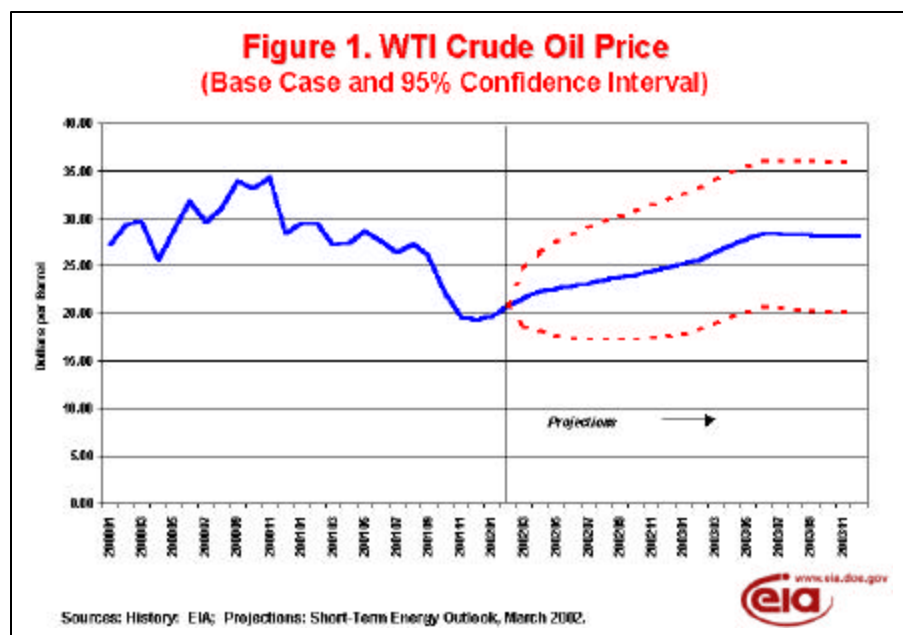


Short-Term Energy Outlook

March 2002



Overview

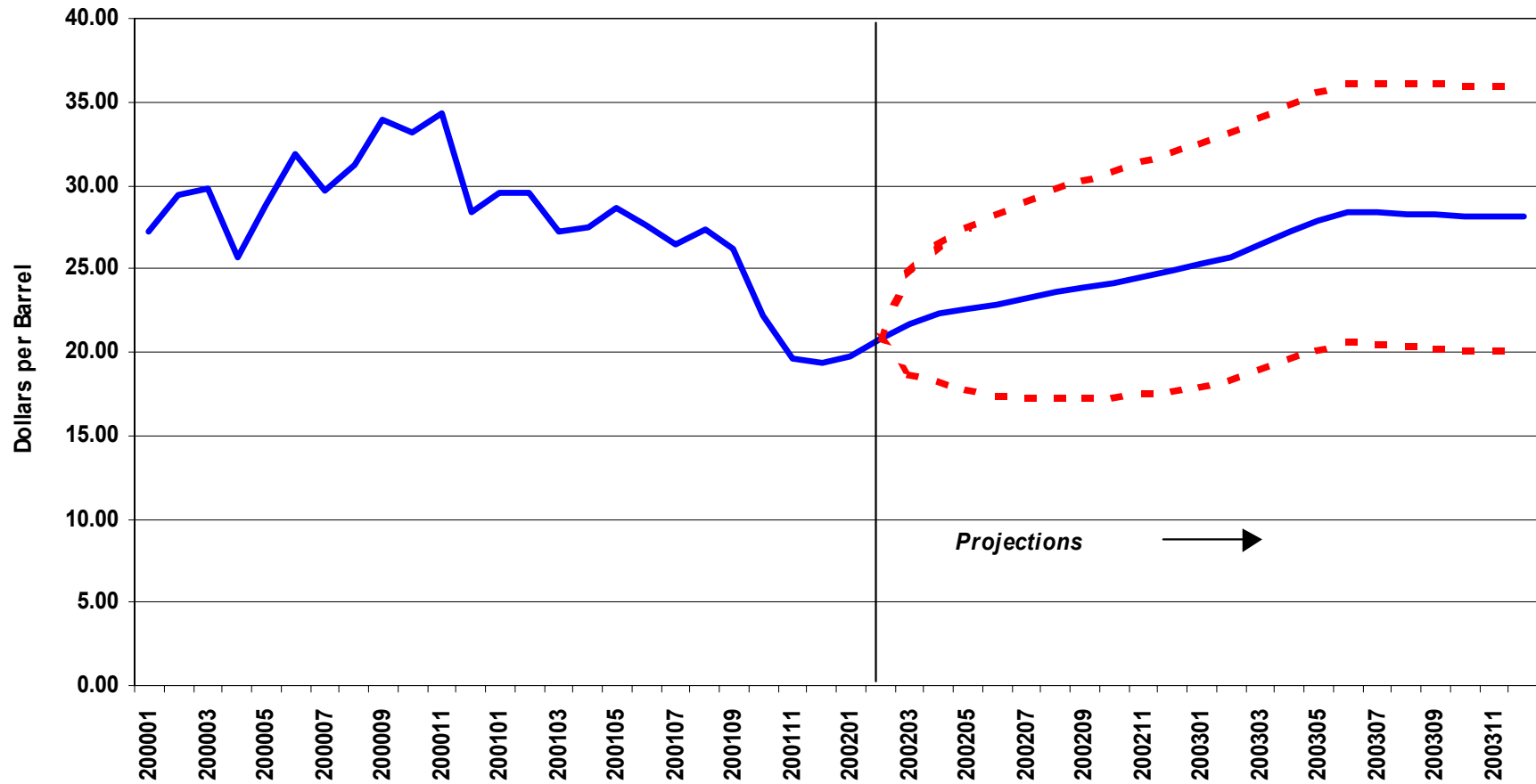
World Oil Markets. Average crude oil prices strengthened by \$1 per barrel in February on evidence that the United States and other industrialized countries trimmed slightly the year-over-year surplus in commercial inventories and on concerns that the U.S. may be turning its attention toward Iraq in its ongoing battle against world terrorism. The West Texas Intermediate price in February was \$20.72 per barrel, compared to \$19.71 per barrel in January. The expected tendency for commercial

petroleum inventories in the industrialized countries to drift toward the lower end of recent historical ranges over the course of the next year or two supports EIA's position that crude oil prices may move up gradually through the forecast period (Figure 1). The principal supply-side impetus for rising prices stems from coordinated cutbacks in OPEC production. On a much smaller scale, the implementation of the U.S. program to increase the level of oil stored in the Strategic Petroleum Reserve will, in effect, remove 160,000 barrels per day of crude oil from the world commercial market in 2002, and about 110,000 barrels per day in 2003.

Weather Update. Population-weighted heating degree-days (HDD) for the 2001/2002 winter are estimated to be 18 percent below last winter, and 11 percent below normal. Last winter, temperatures were abnormally low, particularly in fourth quarter 2000. This winter, in contrast, is the warmest overall (in terms of heating degree-days) in 70 years (Figure 2). The very mild winter temperatures during this heating season have lowered heating fuel demand and contributed to much higher fuel stocks than would otherwise be expected. Despite efforts by refiners to adjust production rates to deal with low profitability and high stocks, stocks remain high for most fuels, putting downward pressure on prices in the near-term.

Heating Fuel Expenditures Update. With the heart of the winter complete and with the focus soon shifting toward the summer outlook for gasoline and electricity, a look now at the household heating fuels expenditure picture compared to last winter is warranted. We currently estimate that household heating bills for the current season will be as follows: typical natural gas-heated Midwestern household: down 43 percent; typical oil-heated Northeastern household: down 36 percent; typical propane-heated Midwestern household: down 36 percent (Figure 3). Last October, assuming normal weather, we had projected for these categories declines of 34 percent, 17 percent and 23 percent, respectively. Based on the likelihood of a colder winter next year, our current guesses for the 2002-2003 winter season are: 12 percent increase for natural gas, 22 percent increase for heating oil and 16 percent increase for propane-heated households.

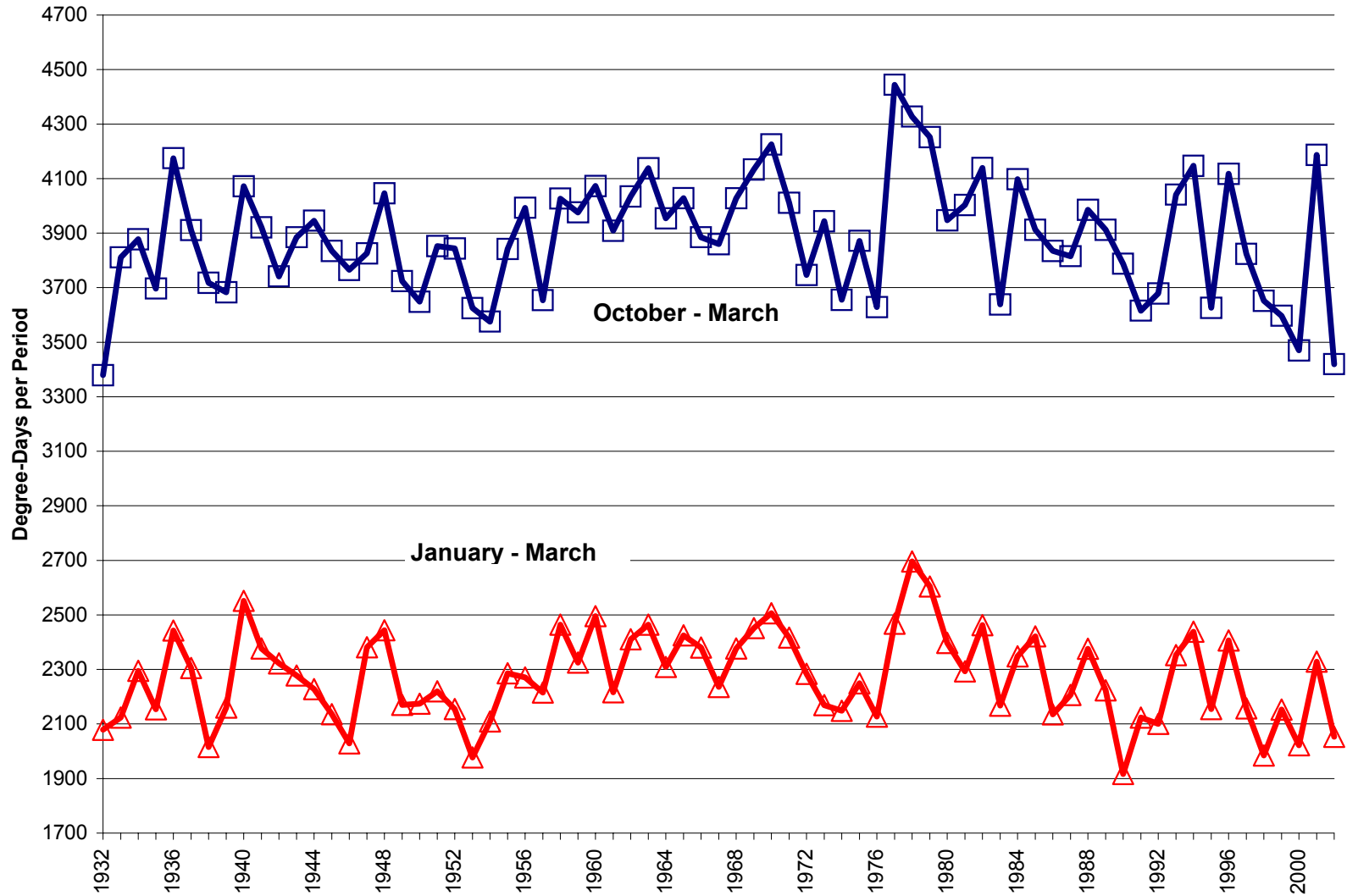
Figure 1. WTI Crude Oil Price (Base Case and 95% Confidence Interval)



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



Figure 2. Winter Heating Degree-day Patterns



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



Figure 3. Illustrated Household Expenditures for Heating Fuels

	1998-1999 Actual	1999-2000 Actual	2000-2001 Actual	2001-2002 Base Forecast
Natural Gas (Midwest)				
Consumption (mcf)	84.5	81.7	97.3	78.8
Avg. Price (\$/mcf)	6.29	6.67	9.54	6.67
Expenditures (\$)	532	545	928	526
Heating Oil (Northeast)				
Consumption (gals)	650	644	727	588
Avg. Price (\$/gal)	0.80	1.18	1.37	1.09
Expenditures (\$)	520	760	996	641
Propane (Midwest)				
Consumption (gals)	835	807	961	779
Avg. Price (\$/gal)	0.85	1.02	1.36	1.08
Expenditures (\$)	710	825	1,309	841

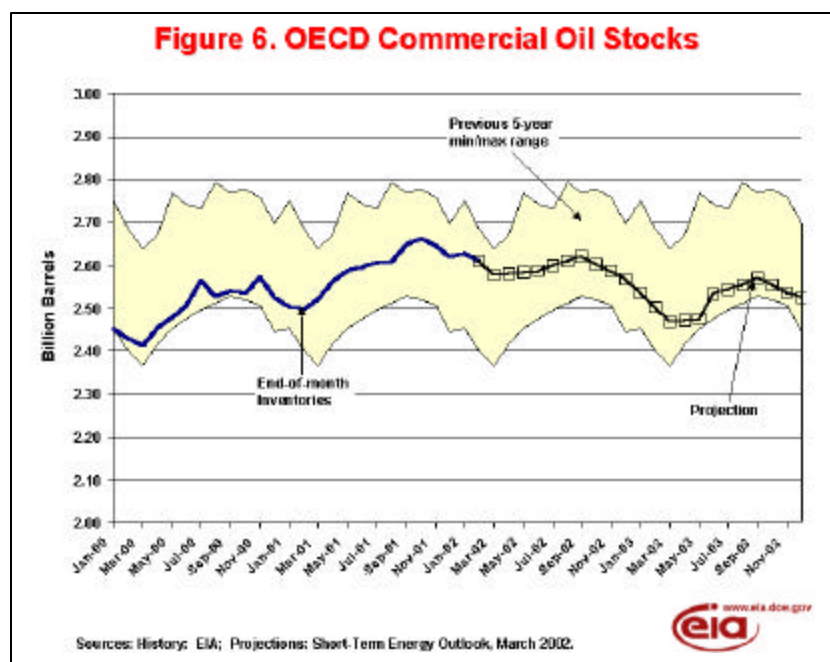
Notes: Consumption based on typical per household use for regions noted.

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

U.S. Natural Gas Markets. Natural gas storage levels are projected to end the heating season at 1,541 billion cubic feet (bcf), more than twice the 742 bcf seen at the same time last year. The need of storage holders to move storage gas out could lead to lower gas prices. For the past five weeks, storage withdrawals have averaged 4 bcf per day higher than a year ago. This is probably due to rising consumption, lower production (due to lower prices), and the very large gas inventory, which has been well above normal this entire winter. Natural gas production declined 1.1 percent in the fourth quarter of 2001 compared with the third quarter. By late 2002 or early 2003 the economic recovery and further declines in natural gas production capacity are likely to cause an upturn in natural gas prices to levels well above current prices of about \$2.50 per thousand cubic feet. Higher oil and gas prices are expected to contribute to about a 50-percent increase by late 2003 in aggregate domestic oil and gas lease revenues from current rates, which are about 60 percent below the peak rate of February 2001 ([Figure 4](#)).

International Oil Markets

Crude Oil Prices. World oil prices rose on average by roughly \$1 per barrel in February from January levels, as the U.S. benchmark West Texas Intermediate crude oil price rose to \$20.72 per barrel ([Figure 1](#)). The OPEC basket price also rose to an average of \$18.89 per barrel, and exceeded \$20 per barrel at end-February for the first time since October. In part, prices rose because markets focused on the uncertain situation in Iraq in the absence of any confirmation that the new agreement between OPEC and non-OPEC countries would hold. World oil prices are expected to firm in 2002, when inventory draws in the OECD countries validate that supply cuts are taking place. West Texas Intermediate prices are projected to reach \$25 per barrel by the end of 2002 and gradually rise further in 2003.



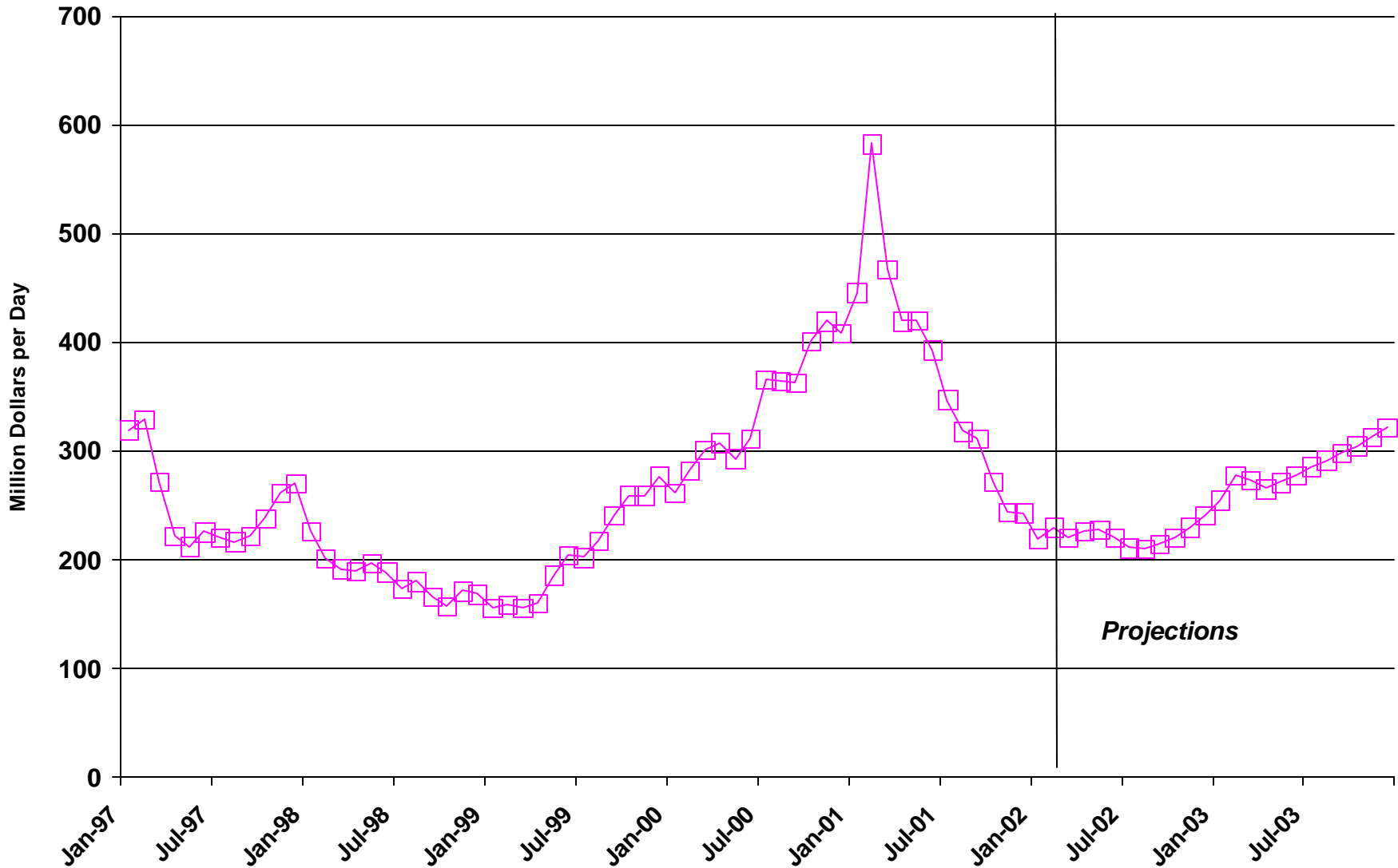
International Oil Supply and Demand.

