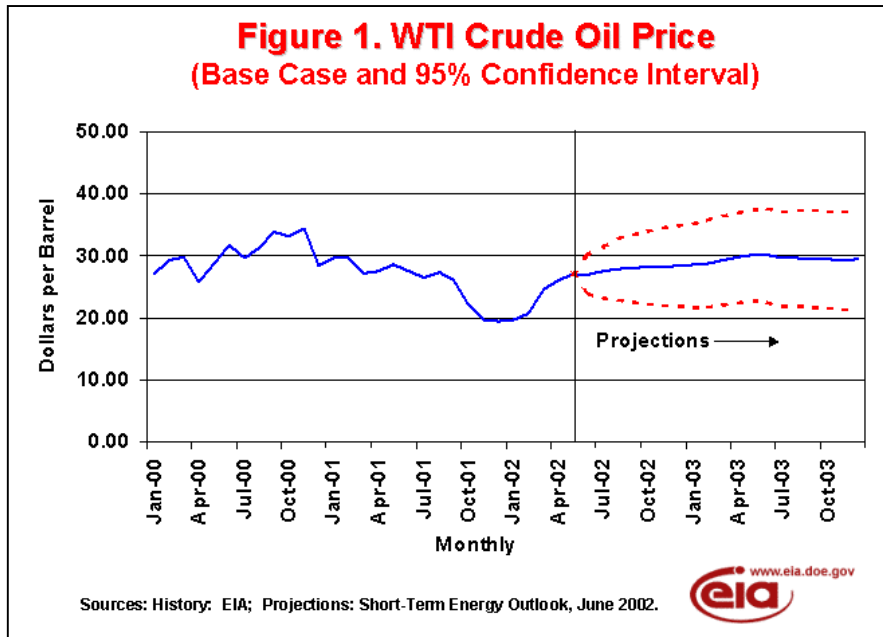


Short-Term Energy Outlook

June 2002

Overview

World Oil Markets: May marked the third consecutive month that the OPEC basket price averaged above \$22 per barrel, the lower end of OPEC's target range for the OPEC basket price. The OPEC basket price has been above \$22 per barrel since March 8, and is projected to remain within the target range throughout the forecast period, with prices rising at end-2002 and early 2003 before declining again in mid-2003. The price of West Texas Intermediate (WTI) was almost \$1 per barrel higher in May than in April, averaging \$27.04 per barrel (Figure 1).



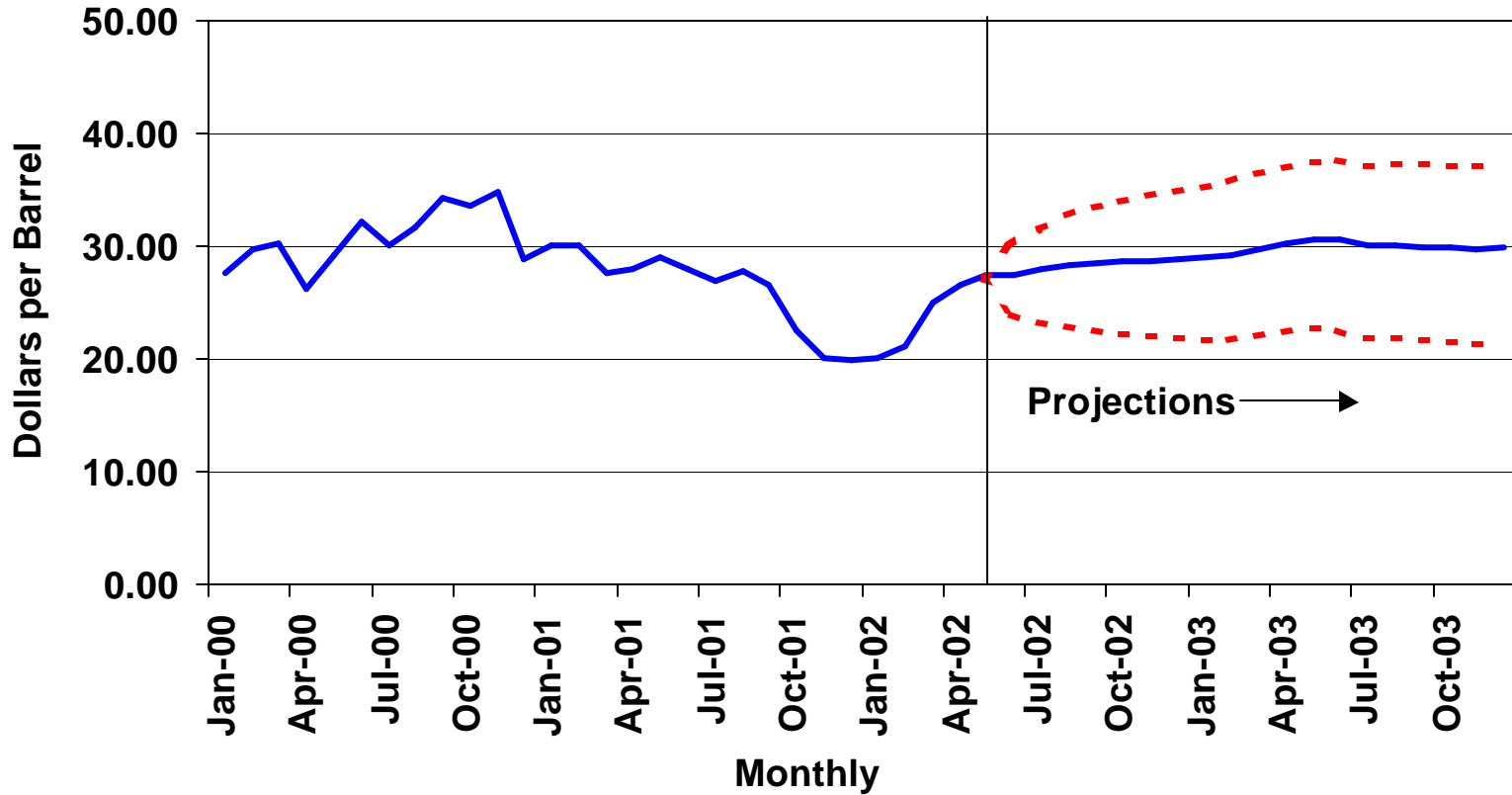
Summer Motor Gasoline Update: Retail average regular grade motor gasoline prices declined by just one cent in May. This follows a substantial 30-cent increase between February and April. Last month's counter-seasonal movement was in response to increasing gasoline inventories, resulting in part from high imports. The projected (base case) average price for the summer is \$1.41 per gallon, 13 cents less than last summer's average (Figure 2). Assuming normal seasonal movements, pump prices are expected to reach a monthly average peak near \$1.43 during the third quarter, with an uncertainty range of \$1.32-\$1.54 per gallon.

U.S. Natural Gas Markets: In 2002, the annual average natural gas wellhead price is projected to be approximately \$2.90 per thousand cubic feet compared to about \$4.10 last year. In 2003, a return to more normal (lower) levels of gas in storage, continuing economic growth, and rising crude oil prices should drive natural gas wellhead prices higher, probably into the range of \$3.20-\$3.30 per thousand cubic feet. Natural gas prices are higher now than they were in February, during the height of the winter. It is atypical to see spot natural gas prices higher in the cooling season than during the heating season. Moreover, working gas in underground storage has remained at exceptionally high levels for the past several months. By the end of May, the storage level for working gas was more than 20 percent above the previous 5-year average for that month. We maintain the belief that a downward correction to below \$3.00 per thousand cubic feet is likely in the next 2-3 months if summer weather is normal or cooler than normal.

International Oil Markets

Crude Oil Prices. Although the U.S. benchmark West Texas Intermediate (WTI) oil price averaged almost \$1 per barrel higher in May than in April, WTI prices were falling at month's-end, finishing almost \$2 per barrel lower than the May average of \$27.04 per barrel. Other world oil price markers also fell slightly or remained about flat last month, with the Brent crude oil price averaging slightly less in May than in April. Nevertheless, May marked the third consecutive month that the OPEC basket price averaged above \$22 per barrel, the lower end of OPEC's target range for the OPEC basket price. The OPEC basket price has been

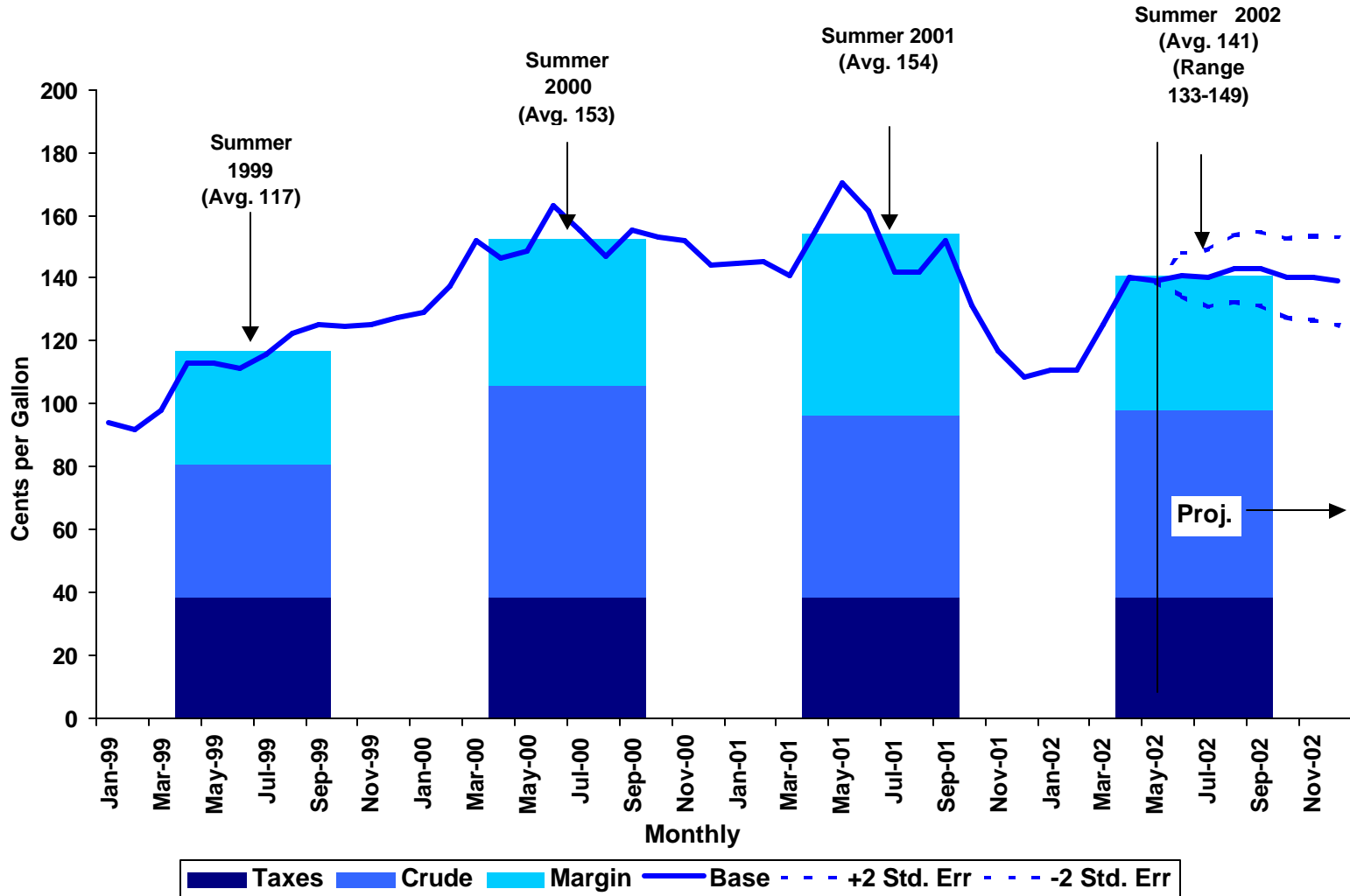
**Figure 1. WTI Crude Oil Price
(Base Case and 95% Confidence Interval)**



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



Figure 2. Retail Gasoline Price Cases*



* Regular gasoline, self-serve cash.

Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



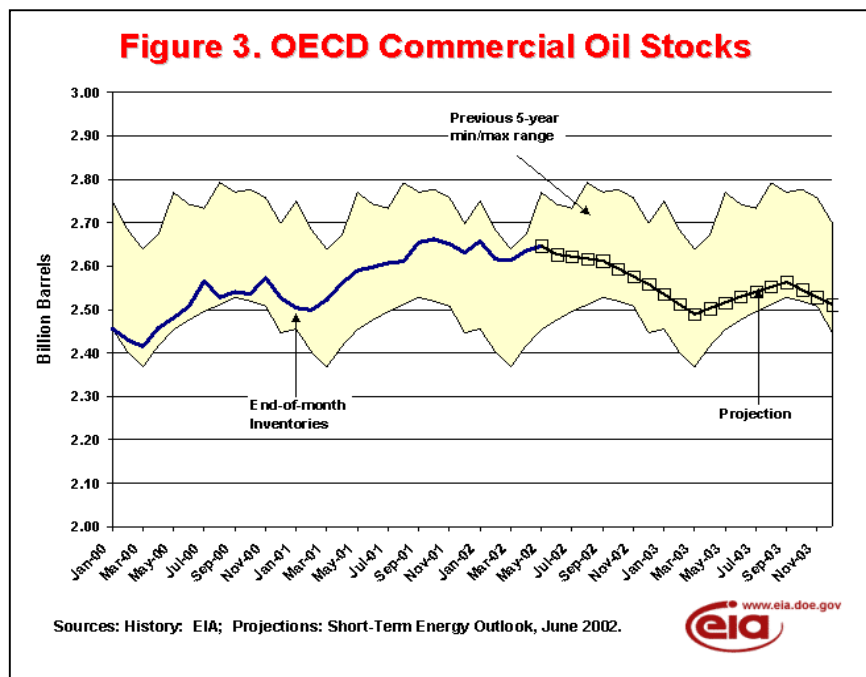
above \$22 per barrel since March 8, and is projected to remain within the target range throughout the forecast period, with prices rising at end-2002 and early 2003 before declining again in mid-2003 (Figure 1).

International Oil Supply and Demand. With OPEC basket prices within OPEC’s target range, members of the OPEC 10 have suggested that the Cartel will not raise their production quotas at their June 26 meeting. OPEC members have been suggesting for weeks that market fundamentals did not yet warrant production increases, and that recent higher prices were due in large part to a “war premium” created by uncertainties over events in the Middle East and Venezuela (in April) and, more recently, over the situation in South Asia. However, OPEC has indicated that it will review the situation at the end of the third quarter, when the long-awaited demand recovery could be underway and reduce surplus world oil inventories.

The continued slump in global oil demand and a warm winter led to a counter-seasonal rise in OECD inventories from December to May, as OECD stocks ended over 50 million barrels higher than they were a year ago at this time, and over 150 million barrels higher than they were in May 2000. However, EIA still projects that the OPEC 10 production cuts that began in January, the continuing reduced level of Iraqi exports, and a demand recovery should become increasingly visible in the form of lower inventories, building support for continued strong or rising world oil prices (Figure 3).

EIA’s current *Outlook* estimates world oil demand growth of over 600,000 barrels per day in 2002, with a demand turnaround beginning in the third quarter (Figure 4). With the expected recovery of the economy in 2003, particularly in the United States, where GDP growth is projected to reach over 3 percent annually, oil demand could increase by 1.2 million barrels per day in 2003, with half of this coming from the United States.

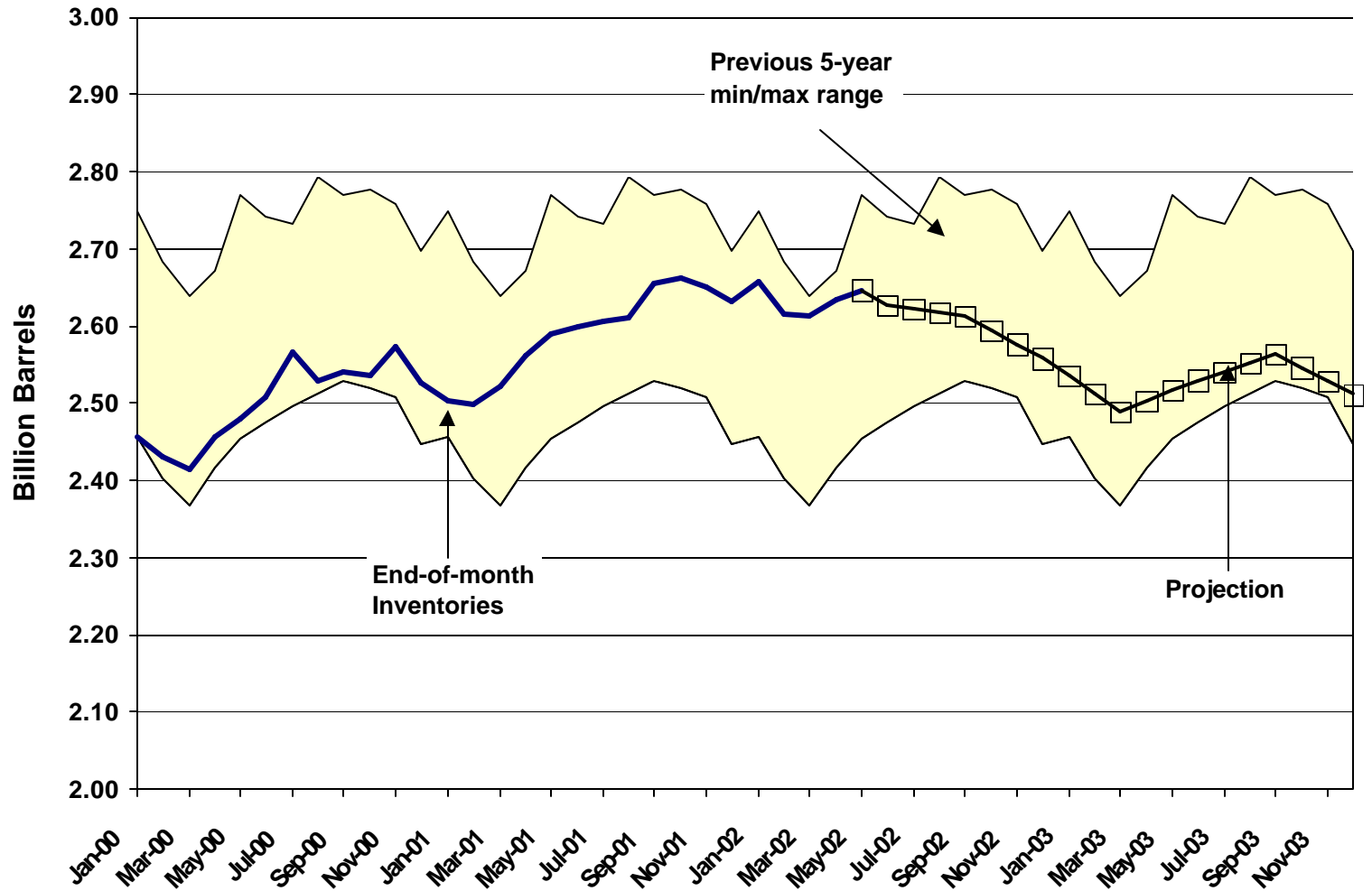
OPEC production in May is estimated to have risen by about 800,000 barrels per day over April levels, but the bulk of this came with the end of Iraq’s self-imposed embargo. OPEC 10 production has apparently increased since February, rising by an estimated 560,000 barrels per day over the last 3 months. However, EIA’s current *Outlook* assumes that OPEC production will need to rise further over the rest of 2002 in order to prevent prices from rising above OPEC’s target range. The expected turnaround in world oil demand in the second half of 2002, combined with OPEC’s very low quota level, is projected to reduce world oil inventories rapidly unless the OPEC 10 increase their production by another half million barrels per day by year’s-end.



