.1	-2.6	2.8	<i>-6.1</i>	<i>-7.1</i>	<i>-10.8</i>	<i>-7.2</i>	<i>1.0</i>	<i>10.5</i>	<i>19.3</i>	<i>25.0</i>	-11.5	<i>-7.8</i>	<i>14.0</i>
Producer Price Index (index, 1982=1.000)	1.291	1.306	1.313	1.335	<i>1.384</i>	<i>1.393</i>	<i>1.395</i>	<i>1.389</i>	<i>1.386</i>	<i>1.386</i>	<i>1.399</i>	<i>1.405</i>	1.311	<i>1.390</i>	<i>1.394</i>
Consumer Price Index (index, 1982-1984=1.000)	1.780	1.795	1.805	1.814	<i>1.831</i>	<i>1.829</i>	<i>1.840</i>	<i>1.849</i>	<i>1.856</i>	<i>1.864</i>	<i>1.873</i>	<i>1.884</i>	1.799	<i>1.837</i>	<i>1.869</i>
Petroleum Product Price Index (index, 1982=1.000)	0.656	0.810	0.839	0.875	<i>1.074</i>	<i>0.918</i>	<i>0.901</i>	<i>0.938</i>	<i>0.879</i>	<i>0.832</i>	<i>0.844</i>	<i>0.879</i>	0.795	<i>0.958</i>	<i>0.859</i>
Non-Farm Employment (millions)	130.5	130.4	130.2	130.3	<i>130.2</i>	<i>130.1</i>	<i>130.2</i>	<i>130.4</i>	<i>131.0</i>	<i>131.4</i>	<i>132.0</i>	<i>132.5</i>	130.4	<i>130.2</i>	<i>131.7</i>
Commercial Employment (millions)	91.3	91.3	91.3	91.5	<i>91.5</i>	<i>91.7</i>	<i>91.8</i>	<i>92.1</i>	<i>92.7</i>	<i>93.2</i>	<i>93.7</i>	<i>94.2</i>	91.4	<i>91.8</i>	<i>93.4</i>
Total Industrial Production (index, 1997=100.0)	109.3	110.5	111.4	110.4	<i>110.5</i>	<i>109.2</i>	<i>110.2</i>	<i>111.4</i>	<i>113.1</i>	<i>115.1</i>	<i>117.2</i>	<i>119.0</i>	110.4	<i>110.3</i>	<i>116.1</i>
Housing Stock (millions)	115.3	115.6	115.8	116.3	<i>116.8</i>	<i>117.2</i>	<i>117.5</i>	<i>117.7</i>	<i>118.0</i>	<i>118.3</i>	<i>118.6</i>	<i>118.9</i>	115.8	<i>117.3</i>	<i>118.5</i>
Miscellaneous															
Gas Weighted Industrial Production (index, 1997=100.0)	100.4	101.0	101.6	100.8	<i>100.6</i>	<i>100.0</i>	<i>100.3</i>	<i>101.2</i>	<i>102.2</i>	<i>103.5</i>	<i>104.9</i>	<i>106.2</i>	100.9	<i>100.5</i>	<i>104.2</i>
Vehicle Miles Traveled ^b (million miles/day)	7268	8033	8060	7641	<i>7220</i>	<i>8024</i>	<i>8133</i>	<i>7736</i>	<i>7419</i>	<i>8207</i>	<i>8326</i>	<i>7943</i>	7752	<i>7781</i>	<i>7975</i>
Vehicle Fuel Efficiency (index, 1999=1.000)	0.997	1.040	1.037	1.006	<i>0.984</i>	<i>1.042</i>	<i>1.039</i>	<i>1.000</i>	<i>0.986</i>	<i>1.037</i>	<i>1.038</i>	<i>0.999</i>	1.020	<i>1.017</i>	<i>1.015</i>
Real Vehicle Fuel Cost (cents per mile)	3.31	3.75	3.76	3.91	<i>4.42</i>	<i>4.01</i>	<i>4.01</i>	<i>3.96</i>	<i>3.94</i>	<i>3.87</i>	<i>3.76</i>	<i>3.65</i>	3.69	<i>4.09</i>	<i>3.80</i>
Air Travel Capacity (mill. available ton-miles/day)	435.8	467.6	488.2	491.4	<i>454.8</i>	<i>473.9</i>	<i>470.5</i>	<i>464.5</i>	<i>444.8</i>	<i>469.2</i>	<i>489.2</i>	<i>491.5</i>	470.9	<i>466.0</i>	<i>473.8</i>
Aircraft Utilization (mill. revenue ton-miles/day)	238.2	265.3	274.3	272.0	<i>244.1</i>	<i>263.3</i>	<i>270.7</i>	<i>258.1</i>	<i>242.9</i>	<i>267.1</i>	<i>283.1</i>	<i>273.7</i>	262.6	<i>259.1</i>	<i>266.8</i>
Airline Ticket Price Index (index, 1982-1984=1.000)	2.317	2.377	2.334	2.235	<i>2.252</i>	<i>2.341</i>	<i>2.457</i>	<i>2.429</i>	<i>2.344</i>	<i>2.276</i>	<i>2.252</i>	<i>2.245</i>	2.316	<i>2.370</i>	<i>2.279</i>
Raw Steel Production (million tons)	23.92	25.03	26.34	25.68	<i>25.61</i>	<i>24.80</i>	<i>22.72</i>	<i>22.25</i>	<i>24.65</i>	<i>25.68</i>	<i>26.22</i>	<i>25.29</i>	100.98	<i>95.37</i>	<i>101.83</i>

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

^bIncludes all highway travel.

SAAR: Seasonally-adjusted annualized rate.

Note: 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
Demand^a															
OECD															
U.S. (50 States)	19.5	19.7	19.9	19.9	<i>20.0</i>	<i>19.6</i>	<i>20.0</i>	<i>20.0</i>	<i>20.2</i>	<i>20.1</i>	<i>20.5</i>	<i>20.7</i>	19.8	<i>19.9</i>	<i>20.4</i>
U.S. Territories.....	0.3	0.3	0.3	0.3	<i>0.3</i>	<i>0.3</i>	<i>0.3</i>	<i>0.3</i>	<i>0.4</i>	<i>0.3</i>	<i>0.3</i>	<i>0.4</i>	0.3	<i>0.3</i>	<i>0.3</i>
Canada	2.1	2.0	2.1	2.2	<i>2.2</i>	<i>2.1</i>	<i>2.2</i>	<i>2.2</i>	<i>2.1</i>	<i>2.1</i>	<i>2.2</i>	<i>2.2</i>	2.1	<i>2.2</i>	<i>2.2</i>
Europe	15.1	14.6	15.2	15.3	<i>15.2</i>	<i>14.7</i>	<i>14.9</i>	<i>15.6</i>	<i>15.5</i>	<i>14.5</i>	<i>15.1</i>	<i>15.7</i>	15.1	<i>15.1</i>	<i>15.2</i>
Japan	5.7	4.6	5.0	5.9	<i>6.2</i>	<i>5.0</i>	<i>5.2</i>	<i>5.7</i>	<i>5.9</i>	<i>4.8</i>	<i>5.0</i>	<i>5.5</i>	5.3	<i>5.5</i>	<i>5.3</i>
Other OECD.....	5.4	5.0	5.0	5.4	<i>5.4</i>	<i>5.1</i>	<i>5.3</i>	<i>5.4</i>	<i>5.2</i>	<i>5.2</i>	<i>5.4</i>	<i>5.4</i>	5.2	<i>5.3</i>	<i>5.3</i>
Total OECD.....	48.1	46.3	47.5	49.0	<i>49.3</i>	<i>46.7</i>	<i>48.0</i>	<i>49.2</i>	<i>49.2</i>	<i>47.0</i>	<i>48.7</i>	<i>49.9</i>	47.7	<i>48.3</i>	<i>48.7</i>
Non-OECD															
Former Soviet Union.....	4.1	3.9	3.9	3.9	<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>	3.9	<i>4.0</i>	<i>4.1</i>
Europe	0.7	0.7	0.7	0.7	<i>0.8</i>	<i>0.8</i>	<i>0.8</i>	<i>0.8</i>	<i>0.8</i>	<i>0.8</i>	<i>0.8</i>	<i>0.8</i>	0.7	<i>0.8</i>	<i>0.8</i>
China.....	5.3	5.3	5.2	5.3	<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>	5.3	<i>5.4</i>	<i>5.6</i>
Other Asia.....	7.7	7.7	7.5	7.8	<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>	7.7	<i>7.8</i>	<i>7.9</i>
Other Non-OECD.....	12.1	12.3	12.4	12.3	<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>	12.3	<i>12.4</i>	<i>12.6</i>
Total Non-OECD.....	29.9	29.9	29.7	30.0	<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>	29.9	<i>30.4</i>	<i>31.0</i>
Total World Demand.....	78.0	76.2	77.2	79.0	<i>79.7</i>	<i>77.1</i>	<i>78.1</i>	<i>79.8</i>	<i>80.2</i>	<i>78.0</i>	<i>79.5</i>	<i>81.0</i>	77.6	<i>78.7</i>	<i>79.7</i>
Supply^b															
OECD															
U.S. (50 States)	9.1	9.2	8.9	8.8	<i>9.0</i>	<i>8.8</i>	<i>8.8</i>	<i>9.0</i>	<i>9.1</i>	<i>9.0</i>	<i>9.0</i>	<i>9.1</i>	9.0	<i>8.9</i>	<i>9.0</i>
Canada	2.9	2.9	2.9	3.0	<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>	2.9	<i>3.1</i>	<i>3.2</i>
Mexico.....	3.6	3.6	3.6	3.6	<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>	3.6	<i>3.8</i>	<i>3.9</i>
North Sea ^c	6.3	6.3	5.8	6.4	<i>6.3</i>	<i>5.9</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>	6.2	<i>6.2</i>	<i>6.2</i>
Other OECD.....	1.7	1.6	1.7	1.6	<i>1.6</i>	<i>1.6</i>	<i>1.6</i>	<i>1.6</i>	<i>1.5</i>	<i>1.6</i>	<i>1.6</i>	<i>1.6</i>	1.7	<i>1.6</i>	<i>1.6</i>
Total OECD.....	23.6	23.7	23.0	23.4	<i>23.7</i>	<i>23.0</i>	<i>23.5</i>	<i>23.9</i>	<i>23.9</i>	<i>23.6</i>	<i>23.8</i>	<i>24.3</i>	23.4	<i>23.5</i>	<i>23.9</i>
Non-OECD															
OPEC.....	28.5	27.9	28.8	29.5	<i>30.1</i>	<i>30.0</i>	<i>29.9</i>	<i>30.7</i>	<i>30.0</i>	<i>30.0</i>	<i>29.3</i>	<i>29.5</i>	28.7	<i>30.2</i>	<i>29.7</i>
Crude Oil Portion	25.2	24.6	25.5	26.3	<i>26.9</i>	<i>26.7</i>	<i>26.6</i>	<i>27.3</i>	<i>26.6</i>	<i>26.6</i>	<i>26.0</i>	<i>26.2</i>	25.4	<i>26.9</i>	<i>26.3</i>
Former Soviet Union.....	9.0	9.2	9.6	9.8	<i>9.9</i>	<i>10.1</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>	9.4	<i>10.2</i>	<i>10.6</i>
China.....	3.3	3.4	3.4	3.4	<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>	3.4	<i>3.4</i>	<i>3.4</i>
Other Non-OECD.....	11.5	11.5	11.4	11.4	<i>11.4</i>	<i>11.4</i>	<i>11.5</i>	<i>11.7</i>	<i>11.8</i>	<i>11.9</i>	<i>12.1</i>	<i>12.3</i>	11.4	<i>11.5</i>	<i>12.0</i>
Total Non-OECD.....	52.3	52.0	53.3	54.1	<i>54.7</i>	<i>55.0</i>	<i>55.2</i>	<i>56.1</i>	<i>55.5</i>	<i>55.8</i>	<i>55.6</i>	<i>56.0</i>	52.9	<i>55.3</i>	<i>55.7</i>
Total World Supply.....	75.9	75.6	76.2	77.5	<i>78.4</i>	<i>78.0</i>	<i>78.6</i>	<i>80.0</i>	<i>79.4</i>	<i>79.4</i>	<i>79.4</i>	<i>80.2</i>	76.3	<i>78.8</i>	<i>79.6</i>
Additional unaccounted for supply.....	0.3	0.3	0.3	0.3	<i>0.3</i>	<i>0.3</i>	<i>0.3</i>	<i>0.3</i>	<i>0.3</i>	<i>0.3</i>	<i>0.3</i>	<i>0.3</i>	0.3	<i>0.3</i>	<i>0.3</i>
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR).....	0.2	-0.5	0.5	0.3	<i>0.8</i>	<i>-0.8</i>	<i>-0.3</i>	<i>0.2</i>	<i>0.0</i>	<i>-0.7</i>	<i>-0.2</i>	<i>0.3</i>	0.1	<i>0.0</i>	<i>-0.2</i>
Other	1.6	0.7	0.2	0.8	<i>0.2</i>	<i>-0.5</i>	<i>-0.4</i>	<i>-0.7</i>	<i>0.6</i>	<i>-1.0</i>	<i>0.0</i>	<i>0.2</i>	0.9	<i>-0.4</i>	<i>-0.1</i>
Total Stock Withdrawals	1.8	0.3	0.7	1.1	<i>1.0</i>	<i>-1.3</i>	<i>-0.8</i>	<i>-0.6</i>	<i>0.5</i>	<i>-1.7</i>	<i>-0.2</i>	<i>0.5</i>	1.0	<i>-0.4</i>	<i>-0.2</i>
OECD Comm. Stocks, End (bill. bbls.)	2.6	2.6	2.6	2.5	<i>2.4</i>	<i>2.5</i>	<i>2.5</i>	<i>2.6</i>	<i>2.5</i>	<i>2.6</i>	<i>2.6</i>	<i>2.6</i>	2.5	<i>2.6</i>	<i>2.6</i>
Non-OPEC Supply	47.4	47.7	47.4	48.0	<i>48.3</i>	<i>48.0</i>	<i>48.7</i>	<i>49.4</i>	<i>49.4</i>	<i>49.4</i>	<i>50.1</i>	<i>50.7</i>	47.6	<i>48.6</i>	<i>49.9</i>