While the results of non-OPEC output reductions were mixed, the OPEC 10 succeeded in reducing their oil production by an estimated 1 million barrels per day in January. If past history is a guide, OPEC production during the February-March period should continue to decline further before reversing course during the spring. Although OPEC Secretary General Rodriguez has said that he does not see OPEC raising output this year, this scenario is highly unlikely given past experience with OPEC cuts. In addition, the current OPEC quota levels are so low that unless the OPEC 10 increase their production during the latter half of the year, world oil markets will tighten rapidly. Even with an assumed 1 million

barrels per day increase in OPEC 10 production during the latter half of the year, oil prices could rise by \$4 per barrel by year's-end. If OPEC production does not increase, prices could rise further and diminish the potential economic recovery expected later this year.

EIA's global oil demand projections for 2002 suggest a world oil demand growth of 600,000 barrels per day, slightly less than the 650,000 barrels per day growth shown in the previous [Outlook](#) ([Figure 5](#)). With the expected recovery of the economy in 2003, particularly in the United States, where GDP growth is projected to reach 4 percent annually, oil demand could increase by 1.4 million barrels per day in 2003, with more than half of this coming from the U.S.

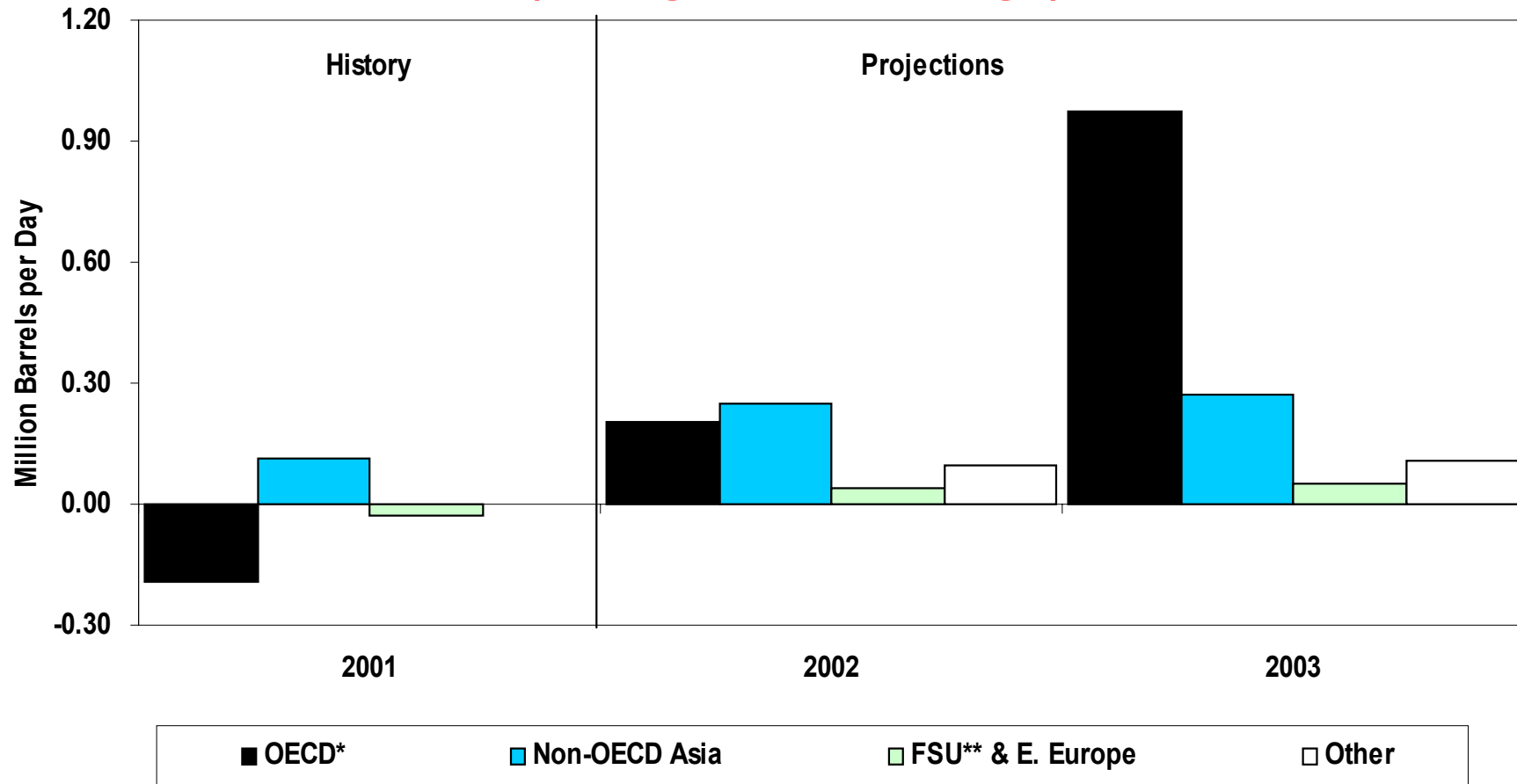
Figure 4. U.S. Oil and Gas Production Revenues



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



Figure 5. 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, March 2002.

The slump in global oil demand led to a rise in inventories in 2001 and commercial oil stocks in the OECD countries continued to rise in early 2002, driven in part by the unseasonably warm winter weather in the United States. Oil stocks in the OECD countries ended well over 100 million barrels higher in February than during the same period a year ago. These builds are expected to be reversed as OPEC's January production cuts show up in the form of reduced oil imports beginning in February, building support for firmer world oil prices ([Figure 6](#)).

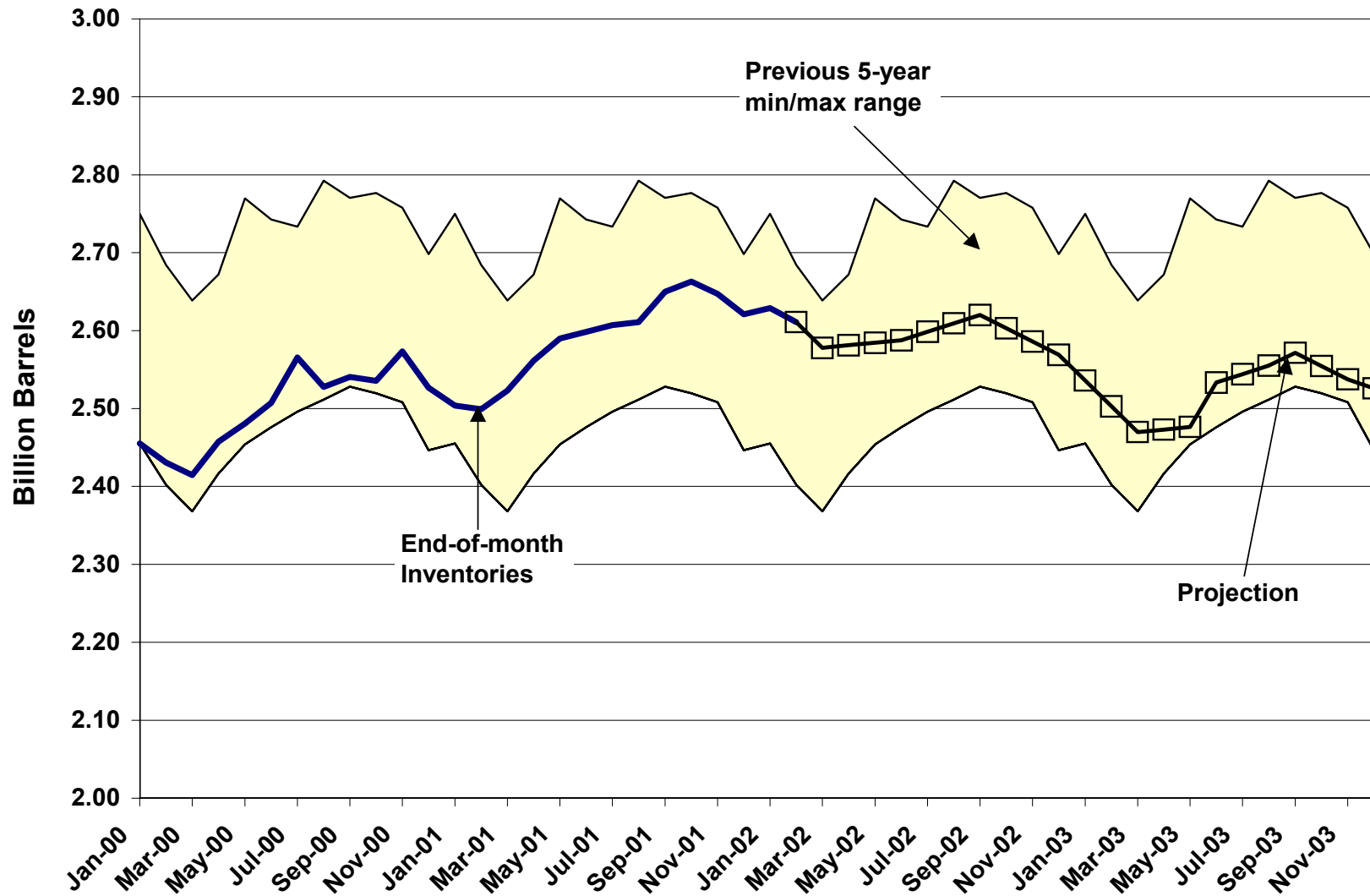
U. S. Energy Prices

Gasoline Prices: Retail motor gasoline prices have stayed fairly level, inching up less than 3 cents per gallon since December. Moderate crude oil prices and a strong stock situation have limited pump price gains to incremental amounts for the first couple of months this year. The January and February retail prices for regular gasoline both averaged \$1.11 per gallon. Last May, the price reached a record high of \$1.70 per gallon ([Figure 7](#)). As the new driving season begins and as crude oil prices rise, we expect retail prices to gain over 20 cents per gallon by June from the current average price. An indicator for price movements that bears watching is the refiner spread (the difference between the refiner price of gasoline and the crude oil cost). The refiner spreads during the last two driving seasons were extraordinarily large as the seasonal changeover to reformulated gasoline proved complicated because of weak inventories and other supply difficulties. For our Base Case assumption, we assume a normal seasonal transition for the coming driving season. Thus, in our forecast, the increase in gasoline consumption combined with the seasonal changeover to reformulated gasoline that typically occurs during the driving season, along with rising crude oil prices, should push average retail prices (regular grade) to about \$1.33 per gallon within the next several months. Still, we cannot rule out even higher prices, including possible price spikes similar to last year's at the regional level, if the seasonal switch to reformulated fuels is complicated by refinery and/or pipeline problems. In 2003, pump prices are projected to increase by about 13 cents per gallon over the 2002 average, with almost all of the gain due to the expectation of higher crude oil prices ([Figure 8](#)). Currently, gasoline inventories are comfortably within the "normal" range ([Figure 9](#)). Last year at this time they were below normal, which helped set the stage for the unusually high prices seen last spring.

Distillate Fuel Oil (Diesel and Heating Oil): The warmest winter in 70 years greatly diminished heating oil consumption this season, refilling inventories of distillate fuel to levels well within the "normal" range. By the end of February, distillate stocks were 13 million barrels above last year's levels ([Figure 10](#)). Thus, over the course of the winter, there was little price movement in either heating oil or diesel prices ([Figure 11](#)). With the winter nearly complete and distillate fuel inventories still at healthy levels, diesel prices over the next two quarters (April-September) are projected to be about 22 cents per gallon lower than year-ago levels.

Natural Gas: Spot wellhead prices are currently averaging around \$2.40-\$2.60 per thousand cubic feet or less than half of what they were in March one year ago. The effects of last year's natural gas price shock, the temperate summer of 2001, and the weakening economy greatly reduced 2001 natural gas use by 5 percent compared to the previous year (2000). Moreover, this record warm winter has greatly lowered heating demand for gas, leaving working gas in storage at near record levels. By the end of February, the storage level for working gas was more than double that of the previous year and over 40 percent higher than the end of February average for the previous 5 years. We expect this percentage increase will continue to hold through the end of the heating season, just 3 weeks away. Accordingly, we project that natural gas wellhead prices will decrease through the spring and early summer ([Figure 12](#)). Slow economic growth through the first half of this year coupled with healthy underground storage levels through most of the year should dampen spot prices until next fall. For this year, assuming normal weather and barring any major supply disruptions, the annual average natural gas price is projected to be just over \$2.00 per thousand