U. S. Energy Prices

Motor Gasoline: Retail average monthly motor gasoline prices fell by one cent per gallon in May compared to the previous month. Only a few months ago the phenomenon of falling pump prices in May (albeit by a small amount) would not have been expected, since motor gasoline prices tend to peak during this time of the year, particularly around the Memorial Day holiday, the traditional beginning of the driving season. Earlier in the year, pump prices had climbed about 30 cents per gallon from February through April. Crude oil prices had also risen over this time

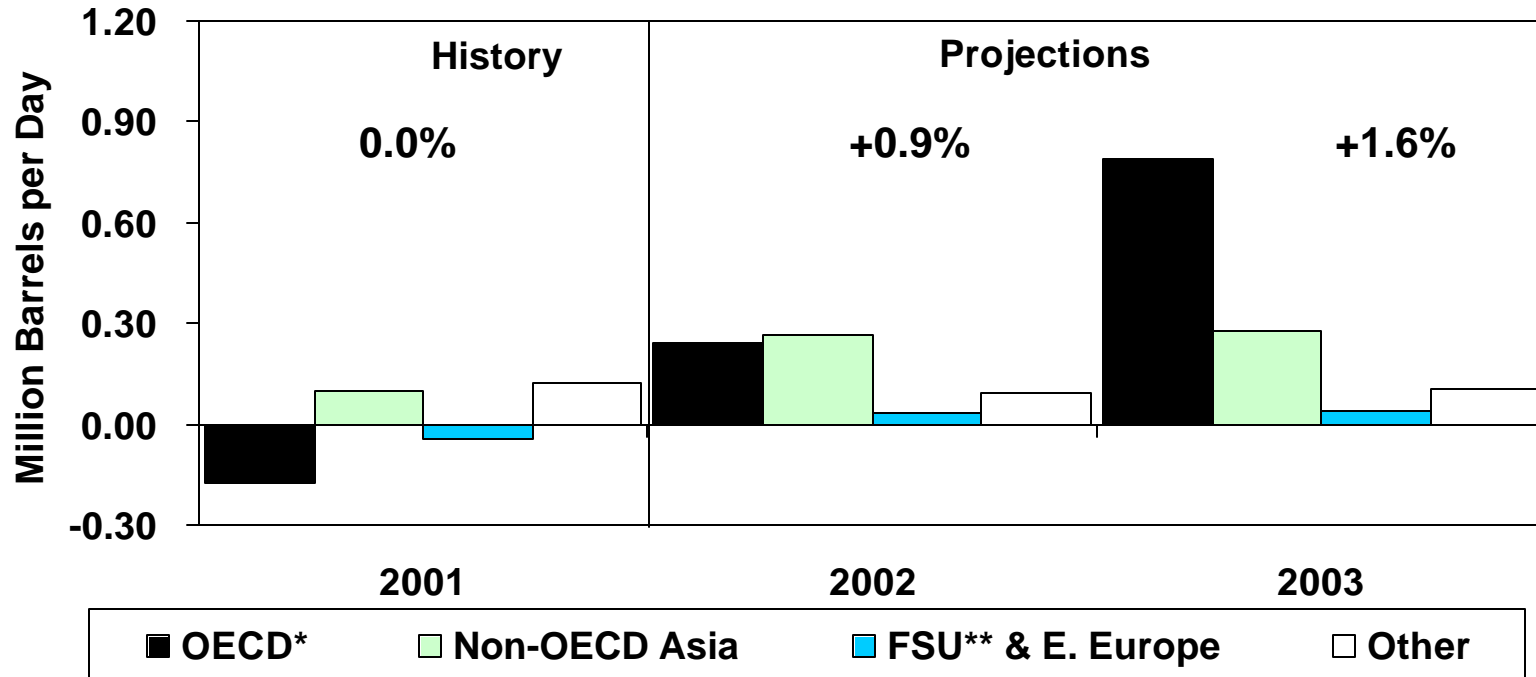
Figure 3. OECD Commercial Oil Stocks



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



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



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

** FSU = Former Soviet Union

Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.

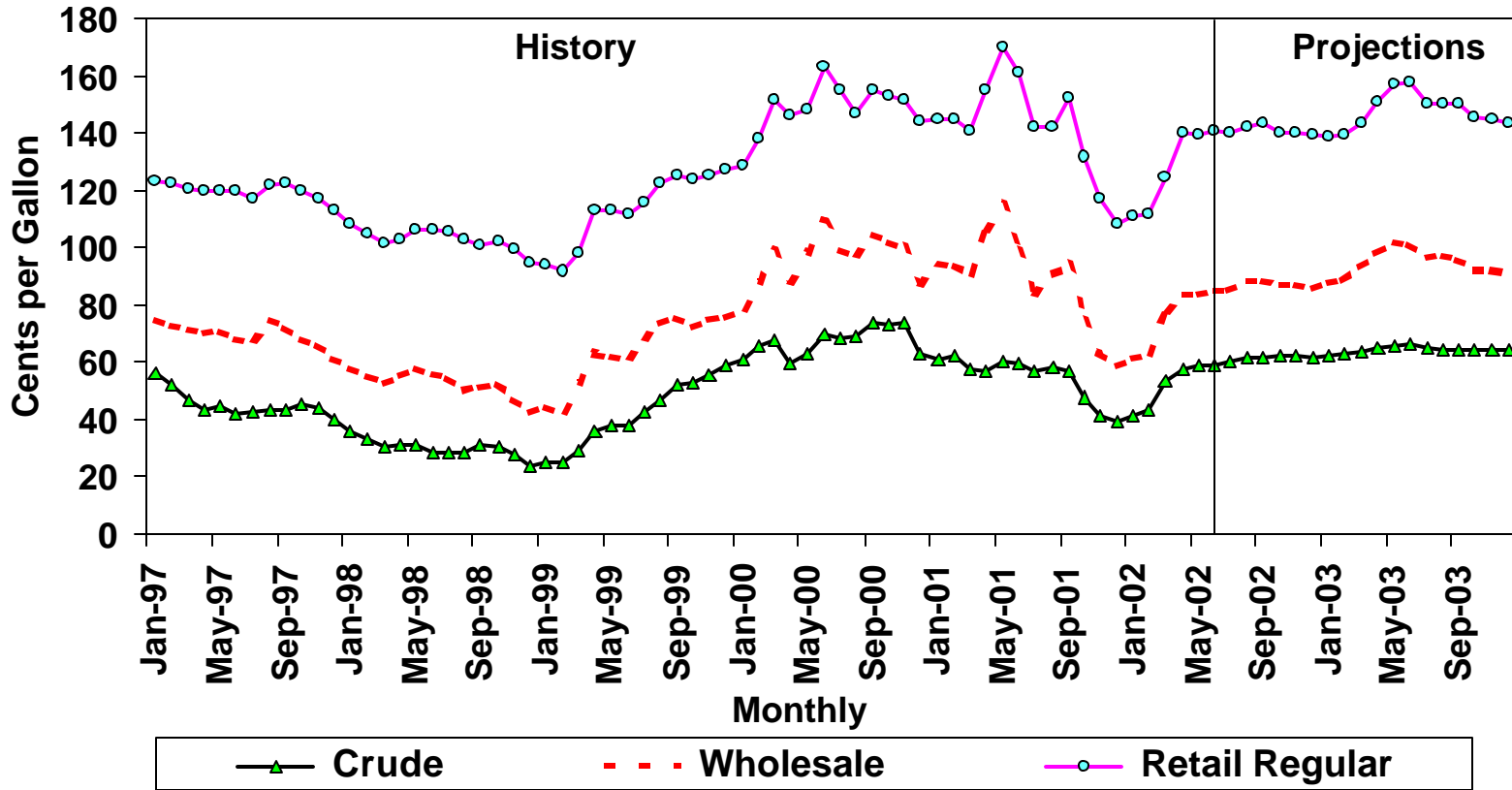


period, gaining about \$5.00 per barrel. About one year ago, the U.S. average retail monthly price of motor gasoline (regular) reached \$1.70 per gallon, a record high ([Figure 5](#)). The seasonal changeover to summer grade gasoline went much more smoothly this year than last year. High inventories of gasoline and record levels of imports of this fuel are two primary factors keeping a lid on motor gasoline prices this summer, even as consumption of gasoline also reaches record levels. It is possible that pump prices could rise a bit over the course of the summer, since crude oil prices are expected to remain strong and the demand for gasoline is expected to increase over the next several months. The current base-case projection calls for the U.S. monthly average retail price of gasoline to peak at around \$1.43 per gallon this summer. Our uncertainty range for the summer peak extends from \$1.32 to \$1.54 per gallon. Still, this represents a downward revision of several cents per gallon from our previous forecast. The incidence of price spikes, particularly at the regional level, is still possible if refinery and/or pipeline problems crop up or if there is a dramatic upward spurt in crude oil prices. Conversely, (assuming ample gasoline inventories) a significant and sustained lessening of crude oil prices would result in a similar reduction of prices at the pump. Interestingly, refiner margins (the difference between the refiner price of gasoline and the refiner acquisition cost of crude oil) have been relatively weak this summer as supplies of gasoline are more than adequate, especially when compared to the last two summers. Next year, retail gasoline prices are projected to gain another 10-15 cents per gallon on an annual basis, assuming rising crude oil prices and recovering refiner margins, as continuing economic growth boosts gasoline demand ([Figure 6](#)). Currently, gasoline inventories are at the high end of the "normal" range ([Figure 7](#)). One year ago, gasoline inventories were below normal.

Distillate Fuel Oil (Diesel and Heating Oil): Diesel fuel oil prices have more or less tracked retail motor gasoline prices since late March. Retail diesel prices have been flat, even slipping a little since April. As in the case of gasoline, inventories for distillate have been quite robust, putting a ceiling on any near-term price increases. At the end of May, distillate fuel oil inventories were about 125 million barrels, a level brushing the upper range of the 5-year average ([Figure 8](#)). Assuming that our base case crude oil price path holds, distillate prices should continue on a fairly stable course over the next several months until the heating season begins. Then, of course, winter demand for fuel oil should propel both heating oil and diesel fuel prices upward through the heating season. A stronger economy combined with the assumption of higher crude oil prices in 2003 should result in price increases of 10-15 cents per gallon for retail heating oil and diesel fuel ([Figure 9](#)).

Natural Gas: Spot wellhead prices have been over \$3.00 per thousand cubic feet since mid-March ([Figure 10](#)). Although the natural gas market has been exhibiting a fair amount of price volatility (rising or falling by as much as 25-30 cents per thousand cubic feet daily) since the end of the winter, the spot price has not breached the \$4.00 per thousand cubic feet mark, nor has it dipped below \$3.00 per thousand cubic feet. Natural gas prices are higher now than they were through the winter until March. It is atypical to see spot gas prices higher in the cooling season than during the heating season, particularly when working gas in underground storage is at high levels, as it has been for the past several months. By the end of May, the storage level for working gas was more than 20 percent above the previous 5-year average for that month. The wellhead price continues to hover over \$3.00 per thousand cubic feet. Rising world oil prices and a strengthened economy will reduce competitive pressure on natural gas prices, but given the current relatively weak demand-side fundamentals, we would have expected prices to be somewhat lower. So, natural gas prices are currently higher than had been previously expected. There has been some anxiety within the industry that natural gas production capacity has been decreasing, resulting in a diminished supply picture for, at least, the short-term. A lack of spare capacity seems dubious to us at this time given the overall resource development efforts of the past 10-18 months. If the summer turns out to be mild and the incremental demand for gas-fired electricity generation (to run air-conditioners) turns out to be moderate, the wellhead price could once more dip below \$3.00 per thousand cubic feet. In 2002, the annual average natural gas wellhead price is projected to be about \$2.90 per thousand cubic feet compared to around \$4.10 last year. In 2003, the combination of lower levels of underground gas storage, continuing