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

^bIncludes production of crude oil (including lease condensates), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gains, alcohol, and liquids produced from coal and other sources.

^cIncludes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

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

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

SPR: Strategic Petroleum Reserve

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

Notes: Minor discrepancies with other published EIA historical data are due to rounding. Historical data are printed in bold; 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
Crude Oil Prices (dollars per barrel)															
Imported Average ^a	19.34	23.84	25.88	25.39	30.58	25.73	27.69	26.91	25.77	25.09	24.41	23.73	23.69	27.64	24.74
WTI ^b Spot Average	21.66	26.25	28.34	28.22	34.10	28.98	30.42	29.50	28.27	27.59	26.91	26.23	26.12	30.75	27.25
Natural Gas Wellhead															
(dollars per thousand cubic feet).....	2.34	2.99	2.88	3.60	5.54	5.01	4.63	4.59	4.53	3.66	3.86	4.21	2.96	4.94	4.07
Petroleum Products															
Gasoline Retail ^c (dollars per gallon)															
All Grades	1.20	1.43	1.44	1.46	1.63	1.57	1.57	1.50	1.47	1.53	1.49	1.40	1.39	1.56	1.47
Regular Unleaded	1.16	1.39	1.40	1.42	1.59	1.53	1.53	1.45	1.42	1.48	1.45	1.36	1.34	1.52	1.43
No. 2 Diesel Oil, Retail															
(dollars per gallon)	1.18	1.30	1.35	1.44	1.62	1.47	1.46	1.49	1.48	1.46	1.43	1.44	1.32	1.51	1.45
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	0.60	0.68	0.73	0.79	1.00	0.77	0.71	0.80	0.81	0.77	0.77	0.80	0.69	0.84	0.79
No. 2 Heating Oil, Retail															
(dollars per gallon)	1.09	1.09	1.06	1.19	1.45	1.31	1.12	1.29	1.29	1.20	1.13	1.27	1.11	1.35	1.25
No. 6 Residual Fuel Oil, Retail ^d															
(dollars per barrel).....	19.34	24.11	25.73	26.22	33.76	26.79	27.75	27.62	26.90	24.35	23.92	23.90	23.81	29.11	24.82
Electric Utility Fuels															
Coal															
(dollars per million Btu)	1.27	1.26	1.26	1.23	1.26	1.26	1.24	1.23	1.24	1.25	1.23	1.22	1.25	1.25	1.23
Heavy Fuel Oil ^e															
(dollars per million Btu)	2.91	3.61	3.81	4.24	4.98	4.36	4.72	4.52	4.08	3.94	4.06	3.90	3.68	4.67	4.02
Natural Gas															
(dollars per million Btu)	2.99	3.58	3.41	4.26	6.23	5.52	4.77	5.20	5.10	4.18	4.43	4.90	3.54	5.33	4.59
Other Residential															
Natural Gas															
(dollars per thousand cubic feet).....	7.21	8.29	10.25	7.97	8.52	10.44	12.04	9.49	9.39	9.88	10.85	8.96	7.85	9.32	9.46
Electricity															
(cents per kilowatthour).....	8.14	8.58	8.74	8.30	8.05	8.68	8.91	8.46	8.15	8.71	8.89	8.44	8.45	8.54	8.56

^a Refiner acquisition cost (RAC) of imported crude oil.

^b West Texas Intermediate.

^c Average self-service cash prices.

^d Average for all sulfur contents.