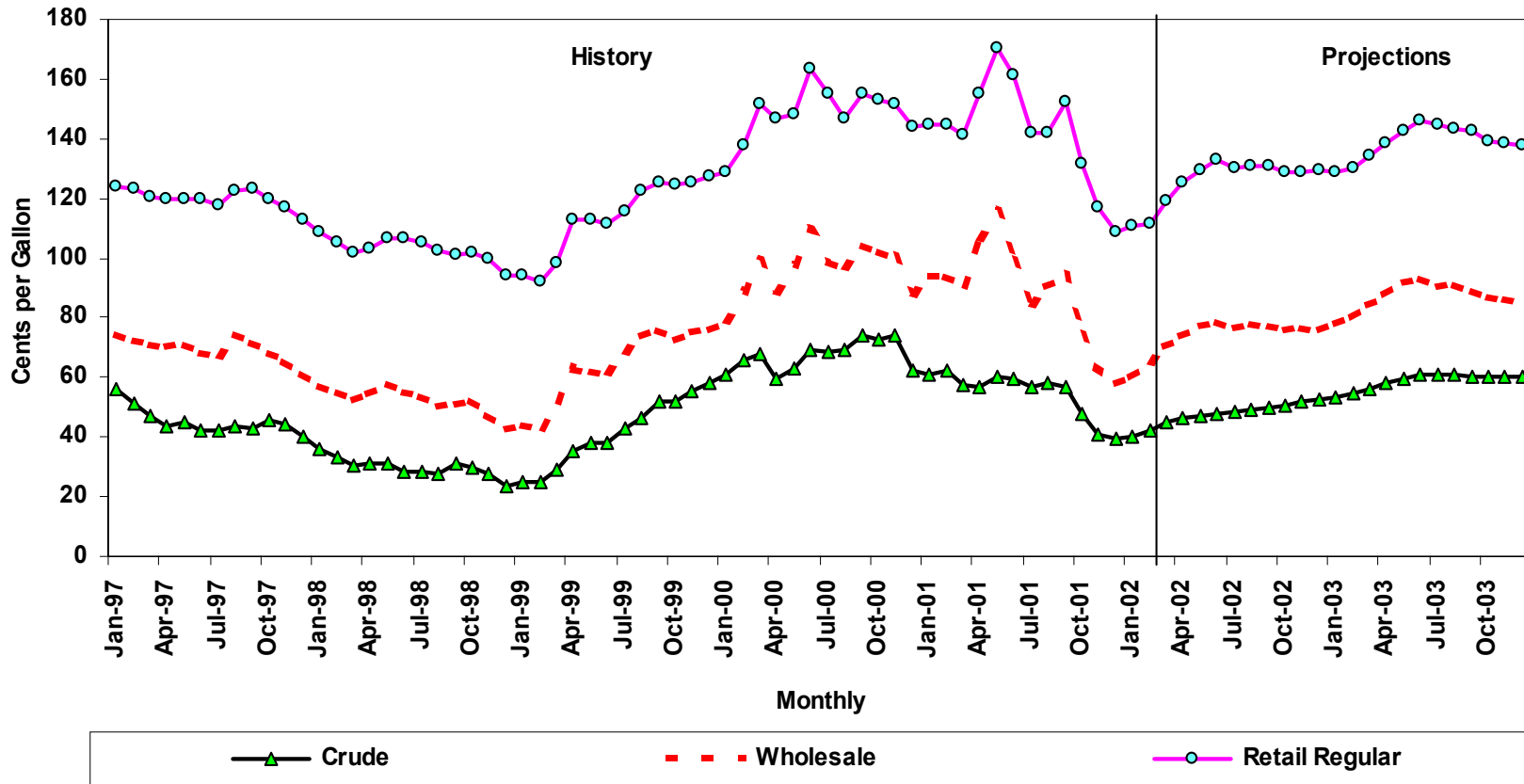
Figure 6. OECD Commercial Oil Stocks



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



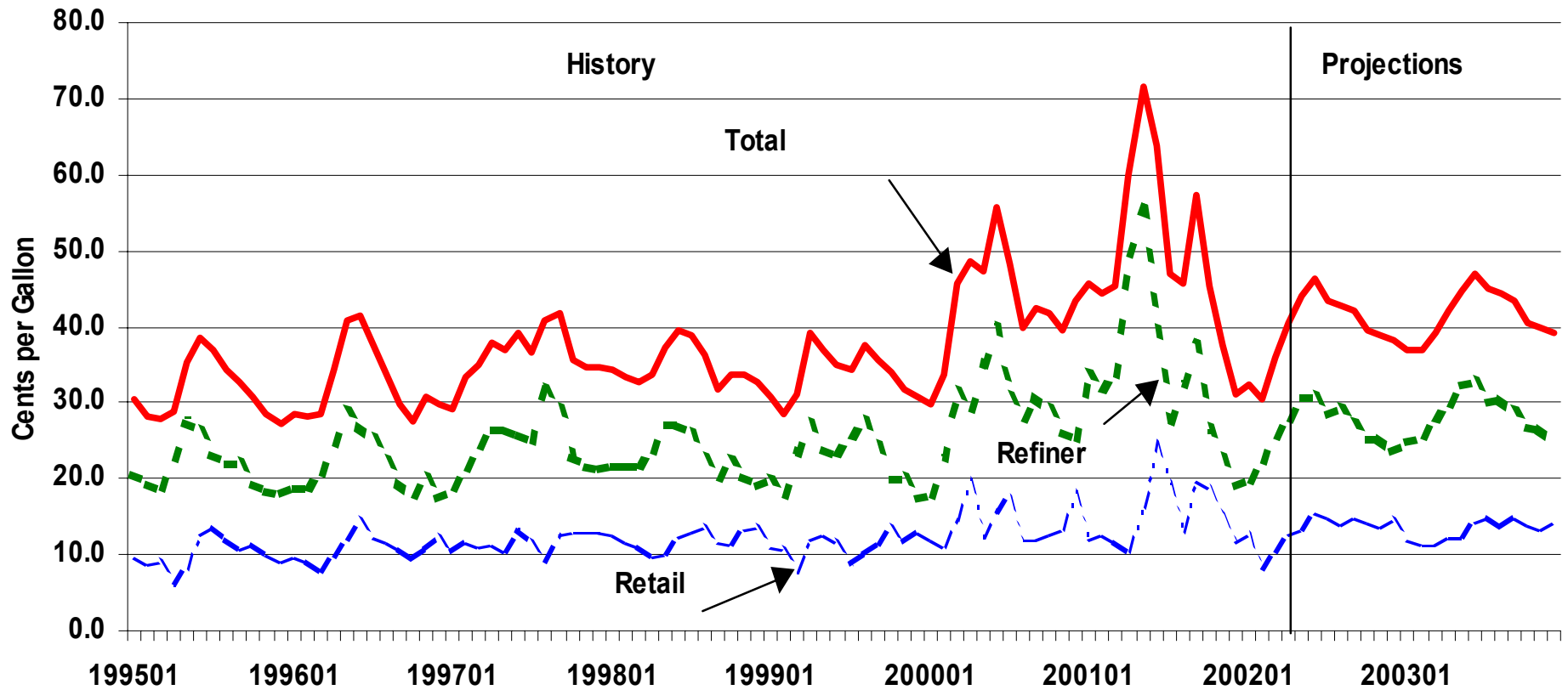
Figure 7. Motor Gasoline Prices



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



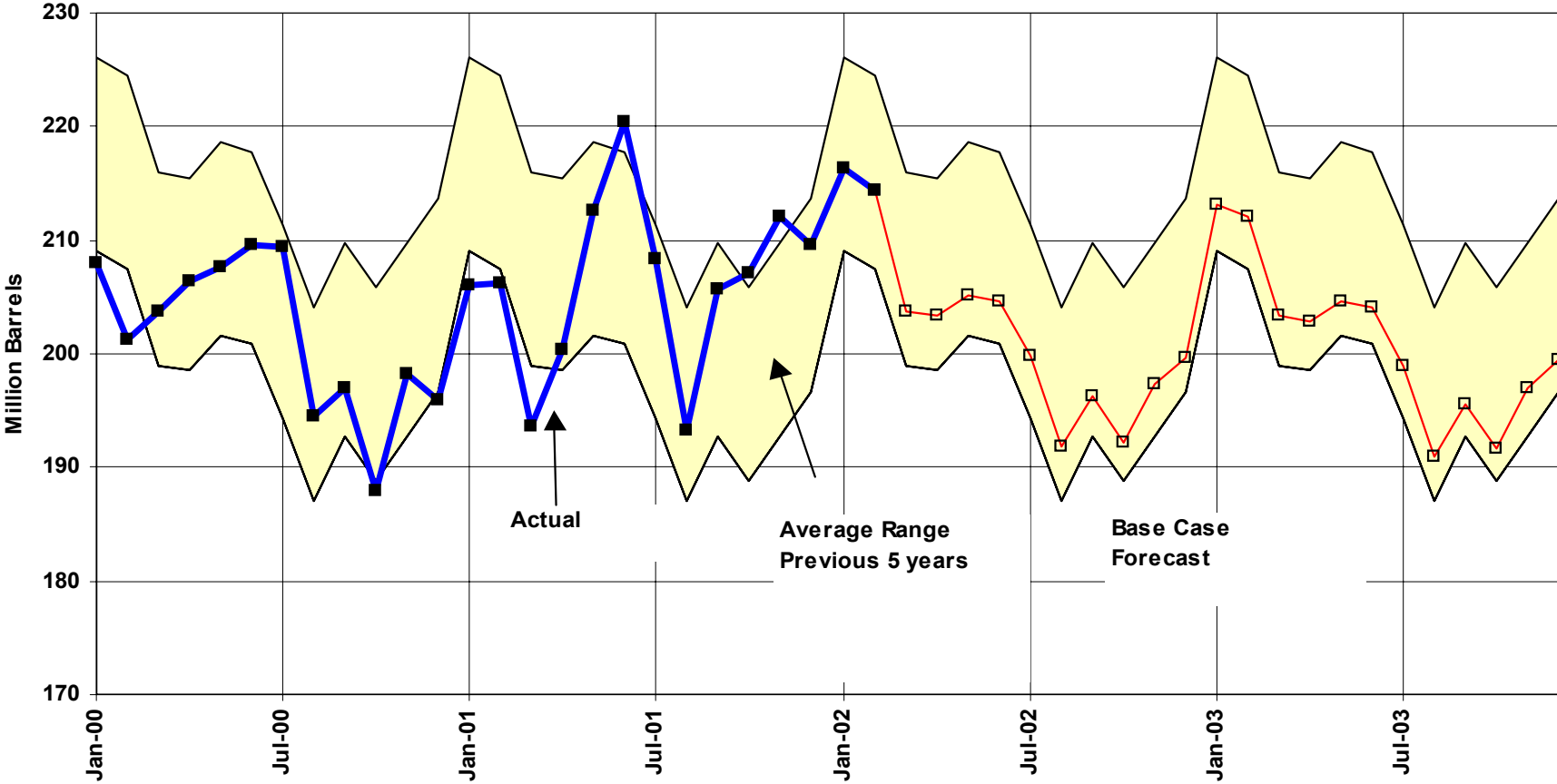
Figure 8. Motor Gasoline Spreads



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



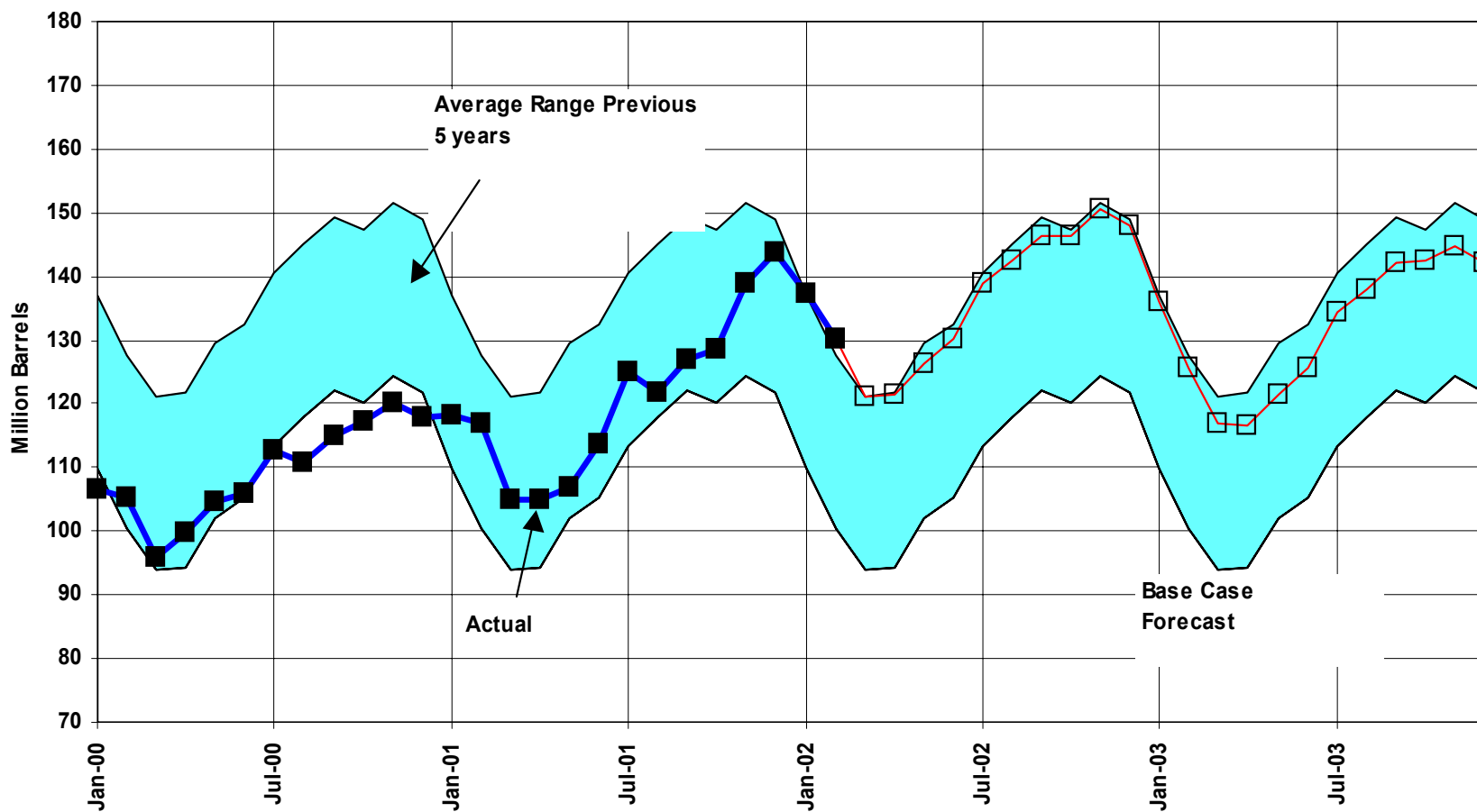
Figure 9. U.S. Gasoline Inventories



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



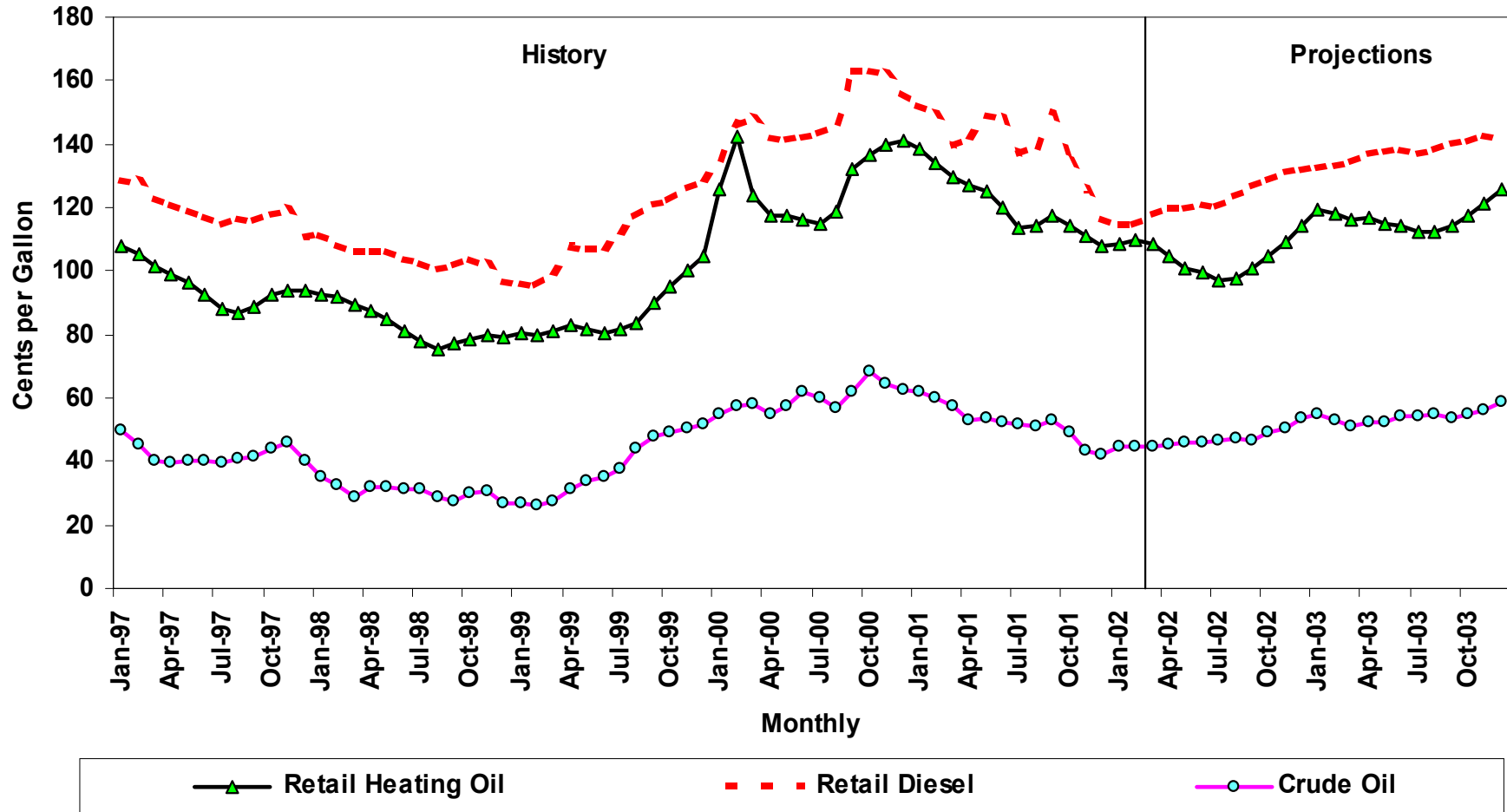
Figure 10. Distillate Fuel Inventories



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



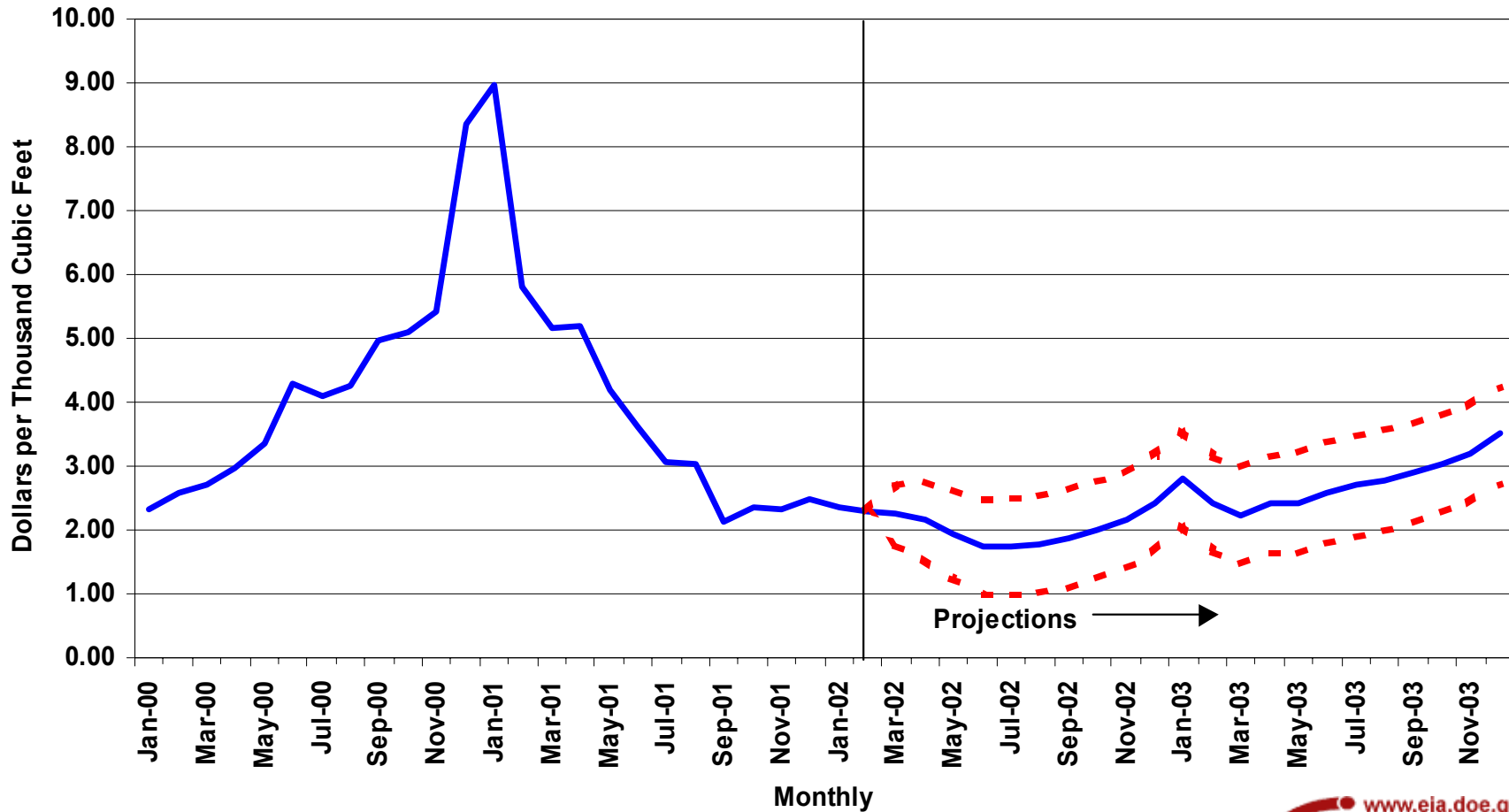
Figure 11. Distillate Fuel Prices



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



**Figure 12. Natural Gas Spot Prices
(Base Case and 95% Confidence Interval)**



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



cubic feet, or less than half of last year's price. We project that next year, as the economy recovers and as world oil prices rise, natural gas wellhead prices will likewise respond, advancing about 60 cents per thousand cubic feet on average compared to this year.