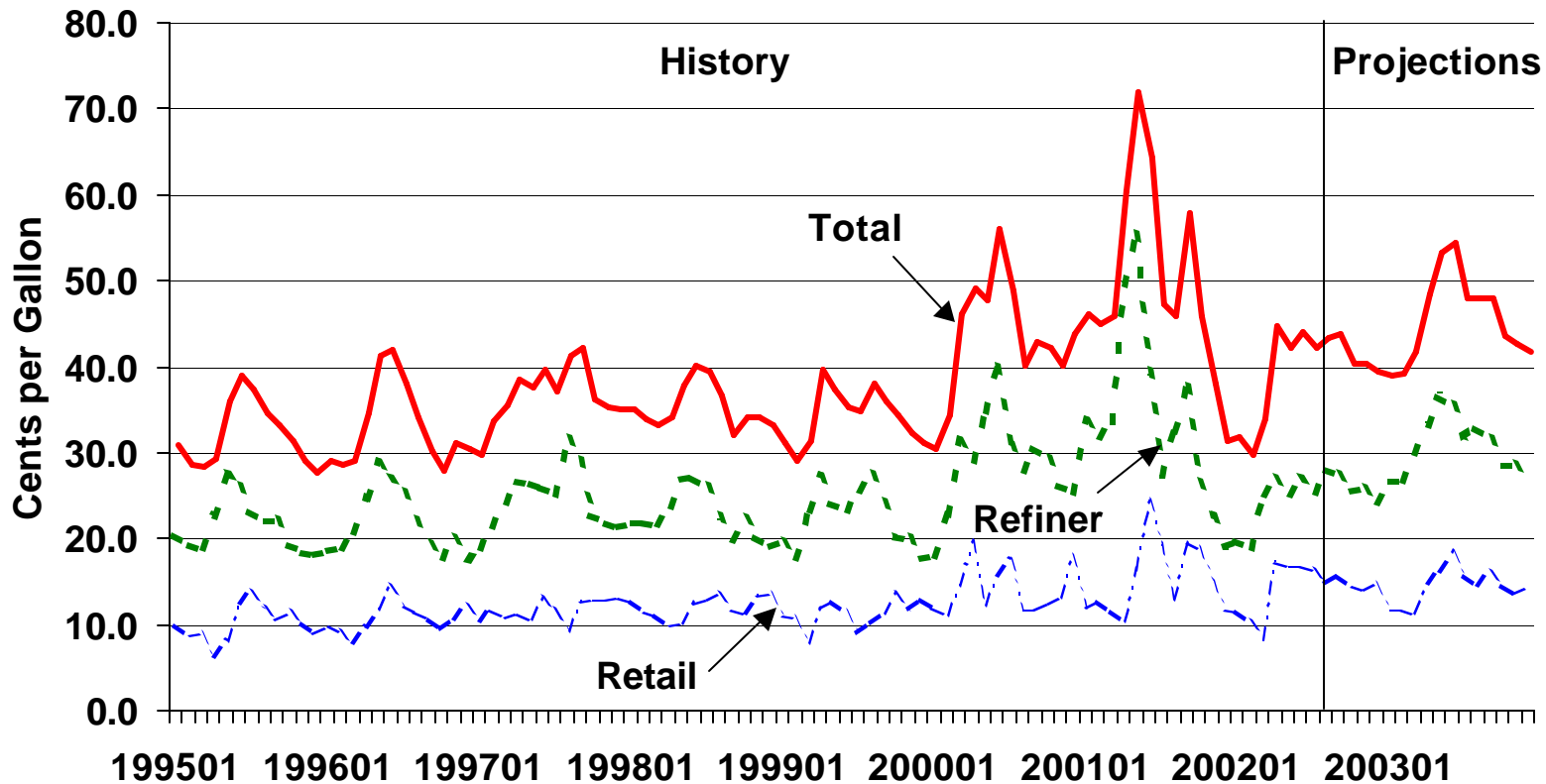
Figure 5. Motor Gasoline Prices



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



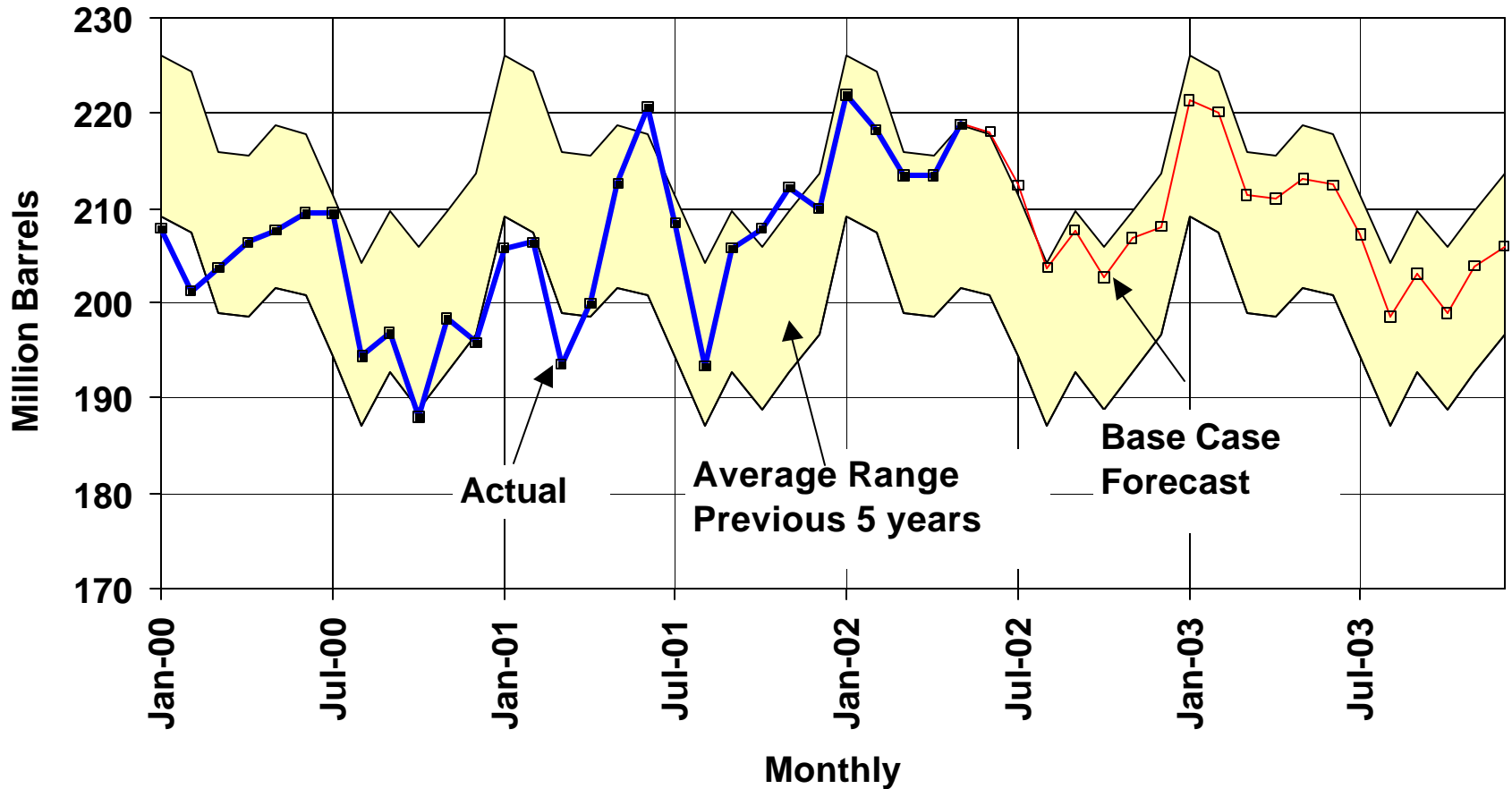
Figure 6. Motor Gasoline Spreads



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



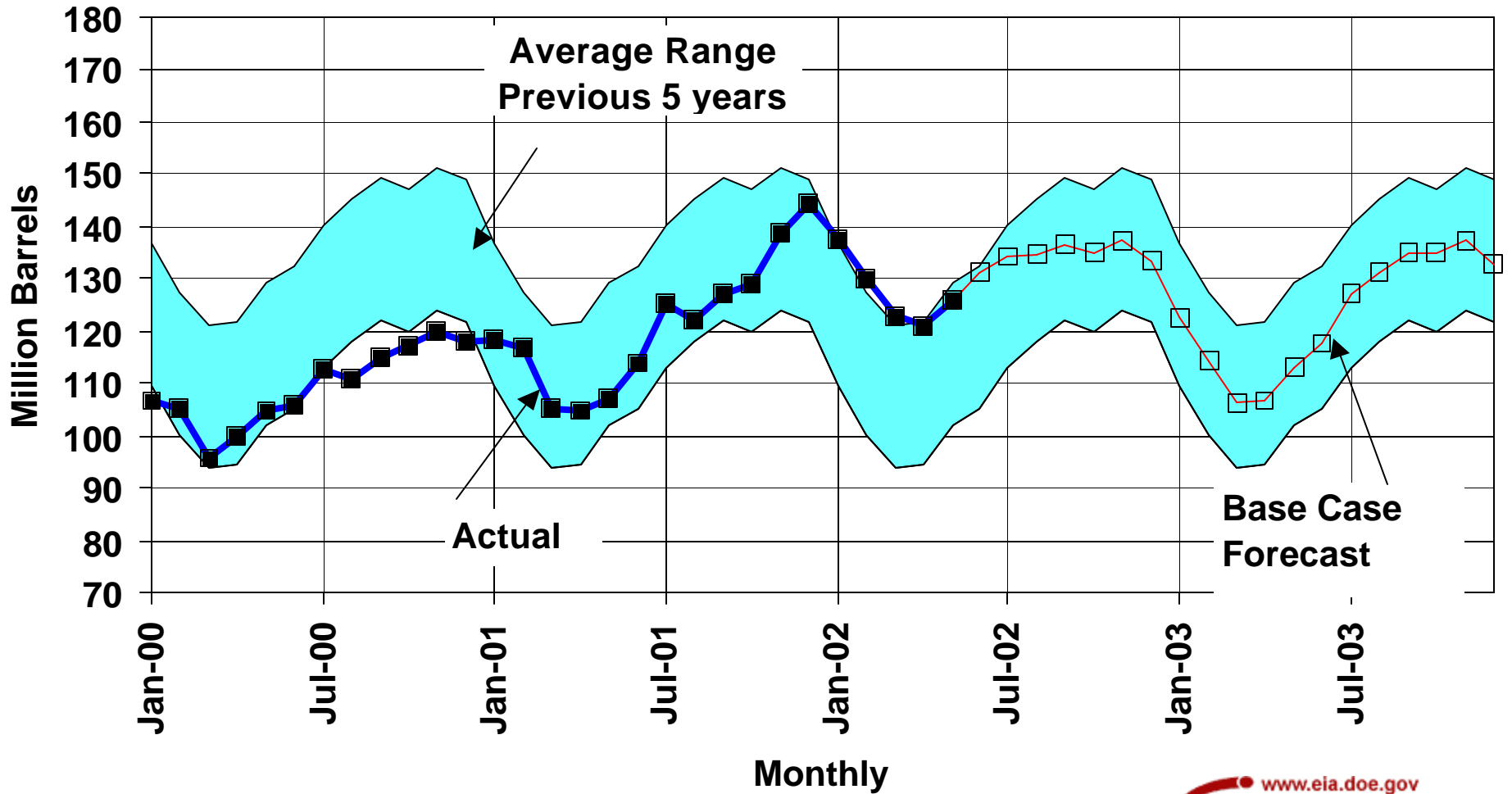
Figure 7. U.S. Gasoline Inventories



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



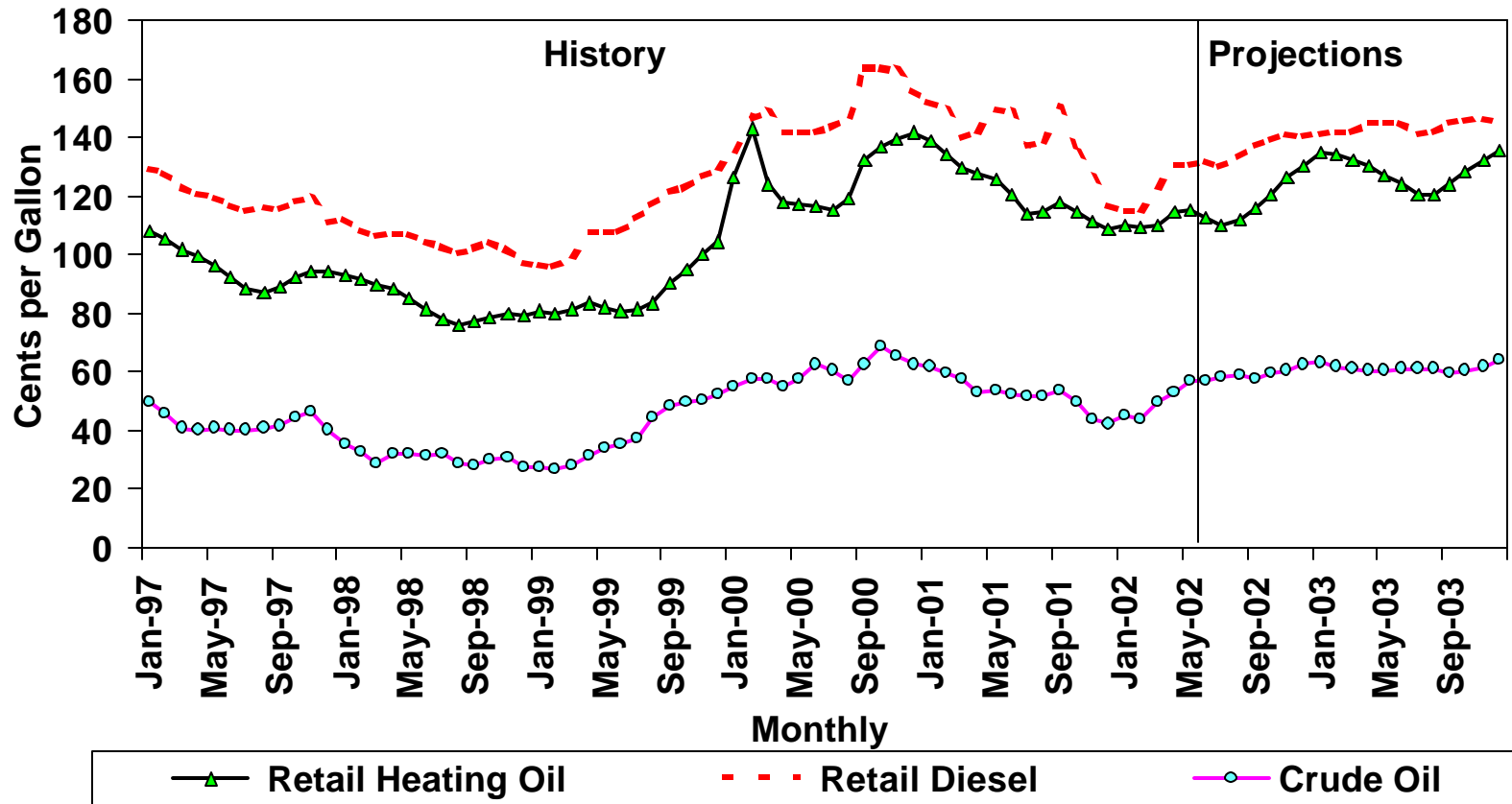
Figure 8. Distillate Fuel Inventories



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



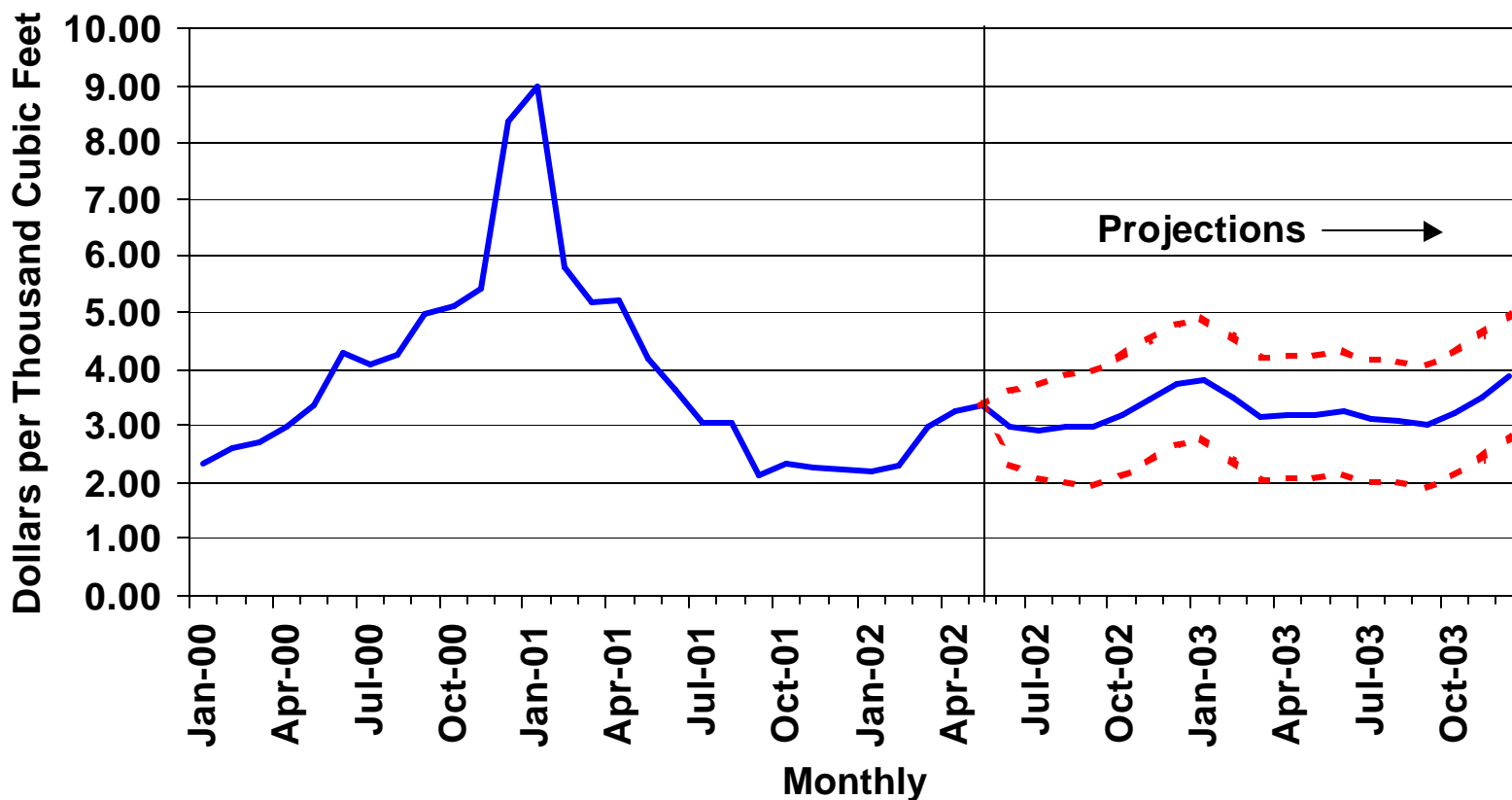
Figure 9. Distillate Fuel Prices



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



**Figure 10. Natural Gas Spot Prices
(Base Case and 95% Confidence Interval)**



Sources: History: Natural Gas Week; Projections: Short-Term Energy Outlook, June 2002.



economic growth, and rising crude oil prices is expected to drive natural gas wellhead prices higher to about \$3.30 per thousand cubic feet.

U.S. Oil Demand

Total petroleum products demand for the current year is projected (under our current base case scenario) to average 19.67 million barrels per day, little changed from the 2001 average (Figure 11). Continued increases in motor gasoline demand, buoyed by increases in real disposable income, are expected to be offset by demand declines in the other major petroleum products. Despite projections of a positive year-over-year growth in industrial production later in the year, the recent weakness in industrial activity, record warm weather for the first quarter, and the (related) increased availability of natural gas compared to early 2001 account for the 2.4-percent decline in distillate demand projected for the year. Although air-travel activity has been gradually recovering from its recent lows resulting from the events of last year, total jet-fuel demand is still projected to register an overall 2.2-percent decline for the year as a whole. The first half of this year is expected to witness an approximately 8- percent decline in demand compared to the same period a year ago. (It should be noted that this comparison represents an improvement in the prospects for air activity: during the quarter following the events of last September, air traffic activity was more than 15 percent below that of the same period in 2000.) Moreover, the final quarter of this year is expected to see a year-to-year increase of 11 percent in jet-fuel demand. But that projection reflects a continuing recovery: the projected demand level is still somewhat less than it would be if the events of last September did not occur. Residual fuel oil demand is expected to contract by 12.3 percent to a record low of about 740,000 barrels per day. Again, that contraction stems primarily from the unusually warm weather during the first quarter, depressed levels of industrial activity in the first half of 2002, and greater availability of natural gas. The presumed return to normal weather in the fourth quarter and a recovery in industrial activity are expected to result in a firming of demand during the latter half of the year.

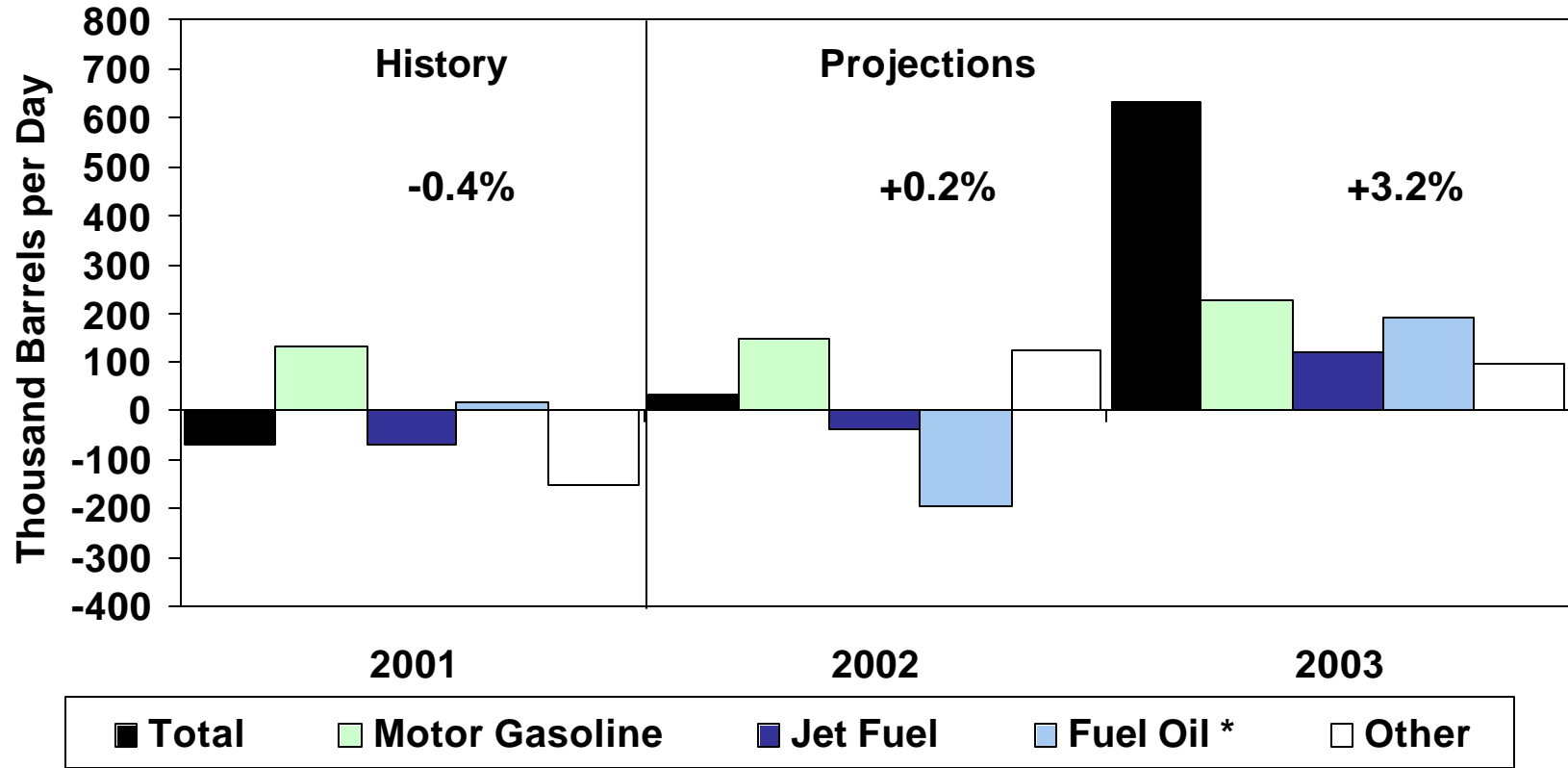
In 2003, petroleum demand is expected to respond to acceleration of the economy as well as assumptions of normal weather. Total demand is projected to average 20.30 million barrels per day in the base case, an increase of 630,000 barrels per day, or 3.2 percent, from that of the previous year. That would be the first time in which total annual petroleum demand averaged more than 20 million barrels per day. Motor gasoline demand is projected to climb by an accelerated 2.6 percent, buoyed by brisk growth in income and employment. Reversing the current year's projected decline, distillate fuel oil demand is projected to climb 3.5 percent, with substantial increases in transportation, heating, and industrial sectors. Jet-fuel demand, reflecting continued recovery in flight activity, is projected to climb 7.3 percent, surpassing levels reached in 2000. Both utilization and capacity levels are also expected to surpass those attained in 2000. In response to continued recovery in industrial activity and higher average natural gas prices, residual fuel oil demand is projected to increase 7.9 percent but still remain on average about 800,000 barrels per day or less.

U.S. Oil Supply

Average domestic oil production is expected to increase by 42 thousand barrels per day or 0.7 percent in 2002, to a level of 5.89 million barrels of oil per day. For 2003, a 0.3-percent increase is expected and results in a production rate of 5.91 million barrels of oil per day average for the year (Figure 12).

Lower-48 States oil production is expected to increase by 18 thousand barrels per day to a rate of 4.90 million barrels per day in 2002, followed by a decrease of 37 thousand barrels per day in 2003. Shell's Brutus platform is expected to peak its oil production at 100 thousand barrels per day in 2002. Oil production from the Mars, Troika, Ursa, Dianna-Hoover and Brutus Federal Offshore fields is expected to account for about 9.2 percent of the lower-48 oil production by the fourth quarter of 2003.

Figure 11. Petroleum Products Demand Growth (Change from Year Ago)

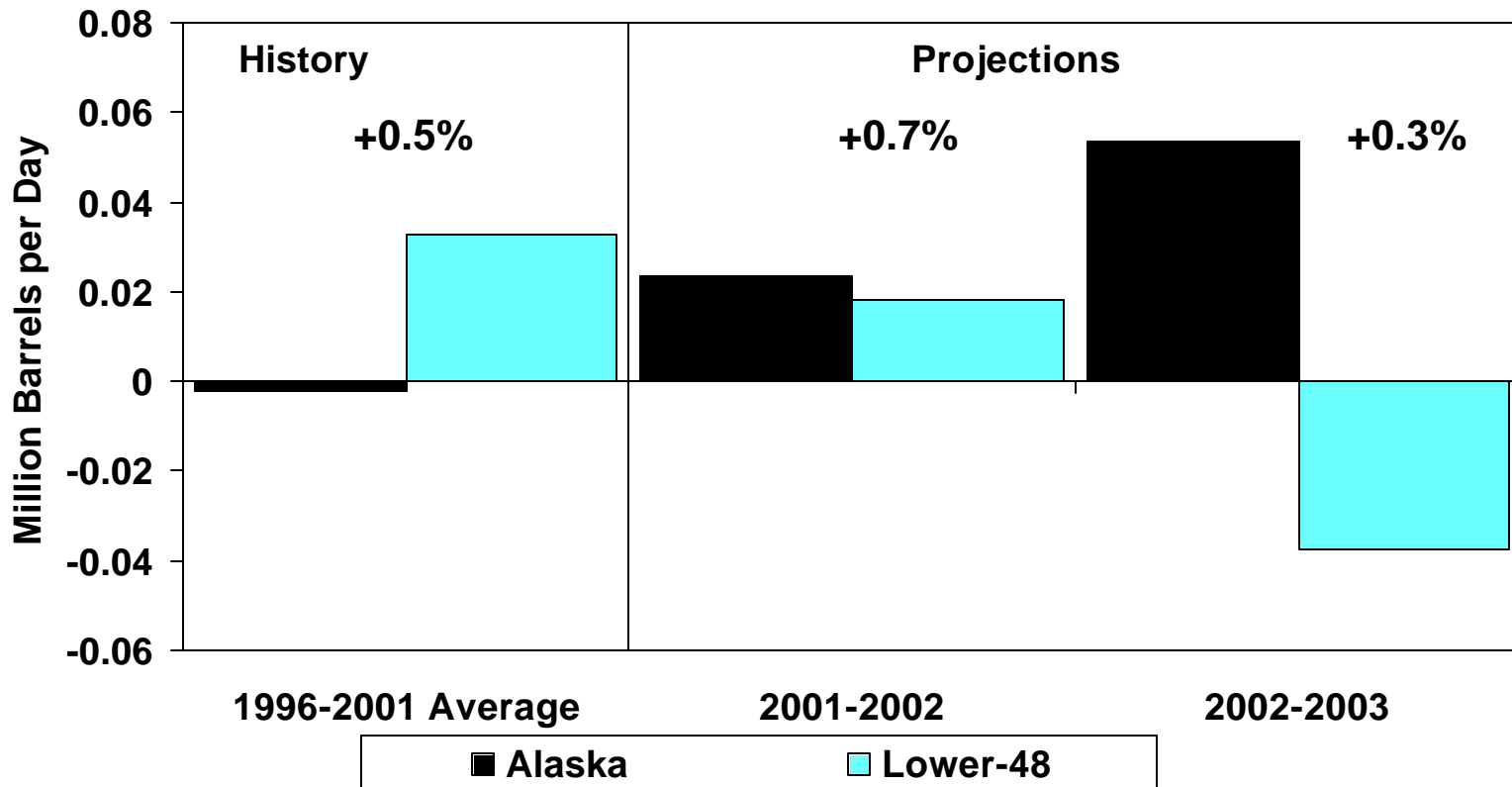


* Sum of distillate and residual fuel.

Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



Figure 12. U.S. Crude Oil Production Growth (Change from Year Ago)



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



Alaska is expected to account for 17.7 percent of the total U.S. oil production in 2003. Alaska oil production is expected to increase by 2.4 percent in 2002 with a further increase of 5.4 percent in 2003. The increase in 2003 will be the result of field facilities expansion in the new satellite Colville River (Alpine). Another satellite field, North Star, came on in November 2001 at a rate of over 50 thousand barrels per day. Production from the Kuparuk River field plus like production from the West Sak, Tabasco, Tarn and Meltwater fields is expected to stay at an average of 220 thousand barrels per day in the 2002 and 2003 forecast period.

Natural Gas Demand and Supply

Domestic dry natural gas production is projected to fall by over 3 percent in 2002 compared to the 2001 level. Major energy companies reported reductions in natural gas output for first quarter 2002 (compared to the same period in 2001) of between 3 and 4 percent. (Some of this decline may have been due to asset sales). Lower natural gas prices have reduced production and resource development incentives from their highs of last summer. Still, current supplies, including natural gas in storage, appear to be at very comfortable levels. Gas-directed drilling, while down sharply from summer 2001 levels is still quite strong by a longer historical perspective.

Based on EIA survey data, natural gas storage levels are estimated to have ended the heating season at 1,532 billion cubic feet (bcf), more than double the 742 bcf seen at the same time last year. Storage is estimated to have reached 1,893 bcf as of the end of May, 20 percent above the 5-year average. Storage is expected to remain above average levels right up through the beginning of the next heating season (Figure 13). In May 2002, spot natural gas prices averaged about \$3.35 per thousand cubic feet (mcf) compared with an average of \$4.19 in May 2001.

Overall natural gas drilling activity has fallen along with production. Baker Hughes reported average active rigs drilling for natural gas at 721 on May 31, 30 percent below the year-ago level and 32 percent below the peak seen in the current drilling cycle, which occurred during the week of July 13, 2001. However, this latest posting, while down slightly from the previous week, is 22 percent above the recent low of 591 posted for the week of April 5, 2002. Aggregate lease revenues from domestic oil and gas production are expected to move up this year and settle at about \$340 million per month in 2003, which would be approximately a 40 percent increase over the rates seen at the end of 2001 (Figure 14). Inasmuch as these revenues are a strong determinant of industry cash flow, which in turn is a powerful driver of drilling activity levels, an upward trend in drilling levels generally (and natural gas-directed drilling in particular) is anticipated for this year and into 2003 (Figure 15). Thus, natural gas drilling rates appear to be at the beginning of a rise in the current drilling cycle.

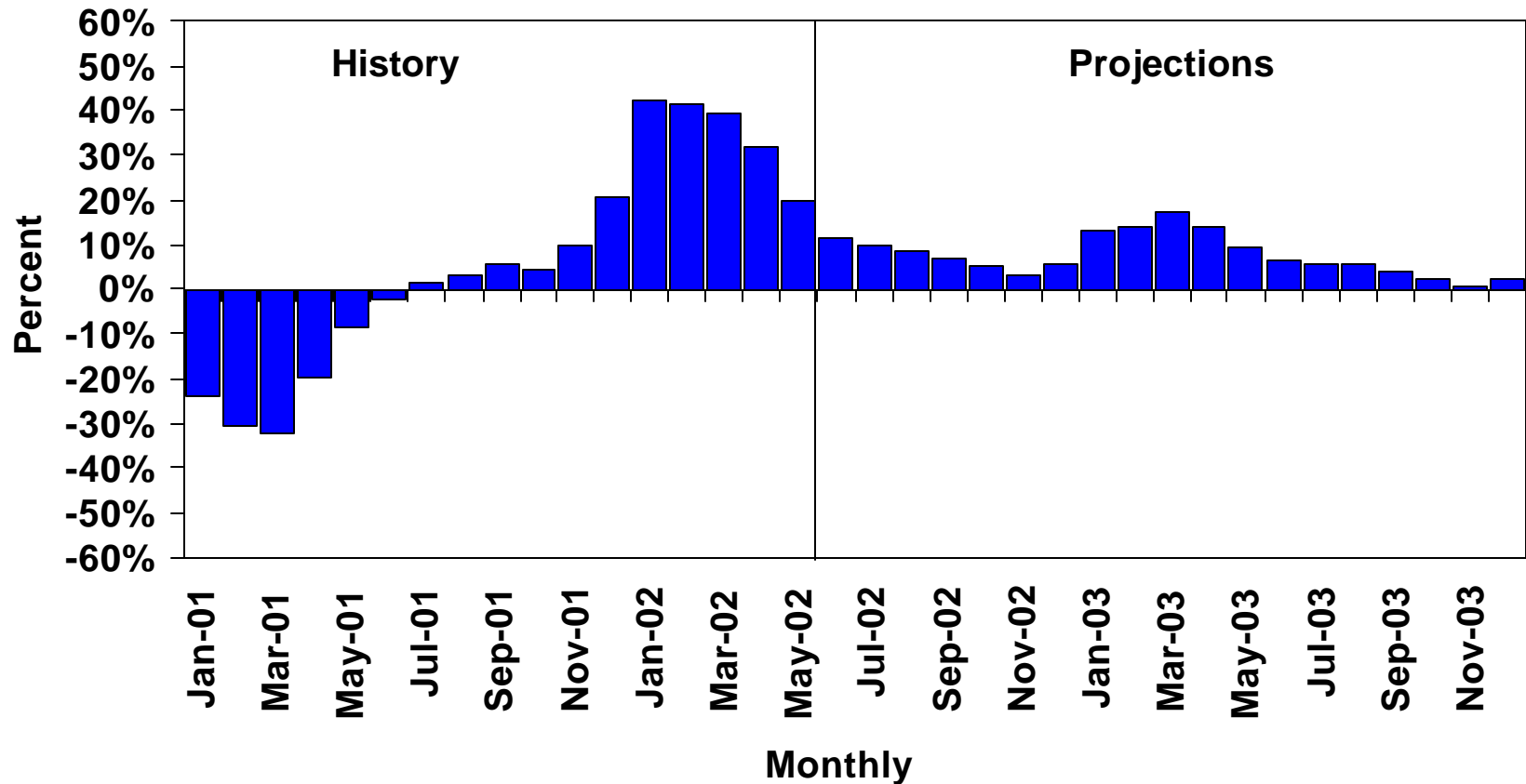
Natural gas net imports have been dropping monthly on a year-over-year basis since the beginning of last winter's heating season (October 2001), reflecting the slowing demand for natural gas, which was occurring at about the same time. U. S. natural gas production continued to rise through December 2001, then began to fall in January 2002, a lagged response to the lower demand and prices. Net imports of natural gas are projected to recover by November 2002 as natural gas demand recovers.

In 2002, natural gas demand is projected to increase by 3.2 percent over 2001 levels, and increase by 3.0 percent in 2003. Rising demand for natural gas in the industrial sector and electricity generating sectors is the primary reason for this growth rate in 2002 (Figure 16). In 2003, growth is expected across all sectors.

Summer natural gas demand is projected to be 4.7 percent above last summer's level due mainly to the fall in natural gas prices since a year ago and the slowly reviving economy.

Electricity Demand and Supply

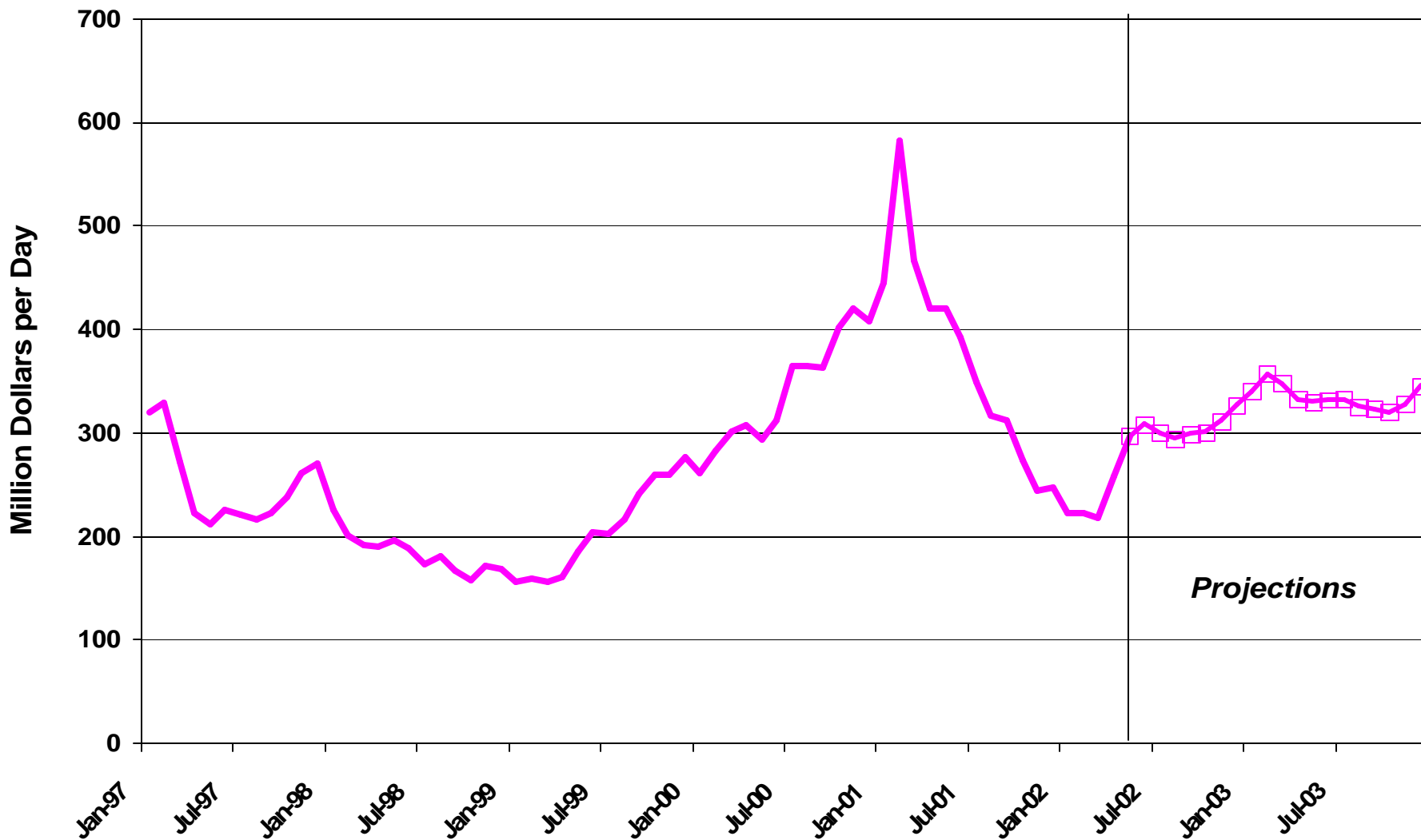
**Figure 13. Working Gas in Storage
(Difference from Previous 5-Year Average)**



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



Figure 14. U.S. Oil and Gas Production Revenues

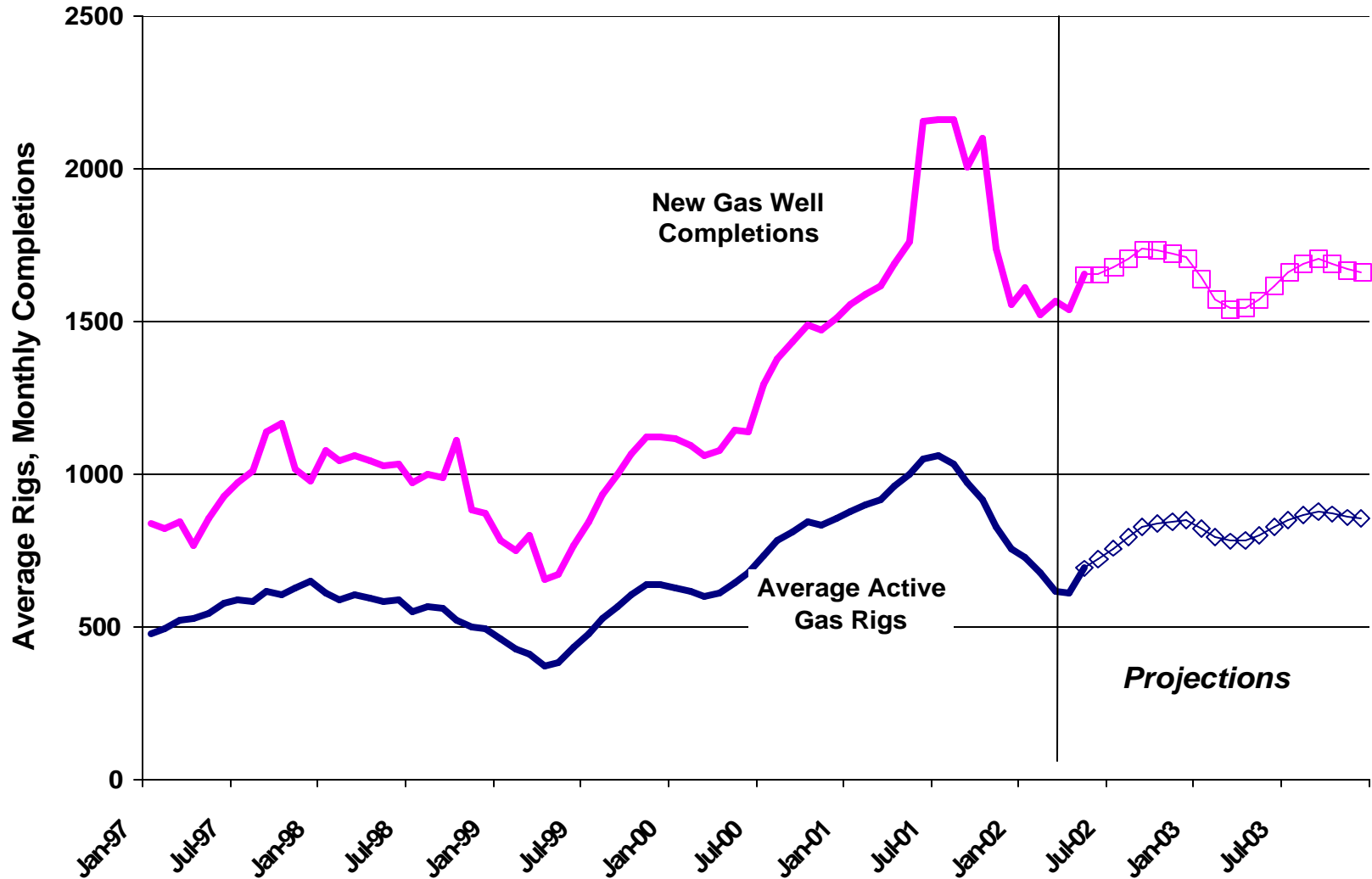


Projections

Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



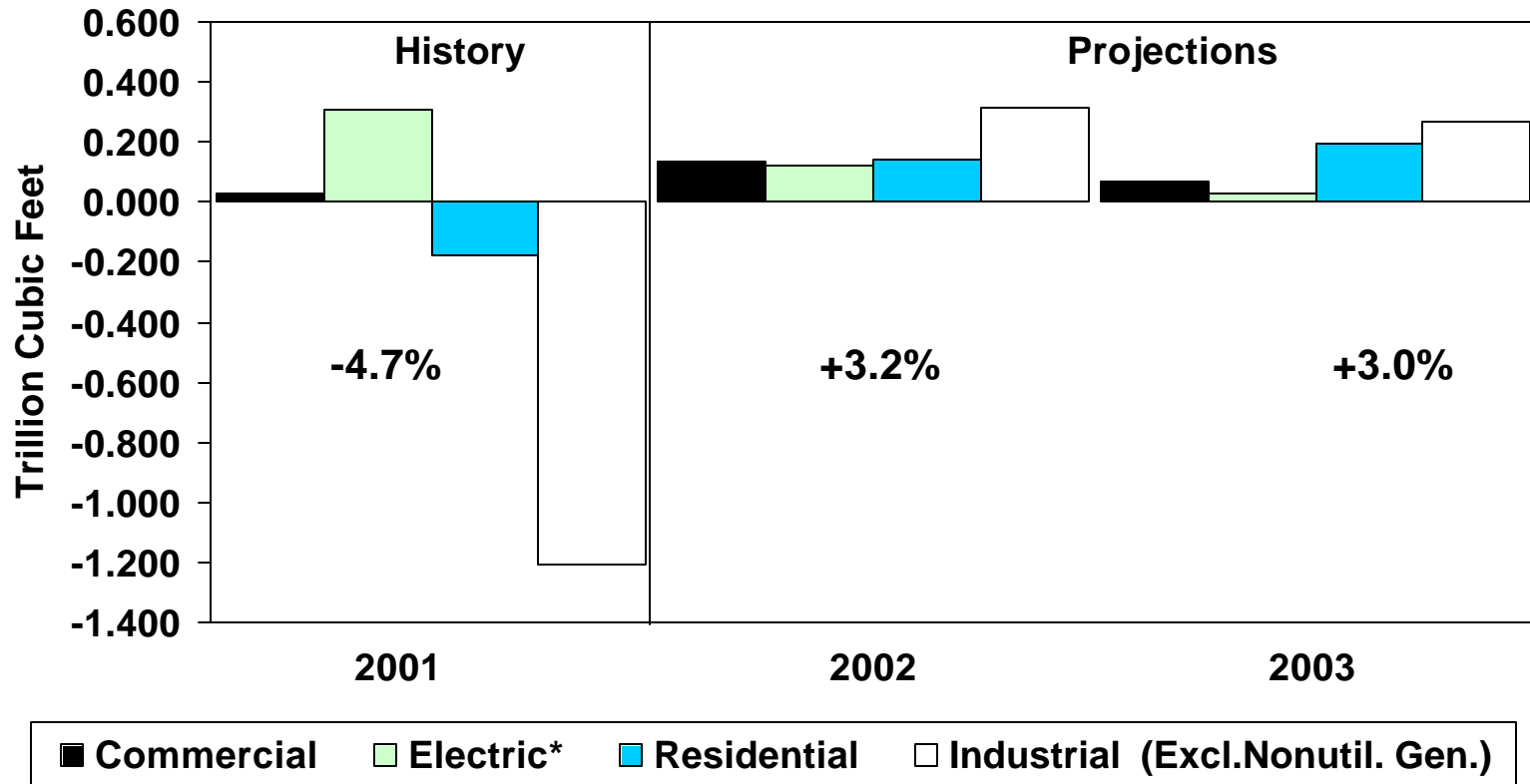
Figure 15. U.S. Natural Gas-Directed Drilling Activity



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



Figure 16. Natural Gas Demand Growth by Sector (Change from Year Ago)



* Includes gas to electric utilities and nonutility generators.

Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.