^e Includes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Data are estimated for the first quarter of 2003. 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
Supply															
Crude Oil Supply															
Domestic Production ^a	5.87	5.90	5.67	5.55	<i>5.88</i>	<i>5.79</i>	<i>5.71</i>	<i>5.81</i>	<i>5.82</i>	<i>5.76</i>	<i>5.73</i>	<i>5.78</i>	5.75	<i>5.80</i>	<i>5.77</i>
Alaska	1.03	1.01	0.93	0.97	<i>1.01</i>	<i>0.98</i>	<i>0.91</i>	<i>1.00</i>	<i>1.00</i>	<i>0.95</i>	<i>0.91</i>	<i>0.93</i>	0.98	<i>0.98</i>	<i>0.95</i>
Lower 48	4.83	4.89	4.74	4.59	<i>4.87</i>	<i>4.81</i>	<i>4.80</i>	<i>4.81</i>	<i>4.81</i>	<i>4.82</i>	<i>4.82</i>	<i>4.86</i>	4.76	<i>4.82</i>	<i>4.83</i>
Net Commercial Imports ^b	8.72	9.30	9.16	9.28	<i>8.64</i>	<i>9.86</i>	<i>9.77</i>	<i>9.17</i>	<i>9.28</i>	<i>9.82</i>	<i>9.94</i>	<i>9.55</i>	9.12	<i>9.36</i>	<i>9.65</i>
Net SPR Withdrawals	-0.10	-0.15	-0.12	-0.11	<i>0.00</i>	<i>-0.10</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>	-0.12	<i>-0.08</i>	<i>-0.03</i>
Net Commercial Withdrawals.....	-0.24	0.18	0.51	-0.08	<i>-0.03</i>	<i>-0.02</i>	<i>0.14</i>	<i>-0.05</i>	<i>-0.23</i>	<i>-0.04</i>	<i>0.14</i>	<i>-0.03</i>	0.09	<i>0.01</i>	<i>-0.04</i>
Product Supplied and Losses	0.00	0.00	0.00	0.00	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	0.00	<i>0.00</i>	<i>0.00</i>
Unaccounted-for Crude Oil	0.19	0.12	-0.01	0.13	<i>0.07</i>	<i>0.18</i>	<i>0.14</i>	<i>0.12</i>	<i>0.17</i>	<i>0.19</i>	<i>0.17</i>	<i>0.12</i>	0.11	<i>0.13</i>	<i>0.16</i>
Total Crude Oil Supply.....	14.44	15.34	15.21	14.78	<i>14.55</i>	<i>15.71</i>	<i>15.65</i>	<i>14.95</i>	<i>14.90</i>	<i>15.73</i>	<i>15.98</i>	<i>15.42</i>	14.95	<i>15.22</i>	<i>15.51</i>
Other Supply															
NGL Production	1.88	1.91	1.89	1.84	<i>1.76</i>	<i>1.61</i>	<i>1.70</i>	<i>1.81</i>	<i>1.93</i>	<i>1.94</i>	<i>1.88</i>	<i>1.96</i>	1.88	<i>1.72</i>	<i>1.93</i>
Other Hydrocarbon and Alcohol	0.37	0.44	0.43	0.43	<i>0.44</i>	<i>0.42</i>	<i>0.42</i>	<i>0.42</i>	<i>0.38</i>	<i>0.38</i>	<i>0.41</i>	<i>0.41</i>	0.42	<i>0.42</i>	<i>0.40</i>
Inputs															
Crude Oil Product Supplied	0.00	0.00	0.00	0.00	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	0.00	<i>0.00</i>	<i>0.00</i>
Processing Gain.....	0.96	0.96	0.95	0.97	<i>0.91</i>	<i>0.93</i>	<i>0.94</i>	<i>0.93</i>	<i>0.93</i>	<i>0.93</i>	<i>0.94</i>	<i>0.96</i>	0.96	<i>0.93</i>	<i>0.94</i>
Net Product Imports ^c	1.37	1.56	1.37	1.36	<i>1.47</i>	<i>1.63</i>	<i>1.62</i>	<i>1.60</i>	<i>1.68</i>	<i>1.69</i>	<i>1.67</i>	<i>1.58</i>	1.42	<i>1.58</i>	<i>1.66</i>
Product Stock Withdrawn or Added (-)	0.51	-0.49	0.06	0.49	<i>0.87</i>	<i>-0.68</i>	<i>-0.37</i>	<i>0.32</i>	<i>0.32</i>	<i>-0.63</i>	<i>-0.34</i>	<i>0.34</i>	0.15	<i>0.03</i>	<i>-0.08</i>
Total Supply	19.53	19.72	19.92	19.87	<i>20.02</i>	<i>19.62</i>	<i>19.96</i>	<i>20.03</i>	<i>20.16</i>	<i>20.05</i>	<i>20.54</i>	<i>20.67</i>	19.76	<i>19.91</i>	<i>20.36</i>
Demand															
Motor Gasoline.....	8.49	9.00	9.05	8.85	<i>8.54</i>	<i>8.97</i>	<i>9.11</i>	<i>9.01</i>	<i>8.77</i>	<i>9.22</i>	<i>9.34</i>	<i>9.26</i>	8.85	<i>8.91</i>	<i>9.15</i>
Jet Fuel	1.57	1.61	1.63	1.65	<i>1.55</i>	<i>1.51</i>	<i>1.63</i>	<i>1.62</i>	<i>1.53</i>	<i>1.56</i>	<i>1.64</i>	<i>1.68</i>	1.61	<i>1.58</i>	<i>1.60</i>
Distillate Fuel Oil	3.80	3.70	3.71	3.89	<i>4.22</i>	<i>3.82</i>	<i>3.70</i>	<i>3.96</i>	<i>4.19</i>	<i>3.83</i>	<i>3.86</i>	<i>4.11</i>	3.78	<i>3.92</i>	<i>4.00</i>
Residual Fuel Oil.....	0.73	0.69	0.62	0.76	<i>0.83</i>	<i>0.80</i>	<i>0.73</i>	<i>0.65</i>	<i>0.73</i>	<i>0.57</i>	<i>0.69</i>	<i>0.65</i>	0.70	<i>0.75</i>	<i>0.66</i>
Other Oils ^d	4.93	4.72	4.91	4.73	<i>4.88</i>	<i>4.53</i>	<i>4.79</i>	<i>4.79</i>	<i>4.95</i>	<i>4.86</i>	<i>5.01</i>	<i>4.97</i>	4.82	<i>4.75</i>	<i>4.95</i>
Total Demand	19.53	19.72	19.92	19.87	<i>20.03</i>	<i>19.62</i>	<i>19.96</i>	<i>20.03</i>	<i>20.16</i>	<i>20.05</i>	<i>20.54</i>	<i>20.67</i>	19.76	<i>19.91</i>	<i>20.35</i>
Total Petroleum Net Imports.....	10.11	10.87	10.54	10.64	<i>10.11</i>	<i>11.49</i>	<i>11.39</i>	<i>10.78</i>	<i>10.97</i>	<i>11.51</i>	<i>11.61</i>	<i>11.14</i>	10.54	<i>10.95</i>	<i>11.31</i>
Closing Stocks (million barrels)															
Crude Oil (excluding SPR).....	334	318	271	278	<i>280</i>	<i>282</i>	<i>269</i>	<i>274</i>	<i>295</i>	<i>299</i>	<i>287</i>	<i>290</i>	278	<i>274</i>	<i>290</i>
Total Motor Gasoline.....	213	217	206	209	<i>200</i>	<i>205</i>	<i>202</i>	<i>205</i>	<i>210</i>	<i>214</i>	<i>208</i>	<i>212</i>	209	<i>205</i>	<i>212</i>
Finished Motor Gasoline.....	160	168	157	162	<i>145</i>	<i>152</i>	<i>149</i>	<i>154</i>	<i>152</i>	<i>159</i>	<i>155</i>	<i>159</i>	162	<i>154</i>	<i>159</i>
Blending Components.....	54	49	49	47	<i>55</i>	<i>54</i>	<i>53</i>	<i>52</i>	<i>57</i>	<i>54</i>	<i>53</i>	<i>53</i>	47	<i>52</i>	<i>53</i>
Jet Fuel	42	39	41	39	<i>37</i>	<i>39</i>	<i>40</i>	<i>40</i>	<i>38</i>	<i>41</i>	<i>43</i>	<i>42</i>	39	<i>40</i>	<i>42</i>
Distillate Fuel Oil	123	133	127	134	<i>99</i>	<i>109</i>	<i>127</i>	<i>131</i>	<i>102</i>	<i>113</i>	<i>130</i>	<i>133</i>	134	<i>131</i>	<i>133</i>
Residual Fuel Oil.....	34	33	33	31	<i>32</i>	<i>35</i>	<i>36</i>	<i>37</i>	<i>35</i>	<i>36</i>	<i>37</i>	<i>38</i>	31	<i>37</i>	<i>38</i>
Other Oils ^e	265	301	309	258	<i>225</i>	<i>267</i>	<i>283</i>	<i>246</i>	<i>245</i>	<i>283</i>	<i>300</i>	<i>261</i>	258	<i>246</i>	<i>261</i>
Total Stocks (excluding SPR)	1011	1040	987	949	<i>873</i>	<i>937</i>	<i>958</i>	<i>933</i>	<i>925</i>	<i>986</i>	<i>1005</i>	<i>977</i>	949	<i>933</i>	<i>977</i>
Crude Oil in SPR.....	561	576	587	599	<i>599</i>	<i>608</i>	<i>618</i>	<i>628</i>	<i>640</i>	<i>640</i>	<i>640</i>	<i>640</i>	599	<i>628</i>	<i>640</i>
Heating Oil Reserve.....	2	2	2	2	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	2	<i>2</i>	<i>2</i>
Total Stocks (incl SPR and HOR).....	1575	1618	1576	1550	<i>1475</i>	<i>1547</i>	<i>1578</i>	<i>1564</i>	<i>1567</i>	<i>1628</i>	<i>1647</i>	<i>1619</i>	1550	<i>1564</i>	<i>1619</i>

^aIncludes lease condensate.^bNet imports equals gross imports plus SPR imports minus exports.^cIncludes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.^dIncludes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.^eIncludes stocks of all other oils, such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

SPR: Strategic Petroleum Reserve

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 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
Supply															
Total Dry Gas Production.....	4.69	4.77	4.78	4.81	4.83	4.87	4.95	4.94	4.90	4.81	4.87	4.95	19.05	19.60	19.52
Gross Imports	0.98	0.95	1.03	1.04	1.01	1.01	1.10	1.10	1.09	1.10	1.15	1.15	4.01	4.22	4.50
Pipeline	0.95	0.88	0.97	0.97	0.93	0.87	0.96	0.97	0.98	0.93	0.99	1.01	3.78	3.73	3.91
LNG.....	0.03	0.07	0.06	0.07	0.07	0.14	0.15	0.13	0.12	0.16	0.16	0.14	0.23	0.49	0.59
Gross Exports	0.10	0.12	0.14	0.15	0.17	0.17	0.17	0.18	0.18	0.19	0.21	0.23	0.52	0.69	0.80
Net Imports	0.88	0.83	0.90	0.89	0.84	0.84	0.93	0.92	0.91	0.91	0.94	0.93	3.49	3.53	3.69
Supplemental Gaseous Fuels.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.08	0.08	0.08
Total New Supply.....	5.59	5.62	5.69	5.72	5.70	5.73	5.90	5.89	5.83	5.73	5.83	5.90	22.62	23.21	23.29
Working Gas in Storage															
Opening	2.90	1.52	2.31	3.04	2.38	0.68	1.70	2.81	2.35	1.03	1.92	2.81	2.90	2.38	2.35
Closing	1.52	2.31	3.04	2.38	0.68	1.70	2.81	2.35	1.03	1.92	2.81	2.31	2.38	2.35	2.31
Net Withdrawals.....	1.39	-0.79	-0.73	0.67	1.70	-1.03	-1.11	0.46	1.32	-0.90	-0.89	0.51	0.53	0.03	0.04
Total Supply	6.98	4.83	4.96	6.38	7.40	4.70	4.79	6.35	7.15	4.84	4.94	6.41	23.15	23.24	23.34
Balancing Item ^a	-0.12	0.14	-0.08	-0.64	-0.08	0.20	-0.03	-0.76	0.09	0.11	-0.09	-0.77	-0.71	-0.67	-0.66
Total Primary Supply.....	6.85	4.96	4.88	5.74	7.32	4.90	4.77	5.59	7.24	4.95	4.85	5.63	22.44	22.57	22.68
Demand															
Residential	2.19	0.84	0.37	1.51	2.54	0.82	0.33	1.37	2.43	0.83	0.37	1.40	4.91	5.05	5.02
Commercial.....	1.20	0.60	0.42	0.90	1.33	0.59	0.42	0.90	1.35	0.58	0.40	0.85	3.11	3.23	3.19
Industrial	2.15	2.03	1.98	2.06	2.15	1.98	1.93	2.03	2.16	2.03	2.04	2.11	8.23	8.09	8.35
Lease and Plant Fuel.....	0.26	0.26	0.26	0.27	0.26	0.25	0.24	0.24	0.25	0.24	0.25	0.26	1.05	0.99	1.00
Other Industrial	1.89	1.77	1.72	1.80	1.89	1.73	1.70	1.79	1.92	1.79	1.79	1.86	7.18	7.10	7.36
CHP ^b	0.32	0.31	0.35	0.29	0.30	0.28	0.31	0.28	0.32	0.30	0.33	0.30	1.28	1.17	1.24
Non-CHP	1.57	1.45	1.37	1.51	1.58	1.45	1.39	1.51	1.60	1.49	1.47	1.56	5.90	5.93	6.11
Transportation ^c	0.20	0.14	0.14	0.16	0.21	0.14	0.15	0.17	0.21	0.15	0.13	0.17	0.64	0.67	0.67
Electric Power ^d	1.12	1.35	1.97	1.11	1.09	1.38	1.93	1.12	1.07	1.36	1.91	1.11	5.55	5.52	5.45
Total Demand	6.85	4.96	4.88	5.74	7.32	4.90	4.77	5.59	7.24	4.95	4.85	5.63	22.44	22.57	22.68

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

^bNatural gas used for electricity generation and production of useful thermal output by combined heat and power plants at industrial facilities. Includes a small amount of natural gas consumption at electricity-only plants in the industrial sector.

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

^dNatural gas used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers. Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: 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
Supply															
Production.....	282.6	267.6	270.8	272.8	<i>264.1</i>	<i>265.0</i>	<i>277.5</i>	<i>280.5</i>	<i>271.8</i>	<i>257.8</i>	<i>275.7</i>	<i>277.2</i>	1093.8	<i>1087.1</i>	<i>1082.6</i>
Appalachia.....	108.3	99.1	95.2	94.2	<i>95.4</i>	<i>96.2</i>	<i>98.6</i>	<i>100.1</i>	<i>99.9</i>	<i>91.1</i>	<i>96.3</i>	<i>96.7</i>	396.8	<i>390.3</i>	<i>384.0</i>
Interior.....	36.8	37.3	36.6	35.6	<i>36.1</i>	<i>34.9</i>	<i>33.7</i>	<i>31.1</i>	<i>32.0</i>	<i>32.9</i>	<i>32.0</i>	<i>29.0</i>	146.2	<i>135.9</i>	<i>125.8</i>
Western.....	137.6	131.2	138.9	143.1	<i>132.5</i>	<i>133.9</i>	<i>143.5</i>	<i>149.3</i>	<i>140.0</i>	<i>133.8</i>	<i>147.4</i>	<i>151.4</i>	550.8	<i>559.2</i>	<i>572.7</i>
Primary Stock Levels ^a															
Opening.....	35.9	40.3	41.3	35.7	<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>	35.9	<i>32.0</i>	<i>32.0</i>
Closing.....	40.3	41.3	35.7	32.0	<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>	32.0	<i>32.0</i>	<i>32.2</i>
Net Withdrawals.....	-4.4	-1.0	5.6	3.7	<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>	3.9	<i>(S)</i>	<i>-0.2</i>
Imports.....	4.0	3.9	4.7	4.4	<i>5.0</i>	<i>6.1</i>	<i>5.1</i>	<i>4.7</i>	<i>5.5</i>	<i>5.9</i>	<i>5.4</i>	<i>5.0</i>	16.9	<i>20.8</i>	<i>21.8</i>
Exports.....	9.3	11.0	9.3	10.0	<i>8.5</i>	<i>11.4</i>	<i>11.1</i>	<i>10.8</i>	<i>10.0</i>	<i>10.6</i>	<i>10.4</i>	<i>10.1</i>	39.6	<i>41.8</i>	<i>41.1</i>
Total Net Domestic Supply.....	273.0	259.4	271.8	270.8	<i>261.2</i>	<i>259.9</i>	<i>272.8</i>	<i>272.1</i>	<i>268.2</i>	<i>252.7</i>	<i>272.7</i>	<i>269.4</i>	1075.0	<i>1066.0</i>	<i>1063.0</i>
Secondary Stock Levels ^b															
Opening.....	146.0	152.9	158.0	142.7	<i>148.9</i>	<i>146.2</i>	<i>158.4</i>	<i>149.3</i>	<i>164.0</i>	<i>166.5</i>	<i>176.4</i>	<i>162.2</i>	146.0	<i>148.9</i>	<i>164.0</i>
Closing.....	152.9	158.0	142.7	148.9	<i>146.2</i>	<i>158.4</i>	<i>149.3</i>	<i>164.0</i>	<i>166.5</i>	<i>176.4</i>	<i>162.2</i>	<i>168.3</i>	148.9	<i>164.0</i>	<i>168.3</i>
Net Withdrawals.....	-6.9	-5.1	15.3	-6.2	<i>2.8</i>	<i>-12.3</i>	<i>9.1</i>	<i>-14.6</i>	<i>-2.6</i>	<i>-9.9</i>	<i>14.2</i>	<i>-6.1</i>	-2.9	<i>-15.0</i>	<i>-4.3</i>
Waste Coal Supplied to IPPs ^c	2.8	2.8	2.8	2.8	<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>	11.1	<i>11.6</i>	<i>14.8</i>
Total Supply.....	268.8	257.1	289.9	267.4	<i>266.9</i>	<i>250.5</i>	<i>284.8</i>	<i>260.4</i>	<i>269.3</i>	<i>246.5</i>	<i>290.6</i>	<i>266.9</i>	1083.2	<i>1062.6</i>	<i>1073.5</i>
Demand															
Coke Plants.....	5.4	5.6	5.6	5.9	<i>6.0</i>	<i>6.4</i>	<i>6.5</i>	<i>5.6</i>	<i>5.9</i>	<i>5.7</i>	<i>6.0</i>	<i>5.4</i>	22.5	<i>24.5</i>	<i>22.9</i>
Electric Power Sector ^d	231.6	231.1	267.0	245.6	<i>248.3</i>	<i>234.4</i>	<i>264.0</i>	<i>238.3</i>	<i>247.3</i>	<i>227.0</i>	<i>270.6</i>	<i>245.4</i>	975.4	<i>985.1</i>	<i>990.3</i>
Retail and General Industry.....	17.6	16.0	16.1	17.7	<i>17.4</i>	<i>14.3</i>	<i>14.3</i>	<i>16.4</i>	<i>16.2</i>	<i>13.9</i>	<i>14.0</i>	<i>16.2</i>	67.4	<i>62.5</i>	<i>60.2</i>
Total Demand ^e	254.6	252.8	288.7	269.2	<i>271.8</i>	<i>255.1</i>	<i>284.8</i>	<i>260.4</i>	<i>269.3</i>	<i>246.5</i>	<i>290.6</i>	<i>266.9</i>	1065.4	<i>1072.1</i>	<i>1073.5</i>
Discrepancy ^f	14.2	4.2	1.1	-1.8	<i>-4.9</i>	<i>-4.6</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>	17.8	<i>-9.5</i>	<i>0.0</i>

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

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

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

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

^eTotal Demand includes estimated IPP consumption.

^fThe discrepancy reflects an unaccounted-for shipper and receiver reporting difference, assumed to be zero in the forecast period.