Electric Utility Fuels: For most of the forecast period, natural gas is projected to be the more price-competitive fuel compared to heavy oil ([Figure 13](#)). We do expect, though, that by the end of 2003 natural gas will move closer to the price of heavy oil on a cost per Btu basis, as heating demand from winter weather, coupled with the assumption of continued economic growth, boosts the price of natural gas to a level near the price of heavy oil. Coal prices are projected to continue their slow decline through 2003 as mining efficiency continues to advance.

U.S. Oil Demand

Recent revisions to data for 2001 show that domestic petroleum products demand in that year averaged 19.60 million barrels per day, down 100,000 barrels per day, or 0.5 percent, from the previous year ([Figure 14](#)). This is not only the first such decline since 1991, when the economy also contracted, but also reflects downward revisions in estimates published in previous *Outlooks*. Despite the overall decline in demand, two major fuels--motor gasoline and distillate fuel oil--continued to experience growth. Gasoline demand increased by 1.4 percent for both the year as a whole and for the period following the terrorist attacks. It appears that, during the fourth quarter, the negative effects of a weakening economy were tempered by a switch from air travel to highway travel stemming from the terrorist attacks. Distillate fuel oil experienced 2.5-percent growth in 2001. But much of that growth occurred early in the year due to record high natural gas prices, prompting fuel switching in the power-generation and industrial sectors. A warm fourth quarter, plentiful natural gas supplies and weakness in the economy pushed distillate demand to 5.6 percent below year-ago levels in the last 3 months of 2001.

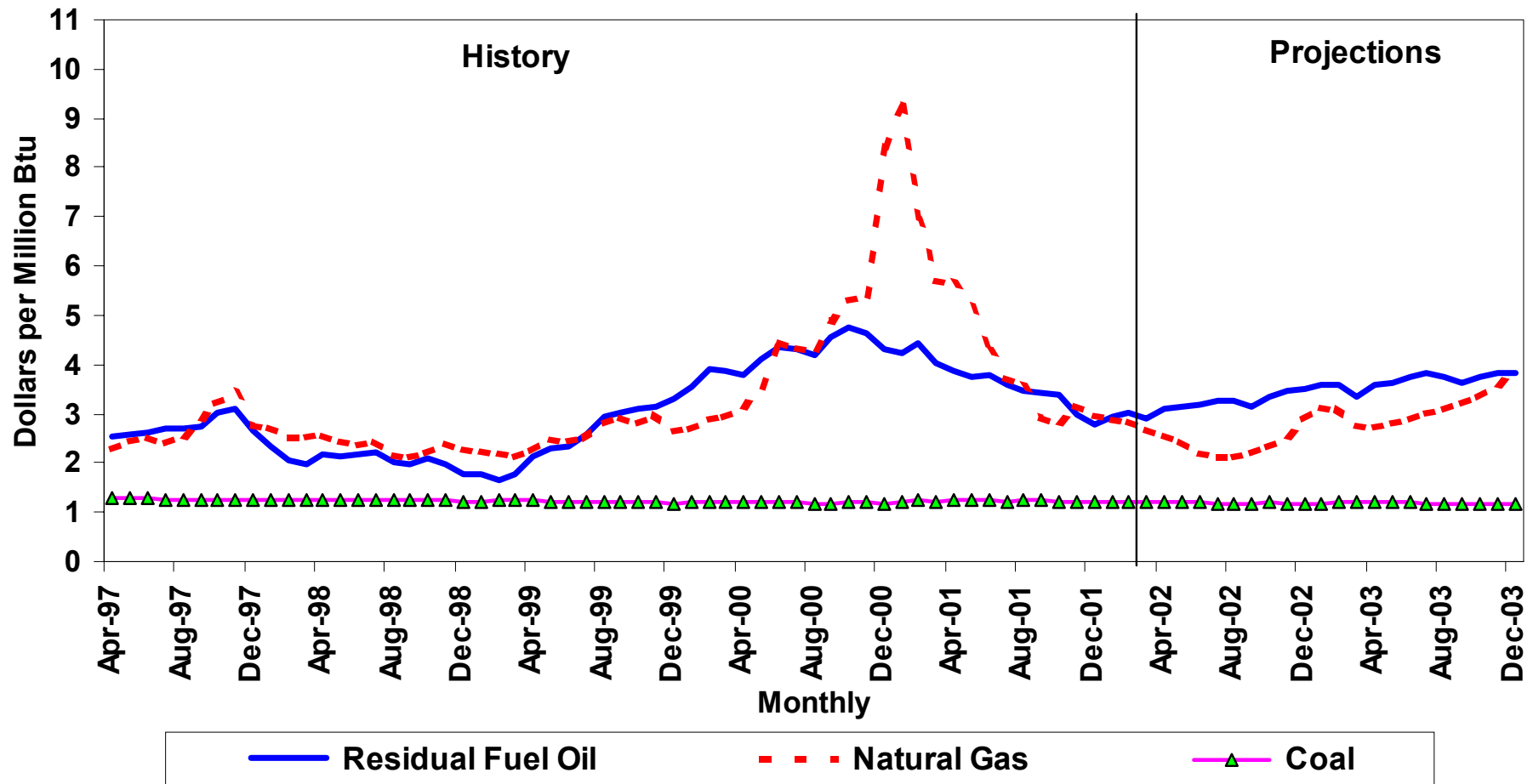
In 2001, jet fuel demand declined more than 4 percent. Even prior to the attacks, demand growth had slowed markedly as a result of a slowdown in air capacity growth, declining passenger load factors and a switch to ground transportation for freight. The direct impact on the domestic jet fuel market of September 11 is striking. September 2001 jet fuel demand sank 13 percent below September 2000 levels and total air traffic was down 15 percent. Fourth quarter 2001 jet fuel demand was off by 14 percent. Year-over-year growth in jet fuel demand is not expected to return until September 2002.

Due to substantial price declines, residual fuel oil managed to stage a demand increase of 3.2 percent in 2001. In the first half of the year, increases in power-generation purchases offset weakness in the industrial sector but power-generation demand eventually subsided during the second half in the wake of sharply falling natural gas prices.

During the forecast interval, total petroleum demand is expected to recover, but only after the weak first half of 2002. Assuming an economic recovery accelerating in the latter half of the current year and normal weather, demand growth in 2002 is expected to average 60,000 barrels per day, or 0.3 percent. But the first half is expected to witness a substantial decline of 340,000 barrels per day due to continued economic weakness, recent record-warm weather and low natural gas prices. Second-half demand is projected to be approximately 460,000 barrels per day higher than during the same period last year. In 2003, petroleum demand is projected to climb a substantial 780,000 barrels per day, or 3.9 percent, bringing the average annual demand above 20 million barrels per day for the first time.

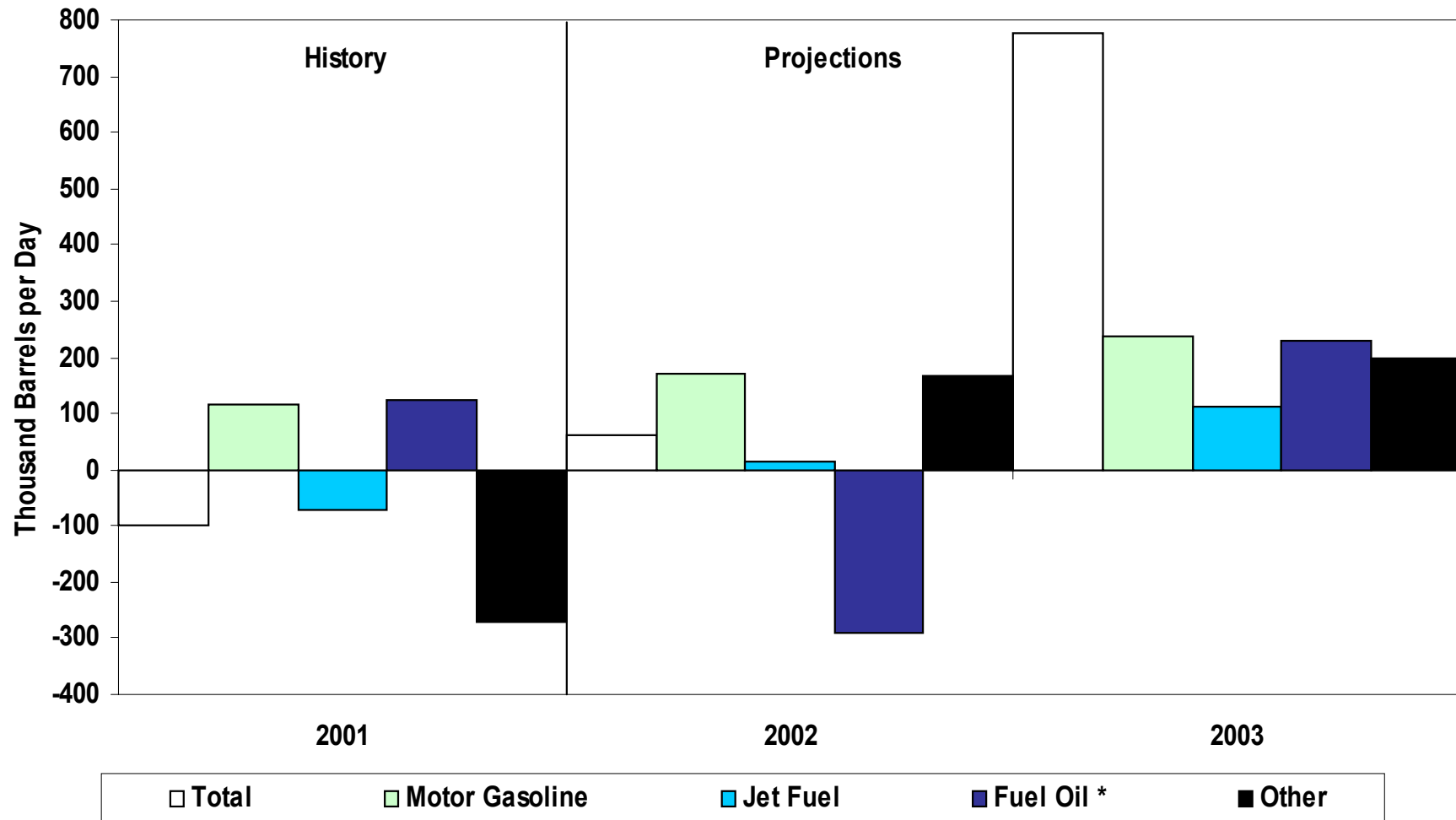
Motor gasoline demand growth in 2002 is projected to be 2.0 percent. Commercial air activity is expected to recover gradually, reflecting a gradual abatement of terrorist-related flight curtailments. Commercial jet fuel demand during the first half of this year is still projected to be down 7 percent, but up 10 percent in the

Figure 13. Fossil Fuel Prices to Electric Utilities



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

Figure 14. Petroleum Products Demand Growth (Change from Year Ago)



* Sum of distillate and residual fuel.

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



second half. The weakness in industrial activity, warm first-quarter weather and continued low gas prices, however, are still projected to result in a decline in distillate demand of 3.5 percent. The presumed return to normal weather patterns and a resumption of growth in industrial output are expected to contribute to the projected 5.5-percent growth in distillate demand in 2003. Residual fuel oil demand in 2002 is projected to slide 17 percent to a record low. Much of that decline stems from the earlier, profound shift in relative prices as gas prices plummeted from record highs to low levels. In 2003, residual fuel oil demand is expected to be up only slightly from that of the current year, because continued firmness in oil prices (as well as continued low gas prices) are expected to curtail any stimulus that might otherwise be provided by the projection of strong economic growth.

U.S. Oil Supply

Average domestic oil production is expected to decrease in 2002 by 11,000 barrels per day, or 0.2 percent, to a level of 5.84 million barrels of oil per day ([Figure 15](#)). For 2003, a 0.3 percent increase is expected which results in a production rate of 5.86 million barrels of oil per day average for the year.

Lower-48 States oil production is expected to increase by 11,000 barrels per day to a rate of 4.9 million barrels per day in 2002, followed by a decrease of 8,000 barrels per day in 2003. Shell's Brutus platform is expected to peak its oil production at 100,000 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 9.5 percent of the lower-48 oil production by the 4th quarter of 2003.

Alaska is expected to account for 16.6 percent of the total U.S. oil production in 2003. Its oil production is expected to decrease by 2.3 percent in 2002 and increase by 2.8 percent in 2003. The increase in 2003 is the result of adding new satellite fields, Colville River (Alpine), Prudhoe Bay (Aurora), Polaris and Borealis, which contributed to the Alaska North Slope production. The initial rate from Alpine averaged 74 thousand barrels per day during March 2000, and it exceeded 100,000 barrels per day in August. Another satellite field, Northstar, came on line in November 2001, and is expected to peak at a rate of 65,000 barrels per day this year. Production from the Kuparuk River field plus like production from West Sak, Tabasco, Tarn and Meltwater fields is expected to stay at an average of 220,000 barrels per day in the 2002 and 2003 forecast periods.

Natural Gas Demand and Supply

Domestic dry natural gas production is projected to fall by about 4.6 percent in 2002 compared to the 2001 level. As production declines due to the recent falloff in prices, the lower supplies prevent a collapse in natural gas spot prices to very low levels in 2002 due to the high natural gas storage levels. Natural gas storage levels are projected to end the heating season at 1,541 bcf, more than double the 742 bcf seen at that time last year. As it is, we see a strong possibility of spot gas prices slipping to about \$1.75-\$1.80 per thousand cubic feet by mid-summer from the current range of \$2.40-\$2.60 per thousand cubic feet. This is of course based on assumptions of normal weather for the rest of the year. The projected cutback in domestic production this year would bring gas inventories much closer to normal by the beginning of the 2002/2003 winter heating season.

Natural gas drilling activity has fallen along with production. [Baker Hughes](#) reported average active rigs drilling for natural gas at 679 in February, 24 percent below the year-ago level and 36 percent below the peak seen in the current drilling cycle, which occurred in July of 2001. Aggregate lease revenues from domestic oil and gas production are expected to remain flat or weaken marginally through August 2002 ([Figure 4](#)). Inasmuch as these revenues are a strong determinant of industry cash flow, which in turn is a powerful driver of drilling activity levels, further reductions in gas drilling levels are anticipated this year ([Figure 16](#)). If the U.S. gas market moves more toward balance as the year wears on (as we expect) then

Figure 15. U.S. Crude Oil Production Growth (Change from Year Ago)

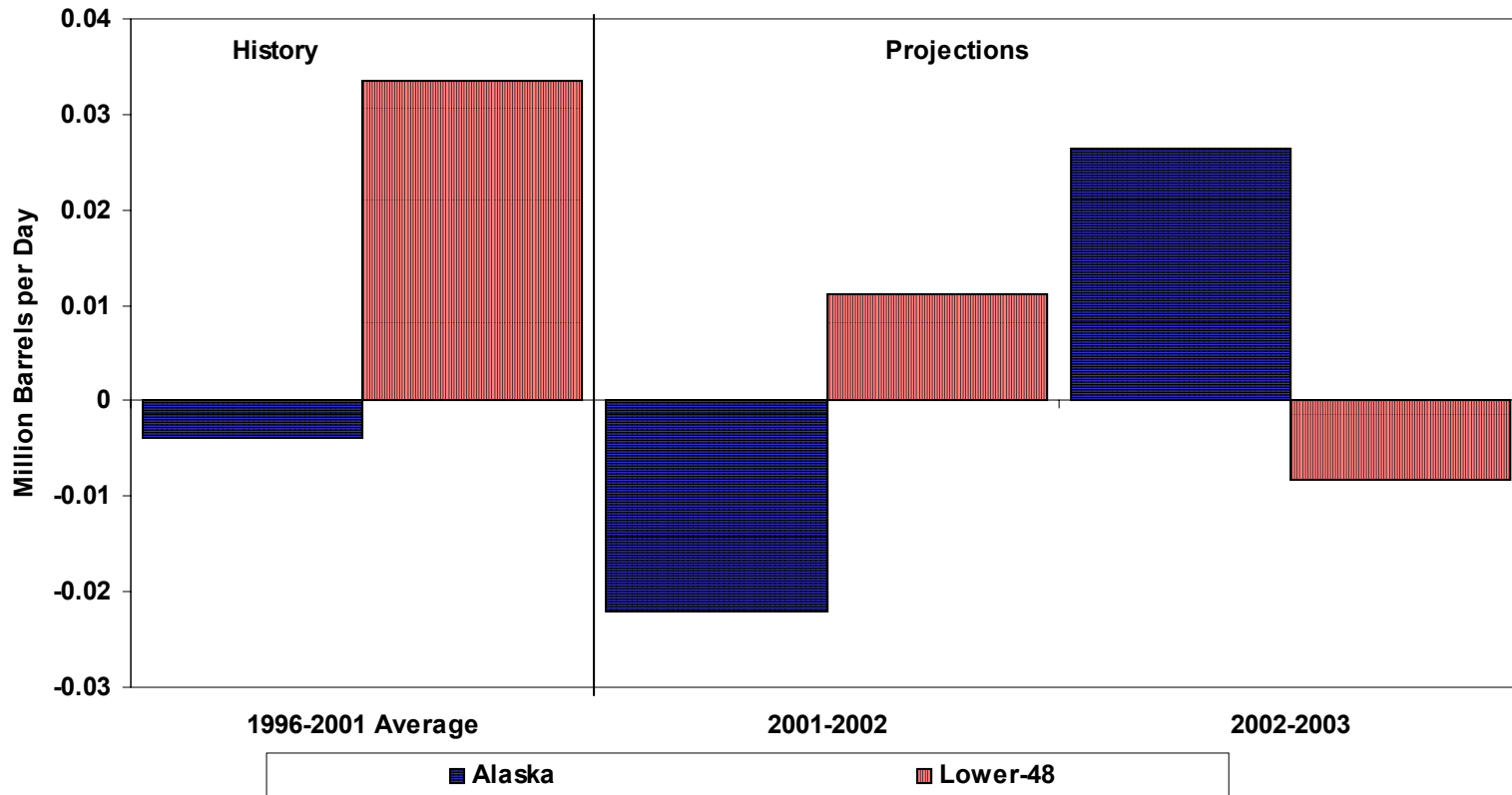
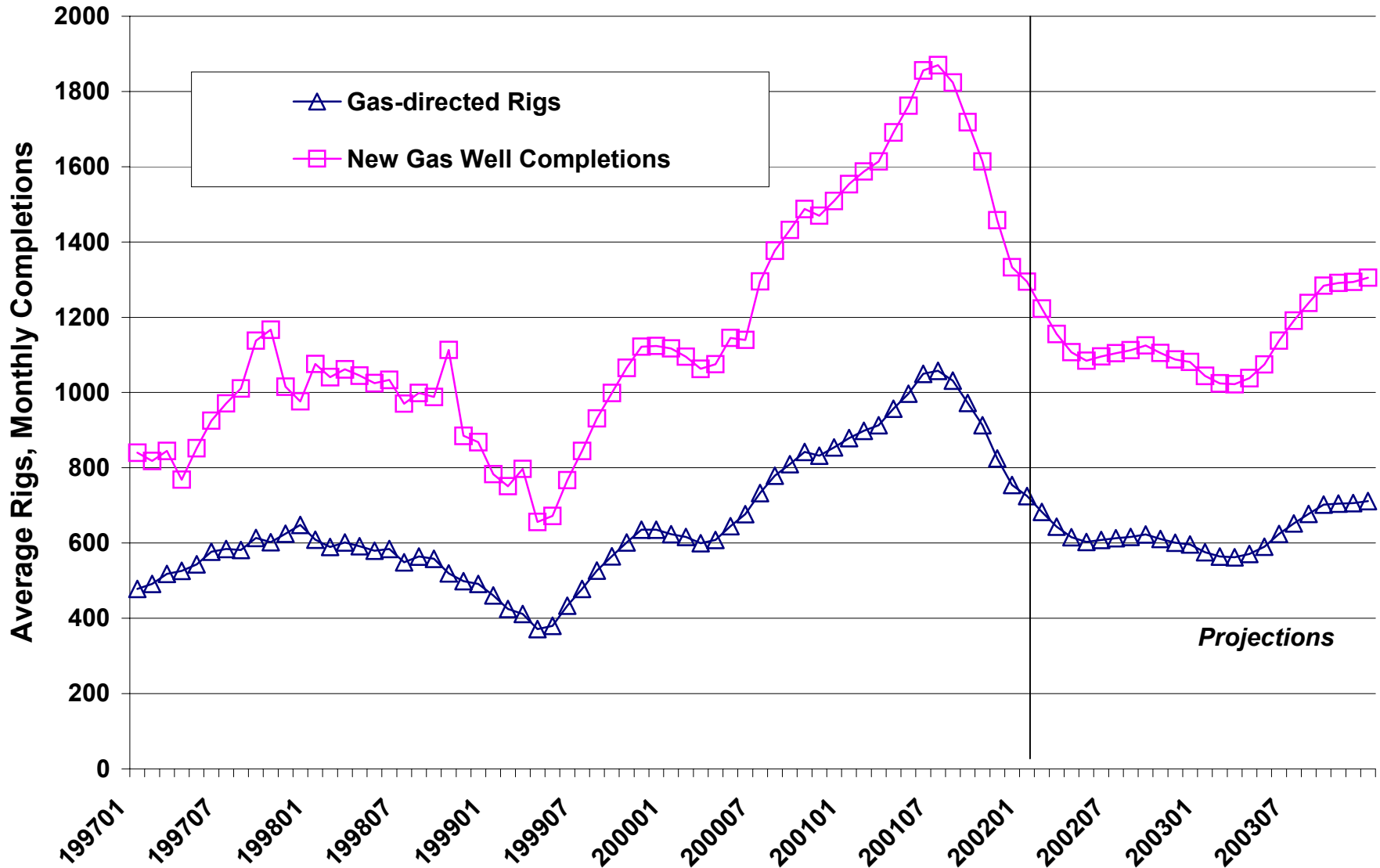


Figure 16. U.S. Natural Gas-Directed Drilling Activity



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



drilling levels should bottom out somewhere between 560 and 600 average monthly active rigs over the next year or so due to lower prices. Drilling rates should begin moving up once prices begin to rise sometime in late 2002 or early 2003 as the expected reduction in gas productive capacity interacts with strengthened demand fundamentals related to economic recovery and (perhaps) more normal weather.

In 2002, natural demand is projected to increase over 2001 levels by 2.9 percent and by another 4.4 percent in 2003. Increased demand for natural gas in the industrial and electricity generating sectors is the primary reason, although by 2003 all sectors show increased demand for natural gas ([Figure 17](#)).

Based on EIA survey data and recent information from the American Gas Association on early-season storage additions, we estimate that, on an EIA survey basis, working gas in storage at the end of February was 1,877 billion cubic feet. Storage is well above last year's level and also above the previous 5-year seasonal range ([Figure 18](#)). In February 2002, spot natural gas prices averaged about \$2.29 per thousand cubic feet (mcf) compared with an average of \$5.80 in February of 2001.

Average heating season temperatures for the fourth quarter of 2001 were 19 percent lower than normal, which caused withdrawals from storage to be delayed. This was despite the cold spell at the end of December 2001, which was 23 percent lower than normal temperatures in that month. If temperatures are assumed to be normal for the rest of this winter, then heating degree-days for the entire 2001-2002 winter season would be about 19 percent lower than last winter. As a consequence, winter demand for natural gas is projected to decline by 9.6 percent compared with growth of 6.4 percent last winter. Spot natural gas prices, which averaged \$6.48 per thousand cubic feet last winter, are expected to have been two-thirds lower this winter at about \$2.34 per thousand cubic feet. Residential and commercial demands for natural gas are expected to be lower than last winter's levels by 18 and 13 percent, respectively. Industrial gas demand, which was under downward pressure all through 2001, is projected to begin to rise in the first quarter of 2002. This expectation is seen as the result of the reversal of significant fuel substitution away from natural gas that occurred last winter and, further into 2002, of the gradually reviving economy.

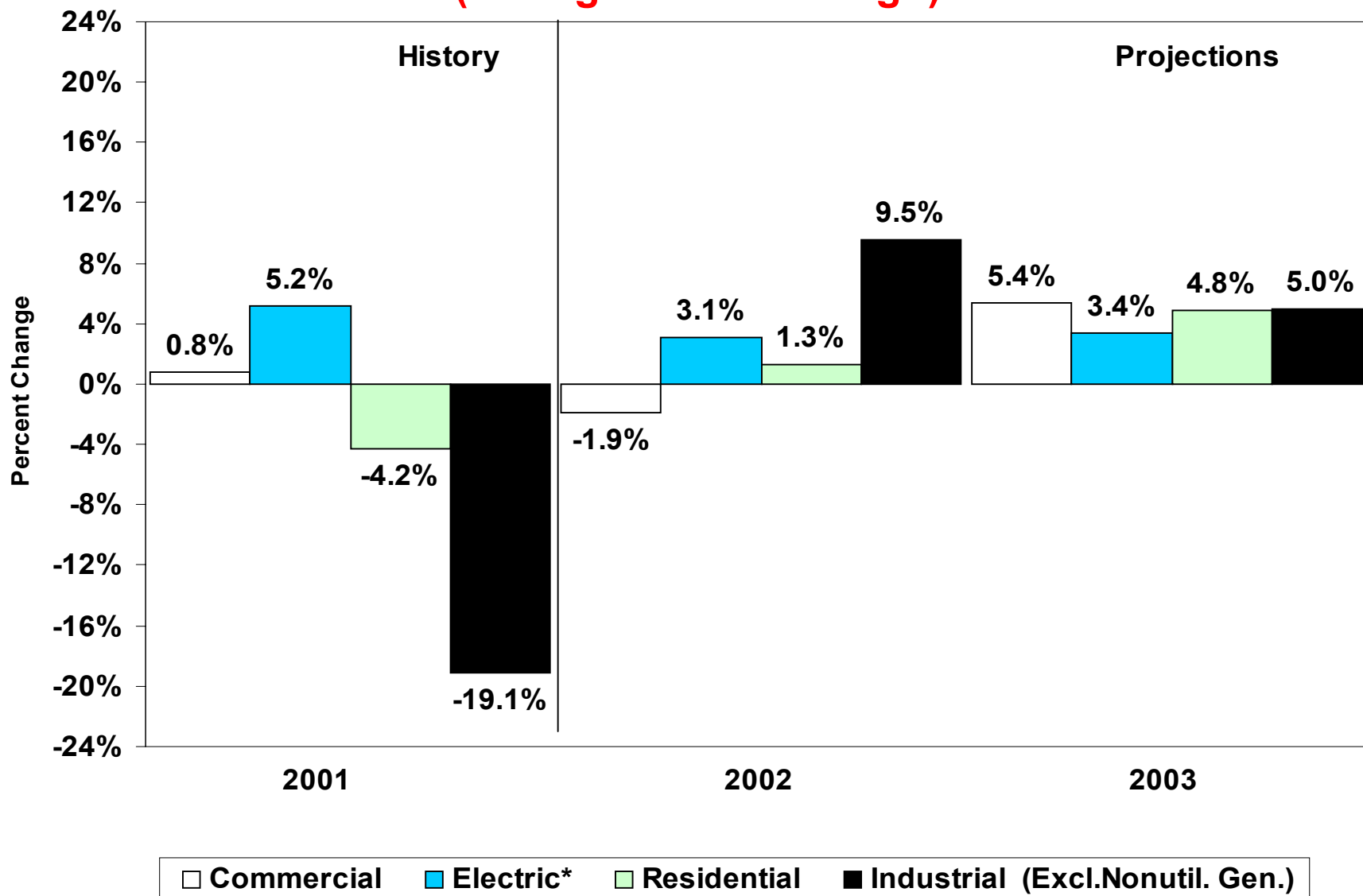
Electricity Demand and Supply

Total annual electricity demand growth (retail sales plus industrial generation for own use and other direct sales) is estimated to have been a negative 0.5 percent in 2001, but is expected to revive slightly by 0.5 percent in 2002, and by a further 3.1 percent in 2003 ([Figure 19](#)). This is compared with estimated demand growth in 2000 of 2.8 percent over 1999's level. Electricity demand growth is expected to rise in the forecast years mainly because the economy is assumed to gradually rebound.

Electricity demand in the industrial sector in 2001 was adversely affected by the overall economic slowdown, particularly as illustrated by falling industrial output. In 2002, growth in industrial demand for electricity (including estimated net industrial own-use generation) is expected to grow by about 1.4 percent in contrast to the estimated 8.0 percent contraction seen in 2001. This category of demand growth is expected to exhibit (approximately normal) growth of 3.3 percent in 2003 as the economic recovery proceeds. In 2003, growth in residential demand for electricity is expected to be 3.5 percent, due mainly to assumptions of normal weather. This winter, total electricity demand growth is expected to be negative (down 3.9 percent) compared with last winter's demand growth of 4.7 percent due to the weaker industrial economy and the relatively warmer weather.

In 2001, total hydropower generation (utility and nonutility sectors) was down to record lows not seen since 1966. In 2002, total hydro generation is expected to rise by 28 percent if normal precipitation materializes in the Pacific Northwest, the main region affected.

Figure 17. 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, March 2002.



Figure 18. Working Gas in Storage (Difference from Previous 5-Year Average)

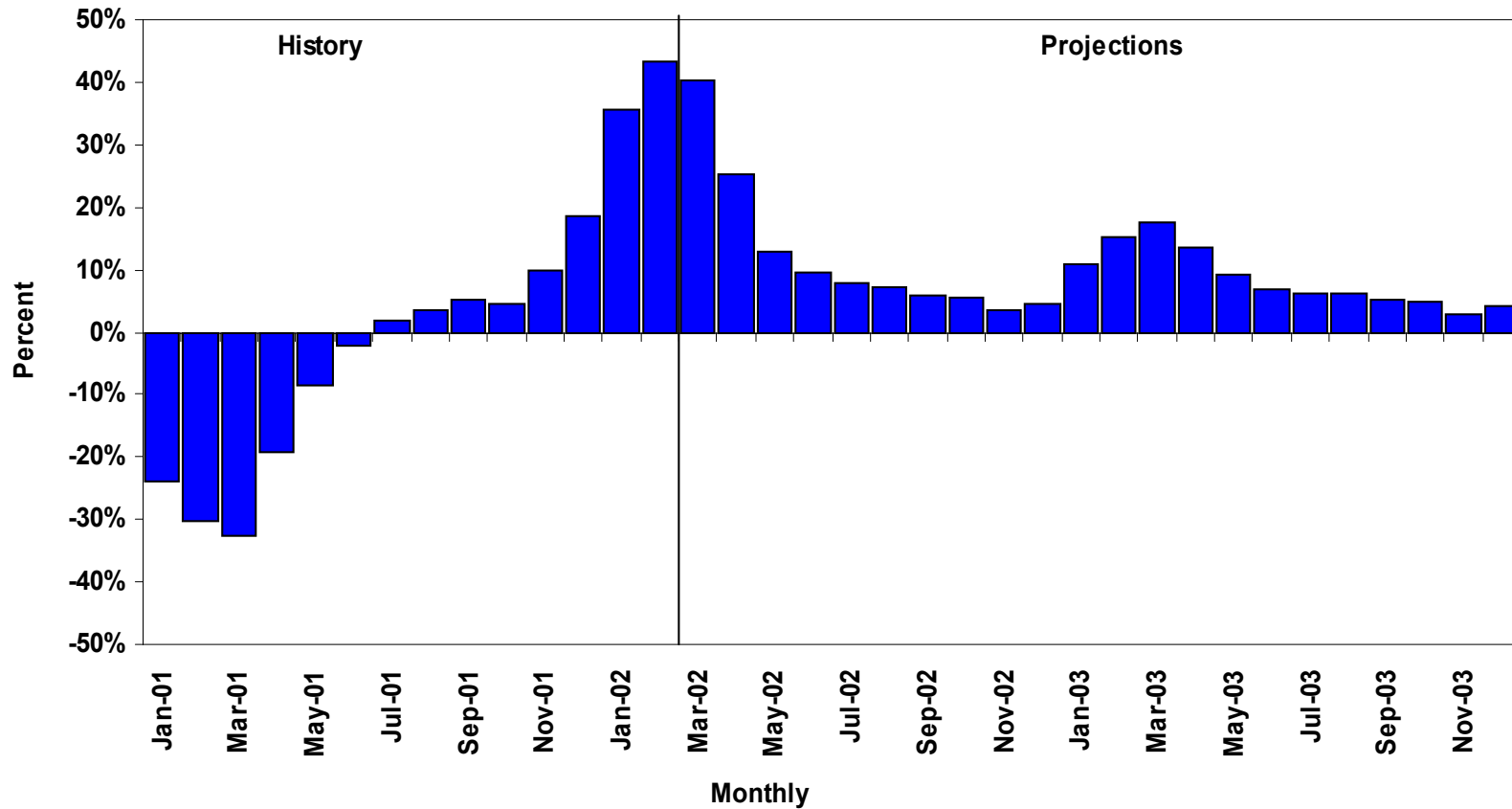
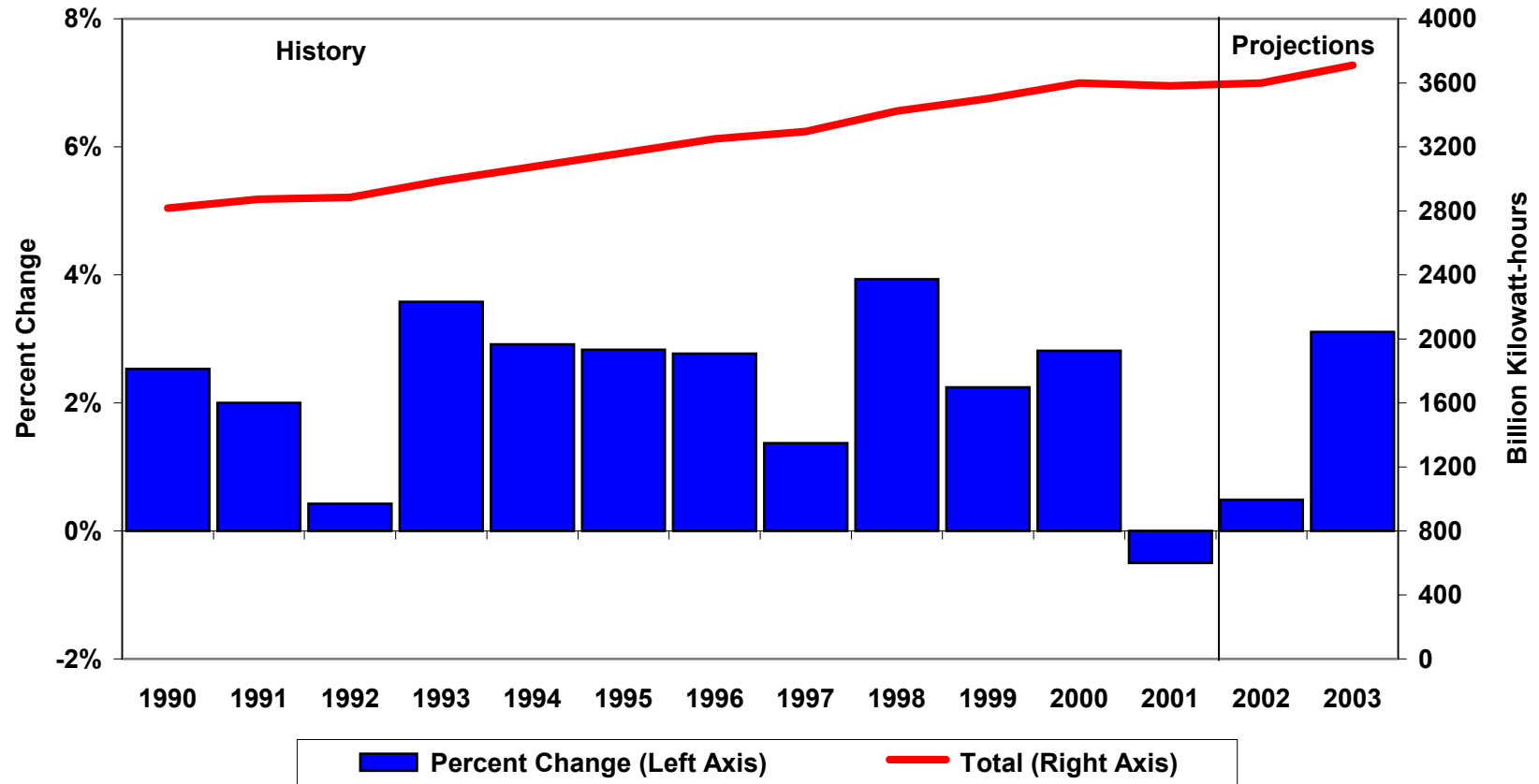


Figure 19. Total Electricity Demand Growth Patterns



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

Table HL1. U. S. Energy Supply and Demand

	Year				Annual Percentage Change		
	2000	2001	2002	2003	2000-2001	2001-2002	2002-2003
Real Gross Domestic Product (GDP) (billion chained 1996 dollars)	9224	9326	9429	9811	1.1	1.1	4.1
Imported Crude Oil Price ^a (nominal dollars per barrel)	27.72	22.03	19.46	24.13	-20.5	-11.7	24.0
Petroleum Supply (million barrels per day)							
Crude Oil Production ^b	5.82	5.85	5.84	5.86	0.5	-0.2	0.3
Total Petroleum Net Imports (including SPR)	10.42	10.77	10.51	11.17	3.4	-2.4	6.3
Energy Demand							
World Petroleum (million barrels per day)	75.7	75.7	76.3	77.7	0.0	0.8	1.8
Petroleum (million barrels per day)	19.70	19.60	19.66	20.44	-0.5	0.3	4.0
Natural Gas (trillion cubic feet)	22.54	21.45	22.08	23.06	-4.8	2.9	4.4
Coal ^c (million short tons)	1081	1092	1131	1159	1.0	3.6	2.5
Electricity (billion kilowatthours)							
Retail Sales ^d	3413	3395	3421	3519	-0.5	0.8	2.9
Nonutility Use/Sales ^e	187	186	178	192	-0.5	-4.3	7.9
Total	3599	3581	3599	3711	-0.5	0.5	3.1
Total Energy Demand ^f (quadrillion Btu)	99.6	98.0	100.1	103.6	-1.6	2.2	3.4
Total Energy Demand per Dollar of GDP (thousand Btu per 1996 Dollar)	10.80	10.51	10.62	10.56	-2.7	1.0	-0.6
Renewable Energy as Percent of Total ^g	7.0	6.7	7.3	7.4			

^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 CONTROL0202.

Table 1. U.S. Macroeconomic and Weather Assumptions

	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	<i>9316</i>	<i>9322</i>	<i>9382</i>	<i>9455</i>	<i>9555</i>	<i>9660</i>	<i>9763</i>	<i>9860</i>	<i>9960</i>	<i>9326</i>	<i>9429</i>	<i>9811</i>
Percentage Change from Prior Year.....	2.5	1.2	0.5	<i>0.1</i>	<i>-0.1</i>	<i>0.4</i>	<i>1.6</i>	<i>2.6</i>	<i>3.6</i>	<i>4.1</i>	<i>4.3</i>	<i>4.2</i>	<i>1.1</i>	<i>1.1</i>	<i>4.1</i>
Annualized Percent Change from Prior Quarter	1.3	0.3	-1.3	<i>0.2</i>	<i>0.3</i>	<i>2.6</i>	<i>3.1</i>	<i>4.2</i>	<i>4.4</i>	<i>4.3</i>	<i>4.0</i>	<i>4.1</i>			
GDP Implicit Price Deflator (Index, 1996=1.000).....	1.087	1.092	1.098	<i>1.097</i>	<i>1.102</i>	<i>1.104</i>	<i>1.107</i>	<i>1.112</i>	<i>1.118</i>	<i>1.122</i>	<i>1.128</i>	<i>1.135</i>	<i>1.094</i>	<i>1.106</i>	<i>1.126</i>
Percentage Change from Prior Year.....	2.3	2.2	2.4	<i>1.8</i>	<i>1.4</i>	<i>1.1</i>	<i>0.8</i>	<i>1.3</i>	<i>1.5</i>	<i>1.7</i>	<i>1.9</i>	<i>2.1</i>	<i>2.2</i>	<i>1.2</i>	<i>1.8</i>
Real Disposable Personal Income (billion chained 1996 Dollars - SAAR)	6679	6719	6918	<i>6778</i>	<i>6838</i>	<i>6900</i>	<i>6959</i>	<i>7011</i>	<i>7074</i>	<i>7143</i>	<i>7212</i>	<i>7259</i>	<i>6773</i>	<i>6927</i>	<i>7172</i>
Percentage Change from Prior Year.....	3.8	3.0	5.3	<i>2.2</i>	<i>2.4</i>	<i>2.7</i>	<i>0.6</i>	<i>3.4</i>	<i>3.4</i>	<i>3.5</i>	<i>3.6</i>	<i>3.5</i>	<i>3.6</i>	<i>2.3</i>	<i>3.5</i>
Manufacturing Production (Index, 1996=1.000).....	1.221	1.202	1.187	<i>1.165</i>	<i>1.162</i>	<i>1.169</i>	<i>1.186</i>	<i>1.209</i>	<i>1.237</i>	<i>1.266</i>	<i>1.294</i>	<i>1.316</i>	<i>1.194</i>	<i>1.182</i>	<i>1.278</i>
Percentage Change from Prior Year.....	-1.1	-4.2	-5.5	<i>-6.4</i>	<i>-4.8</i>	<i>-2.8</i>	<i>0.0</i>	<i>3.8</i>	<i>6.5</i>	<i>8.3</i>	<i>9.0</i>	<i>8.8</i>	<i>-4.3</i>	<i>-1.0</i>	<i>8.2</i>
OECD Economic Growth (percent) ^b													<i>0.9</i>	<i>1.3</i>	<i>3.0</i>
Weather ^c															
Heating Degree-Days															
U.S.	2329	446	90	<i>1366</i>	<i>2029</i>	<i>518</i>	<i>86</i>	<i>1622</i>	<i>2231</i>	<i>518</i>	<i>86</i>	<i>1622</i>	<i>4231</i>	<i>4255</i>	<i>4456</i>
New England.....	3268	802	149	<i>1926</i>	<i>2849</i>	<i>883</i>	<i>167</i>	<i>2237</i>	<i>3171</i>	<i>882</i>	<i>167</i>	<i>2237</i>	<i>6145</i>	<i>6137</i>	<i>6457</i>
Middle Atlantic	2950	627	101	<i>1601</i>	<i>2524</i>	<i>700</i>	<i>105</i>	<i>2002</i>	<i>2888</i>	<i>699</i>	<i>105</i>	<i>2001</i>	<i>5279</i>	<i>5331</i>	<i>5693</i>
U.S. Gas-Weighted	2450	470	93	<i>1438</i>	<i>2134</i>	<i>555</i>	<i>90</i>	<i>1714</i>	<i>2348</i>	<i>555</i>	<i>90</i>	<i>1713</i>	<i>4451</i>	<i>4493</i>	<i>4706</i>
Cooling Degree-Days (U.S.).....	26	371	779	<i>80</i>	<i>30</i>	<i>347</i>	<i>782</i>	<i>76</i>	<i>33</i>	<i>347</i>	<i>783</i>	<i>76</i>	<i>1256</i>	<i>1234</i>	<i>1238</i>

^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 CONTROL0202.

Table 2. U.S. Energy Indicators: Mid World Oil Price 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	1623	1621	1616	1625	1643	1670	1699	1724	1752	1683	1626	1711
Real Exchange Rate															
(index).....	1.105	1.141	1.134	1.147	1.189	1.186	1.170	1.149	1.133	1.120	1.107	1.097	1.132	1.174	1.114
Business Inventory Change															
(billion chained 1996 dollars-SAAR)...	-15.0	-35.6	-47.0	-34.5	-28.7	-11.3	1.1	4.9	11.2	13.3	13.2	12.8	-33.0	-8.5	12.6
Producer Price Index															
(index, 1982=1.000).....	1.385	1.363	1.330	1.293	1.291	1.286	1.286	1.292	1.299	1.301	1.309	1.315	1.343	1.289	1.306
Consumer Price Index															
(index, 1982-1984=1.000).....	1.761	1.774	1.777	1.775	1.782	1.790	1.799	1.811	1.822	1.830	1.842	1.854	1.772	1.796	1.837
Petroleum Product Price Index															
(index, 1982=1.000).....	0.892	0.968	0.875	0.675	0.641	0.688	0.700	0.747	0.801	0.836	0.828	0.847	0.853	0.694	0.828
Non-Farm Employment															
(millions).....	132.6	132.5	132.4	131.5	131.3	131.5	131.9	132.4	132.9	133.5	134.2	135.0	132.2	131.8	133.9
Commercial Employment															
(millions).....	93.2	93.3	93.3	92.7	92.7	92.9	93.4	93.9	94.3	94.8	95.3	95.9	93.1	93.3	95.1
Total Industrial Production															
(index, 1996=1.000).....	1.199	1.181	1.167	1.146	1.142	1.148	1.162	1.183	1.209	1.235	1.261	1.282	1.173	1.159	1.247
Housing Stock															
(millions).....	117.5	117.9	117.7	118.4	119.1	119.4	119.7	120.1	120.4	120.8	121.2	121.5	117.9	119.6	121.0
Miscellaneous															
Gas Weighted Industrial Production															
(index, 1996=1.000).....	1.081	1.073	1.069	1.058	1.059	1.068	1.081	1.097	1.114	1.132	1.149	1.162	1.070	1.076	1.139
Vehicle Miles Traveled ^b															
(million miles/day).....	7103	7893	7877	7515	7189	7976	8077	7625	7417	8132	8312	7845	7599	7719	7929
Vehicle Fuel Efficiency															
(index, 1999=1.000).....	0.993	1.001	0.991	1.006	0.987	0.986	1.005	0.997	0.994	0.981	1.004	0.996	0.998	0.994	0.994
Real Vehicle Fuel Cost															
(cents per mile).....	4.10	4.32	3.96	3.33	3.25	3.46	3.45	3.55	3.61	3.74	3.69	3.72	3.93	3.43	3.69
Air Travel Capacity															
(mill. available ton-miles/day).....	475.5	493.2	475.1	402.6	424.2	454.2	463.0	453.7	455.9	485.4	511.3	503.1	461.4	448.9	489.1
Aircraft Utilization															
(mill. revenue ton-miles/day).....	263.5	279.3	262.8	217.5	229.6	256.9	279.3	266.5	263.9	287.6	303.6	290.9	255.7	258.3	286.6
Airline Ticket Price Index															
(index, 1982-1984=1.000).....	2.399	2.408	2.452	2.318	2.338	2.392	2.428	2.457	2.511	2.542	2.565	2.583	2.394	2.404	2.550
Raw Steel Production															
(millions tons).....	25.53	26.07	25.25	23.75	24.81	25.77	25.56	25.62	26.52	27.19	26.64	26.59	100.59	101.75	106.94

^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: Mid World Oil Price 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	19.3	19.2	19.5	19.9	20.0	20.3	20.1	20.6	20.7	19.6	19.7	20.4
U.S. Territories.....	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.4
Canada.....	2.0	1.9	2.0	2.2	2.0	2.0	2.1	2.1	2.1	2.0	2.2	2.2	2.0	2.1	2.1
Europe.....	15.2	14.8	15.5	15.3	15.5	14.5	15.1	15.8	15.5	14.6	15.2	15.8	15.2	15.2	15.3
Japan.....	6.1	5.0	5.1	5.6	6.1	5.0	5.2	5.6	6.1	5.0	5.2	5.6	5.4	5.4	5.5
Other OECD.....	5.3	4.9	4.9	5.2	5.0	5.0	5.2	5.3	5.1	5.0	5.3	5.3	5.1	5.1	5.2
Total OECD.....	48.9	46.6	47.5	48.0	48.3	46.3	48.0	49.2	49.5	47.1	48.9	50.1	47.7	47.9	48.9
Non-OECD															
Former Soviet Union.....	3.7	3.5	3.5	3.5	3.7	3.5	3.5	3.5	3.7	3.6	3.6	3.6	3.6	3.6	3.6
Europe.....	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.8
China.....	4.9	4.9	4.8	4.8	5.1	5.0	5.0	5.0	5.3	5.2	5.2	5.2	4.9	5.0	5.2
Other Asia.....	7.0	7.0	6.7	7.0	7.0	7.0	6.8	7.1	7.1	7.1	6.9	7.2	6.9	3.1	7.1
Other Non-OECD.....	11.8	12.0	12.1	11.9	11.9	12.1	12.2	12.1	12.0	12.2	12.3	12.2	12.0	16.0	12.2
Total Non-OECD.....	28.1	28.1	27.8	28.0	28.4	28.4	28.2	28.5	28.8	28.9	28.7	29.0	28.0	28.4	28.8
Total World Demand.....	77.0	74.7	75.3	76.0	76.7	74.8	76.2	77.7	78.3	76.0	77.5	79.1	75.7	76.3	77.7
Supply^b															
OECD															
U.S. (50 States).....	8.8	9.0	9.1	9.2	9.0	9.0	9.1	9.1	9.2	9.2	9.1	9.2	9.0	9.1	9.2
Canada.....	2.8	2.8	2.7	2.9	3.0	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	3.9	3.9	3.9	3.8	3.6	3.7	3.9
North Sea ^c	5.9	5.6	5.7	6.0	5.9	5.6	5.8	6.0	5.9	5.6	5.7	6.0	5.8	5.8	5.8
Other OECD.....	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Total OECD.....	23.2	23.0	23.2	23.8	23.6	23.3	23.7	24.0	24.1	23.8	24.0	24.3	23.3	23.6	24.1
Non-OECD															
OPEC.....	31.2	29.9	30.1	29.2	27.9	28.0	29.0	28.5	29.2	28.9	29.4	28.9	30.1	28.3	29.1
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	3.4	3.4	3.4	3.3	3.4	3.4	3.4	3.3	3.4	3.4
Other Non-OECD.....	11.3	11.1	11.3	11.3	11.3	11.4	11.6	11.8	11.7	11.8	12.0	12.1	11.3	11.5	11.9
Total Non-OECD.....	54.4	53.1	53.7	52.8	51.5	51.9	53.3	53.0	53.6	53.5	54.4	54.2	53.5	52.4	53.9
Total World Supply.....	77.7	76.1	76.9	76.6	75.1	75.1	77.0	77.0	77.7	77.3	78.4	78.5	76.8	76.1	78.0
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR).....	-0.1	-0.9	-0.2	-0.1	0.2	-0.6	-0.2	0.3	0.1	-0.6	-0.2	0.4	-0.3	-0.1	-0.1
Other.....	-0.6	-0.5	-1.4	-0.5	1.4	0.3	-0.6	0.4	0.5	-0.8	-0.7	0.2	-0.8	0.4	-0.2
Total Stock Withdrawals.....	-0.7	-1.4	-1.6	-0.7	1.6	-0.4	-0.8	0.7	0.6	-1.3	-0.9	0.6	-1.1	0.3	-0.2
OECD Comm. Stocks, End (bill. bbls.).....	2.5	2.6	2.7	2.7	2.6	2.6	2.6	2.6	2.5	2.6	2.6	2.6	2.7	2.6	2.6
Non-OPEC Supply.....	46.5	46.2	46.7	47.5	47.2	47.2	48.0	48.6	48.5	48.4	49.1	49.6	46.7	47.7	48.9
Net Exports from Former Soviet Union.....	5.0	5.2	5.4	5.6	5.3	5.6	5.8	5.8	5.6	5.9	6.1	6.2	5.3	5.6	6.0

^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
(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	17.28	19.22	20.12	21.06	22.41	24.44	24.88	24.69	22.03	19.46	24.13
WTI ^b Spot Average.....	28.82	27.92	26.66	20.40	20.71	22.62	23.53	24.47	25.81	27.83	28.28	28.09	25.95	22.83	27.50
Natural Gas Wellhead (dollars per thousand cubic feet)															
	6.37	4.56	3.06	2.51	2.30	2.00	1.77	2.09	2.47	2.40	2.71	3.10	4.13	2.04	2.68
Petroleum Products															
Gasoline Retail ^c (dollars per gallon)															
All Grades	1.47	1.66	1.49	1.23	1.18	1.32	1.34	1.32	1.35	1.46	1.46	1.42	1.47	1.29	1.42
Regular Unleaded.....	1.43	1.62	1.45	1.19	1.14	1.29	1.31	1.29	1.31	1.43	1.44	1.39	1.43	1.26	1.39
No. 2 Diesel Oil, Retail (dollars per gallon).....															
	1.47	1.47	1.42	1.26	1.16	1.20	1.24	1.31	1.34	1.38	1.39	1.42	1.40	1.23	1.38
No. 2 Heating Oil, Wholesale (dollars per gallon).....															
	0.83	0.80	0.76	0.62	0.60	0.59	0.63	0.69	0.72	0.75	0.77	0.80	0.76	0.63	0.76
No. 2 Heating Oil, Retail (dollars per gallon).....															
	1.35	1.25	1.15	1.10	1.09	1.02	0.98	1.10	1.18	1.16	1.13	1.22	1.24	1.05	1.17
No. 6 Residual Fuel Oil, Retail ^d (dollars per barrel)															
	25.13	22.29	21.77	18.93	18.81	19.17	19.59	21.53	22.36	22.24	22.79	23.76	22.22	19.76	22.79
Electric Utility Fuels															
Coal (dollars per million Btu).....															
	1.23	1.24	1.23	1.21	1.21	1.21	1.19	1.18	1.19	1.20	1.17	1.17	1.23	1.19	1.18
Heavy Fuel Oil ^e (dollars per million Btu).....															
	4.22	3.82	3.50	2.99	2.97	3.16	3.23	3.45	3.52	3.67	3.75	3.80	3.70	3.18	3.68
Natural Gas (dollars per million Btu).....															
	7.26	4.96	3.47	2.98	2.82	2.40	2.15	2.58	3.00	2.83	3.10	3.61	4.43	2.42	3.11
Other Residential															
Natural Gas (dollars per thousand cubic feet)															
	10.09	10.64	10.64	7.17	6.39	7.12	8.31	6.51	6.53	7.49	9.07	7.53	9.50	6.70	7.16
Electricity (cents per kilowatthour).....															
	7.96	8.62	8.85	8.37	7.92	8.51	8.71	8.23	7.92	8.52	8.77	8.33	8.45	8.36	8.39

^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: Mid World Oil Price 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	5.86	5.81	5.80	5.89	5.93	5.83	5.80	5.88	5.85	5.84	5.86
Alaska.....	0.99	0.96	0.94	0.98	0.96	0.92	0.91	0.99	1.03	0.96	0.93	0.97	0.97	0.94	0.97
Lower 48.....	4.86	4.88	4.88	4.92	4.90	4.89	4.90	4.90	4.90	4.88	4.87	4.90	4.88	4.90	4.89
Net Imports (including SPR) ^d	9.02	9.59	9.33	8.99	8.68	9.55	9.49	9.10	9.21	9.95	9.94	9.56	9.23	9.21	9.67
Other SPR Supply	0.00	0.00	0.01	0.05	0.11	0.18	0.15	0.19	0.16	0.10	0.10	0.10	0.02	0.16	0.11
SPR Stock Withdrawn or Added (-)	-0.02	-0.01	-0.02	-0.05	-0.12	-0.18	-0.15	-0.19	-0.16	-0.10	-0.10	-0.10	-0.02	-0.16	-0.11
Other Stock Withdrawn or Added (-)	-0.24	0.00	-0.01	-0.06	-0.14	0.03	0.18	0.04	-0.18	0.01	0.18	0.04	-0.07	0.03	0.01
Product Supplied and Losses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaccounted-for Crude Oil	0.13	0.23	0.08	0.11	0.25	0.17	0.17	0.17	0.16	0.17	0.18	0.17	0.14	0.19	0.17
Total Crude Oil Supply	14.75	15.65	15.22	14.89	14.53	15.38	15.49	15.00	14.97	15.87	15.99	15.55	15.13	15.10	15.60
Other Supply															
NGL Production	1.64	1.89	1.95	1.96	1.86	1.88	1.90	1.91	1.92	1.97	1.95	1.99	1.86	1.89	1.96
Other Hydrocarbon and Alcohol															
Inputs	0.38	0.39	0.40	0.38	0.39	0.41	0.42	0.42	0.41	0.41	0.42	0.43	0.39	0.41	0.42
Crude Oil Product Supplied.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Processing Gain.....	0.91	0.90	0.89	0.93	0.91	0.94	0.94	0.91	0.92	0.95	0.94	0.91	0.91	0.93	0.93
Net Product Imports ^e	2.07	1.59	1.36	1.16	1.11	1.35	1.41	1.33	1.60	1.39	1.59	1.43	1.54	1.30	1.50
Product Stock Withdrawn or Added (-)	0.12	-0.87	-0.14	0.00	0.44	-0.48	-0.25	0.42	0.45	-0.49	-0.25	0.43	-0.22	0.03	0.03
Total Supply	19.87	19.55	19.68	19.33	19.24	19.48	19.92	19.99	20.27	20.10	20.64	20.74	19.60	19.66	20.44
Demand															
Motor Gasoline.....	8.27	8.66	8.82	8.60	8.41	8.89	8.92	8.81	8.62	9.10	9.19	9.07	8.59	8.76	9.00
Jet Fuel	1.73	1.72	1.67	1.50	1.60	1.65	1.70	1.72	1.75	1.74	1.80	1.83	1.65	1.67	1.78
Distillate Fuel Oil	4.21	3.72	3.64	3.71	3.83	3.57	3.54	3.81	4.11	3.73	3.72	3.99	3.82	3.68	3.89
Residual Fuel Oil.....	1.03	0.99	0.96	0.78	0.81	0.75	0.83	0.75	0.88	0.71	0.86	0.78	0.94	0.78	0.81
Other Oils ^d	4.62	4.46	4.59	4.73	4.60	4.63	4.93	4.91	4.91	4.82	5.07	5.07	4.60	4.77	4.97
Total Demand.....	19.86	19.55	19.68	19.32	19.24	19.48	19.92	19.99	20.27	20.10	20.64	20.74	19.60	19.66	20.44
Total Petroleum Net Imports	11.09	11.18	10.69	10.15	9.79	10.90	10.90	10.43	10.82	11.34	11.53	10.99	10.77	10.51	11.17
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	307	306	307	313	325	323	306	303	318	318	301	298	313	303	298
Total Motor Gasoline.....	194	220	206	210	204	205	196	200	203	204	196	199	210	200	199
Finished Motor Gasoline	145	169	158	161	153	158	152	156	154	159	152	156	161	156	156
Blending Components.....	49	51	48	48	51	46	44	44	49	45	44	44	48	44	44
Jet Fuel	40	43	43	42	38	40	41	42	39	40	42	42	42	42	42
Distillate Fuel Oil	105	114	127	144	121	130	146	148	117	126	142	142	144	148	142
Residual Fuel Oil.....	39	43	37	41	38	39	40	40	38	39	40	40	41	40	40
Other Oils ^e	253	290	311	287	282	314	326	282	275	307	320	275	287	282	275
Total Stocks (excluding SPR).....	938	1017	1031	1036	1009	1050	1056	1014	990	1033	1040	997	1036	1014	997
Crude Oil in SPR.....	542	543	545	550	560	576	590	608	622	631	640	649	550	608	649
Heating Oil Reserve.....	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Total Stocks (including SPR).....	1480	1560	1575	1585	1569	1626	1646	1622	1612	1664	1680	1646	1585	1622	1646

^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 6. Approximate Energy Demand Sensitivities^a for the STIFS^b Model
(Percent Deviation Base Case)

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

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

^bShort-Term Integrated Forecasting System.

^cRefiner acquisitions cost of imported crude oil.

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

^eRefers to percent changes in degree-days.

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

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

	High Price Case	Low Price Case	Difference		
			Total	Uncertainty	Price Impact
United States	6.09	5.66	0.43	0.07	0.36
Lower 48 States	5.11	4.71	0.40	0.05	0.35
Alaska.....	0.99	0.96	0.03	0.01	0.01

Note: Components provided are for the fourth quarter 2003. Totals may not add to sum of components due to independent rounding.

Source: Energy Information Administration, Office of Oil and Gas, Reserves and Natural Gas Division.

Table 8. U.S. Natural Gas Supply and Demand: Mid World Oil Price 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	4.84	<i>4.80</i>	<i>4.56</i>	<i>4.57</i>	<i>4.61</i>	<i>4.72</i>	<i>4.76</i>	<i>4.80</i>	<i>4.84</i>	<i>4.95</i>	19.36	18.47	19.36
Net Imports	0.97	0.90	0.94	<i>0.81</i>	<i>0.87</i>	<i>0.89</i>	<i>0.91</i>	<i>0.97</i>	<i>1.02</i>	<i>0.99</i>	<i>1.01</i>	<i>1.03</i>	3.62	3.64	4.04
Supplemental Gaseous Fuels.....	0.02	0.02	0.02	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.03</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	0.08	0.08	0.09
Total New Supply	5.85	5.77	5.81	<i>5.62</i>	<i>5.46</i>	<i>5.48</i>	<i>5.54</i>	<i>5.72</i>	<i>5.81</i>	<i>5.80</i>	<i>5.87</i>	<i>6.01</i>	23.05	22.19	23.48
Working Gas in Storage															
Opening.....	1.72	0.74	1.88	<i>2.94</i>	<i>2.85</i>	<i>1.54</i>	<i>2.11</i>	<i>2.96</i>	<i>2.51</i>	<i>1.29</i>	<i>2.06</i>	<i>2.94</i>	1.72	2.85	2.51
Closing.....	0.74	1.88	2.94	<i>2.85</i>	<i>1.54</i>	<i>2.11</i>	<i>2.96</i>	<i>2.51</i>	<i>1.29</i>	<i>2.06</i>	<i>2.94</i>	<i>2.50</i>	2.85	2.51	2.50
Net Withdrawals	0.98	-1.14	-1.06	<i>0.09</i>	<i>1.31</i>	<i>-0.57</i>	<i>-0.86</i>	<i>0.46</i>	<i>1.22</i>	<i>-0.77</i>	<i>-0.88</i>	<i>0.44</i>	-1.13	0.34	0.01
Total Supply.....	6.83	4.63	4.74	<i>5.72</i>	<i>6.77</i>	<i>4.91</i>	<i>4.68</i>	<i>6.17</i>	<i>7.02</i>	<i>5.04</i>	<i>4.99</i>	<i>6.45</i>	21.92	22.54	23.49
Balancing Item ^a	0.30	0.00	-0.28	<i>-0.48</i>	<i>-0.08</i>	<i>0.00</i>	<i>0.02</i>	<i>-0.39</i>	<i>0.27</i>	<i>0.04</i>	<i>-0.14</i>	<i>-0.60</i>	-0.47	-0.45	-0.43
Total Primary Supply	7.13	4.63	4.47	<i>5.23</i>	<i>6.69</i>	<i>4.91</i>	<i>4.70</i>	<i>5.78</i>	<i>7.29</i>	<i>5.07</i>	<i>4.85</i>	<i>5.84</i>	21.45	22.08	23.06
Demand															
Lease and Plant Fuel.....	0.29	0.29	0.29	<i>0.28</i>	<i>0.27</i>	<i>0.27</i>	<i>0.27</i>	<i>0.28</i>	<i>0.28</i>	<i>0.28</i>	<i>0.28</i>	<i>0.30</i>	1.15	1.09	1.14
Pipeline Use.....	0.20	0.13	0.13	<i>0.16</i>	<i>0.20</i>	<i>0.13</i>	<i>0.13</i>	<i>0.16</i>	<i>0.20</i>	<i>0.13</i>	<i>0.13</i>	<i>0.16</i>	0.62	0.62	0.63
Residential.....	2.46	0.77	0.37	<i>1.18</i>	<i>2.17</i>	<i>0.84</i>	<i>0.37</i>	<i>1.46</i>	<i>2.44</i>	<i>0.85</i>	<i>0.38</i>	<i>1.41</i>	4.78	4.84	5.07
Commercial.....	1.37	0.63	0.46	<i>0.79</i>	<i>1.23</i>	<i>0.63</i>	<i>0.47</i>	<i>0.86</i>	<i>1.36</i>	<i>0.64</i>	<i>0.47</i>	<i>0.87</i>	3.24	3.18	3.35
Industrial (Incl. Nonutility Use).....	2.34	2.10	2.25	<i>2.28</i>	<i>2.35</i>	<i>2.28</i>	<i>2.47</i>	<i>2.48</i>	<i>2.51</i>	<i>2.38</i>	<i>2.56</i>	<i>2.55</i>	8.97	9.59	10.00
Electric Utilities	0.47	0.71	0.97	<i>0.54</i>	<i>0.47</i>	<i>0.76</i>	<i>0.99</i>	<i>0.55</i>	<i>0.50</i>	<i>0.78</i>	<i>1.02</i>	<i>0.55</i>	2.68	2.77	2.86
Total Demand	7.13	4.63	4.47	<i>5.23</i>	<i>6.69</i>	<i>4.91</i>	<i>4.70</i>	<i>5.78</i>	<i>7.29</i>	<i>5.07</i>	<i>4.85</i>	<i>5.84</i>	21.45	22.08	23.06

^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: Mid World Oil Price 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	278.3	285.9	268.1	290.6	291.9	285.2	279.7	297.6	297.5	1118.3	1135.4	1155.2
Appalachia.....	110.8	109.0	104.1	100.3	109.8	102.9	104.1	106.8	107.4	105.2	104.0	106.5	424.1	424.8	423.2
Interior.....	37.5	37.0	37.9	39.2	36.1	34.1	36.0	34.5	34.2	33.9	34.9	33.3	151.6	144.6	139.6
Western.....	135.3	132.3	136.1	138.8	140.1	131.1	150.6	150.5	143.6	140.6	158.7	157.7	542.5	566.1	592.3
Primary Stock Levels ^a															
Opening.....	31.9	39.2	38.3	37.0	33.9	40.7	35.0	33.1	32.5	32.8	31.6	33.0	31.9	33.9	32.5
Closing.....	39.2	38.3	37.0	33.9	40.7	35.0	33.1	32.5	32.8	31.6	33.0	32.7	33.9	32.5	32.7
Net Withdrawals	-7.3	0.9	1.2	3.1	-6.8	5.7	1.9	0.6	-0.2	1.1	-1.4	0.3	-2.0	1.4	-0.2
Imports	3.9	4.1	6.0	4.5	5.6	5.6	5.6	5.6	6.6	6.6	6.6	6.7	19.8	24.3	28.4
Exports	11.8	13.5	11.7	14.0	12.8	13.0	13.3	13.2	13.1	13.3	13.5	13.5	48.7	49.4	50.5
Total Net Domestic Supply	268.4	269.9	273.7	271.9	271.9	266.3	284.8	284.9	278.5	274.1	289.2	291.0	1087.4	1111.6	1132.9
Secondary Stock Levels ^b															
Opening.....	108.1	113.9	128.6	117.6	126.2	132.5	137.0	120.2	114.5	117.7	124.5	105.7	108.1	126.2	114.5
Closing.....	113.9	128.6	117.6	126.2	132.5	137.0	120.2	114.5	117.7	124.5	105.7	100.2	126.2	114.5	100.2
Net Withdrawals	-5.8	-14.7	11.0	-8.5	-6.4	-4.5	16.8	5.7	-3.2	-6.7	18.7	5.5	-18.0	11.6	14.3
Waste Coal Supplied to IPPs ^c	2.6	2.6	2.6	2.6	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	10.6	11.1	11.6
Total Supply.....	265.2	257.9	287.3	266.0	268.3	264.6	304.4	293.4	278.2	270.3	310.9	299.5	1080.0	1134.3	1158.8
Demand															
Coke Plants	6.8	7.0	6.8	6.0	6.5	6.4	6.6	6.3	6.5	6.3	6.5	6.2	26.6	25.7	25.5
Electricity Production															
Electric Utilities	203.9	196.1	223.7	205.4	197.8	198.5	232.2	221.3	206.9	203.6	238.0	226.8	829.2	849.7	875.3
Nonutilities (Excl. Cogen.) ^d	36.7	34.7	40.8	38.5	37.7	35.7	41.5	39.2	38.5	36.4	42.5	40.1	150.6	154.1	157.5
Retail and General Industry ^e	17.8	16.2	24.8	26.7	26.4	24.1	24.1	26.6	26.3	23.9	23.9	26.5	85.5	101.2	100.6
Total Demand ^f	265.3	254.0	296.0	276.5	268.3	264.6	304.4	293.4	278.2	270.3	310.9	299.5	1091.9	1130.7	1158.8
Discrepancy ^g	0.0	3.9	-8.8	-10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-11.9	3.6	0.0

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

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

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

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

^eBeginning in July 2001, includes data and forecasts of coal consumed at 22 synfuel plants; January-June 2001 consumption will be adjusted in a later release.

^fTotal Demand includes estimated IPP consumption.

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

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: Mid World Oil Price 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.....	399.8	383.2	431.7	389.3	374.6	378.1	441.4	424.0	394.5	389.2	454.1	436.0	1603.9	1618.0	1673.7
Petroleum.....	24.2	21.8	21.6	14.9	17.6	11.2	20.8	11.3	17.9	11.2	22.8	13.7	82.5	60.9	65.7
Natural Gas.....	45.7	69.1	95.0	52.1	44.7	72.0	94.0	51.8	47.5	74.4	96.7	52.7	261.8	262.5	271.3
Nuclear.....	135.8	130.1	140.4	128.2	130.5	127.6	137.2	127.4	130.8	128.0	137.7	127.8	534.4	522.8	524.3
Hydroelectric.....	50.4	50.8	46.7	51.1	64.3	69.4	59.8	60.8	70.7	74.6	62.6	61.7	199.0	254.3	269.6
Geothermal and Other ^a	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	2.4	2.3	2.4
Subtotal.....	656.5	655.5	736.1	636.0	632.2	658.9	753.8	675.9	662.1	678.0	774.5	692.4	2684.0	2720.8	2807.0
Nonutility Generation ^b															
Coal.....	93.5	81.1	96.1	69.5	92.3	80.6	91.1	66.1	97.3	82.7	93.8	68.0	340.1	330.1	341.8
Petroleum.....	17.0	12.0	11.9	10.5	12.6	6.7	10.9	8.1	12.8	6.7	11.9	9.9	51.4	38.3	41.3
Natural Gas.....	78.4	83.9	109.1	87.1	81.3	88.3	107.5	89.6	86.6	91.1	110.6	91.2	358.4	366.6	379.4
Other Gaseous Fuels ^c	4.0	4.3	5.6	4.7	4.4	4.5	5.4	4.7	4.4	4.5	5.4	4.7	18.6	19.0	19.0
Nuclear.....	56.2	55.3	60.4	59.2	59.9	58.6	63.0	58.4	59.9	58.7	63.1	58.5	231.1	239.8	240.2
Hydroelectric.....	5.3	6.4	3.3	3.7	6.5	8.8	4.3	5.7	7.5	9.5	4.5	5.8	18.8	25.3	27.3
Geothermal and Other ^d	20.4	21.5	22.2	20.9	20.4	21.2	22.3	20.9	20.5	21.2	22.4	20.9	85.0	84.8	85.0
Subtotal.....	275.0	264.5	308.6	255.4	277.2	268.6	304.6	253.5	289.0	274.5	311.7	258.9	1103.5	1103.9	1134.1
Total Generation.....	931.4	920.0	1044.7	891.4	909.4	927.5	1058.4	929.4	951.1	952.5	1086.3	951.3	3787.5	3824.7	3941.1
Net Imports ^e	3.6	7.2	5.0	7.9	7.1	6.7	9.9	4.2	6.2	7.6	10.9	6.7	23.8	28.0	31.5
Total Supply.....	936.4	927.8	1049.7	899.3	916.6	934.2	1068.3	933.6	957.3	960.1	1097.2	958.0	3813.2	3852.7	3972.5
Losses and Unaccounted for ^f	38.7	76.4	55.5	61.2	48.7	76.9	67.1	61.2	50.9	79.1	69.0	62.9	231.8	253.9	262.0
Demand															
Retail Sales ^g															
Residential.....	322.0	264.1	354.4	266.3	306.0	275.1	359.2	286.8	325.7	282.5	368.4	293.0	1206.8	1227.1	1269.6
Commercial.....	253.1	264.6	307.8	261.8	257.0	261.4	300.8	261.6	260.7	266.0	307.1	267.2	1087.3	1080.7	1100.9
Industrial.....	248.5	248.9	248.6	239.3	234.8	249.9	262.1	252.1	245.4	257.7	269.3	259.0	985.3	998.9	1031.4
Other.....	26.4	28.0	33.4	28.1	27.5	27.7	30.9	28.1	28.0	28.3	31.6	28.8	115.8	114.3	116.7
Subtotal.....	850.1	805.6	944.2	795.4	825.2	814.1	953.0	828.6	859.8	834.5	976.4	847.9	3395.3	3420.9	3518.7
Nonutility Use/Sales ^h	47.6	45.8	50.0	42.7	42.6	43.2	48.3	43.8	46.5	46.5	51.8	47.1	186.1	177.8	191.9
Total Demand.....	897.7	851.4	994.2	838.1	867.9	857.3	1001.2	872.4	906.3	881.0	1028.2	895.1	3581.4	3598.8	3710.6
Memo:															
Nonutility Sales to															
Electric Utilities ^d	227.3	218.8	258.6	212.7	234.6	225.5	256.3	209.7	242.5	228.1	260.0	211.7	917.4	926.1	942.2

^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: Mid World Oil Price Case
(Quadrillion Btu)

	Year				Annual Percentage Change		
	2000	2001	2002	2003	2000-2001	2001-2002	2002-2003
Electric Utilities							
Hydroelectric Power ^a	2.600	<i>2.084</i>	<i>2.664</i>	<i>2.824</i>	-19.8	<i>27.8</i>	<i>6.0</i>
Geothermal, Solar and Wind Energy ^b	0.004	<i>0.004</i>	<i>0.004</i>	<i>0.005</i>	0.0	<i>0.0</i>	<i>25.0</i>
Biofuels ^c	0.021	<i>0.022</i>	<i>0.021</i>	<i>0.021</i>	4.8	<i>-4.5</i>	<i>0.0</i>
Total	2.625	<i>2.111</i>	<i>2.690</i>	<i>2.851</i>	-19.6	<i>27.4</i>	<i>6.0</i>
Nonutility Power Generators							
Hydroelectric Power ^a	0.149	<i>0.194</i>	<i>0.262</i>	<i>0.283</i>	30.2	<i>35.1</i>	<i>8.0</i>
Geothermal, Solar and Wind Energy ^b	0.355	<i>0.372</i>	<i>0.378</i>	<i>0.382</i>	4.8	<i>1.6</i>	<i>1.1</i>
Biofuels ^c	0.523	<i>0.655</i>	<i>0.651</i>	<i>0.651</i>	25.2	<i>-0.6</i>	<i>0.0</i>
Total.....	1.027	<i>1.222</i>	<i>1.291</i>	<i>1.316</i>	19.0	<i>5.6</i>	<i>1.9</i>
Total Power Generation.....	3.652	<i>3.332</i>	<i>3.981</i>	<i>4.166</i>	-8.8	<i>19.5</i>	<i>4.6</i>
Other Sectors ^d							
Residential and Commercial ^e	0.570	<i>0.560</i>	<i>0.560</i>	<i>0.590</i>	-1.8	<i>0.0</i>	<i>5.4</i>
Industrial ^f	2.410	<i>2.410</i>	<i>2.470</i>	<i>2.540</i>	0.0	<i>2.5</i>	<i>2.8</i>
Transportation ^g	0.114	<i>0.122</i>	<i>0.127</i>	<i>0.143</i>	7.0	<i>4.1</i>	<i>12.6</i>
Total.....	3.094	<i>3.092</i>	<i>3.157</i>	<i>3.273</i>	-0.1	<i>2.1</i>	<i>3.7</i>
Net Imported Electricity ^h	0.244	<i>0.171</i>	<i>0.201</i>	<i>0.225</i>	-29.9	<i>17.5</i>	<i>11.9</i>
Total Renewable Energy Demand.....	6.990	<i>6.595</i>	<i>7.338</i>	<i>7.665</i>	-5.7	<i>11.3</i>	<i>4.5</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

	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	<i>9326</i>	<i>9429</i>	<i>9811</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	<i>22.03</i>	<i>19.46</i>	<i>24.13</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	<i>5.85</i>	<i>5.84</i>	<i>5.86</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	<i>10.77</i>	<i>10.51</i>	<i>11.17</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	75.7	<i>75.7</i>	<i>75.7</i>	<i>76.3</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	<i>19.60</i>	<i>19.66</i>	<i>20.44</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	<i>21.45</i>	<i>22.08</i>	<i>23.06</i>
Coal (million short tons).....	889	896	893	901	943	950	962	1006	1030	1038	1045	1081	<i>1092</i>	<i>1131</i>	<i>1159</i>
Electricity (billion kilowatthours)															
Retail Sales ^c	2647	2713	2762	2763	2861	2935	3013	3101	3146	3264	3312	3413	<i>3395</i>	<i>3421</i>	<i>3519</i>
Nonutility Own Use ^d	NA	104	111	122	127	141	149	149	149	160	189	187	<i>186</i>	<i>178</i>	<i>192</i>
Total	2747	2817	2873	2885	2988	3075	3162	3250	3295	3424	3501	3599	<i>3581</i>	<i>3599</i>	<i>3711</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	<i>98.0</i>	<i>100.1</i>	<i>103.6</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	<i>10.51</i>	<i>10.62</i>	<i>10.56</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 CONTROL0202.

Table A2. Annual U.S. Macroeconomic and Weather Indicators

	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	9326	9429	9811
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	1.106	1.126
Real Disposable Personal Income (billion chained 1996 Dollars).....	4907	5014	5033	5189	5261	5397	5539	5678	5854	6169	6320	6539	6773	6927	7172
Manufacturing Production (Index, 1996=1.000).....	0.816	0.812	0.792	0.824	0.854	0.906	0.953	1.000	1.076	1.134	1.191	1.247	1.194	1.182	1.278
Real Fixed Investment (billion chained 1996 dollars)	911	895	833	886	958	1046	1109	1213	1329	1480	1595	1716	1683	1626	1711
Real Exchange Rate (Index, 1996=1.000).....	NA	0.913	0.915	0.923	0.958	0.938	0.875	0.920	0.990	1.040	1.039	1.076	1.132	1.174	1.114
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	-33.0	-8.5	12.6
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	1.343	1.289	1.306
Consumer Price Index (index, 1982-1984=1.000)	1.240	1.308	1.363	1.404	1.446	1.483	1.525	1.570	1.606	1.631	1.667	1.723	1.772	1.796	1.837
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	0.853	0.694	0.828
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	131.8	133.9
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	93.3	95.1
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	1.2	1.2
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	119.6	121.0
Weather ^a															
Heating Degree-Days															
U.S.	4726	4016	4200	4441	4700	4483	4531	4713	4542	3951	4169	4460	4231	4255	4456
New England.....	6887	5848	5960	6844	6728	6672	6559	6679	6662	5680	5952	6489	6145	6137	6457
Middle Atlantic.....	6134	4998	5177	5964	5948	5934	5831	5986	5809	4812	5351	5774	5279	5331	5693
U.S. Gas-Weighted	4856	4139	4337	4458	4754	4659	4707	4980	4802	4183	4399	4680	4451	4493	4706
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	1234.4	1238.3

^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 CONTROL0202.

Table A3. Annual International Petroleum Supply and Demand Balance

(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	20.4
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	15.2	15.2	15.3
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	5.5
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	7.5	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	47.9	48.9
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	3.6	3.6	3.6	3.6
Europe.....	1.3	1.0	0.8	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8
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	5.0	5.2
Other Asia.....	4.0	4.3	4.5	4.7	5.1	5.5	5.9	6.3	6.6	6.7	6.9	6.9	6.9	7.0	7.1
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	11.8	12.0	12.0	12.2
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	27.8	28.0	28.4	28.8
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	75.7	75.7	76.3	77.7
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	3.9
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	5.8	5.8	5.8
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	2.1	2.1	2.1
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	23.6	24.1
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	28.3	29.1
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	3.4	3.4
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	11.3	11.5	11.9
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	52.4	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	76.8	76.1	78.0
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	-1.1	-1.1	0.3	-0.2
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	2.7	2.6	2.6
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	5.3	5.6	6.0

^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
(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	22.03	19.46	24.13
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	22.83	27.50
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	4.13	2.04	2.68
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	1.29	1.42
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	1.26	1.39
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	1.23	1.38
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	0.63	0.76
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	1.05	1.17
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	22.22	19.76	22.79
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	1.19	1.18
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	3.70	3.18	3.68
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	2.42	3.11
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	9.50	6.70	7.16
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	8.23	8.45	8.36	8.39

^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
(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	5.84	5.86
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	0.94	0.97
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	4.89
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	9.23	9.21	9.67
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	0.16	0.11
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	0.03	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	0.14	0.19	0.17
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	15.10	15.60
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	1.86	1.89	1.96
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	0.41	0.42
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	0.91	0.93	0.93
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	1.54	1.30	1.50
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	-0.22	0.03	0.03
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	19.60	19.66	20.44
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	8.59	8.76	9.00
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	1.65	1.67	1.78
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	3.82	3.68	3.89
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	0.94	0.78	0.81
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	4.60	4.77	4.97
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	19.60	19.66	20.44
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	10.77	10.51	11.17
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	341	323	325	318	335	337	303	284	305	324	284	286	313	303	298
Total Motor Gasoline.....	213	220	219	216	226	215	202	195	210	216	193	196	210	200	199
Jet Fuel.....	41	52	49	43	40	47	40	40	44	45	41	45	42	42	42
Distillate Fuel Oil	106	132	144	141	141	145	130	127	138	156	125	118	144	148	142
Residual Fuel Oil	44	49	50	43	44	42	37	46	40	45	36	36	41	40	40
Other Oils ^f	257	261	267	263	273	275	258	250	259	291	246	247	287	282	275

^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
(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	<i>19.36</i>	<i>18.47</i>	<i>19.36</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	<i>3.62</i>	<i>3.64</i>	<i>4.04</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	<i>0.08</i>	<i>0.08</i>	<i>0.09</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	<i>23.05</i>	<i>22.19</i>	<i>23.48</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	<i>1.72</i>	<i>2.85</i>	<i>2.51</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	<i>2.85</i>	<i>2.51</i>	<i>2.50</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	<i>-1.13</i>	<i>0.34</i>	<i>0.01</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	<i>21.92</i>	<i>22.54</i>	<i>23.49</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	<i>-0.47</i>	<i>-0.45</i>	<i>-0.43</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	<i>21.45</i>	<i>22.08</i>	<i>23.06</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	<i>1.15</i>	<i>1.09</i>	<i>1.14</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	<i>0.62</i>	<i>0.62</i>	<i>0.63</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	<i>4.78</i>	<i>4.84</i>	<i>5.07</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	<i>3.24</i>	<i>3.18</i>	<i>3.35</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	<i>8.97</i>	<i>9.59</i>	<i>10.00</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	<i>2.68</i>	<i>2.77</i>	<i>2.86</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	<i>21.45</i>	<i>22.08</i>	<i>23.06</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
(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	<i>1118.3</i>	<i>1135.4</i>	<i>1155.2</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	<i>424.1</i>	<i>424.8</i>	<i>423.2</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	<i>151.6</i>	<i>144.6</i>	<i>139.6</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	<i>542.5</i>	<i>566.1</i>	<i>592.3</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	<i>31.9</i>	<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	31.9	31.9	<i>33.9</i>	<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	<i>-2.0</i>	<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	<i>19.8</i>	<i>24.3</i>	<i>28.4</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	<i>48.7</i>	<i>49.4</i>	<i>50.5</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	<i>1087.4</i>	<i>1111.6</i>	<i>1132.9</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	<i>108.1</i>	<i>126.2</i>	<i>114.5</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	<i>126.2</i>	<i>114.5</i>	<i>100.2</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	<i>-18.0</i>	<i>11.6</i>	<i>14.3</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	<i>10.6</i>	<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	<i>1080.0</i>	<i>1134.3</i>	<i>1158.8</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	<i>26.6</i>	<i>25.7</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	<i>829.2</i>	<i>849.7</i>	<i>875.3</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	<i>150.6</i>	<i>154.1</i>	<i>157.5</i>
Retail and General Industry ^e	76.1	76.3	75.4	74.1	81.1	81.2	78.9	77.7	78.0	72.3	69.6	69.3	<i>85.5</i>	<i>101.2</i>	<i>100.6</i>
Total Demand ^f	889.2	896.2	893.0	901.2	943.5	950.1	962.0	1006.3	1030.1	1038.3	1044.5	1080.9	<i>1091.9</i>	<i>1130.7</i>	<i>1158.8</i>
Discrepancy ^g	7.3	3.3	-1.6	6.6	-7.0	3.9	-1.6	0.4	3.1	-6.7	-1.5	0.4	<i>-11.9</i>	<i>3.6</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).

^eBeginning in July 2001, includes data and forecasts of coal consumed at 22 synfuel plants; January-June 2001 consumption will be adjusted in a later release.

^fTotal Demand includes estimated IPP consumption.

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

Notes: Rows and columns may not add due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

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

Table A8. Annual U.S. Electricity Supply and Demand
(Billion Kilowatt-hours)

	Year														
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Supply															
Net Utility Generation															
Coal	1553.7	1559.6	1551.2	1575.9	1639.2	1635.5	1652.9	1737.5	1787.8	1807.5	1767.7	1696.6	1603.9	1618.0	1673.7
Petroleum.....	158.3	117.0	111.5	88.9	99.5	91.0	60.8	67.3	77.8	110.2	86.9	72.2	82.5	60.9	65.7
Natural Gas	266.6	264.1	264.2	263.9	258.9	291.1	307.3	262.7	283.6	309.2	296.4	290.7	261.8	262.5	271.3
Nuclear.....	529.4	576.9	612.6	618.8	610.3	640.4	673.4	674.7	628.6	673.7	725.0	705.4	534.4	522.8	524.3
Hydroelectric	265.1	279.9	275.5	239.6	265.1	243.7	293.7	328.0	337.2	304.4	293.9	248.2	199.0	254.3	269.6
Geothermal and Other ^a	11.3	10.7	10.1	10.2	9.6	8.9	6.4	7.2	7.5	7.2	3.7	2.2	2.4	2.3	2.4
Subtotal	2784.3	2808.2	2825.0	2797.2	2882.5	2910.7	2994.5	3077.4	3122.5	3212.2	3173.7	3015.4	2684.0	2720.8	2807.0
Nonutility Generation ^b	NA	216.7	246.3	286.1	314.4	343.1	363.3	369.6	371.7	405.7	530.9	784.6	1103.5	1103.9	1134.1
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	3787.5	3824.7	3941.1
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	23.8	28.0	31.5
Total Supply	2982.8	3027.2	3091.0	3108.8	3198.0	3298.6	3397.1	3485.0	3530.8	3645.5	3735.1	3835.5	3813.2	3852.7	3972.5
Losses and Unaccounted for ^d ..	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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	1193.4	1206.8	1227.1	1269.6
Commercial.....	725.9	751.0	765.7	761.3	794.6	820.3	862.7	887.4	928.6	979.4	1002.0	1037.9	1087.3	1080.7	1100.9
Industrial.....	925.7	945.5	946.6	972.7	977.2	1008.0	1012.7	1033.6	1038.2	1051.2	1058.2	1070.8	985.3	998.9	1031.4
Other	89.8	92.0	94.3	93.4	94.9	97.8	95.4	97.5	102.9	103.5	107.0	110.6	115.8	114.3	116.7
Subtotal	2646.8	2712.6	2762.0	2763.4	2861.5	2934.6	3013.3	3101.1	3145.6	3264.2	3312.1	3412.8	3395.3	3420.9	3518.7
Nonutility Use/Sales ^f	NA	104.2	111.0	121.8	126.9	140.9	149.2	148.9	149.0	159.8	188.8	186.6	186.1	177.8	191.9
Total Demand.....	2747.2	2816.7	2873.0	2885.1	2988.4	3075.5	3162.4	3250.1	3294.6	3424.0	3500.9	3599.4	3581.4	3598.8	3710.6
Memo:															
Nonutility Sales															
to Electric Utilities.....	NA	112.5	135.3	164.4	187.5	202.2	214.2	220.6	222.7	245.9	342.0	597.9	917.4	926.1	942.2

^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.