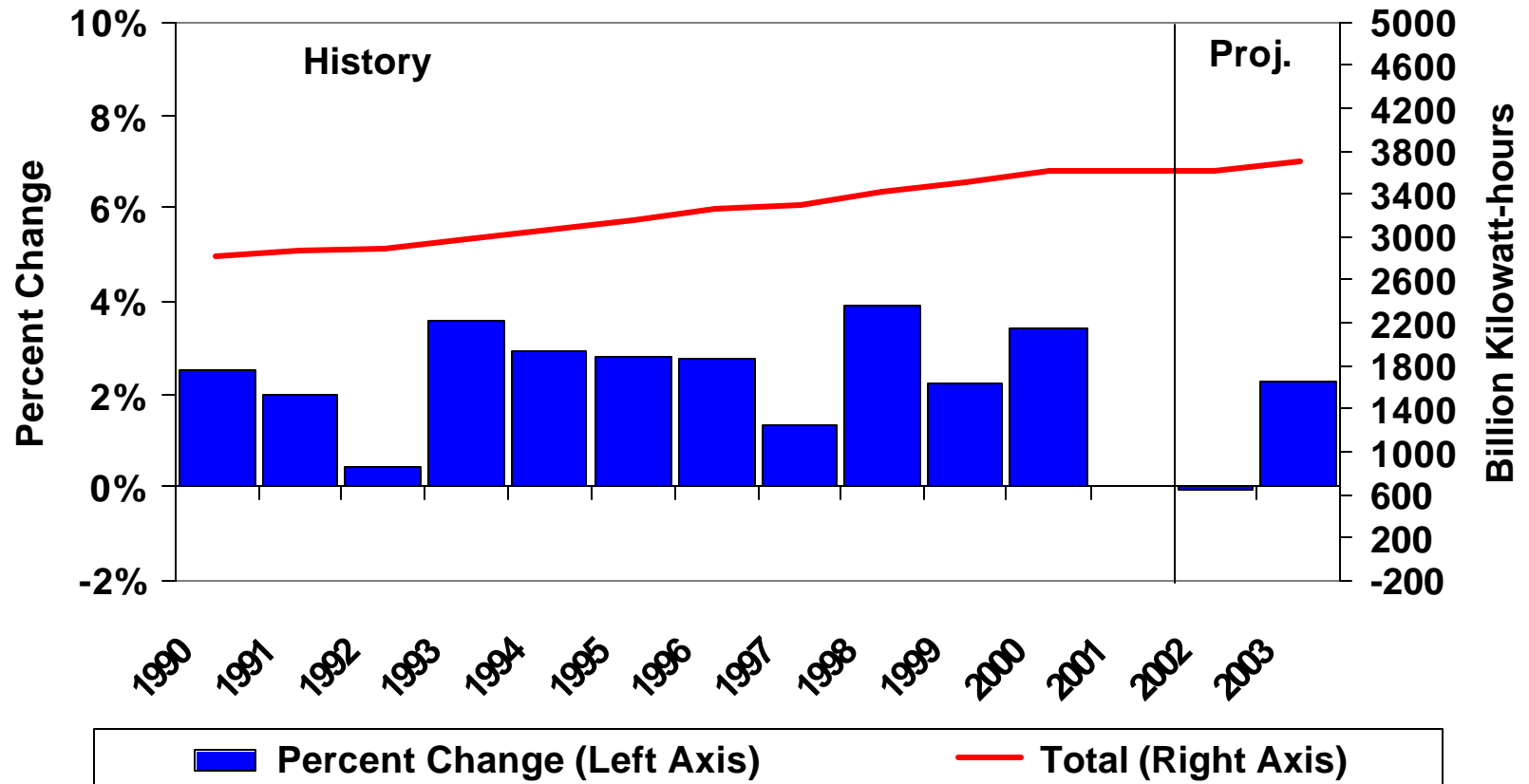


This summer, total electricity demand is expected to grow by less than 1 percent over last summer's demand level, following an actual decline in summer demand last year. Cooling degree-days (CDDs) for the cooling season (April through September), based on CDDs thus far, are assumed to be at around the same level as last year, which was about 2 percent above normal. Also, the economy is assumed to be growing through the summer months and year-over-year increases in industrial output are expected to show up sometime during the third quarter of this year.

Total annual electricity demand growth (retail sales plus industrial generation for own use and other direct sales) is estimated to have been flat in 2001. For 2002, demand is also expected to be flat but it is expected to begin to revive in the third quarter of 2002, and to grow by 2.4 percent in 2003 ([Figure 17](#)) because the economy is assumed to gradually revive.

In 2001, total hydropower generation was down to lows not seen since 1966. In 2002, total hydro generation is expected to rise by 22 percent if normal precipitation materializes in the Pacific Northwest, the main region affected. Total oil-fired generation is projected to be down considerably, by 23 percent from last year due to higher relative prices, while total gas-fired generation is projected to be about what it was last year. Nuclear generation is expected to be up by about 0.9 percent in 2002 and rise again by 0.7 percent in 2003, due mainly to increased efficiencies.

Figure 17. Total Electricity Demand Growth Patterns



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2002.



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

	Year				Annual Percentage Change		
	2000	2001	2002	2003	2000-2001	2001-2002	2002-2003
Real Gross Domestic Product (GDP) (billion chained 1996 dollars)	9224	9334	<i>9574</i>	<i>9903</i>	1.2	2.6	3.4
Imported Crude Oil Price ^a (nominal dollars per barrel)	27.72	22.02	<i>23.66</i>	<i>26.47</i>	-20.6	7.4	11.9
Petroleum Supply (million barrels per day)							
Crude Oil Production ^b	5.82	5.85	<i>5.89</i>	<i>5.91</i>	0.5	0.7	0.3
Total Petroleum Net Imports (including SPR)	10.42	10.88	<i>10.35</i>	<i>11.07</i>	4.4	-4.9	7.0
Energy Demand							
World Petroleum (million barrels per day).....	76.0	76.0	<i>76.7</i>	<i>77.9</i>	0.0	0.9	1.6
Petroleum (million barrels per day).....	19.70	19.63	<i>19.67</i>	<i>20.30</i>	-0.4	0.2	3.2
Natural Gas (trillion cubic feet)	22.54	21.48	<i>22.17</i>	<i>22.84</i>	-4.7	3.2	3.0
Coal ^c (million short tons)	1081	1050	<i>1084</i>	<i>1103</i>	-2.9	3.2	1.8
Electricity (billion kilowatthours)							
Retail Sales ^d	3421	3402	<i>3407</i>	<i>3487</i>	-0.6	0.1	2.3
Nonutility Use/Sales ^e	199	219	<i>221</i>	<i>227</i>	10.1	0.9	2.7
Total	3620	3621	<i>3628</i>	<i>3714</i>	0.0	0.2	2.4
Total Energy Demand ^f (quadrillion Btu).....	99.6	97.1	<i>99.1</i>	<i>102.0</i>	-2.5	2.0	3.0
Total Energy Demand per Dollar of GDP (thousand Btu per 1996 Dollar).....	10.80	10.41	<i>10.35</i>	<i>10.30</i>	-3.6	-0.6	-0.5
Renewable Energy as Percent of Total ^g	7.2	6.7	<i>7.2</i>	<i>7.5</i>			

^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 2000 are estimates.

^eDefined as the sum of nonutility facility use of onsite net electricity generation plus direct sales of power by nonutility generators to third parties, reported annually in Table 7.5 of the Monthly Energy Review (MER). Data for 2000 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 DRI-WEFA Forecast CONTROL0502.

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

	2001				2002				2003				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2001	2002	2003
Macroeconomic^a															
Real Gross Domestic Product (billion chained 1996 dollars - SAAR).....	9334	9342	9310	9349	9482	9537	9597	9680	9765	9861	9943	10044	9334	9574	9903
Percentage Change from Prior Year.....	2.5	1.2	0.5	0.5	1.6	2.1	3.1	3.5	3.0	3.4	3.6	3.8	1.2	2.6	3.4
Annualized Percent Change from Prior Quarter.....	1.3	0.3	-1.3	1.6	5.7	2.3	2.5	3.5	3.5	3.9	3.3	4.0			
GDP Implicit Price Deflator (Index, 1996=1.000).....	1.087	1.092	1.098	1.098	1.100	1.104	1.109	1.116	1.125	1.129	1.136	1.143	1.094	1.107	1.133
Percentage Change from Prior Year.....	2.3	2.2	2.4	1.9	1.2	1.1	1.0	1.6	2.2	2.2	2.4	2.4	2.2	1.2	2.3
Real Disposable Personal Income (billion chained 1996 Dollars - SAAR).....	6679	6719	6918	6774	6944	6956	7026	7085	7150	7220	7268	7308	6772	7003	7236
Percentage Change from Prior Year.....	3.8	3.0	5.3	2.1	4.0	3.5	1.6	4.6	3.0	3.8	3.4	3.2	3.6	3.4	3.3
Manufacturing Production (Index, 1996=1.000).....	1.221	1.202	1.187	1.167	1.177	1.197	1.213	1.229	1.247	1.267	1.289	1.305	1.194	1.204	1.277
Percentage Change from Prior Year.....	-1.1	-4.2	-5.5	-6.1	-3.6	-0.4	2.2	5.3	5.9	5.8	6.3	6.1	-4.2	0.8	6.0
OECD Economic Growth (percent) ^b													0.9	1.8	2.7
Weather^c															
Heating Degree-Days															
U.S.	2329	446	85	1363	2067	515	86	1622	2231	518	86	1622	4223	4289	4456
New England.....	3268	802	122	1867	2800	828	167	2237	3171	882	167	2237	6059	6032	6457
Middle Atlantic.....	2950	627	102	1618	2476	673	105	2002	2888	699	105	2001	5297	5256	5693
U.S. Gas-Weighted.....	2450	470	93	1438	2181	555	90	1714	2348	555	90	1713	4451	4540	4706
Cooling Degree-Days (U.S.).....	26	371	779	80	30	376	782	76	33	347	783	76	1256	1264	1238

^aMacroeconomic projections from DRI/McGraw-Hill model forecasts are seasonally adjusted at annual rates and modified as appropriate to the mid 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 1990 population.

SAAR: Seasonally-adjusted annualized rate.

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

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, Statistical Release G.17(419). Projections of OECD growth are based on DRI-WEFA, "World Economic Outlook," Volume 1. Macroeconomic projections are based on DRI-WEFA Forecast CONTROL0502.

Table 2. U.S. Energy Indicators: Mid World Oil Price Case: Base Case

	2001				2002				2003				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2001	2002	2003
Macroeconomic^a															
Real Fixed Investment (billion chained 1996 dollars-SAAR)...	1740	1696	1672	1622	<i>1621</i>	<i>1628</i>	<i>1631</i>	<i>1650</i>	<i>1674</i>	<i>1708</i>	<i>1741</i>	<i>1774</i>	1683	<i>1633</i>	<i>1724</i>
Real Exchange Rate (index).....	1.113	1.147	1.140	1.160	<i>1.190</i>	<i>1.173</i>	<i>1.167</i>	<i>1.153</i>	<i>1.143</i>	<i>1.120</i>	<i>1.107</i>	<i>1.093</i>	1.140	<i>1.171</i>	<i>1.116</i>
Business Inventory Change (billion chained 1996 dollars-SAAR)...	-15.0	-35.6	-47.0	-44.1	<i>-29.7</i>	<i>-13.1</i>	<i>-2.1</i>	<i>2.2</i>	<i>8.7</i>	<i>10.7</i>	<i>11.5</i>	<i>11.2</i>	-35.4	<i>-10.7</i>	<i>10.5</i>
Producer Price Index (index, 1982=1.000).....	1.385	1.363	1.329	1.292	<i>1.297</i>	<i>1.315</i>	<i>1.321</i>	<i>1.330</i>	<i>1.340</i>	<i>1.340</i>	<i>1.348</i>	<i>1.356</i>	1.342	<i>1.316</i>	<i>1.346</i>
Consumer Price Index (index, 1982-1984=1.000).....	1.759	1.773	1.776	1.775	<i>1.781</i>	<i>1.794</i>	<i>1.806</i>	<i>1.818</i>	<i>1.833</i>	<i>1.843</i>	<i>1.855</i>	<i>1.869</i>	1.771	<i>1.800</i>	<i>1.850</i>
Petroleum Product Price Index (index, 1982=1.000).....	0.892	0.968	0.875	0.675	<i>0.655</i>	<i>0.767</i>	<i>0.791</i>	<i>0.848</i>	<i>0.888</i>	<i>0.907</i>	<i>0.872</i>	<i>0.895</i>	0.852	<i>0.765</i>	<i>0.890</i>
Non-Farm Employment (millions)	132.6	132.5	132.4	131.5	<i>131.2</i>	<i>131.4</i>	<i>131.9</i>	<i>132.6</i>	<i>133.3</i>	<i>133.8</i>	<i>134.3</i>	<i>135.2</i>	132.2	<i>131.8</i>	<i>134.2</i>
Commercial Employment (millions)	93.2	93.3	93.3	92.8	<i>92.7</i>	<i>92.8</i>	<i>93.4</i>	<i>94.0</i>	<i>94.6</i>	<i>95.0</i>	<i>95.5</i>	<i>96.4</i>	93.1	<i>93.2</i>	<i>95.4</i>
Total Industrial Production (index, 1996=1.000).....	1.199	1.181	1.167	1.147	<i>1.154</i>	<i>1.173</i>	<i>1.187</i>	<i>1.204</i>	<i>1.221</i>	<i>1.240</i>	<i>1.259</i>	<i>1.274</i>	1.173	<i>1.180</i>	<i>1.248</i>
Housing Stock (millions)	117.5	117.7	117.7	118.4	<i>119.3</i>	<i>119.5</i>	<i>119.8</i>	<i>120.1</i>	<i>120.5</i>	<i>120.8</i>	<i>121.2</i>	<i>121.5</i>	117.9	<i>119.7</i>	<i>121.0</i>
Miscellaneous															
Gas Weighted Industrial Production (index, 1996=1.000).....	1.081	1.073	1.069	1.060	<i>1.070</i>	<i>1.079</i>	<i>1.087</i>	<i>1.096</i>	<i>1.104</i>	<i>1.112</i>	<i>1.121</i>	<i>1.128</i>	1.071	<i>1.083</i>	<i>1.116</i>
Vehicle Miles Traveled ^b (million miles/day).....	7103	7883	7877	7574	<i>7235</i>	<i>7950</i>	<i>8042</i>	<i>7605</i>	<i>7393</i>	<i>8112</i>	<i>8270</i>	<i>7813</i>	7611	<i>7710</i>	<i>7899</i>
Vehicle Fuel Efficiency (index, 1999=1.000).....	0.990	0.999	0.989	1.012	<i>0.986</i>	<i>0.986</i>	<i>1.004</i>	<i>0.999</i>	<i>0.990</i>	<i>0.980</i>	<i>1.003</i>	<i>0.996</i>	0.998	<i>0.994</i>	<i>0.992</i>
Real Vehicle Fuel Cost (cents per mile)	4.11	4.33	3.97	3.31	<i>3.31</i>	<i>3.76</i>	<i>3.74</i>	<i>3.82</i>	<i>3.86</i>	<i>4.05</i>	<i>3.85</i>	<i>3.84</i>	3.93	<i>3.66</i>	<i>3.90</i>
Air Travel Capacity (mill. available ton-miles/day).....	488.9	495.6	476.6	430.2	<i>432.0</i>	<i>460.4</i>	<i>464.3</i>	<i>455.8</i>	<i>462.1</i>	<i>489.5</i>	<i>509.2</i>	<i>500.8</i>	472.7	<i>453.2</i>	<i>490.6</i>
Aircraft Utilization (mill. revenue ton-miles/day).....	263.7	282.8	265.9	225.3	<i>235.7</i>	<i>267.6</i>	<i>284.0</i>	<i>270.8</i>	<i>267.7</i>	<i>288.7</i>	<i>304.3</i>	<i>290.5</i>	259.4	<i>264.7</i>	<i>287.9</i>
Airline Ticket Price Index (index, 1982-1984=1.000).....	2.399	2.408	2.452	2.318	<i>2.317</i>	<i>2.371</i>	<i>2.437</i>	<i>2.489</i>	<i>2.550</i>	<i>2.581</i>	<i>2.601</i>	<i>2.624</i>	2.394	<i>2.403</i>	<i>2.589</i>
Raw Steel Production (millions tons).....	25.53	26.07	25.25	22.05	<i>24.30</i>	<i>25.64</i>	<i>25.53</i>	<i>25.28</i>	<i>26.43</i>	<i>27.27</i>	<i>26.86</i>	<i>26.43</i>	98.89	<i>100.74</i>	<i>106.99</i>

^aMacroeconomic projections from DRI-WEFA model forecasts are seasonally adjusted at annual rates and modified as appropriate to the mid 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)

	2001				2002				2003				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2001	2002	2003
Demand ^a															
OECD															
U.S. (50 States).....	19.9	19.6	19.7	19.4	19.4	19.5	19.9	19.9	20.2	20.0	20.5	20.5	19.6	19.7	20.3
U.S. Territories.....	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.4
Canada.....	2.0	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.2	2.2	2.0	2.0	2.1
Europe.....	15.2	14.8	15.5	15.5	15.3	14.9	15.6	15.6	15.6	14.7	15.3	16.0	15.3	15.4	15.4
Japan.....	6.1	5.0	5.1	5.5	6.0	5.0	5.1	5.6	6.0	4.9	5.1	5.6	5.4	5.4	5.4
Other OECD.....	5.3	4.9	4.9	5.2	5.4	5.0	5.0	5.3	5.1	5.0	5.3	5.3	5.1	5.2	5.2
Total OECD.....	48.9	46.6	47.5	48.0	48.5	46.7	47.9	48.8	49.4	47.0	48.7	50.0	47.7	48.0	48.8
Non-OECD															
Former Soviet Union.....	3.7	3.6	3.6	3.6	3.8	3.6	3.6	3.6	3.8	3.7	3.7	3.7	3.6	3.7	3.7
Europe.....	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
China.....	4.9	4.9	4.8	4.8	5.1	5.1	5.0	5.1	5.3	5.3	5.2	5.3	4.9	5.1	5.3
Other Asia.....	7.4	7.4	7.1	7.4	7.4	7.4	7.2	7.5	7.5	7.5	7.2	7.6	7.3	7.4	7.4
Other Non-OECD.....	11.7	11.9	12.0	11.8	11.8	12.0	12.1	12.0	11.9	12.1	12.2	12.1	11.8	11.9	12.0
Total Non-OECD.....	28.4	28.4	28.1	28.3	28.7	28.7	28.5	28.8	29.1	29.1	28.9	29.2	28.3	28.7	29.1
Total World Demand.....	77.3	75.0	75.6	76.3	77.2	75.4	76.4	77.6	78.5	76.2	77.6	79.2	76.0	76.7	77.9
Supply ^b															
OECD															
U.S. (50 States).....	8.8	9.0	9.0	9.2	9.1	9.1	9.1	9.2	9.2	9.1	9.1	9.2	9.0	9.1	9.2
Canada.....	2.8	2.8	2.7	2.9	2.9	3.0	3.1	3.1	3.0	3.0	3.1	3.2	2.8	3.0	3.1
Mexico.....	3.6	3.5	3.6	3.6	3.6	3.6	3.7	3.6	3.8	3.8	3.9	3.8	3.6	3.7	3.8
North Sea ^c	6.4	6.1	6.2	6.5	6.4	6.1	6.3	6.6	6.5	6.1	6.2	6.5	6.3	6.3	6.3
Other OECD.....	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.6	1.6	1.5
Total OECD.....	23.2	23.0	23.2	23.8	23.7	23.4	23.7	24.1	24.0	23.6	23.9	24.2	23.3	23.7	23.9
Non-OECD															
OPEC.....	31.1	29.9	30.1	29.2	27.8	27.4	28.3	28.3	29.3	29.0	29.6	29.1	30.1	28.0	29.3
Former Soviet Union.....	8.6	8.7	8.9	9.1	9.0	9.1	9.3	9.4	9.4	9.5	9.7	9.8	8.8	9.2	9.6
China.....	3.3	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.3	3.3	3.4	3.4	3.3	3.3	3.3
Other Non-OECD.....	11.2	11.1	11.3	11.3	11.5	11.4	11.7	11.8	11.5	11.6	11.9	12.0	11.2	11.6	11.8
Total Non-OECD.....	54.3	53.0	53.6	52.9	51.7	51.2	52.7	52.8	53.5	53.5	54.5	54.2	53.5	52.1	53.9
Total World Supply.....	77.5	76.0	76.8	76.7	75.3	74.6	76.4	76.9	77.5	77.1	78.4	78.5	76.7	75.8	77.9
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR).....	-0.2	-0.9	-0.2	-0.1	0.2	-0.4	-0.1	0.4	0.1	-0.6	-0.2	0.4	-0.3	0.0	-0.1
Other.....	0.0	-0.2	-1.1	-0.3	1.7	1.2	0.1	0.3	0.9	-0.3	-0.6	0.3	-0.4	0.8	0.1
Total Stock Withdrawals.....	-0.2	-1.0	-1.2	-0.4	1.9	0.8	0.0	0.7	1.0	-0.9	-0.8	0.7	-0.7	0.8	0.0
OECD Comm. Stocks, End (bill. bbls.).....	2.5	2.6	2.6	2.6	2.5	2.5	2.5	2.4	2.3	2.4	2.4	2.4	2.6	2.4	2.4
Non-OPEC Supply.....	46.4	46.1	46.7	47.5	47.5	47.2	48.1	48.6	48.2	48.1	48.8	49.4	46.7	47.9	48.6
Net Exports from Former Soviet Union.....	4.9	5.1	5.3	5.5	5.2	5.5	5.7	5.7	5.5	5.8	6.0	6.1	5.2	5.5	5.9

^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)