Notes: 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

	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 ^a															
Coal.....	454.2	452.0	519.5	479.0	<i>487.5</i>	<i>456.3</i>	<i>513.8</i>	<i>463.7</i>	<i>480.5</i>	<i>439.9</i>	<i>524.3</i>	<i>474.6</i>	1904.7	<i>1921.3</i>	<i>1919.3</i>
Petroleum.....	18.0	21.6	24.9	20.2	<i>32.7</i>	<i>34.5</i>	<i>35.2</i>	<i>18.1</i>	<i>23.0</i>	<i>16.3</i>	<i>29.1</i>	<i>18.3</i>	84.6	<i>120.5</i>	<i>86.6</i>
Natural Gas.....	121.9	143.8	211.3	123.5	<i>121.3</i>	<i>149.1</i>	<i>206.8</i>	<i>127.0</i>	<i>123.4</i>	<i>148.5</i>	<i>207.4</i>	<i>126.8</i>	600.5	<i>604.2</i>	<i>606.1</i>
Nuclear.....	195.6	187.8	205.7	190.9	<i>190.2</i>	<i>181.8</i>	<i>205.3</i>	<i>190.4</i>	<i>195.1</i>	<i>191.4</i>	<i>206.3</i>	<i>191.5</i>	780.1	<i>767.6</i>	<i>784.3</i>
Hydroelectric.....	59.9	76.8	59.4	54.7	<i>60.8</i>	<i>76.9</i>	<i>62.5</i>	<i>63.0</i>	<i>77.7</i>	<i>83.8</i>	<i>66.9</i>	<i>68.2</i>	250.8	<i>263.2</i>	<i>296.6</i>
Geothermal and Other ^b	13.3	14.1	14.2	13.1	<i>12.9</i>	<i>13.6</i>	<i>14.5</i>	<i>14.2</i>	<i>15.1</i>	<i>14.9</i>	<i>15.5</i>	<i>15.1</i>	54.7	<i>55.2</i>	<i>60.7</i>
Subtotal.....	863.0	896.1	1035.0	881.3	<i>905.4</i>	<i>912.2</i>	<i>1038.0</i>	<i>876.4</i>	<i>914.7</i>	<i>894.9</i>	<i>1049.5</i>	<i>894.6</i>	3675.4	<i>3732.1</i>	<i>3753.7</i>
Other Sectors ^c	40.5	39.8	44.1	38.6	<i>39.8</i>	<i>38.2</i>	<i>40.9</i>	<i>39.0</i>	<i>39.5</i>	<i>39.6</i>	<i>42.6</i>	<i>40.7</i>	163.1	<i>157.8</i>	<i>162.4</i>
Total Generation.....	903.5	935.9	1079.2	920.0	<i>945.2</i>	<i>950.4</i>	<i>1078.9</i>	<i>915.4</i>	<i>954.2</i>	<i>934.5</i>	<i>1092.1</i>	<i>935.3</i>	3838.6	<i>3889.9</i>	<i>3916.1</i>
Net Imports ^d	6.3	4.7	8.6	3.2	<i>2.4</i>	<i>5.8</i>	<i>7.6</i>	<i>3.2</i>	<i>2.4</i>	<i>2.6</i>	<i>5.3</i>	<i>2.3</i>	22.9	<i>19.1</i>	<i>12.7</i>
Total Supply.....	909.8	940.6	1087.8	923.2	<i>947.6</i>	<i>956.2</i>	<i>1086.5</i>	<i>918.6</i>	<i>956.6</i>	<i>937.1</i>	<i>1097.4</i>	<i>937.6</i>	3861.4	<i>3909.0</i>	<i>3928.8</i>
Losses and Unaccounted for ^e	38.6	67.6	50.8	49.2	<i>37.9</i>	<i>72.3</i>	<i>52.8</i>	<i>49.2</i>	<i>39.4</i>	<i>67.4</i>	<i>51.2</i>	<i>50.2</i>	206.1	<i>212.1</i>	<i>208.1</i>
Demand															
Retail Sales ^f															
Residential.....	311.3	281.7	382.7	292.5	<i>336.0</i>	<i>281.9</i>	<i>386.7</i>	<i>287.8</i>	<i>338.2</i>	<i>274.4</i>	<i>391.5</i>	<i>292.1</i>	1268.2	<i>1292.4</i>	<i>1296.2</i>
Commercial.....	255.1	273.0	313.4	266.7	<i>265.8</i>	<i>280.8</i>	<i>315.0</i>	<i>268.6</i>	<i>269.8</i>	<i>275.7</i>	<i>317.5</i>	<i>273.7</i>	1108.1	<i>1130.1</i>	<i>1136.6</i>
Industrial.....	236.3	249.0	262.3	246.2	<i>238.5</i>	<i>252.3</i>	<i>257.1</i>	<i>243.6</i>	<i>239.1</i>	<i>249.6</i>	<i>260.4</i>	<i>249.8</i>	993.8	<i>991.5</i>	<i>999.0</i>
Other.....	23.9	25.3	30.0	26.0	<i>25.5</i>	<i>26.8</i>	<i>29.8</i>	<i>26.5</i>	<i>26.5</i>	<i>26.3</i>	<i>29.9</i>	<i>26.9</i>	105.2	<i>108.6</i>	<i>109.6</i>
Subtotal.....	826.5	829.1	988.2	831.4	<i>865.8</i>	<i>841.8</i>	<i>988.6</i>	<i>826.4</i>	<i>873.6</i>	<i>826.0</i>	<i>999.2</i>	<i>842.5</i>	3475.2	<i>3522.6</i>	<i>3541.4</i>
Other Use/Sales ^g	44.7	44.0	48.7	42.7	<i>43.9</i>	<i>42.2</i>	<i>45.1</i>	<i>43.0</i>	<i>43.6</i>	<i>43.7</i>	<i>47.1</i>	<i>44.9</i>	180.1	<i>174.2</i>	<i>179.3</i>
Total Demand.....	871.3	873.0	1037.0	874.1	<i>909.7</i>	<i>884.0</i>	<i>1033.7</i>	<i>869.5</i>	<i>917.3</i>	<i>869.7</i>	<i>1046.3</i>	<i>887.4</i>	3655.3	<i>3696.9</i>	<i>3720.7</i>

^aElectric Utilities and independent power producers.

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

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

^dData for 2002 are estimates.

^eBalancing item, mainly transmission and distribution losses.

^fTotal 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 2002 are estimated.

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

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

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 ^a															
Coal	454.2	452.0	519.5	479.0	487.5	456.3	513.8	463.7	480.5	439.9	524.3	474.6	1904.7	1921.3	1919.3
Petroleum	18.0	21.6	24.9	20.2	32.7	34.5	35.2	18.1	23.0	16.3	29.1	18.3	84.6	120.5	86.6
Natural Gas	121.9	143.8	211.3	123.5	121.3	149.1	206.8	127.0	123.4	148.5	207.4	126.8	600.5	604.2	606.1
Other ^b	268.8	278.7	279.3	258.7	263.8	272.3	282.2	267.7	287.9	290.2	288.8	274.8	1085.5	1086.1	1141.6
Subtotal	863.0	896.1	1035.0	881.3	905.4	912.2	1038.0	876.4	914.7	894.9	1049.5	894.6	3675.4	3732.1	3753.7
Commercial															
Coal	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	1.0	1.1	1.1
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	0.6	0.5
Natural Gas	1.1	1.0	2.4	1.0	1.1	1.2	2.0	1.2	1.2	1.2	1.9	1.1	5.4	5.4	5.4
Other ^b	0.4	0.5	0.5	0.5	0.4	0.6	0.4	0.6	0.5	0.6	0.4	0.6	1.9	2.0	2.0
Subtotal	1.8	1.8	3.3	1.8	2.0	2.2	2.8	2.2	2.2	2.1	2.6	2.1	8.7	9.1	9.0
Industrial															
Coal	4.9	5.0	5.4	5.3	5.3	4.7	5.0	5.2	5.1	4.8	5.3	5.4	20.7	20.2	20.7
Petroleum	1.2	1.1	1.2	1.3	1.6	1.7	1.6	1.2	1.1	0.9	1.4	1.2	4.9	6.1	4.5
Natural Gas	21.0	19.5	21.4	17.9	20.1	17.7	19.4	17.9	20.3	19.1	20.8	18.8	79.9	75.1	79.0
Other ^b	11.6	12.3	12.8	12.3	10.7	11.9	12.0	12.6	10.8	12.7	12.6	13.2	49.0	47.3	49.2
Subtotal	38.7	38.0	40.9	36.8	37.8	36.1	38.1	36.8	37.3	37.5	40.0	38.6	154.4	148.7	153.5
Total	903.5	935.9	1079.2	920.0	945.2	950.4	1078.9	915.4	954.2	934.5	1092.1	935.3	3838.6	3889.9	3916.1

^aElectric Utilities and independent power producers.

^b"Other" includes nuclear, hydroelectric, geothermal, wood, waste, wind and solar power sources.

Note: Commercial and industrial categories include electricity output from 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 ^a															
Coal	4.752	4.747	5.485	5.042	5.119	4.819	5.429	4.903	5.089	4.668	5.567	5.048	20.0	20.3	20.4
Petroleum	0.194	0.226	0.267	0.218	0.352	0.376	0.379	0.196	0.249	0.176	0.312	0.199	0.9	1.3	0.9
Natural Gas.....	1.087	1.326	1.957	1.084	1.052	1.356	1.888	1.098	1.051	1.328	1.866	1.082	5.5	5.4	5.3
Other ^b	2.843	3.082	3.169	2.869	2.912	2.887	3.001	2.849	3.065	3.078	3.071	2.924	12.0	11.6	12.1
Subtotal	8.875	9.381	10.878	9.214	9.435	9.438	10.696	9.045	9.454	9.251	10.816	9.253	38.3	38.6	38.8
Commercial															
Coal	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.004	0.004	0.003	0.003	0.004	0.013	0.014	0.013
Petroleum	0.001	0.001	0.001	0.001	0.003	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.005	0.008	0.006
Natural Gas.....	0.009	0.009	0.019	0.009	0.009	0.010	0.017	0.010	0.011	0.011	0.016	0.009	0.047	0.046	0.047
Other ^b	0.006	0.007	0.007	0.008	0.006	0.009	0.006	0.009	0.007	0.009	0.006	0.009	0.028	0.030	0.030
Subtotal	0.019	0.020	0.032	0.021	0.021	0.024	0.028	0.024	0.024	0.023	0.026	0.023	0.092	0.098	0.096
Industrial															
Coal	0.062	0.064	0.067	0.068	0.068	0.059	0.063	0.065	0.065	0.061	0.067	0.069	0.261	0.255	0.262
Petroleum	0.015	0.014	0.015	0.016	0.019	0.021	0.020	0.014	0.013	0.010	0.017	0.015	0.059	0.074	0.055
Natural Gas.....	0.183	0.179	0.197	0.157	0.179	0.160	0.174	0.159	0.182	0.171	0.186	0.169	0.717	0.671	0.707
Other ^b	0.142	0.145	0.153	0.162	0.138	0.157	0.157	0.162	0.141	0.167	0.164	0.168	0.603	0.614	0.640
Subtotal	0.402	0.401	0.433	0.403	0.404	0.397	0.413	0.401	0.401	0.409	0.433	0.420	1.639	1.615	1.664
Total	9.296	9.802	11.342	9.638	9.860	9.858	11.137	9.471	9.878	9.683	11.275	9.696	40.078	40.326	40.533
(Physical Units)															
Electric Power ^a															
Coal (Million Short Tons).....	231.0	230.8	266.7	245.1	248.9	234.3	264.0	238.4	247.4	227.0	270.7	245.4	973.7	985.6	990.6
Petroleum (Million Barrels per Day) ...	0.348	0.402	0.470	0.383	0.636	0.675	0.667	0.348	0.445	0.316	0.549	0.353	0.401	0.581	0.416
Natural Gas (Trillion Cubic Feet).....	1.060	1.294	1.909	1.058	1.026	1.323	1.842	1.071	1.025	1.296	1.820	1.056	5.321	5.261	5.197
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	0.003	0.002	0.006	0.003	0.003	0.003	0.004	0.002	0.003	0.003	0.002	0.004	0.003
Natural Gas (Trillion Cubic Feet).....	0.009	0.009	0.019	0.008	0.009	0.010	0.017	0.010	0.010	0.010	0.015	0.009	0.045	0.045	0.045
Industrial															
Coal (Million Short Tons).....	2.7	2.7	2.9	2.9	2.9	2.5	2.7	2.8	2.8	2.6	2.9	2.9	11.2	10.9	11.2
Petroleum (Million Barrels per Day) ...	0.027	0.025	0.026	0.028	0.036	0.038	0.035	0.025	0.024	0.019	0.030	0.026	0.026	0.033	0.025
Natural Gas (Trillion Cubic Feet).....	0.179	0.174	0.192	0.153	0.174	0.155	0.170	0.155	0.177	0.167	0.181	0.164	0.699	0.654	0.689

^aElectric Utilities and independent power producers.

^b"Other" includes nuclear, hydroelectric, geothermal, wood, waste, wind and solar power sources.

Note: Commercial and industrial categories include electricity output from 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
Electricity Sector							
Hydroelectric Power ^a	2.165	2.623	<i>2.756</i>	<i>3.106</i>	21.2	<i>5.1</i>	<i>12.7</i>
Geothermal, Solar and Wind Energy ^b	0.363	0.392	<i>0.394</i>	<i>0.457</i>	8.0	<i>0.5</i>	<i>16.0</i>
Biofuels ^c	0.450	0.466	<i>0.478</i>	<i>0.495</i>	3.6	<i>2.6</i>	<i>3.6</i>
Total	2.978	3.481	<i>3.628</i>	<i>4.058</i>	16.9	<i>4.2</i>	<i>11.9</i>
Other Sectors ^d							
Residential and Commercial ^e	0.567	0.513	<i>0.534</i>	<i>0.551</i>	-9.5	<i>4.1</i>	<i>3.2</i>
Residential	0.475	0.418	<i>0.436</i>	<i>0.455</i>	-12.0	<i>4.3</i>	<i>4.4</i>
Commercial	0.091	0.095	<i>0.098</i>	<i>0.096</i>	4.4	<i>3.2</i>	<i>-2.0</i>
Industrial ^f	1.641	1.734	<i>1.642</i>	<i>1.684</i>	5.7	<i>-5.3</i>	<i>2.6</i>
Transportation ^g	0.147	0.175	<i>0.205</i>	<i>0.205</i>	19.0	<i>17.1</i>	<i>0.0</i>
Total	2.354	2.422	<i>2.381</i>	<i>2.440</i>	2.9	<i>-1.7</i>	<i>2.5</i>
Total Renewable Energy Demand	5.331	5.903	<i>6.008</i>	<i>6.498</i>	10.7	<i>1.8</i>	<i>8.2</i>

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

^bAlso includes photovoltaic and solar thermal energy. Sharp declines since 1998 in the electric utility sector and corresponding increases in the nonutility sector for this category mostly reflect sale of geothermal facilities to the nonutility sector.

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

^dRenewable energy includes minor components of non-marketed renewable energy, which is renewable energy that is neither bought nor sold, either directly or indirectly as inputs to marketed energy. The Energy Information Administration does not estimate or project total consumption of non-marketed renewable energy.

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

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

^gEthanol blended into gasoline.

Notes: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; 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
Real Gross Domestic Product (GDP) (billion chained 1996 dollars)	6708	6676	6880	7063	7348	7544	7813	8159	8509	8859	9191	9215	9440	<i>9629</i>	<i>9987</i>
Imported Crude Oil Price ^a (nominal dollars per barrel)	21.79	18.74	18.20	16.13	15.53	17.14	20.62	18.49	12.07	17.26	27.72	22.00	23.69	<i>27.64</i>	<i>24.74</i>
Petroleum Supply															
Crude Oil Production ^b (million barrels per day)	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	5.82	5.80	5.75	<i>5.80</i>	<i>5.77</i>
Total Petroleum Net Imports (including SPR) (million barrels per day)	7.16	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	10.42	10.90	10.54	<i>10.95</i>	<i>11.31</i>
Energy Demand															
U.S. Petroleum (million barrels per day)	17.04	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	19.70	19.65	19.76	<i>19.91</i>	<i>20.35</i>
Natural Gas (trillion cubic feet).....	19.17	19.56	20.23	20.79	21.24	22.20	22.60	22.72	22.24	22.39	23.47	22.23	22.44	<i>22.57</i>	<i>22.68</i>
Coal (million short tons).....	904	899	908	944	951	962	1006	1030	1037	1039	1084	1060	1065	<i>1072</i>	<i>1073</i>
Electricity (billion kilowatthours) Retail Sales ^c	2713	2762	2763	2861	2935	3013	3101	3146	3264	3312	3421	3370	3475	<i>3523</i>	<i>3541</i>
Other Use/Sales ^d	115	118	122	128	134	144	146	148	161	183	181	173	180	<i>174</i>	<i>179</i>
Total	2827	2880	2886	2989	3069	3157	3247	3294	3425	3495	3603	3543	3655	<i>3697</i>	<i>3721</i>
Total Energy Demand ^e (quadrillion Btu)	84.6	84.5	85.9	87.6	89.2	91.2	94.2	94.7	95.1	96.8	99.0	96.3	97.6	<i>98.4</i>	<i>99.8</i>
Total Energy Demand per Dollar of GDP (thousand Btu per 1996 Dollar).....	12.62	12.66	12.48	12.40	12.15	12.09	12.06	11.63	11.18	10.92	10.78	10.45	10.34	<i>10.22</i>	<i>10.00</i>

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

^bIncludes lease condensate.

^cTotal 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.

^dDefined as the sum of facility use of onsite net electricity generation plus direct sales of power by industrial- or commercial-sector generators to third parties, reported annually in Table 7.5 of the Monthly Energy Review (MER). Data for 2001 are estimates.

^e"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/EIA-0109; Petroleum Supply Annual, DOE/EIA-0340/2; Natural Gas Monthly, DOE/EIA-0130; Electric Power Monthly, DOE/EIA-0226; Quarterly Coal Report, DOE/EIA-0121; International Petroleum Monthly DOE/EIA-520, and Weekly Petroleum Status Report DOE/EIA-0208. Macroeconomic projections are based on Global Insight Forecast CONTROL0703.

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
Macroeconomic															
Real Gross Domestic Product (billion chained 1996 dollars).....	6708	6676	6880	7063	7348	7544	7813	8159	8509	8859	9191	9215	9440	<i>9629</i>	<i>9987</i>
GDP Implicit Price Deflator (Index, 1996=1.000).....	0.865	0.897	0.918	0.941	0.960	0.981	1.000	1.019	1.032	1.047	1.069	1.094	1.107	<i>1.124</i>	<i>1.143</i>
Real Disposable Personal Income (billion chained 1996 Dollars).....	5014	5033	5189	5261	5397	5539	5678	5854	6169	6328	6630	6748	7032	<i>7225</i>	<i>7483</i>
Manufacturing Production (Index, 1996=1.000).....	74.156	72.721	75.516	78.214	83.212	87.846	92.157	100.000	106.518	111.872	117.672	112.800	111.691	<i>111.109</i>	<i>117.885</i>
Real Fixed Investment (billion chained 1996 dollars).....	895	833	886	958	1046	1109	1213	1329	1480	1595	1692	1627	1577	<i>1595</i>	<i>1652</i>
Real Exchange Rate (Index, 1996=1.000).....	0.918	0.920	0.926	0.956	0.933	0.869	0.918	0.992	1.044	1.047	1.083	1.141	1.138	<i>1.019</i>	<i>1.001</i>
Business Inventory Change (billion chained 1996 dollars).....	8.7	-6.6	-4.7	3.6	11.9	13.8	9.9	14.8	27.1	14.4	17.5	-36.2	-11.5	<i>-7.8</i>	<i>14.0</i>
Producer Price Index (index, 1982=1.000).....	1.163	1.165	1.172	1.189	1.205	1.248	1.277	1.276	1.244	1.255	1.328	1.342	1.311	<i>1.390</i>	<i>1.394</i>
Consumer Price Index (index, 1982-1984=1.000).....	1.307	1.362	1.403	1.445	1.482	1.524	1.569	1.605	1.630	1.666	1.722	1.771	1.799	<i>1.837</i>	<i>1.869</i>
Petroleum Product Price Index (index, 1982=1.000).....	0.748	0.671	0.647	0.620	0.591	0.608	0.701	0.680	0.513	0.609	0.913	0.853	0.795	<i>0.958</i>	<i>0.859</i>
Non-Farm Employment (millions).....	109.5	108.4	108.7	110.8	114.3	117.3	119.7	122.8	125.9	129.0	131.8	131.8	130.4	<i>130.2</i>	<i>131.7</i>
Commercial Employment (millions).....	71.0	70.5	70.9	72.9	75.7	78.4	80.7	83.4	86.1	89.1	91.4	92.0	91.4	<i>91.8</i>	<i>93.4</i>
Total Industrial Production (index, 1997=100.0).....	77.6	76.3	78.3	80.9	85.2	89.3	93.2	100.0	105.6	110.1	115.3	111.2	110.4	<i>110.3</i>	<i>116.1</i>
Housing Stock (millions).....	101.1	101.8	102.6	103.8	105.1	106.7	108.0	109.4	111.1	112.7	113.3	114.7	115.8	<i>117.3</i>	<i>118.5</i>
Weather ^a															
Heating Degree-Days															
U.S.	4016	4200	4441	4700	4483	4531	4713	4542	3951	4169	4460	4207	4284	<i>4607</i>	<i>4477</i>
New England	5848	5960	6844	6728	6672	6559	6679	6662	5680	5952	6489	6055	6099	<i>7050</i>	<i>6488</i>
Middle Atlantic	4998	5177	5964	5948	5934	5831	5986	5809	4812	5351	5774	5323	5372	<i>6206</i>	<i>5723</i>
U.S. Gas-Weighted.....	4139	4337	4458	4754	4659	4707	4980	4802	4183	4399	4680	4451	4560	<i>4862</i>	<i>4730</i>
Cooling Degree-Days (U.S.).....	1260	1331	1040	1218	1220	1293	1180	1156	1410	1297	1229	1256	1393	<i>1228</i>	<i>1240</i>

^aPopulation-weighted degree-days. A degree-day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 2000 population.