	2001				2002				2003				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2001	2002	2003
Crude Oil Prices (dollars per barrel)															
Imported Average ^a	24.12	23.85	23.04	16.93	19.29	24.23	25.32	25.57	25.85	27.04	26.57	26.38	22.02	23.66	26.47
WTI ^b Spot Average.....	28.82	27.92	26.66	20.40	21.66	26.74	27.82	28.32	28.85	30.04	29.57	29.38	25.95	26.14	29.46
Natural Gas Wellhead (dollars per thousand cubic feet).....															
	6.37	4.56	3.06	2.50	2.34	3.07	2.89	3.31	3.49	3.15	3.06	3.39	4.12	2.91	3.28
Petroleum Products															
Gasoline Retail ^c (dollars per gallon)															
All Grades.....	1.47	1.66	1.49	1.23	1.20	1.44	1.45	1.43	1.44	1.59	1.54	1.48	1.47	1.38	1.51
Regular Unleaded.....	1.43	1.62	1.45	1.19	1.16	1.40	1.42	1.40	1.41	1.55	1.50	1.45	1.43	1.35	1.48
No. 2 Diesel Oil, Retail (dollars per gallon).....															
	1.47	1.47	1.42	1.26	1.18	1.31	1.34	1.41	1.42	1.45	1.43	1.46	1.40	1.31	1.44
No. 2 Heating Oil, Wholesale (dollars per gallon).....															
	0.83	0.80	0.76	0.62	0.60	0.74	0.76	0.82	0.85	0.84	0.83	0.87	0.76	0.73	0.85
No. 2 Heating Oil, Retail (dollars per gallon).....															
	1.35	1.25	1.15	1.10	1.09	1.14	1.13	1.26	1.34	1.27	1.22	1.32	1.24	1.15	1.29
No. 6 Residual Fuel Oil, Retail ^d (dollars per barrel)															
	25.13	22.29	21.76	18.96	19.34	23.43	24.45	25.43	25.99	25.48	25.46	25.95	22.26	23.32	25.73
Electric Utility Fuels															
Coal (dollars per million Btu).....															
	1.23	1.24	1.23	1.22	1.22	1.22	1.21	1.20	1.21	1.21	1.20	1.19	1.23	1.21	1.20
Heavy Fuel Oil ^e (dollars per million Btu).....															
	4.22	3.82	3.50	2.89	3.00	3.85	4.05	4.04	4.05	4.19	4.22	4.12	3.72	3.71	4.15
Natural Gas (dollars per million Btu).....															
	7.26	4.96	3.47	2.97	2.94	3.54	3.32	3.85	4.07	3.62	3.50	3.94	4.43	3.41	3.72
Other Residential															
Natural Gas (dollars per thousand cubic feet).....															
	10.10	10.66	10.64	7.68	6.98	7.67	9.34	7.70	7.83	8.59	9.86	8.00	9.62	7.50	8.16
Electricity (cents per kilowatthour).....															
	7.96	8.62	8.85	8.47	8.29	8.80	9.01	8.52	8.22	8.79	9.02	8.56	8.48	8.67	8.66

^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: Data are estimated for the fourth quarter of 2000. 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)

	2001				2002				2003				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2001	2002	2003
Supply															
Crude Oil Supply															
Domestic Production ^a	5.85	5.84	5.82	5.90	5.93	<i>5.86</i>	<i>5.84</i>	<i>5.94</i>	<i>5.95</i>	<i>5.88</i>	<i>5.87</i>	<i>5.94</i>	5.85	<i>5.89</i>	<i>5.91</i>
Alaska.....	0.99	0.96	0.94	0.99	1.04	<i>0.97</i>	<i>0.94</i>	<i>1.02</i>	<i>1.05</i>	<i>1.02</i>	<i>1.02</i>	<i>1.09</i>	0.97	<i>0.99</i>	<i>1.05</i>
Lower 48.....	4.86	4.88	4.88	4.91	4.89	<i>4.88</i>	<i>4.91</i>	<i>4.92</i>	<i>4.91</i>	<i>4.86</i>	<i>4.84</i>	<i>4.85</i>	4.88	<i>4.90</i>	<i>4.86</i>
Net Imports (including SPR) ^b	9.04	9.66	9.41	9.11	8.66	<i>9.12</i>	<i>9.33</i>	<i>9.05</i>	<i>9.23</i>	<i>9.84</i>	<i>9.79</i>	<i>9.48</i>	9.31	<i>9.04</i>	<i>9.59</i>
Other SPR Supply	0.00	0.00	0.01	0.05	0.04	<i>0.09</i>	<i>0.13</i>	<i>0.14</i>	<i>0.15</i>	<i>0.11</i>	<i>0.11</i>	<i>0.11</i>	0.02	<i>0.10</i>	<i>0.12</i>
SPR Stock Withdrawn or Added (-).....	-0.02	-0.01	-0.02	-0.06	-0.12	<i>-0.14</i>	<i>-0.13</i>	<i>-0.14</i>	<i>-0.15</i>	<i>-0.11</i>	<i>-0.11</i>	<i>-0.11</i>	-0.03	<i>-0.14</i>	<i>-0.12</i>
Other Stock Withdrawn or Added (-).....	-0.25	0.00	-0.01	-0.03	-0.22	<i>0.21</i>	<i>0.19</i>	<i>0.05</i>	<i>-0.18</i>	<i>0.00</i>	<i>0.17</i>	<i>0.04</i>	-0.07	<i>0.06</i>	<i>0.01</i>
Product Supplied and Losses.....	0.00	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>	0.00	<i>0.00</i>	<i>0.00</i>
Unaccounted-for Crude Oil.....	0.13	0.16	0.00	-0.07	0.15	<i>0.26</i>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	0.05	<i>0.18</i>	<i>0.15</i>
Total Crude Oil Supply.....	14.75	15.65	15.21	14.90	14.40	<i>15.30</i>	<i>15.39</i>	<i>15.05</i>	<i>15.00</i>	<i>15.77</i>	<i>15.88</i>	<i>15.50</i>	15.13	<i>15.04</i>	<i>15.54</i>
Other Supply															
NGL Production.....	1.65	1.89	1.96	1.97	1.88	<i>1.91</i>	<i>1.91</i>	<i>1.89</i>	<i>1.89</i>	<i>1.92</i>	<i>1.94</i>	<i>1.95</i>	1.87	<i>1.90</i>	<i>1.93</i>
Other Hydrocarbon and Alcohol Inputs	0.38	0.40	0.39	0.38	0.36	<i>0.40</i>	<i>0.41</i>	<i>0.41</i>	<i>0.40</i>	<i>0.40</i>	<i>0.41</i>	<i>0.42</i>	0.39	<i>0.40</i>	<i>0.41</i>
Crude Oil Product Supplied.....	0.00	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>	0.00	<i>0.00</i>	<i>0.00</i>
Processing Gain.....	0.90	0.88	0.88	0.94	0.96	<i>0.93</i>	<i>0.92</i>	<i>0.92</i>	<i>0.92</i>	<i>0.93</i>	<i>0.92</i>	<i>0.91</i>	0.90	<i>0.93</i>	<i>0.92</i>
Net Product Imports ^c	2.11	1.62	1.38	1.20	1.30	<i>1.39</i>	<i>1.36</i>	<i>1.19</i>	<i>1.57</i>	<i>1.50</i>	<i>1.56</i>	<i>1.32</i>	1.58	<i>1.31</i>	<i>1.48</i>
Product Stock Withdrawn or Added (-)	0.09	-0.86	-0.15	0.01	0.52	<i>-0.49</i>	<i>-0.11</i>	<i>0.49</i>	<i>0.42</i>	<i>-0.52</i>	<i>-0.25</i>	<i>0.45</i>	-0.23	<i>0.10</i>	<i>0.02</i>
Total Supply.....	19.88	19.59	19.67	19.39	19.41	<i>19.45</i>	<i>19.87</i>	<i>19.95</i>	<i>20.20</i>	<i>20.00</i>	<i>20.45</i>	<i>20.54</i>	19.63	<i>19.67</i>	<i>20.30</i>
Demand															
Motor Gasoline.....	8.29	8.67	8.83	8.62	8.48	<i>8.86</i>	<i>8.88</i>	<i>8.77</i>	<i>8.63</i>	<i>9.09</i>	<i>9.15</i>	<i>9.03</i>	8.60	<i>8.75</i>	<i>8.98</i>
Jet Fuel.....	1.73	1.72	1.67	1.51	1.56	<i>1.59</i>	<i>1.65</i>	<i>1.67</i>	<i>1.71</i>	<i>1.70</i>	<i>1.75</i>	<i>1.78</i>	1.66	<i>1.62</i>	<i>1.74</i>
Distillate Fuel Oil.....	4.20	3.71	3.62	3.71	3.78	<i>3.65</i>	<i>3.59</i>	<i>3.84</i>	<i>4.10</i>	<i>3.70</i>	<i>3.65</i>	<i>3.92</i>	3.81	<i>3.71</i>	<i>3.84</i>
Residual Fuel Oil.....	0.97	0.90	0.81	0.71	0.68	<i>0.67</i>	<i>0.84</i>	<i>0.77</i>	<i>0.89</i>	<i>0.69</i>	<i>0.85</i>	<i>0.77</i>	0.84	<i>0.74</i>	<i>0.80</i>
Other Oils ^d	4.69	4.60	4.74	4.85	4.88	<i>4.68</i>	<i>4.91</i>	<i>4.90</i>	<i>4.86</i>	<i>4.82</i>	<i>5.05</i>	<i>5.04</i>	4.72	<i>4.84</i>	<i>4.94</i>
Total Demand.....	19.87	19.59	19.67	19.39	19.38	<i>19.45</i>	<i>19.87</i>	<i>19.95</i>	<i>20.20</i>	<i>20.00</i>	<i>20.45</i>	<i>20.54</i>	19.63	<i>19.67</i>	<i>20.30</i>
Total Petroleum Net Imports.....	11.15	11.28	10.79	10.31	9.96	<i>10.51</i>	<i>10.70</i>	<i>10.25</i>	<i>10.80</i>	<i>11.34</i>	<i>11.35</i>	<i>10.80</i>	10.88	<i>10.35</i>	<i>11.07</i>
Closing Stocks (million barrels)															
Crude Oil (excluding SPR).....	308	308	309	312	331	<i>312</i>	<i>295</i>	<i>290</i>	<i>307</i>	<i>306</i>	<i>290</i>	<i>287</i>	312	<i>290</i>	<i>287</i>
Total Motor Gasoline.....	194	221	206	210	213	<i>218</i>	<i>208</i>	<i>208</i>	<i>211</i>	<i>212</i>	<i>203</i>	<i>206</i>	210	<i>208</i>	<i>206</i>
Finished Motor Gasoline.....	145	169	158	161	160	<i>171</i>	<i>162</i>	<i>164</i>	<i>162</i>	<i>167</i>	<i>159</i>	<i>162</i>	161	<i>164</i>	<i>162</i>
Blending Components.....	49	51	48	48	53	<i>47</i>	<i>45</i>	<i>44</i>	<i>49</i>	<i>46</i>	<i>44</i>	<i>44</i>	48	<i>44</i>	<i>44</i>
Jet Fuel.....	41	43	43	42	42	<i>41</i>	<i>42</i>	<i>43</i>	<i>40</i>	<i>41</i>	<i>42</i>	<i>43</i>	42	<i>43</i>	<i>43</i>
Distillate Fuel Oil.....	105	114	127	145	123	<i>131</i>	<i>137</i>	<i>133</i>	<i>106</i>	<i>118</i>	<i>135</i>	<i>133</i>	145	<i>133</i>	<i>133</i>
Residual Fuel Oil.....	39	42	37	41	34	<i>36</i>	<i>37</i>	<i>38</i>	<i>36</i>	<i>37</i>	<i>38</i>	<i>39</i>	41	<i>38</i>	<i>39</i>
Other Oils ^e	255	292	312	287	265	<i>296</i>	<i>309</i>	<i>265</i>	<i>257</i>	<i>290</i>	<i>302</i>	<i>258</i>	287	<i>265</i>	<i>258</i>
Total Stocks (excluding SPR).....	942	1020	1034	1036	1009	<i>1034</i>	<i>1027</i>	<i>977</i>	<i>956</i>	<i>1003</i>	<i>1010</i>	<i>965</i>	1036	<i>977</i>	<i>965</i>
Crude Oil in SPR.....	542	543	545	550	561	<i>575</i>	<i>587</i>	<i>600</i>	<i>613</i>	<i>623</i>	<i>633</i>	<i>643</i>	550	<i>600</i>	<i>643</i>
Heating Oil Reserve.....	2	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>	2	<i>2</i>	<i>2</i>
Total Stocks (including SPR).....	1484	1563	1579	1586	1571	<i>1609</i>	<i>1614</i>	<i>1577</i>	<i>1569</i>	<i>1626</i>	<i>1643</i>	<i>1609</i>	1586	<i>1577</i>	<i>1609</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.

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)

	2001				2002				2003				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2001	2002	2003
Supply															
Total Dry Gas Production	4.86	4.86	4.83	4.87	4.56	4.70	4.73	4.79	4.87	4.90	4.94	5.06	19.41	18.79	19.77
Net Imports	0.98	0.90	0.95	0.83	0.79	0.76	0.80	0.82	0.85	0.81	0.84	0.88	3.65	3.18	3.39
Supplemental Gaseous Fuels.....	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.01	0.02	0.02	0.08	0.07	0.07
Total New Supply	5.86	5.77	5.79	5.71	5.38	5.48	5.55	5.63	5.73	5.73	5.80	5.96	23.13	22.04	23.23
Working Gas in Storage															
Opening.....	1.72	0.74	1.88	2.94	2.90	1.53	2.15	2.99	2.55	1.29	2.05	2.91	1.72	2.90	2.55
Closing.....	0.74	1.88	2.94	2.90	1.53	2.15	2.99	2.55	1.29	2.05	2.91	2.47	2.90	2.55	2.47
Net Withdrawals.....	0.98	-1.14	-1.06	0.04	1.37	-0.62	-0.84	0.44	1.25	-0.76	-0.86	0.44	-1.18	0.36	0.08
Total Supply	6.84	4.63	4.73	5.75	6.75	4.86	4.71	6.07	6.99	4.97	4.94	6.40	21.95	22.39	23.31
Balancing Item ^a	0.29	0.01	-0.24	-0.52	0.13	0.04	-0.06	-0.33	0.23	0.04	-0.19	-0.54	-0.47	-0.22	-0.47
Total Primary Supply	7.13	4.64	4.49	5.23	6.88	4.90	4.65	5.74	7.22	5.01	4.75	5.86	21.48	22.17	22.84
Demand															
Lease and Plant Fuel.....	0.29	0.29	0.29	0.29	0.27	0.29	0.29	0.30	0.30	0.30	0.31	0.32	1.16	1.15	1.23
Pipeline Use.....	0.20	0.13	0.13	0.15	0.18	0.13	0.12	0.16	0.20	0.13	0.12	0.16	0.61	0.59	0.62
Residential.....	2.46	0.77	0.37	1.21	2.27	0.85	0.40	1.43	2.46	0.87	0.39	1.43	4.81	4.96	5.16
Commercial	1.37	0.63	0.46	0.79	1.30	0.67	0.51	0.91	1.33	0.68	0.52	0.92	3.25	3.38	3.45
Industrial (Incl. Nonutility Use).....	2.34	2.11	2.27	2.26	2.34	2.24	2.36	2.42	2.46	2.30	2.43	2.49	8.98	9.36	9.68
Electric Utilities	0.47	0.71	0.97	0.53	0.52	0.72	0.96	0.52	0.47	0.72	0.98	0.54	2.68	2.73	2.71
Total Demand	7.13	4.64	4.49	5.23	6.88	4.90	4.65	5.74	7.22	5.01	4.75	5.86	21.48	22.17	22.84

^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.

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)

	2001				2002				2003				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2001	2002	2003
Supply															
Production	283.6	278.3	278.1	281.3	<i>268.8</i>	<i>258.6</i>	<i>281.8</i>	<i>279.6</i>	<i>272.2</i>	<i>263.3</i>	<i>286.7</i>	<i>285.3</i>	1121.3	<i>1088.8</i>	<i>1107.5</i>
Appalachia.....	110.8	109.0	104.1	105.1	<i>100.9</i>	<i>99.3</i>	<i>103.0</i>	<i>102.1</i>	<i>102.5</i>	<i>99.0</i>	<i>102.4</i>	<i>101.9</i>	428.9	<i>405.4</i>	<i>405.8</i>
Interior.....	37.5	37.0	37.9	35.2	<i>34.6</i>	<i>32.8</i>	<i>36.6</i>	<i>33.2</i>	<i>32.6</i>	<i>31.9</i>	<i>35.5</i>	<i>32.0</i>	147.7	<i>137.2</i>	<i>132.0</i>
Western.....	135.3	132.3	136.1	141.0	<i>133.2</i>	<i>126.5</i>	<i>142.1</i>	<i>144.3</i>	<i>137.1</i>	<i>132.4</i>	<i>148.9</i>	<i>151.4</i>	544.7	<i>546.1</i>	<i>569.7</i>
Primary Stock Levels^a															
Opening.....	31.9	39.2	38.3	37.0	<i>33.9</i>	<i>40.7</i>	<i>35.0</i>	<i>33.1</i>	<i>32.5</i>	<i>32.8</i>	<i>31.6</i>	<i>33.0</i>	31.9	<i>33.9</i>	<i>32.5</i>
Closing.....	39.2	38.3	37.0	33.9	<i>40.7</i>	<i>35.0</i>	<i>33.1</i>	<i>32.5</i>	<i>32.8</i>	<i>31.6</i>	<i>33.0</i>	<i>32.7</i>	33.9	<i>32.5</i>	<i>32.7</i>
Net Withdrawals.....	-7.3	0.9	1.2	3.1	<i>-6.8</i>	<i>5.7</i>	<i>1.9</i>	<i>0.6</i>	<i>-0.2</i>	<i>1.1</i>	<i>-1.4</i>	<i>0.3</i>	-2.0	<i>1.4</i>	<i>-0.2</i>
Imports.....	3.9	4.1	6.0	5.7	<i>4.0</i>	<i>5.1</i>	<i>5.2</i>	<i>5.2</i>	<i>4.8</i>	<i>4.8</i>	<i>4.8</i>	<i>4.9</i>	19.8	<i>19.5</i>	<i>19.2</i>
Exports.....	11.8	13.5	11.7	11.7	<i>9.3</i>	<i>12.3</i>	<i>12.1</i>	<i>11.9</i>	<i>11.4</i>	<i>11.6</i>	<i>11.9</i>	<i>11.8</i>	48.7	<i>45.7</i>	<i>46.7</i>
Total Net Domestic Supply	268.4	269.9	273.7	278.5	<i>256.8</i>	<i>257.1</i>	<i>276.7</i>	<i>273.4</i>	<i>265.4</i>	<i>257.6</i>	<i>278.3</i>	<i>278.6</i>	1090.4	<i>1064.0</i>	<i>1079.9</i>
Secondary Stock Levels^b															
Opening.....	108.1	112.4	127.0	116.9	<i>136.6</i>	<i>143.8</i>	<i>147.2</i>	<i>134.1</i>	<i>130.7</i>	<i>134.8</i>	<i>140.4</i>	<i>122.5</i>	108.1	<i>136.6</i>	<i>130.7</i>
Closing.....	112.4	127.0	116.9	136.6	<i>143.8</i>	<i>147.2</i>	<i>134.1</i>	<i>130.7</i>	<i>134.8</i>	<i>140.4</i>	<i>122.5</i>	<i>118.9</i>	136.6	<i>130.7</i>	<i>118.9</i>
Net Withdrawals.....	-4.3	-14.6	10.1	-19.6	<i>-7.2</i>	<i>-3.4</i>	<i>13.1</i>	<i>3.4</i>	<i>-4.1</i>	<i>-5.6</i>	<i>18.0</i>	<i>3.6</i>	-28.4	<i>5.9</i>	<i>11.8</i>
Waste Coal Supplied to IPPs ^c	2.6	2.6	2.6	2.6	<i>2.8</i>	<i>2.8</i>	<i>2.8</i>	<i>2.8</i>	<i>2.9</i>	<i>2.9</i>	<i>2.9</i>	<i>2.9</i>	10.6	<i>11.1</i>	<i>11.6</i>
Total Supply.....	266.7	257.9	286.4	261.5	<i>252.3</i>	<i>256.4</i>	<i>292.6</i>	<i>279.7</i>	<i>264.1</i>	<i>254.9</i>	<i>299.1</i>	<i>285.1</i>	1072.6	<i>1080.9</i>	<i>1103.3</i>
Demand															
Coke Plants	6.8	6.9	6.6	5.8	<i>6.3</i>	<i>6.3</i>	<i>6.6</i>	<i>6.2</i>	<i>6.5</i>	<i>6.4</i>	<i>6.5</i>	<i>6.1</i>	26.1	<i>25.4</i>	<i>25.5</i>
Electricity Production															
Electric Utilities	200.7	193.2	220.3	191.6	<i>195.0</i>	<i>195.2</i>	<i>231.9</i>	<i>217.5</i>	<i>201.4</i>	<i>196.8</i>	<i>234.9</i>	<i>221.1</i>	805.9	<i>839.6</i>	<i>854.2</i>
Nonutilities (Excl. Cogen.) ^d	36.7	34.7	40.8	38.5	<i>37.7</i>	<i>35.7</i>	<i>41.5</i>	<i>39.2</i>	<i>38.5</i>	<i>36.4</i>	<i>42.5</i>	<i>40.1</i>	150.6	<i>154.1</i>	<i>157.5</i>
Retail and General Industry.....	18.1	16.1	16.3	17.0	<i>16.5</i>	<i>15.2</i>	<i>15.4</i>	<i>18.0</i>	<i>17.7</i>	<i>15.3</i>	<i>15.3</i>	<i>17.8</i>	67.5	<i>65.2</i>	<i>66.1</i>
Total Demand ^e	262.2	251.0	284.0	252.8	<i>255.4</i>	<i>252.4</i>	<i>295.5</i>	<i>280.9</i>	<i>264.1</i>	<i>254.9</i>	<i>299.1</i>	<i>285.1</i>	1050.1	<i>1084.2</i>	<i>1103.3</i>
Discrepancy ^f	4.5	6.9	2.4	8.7	<i>-3.2</i>	<i>4.0</i>	<i>-2.9</i>	<i>-1.2</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	22.5	<i>-3.2</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 2000 and projections for 2001 and 2002 are based on (1) estimated consumption by utility power plants sold to nonutility generators during 1999 and 2000, and (2) annual coal-fired generation at nonutilities from Form EIA-867 (Annual Nonutility Power Producer Report).

^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 10. U.S. Electricity Supply and Demand: Base Case
(Billion Kilowatt-hours)

	2001				2002				2003				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2001	2002	2003
Supply															
Net Utility Generation															
Coal	391.6	375.9	423.5	368.0	366.8	370.1	440.5	415.5	381.6	373.4	446.8	423.4	1559.0	1592.8	1625.1
Petroleum.....	24.0	21.6	21.3	11.9	18.0	12.1	22.1	12.0	18.0	10.0	22.3	13.1	78.8	64.2	63.5
Natural Gas.....	45.7	69.6	95.2	54.5	46.2	70.9	94.4	51.4	46.3	71.0	96.2	52.8	265.0	263.0	266.3
Nuclear	135.1	129.5	139.9	127.1	130.3	127.7	137.5	127.7	131.1	128.5	138.4	128.5	531.6	523.1	526.6
Hydroelectric.....	59.9	58.8	56.0	51.4	55.6	63.2	56.9	59.2	69.1	74.6	62.7	62.1	226.0	234.9	268.5
Geothermal and Other ^a	0.3	0.2	0.3	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7	1.1	1.5	2.5
Subtotal.....	656.6	655.6	736.2	613.1	617.2	644.3	751.8	666.2	646.7	658.1	767.0	680.6	2661.6	2679.5	2752.5
Nonutility Generation ^b															
Coal	93.5	81.1	96.1	82.3	89.6	78.4	90.8	60.2	93.4	78.8	92.1	61.3	353.0	319.0	325.7
Petroleum.....	17.0	12.0	11.9	7.3	12.8	7.1	11.9	7.3	12.8	5.8	12.0	7.9	48.2	39.1	38.5
Natural Gas.....	78.4	83.9	109.1	87.0	82.9	85.7	106.7	85.3	83.1	85.8	108.6	87.7	358.3	360.5	365.2
Other Gaseous Fuels ^c	4.0	4.3	5.6	4.5	4.0	4.5	5.8	4.5	4.0	4.5	5.9	4.6	18.5	18.8	19.0
Nuclear	56.2	55.3	60.4	61.7	61.8	60.8	65.5	60.8	62.4	61.1	65.8	61.3	233.6	248.8	250.6
Hydroelectric.....	5.3	6.4	3.3	3.3	5.5	8.0	4.1	5.7	7.3	9.5	4.5	6.0	18.4	23.3	27.3
Geothermal and Other ^d	20.4	21.5	22.2	21.9	21.0	21.5	22.6	21.3	20.9	21.4	22.5	21.2	86.1	86.5	85.9
Subtotal.....	275.0	264.5	308.6	267.9	277.6	266.0	307.3	245.1	283.9	266.9	311.3	249.9	1116.0	1096.0	1112.1
Total Generation	931.6	920.1	1044.8	881.1	894.8	910.3	1059.1	911.3	930.6	925.0	1078.4	930.5	3777.6	3775.5	3864.6
Net Imports ^e	3.6	7.2	5.1	4.4	4.9	8.5	6.3	5.6	6.1	7.7	11.1	6.6	20.3	25.3	31.4
Total Supply	935.2	927.3	1049.9	885.4	899.7	918.8	1065.4	916.9	936.7	932.8	1089.5	937.1	3797.9	3800.8	3896.0
Losses and Unaccounted for ^f	26.7	64.1	44.9	41.4	28.0	55.6	47.7	41.4	31.7	58.1	49.3	42.7	177.1	172.7	181.9
Demand															
Retail Sales ^g															
Residential.....	322.8	263.2	353.8	262.8	302.1	265.0	361.2	283.8	322.0	268.0	371.2	289.3	1202.5	1212.1	1250.6
Commercial.....	256.9	264.8	305.6	258.4	254.7	267.4	305.5	259.5	256.9	269.0	312.9	268.2	1085.7	1087.0	1107.0
Industrial	248.3	253.3	253.1	241.3	232.3	247.1	258.6	247.9	239.9	251.7	261.9	251.0	996.0	985.8	1004.4
Other.....	27.3	28.5	33.8	28.3	29.0	29.8	33.1	30.3	30.0	30.3	33.8	30.8	117.9	122.1	124.9
Subtotal.....	855.3	809.8	946.3	790.7	818.0	809.2	958.5	821.4	848.8	819.0	979.9	839.3	3402.1	3407.1	3486.9
Nonutility Use/Sales ^h	53.2	53.4	58.7	53.2	53.7	54.0	59.2	54.1	56.2	55.7	60.3	55.1	218.6	220.9	227.2
Total Demand	908.5	863.2	1005.0	844.0	871.7	863.1	1017.7	875.5	905.0	874.7	1040.1	894.4	3620.7	3628.1	3714.1
Memo:															
Nonutility Sales to															
Electric Utilities ^b	221.7	211.1	249.9	214.7	223.9	212.0	248.1	191.0	227.7	211.3	251.1	194.8	897.4	875.1	884.9

^a"Other" includes generation from wind, wood, waste, and solar sources.

^bElectricity (net Generation) from nonutility sources, including cogenerators and small power producers.

^cIncludes refinery still gas and other process or waste gases and liquefied petroleum gases.

^dIncludes geothermal, solar, wind, wood, waste, hydrogen, sulfur, batteries, chemicals and spent sulfite liquor.

^eData for 2000 are estimates.

^fBalancing item, mainly transmission and distribution losses.

^gTotal 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 2000 are estimated.

^hDefined as the sum of nonutility facility use of onsite net electricity generation plus direct sales of power by nonutility generators to third parties, reported annually in Table 7.5 of the Monthly Energy Review (MER). Data for 2000 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 11. U.S. Renewable Energy Use by Sector: Base Case
(Quadrillion Btu)

	Year				Annual Percentage Change		
	2000	2001	2002	2003	2000-2001	2001-2002	2002-2003
Electric Utilities							
Hydroelectric Power ^a	2.600	2.020	<i>2.460</i>	<i>2.813</i>	-22.3	<i>21.8</i>	<i>14.3</i>
Geothermal, Solar and Wind Energy ^b	0.004	0.004	<i>0.005</i>	<i>0.010</i>	0.0	<i>25.0</i>	<i>100.0</i>
Biofuels ^c	0.021	0.009	<i>0.013</i>	<i>0.018</i>	-57.1	<i>44.4</i>	<i>38.5</i>
Total	2.625	2.033	<i>2.478</i>	<i>2.840</i>	-22.6	<i>21.9</i>	<i>14.6</i>
Nonutility Power Generators							
Hydroelectric Power ^a	0.257	0.190	<i>0.241</i>	<i>0.282</i>	-26.1	<i>26.8</i>	<i>17.0</i>
Geothermal, Solar and Wind Energy ^b	0.355	0.375	<i>0.382</i>	<i>0.375</i>	5.6	<i>1.9</i>	<i>-1.8</i>
Biofuels ^c	0.642	0.663	<i>0.659</i>	<i>0.659</i>	3.3	<i>-0.6</i>	<i>0.0</i>
Total	1.254	1.228	<i>1.282</i>	<i>1.316</i>	-2.1	<i>4.4</i>	<i>2.7</i>
Total Power Generation.....	3.879	3.262	<i>3.760</i>	<i>4.156</i>	-15.9	<i>15.3</i>	<i>10.5</i>
Other Sectors ^d							
Residential and Commercial ^e	0.570	0.560	<i>0.560</i>	<i>0.590</i>	-1.8	<i>0.0</i>	<i>5.4</i>
Industrial ^f	2.410	2.410	<i>2.470</i>	<i>2.540</i>	0.0	<i>2.5</i>	<i>2.8</i>
Transportation ^g	0.114	0.122	<i>0.129</i>	<i>0.143</i>	7.0	<i>5.7</i>	<i>10.9</i>
Total	3.094	3.092	<i>3.159</i>	<i>3.273</i>	-0.1	<i>2.2</i>	<i>3.6</i>
Net Imported Electricity ^h	0.244	0.146	<i>0.181</i>	<i>0.225</i>	-40.2	<i>24.0</i>	<i>24.3</i>
Total Renewable Energy Demand.....	7.217	6.499	<i>7.100</i>	<i>7.655</i>	-9.9	<i>9.2</i>	<i>7.8</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.

^hRepresents 69.3 percent of total electricity net imports, which is the proportion of total 1999 net imported electricity (0.300 quadrillion Btu) attributable to renewable sources (0.208 quadrillion Btu). See EIA's Monthly Energy Review, Table 1.5

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														
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Real Gross Domestic Product (GDP) (billion chained 1996 dollars).....	6592	6708	6676	6880	7063	7348	7544	7813	8159	8509	8857	9224	9334	<i>9574</i>	<i>9903</i>
Imported Crude Oil Price ^a (nominal dollars per barrel).....	18.08	21.75	18.70	18.20	16.14	15.52	17.14	20.61	18.50	12.08	17.22	27.72	22.02	<i>23.66</i>	<i>26.47</i>
Petroleum Supply															
Crude Oil Production ^b (million barrels per day).....	7.61	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	5.82	5.85	<i>5.89</i>	<i>5.91</i>
Total Petroleum Net Imports (including SPR) (million barrels per day).....	7.20	7.16	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	10.42	10.88	<i>10.35</i>	<i>11.07</i>
Energy Demand															
World Petroleum (million barrels per day).....	65.9	66.0	66.6	66.8	67.0	68.3	69.9	71.4	72.9	73.6	75.0	76.0	76.0	<i>76.7</i>	<i>77.9</i>
U.S. Petroleum (million barrels per day).....	17.37	17.04	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	19.70	19.63	<i>19.67</i>	<i>20.30</i>
Natural Gas (trillion cubic feet).....	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.95	21.26	21.61	22.54	21.48	<i>22.17</i>	<i>22.84</i>
Coal (million short tons).....	889	896	893	901	943	950	962	1006	1030	1038	1045	1081	1050	<i>1084</i>	<i>1103</i>
Electricity (billion kilowatthours)															
Retail Sales ^c	2647	2713	2762	2763	2861	2935	3013	3101	3146	3264	3312	3421	3402	<i>3407</i>	<i>3487</i>
Nonutility Own Use ^d	NA	104	111	122	127	141	149	149	149	160	189	199	219	<i>221</i>	<i>227</i>
Total.....	2747	2817	2873	2885	2988	3075	3162	3250	3295	3424	3501	3620	3621	<i>3628</i>	<i>3714</i>
Total Energy Demand ^e (quadrillion Btu).....	84.2	84.2	84.5	85.6	87.4	89.2	90.9	93.9	94.2	95.2	97.1	99.6	97.1	<i>99.1</i>	<i>102.0</i>
Total Energy Demand per Dollar of GDP (thousand Btu per 1996 Dollar).....	NA	12.55	12.66	12.44	12.37	12.14	12.05	12.04	11.54	11.19	10.96	10.80	10.41	<i>10.35</i>	<i>10.30</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. Data for 2000 are estimates.

^dDefined as the sum of nonutility facility use of onsite net electricity generation plus direct sales of power by nonutility generators to third parties, reported annually in Table 7.5 of the Monthly Energy Review (MER). Data for 2000 are estimates.

^e"Total Energy Demand" refers to the aggregate energy concept presented in Energy Information Administration, Annual Energy Review, 1999, DOE/EIA-0384(97) (AER), Table 1.1. Prior to 1990, some components of renewable energy consumption, particularly relating to consumption at nonutility electric generating facilities, were not available. For those years, a less comprehensive measure of total energy demand can be found in EIA's AER. 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 DRI-WEFA Forecast CONTROL0502.

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

	Year														
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Macroeconomic															
Real Gross Domestic Product (billion chained 1996 dollars).....	6592	6708	6676	6880	7063	7348	7544	7813	8159	8509	8857	9224	9334	<i>9574</i>	<i>9903</i>
GDP Implicit Price Deflator (Index, 1996=1.000).....	0.833	0.865	0.897	0.919	0.941	0.960	0.981	1.000	1.019	1.032	1.047	1.070	1.094	<i>1.107</i>	<i>1.133</i>
Real Disposable Personal Income (billion chained 1996 Dollars).....	4907	5014	5033	5189	5261	5397	5539	5678	5854	6169	6320	6539	6772	<i>7003</i>	<i>7236</i>
Manufacturing Production (Index, 1996=1.000).....	0.816	0.812	0.792	0.824	0.853	0.905	0.953	1.000	1.079	1.142	1.191	1.247	1.194	<i>1.204</i>	<i>1.277</i>
Real Fixed Investment (billion chained 1996 dollars).....	911	895	833	886	958	1046	1109	1213	1329	1480	1595	1716	1683	<i>1633</i>	<i>1724</i>
Real Exchange Rate (Index, 1996=1.000).....	NA	0.913	0.915	0.923	0.958	0.938	0.875	0.919	0.990	1.041	1.047	1.083	1.140	<i>1.171</i>	<i>1.116</i>
Business Inventory Change (billion chained 1996 dollars).....	14.2	8.9	-6.8	-4.7	3.6	12.1	14.1	10.1	14.8	27.2	13.3	13.1	-35.4	<i>-10.7</i>	<i>10.5</i>
Producer Price Index (index, 1982=1.000).....	1.122	1.163	1.165	1.172	1.189	1.205	1.248	1.277	1.276	1.244	1.255	1.328	1.342	<i>1.316</i>	<i>1.346</i>
Consumer Price Index (index, 1982-1984=1.000).....	1.240	1.308	1.363	1.404	1.445	1.482	1.524	1.569	1.605	1.630	1.666	1.722	1.771	<i>1.800</i>	<i>1.850</i>
Petroleum Product Price Index (index, 1982=1.000).....	0.612	0.748	0.671	0.647	0.620	0.591	0.608	0.701	0.680	0.513	0.609	0.913	0.852	<i>0.765</i>	<i>0.890</i>
Non-Farm Employment (millions).....	107.9	109.4	108.3	108.6	110.7	114.1	117.2	119.6	122.7	125.8	128.9	131.8	132.2	<i>131.8</i>	<i>134.2</i>
Commercial Employment (millions).....	70.0	71.3	70.8	71.2	73.2	76.1	78.8	81.1	83.9	86.6	89.6	92.1	93.1	<i>93.2</i>	<i>95.4</i>
Total Industrial Production (index, 1996=1.000).....	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.2	<i>1.2</i>	<i>1.2</i>
Housing Stock (millions).....	102.8	103.4	104.4	105.4	106.7	108.0	109.6	110.9	112.3	114.1	115.7	116.2	117.9	<i>119.7</i>	<i>121.0</i>
Weather ^a															
Heating Degree-Days															
U.S.	4726	4016	4200	4441	4700	4483	4531	4713	4542	3951	4169	4460	4223	<i>4289</i>	<i>4456</i>
New England	6887	5848	5960	6844	6728	6672	6559	6679	6662	5680	5952	6489	6059	<i>6032</i>	<i>6457</i>
Middle Atlantic	6134	4998	5177	5964	5948	5934	5831	5986	5809	4812	5351	5774	5297	<i>5256</i>	<i>5693</i>
U.S. Gas-Weighted.....	4856	4139	4337	4458	4754	4659	4707	4980	4802	4183	4399	4680	4451	<i>4540</i>	<i>4706</i>
Cooling Degree-Days (U.S.).....	1156.0	1260.0	1331.0	1040.0	1218.0	1220.0	1293.0	1180.0	1156.0	1410.0	1297.0	1229.0	1256.0	<i>1264.1</i>	<i>1238.3</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 1990 population.

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

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, Statistical Release G.17(419); U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on DRI-WEFA Forecast CONTROL0502.

Table A3. Annual International Petroleum Supply and Demand Balance: Base Case

(Millions Barrels per Day, Except OECD Commercial Stocks)

	Year														
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Demand^a															
OECD															
U.S. (50 States).....	17.3	17.0	16.7	17.0	17.2	17.7	17.7	18.3	18.6	18.9	19.5	19.7	19.6	19.7	20.3
Europe ^b	13.2	13.3	13.3	14.0	14.2	14.1	14.2	14.8	15.0	15.3	15.2	15.1	15.3	15.4	15.4
Japan.....	5.0	5.1	5.3	5.4	5.4	5.7	5.7	5.9	5.7	5.5	5.6	5.5	5.4	5.4	5.4
Other OECD.....	5.2	5.4	5.6	5.9	6.2	6.6	6.8	6.9	7.3	7.1	7.4	7.6	7.4	7.6	7.7
Total OECD.....	40.8	40.8	41.6	42.6	43.0	44.2	45.0	46.1	46.6	46.9	47.7	47.9	47.7	48.0	48.8
Non-OECD															
Former Soviet Union.....	8.7	8.4	8.4	6.8	5.6	4.8	4.6	4.0	3.9	3.8	3.7	3.7	3.6	3.7	3.7
Europe.....	1.3	1.0	0.8	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
China.....	2.4	2.3	2.5	2.7	3.0	3.2	3.4	3.6	3.9	4.1	4.3	4.8	4.9	5.1	5.3
Other Asia.....	4.0	4.3	4.5	4.7	5.1	5.5	5.9	6.3	6.6	6.7	6.9	7.3	7.3	7.4	7.4
Other Non-OECD.....	8.6	8.9	8.9	9.3	9.7	10.0	10.4	10.7	11.1	11.4	11.6	11.7	11.8	11.9	12.0
Total Non-OECD.....	25.1	24.9	25.0	24.2	24.0	24.1	24.9	25.3	26.2	26.7	27.3	28.1	28.3	28.7	29.1
Total World Demand.....	65.9	65.7	66.6	66.8	67.0	68.3	69.9	71.4	72.9	73.6	75.0	76.0	76.0	76.7	77.9
Supply^c															
OECD															
U.S. (50 States).....	9.9	9.7	9.9	9.8	9.6	9.4	9.4	9.4	9.5	9.3	9.0	9.1	9.0	9.1	9.2
Canada.....	2.0	2.0	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.6	2.7	2.8	3.0	3.1
Mexico.....	2.9	3.0	3.2	3.2	3.2	3.2	3.1	3.3	3.4	3.5	3.4	3.5	3.6	3.7	3.8
North Sea ^d	3.7	3.9	4.1	4.5	4.8	5.5	5.9	6.3	5.9	5.8	6.0	6.0	6.3	6.3	6.3
Other OECD.....	1.4	1.5	1.5	1.5	1.4	1.5	1.5	1.5	1.8	2.1	1.9	2.1	1.6	1.6	1.5
Total OECD.....	20.0	20.2	20.8	21.1	21.2	21.9	22.4	22.7	23.1	23.6	22.9	23.4	23.3	23.7	23.9
Non-OECD															
OPEC.....	23.3	24.5	24.6	25.8	26.6	27.0	27.6	28.3	29.9	30.4	29.3	30.9	30.1	28.0	29.3
Former Soviet Union.....	12.1	11.4	10.4	8.9	8.0	7.3	7.1	7.1	7.1	7.2	7.6	8.1	8.8	9.2	9.6
China.....	2.8	2.8	2.8	2.8	2.9	2.9	3.0	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3
Other Non-OECD.....	7.7	7.9	8.1	8.3	8.7	9.1	9.8	10.2	10.4	10.7	11.2	11.2	11.2	11.6	11.8
Total Non-OECD.....	45.9	46.6	45.9	45.9	46.2	46.3	47.5	48.7	50.6	51.6	51.3	53.4	53.5	52.1	53.9
Total World Supply.....	65.9	66.8	66.7	67.0	67.4	68.2	69.9	71.4	73.7	75.2	74.2	76.8	76.7	75.8	77.9
Total Stock Withdrawals.....	0.0	-0.8	-0.1	-0.3	-0.4	0.0	0.0	-0.4	-1.2	-1.3	0.8	-0.8	-0.7	0.8	0.0
OECD Comm. Stocks, End (bill. bbls.).....	2.6	2.7	2.7	2.7	2.8	2.8	2.7	2.7	2.7	2.8	2.4	2.5	2.6	2.4	2.4
Net Exports from Former Soviet Union.....	3.4	3.0	2.1	2.1	2.3	2.4	2.6	3.0	3.3	3.5	3.9	4.5	5.2	5.5	5.9

^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.