Notes: 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 CONTROL0703.

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
Production															
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	22.41	22.32
Natural Gas.....	18.33	18.23	18.38	18.58	19.35	19.08	19.27	19.32	19.61	19.34	19.66	20.23	19.58	20.15	20.07
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	12.16	12.28	12.26
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	2.35	2.64
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	8.02	8.19
Hydroelectric.....	3.04	2.99	2.60	2.87	2.67	3.20	3.58	3.62	3.27	3.23	2.78	2.12	2.59	2.72	3.07
Other Renewables.....	3.08	3.14	3.29	3.27	3.38	3.46	3.55	3.43	3.26	3.33	3.35	3.12	3.22	3.19	3.32
Total.....	70.75	70.38	69.96	68.29	70.70	71.17	72.42	72.34	72.80	71.67	71.24	71.38	70.82	71.12	71.86
Net Imports															
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	-0.57	-0.53
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	3.62	3.79
Crude Oil.....	12.50	12.22	13.00	14.43	15.07	15.36	16.20	17.88	18.96	19.06	19.94	20.58	20.17	20.70	21.39
Petroleum Products	2.79	2.00	1.96	1.97	2.19	1.53	2.02	1.76	1.98	2.12	2.44	2.72	2.49	2.81	2.84
Electricity	0.01	0.07	0.09	0.09	0.15	0.13	0.14	0.12	0.09	0.10	0.12	0.08	0.08	0.07	0.04
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	25.77	26.67	27.58
Adjustments ^a	-0.25	1.06	1.65	2.50	0.58	2.63	3.06	1.93	0.25	1.76	3.11	-1.62	0.69	0.30	0.11
Consumption															
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	22.10	22.12
Natural Gas.....	19.72	20.15	20.83	21.35	21.84	22.78	23.20	23.33	22.93	23.01	24.04	22.84	23.06	23.19	23.29
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	38.30	38.69	39.55
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	8.02	8.19
Other.....	6.00	6.23	6.09	6.34	6.46	7.00	7.48	7.33	6.75	6.77	6.43	5.22	5.80	6.10	6.41
Total.....	84.57	84.64	86.05	87.78	89.57	91.50	94.52	94.97	95.34	96.97	99.32	96.08	97.29	98.09	99.56

^aBalancing 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
Crude Oil Prices (dollars per barrel)															
Imported Average ^a	21.79	18.74	18.20	16.13	15.53	17.14	20.62	18.49	12.07	17.26	27.72	22.00	23.69	27.64	24.74
WTI ^b 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	30.75	27.25
Natural Gas Wellhead															
(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	4.02	2.96	4.94	4.07
Petroleum Products															
Gasoline Retail ^b (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	1.56	1.47
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	1.52	1.43
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	1.51	1.45
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	0.84	0.79
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	1.25
No. 6 Residual Fuel Oil, Retail ^c															
(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	22.24	23.81	29.11	24.82
Electric Utility Fuels															
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	1.25	1.25	1.23
Heavy Fuel Oil ^d															
(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	3.68	4.67	4.02
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	3.54	5.33	4.59
Other Residential															
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	7.85	9.32	9.46
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	8.45	8.54	8.56

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

^bWest Texas Intermediate.

^cAverage self-service cash prices.

^dAverage for all sulfur contents.

^eIncludes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. 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
Supply															
Crude Oil Supply															
Domestic Production ^a	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	5.82	5.80	5.75	5.80	5.77
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	0.98	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	4.76	4.82	4.83
Net Commercial Imports ^b	5.76	5.67	5.98	6.67	6.95	7.14	7.40	8.12	8.60	8.60	9.01	9.30	9.12	9.36	9.65
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	-0.12	-0.08	-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	-0.04
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	0.11	0.13	0.16
Total Crude Oil Supply	13.41	13.30	13.41	13.61	13.87	13.97	14.19	14.66	14.89	14.80	15.07	15.13	14.95	15.22	15.51
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	1.72	1.93
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	0.42	0.42	0.40
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	0.96	0.93	0.94
Net Product Imports ^c	1.38	0.96	0.94	0.93	1.09	0.75	1.10	1.04	1.17	1.30	1.40	1.59	1.42	1.58	1.66
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	0.03	-0.08
Total Supply	17.04	16.76	17.10	17.26	17.72	17.72	18.31	18.62	18.92	19.52	19.70	19.65	19.76	19.91	20.36
Demand															
Motor Gasoline ^d	7.31	7.23	7.38	7.48	7.60	7.79	7.89	8.02	8.25	8.43	8.47	8.61	8.85	8.91	9.15
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	1.60
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	3.78	3.92	4.00
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	0.70	0.75	0.66
Other Oils ^e	3.95	3.99	4.20	4.17	4.41	4.36	4.63	4.77	4.69	5.01	4.87	4.73	4.82	4.75	4.95
Total Demand.....	17.04	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	19.70	19.65	19.76	19.91	20.35
Total Petroleum Net Imports	7.16	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	10.42	10.90	10.54	10.95	11.31
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	323	325	318	335	337	303	284	305	324	284	286	312	278	274	290
Total Motor Gasoline.....	220	219	216	226	215	202	195	210	216	193	196	210	209	205	212
Jet Fuel.....	52	49	43	40	47	40	40	44	45	41	45	42	39	40	42
Distillate Fuel Oil	132	144	141	141	145	130	127	138	156	125	118	145	134	131	133
Residual Fuel Oil.....	49	50	43	44	42	37	46	40	45	36	36	41	31	37	38
Other Oils ^f	227	251	292	237	274	348	280	204	212	396	246	178	345	262	218

^aIncludes lease condensate.

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

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

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

^eIncludes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.

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

SPR: Strategic Petroleum Reserve. NGL: Natural Gas Liquids

Notes: Minor discrepancies with other EIA published historical data are due to rounding, with the following exception: recent petroleum demand and supply data displayed here reflect the incorporation of resubmissions of the data as reported in EIA's Petroleum Supply Monthly, TableC1. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: 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
Supply															
Total Dry Gas Production	17.81	17.70	17.84	18.10	18.82	18.60	18.78	18.83	19.02	18.83	19.18	19.68	19.05	<i>19.60</i>	<i>19.52</i>
Gross Imports	1.53	1.77	2.14	2.35	2.62	2.84	2.94	2.99	3.15	3.59	3.78	3.98	4.01	<i>4.22</i>	<i>4.50</i>
Gross Exports	0.09	0.13	0.22	0.14	0.16	0.15	0.15	0.16	0.16	0.16	0.24	0.37	0.52	<i>0.69</i>	<i>0.80</i>
Net Imports	1.45	1.64	1.92	2.21	2.46	2.69	2.78	2.84	2.99	3.42	3.54	3.60	3.49	<i>3.53</i>	<i>3.69</i>
Supplemental Gaseous Fuels.....	0.12	0.11	0.12	0.12	0.11	0.11	0.09	0.08	0.08	0.08	0.09	0.09	0.08	<i>0.08</i>	<i>0.08</i>
Total New Supply.....	19.38	19.45	19.88	20.42	21.39	21.40	21.66	21.74	22.10	22.34	22.81	23.37	22.62	<i>23.21</i>	<i>23.29</i>
Working Gas in Storage															
Opening	2.85	3.07	2.82	2.60	2.32	2.61	2.15	2.17	2.17	2.73	2.52	1.72	2.90	<i>2.38</i>	<i>2.35</i>
Closing.....	3.07	2.82	2.60	2.32	2.61	2.15	2.17	2.17	2.73	2.52	1.72	2.90	2.38	<i>2.35</i>	<i>2.31</i>
Net Withdrawals.....	-0.22	0.24	0.23	0.28	-0.28	0.45	-0.02	0.00	-0.56	0.21	0.80	-1.18	0.53	<i>0.03</i>	<i>0.04</i>
Total Supply.....	19.16	19.70	20.11	20.70	21.11	21.85	21.64	21.74	21.54	22.54	23.61	22.18	23.15	<i>23.24</i>	<i>23.34</i>
Balancing Item ^a	0.01	-0.14	0.12	0.09	0.13	0.35	0.96	0.98	0.70	-0.15	-0.15	0.05	-0.71	<i>-0.67</i>	<i>-0.66</i>
Total Primary Supply	19.17	19.56	20.23	20.79	21.24	22.20	22.60	22.72	22.24	22.39	23.47	22.23	22.44	<i>22.57</i>	<i>22.68</i>
Demand															
Residential	4.39	4.56	4.69	4.96	4.85	4.85	5.24	4.98	4.52	4.73	4.99	4.78	4.91	<i>5.05</i>	<i>5.02</i>
Commercial.....	2.62	2.73	2.80	2.86	2.90	3.03	3.16	3.21	3.00	3.04	3.22	3.04	3.11	<i>3.23</i>	<i>3.19</i>
Industrial	8.25	8.36	8.70	8.87	8.91	9.38	9.68	9.71	9.49	9.16	9.40	8.45	8.23	<i>8.09</i>	<i>8.35</i>
Lease and Plant Fuel.....	1.24	1.13	1.17	1.17	1.12	1.22	1.25	1.20	1.17	1.08	1.15	1.09	1.05	<i>0.99</i>	<i>1.00</i>
Other Industrial	7.02	7.23	7.53	7.70	7.79	8.16	8.44	8.51	8.32	8.08	8.25	7.36	7.18	<i>7.10</i>	<i>7.36</i>
CHP ^b	1.06	1.06	1.11	1.12	1.18	1.26	1.29	1.28	1.35	1.40	1.39	1.31	1.28	<i>1.17</i>	<i>1.24</i>
Non-CHP	5.96	6.17	6.42	6.58	6.61	6.90	7.15	7.23	6.97	6.68	6.87	6.05	5.90	<i>5.93</i>	<i>6.11</i>
Transportation ^c	0.66	0.60	0.59	0.63	0.69	0.70	0.72	0.76	0.64	0.66	0.66	0.64	0.64	<i>0.67</i>	<i>0.67</i>
Electric Power ^d	3.24	3.32	3.45	3.47	3.90	4.24	3.81	4.06	4.59	4.82	5.21	5.34	5.55	<i>5.52</i>	<i>5.45</i>
Total Demand	19.17	19.56	20.23	20.79	21.24	22.20	22.60	22.72	22.24	22.39	23.47	22.23	22.44	<i>22.57</i>	<i>22.68</i>

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

^bNatural gas used for electricity generation and production of useful thermal output by combined heat and power plants at industrial facilities. Includes a small amount of natural gas consumption at electricity-only plants in the industrial sector.

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

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

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

Sources: Historical data: 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
Supply															
Production.....	1029.1	996.0	997.5	945.4	1033.5	1033.0	1063.9	1089.9	1117.5	1100.4	1073.6	1127.7	1093.8	<i>1087.1</i>	<i>1082.6</i>
Appalachia.....	489.0	457.8	456.6	409.7	445.4	434.9	451.9	467.8	460.4	425.6	419.4	432.8	396.8	<i>390.3</i>	<i>384.0</i>
Interior.....	205.8	195.4	195.7	167.2	179.9	168.5	172.8	170.9	168.4	162.5	143.5	147.0	146.2	<i>135.9</i>	<i>125.8</i>
Western.....	334.3	342.8	345.3	368.5	408.3	429.6	439.1	451.3	488.8	512.3	510.7	547.9	550.8	<i>559.2</i>	<i>572.7</i>
Primary Stock Levels ^a															
Opening.....	29.0	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	39.5	31.9	35.9	<i>32.0</i>	<i>32.0</i>
Closing.....	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	39.5	31.9	35.9	32.0	<i>32.0</i>	<i>32.2</i>
Net Withdrawals.....	-4.4	0.4	-1.0	8.7	-7.9	-1.2	5.8	-5.3	-2.6	-2.9	7.6	-4.0	3.9	<i>S</i>	<i>-0.2</i>
Imports.....	2.7	3.4	3.8	7.3	7.6	7.2	7.1	7.5	8.7	9.1	12.5	19.8	16.9	<i>20.8</i>	<i>21.8</i>
Exports.....	105.8	109.0	102.5	74.5	71.4	88.5	90.5	83.5	78.0	58.5	58.5	48.7	39.6	<i>41.8</i>	<i>41.1</i>
Total Net Domestic Supply.....	921.6	890.9	897.8	886.9	961.8	950.4	986.3	1008.5	1045.7	1048.1	1035.2	1094.8	1075.0	<i>1066.0</i>	<i>1063.0</i>
Secondary Stock Levels ^b															
Opening.....	147.1	170.1	170.2	166.8	123.1	139.6	138.0	126.0	108.8	131.6	149.1	108.5	146.0	<i>148.9</i>	<i>164.0</i>
Closing.....	170.1	170.2	166.8	123.1	139.6	138.0	126.0	108.8	131.6	149.1	108.5	146.0	148.9	<i>164.0</i>	<i>168.3</i>
Net Withdrawals.....	-23.0	-0.1	3.3	43.8	-16.5	1.5	12.0	17.2	-22.8	-17.5	40.7	-37.6	-2.9	<i>-15.0</i>	<i>-4.3</i>
Waste Coal Supplied to IPPs ^c	0.0	0.0	6.0	6.4	7.9	8.5	8.8	8.1	9.0	9.6	10.1	10.6	11.1	<i>11.6</i>	<i>14.8</i>
Total Supply.....	898.5	890.8	907.2	937.1	953.2	960.4	1007.1	1033.9	1031.8	1040.2	1086.0	1067.9	1083.2	<i>1062.6</i>	<i>1073.5</i>
Demand															
Coke Plants.....	38.9	33.9	32.4	31.3	31.7	33.0	31.7	30.2	28.2	28.1	28.9	26.1	22.5	<i>24.5</i>	<i>22.9</i>
Electric Power Sector ^d	782.6	783.9	795.1	831.6	838.4	850.2	896.9	921.4	936.6	940.9	985.8	964.5	975.4	<i>985.1</i>	<i>990.3</i>
Retail and General Industry.....	83.1	81.5	80.2	81.1	81.2	78.9	77.7	78.0	72.3	69.6	69.3	69.6	67.4	<i>62.5</i>	<i>60.2</i>
Residential and Commercial.....	6.7	6.1	6.2	6.2	6.0	5.8	6.0	6.5	4.9	4.9	4.1	4.4	4.4	<i>4.4</i>	<i>4.1</i>
Industrial.....	76.3	75.4	74.0	74.9	75.2	73.1	71.7	71.5	67.4	64.7	65.2	65.3	63.1	<i>58.1</i>	<i>56.2</i>
CHP ^e	27.8	27.0	28.2	28.9	29.7	29.4	29.4	29.9	28.6	27.8	28.0	26.4	26.5	<i>25.1</i>	<i>25.8</i>
Non-CHP.....	48.5	48.4	45.8	46.0	45.5	43.7	42.3	41.7	38.9	37.0	37.2	38.8	36.6	<i>33.0</i>	<i>30.4</i>
Total Demand ^f	904.5	899.2	907.7	944.1	951.3	962.1	1006.3	1029.5	1037.1	1038.6	1084.1	1060.2	1065.4	<i>1072.1</i>	<i>1073.5</i>
Discrepancy ^g	-6.0	-8.5	-0.5	-7.0	1.9	-1.7	0.8	4.3	-5.3	1.6	1.9	7.7	17.8	<i>-9.5</i>	<i>0.0</i>

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

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

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

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

^eCoal used for electricity generation and production of useful thermal output by combined heat and power plants at industrial facilities. Includes a small amount of coal consumption at electricity—only plants in the industrial sector.

^fTotal Demand includes estimated IPP consumption.

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

Notes: Rows and columns may not add due to independent rounding. 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
Net Electricity Generation															
Electric Power Sector ^a															
Coal	1572.1	1568.8	1597.7	1665.5	1666.3	1686.1	1772.0	1820.8	1850.2	1858.6	1943.1	1882.8	1904.7	<i>1921.3</i>	<i>1919.3</i>
Petroleum	118.9	112.8	92.2	105.4	98.7	68.1	74.8	86.5	122.2	111.5	105.2	119.1	84.6	<i>120.5</i>	<i>86.6</i>
Natural Gas	309.5	317.8	334.3	342.2	385.7	419.2	378.8	399.6	449.3	473.0	518.0	554.9	600.5	<i>604.2</i>	<i>606.1</i>
Nuclear	576.9	612.6	618.8	610.3	640.4	673.4	674.7	628.6	673.7	728.3	753.9	768.8	780.1	<i>767.6</i>	<i>784.3</i>
Hydroelectric	286.2	281.5	245.8	273.5	250.6	302.7	338.1	346.6	313.4	308.6	265.8	204.9	250.8	<i>263.2</i>	<i>296.6</i>
Geothermal and Other ^b	36.5	40.8	44.3	45.9	45.8	43.7	44.7	46.0	47.3	48.7	50.2	49.4	54.7	<i>55.2</i>	<i>60.7</i>
Subtotal	2900.1	2934.2	2933.1	3042.8	3087.5	3193.2	3283.0	3328.1	3456.1	3528.7	3636.2	3580.1	3675.4	<i>3732.1</i>	<i>3753.7</i>
Other Sectors ^c	136.7	138.2	149.5	153.3	158.8	159.3	160.0	162.8	162.9	164.8	164.6	156.6	163.1	<i>157.8</i>	<i>162.4</i>
Total	3036.7	3072.5	3082.6	3196.1	3246.3	3352.5	3443.0	3490.9	3619.0	3693.5	3800.8	3736.6	3838.6	<i>3889.9</i>	<i>3916.1</i>
Net Imports ^d	2.3	19.6	25.4	27.8	44.8	39.2	40.2	34.1	25.8	29.0	34.0	22.0	22.9	<i>19.1</i>	<i>12.7</i>
Total Supply	3039.0	3092.1	3108.0	3223.9	3291.1	3391.7	3483.2	3525.0	3644.8	3722.5	3834.8	3758.7	3861.4	<i>3909.0</i>	<i>3928.8</i>
Losses and Unaccounted for ^e	211.9	212.0	222.4	234.9	222.4	234.4	236.2	230.9	219.7	227.9	231.9	216.1	206.1	<i>212.1</i>	<i>208.1</i>
Demand															
Retail Sales ^f															
Residential	924.0	955.4	935.9	994.8	1008.5	1042.5	1082.5	1075.9	1130.1	1144.9	1192.4	1202.6	1268.2	<i>1292.4</i>	<i>1296.2</i>
Commercial	751.0	765.7	761.3	794.6	820.3	862.7	887.4	928.6	979.4	1002.0	1055.2	1089.2	1108.1	<i>1130.1</i>	<i>1136.6</i>
Industrial	945.5	946.6	972.7	977.2	1008.0	1012.7	1033.6	1038.2	1051.2	1058.2	1064.2	964.2	993.8	<i>991.5</i>	<i>999.0</i>
Other	92.0	94.3	93.4	94.9	97.8	95.4	97.5	102.9	103.5	107.0	109.5	113.8	105.2	<i>108.6</i>	<i>109.6</i>
Subtotal	2712.6	2762.0	2763.4	2861.5	2934.6	3013.3	3101.1	3145.6	3264.2	3312.1	3421.4	3369.8	3475.2	<i>3522.6</i>	<i>3541.4</i>
Other Use/Sales ^g	114.6	118.1	122.3	127.5	134.1	144.1	145.9	148.4	160.9	182.5	181.5	172.8	180.1	<i>174.2</i>	<i>179.3</i>
Total Demand	2827.1	2880.1	2885.6	2989.0	3068.7	3157.3	3247.0	3294.0	3425.1	3494.6	3602.9	3542.6	3655.3	<i>3696.9</i>	<i>3720.7</i>

^aElectric Utilities and independent power producers.

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

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

^dData for 2002 are estimates.

^eBalancing item, mainly transmission and distribution losses.

^fTotal 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 2002 are estimated.

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

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

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.