^bOECD Europe includes the former East Germany.

^cIncludes 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.

^dIncludes 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, and Organization for Economic Cooperation and Development, Annual and Monthly Oil Statistics Database.

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

	Year														
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Crude Oil Prices (dollars per barrel)															
Imported Average ^a	18.08	21.75	18.70	18.20	16.14	15.52	17.14	20.61	18.50	12.08	17.22	27.72	22.02	23.66	26.47
WTI ^b Spot Average.....	19.78	24.48	21.60	20.54	18.49	17.16	18.41	22.11	20.61	14.45	19.25	30.29	25.95	26.14	29.46
Natural Gas Wellhead															
(dollars per thousand cubic feet).....	1.69	1.71	1.64	1.74	2.04	1.85	1.55	2.17	2.32	1.96	2.19	3.69	4.12	2.91	3.28
Petroleum Products															
Gasoline Retail ^b (dollars per gallon)															
All Grades.....	1.02	1.17	1.15	1.14	1.13	1.13	1.16	1.25	1.24	1.07	1.18	1.53	1.47	1.38	1.51
Regular Unleaded.....	0.99	1.13	1.10	1.09	1.07	1.08	1.11	1.20	1.20	1.03	1.14	1.49	1.43	1.35	1.48
No. 2 Diesel Oil, Retail															
(dollars per gallon).....	0.99	1.16	1.13	1.11	1.11	1.11	1.11	1.24	1.20	1.04	1.12	1.49	1.40	1.31	1.44
No. 2 Heating Oil, Wholesale															
(dollars per gallon).....	0.56	0.70	0.62	0.58	0.54	0.51	0.51	0.64	0.59	0.42	0.51	0.89	0.76	0.73	0.85
No. 2 Heating Oil, Retail															
(dollars per gallon).....	0.90	1.06	1.02	0.93	0.91	0.88	0.87	0.99	0.99	0.85	0.88	1.31	1.24	1.15	1.29
No. 6 Residual Fuel Oil, Retail ^c															
(dollars per barrel).....	16.20	18.66	14.32	14.21	14.00	14.79	16.49	19.01	17.82	12.83	16.02	25.34	22.26	23.32	25.73
Electric Utility Fuels															
Coal															
(dollars per million Btu).....	1.44	1.45	1.45	1.41	1.38	1.36	1.32	1.29	1.27	1.25	1.22	1.20	1.23	1.21	1.20
Heavy Fuel Oil ^d															
(dollars per million Btu).....	2.85	3.22	2.49	2.46	2.36	2.40	2.60	3.01	2.79	2.07	2.38	4.26	3.72	3.71	4.15
Natural Gas															
(dollars per million Btu).....	2.36	2.32	2.15	2.33	2.56	2.23	1.98	2.64	2.76	2.38	2.57	4.33	4.43	3.41	3.72
Other Residential															
Natural Gas															
(dollars per thousand cubic feet).....	5.64	5.80	5.82	5.89	6.17	6.41	6.06	6.35	6.95	6.83	6.69	7.77	9.62	7.50	8.16
Electricity															
(cents per kilowatthour).....	7.64	7.85	8.05	8.23	8.34	8.40	8.40	8.36	8.43	8.26	8.16	8.24	8.48	8.67	8.66

^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														
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Supply															
Crude Oil Supply															
Domestic Production ^a	7.61	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	5.82	5.85	5.89	5.91
Alaska	1.87	1.77	1.80	1.71	1.58	1.56	1.48	1.39	1.30	1.17	1.05	0.97	0.97	0.99	1.05
Lower 48	5.74	5.58	5.62	5.46	5.26	5.10	5.08	5.07	5.16	5.08	4.83	4.85	4.88	4.90	4.86
Net Imports (including SPR) ^b	5.70	5.79	5.67	5.99	6.69	6.96	7.14	7.40	8.12	8.60	8.61	9.02	9.31	9.04	9.59
Other SPR Supply	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.02	0.10	0.12
Stock Draw (Including SPR)	-0.09	0.02	-0.01	0.00	-0.08	-0.02	0.09	0.05	-0.06	-0.07	0.09	-0.01	-0.07	0.06	0.01
Product Supplied and Losses	-0.03	-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
Unaccounted-for Crude Oil	0.20	0.26	0.20	0.26	0.17	0.27	0.19	0.22	0.14	0.11	0.19	0.15	0.05	0.18	0.15
Total Crude Oil Supply	13.40	13.41	13.30	13.41	13.61	13.87	13.97	14.19	14.66	14.89	14.80	15.07	15.13	15.04	15.54
Other Supply															
NGL Production	1.55	1.56	1.66	1.70	1.74	1.73	1.76	1.83	1.82	1.76	1.85	1.91	1.87	1.90	1.93
Other Hydrocarbon and Alcohol Inputs	0.11	0.13	0.15	0.20	0.25	0.26	0.30	0.31	0.34	0.38	0.38	0.38	0.39	0.40	0.41
Crude Oil Product Supplied	0.03	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
Processing Gain	0.66	0.68	0.71	0.77	0.77	0.77	0.77	0.84	0.85	0.89	0.89	0.95	0.90	0.93	0.92
Net Product Imports ^c	1.50	1.38	0.96	0.94	0.93	1.09	0.75	1.10	1.04	1.17	1.30	1.40	1.58	1.31	1.48
Product Stock Withdrawn	0.13	-0.14	-0.04	0.06	-0.05	0.00	0.15	0.03	-0.09	-0.17	0.30	0.00	-0.23	0.10	0.02
Total Supply	17.37	17.04	16.76	17.10	17.26	17.72	17.72	18.31	18.62	18.92	19.52	19.70	19.63	19.67	20.30
Demand															
Motor Gasoline ^d	7.40	7.31	7.23	7.38	7.48	7.60	7.79	7.89	8.02	8.25	8.43	8.47	8.60	8.75	8.98
Jet Fuel	1.49	1.52	1.47	1.45	1.47	1.53	1.51	1.58	1.60	1.62	1.67	1.73	1.66	1.62	1.74
Distillate Fuel Oil	3.16	3.02	2.92	2.98	3.04	3.16	3.21	3.37	3.44	3.46	3.57	3.72	3.81	3.71	3.84
Residual Fuel Oil	1.37	1.23	1.16	1.09	1.08	1.02	0.85	0.85	0.80	0.89	0.83	0.91	0.84	0.74	0.80
Other Oils ^e	3.95	3.95	3.99	4.20	4.17	4.41	4.36	4.63	4.77	4.69	5.01	4.87	4.72	4.84	4.94
Total Demand	17.37	17.04	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	19.70	19.63	19.67	20.30
Total Petroleum Net Imports	7.20	7.16	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	10.42	10.88	10.35	11.07
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	341	323	325	318	335	337	303	284	305	324	284	286	312	290	287
Total Motor Gasoline	213	220	219	216	226	215	202	195	210	216	193	196	210	208	206
Jet Fuel	41	52	49	43	40	47	40	40	44	45	41	45	42	43	43
Distillate Fuel Oil	106	132	144	141	141	145	130	127	138	156	125	118	145	133	133
Residual Fuel Oil	44	49	50	43	44	42	37	46	40	45	36	36	41	38	39
Other Oils ^f	257	261	267	263	273	275	258	250	259	291	246	247	287	265	258

^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														
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Supply															
Total Dry Gas Production	17.31	17.81	17.70	17.84	18.10	18.82	18.60	18.85	18.90	18.71	18.83	18.99	19.41	<i>18.79</i>	<i>19.77</i>
Net Imports	1.27	1.45	1.64	1.92	2.21	2.46	2.69	2.78	2.84	2.99	3.42	3.54	3.65	<i>3.18</i>	<i>3.39</i>
Supplemental Gaseous Fuels.....	0.11	0.12	0.11	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.08	<i>0.07</i>	<i>0.07</i>
Total New Supply	18.69	19.38	19.45	19.88	20.42	21.39	21.40	21.75	21.84	21.80	22.35	22.61	23.13	<i>22.04</i>	<i>23.23</i>
Working Gas in Storage															
Opening.....	2.85	2.51	3.07	2.82	2.60	2.32	2.61	2.15	2.17	2.17	2.73	2.51	1.72	<i>2.90</i>	<i>2.55</i>
Closing.....	2.51	3.07	2.82	2.60	2.32	2.61	2.15	2.17	2.17	2.73	2.51	1.72	2.90	<i>2.55</i>	<i>2.47</i>
Net Withdrawals.....	0.34	-0.56	0.24	0.23	0.28	-0.28	0.45	-0.02	0.00	-0.56	0.22	0.79	-1.18	<i>0.36</i>	<i>0.08</i>
Total Supply.....	19.03	18.82	19.70	20.11	20.70	21.11	21.85	21.73	21.84	21.25	22.57	23.40	21.95	<i>22.39</i>	<i>23.31</i>
Balancing Item ^a	-0.23	-0.11	-0.66	-0.56	-0.42	-0.40	-0.27	0.24	0.11	0.01	-0.96	-0.86	-0.47	<i>-0.22</i>	<i>-0.47</i>
Total Primary Supply	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.95	21.26	21.61	22.54	21.48	<i>22.17</i>	<i>22.84</i>
Demand															
Lease and Plant Fuel.....	1.07	1.24	1.13	1.17	1.17	1.12	1.22	1.25	1.20	1.16	1.08	1.13	1.16	<i>1.15</i>	<i>1.23</i>
Pipeline Use	0.63	0.66	0.60	0.59	0.62	0.69	0.70	0.71	0.75	0.64	0.65	0.64	0.61	<i>0.59</i>	<i>0.62</i>
Residential.....	4.78	4.39	4.56	4.69	4.96	4.85	4.85	5.24	4.98	4.52	4.73	4.99	4.81	<i>4.96</i>	<i>5.16</i>
Commercial	2.72	2.62	2.73	2.80	2.86	2.90	3.03	3.16	3.21	3.00	3.04	3.22	3.25	<i>3.38</i>	<i>3.45</i>
Industrial (Incl. Nonutilities).....	6.82	7.02	7.23	7.53	7.98	8.17	8.58	8.87	8.83	8.69	9.01	9.51	8.98	<i>9.36</i>	<i>9.68</i>
Electric Utilities	2.79	2.79	2.79	2.77	2.68	2.99	3.20	2.73	2.97	3.26	3.11	3.04	2.68	<i>2.73</i>	<i>2.71</i>
Total Demand	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.95	21.26	21.61	22.54	21.48	<i>22.17</i>	<i>22.84</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.

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														
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Supply															
Production	980.7	1029.1	996.0	997.5	945.4	1033.5	1033.0	1063.9	1089.9	1117.5	1100.4	1073.6	1121.3	<i>1088.8</i>	<i>1107.5</i>
Appalachia.....	464.8	489.0	457.8	456.6	409.7	445.4	434.9	451.9	467.8	460.4	425.6	419.4	428.9	<i>405.4</i>	<i>405.8</i>
Interior	198.1	205.8	195.4	195.7	167.2	179.9	168.5	172.8	170.9	168.4	162.5	143.5	147.7	<i>137.2</i>	<i>132.0</i>
Western.....	317.9	334.3	342.8	345.3	368.5	408.3	429.6	439.1	451.3	488.8	512.3	510.7	544.7	<i>546.1</i>	<i>569.7</i>
Primary Stock Levels ^a															
Opening.....	30.4	29.0	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	39.5	31.9	<i>33.9</i>	<i>32.5</i>
Closing.....	29.0	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	39.5	31.9	33.9	<i>32.5</i>	<i>32.7</i>
Net Withdrawals.....	1.4	-4.4	0.4	-1.0	8.7	-7.9	-1.2	5.8	-5.3	-2.6	-2.9	7.6	-2.0	<i>1.4</i>	<i>-0.2</i>
Imports.....	2.9	2.7	3.4	3.8	7.3	7.6	7.2	7.1	7.5	8.7	9.1	12.5	19.8	<i>19.5</i>	<i>19.2</i>
Exports.....	100.8	105.8	109.0	102.5	74.5	71.4	88.5	90.5	83.5	78.0	58.5	58.5	48.7	<i>45.7</i>	<i>46.7</i>
Total Net Domestic Supply	884.2	921.6	890.9	897.8	886.9	961.8	950.4	986.3	1008.5	1045.7	1048.1	1035.2	1090.4	<i>1064.0</i>	<i>1079.9</i>
Secondary Stock Levels ^b															
Opening.....	158.4	146.1	168.2	167.7	163.7	120.5	136.1	134.6	123.0	106.4	129.4	144.0	108.1	<i>136.6</i>	<i>130.7</i>
Closing.....	146.1	168.2	167.7	163.7	120.5	136.1	134.6	123.0	106.4	129.4	144.0	108.1	136.6	<i>130.7</i>	<i>118.9</i>
Net Withdrawals.....	12.3	-22.1	0.5	4.0	43.2	-15.7	1.5	11.7	16.6	-23.0	-14.6	35.9	-28.4	<i>5.9</i>	<i>11.8</i>
Waste Coal Supplied to IPPs ^c	0.0	0.0	0.0	6.0	6.4	7.9	8.5	8.8	8.1	9.0	9.6	10.1	10.6	<i>11.1</i>	<i>11.6</i>
Total Supply.....	896.5	899.4	891.4	907.8	936.5	954.0	960.4	1006.7	1033.2	1031.6	1043.1	1081.2	1072.6	<i>1080.9</i>	<i>1103.3</i>
Demand															
Coke Plants	40.5	38.9	33.9	32.4	31.3	31.7	33.0	31.7	30.2	28.2	28.1	28.9	26.1	<i>25.4</i>	<i>25.5</i>
Electricity Production															
Electric Utilities	766.9	773.5	772.3	779.9	813.5	817.3	829.0	874.7	900.4	910.9	894.1	859.3	805.9	<i>839.6</i>	<i>854.2</i>
Nonutilities (Excl. Cogen.) ^d	5.7	7.4	11.4	15.0	17.5	19.9	21.2	22.2	21.6	26.9	52.7	123.3	150.6	<i>154.1</i>	<i>157.5</i>
Retail and General Industry.....	76.1	76.3	75.4	74.1	81.1	81.2	78.9	77.7	78.0	72.3	69.6	69.3	67.5	<i>65.2</i>	<i>66.1</i>
Total Demand ^e	889.2	896.2	893.0	901.2	943.5	950.1	962.0	1006.3	1030.1	1038.3	1044.5	1080.9	1050.1	<i>1084.2</i>	<i>1103.3</i>
Discrepancy ^f	7.3	3.3	-1.6	6.6	-7.0	3.9	-1.6	0.4	3.1	-6.7	-1.5	0.4	22.5	<i>-3.2</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 2000 and projections for 2001 and 2002 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).

^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. 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														
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Supply															
Total Utility and Nonutility Net Generation															
Coal	1583.8	1590.3	1589.9	1621.1	1685.7	1691.7	1710.2	1795.7	1844.1	1873.9	1884.3	1967.7	1912.0	<i>1911.8</i>	<i>1950.8</i>
Petroleum.....	163.9	124.0	119.0	99.4	111.3	105.5	75.3	81.7	93.0	126.9	123.6	108.8	127.1	<i>103.3</i>	<i>101.9</i>
Natural Gas.....	363.9	378.3	392.6	418.3	428.4	465.9	498.5	455.8	485.4	540.6	556.6	596.6	623.3	<i>623.5</i>	<i>631.5</i>
Nuclear	529.4	577.0	612.6	618.8	610.4	640.5	673.4	674.7	628.6	673.7	728.3	753.9	765.2	<i>771.9</i>	<i>777.2</i>
Hydroelectric.....	273.7	289.5	285.0	248.9	275.5	256.8	308.3	344.4	354.9	318.9	313.4	273.1	211.3	<i>258.2</i>	<i>295.8</i>
Geothermal and Other ^a	57.2	65.7	72.2	76.8	85.7	93.4	92.2	94.7	88.1	83.8	98.5	99.8	105.6	<i>106.8</i>	<i>107.4</i>
Total Generation	2971.9	3024.9	3071.3	3083.4	3196.9	3253.8	3357.8	3447.0	3494.2	3617.9	3704.5	3799.9	3777.6	<i>3775.5</i>	<i>3864.6</i>
Net Imports ^c	11.0	2.3	19.6	25.4	27.8	44.8	39.2	38.0	36.6	27.6	30.6	34.0	20.3	<i>25.3</i>	<i>31.4</i>
Total Supply	2982.8	3027.2	3091.0	3108.8	3224.7	3298.6	3397.1	3485.0	3530.8	3645.5	3735.1	3834.0	3797.9	<i>3800.8</i>	<i>3896.0</i>
Losses and Unaccounted for ^d	235.6	210.4	217.9	223.6	236.4	223.2	234.6	234.9	236.2	221.4	234.2	214.0	177.1	<i>172.7</i>	<i>181.9</i>
Demand															
Retail Sales ^e															
Residential	905.5	924.0	955.4	935.9	994.8	1008.5	1042.5	1082.5	1075.9	1130.1	1144.9	1192.4	1202.5	<i>1212.1</i>	<i>1250.6</i>
Commercial.....	725.9	751.0	765.7	761.3	794.6	820.3	862.7	887.4	928.6	979.4	1002.0	1055.2	1085.7	<i>1087.0</i>	<i>1107.0</i>
Industrial	925.7	945.5	946.6	972.7	977.2	1008.0	1012.7	1033.6	1038.2	1051.2	1058.2	1064.2	996.0	<i>985.8</i>	<i>1004.4</i>
Other.....	89.8	92.0	94.3	93.4	94.9	97.8	95.4	97.5	102.9	103.5	107.0	109.5	117.9	<i>122.1</i>	<i>124.9</i>
Subtotal.....	2646.8	2712.6	2762.0	2763.4	2861.5	2934.6	3013.3	3101.1	3145.6	3264.2	3312.1	3421.4	3402.1	<i>3407.1</i>	<i>3486.9</i>
Nonutility Use/Sales ^f	100.4	104.2	111.0	121.8	126.9	140.9	149.2	148.9	149.0	159.8	188.8	198.6	218.6	<i>220.9</i>	<i>227.2</i>
Total Demand	2747.2	2816.7	2873.0	2885.1	2988.4	3075.5	3162.4	3250.1	3294.6	3424.0	3500.9	3620.0	3620.7	<i>3628.1</i>	<i>3714.1</i>
Memos:															
Nonutility Sales															
to Electric Utilities.....	87.1	112.5	135.3	164.4	187.5	202.2	214.2	220.6	222.7	245.9	342.0	586.0	897.4	<i>875.1</i>	<i>884.9</i>
Electric Utility Generation.....	2784.3	2808.2	2825.0	2797.2	2882.5	2910.7	2994.5	3077.4	3122.5	3212.2	3173.7	3015.4	2661.6	<i>2679.5</i>	<i>2752.5</i>
Nonutility Generation	187.6	216.7	246.3	286.1	314.4	343.1	363.3	369.6	371.7	405.7	530.9	784.6	1116.0	<i>1096.0</i>	<i>1112.1</i>

^aOther includes generation from wind, wood, waste, and solar sources.

^bNet generation.

^cData for 2000 are estimates.

^dBalancing item, mainly transmission and distribution losses.

^eTotal of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA's Electric Power Monthly and Electric Power Annual. Power marketers' sales for historical periods are reported in EIA's Electric Sales and Revenue, Appendix C. Data for 2000 are estimates.

^fDefined as the sum of nonutility facility use of onsite net electricity generation plus direct sales of power by nonutility generators to third parties, reported annually in Table 7.5 of the Monthly Energy Review (MER). Data for 2000 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.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following report: Electric Power Monthly, DOE/EIA-0226 and Electric Power Annual, DOE/EIA-0348. Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels.