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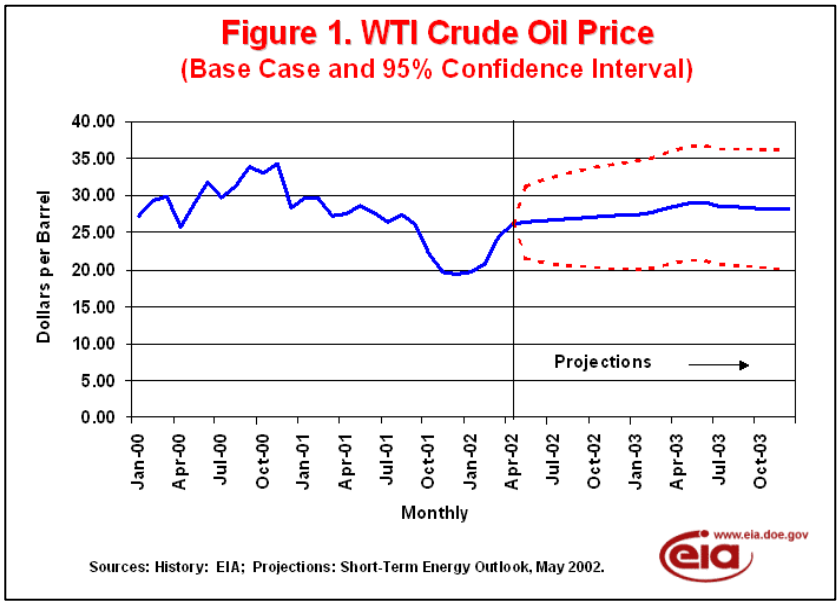
Energy Information Administration

Short-Term Energy Outlook

May *2002*



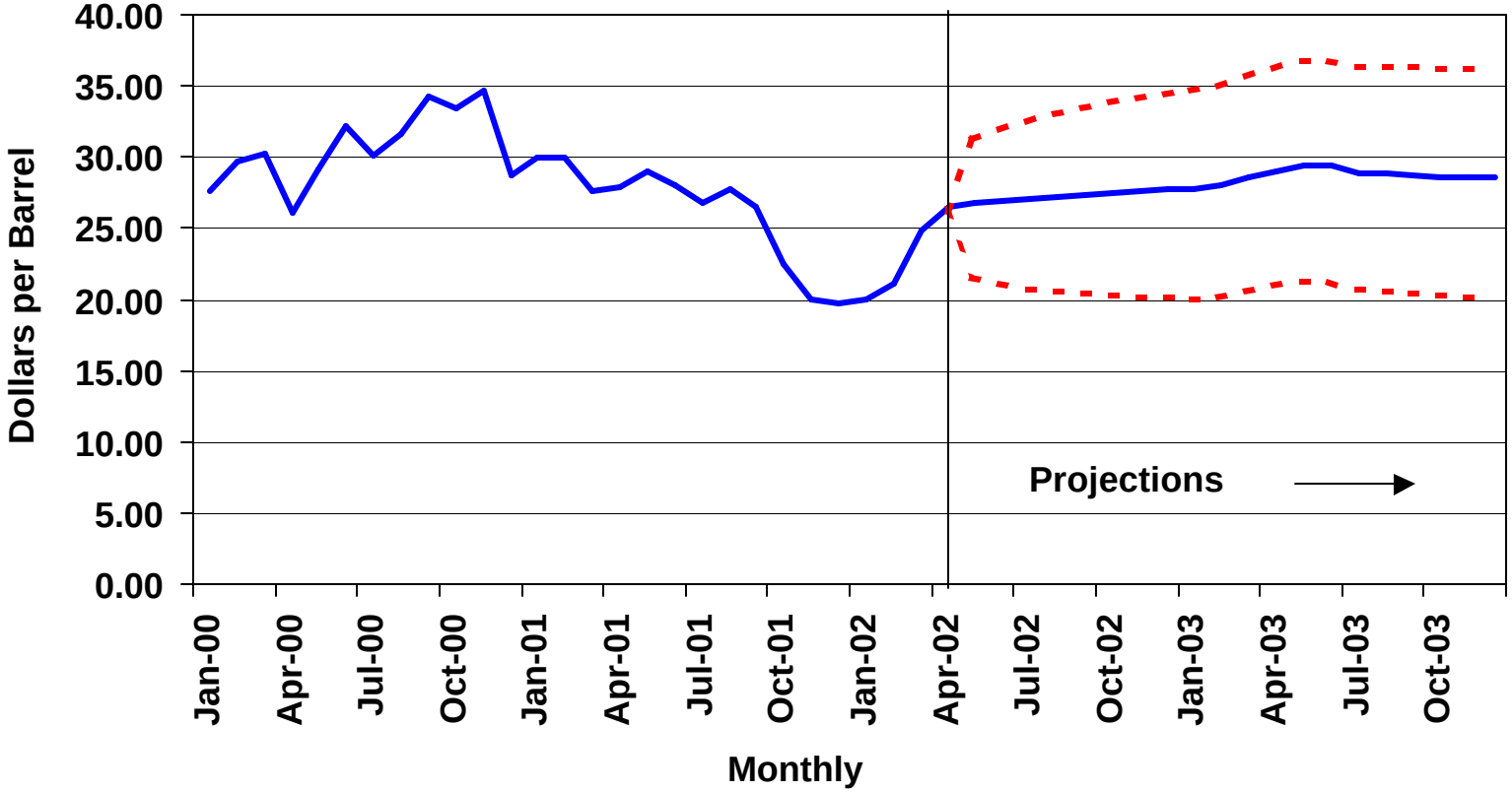
Overview

World Oil Markets: World oil prices continued to rise in April, with OPEC Basket and Brent prices rising by $2 per barrel on average from March levels. April marked the second consecutive month that the OPEC basket price finished above $22 per barrel, the lower end of the target range for the OPEC basket price. The U.S. benchmark West Texas Intermediate (WTI) crude oil price averaged over $26 per barrel in April, and closed over $27 per barrel by month's-end (Figure 1). In addition to psychological factors market fundamentals will also push world oil prices up as inventory draws in the OECD countries validate that supply cuts are taking place following the enactment of the January 2002 quota. West Texas Intermediate prices could rise to almost $30 per barrel in 2003 unless the OPEC countries increase their production significantly in the latter half of this year. This analysis assumes that they do, leaving prices under the $30 level for WTI.

Summer Motor Gasoline Outlook: U.S. average pump prices have stabilized at about $1.40 per gallon for regular grade over the last several weeks in April, after surging by a record breaking 23 cents per gallon from the first week to the last week of March. It is likely that pump prices will soon rise after this current pause, since crude oil prices and demand for gasoline are both expected to increase over the next several months. Last May, the price averaged $1.70 per gallon, a record high in current dollar terms (Figure 2). However, gasoline stocks were an estimated 10 million barrels (5 percent) lower a year ago than they are now. Assuming no major supply disruptions and assuming our base case of rising crude oil prices, gasoline pump prices could gain an additional 8-10 cents per gallon by June from the April average price of $1.40 per gallon. The summer average (April to September) is now expected to center around $1.44 per gallon, about 10 cents per gallon below the 2001 summer average.

U.S. Natural Gas Markets: Natural gas spot prices have been hovering over $3.00 per thousand cubic feet since March. This phenomenon may be explained in part by 1) the unusual weather patterns in March and April: March and much of April were colder than normal, but in part of April, an unusual and intense heat wave occurred, resulting in a surge in electricity demand for cooling, which in turn led to increased demand for natural gas in the power sector; 2) the rising price of crude oil due to a general concern in the market in response to the current tensions in the Middle East; 3) the sense that the U.S. economy is recovering at a more rapid pace than previously expected; 4) the increased capacity and the planned new capacity of gas-burning power plants; and 5) concerns that natural gas production, as well as drilling and exploration, have recently fallen off, resulting in a less rosy supply outlook for the near term. For this year, assuming normal weather and barring any major supply disruptions, the annual average natural gas wellhead price is projected to be about $2.80 per thousand cubic feet compared to over $4.00 last year.

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



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

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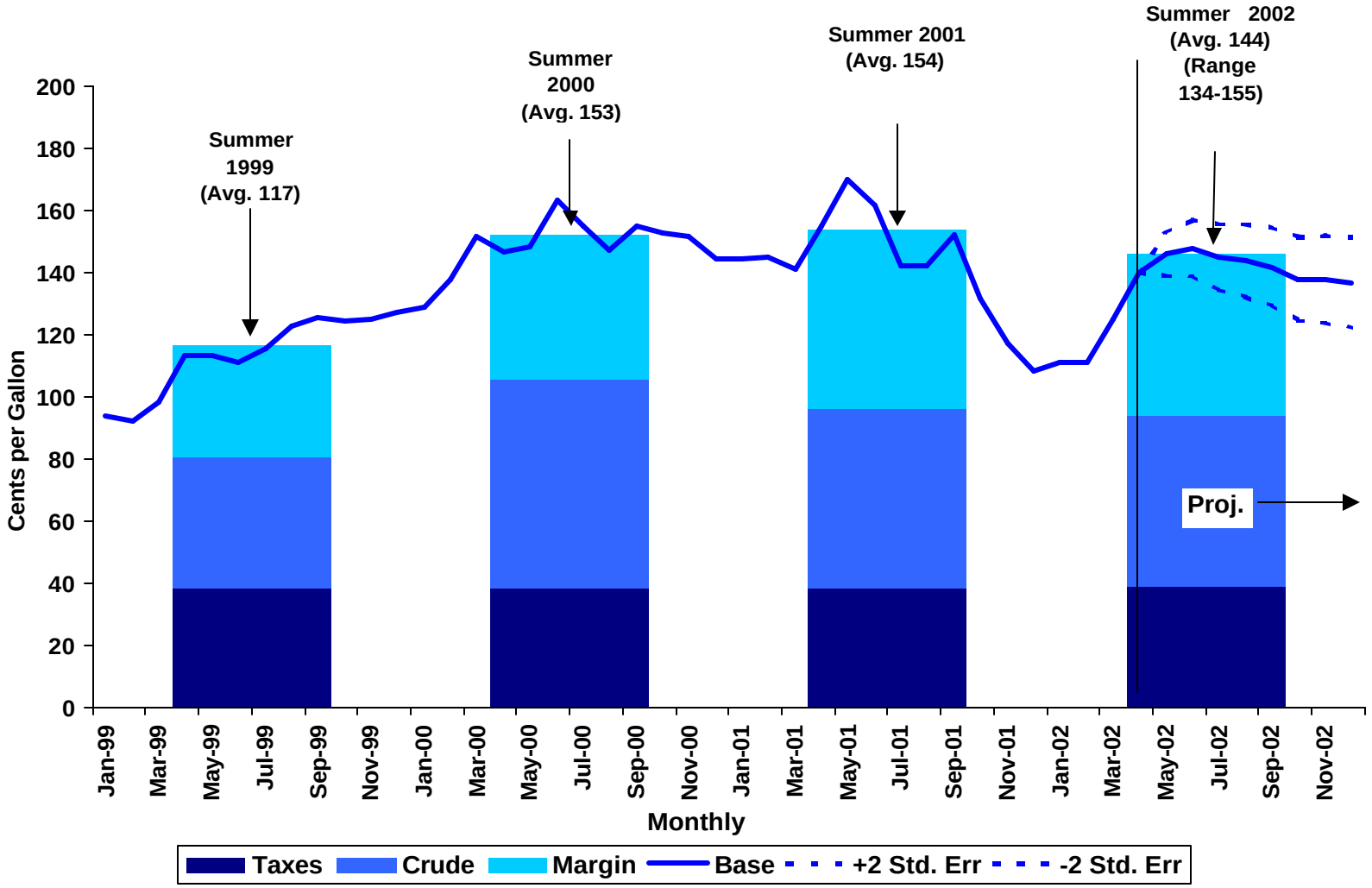
Figure 2. Retail Gasoline Price Cases*



* Regular gasoline, self-serve cash.

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

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Electricity Update and Outlook: This summer, total electricity demand is expected to be level with last summer's demand. Cooling degree-days are expected to be somewhat lower than last year, assuming normal weather for May through September. Although the economy is assumed to be growing through the summer months, year-over-year increases in industrial output are not expected to show up until the third quarter of this year.

Data Note: For the previous three Outlooks (February through April) we have been reporting coal demand for 2001 for "synfuel" operations. The synthetic coal was primarily used at power plants (see footnotes to Table 9 in those previous reports). Since the fuel from these operations is also reported by power plant operators, a double counting of energy inputs occurred. For this and future reports, the coal demand by synfuel plants is omitted from industrial demand and reported only under electricity demand. As a result, total coal demand is reduced in this report by about 2 million tons per month from July 2001 through the forecast period.

International Oil Markets

Crude Oil Prices. World oil prices continued to rise in April, with OPEC Basket and Brent prices rising by $2 per barrel on average from March levels. April marked the second consecutive month that the OPEC basket price finished above $22 per barrel, the lower end of OPEC's target range for the OPEC basket price. Although use of this target range had been suspended after the price drop following September 11, OPEC is beginning to focus again on an appropriate range for their basket price. The U.S. benchmark West Texas Intermediate (WTI) crude oil price averaged over $26 per barrel in April, and closed over $27 per barrel by month's-end (Figure 1).

Oil prices fell in mid-April during the political crisis in Venezuela, when the possibility arose that President Chavez's policies in support of OPEC might be reversed. However, when President Chavez remained in power, prices rose again when it became clear that Venezuela would continue to support OPEC's production policies. It is expected that OPEC's production cuts and other market fundamentals will continue to push world oil prices up. As inventory draws in the OECD countries validate that the January 2002 quota cuts are reducing supplies, West Texas Intermediate prices could rise to almost $30 per barrel in 2003 unless the OPEC countries increase their production significantly in the latter half of this year. This forecast assumes that some increased production will occur and that prices will remain below $30 per barrel for WTI.

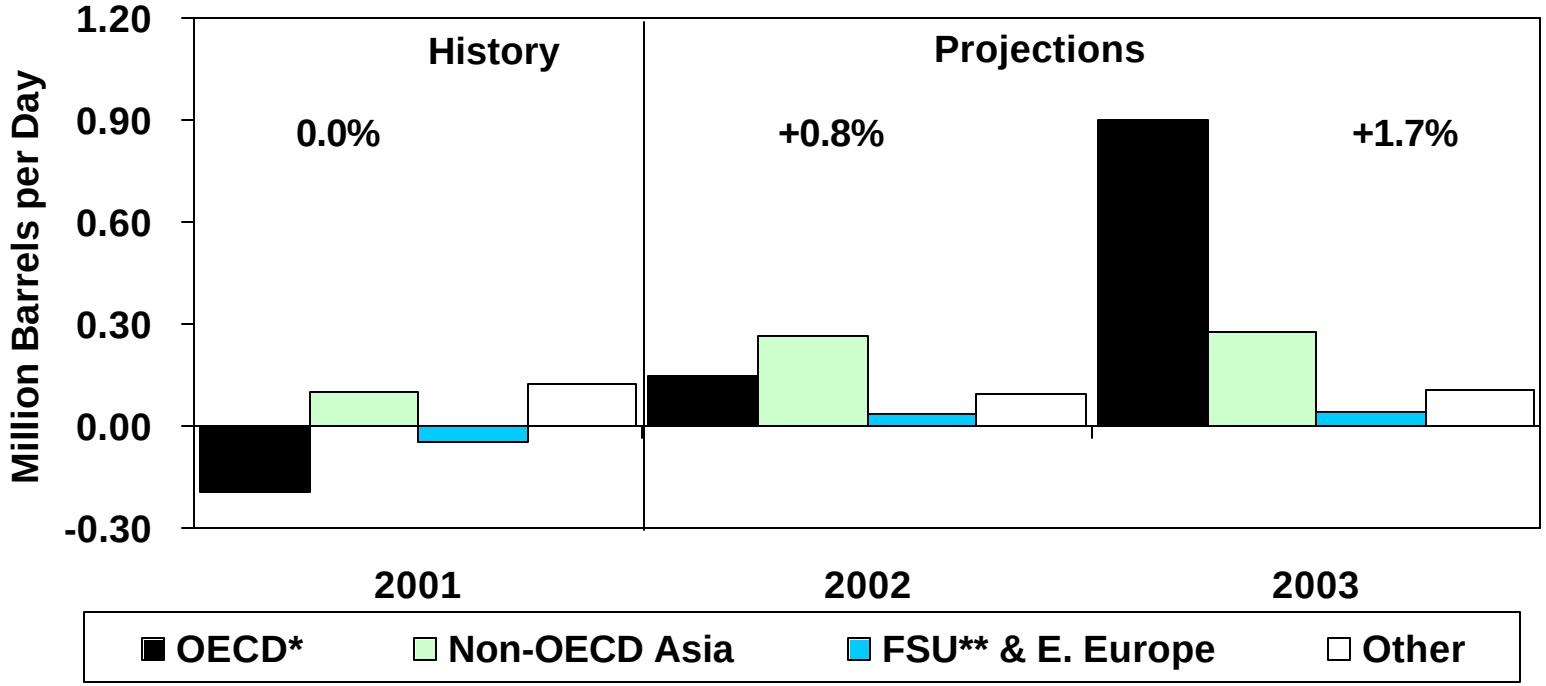
International Oil Supply and Demand. The OPEC 10 succeeded in reducing their oil production by an estimated 900,000 barrels per day during January-April 2002. Efforts to improve compliance leveled off in March and April, and more OPEC production is expected in the coming months. OPEC quotas have been set at very low levels, the result of repeated OPEC 10 quota cuts totaling over 5 million barrels per day over the past year. As a result, world oil markets could tighten and oil prices rise despite little or no demand growth and large increases in non-OPEC production. OPEC ministers have recently begun to echo this sentiment. Saudi Arabian Oil Minister Ali Naimi suggested that while the level of oil stocks is "fairly good" now, "that does not mean a month or two months from now it's going to be good, and we will probably have to take action to increase the supply side."

World oil demand growth is estimated at just over 500,000 barrels per day (0.8 percent) in 2002 (Figure 3). With the expected recovery of the economy in 2003, particularly in the United States, where GDP growth is projected to reach almost 4 percent annually, oil demand could increase by 1.3 million barrels per day (1.7 percent) next year, with more than half of this coming from the U.S.

The slump in global oil demand led to a rise in inventories in 2001, and commercial oil stocks in the OECD

Figure 3. World Oil Demand Growth

(Change from Year Ago)



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

** FSU = Former Soviet Union

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

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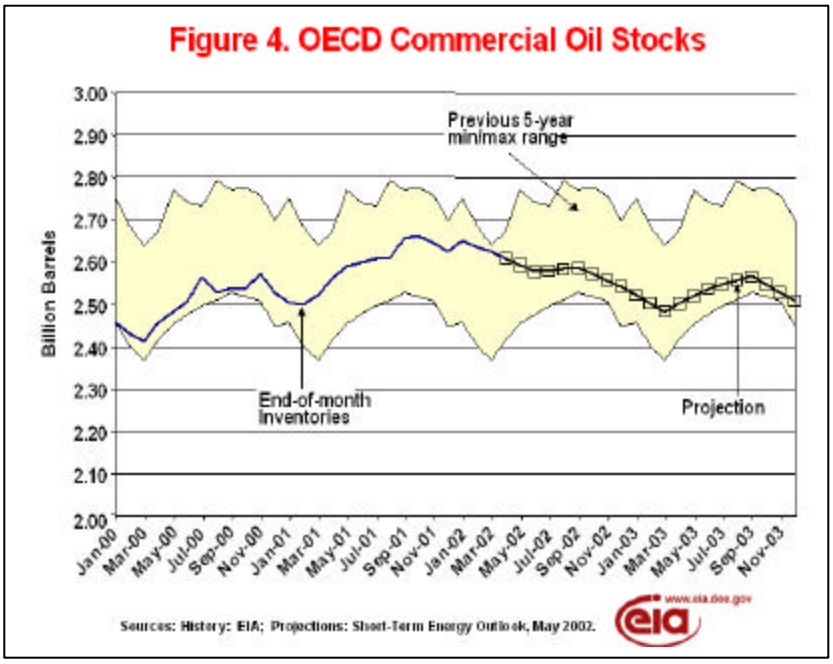
countries continued to rise in early 2002, driven in part by the unseasonably warm winter weather in the United States. Oil stocks in the OECD countries ended over 100 million barrels higher in January than during the same period a year ago. However, the additional OPEC 10 production cuts that began in January and the loss of Iraqi exports that began in April should become increasingly visible in the form of lower inventories, building support for rising world oil prices (Figure 4).

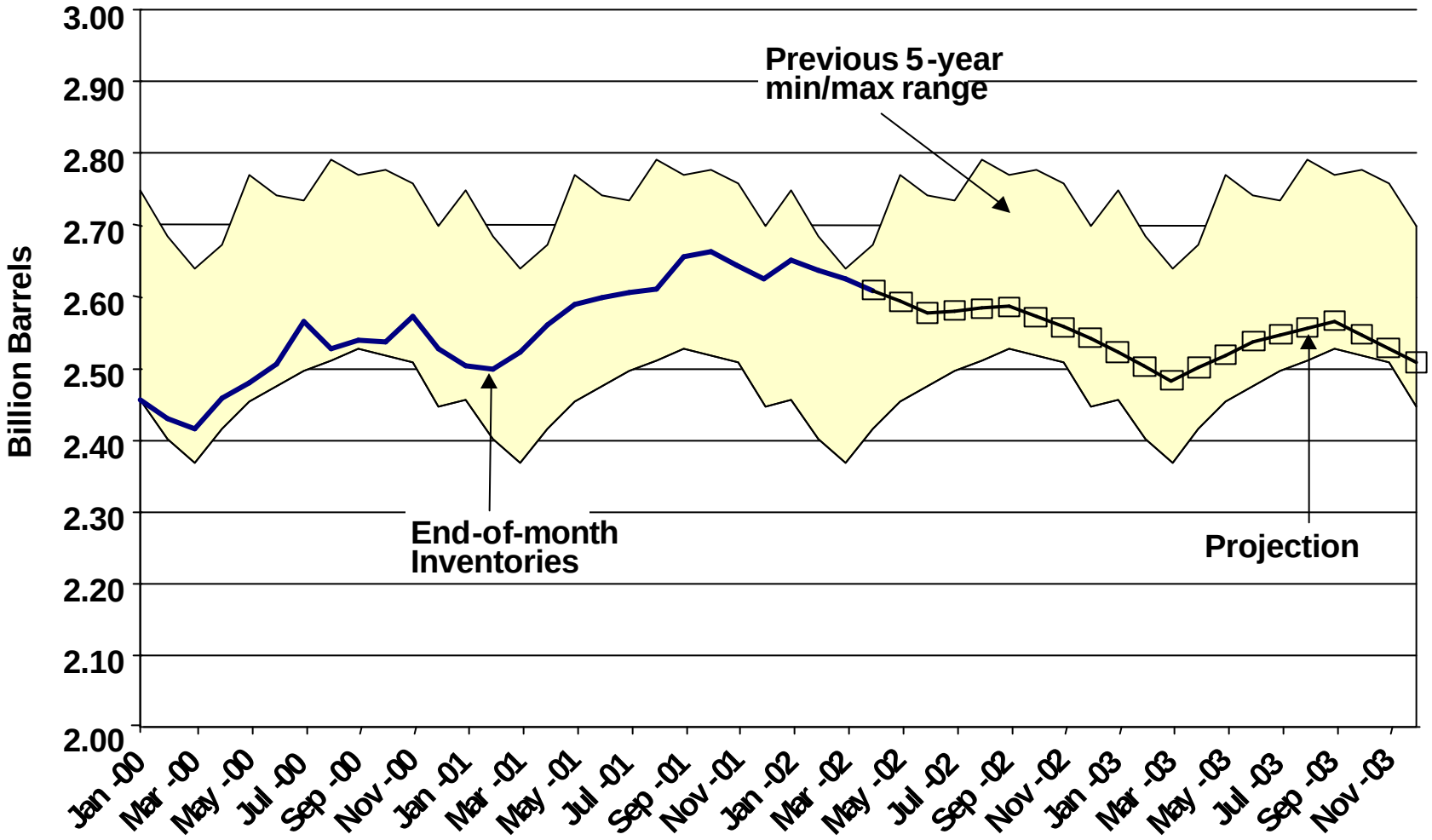


U. S. Energy Prices

Motor Gasoline: U.S. average pump prices have stabilized at about $1.40 per gallon (regular) over the last several weeks in April, after rising a record-breaking 23 cents per gallon from the first week to the last week of March. It is likely that pump prices will soon rise after this current pause, since crude oil prices and demand for gasoline are both expected to increase over the next several months. The seasonal changeover to reformulated gasoline also added to the higher prices. For April 2001, the price was $1.70 per gallon, a record high in current dollar-terms (Figure 5). Yet, gasoline stocks were lower a year ago than they are now. Further complicating the situation last spring were numerous occurrences of major supply problems, such as refinery and pipeline shutdowns. This spring, while the gasoline supply situation is not in such dire straits, there are some supply problems, such as the refinery outages of Hovesna in St Croix, U.S. Virgin Islands, Citgo in Lemont, Illinois, and BP in Texas City, Texas, that may whittle away at gasoline inventories as demand rises. Some of the refinery outages are expected to be resolved soon, such as the planned shutdown at St. Croix (from March 15 through May 15) or the unplanned outage in Texas City (down since August 14, 2001), which is in the process of being restarted. In any case, these and other current and planned outages are not expected to impact the price of gasoline to the degree that the supply disruptions did last year. Assuming no further major supply disruptions and assuming our base case of rising crude oil prices, gasoline pump prices could gain an additional 8-10 cents per gallon by June from the April average price of $1.40 per gallon. For this forecast, the U.S. average retail price of gasoline is projected to peak at close to $1.50 per gallon within the next month or two. Of course, it is possible that even higher prices may occur, particularly at the regional level, if unanticipated refinery and/or pipeline problems arise or if there is an unexpected surge in crude oil prices. On the other hand, if crude oil prices take a downturn, then gasoline prices would recede. In 2003, retail gasoline prices are projected to gain another 10 cents per gallon on an annual basis, with most of the increase due to assumptions of rising crude oil prices. Also in 2003, refiner margins are projected to increase as a strengthening economy lifts gasoline demand (Figure 6). Currently, gasoline inventories are within the "normal" range (Figure 7). Last year at this time they were below normal, and approximately 10 million barrels below the current level.

Distillate Fuel Oil (Diesel and Heating Oil): Diesel fuel oil prices have been fairly stable since the beginning of April. From February to March, however, the average monthly retail price has increased by about 8 cents per gallon, primarily in response to higher crude costs. At the end of April, distillate fuel oil inventories were about 120 million barrels, a level approaching the upper range of the 5-year average (Figure 8). Unless crude oil prices change drastically and/or a major supply disruption occurs, distillate prices should remain fairly flat throughout the summer until the heating season begins. Still, certain

Figure 4. OECD Commercial Oil Stocks



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

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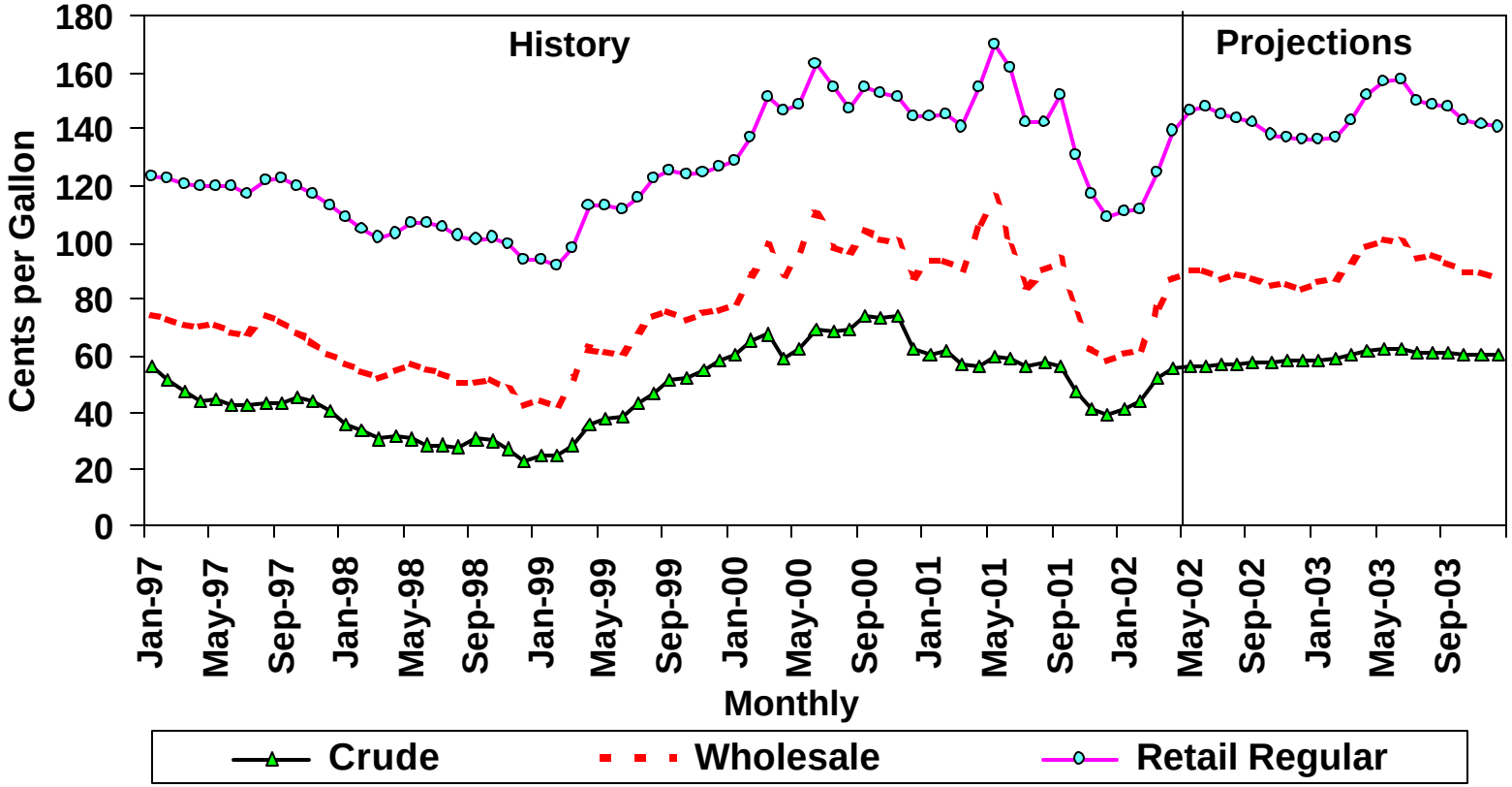
Figure 5. Motor Gasoline Prices



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

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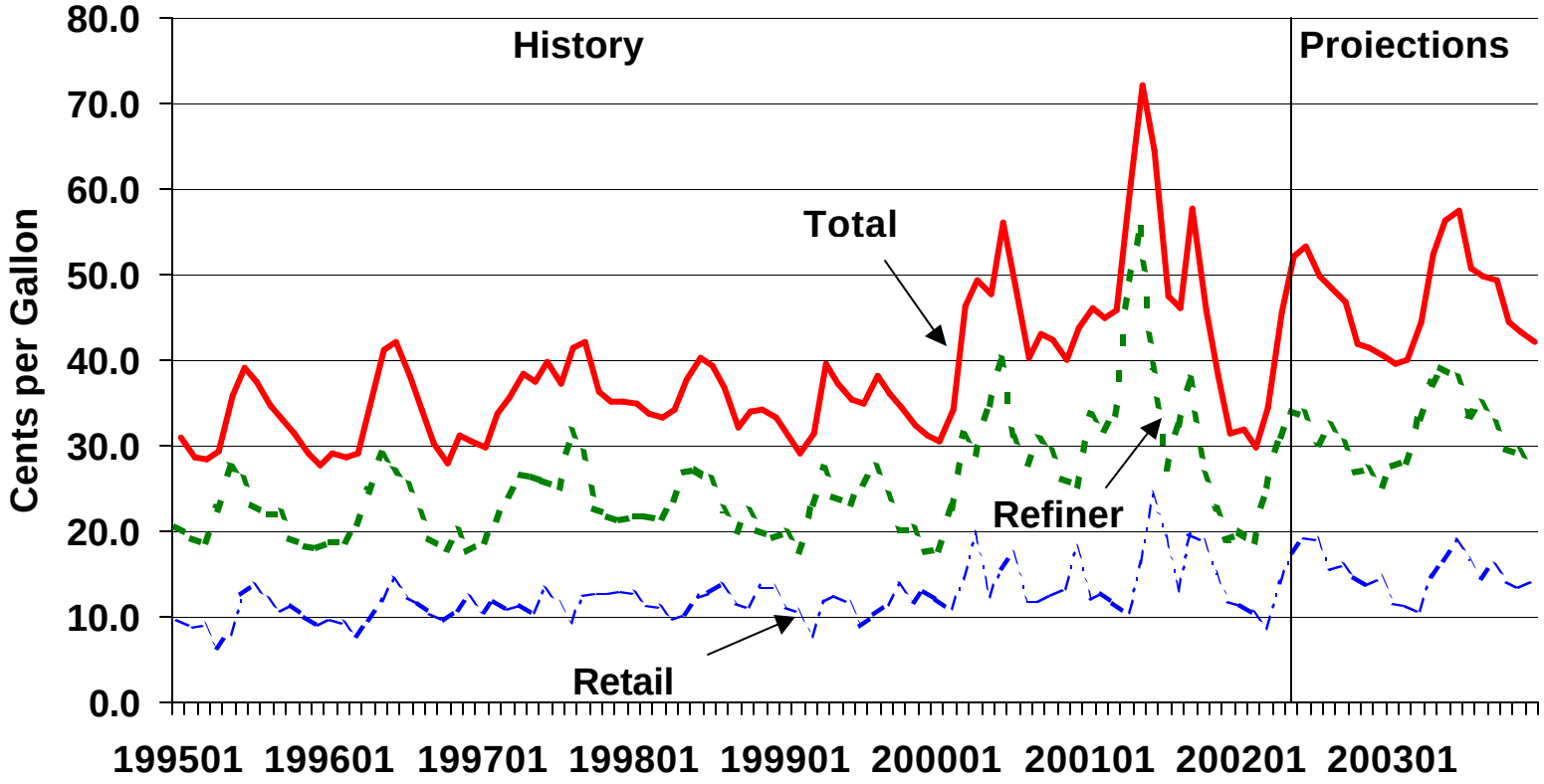
Figure 6. Motor Gasoline Spreads



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

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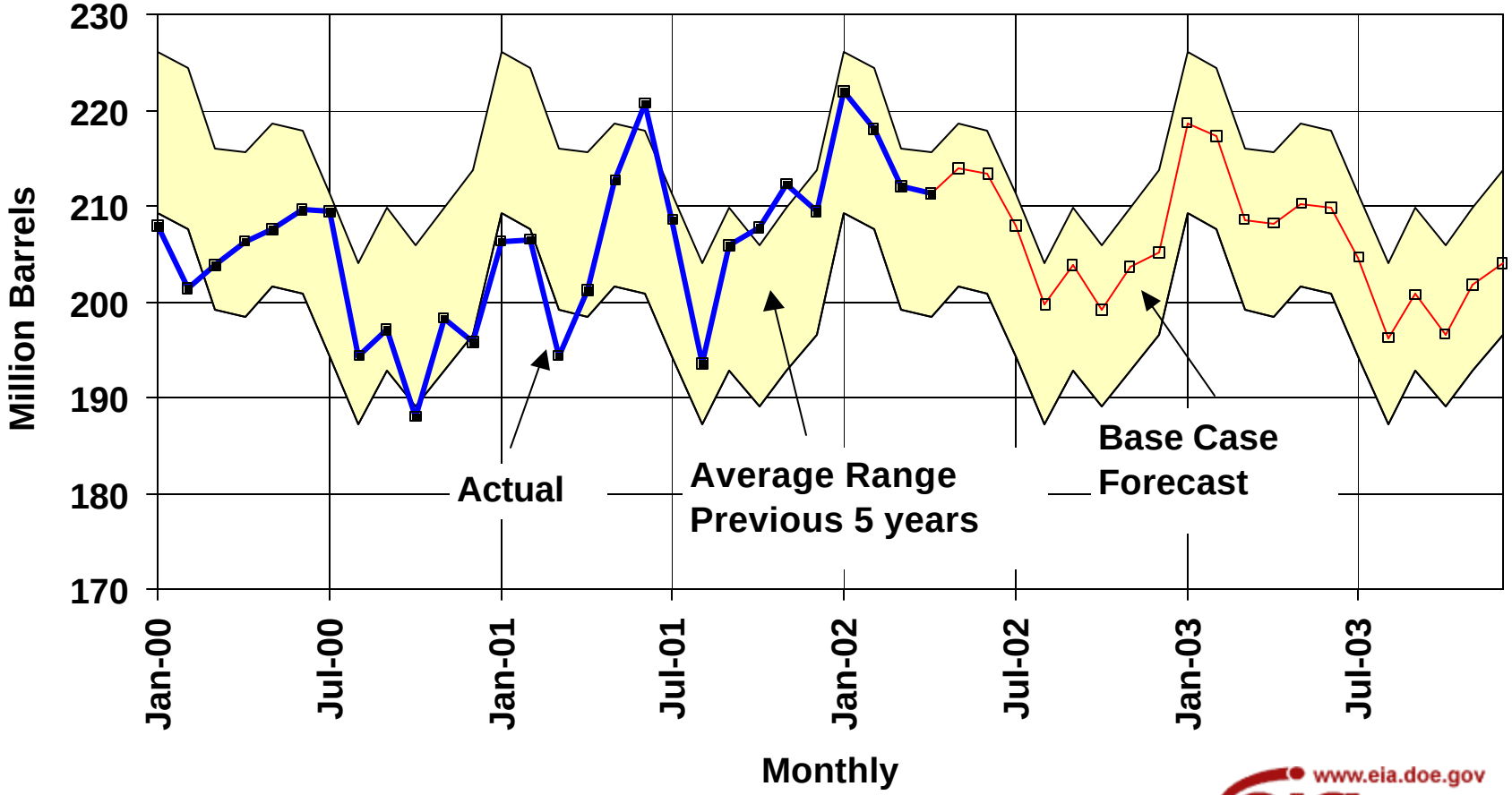
Figure 7. U.S. Gasoline Inventories



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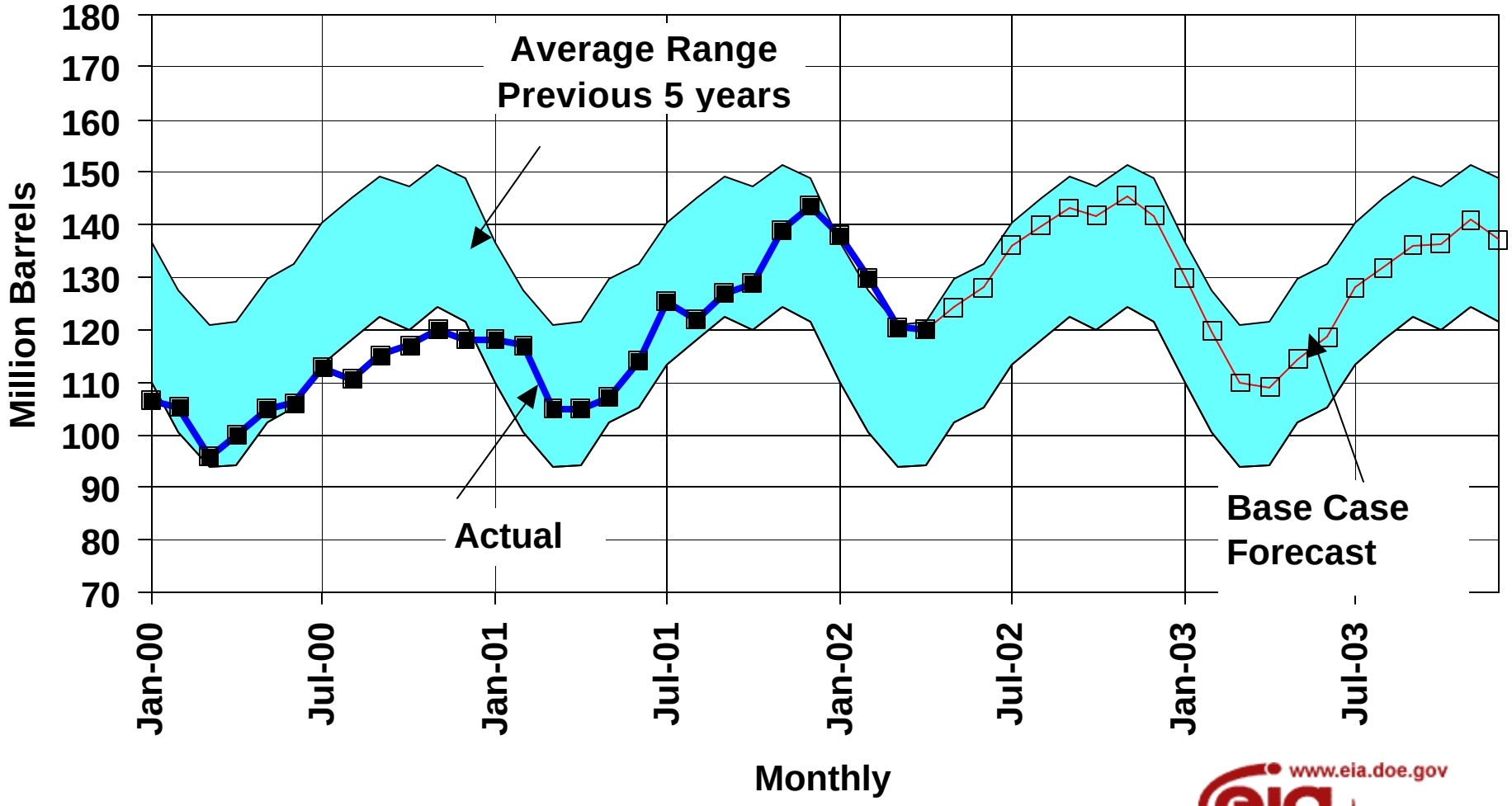
Sources: History: EIA; Projections: Short-Term Energy Outlook, May 2002.

Figure 8. Distillate Fuel Inventories



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

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regions, particularly PADD V, which includes California, could possibly see sharp increases in prices this spring, since the California diesel market is generally tighter than in the rest of the country. A stronger economy combined with the assumption of higher crude oil prices in 2003 should result in price increases of 10-11 cents per gallon for retail heating oil and diesel fuel next year (Figure 9).

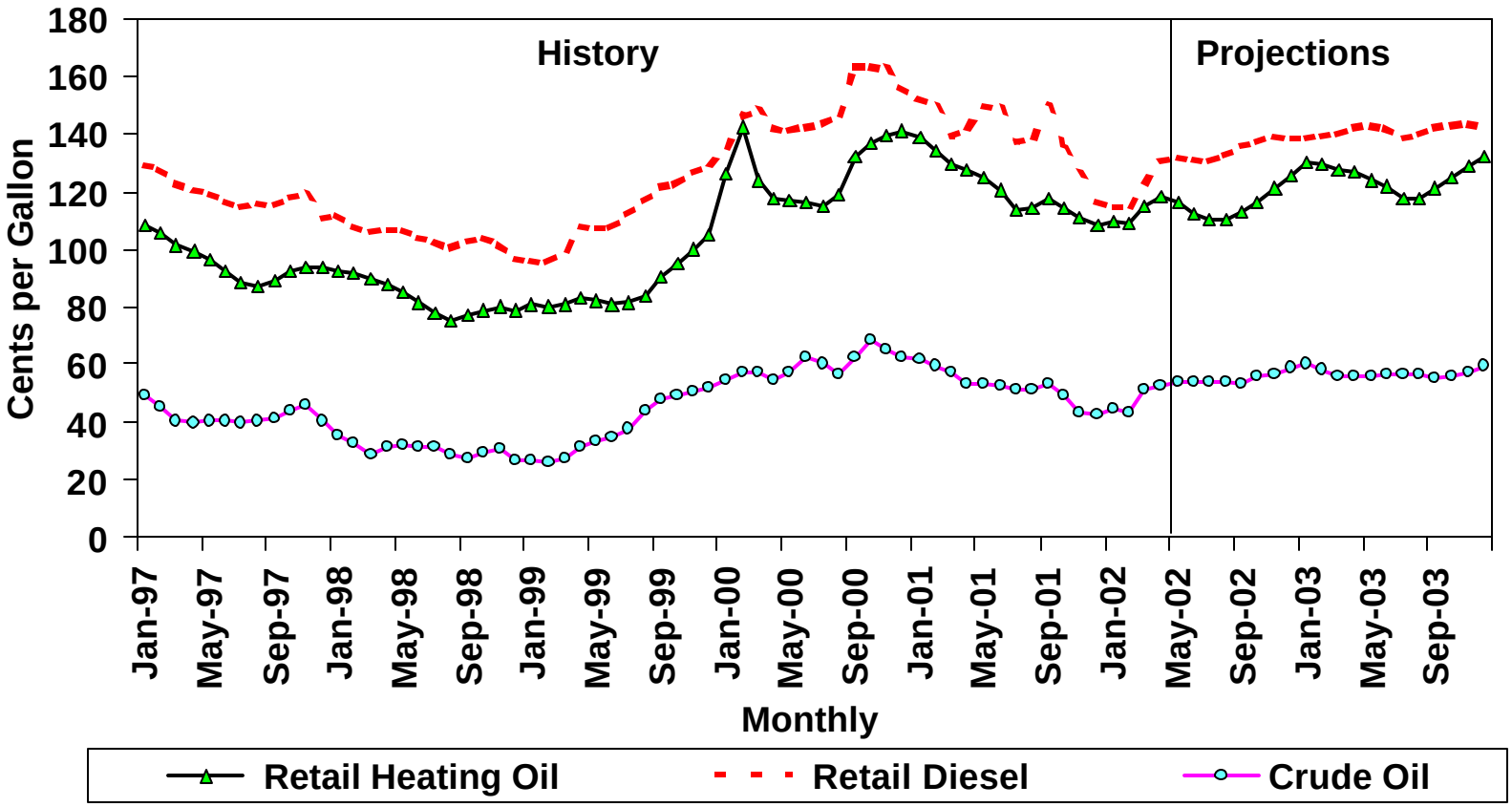
Natural Gas: Spot wellhead prices have been recently averaging over $3.00 per thousand cubic feet (mcf). Last year at this time, they were heading down from record highs, but still averaged over $4.00 per thousand cubic feet. It is unusual to see spot gas prices rising (by more than $1.50 per mcf at the Henry Hub since early February) as the heating season has ended and as the total demand for natural gas diminishes with the change in seasons. Furthermore, we are currently experiencing very high underground storage levels of gas, the result of record-breaking warm weather this past winter which greatly reduced the demand for gas as a heating fuel. By the end of April, the storage level for working gas was more than 80 percent above that of the previous year and well (47 percent) above the previous 5-year average. The "historical" market fundamentals dictate that soon natural gas wellhead prices should start to decline sometime in the spring or early summer. However, spot prices have been well over $3.00 per thousand cubic feet since March (Figure 10). This phenomenon may be explained in part by the unusual weather patterns in March and April. March and much of April were colder than normal. Conversely, also in April, an unusual and intense heat wave occurred, resulting in a surge in electricity demand for cooling, which in turn led to increased demand for natural gas at electric utilities. Another important factor that may be lifting natural gas prices is the rising price of crude oil. A general skittishness in the market ensuing from the current state of affairs in the (oil exporting) Middle East and its possible effect on world crude oil prices may also be driving the natural gas market. Furthermore, not only has the current economic picture been improving, but also the economic outlook for the near future has been revised upward, contributing to a growing demand for gas. Also, the increased capacity and the planned new capacity of gas-burning power plants may be pushing natural gas prices upward. Finally, there has been some concern that natural gas production, as well as drilling and exploration, have recently fallen off, resulting in a less rosy supply outlook for the near term. For this year, assuming normal weather and barring any major supply disruptions, the annual average natural gas wellhead price is projected to be $2.80 per thousand cubic feet compared to over $4.00 last year. In 2003, the combined pressure of the strengthening economy and a higher crude oil price path is expected to push natural gas wellhead prices upward to about $3.10 per thousand cubic feet on an annual average basis.

Electric Utility Fuels: For much of the forecast period, natural gas is projected to be the more price-competitive fuel compared to heavy oil (Figure 11). However, during the peak of the heating seasons in both 2002Q4-2003Q1 and the fourth quarter of 2003, we project that the cost of gas will be more expensive than the cost of heavy oil on a cost per Btu basis, as heating demand from winter weather, along with the assumption of continued economic gains, advances the gas price above the price of the heavy oil. Coal prices are projected to continue their decline through 2003 as mining productivity continues to improve. However, the rising gas prices projected through 2003 may slow the decrease in the price of coal to electric utilities.

U.S. Oil Demand

In the current year, total petroleum products demand is projected to average 19.62 million barrels per day, virtually unchanged from that of the previous year (Figure 12). Motor gasoline demand, the single largest product category, is, however, projected to climb 1.7 percent. (Projections for the summer season call for a similar, 1.6-percent, demand increase over that of the previous year.) That reflects continuing increases in real disposable income despite the recent downturn in the economy as a whole. Most of the other fuel categories, however, are expected to register declines in demand. Current weakness in industrial activity, in fact, accounts for part of the projected 2.6-percent contraction in total distillate demand for this year. Contributing to that decline was the unusually warm weather, which depressed heating oil consumption

Figure 9. Distillate Fuel Prices



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

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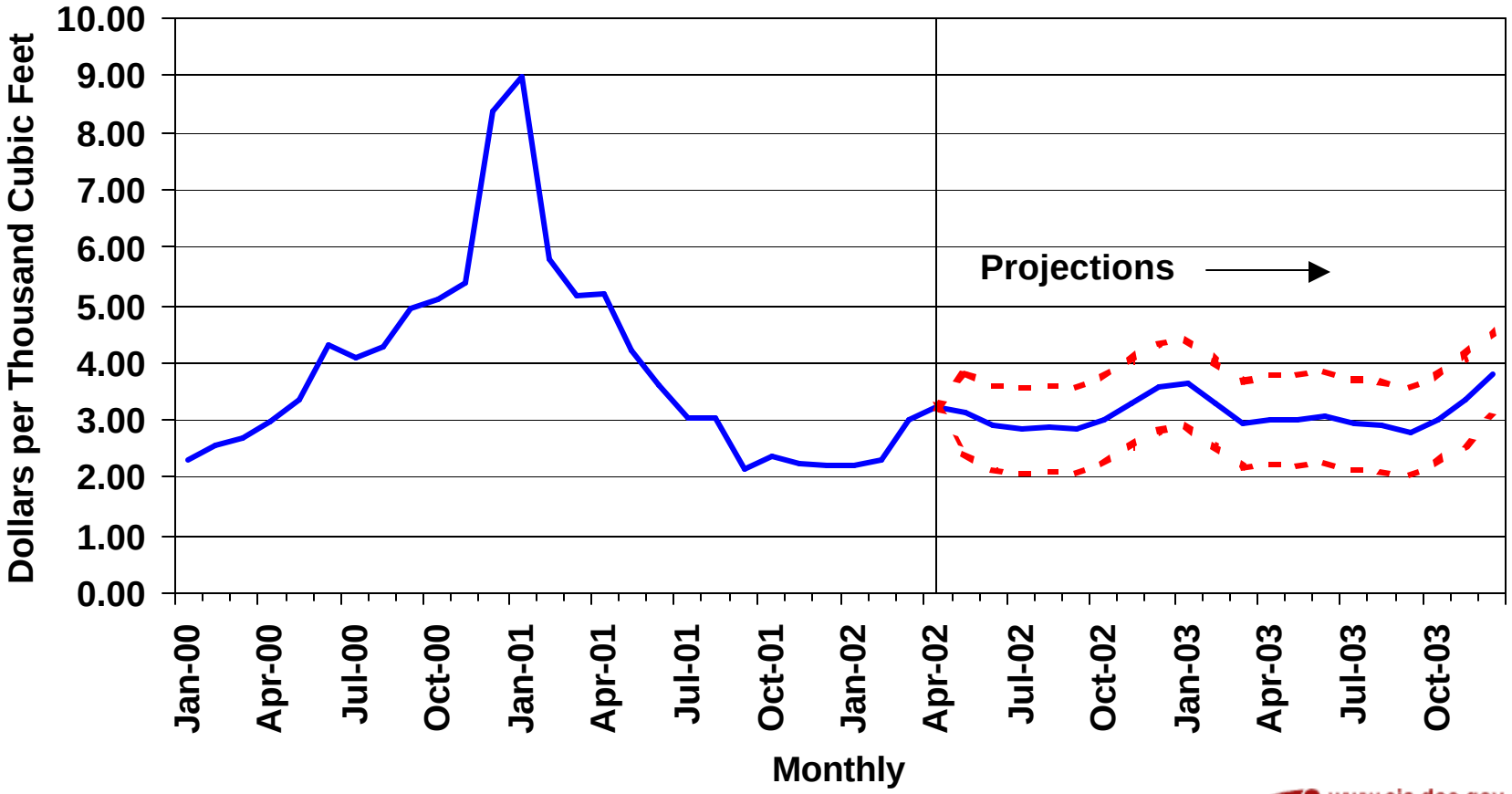
Figure 10. Natural Gas Spot Prices
(Base Case and 95% Confidence Interval)



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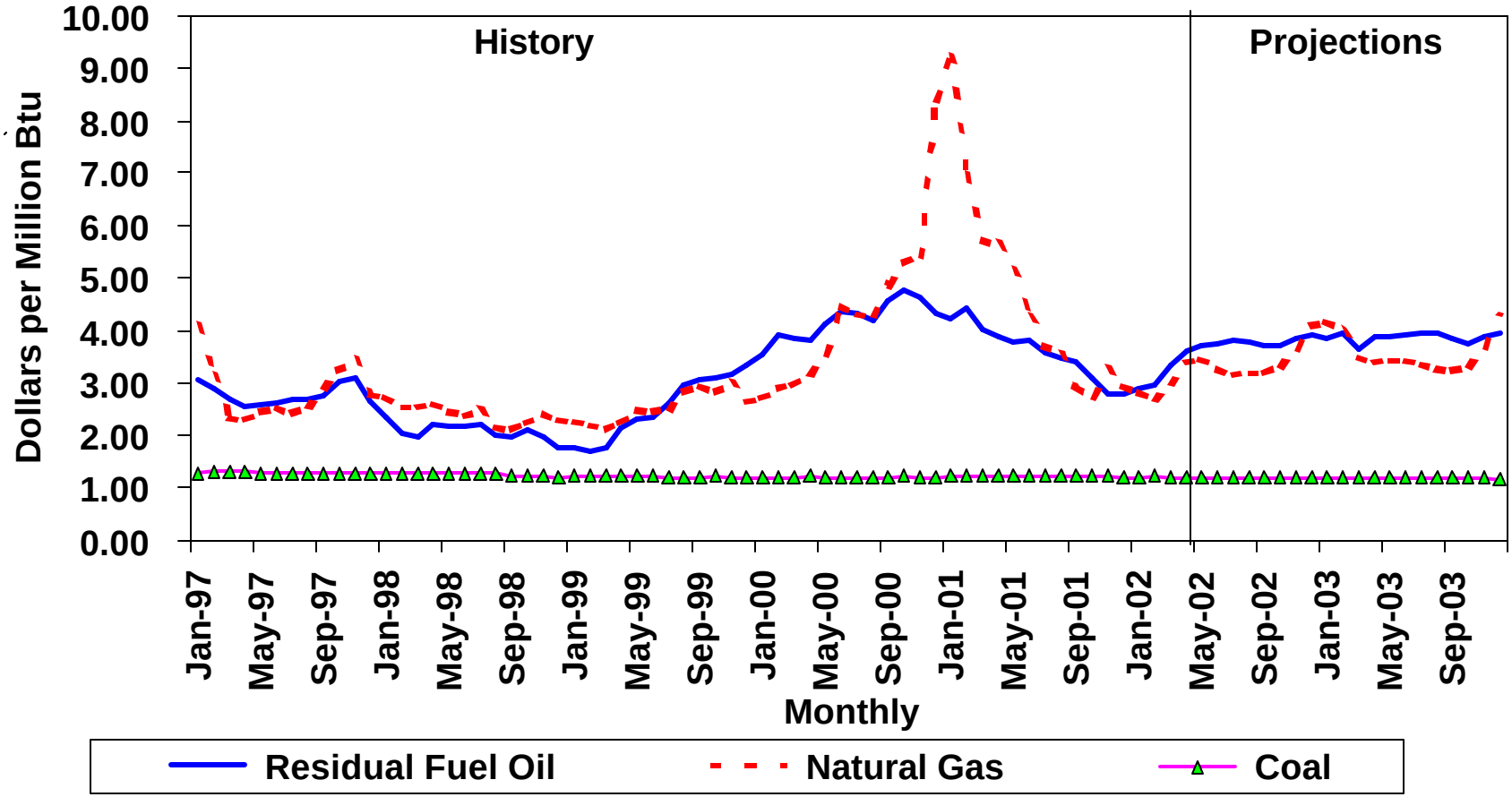
Sources: History: Natural Gas Week; Projections: Short-Term Energy Outlook, May 2002.

Figure 11. Fossil Fuel Prices to Electric Utilities



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

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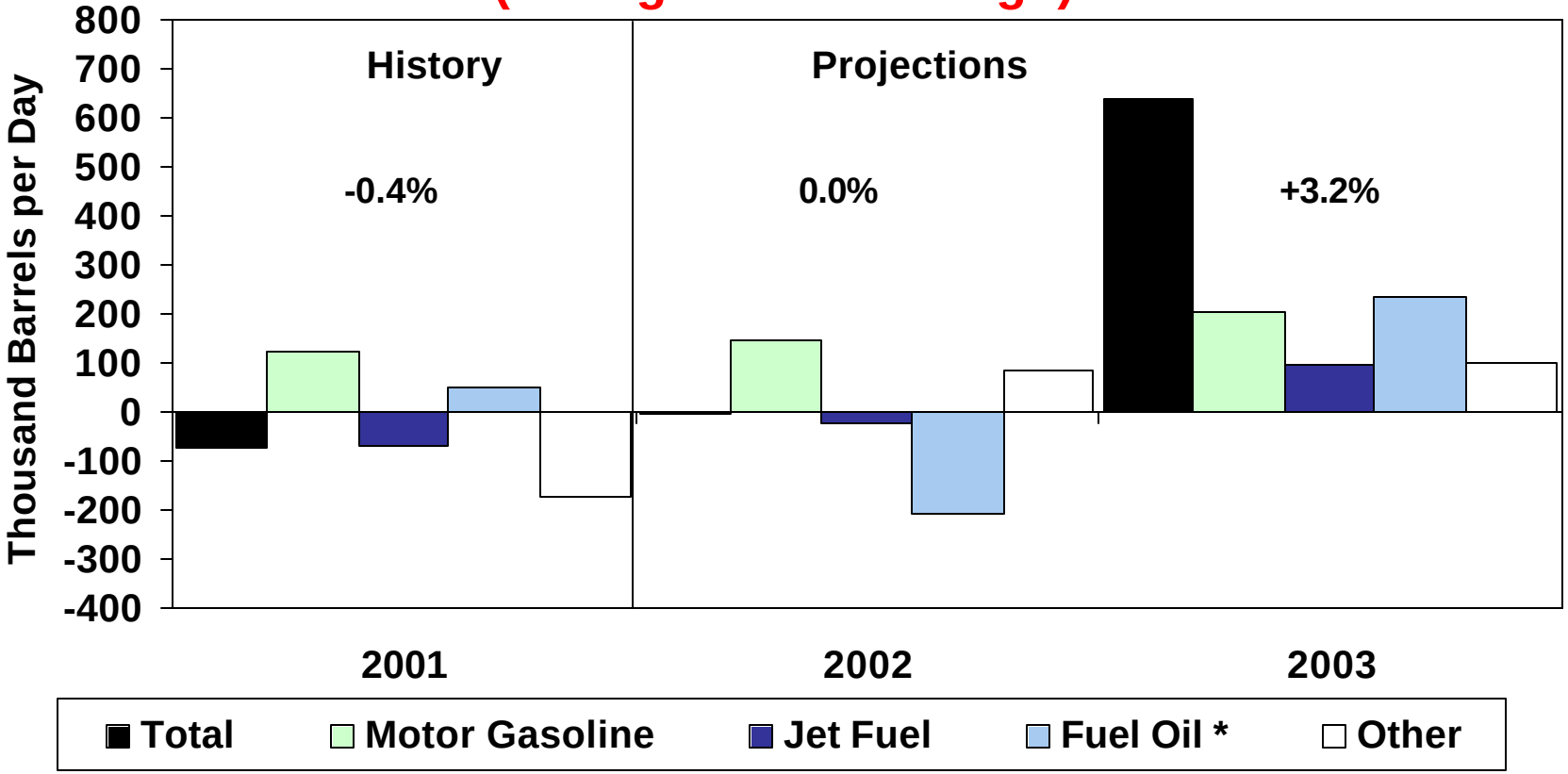
Figure 12. Petroleum Products Demand Growth
(Change from Year Ago)



* Sum of distillate and residual fuel.

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

during the first quarter. Although air travel has begun to recover slowly from its recent lows resulting from the events of last September, total jet-fuel demand is projected to register an overall 1.6-percent decline for this year. The first half of this year is projected to witness a 7.8-percent demand decline. Some airlines, however, have begun to resume previously curtailed flights. As a result, the second half of this year is expected to register a 5-percent increase in jet-fuel demand, albeit from the low levels of the previous year. Following a decline of almost 6 percent in 2001, residual fuel oil is expected to decline a further 13 percent this year to a record low of less than 750,000 barrels per day. But that contraction is concentrated in the first half of this year as a result of warm weather and continued weakness in industrial activity. The assumptions of "normal" weather in the fourth quarter and a recovery in industrial activity are expected to result in a slight increase in residual fuel oil demand.

Next year we expect to see a brisk recovery in petroleum demand, based on accelerations in real disposable income growth, continued recovery in industrial output, and assumptions of normal weather. Total demand in 2003 is expected to expand by 640,000 barrels per day, or 3.2 percent, to 20.26 million barrels per day. That would mark the first year in which total demand exceeded 20 million barrels per day. Motor gasoline consumption is projected to increase by an accelerated 2.3 percent, buoyed by brisk growth in personal disposable income. Reversing last year's decline, distillate fuel oil demand is projected to climb 4.7 percent, with substantial increases in the transportation, space-heating, and industrial sectors. Jet-fuel demand, reflecting continued expansion of the number of flights, is projected to climb 5.9 percent to levels reached in 2000. Both utilization and capacity levels are expected to surpass those attained in 2000. In response to industrial recovery, a return to "normal" weather patterns, and higher average natural gas prices, residual fuel oil demand is expected to increase by 8.2 percent; but continued firmness in oil prices are expected to prevent that fuel from recovering much of the share of the price-sensitive power-generation and industrial sectors lost during the previous two years.

U.S. Oil Supply

Average domestic oil production is expected to increase by 50 thousand barrels per day in 2002, or 0.9 percent, to a level of 5.89 million barrels of oil per day. For 2003, a 0.6 percent increase is expected for a production rate of 5.93 million barrels of oil per day average for the year (Figure 13).

Lower-48 States oil production is expected to increase by 21 thousand barrels per day to a rate of 4.91 million barrels per day in 2002, followed by a decrease of 20 thousand barrels per day in 2003. Shell's Brutus platform is expected to peak its oil production at 100 thousand barrels per day in 2002. Oil production from the Mars, Troika, Ursa, Dianna-Hoover and Brutus Federal Offshore fields is expected to account for about 9.2 percent of the lower-48 oil production by the 4th quarter of 2003.

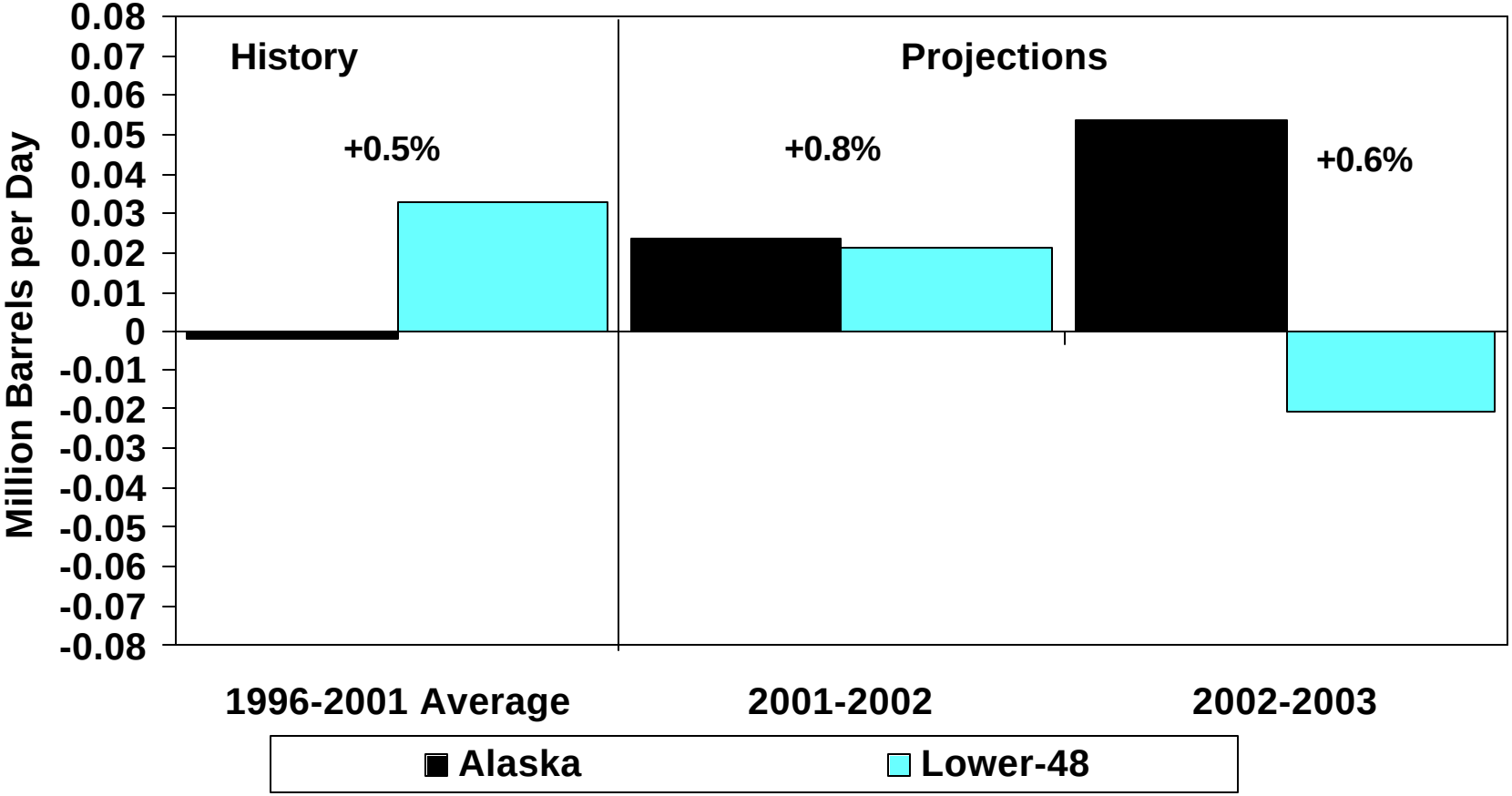
Alaska is expected to account for 17.6 percent of the total U.S. oil production in 2003. Alaska oil production is expected to increase by 3.0 percent in 2002 and by 5.4 percent in 2003. The increase in 2003 will be the result of field facilities expansion in the new satellite Colville River (Alpine) field. Another satellite field, North Star, came on in November 2001 at a rate of over 50 thousand barrels per day. Production from the Kuparuk River field plus like production from the West Sak, Tabasco, Tarn and Meltwater fields is expected to stay at an average of 220 thousand barrels per day in the 2002 and 2003 forecast periods.

Natural Gas Demand and Supply

Domestic dry natural gas production is projected to fall by almost 2 percent in 2002 compared to the 2001 level. Weak demand and falling prices have reduced production and resource development incentive in natural gas since last summer. Still, current supplies, including natural gas in storage, appear to be at very comfortable levels.

Figure 13. U.S. Crude Oil Production Growth

(Change from Year Ago)



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

Based on EIA survey data, natural gas storage levels are estimated to have ended the heating season at 1,520 bcf, more than double the 742 bcf seen at the same time last year, and at an estimated 1,703 bcf as of the end of April, 47 percent above the 5-year average. Storage is expected to remain above average levels right up to the beginning of the next heating season (Figure 14). In April 2002, spot natural gas prices averaged about $3.24 per thousand cubic feet (mcf) compared with an average of $5.20 in April of 2001.

Overall natural gas drilling activity has fallen along with production. Baker Hughes reported average active rigs drilling for natural gas at 640 on May 3, 34 percent below the year-ago level and 40 percent below the peak seen in the current drilling cycle, which occurred during the week of July 13, 2001. However, this latest posting represents the fourth straight weekly increase since the recent low of 591 posted for the week of April 5, 2002. Aggregate lease revenues from domestic oil and gas production are expected to move up this year and settle at about $300 million per month in 2003, which would be approximately a 50 percent increase over the rates seen at the end of 2001 (Figure 15). Inasmuch as these revenues are a strong determinant of industry cash flow, which in turn is a powerful driver of drilling activity levels, an upward trend in gas drilling levels is anticipated for this year and into 2003 (Figure 16). Thus, natural gas drilling rates probably are at (or near) the bottom of the current drilling cycle.

In 2002, natural gas demand is projected to increase by 2.8 percent over 2001 levels, and increase by 4.2 percent in 2003. Rising demand for natural gas in the industrial sector and electricity generating sectors is the primary reason. By 2003, all sectors are expected to show increased demand for natural gas (Figure 17).

Summer natural gas demand is projected to be 4.4 percent above last summer's level due mainly to the fall in natural gas prices since a year ago and the slowly reviving economy.

Electricity Demand and Supply

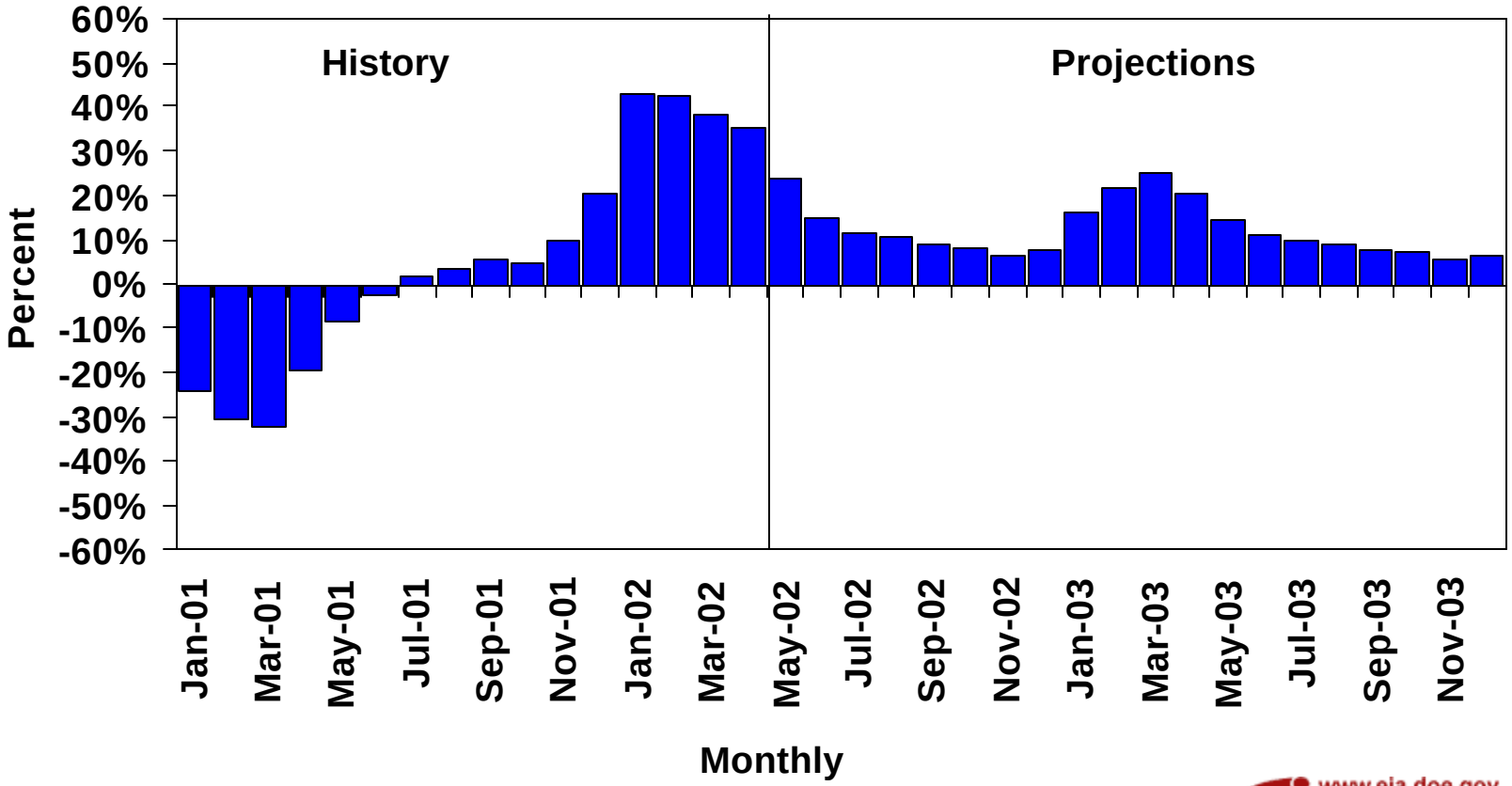
This summer, total electricity demand is expected to be level with last summer's demand. Cooling degree-days for the cooling season (April through September) are assumed to be somewhat lower than last year. Also, although the economy is assumed to be growing through the summer months, year-over-year increases in industrial output are not expected to show up until the third quarter of this year or later.

Total annual electricity demand growth (retail sales plus industrial generation for own use and other direct sales) is estimated to have been a negative 0.6 percent in 2001. For 2002, demand is expected to be flat but it is expected to begin to revive slightly by the end of 2002, and to grow by 2.9 percent in 2003 (Figure 18) because the economy is assumed to gradually revive.

In 2001, total hydropower generation was down to lows not seen since 1966. In 2002, total hydro generation is expected to rise by 22 percent if normal precipitation materializes in the Pacific Northwest, the main region affected. Total oil-fired generation is projected to be down considerably, by 22 percent from last year due to higher relative prices, while total gas-fired generation is projected to be about 1.6 percent above last year.

After a period of heightened concern for the availability of nuclear generation this summer, the prospect for normal operations appears likely. Upon discovery of corrosion in a major component in a nuclear plant in Ohio, the Nuclear Regulator Commission ordered the submission of safety information on 68 other units, implying the possible need for shutdowns for inspections. It now appears the problem is confined to one unit and the cause is being investigated. The temporary loss of this capacity is offset by increases in capacity at several reactors due to NRC-approved upgrades ranging from 2 to 20 percent and totaling several hundred megawatts in each year of the projection. Nuclear generation is expected to be up by about 0.6-0.7 percent in 2002 and 2003.

Figure 14. Working Gas in Storage
(Difference from Previous 5-Year Average)



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

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

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

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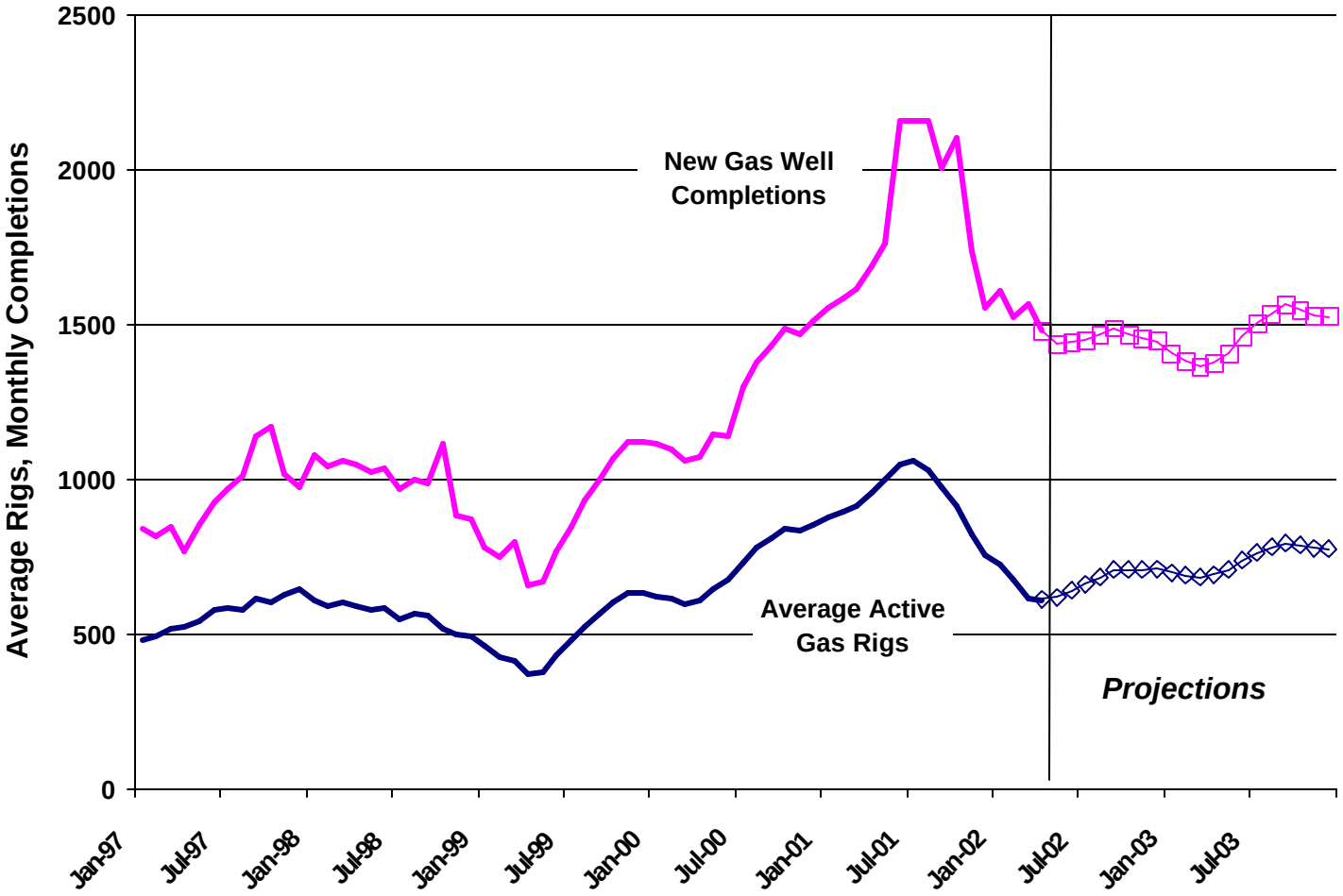
Figure 16. U.S. Natural Gas-Directed Drilling Activity



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

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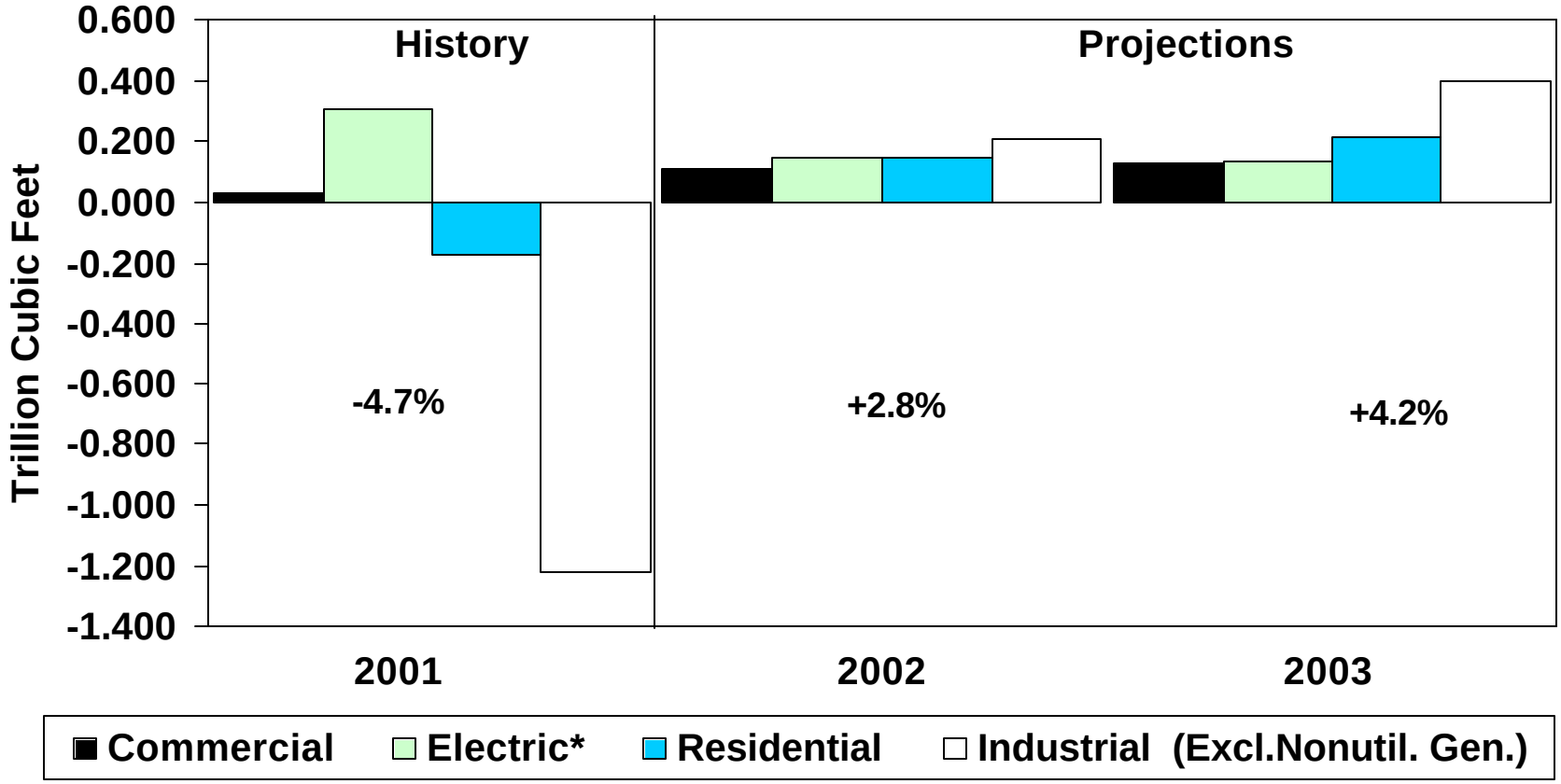
Figure 17. Natural Gas Demand Growth by Sector

(Change from Year Ago)



* Includes gas to electric utilities and nonutility generators.

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

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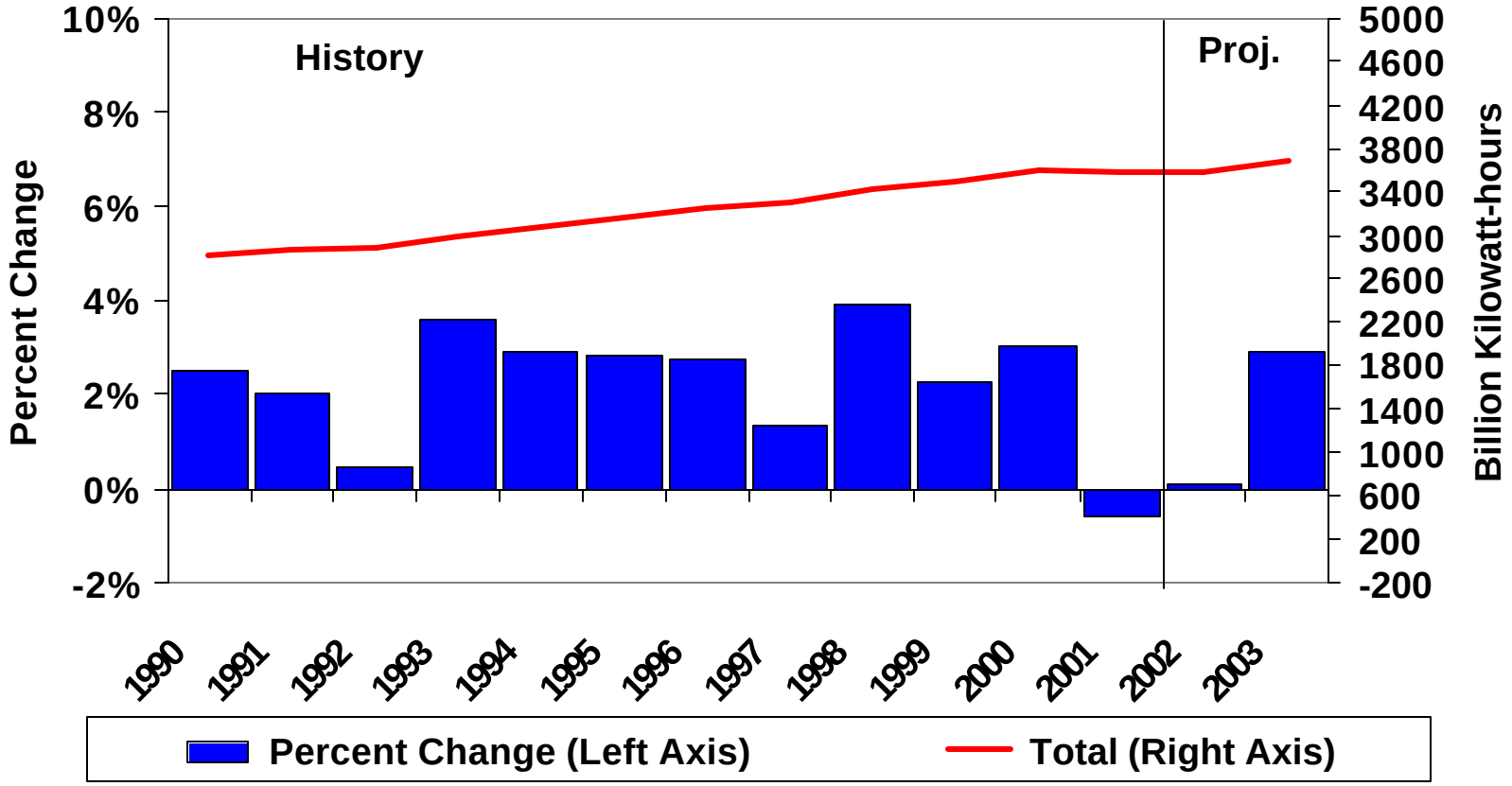
Figure 18. Total Electricity Demand Growth Patterns



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

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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**	*9334*	*9528*	*9883*	**1.2**	*2.1*	*3.7*
Imported Crude Oil Price [a]							
(nominal dollars per barrel)	**27.72**	*22.03*	*22.49*	*25.18*	**-20.5**	*2.1*	*12.0*
Petroleum Supply (million barrels per day)							
Crude Oil Production [b]	**5.82**	*5.85*	*5.90*	*5.93*	**0.5**	*0.9*	*0.5*
Total Petroleum Net Imports							
(including SPR)	**10.42**	*10.87*	*10.41*	*11.00*	**4.3**	*-4.2*	*5.7*
Energy Demand							
World Petroleum							
(million barrels per day)	**76.0**	*76.0*	*76.6*	*77.9*	**0.0**	*0.8*	*1.7*
Petroleum							
(million barrels per day)	**19.70**	*19.63*	*19.62*	*20.26*	**-0.4**	*-0.1*	*3.3*
Natural Gas							
(trillion cubic feet)	**22.54**	*21.47*	*22.07*	*23.00*	**-4.7**	*2.8*	*4.2*
Coal [c]							
(million short tons)	**1081**	*1063*	*1099*	*1120*	**-1.7**	*3.4*	*1.9*
Electricity (billion kilowatthours)							
Retail Sales [d]	**3421**	*3402*	*3417*	*3510*	**-0.6**	*0.4*	*2.7*
Nonutility Use/Sales [e]	**185**	*182*	*169*	*182*	**-1.6**	*-7.1*	*7.7*
Total	**3606**	*3584*	*3586*	*3691*	**-0.6**	*0.1*	*2.9*
Total Energy Demand [f]							
(quadrillion Btu)	**99.6**	*97.4*	*99.2*	*102.5*	**-2.2**	*1.8*	*3.3*
Total Energy Demand per Dollar of GDP							
(thousand Btu per 1996 Dollar)	**10.80**	*10.43*	*10.41*	*10.37*	**-3.4**	*-0.2*	*-0.4*
Renewable Energy as Percent of Total [g]	**7.0**	*6.7*	*7.1*	*7.5*			

[a]Refers to the refiner acquisition cost (RAC) of imported crude oil.
[b]Includes lease condensate.
[c]Total Demand includes estimated Independent Power Producer (IPP) coal consumption.
[d]Total of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA's Electric Power Monthly and Electric Power Annual. Power marketers' sales for historical periods are reported in EIA's Electric Sales and Revenue, Appendix C. Data for 2000 are estimates.
[e]Defined 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.
[f]The conversion from physical units to Btu is calculated by using a subset of conversion factors used in the calculations performed for gross energy consumption in Energy Information Administration, Monthly Energy Review (MER). Consequently, the historical data may not precisely match those published in the MER or the Annual Energy Review (AER).
[g]Renewable energy includes minor components of non-marketed renewable energy, which is renewable energy that is neither bought nor sold, either directly or indirectly, as inputs to marketed energy. The Energy Information Administration does not estimate or project total consumption of non-marketed renewable energy.
SPR: Strategic Petroleum Reserve.
Notes: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.
Sources: Historical data: Latest data available from Bureau of Economic Analysis and Energy Information Administration; latest data available from EIA databases supporting the following reports: Petroleum Supply Monthly, DOE/EIA-0109; Petroleum Supply Annual, DOE/EIA-0340/2; Natural Gas Monthly, DOE/EIA-0130; Electric Power Monthly, DOE/EIA-0226; and Quarterly Coal Report, DOE/EIA-0121; International Petroleum Monthly DOE/EIA-0520; Weekly Petroleum Status Report, DOE/EIA-0208. Macroeconomic projections are based on DRI-WEFA Forecast CONTROL0402.

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**	**9349**	*9451*	*9501*	*9521*	*9637*	*9747*	*9840*	*9922*	*10023*	*9334*	*9528*	*9883*
Percentage Change from Prior Year	**2.5**	**1.2**	**0.5**	**0.5**	*1.2*	*1.7*	*2.3*	*3.1*	*3.1*	*3.6*	*4.2*	*4.0*	*1.2*	*2.1*	*3.7*
Annualized Percent Change from Prior Quarter	**1.3**	**0.3**	**-1.3**	**1.6**	*4.4*	*2.1*	*0.9*	*4.9*	*4.5*	*3.8*	*3.3*	*4.1*			
GDP Implicit Price Deflator (Index, 1996=1.000)	**1.087**	**1.092**	**1.098**	**1.098**	*1.104*	*1.109*	*1.113*	*1.120*	*1.127*	*1.132*	*1.138*	*1.146*	*1.094*	*1.112*	*1.136*
Percentage Change from Prior Year	**2.3**	**2.2**	**2.4**	**1.9**	*1.6*	*1.6*	*1.4*	*2.0*	*2.1*	*2.0*	*2.2*	*2.3*	*2.2*	*1.6*	*2.2*
Real Disposable Personal Income (billion chained 1996 Dollars - SAAR)	**6679**	**6719**	**6918**	**6774**	*6927*	*6963*	*7001*	*7052*	*7114*	*7176*	*7227*	*7286*	*6772*	*6986*	*7201*
Percentage Change from Prior Year	**3.8**	**3.0**	**5.3**	**2.1**	*3.7*	*3.6*	*1.2*	*4.1*	*2.7*	*3.1*	*3.2*	*3.3*	*3.6*	*3.1*	*3.1*
Manufacturing Production (Index, 1996=1.000)	**1.221**	**1.202**	**1.187**	**1.167**	*1.172*	*1.180*	*1.188*	*1.208*	*1.231*	*1.256*	*1.277*	*1.295*	*1.194*	*1.187*	*1.265*
Percentage Change from Prior Year	**-1.1**	**-4.2**	**-5.5**	**-6.2**	*-4.0*	*-1.9*	*0.1*	*3.5*	*5.1*	*6.4*	*7.5*	*7.2*	*-4.3*	*-0.6*	*6.6*
OECD Economic Growth (percent) [b]													0.9	*1.2*	*1.4*
Weather [c]															
Heating Degree-Days															
U.S.	**2329**	**446**	**85**	**1363**	*2067*	*475*	*86*	*1622*	*2231*	*518*	*86*	*1622*	*4223*	*4249*	*4456*
New England	**3268**	**802**	**122**	**1867**	*2800*	*783*	*167*	*2237*	*3171*	*882*	*167*	*2237*	*6059*	*5987*	*6457*
Middle Atlantic	**2950**	**627**	**102**	**1618**	*2476*	*625*	*105*	*2002*	*2888*	*699*	*105*	*2001*	*5297*	*5208*	*5693*
U.S. Gas-Weighted	**2450**	**470**	**93**	**1438**	*2181*	*512*	*90*	*1714*	*2348*	*555*	*90*	*1713*	*4451*	*4496*	*4706*
Cooling Degree-Days (U.S.)	**26**	**371**	**779**	**80**	*30*	*378*	*782*	*76*	*33*	*347*	*783*	*76*	*1256*	*1265*	*1238*

[a] Macroeconomic projections from DRI/McGraw-Hill model forecasts are seasonally adjusted at annual rates and modified as appropriate to the mid world oil price case.

[b] 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.

[c] Population-weighted degree days. A degree day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 1990 population.

SAAR: Seasonally-adjusted annualized rate.

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

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, Statistical Release G.17(419). Projections of OECD growth are based on DRI-WEFA, "World Economic Outlook," Volume 1. Macroeconomic projections are based on DRI-WEFA Forecast CONTROL0402.

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**	**1622**	*1619*	*1619*	*1628*	*1645*	*1676*	*1709*	*1735*	*1767*	*1683*	*1628*	*1721*
Real Exchange Rate (index)	**1.103**	**1.140**	**1.130**	**1.150**	*1.190*	*1.190*	*1.187*	*1.170*	*1.140*	*1.113*	*1.097*	*1.087*	*1.131*	*1.184*	*1.109*
Business Inventory Change (billion chained 1996 dollars-SAAR)	**-15.0**	**-35.6**	**-47.0**	**-44.1**	*-28.4*	*-13.3*	*-1.5*	*3.8*	*11.3*	*13.3*	*12.0*	*11.7*	*-35.4*	*-9.9*	*12.1*
Producer Price Index (index, 1982=1.000)	**1.385**	**1.363**	**1.329**	**1.293**	*1.297*	*1.308*	*1.308*	*1.315*	*1.327*	*1.329*	*1.340*	*1.348*	*1.343*	*1.307*	*1.336*
Consumer Price Index (index, 1982-1984=1.000)	**1.759**	**1.773**	**1.776**	**1.775**	*1.787*	*1.801*	*1.811*	*1.823*	*1.837*	*1.848*	*1.860*	*1.873*	*1.771*	*1.806*	*1.855*
Petroleum Product Price Index (index, 1982=1.000)	**0.892**	**0.968**	**0.875**	**0.675**	*0.659*	*0.795*	*0.790*	*0.828*	*0.871*	*0.897*	*0.855*	*0.873*	*0.853*	*0.768*	*0.874*
Non-Farm Employment (millions)	**132.6**	**132.5**	**132.4**	**131.5**	*131.2*	*131.3*	*131.5*	*132.1*	*132.6*	*133.1*	*133.8*	*134.6*	*132.2*	*131.5*	*133.5*
Commercial Employment (millions)	**93.1**	**93.3**	**93.3**	**92.7**	*92.7*	*92.8*	*93.0*	*93.6*	*94.1*	*94.4*	*95.0*	*95.7*	*93.1*	*93.0*	*94.8*
Total Industrial Production (index, 1996=1.000)	**1.199**	**1.181**	**1.167**	**1.147**	*1.152*	*1.158*	*1.165*	*1.184*	*1.206*	*1.228*	*1.248*	*1.266*	*1.173*	*1.165*	*1.237*
Housing Stock (millions)	**117.5**	**117.8**	**117.7**	**118.4**	*119.1*	*119.4*	*119.8*	*120.1*	*120.5*	*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**	**1.059**	*1.063*	*1.066*	*1.071*	*1.082*	*1.094*	*1.106*	*1.118*	*1.128*	*1.071*	*1.070*	*1.112*
Vehicle Miles Traveled [b] (million miles/day)	**7103**	**7883**	**7877**	**7574**	*7265*	*7978*	*8032*	*7600*	*7400*	*8100*	*8267*	*7827*	*7611*	*7721*	*7901*
Vehicle Fuel Efficiency (index, 1999=1.000)	**0.993**	**0.999**	**0.991**	**1.012**	*0.995*	*0.986*	*1.005*	*0.999*	*0.995*	*0.983*	*1.006*	*1.000*	*0.999*	*0.996*	*0.996*
Real Vehicle Fuel Cost (cents per mile)	**4.10**	**4.33**	**3.96**	**3.31**	*3.27*	*3.86*	*3.76*	*3.75*	*3.79*	*4.03*	*3.79*	*3.75*	*3.93*	*3.66*	*3.84*
Air Travel Capacity (mill. available ton-miles/day)	**475.5**	**493.2**	**475.1**	**410.0**	*431.6*	*457.4*	*458.3*	*449.4*	*454.2*	*478.9*	*498.3*	*491.1*	*463.3*	*449.3*	*480.8*
Aircraft Utilization (mill. revenue ton-miles/day)	**263.5**	**282.3**	**261.1**	**224.8**	*236.6*	*264.0*	*276.8*	*263.6*	*261.4*	*282.8*	*298.6*	*285.5*	*257.8*	*260.4*	*282.2*
Airline Ticket Price Index (index, 1982-1984=1.000)	**2.399**	**2.408**	**2.452**	**2.318**	*2.317*	*2.374*	*2.436*	*2.484*	*2.543*	*2.573*	*2.593*	*2.616*	*2.394*	*2.403*	*2.581*
Raw Steel Production (millions tons)	**25.53**	**26.07**	**25.25**	**22.05**	*24.29*	*25.55*	*25.51*	*25.27*	*26.49*	*27.33*	*26.82*	*26.39*	*98.89*	*100.61*	*107.04*

[a]Macroeconomic projections from DRI-WEFA model forecasts are seasonally adjusted at annual rates and modified as appropriate to the mid world oil price case.

[b]Includes all highway travel.

SAAR: Seasonally-adjusted annualized rate.

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

Table 3. International Petroleum Supply and Demand: 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**	**19.4**	*19.3*	*19.4*	*19.9*	*20.0*	*20.2*	*20.0*	*20.5*	*20.6*	*19.6*	*19.6*	*20.3*
U.S. Territories	**0.4**	**0.4**	**0.3**	**0.3**	*0.4*	*0.3*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	*0.3*	*0.4*	*0.4*
Canada	**2.0**	**1.9**	**2.0**	**2.0**	*2.0*	*2.0*	*2.1*	*2.1*	*2.1*	*2.0*	*2.2*	*2.2*	*2.0*	*2.0*	*2.1*
Europe	**15.2**	**14.8**	**15.5**	**15.5**	*15.5*	*14.6*	*15.2*	*15.8*	*15.6*	*14.7*	*15.3*	*16.0*	*15.2*	*15.3*	*15.4*
Japan	**6.1**	**5.0**	**5.1**	**5.5**	*6.0*	*4.9*	*5.2*	*5.6*	*6.0*	*5.0*	*5.2*	*5.6*	*5.4*	*5.4*	*5.4*
Other OECD	**5.3**	**4.9**	**4.9**	**5.2**	*5.0*	*5.0*	*5.2*	*5.2*	*5.1*	*5.0*	*5.2*	*5.3*	*5.1*	*5.1*	*5.1*
Total OECD	**49.0**	**46.6**	**47.5**	**47.9**	*48.2*	*46.2*	*47.9*	*49.2*	*49.4*	*47.0*	*48.7*	*50.0*	*47.7*	*47.9*	*48.8*
Non-OECD															
Former Soviet Union	**3.7**	**3.6**	**3.6**	**3.6**	*3.8*	*3.6*	*3.6*	*3.6*	*3.8*	*3.7*	*3.7*	*3.7*	*3.6*	*3.7*	*3.7*
Europe	**0.6**	**0.6**	**0.6**	**0.6**	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*
China	**4.9**	**4.9**	**4.8**	**4.8**	*5.1*	*5.1*	*5.0*	*5.1*	*5.3*	*5.3*	*5.2*	*5.3*	*4.9*	*5.1*	*5.3*
Other Asia	**7.4**	**7.4**	**7.1**	**7.4**	*7.4*	*7.4*	*7.2*	*7.5*	*7.5*	*7.5*	*7.2*	*7.6*	*7.3*	*7.4*	*7.4*
Other Non-OECD	**11.7**	**11.9**	**12.0**	**11.8**	*11.8*	*12.0*	*12.1*	*12.0*	*11.9*	*12.1*	*12.2*	*12.1*	*11.8*	*11.9*	*12.0*
Total Non-OECD	**28.4**	**28.4**	**28.1**	**28.3**	*28.7*	*28.7*	*28.5*	*28.8*	*29.1*	*29.1*	*28.9*	*29.2*	*28.3*	*28.7*	*29.1*
Total World Demand	**77.3**	**75.0**	**75.6**	**76.2**	*76.9*	*74.9*	*76.4*	*78.0*	*78.5*	*76.1*	*77.6*	*79.2*	*76.0*	*76.6*	*77.9*
Supply [b]															
OECD															
U.S. (50 States)	**8.8**	**9.0**	**9.1**	**9.2**	*9.1*	*9.0*	*9.1*	*9.2*	*9.1*	*9.1*	*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]	**5.8**	**5.6**	**5.7**	**6.0**	*5.8*	*5.5*	*5.7*	*6.0*	*5.8*	*5.5*	*5.6*	*5.9*	*5.7*	*5.7*	*5.7*
Other OECD	**2.2**	**2.2**	**2.2**	**2.1**	*2.2*	*2.2*	*2.2*	*2.2*	*2.2*	*2.2*	*2.2*	*2.2*	*2.2*	*2.2*	*2.2*
Total OECD	**23.2**	**23.0**	**23.3**	**23.8**	*23.7*	*23.3*	*23.7*	*24.0*	*24.1*	*23.7*	*24.0*	*24.4*	*23.3*	*23.7*	*24.1*
Non-OECD															
OPEC	**31.2**	**29.9**	**30.1**	**29.2**	*27.9*	*27.1*	*28.7*	*28.8*	*29.3*	*29.0*	*29.3*	*28.8*	*30.1*	*28.1*	*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	**11.2**	**11.1**	**11.3**	**11.3**	*11.3*	*11.4*	*11.6*	*11.8*	*11.6*	*11.8*	*12.0*	*12.1*	*11.2*	*11.5*	*11.9*
Total Non-OECD	**54.4**	**53.0**	**53.6**	**52.9**	*51.6*	*51.0*	*53.0*	*53.4*	*53.6*	*53.6*	*54.3*	*54.0*	*53.5*	*52.3*	*53.9*
Total World Supply	**77.6**	**76.1**	**76.9**	**76.7**	*75.2*	*74.3*	*76.7*	*77.4*	*77.7*	*77.3*	*78.3*	*78.4*	*76.8*	*75.9*	*77.9*
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR)	**-0.2**	**-0.9**	**-0.2**	**-0.1**	*0.3*	*-0.6*	*-0.2*	*0.3*	*0.1*	*-0.6*	*-0.2*	*0.3*	*-0.3*	*0.0*	*-0.1*
Other	**-0.2**	**-0.2**	**-1.1**	**-0.4**	*1.4*	*1.3*	*-0.2*	*0.3*	*0.7*	*-0.6*	*-0.5*	*0.5*	*-0.5*	*0.7*	*0.0*
Total Stock Withdrawals	**-0.3**	**-1.1**	**-1.3**	**-0.5**	*1.7*	*0.7*	*-0.4*	*0.6*	*0.8*	*-1.2*	*-0.7*	*0.8*	*-0.8*	*0.6*	*-0.1*
OECD Comm. Stocks, End (bill. bbls.)	**2.5**	**2.6**	**2.6**	**2.7**	*2.5*	*2.5*	*2.5*	*2.5*	*2.4*	*2.5*	*2.5*	*2.4*	*2.7*	*2.5*	*2.4*
Non-OPEC Supply	**46.4**	**46.1**	**46.8**	**47.5**	*47.3*	*47.2*	*48.0*	*48.6*	*48.4*	*48.4*	*49.1*	*49.6*	*46.7*	*47.8*	*48.9*
Net Exports from Former Soviet Union	**4.9**	**5.1**	**5.3**	**5.5**	*5.2*	*5.5*	*5.7*	*5.7*	*5.5*	*5.8*	*6.0*	*6.1*	*5.2*	*5.5*	*5.9*

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

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

[c]Includes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

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

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

SPR: Strategic Petroleum Reserve

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

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

Sources: Energy Information Administration: latest data available from EIA databases supporting the following reports: *International Petroleum Monthly*, DOE/EIA-0520; Organization for Economic Cooperation and Development, Annual and Monthly Oil Statistics Database.

Table 4. U.S. Energy Prices
(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**	**16.94**	*18.83*	*23.20*	*23.62*	*24.03*	*24.56*	*25.75*	*25.28*	*25.09*	*22.03*	*22.49*	*25.18*
WTI [b] Spot Average	**28.82**	**27.92**	**26.66**	**20.40**	*21.66*	*26.37*	*26.81*	*27.22*	*27.75*	*28.94*	*28.48*	*28.28*	*25.95*	*25.52*	*28.36*
Natural Gas Wellhead (dollars per thousand cubic feet)	**6.37**	**4.56**	**3.06**	**2.51**	*2.34*	*2.94*	*2.77*	*3.14*	*3.32*	*2.97*	*2.88*	*3.24*	*4.13*	*2.80*	*3.10*
Petroleum Products															
Gasoline Retail [c] (dollars per gallon)															
All Grades	**1.47**	**1.66**	**1.49**	**1.23**	*1.20*	*1.49*	*1.47*	*1.41*	*1.43*	*1.59*	*1.52*	*1.45*	*1.47*	*1.39*	*1.50*
Regular Unleaded	**1.43**	**1.62**	**1.45**	**1.19**	*1.16*	*1.45*	*1.44*	*1.37*	*1.39*	*1.56*	*1.49*	*1.42*	*1.43*	*1.36*	*1.47*
No. 2 Diesel Oil, Retail (dollars per gallon)	**1.47**	**1.47**	**1.42**	**1.26**	*1.18*	*1.31*	*1.33*	*1.39*	*1.40*	*1.43*	*1.41*	*1.43*	*1.40*	*1.30*	*1.42*
No. 2 Heating Oil, Wholesale (dollars per gallon)	**0.83**	**0.80**	**0.76**	**0.62**	*0.61*	*0.72*	*0.73*	*0.78*	*0.81*	*0.81*	*0.80*	*0.84*	*0.76*	*0.71*	*0.81*
No. 2 Heating Oil, Retail (dollars per gallon)	**1.35**	**1.25**	**1.15**	**1.10**	*1.11*	*1.16*	*1.11*	*1.21*	*1.29*	*1.24*	*1.19*	*1.29*	*1.24*	*1.15*	*1.26*
No. 6 Residual Fuel Oil, Retail [d] (dollars per barrel)	**25.13**	**22.29**	**21.76**	**18.90**	*19.62*	*22.46*	*22.68*	*24.07*	*24.52*	*23.73*	*23.72*	*24.28*	*22.21*	*22.31*	*24.08*
Electric Utility Fuels															
Coal (dollars per million Btu)	**1.23**	**1.24**	**1.23**	**1.22**	*1.21*	*1.21*	*1.20*	*1.19*	*1.20*	*1.20*	*1.19*	*1.18*	*1.23*	*1.20*	*1.19*
Heavy Fuel Oil [e] (dollars per million Btu)	**4.22**	**3.82**	**3.50**	**2.90**	*3.03*	*3.69*	*3.76*	*3.83*	*3.83*	*3.90*	*3.93*	*3.86*	*3.72*	*3.56*	*3.89*
Natural Gas (dollars per million Btu)	**7.26**	**4.96**	**3.47**	**2.93**	*2.85*	*3.38*	*3.20*	*3.67*	*3.88*	*3.43*	*3.30*	*3.73*	*4.42*	*3.28*	*3.52*
Other Residential															
Natural Gas (dollars per thousand cubic feet)	**10.10**	**10.65**	**10.64**	**7.73**	*6.70*	*7.55*	*9.20*	*7.54*	*7.65*	*8.40*	*9.67*	*7.82*	*9.64*	*7.30*	*7.99*
Electricity (cents per kilowatthour)	**7.96**	**8.62**	**8.85**	**8.47**	*8.28*	*8.78*	*8.99*	*8.47*	*8.15*	*8.73*	*8.97*	*8.50*	*8.48*	*8.65*	*8.60*

[a]Refiner acquisition cost (RAC) of imported crude oil.
[b]West Texas Intermediate.
[c]Average self-service cash prices.
[d]Average for all sulfur contents.
[e]Includes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Data are estimated for the 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**	*5.94*	*5.86*	*5.84*	*5.95*	*5.97*	*5.90*	*5.89*	*5.97*	*5.85*	*5.90*	*5.93*
Alaska	**0.99**	**0.96**	**0.94**	**0.99**	*1.04*	*0.97*	*0.94*	*1.02*	*1.05*	*1.02*	*1.02*	*1.09*	*0.97*	*0.99*	*1.05*
Lower 48	**4.86**	**4.88**	**4.88**	**4.91**	*4.90*	*4.89*	*4.90*	*4.93*	*4.92*	*4.87*	*4.87*	*4.88*	*4.88*	*4.91*	*4.89*
Net Imports (including SPR) [b]	**9.04**	**9.67**	**9.42**	**9.09**	*8.58*	*9.38*	*9.40*	*9.12*	*9.22*	*9.85*	*9.77*	*9.43*	*9.30*	*9.12*	*9.57*
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**	**-0.06**	*-0.12*	*-0.18*	*-0.15*	*-0.19*	*-0.16*	*-0.10*	*-0.10*	*-0.10*	*-0.03*	*-0.16*	*-0.11*
Other Stock Withdrawn or Added (-)	**-0.25**	**0.00**	**-0.01**	**-0.03**	*-0.15*	*0.05*	*0.20*	*0.05*	*-0.18*	*0.01*	*0.17*	*0.04*	*-0.07*	*0.04*	*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**	**0.15**	**-0.01**	**-0.01**	*0.13*	*0.28*	*0.15*	*0.15*	*0.14*	*0.15*	*0.15*	*0.15*	*0.07*	*0.17*	*0.15*
Total Crude Oil Supply	**14.75**	**15.65**	**15.21**	**14.90**	*14.38*	*15.39*	*15.45*	*15.07*	*14.99*	*15.81*	*15.89*	*15.49*	*15.13*	*15.07*	*15.55*
Other Supply															
NGL Production	**1.65**	**1.89**	**1.95**	**1.96**	*1.86*	*1.86*	*1.86*	*1.86*	*1.86*	*1.91*	*1.94*	*1.95*	*1.86*	*1.86*	*1.92*
Other Hydrocarbon and Alcohol Inputs	**0.38**	**0.39**	**0.40**	**0.39**	*0.38*	*0.40*	*0.41*	*0.42*	*0.41*	*0.40*	*0.42*	*0.42*	*0.39*	*0.40*	*0.41*
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**	**0.90**	**0.94**	*0.94*	*0.92*	*0.92*	*0.92*	*0.92*	*0.94*	*0.92*	*0.91*	*0.91*	*0.93*	*0.92*
Net Product Imports [c]	**2.11**	**1.62**	**1.37**	**1.17**	*1.14*	*1.35*	*1.41*	*1.25*	*1.53*	*1.39*	*1.48*	*1.32*	*1.56*	*1.29*	*1.43*
Product Stock Withdrawn or Added (-)	**0.11**	**-0.86**	**-0.16**	**0.00**	*0.57*	*-0.49*	*-0.23*	*0.46*	*0.45*	*-0.50*	*-0.26*	*0.41*	*-0.23*	*0.07*	*0.03*
Total Supply	**19.90**	**19.59**	**19.67**	**19.37**	*19.28*	*19.42*	*19.83*	*19.98*	*20.17*	*19.95*	*20.40*	*20.51*	*19.63*	*19.63*	*20.26*
Demand															
Motor Gasoline	**8.27**	**8.67**	**8.82**	**8.62**	*8.44*	*8.89*	*8.87*	*8.76*	*8.59*	*9.05*	*9.12*	*9.01*	*8.59*	*8.74*	*8.94*
Jet Fuel	**1.73**	**1.72**	**1.67**	**1.51**	*1.55*	*1.63*	*1.65*	*1.68*	*1.71*	*1.69*	*1.74*	*1.77*	*1.66*	*1.63*	*1.73*
Distillate Fuel Oil	**4.21**	**3.72**	**3.64**	**3.73**	*3.79*	*3.59*	*3.61*	*3.90*	*4.17*	*3.78*	*3.70*	*3.95*	*3.82*	*3.72*	*3.90*
Residual Fuel Oil	**0.97**	**0.90**	**0.82**	**0.74**	*0.68*	*0.69*	*0.85*	*0.78*	*0.90*	*0.69*	*0.85*	*0.78*	*0.86*	*0.75*	*0.81*
Other Oils [d]	**4.71**	**4.59**	**4.72**	**4.77**	*4.80*	*4.62*	*4.85*	*4.86*	*4.79*	*4.74*	*4.99*	*5.00*	*4.70*	*4.78*	*4.88*
Total Demand	**19.89**	**19.59**	**19.67**	**19.36**	*19.25*	*19.42*	*19.83*	*19.98*	*20.17*	*19.95*	*20.40*	*20.51*	*19.63*	*19.62*	*20.26*
Total Petroleum Net Imports	**11.15**	**11.29**	**10.79**	**10.26**	*9.72*	*10.73*	*10.82*	*10.37*	*10.75*	*11.24*	*11.25*	*10.75*	*10.87*	*10.41*	*11.00*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**308**	**308**	**309**	**312**	*325*	*321*	*302*	*297*	*313*	*313*	*297*	*294*	*312*	*297*	*294*
Total Motor Gasoline	**194**	**221**	**206**	**209**	*212*	*213*	*204*	*205*	*209*	*210*	*201*	*204*	*209*	*205*	*204*
Finished Motor Gasoline	**145**	**170**	**158**	**161**	*159*	*166*	*158*	*161*	*159*	*164*	*157*	*160*	*161*	*161*	*160*
Blending Components	**49**	**51**	**48**	**48**	*53*	*47*	*45*	*44*	*49*	*46*	*44*	*44*	*48*	*44*	*44*
Jet Fuel	**40**	**43**	**43**	**42**	*41*	*41*	*42*	*43*	*40*	*41*	*42*	*43*	*42*	*43*	*43*
Distillate Fuel Oil	**105**	**114**	**127**	**144**	*120*	*128*	*143*	*142*	*110*	*119*	*136*	*137*	*144*	*142*	*137*
Residual Fuel Oil	**39**	**42**	**37**	**41**	*35*	*35*	*37*	*39*	*36*	*37*	*39*	*40*	*41*	*39*	*40*
Other Oils [e]	**253**	**290**	**311**	**288**	*265*	*301*	*313*	*269*	*262*	*295*	*307*	*263*	*288*	*269*	*263*
Total Stocks (excluding SPR)	**940**	**1018**	**1033**	**1036**	*998*	*1038*	*1040*	*994*	*969*	*1014*	*1022*	*981*	*1036*	*994*	*981*
Crude Oil in SPR	**542**	**543**	**545**	**550**	*561*	*577*	*591*	*609*	*623*	*632*	*641*	*650*	*550*	*609*	*650*
Heating Oil Reserve	**2**	**2**	**2**	**2**	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
Total Stocks (including SPR)	**1482**	**1561**	**1578**	**1586**	*1559*	*1615*	*1632*	*1603*	*1592*	*1646*	*1663*	*1631*	*1586*	*1603*	*1631*

[a]Includes lease condensate.

[b]Net imports equals gross imports plus SPR imports minus exports.

[c]Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

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

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

SPR: Strategic Petroleum Reserve

NGL: Natural Gas Liquids

Notes: Minor discrepancies with other EIA published historical data are due to rounding, with the following exception: recent petroleum demand and supply data displayed here reflect the incorporation of resubmissions of the data as reported in EIA's Petroleum Supply Monthly, Table C1. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

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]
(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%

[a]Percent change in demand quantity resulting from specified percent changes in model inputs.
[b]Short-Term Integrated Forecasting System.
[c]Refiner acquisitions cost of imported crude oil.
[d]Average unit value of marketed natural gas production reported by States.
[e]Refers to percent changes in degree-days.
[f]Response during fall/winter period(first and fourth calendar quarters) refers to change in heating degree-days. Response during the spring/summer period (second and third calendar quarters) refers to change in cooling degree-days.

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

	High Price Case	Low Price Case	Difference		
			Total	Uncertainty	Price Impact
United States	*6.21*	*5.73*	*0.47*	*0.07*	*0.40*
Lower 48 States	*5.10*	*4.66*	*0.44*	*0.05*	*0.39*
Alaska	*1.11*	*1.08*	*0.03*	*0.02*	*0.02*

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**	**4.80**	*4.75*	*4.70*	*4.73*	*4.79*	*4.87*	*4.90*	*4.94*	*5.06*	*19.36*	*18.97*	*19.77*
Net Imports	**0.97**	**0.90**	**0.94**	**0.82**	*0.86*	*0.83*	*0.84*	*0.88*	*0.91*	*0.87*	*0.89*	*0.95*	*3.63*	*3.41*	*3.61*
Supplemental Gaseous Fuels	**0.02**	**0.02**	**0.02**	**0.02**	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*	*0.08*	*0.08*	*0.08*
Total New Supply	**5.85**	**5.77**	**5.81**	**5.64**	*5.63*	*5.55*	*5.60*	*5.69*	*5.80*	*5.79*	*5.85*	*6.03*	*23.07*	*22.46*	*23.47*
Working Gas in Storage															
Opening	**1.72**	**0.74**	**1.88**	**2.94**	*2.90*	*1.52*	*2.21*	*3.05*	*2.59*	*1.38*	*2.14*	*3.01*	*1.72*	*2.90*	*2.59*
Closing	**0.74**	**1.88**	**2.94**	**2.90**	*1.52*	*2.21*	*3.05*	*2.59*	*1.38*	*2.14*	*3.01*	*2.57*	*2.90*	*2.59*	*2.57*
Net Withdrawals	**0.98**	**-1.14**	**-1.06**	**0.04**	*1.38*	*-0.69*	*-0.84*	*0.46*	*1.22*	*-0.76*	*-0.87*	*0.45*	*-1.18*	*0.31*	*0.03*
Total Supply	**6.83**	**4.63**	**4.74**	**5.68**	*7.01*	*4.86*	*4.76*	*6.14*	*7.02*	*5.03*	*4.98*	*6.47*	*21.88*	*22.77*	*23.49*
Balancing Item [a]	**0.30**	**0.01**	**-0.26**	**-0.46**	*-0.18*	*0.03*	*-0.12*	*-0.44*	*0.28*	*0.02*	*-0.18*	*-0.61*	*-0.41*	*-0.70*	*-0.49*
Total Primary Supply	**7.13**	**4.64**	**4.49**	**5.22**	*6.84*	*4.89*	*4.64*	*5.70*	*7.30*	*5.04*	*4.80*	*5.87*	*21.47*	*22.07*	*23.00*
Demand															
Lease and Plant Fuel	**0.29**	**0.29**	**0.29**	**0.29**	*0.29*	*0.29*	*0.29*	*0.29*	*0.30*	*0.29*	*0.30*	*0.30*	*1.15*	*1.16*	*1.19*
Pipeline Use	**0.20**	**0.13**	**0.13**	**0.15**	*0.19*	*0.13*	*0.12*	*0.16*	*0.20*	*0.14*	*0.13*	*0.17*	*0.61*	*0.60*	*0.63*
Residential	**2.46**	**0.77**	**0.37**	**1.21**	*2.25*	*0.86*	*0.43*	*1.42*	*2.44*	*0.88*	*0.42*	*1.42*	*4.81*	*4.96*	*5.16*
Commercial	**1.37**	**0.63**	**0.46**	**0.79**	*1.31*	*0.66*	*0.50*	*0.88*	*1.40*	*0.68*	*0.51*	*0.90*	*3.25*	*3.36*	*3.48*
Industrial (Incl. Nonutility Use)	**2.34**	**2.11**	**2.27**	**2.25**	*2.33*	*2.22*	*2.34*	*2.42*	*2.47*	*2.32*	*2.46*	*2.53*	*8.97*	*9.30*	*9.78*
Electric Utilities	***0.47***	***0.71***	***0.97***	**0.53**	*0.48*	*0.73*	*0.96*	*0.53*	*0.48*	*0.73*	*0.99*	*0.55*	*2.68*	*2.69*	*2.75*
Total Demand	**7.13**	**4.64**	**4.49**	**5.22**	*6.84*	*4.89*	*4.64*	*5.70*	*7.30*	*5.04*	*4.80*	*5.87*	*21.47*	*22.07*	*23.00*

[a]The balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

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**	**281.3**	*268.8*	*258.3*	*287.9*	*285.7*	*278.4*	*268.7*	*291.0*	*289.9*	*1121.3*	*1100.6*	*1128.0*
Appalachia	**110.8**	**109.0**	**104.1**	**105.1**	*100.9*	*99.1*	*105.3*	*104.4*	*104.9*	*101.1*	*103.9*	*103.6*	*428.9*	*409.7*	*413.3*
Interior	**37.5**	**37.0**	**37.9**	**35.2**	*34.6*	*32.8*	*37.4*	*33.9*	*33.4*	*32.5*	*36.0*	*32.5*	*147.7*	*138.8*	*134.4*
Western	**135.3**	**132.3**	**136.1**	**141.0**	*133.2*	*126.3*	*145.2*	*147.4*	*140.2*	*135.1*	*151.1*	*153.8*	*544.7*	*552.2*	*580.2*
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**	**5.7**	*4.4*	*5.1*	*5.2*	*5.2*	*4.9*	*4.9*	*4.9*	*5.0*	*19.8*	*19.9*	*19.7*
Exports	**11.8**	**13.5**	**11.7**	**11.7**	*10.8*	*12.3*	*12.6*	*12.5*	*12.0*	*12.2*	*12.5*	*12.4*	*48.7*	*48.1*	*49.1*
Total Net Domestic Supply	**268.4**	**269.9**	**273.7**	**278.5**	*255.7*	*256.7*	*282.4*	*279.0*	*271.1*	*262.5*	*282.0*	*282.8*	*1090.4*	*1073.7*	*1098.4*
Secondary Stock Levels [b]															
Opening	**108.1**	**113.7**	**128.6**	**118.4**	*138.5*	*139.5*	*143.6*	*131.0*	*127.2*	*132.0*	*138.9*	*121.4*	*108.1*	*138.5*	*127.2*
Closing	**113.7**	**128.6**	**118.4**	**138.5**	*139.5*	*143.6*	*131.0*	*127.2*	*132.0*	*138.9*	*121.4*	*116.7*	*138.5*	*127.2*	*116.7*
Net Withdrawals	**-5.5**	**-14.9**	**10.2**	**-20.2**	*-1.0*	*-4.1*	*12.6*	*3.8*	*-4.9*	*-6.9*	*17.5*	*4.7*	*-30.4*	*11.4*	*10.5*
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	**265.5**	**257.6**	**286.5**	**260.9**	*257.4*	*255.4*	*297.8*	*285.6*	*269.1*	*258.5*	*302.4*	*290.4*	*1070.6*	*1096.2*	*1120.5*
Demand															
Coke Plants	**6.8**	**6.9**	**6.6**	**5.8**	*6.3*	*6.3*	*6.6*	*6.2*	*6.6*	*6.4*	*6.5*	*6.1*	*26.1*	*25.4*	*25.6*
Electricity Production															
Electric Utilities	**203.9**	**196.1**	**223.7**	**194.6**	*198.9*	*198.3*	*234.3*	*222.3*	*206.5*	*200.6*	*238.2*	*226.5*	*818.4*	*853.8*	*871.8*
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	**18.3**	**16.2**	**16.4**	**17.0**	*16.9*	*15.2*	*15.3*	*17.9*	*17.5*	*15.2*	*15.2*	*17.7*	*67.9*	*65.3*	*65.6*
Total Demand [e]	**265.7**	**254.0**	**287.4**	**255.8**	*259.8*	*255.4*	*297.8*	*285.6*	*269.1*	*258.5*	*302.4*	*290.4*	*1063.0*	*1098.6*	*1120.5*
Discrepancy [f]	**-0.2**	**3.6**	**-0.9**	**5.2**	*-2.4*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*7.6*	*-2.4*	*0.0*

[a]Primary stocks are held at the mines, preparation plants, and distribution points.

[b]Secondary stocks are held by users. It includes an estimate of stocks held at utility plants sold to nonutility generators.

[c]Estimated independent power producers' (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes.

[d]Estimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA). Quarterly coal consumption estimates for 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).

[e]Total Demand includes estimated IPP consumption.

[f]The discrepancy reflects an unaccounted-for shipper and receiver reporting difference, assumed to be zero in the forecast period.

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

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

Table 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**	**375.1**	*378.0*	*377.6*	*446.3*	*426.5*	*393.6*	*382.3*	*454.6*	*435.7*	*1589.8*	*1628.4*	*1666.2*
Petroleum	**24.2**	**21.8**	**21.6**	**12.0**	*16.5*	*11.0*	*22.1*	*12.1*	*18.6*	*10.2*	*22.7*	*13.5*	*79.6*	*61.8*	*64.9*
Natural Gas	**45.7**	**69.1**	**95.0**	**53.1**	*46.9*	*71.3*	*94.6*	*52.1*	*47.4*	*72.0*	*97.2*	*53.7*	*262.8*	*264.9*	*270.2*
Nuclear	**135.8**	**130.1**	**140.4**	**127.4**	*130.3*	*127.7*	*137.5*	*127.7*	*131.1*	*128.5*	*138.4*	*128.5*	*533.7*	*523.1*	*526.6*
Hydroelectric	**50.4**	**50.8**	**46.7**	**45.0**	*55.6*	*63.2*	*56.9*	*59.2*	*69.1*	*74.6*	*62.7*	*62.1*	*192.9*	*234.9*	*268.5*
Geothermal and Other [a]	**0.6**	**0.6**	**0.6**	**0.4**	*0.5*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*2.3*	*2.3*	*2.4*
Subtotal	**656.5**	**655.5**	**736.1**	**613.0**	*627.8*	*651.4*	*758.0*	*678.2*	*660.4*	*668.1*	*776.2*	*694.1*	*2661.0*	*2715.3*	*2798.8*
Nonutility Generation [b]															
Coal	**93.5**	**81.1**	**96.1**	**82.3**	*90.5*	*78.4*	*90.3*	*60.5*	*94.4*	*79.1*	*92.0*	*61.8*	*353.0*	*319.7*	*327.3*
Petroleum	**17.0**	**12.0**	**11.9**	**7.3**	*11.7*	*6.6*	*11.5*	*8.4*	*13.2*	*6.0*	*11.8*	*9.3*	*48.2*	*38.1*	*40.3*
Natural Gas	**78.4**	**83.9**	**109.1**	**87.0**	*84.6*	*86.9*	*107.3*	*87.6*	*85.5*	*87.6*	*110.3*	*90.3*	*358.3*	*366.4*	*373.8*
Other Gaseous Fuels [c]	**4.0**	**4.3**	**5.6**	**4.5**	*4.2*	*4.4*	*5.2*	*4.6*	*4.2*	*4.4*	*5.2*	*4.6*	*18.5*	*18.3*	*18.3*
Nuclear	**56.2**	**55.3**	**60.4**	**61.7**	*61.8*	*60.8*	*65.5*	*60.8*	*62.4*	*61.1*	*65.8*	*61.3*	*233.6*	*248.8*	*250.6*
Hydroelectric	**5.3**	**6.4**	**3.3**	**3.3**	*5.5*	*8.0*	*4.1*	*5.7*	*7.3*	*9.5*	*4.5*	*6.0*	*18.4*	*23.3*	*27.3*
Geothermal and Other [d]	**20.4**	**21.5**	**22.2**	**21.9**	*20.1*	*20.9*	*22.1*	*20.9*	*20.3*	*20.9*	*22.1*	*20.9*	*86.1*	*84.0*	*84.2*
Subtotal	**275.0**	**264.5**	**308.6**	**267.9**	*278.4*	*265.8*	*305.9*	*248.5*	*287.3*	*268.6*	*311.7*	*254.2*	*1116.0*	*1098.6*	*1121.8*
Total Generation	**931.4**	**920.0**	**1044.7**	**881.0**	*906.1*	*917.2*	*1063.9*	*926.6*	*947.7*	*936.7*	*1088.0*	*948.3*	*3777.0*	*3813.9*	*3920.6*
Net Imports [e]	**3.6**	**7.2**	**5.1**	**4.4**	*4.9*	*8.5*	*6.3*	*5.6*	*6.1*	*7.7*	*11.1*	*6.6*	*20.3*	*25.3*	*31.4*
Total Supply	**936.4**	**927.8**	**1049.7**	**885.3**	*911.0*	*925.7*	*1070.2*	*932.2*	*953.7*	*944.5*	*1099.1*	*954.8*	*3799.3*	*3839.2*	*3952.1*
Losses and Unaccounted for [f]	**34.4**	**72.9**	**54.2**	**53.5**	*48.4*	*76.1*	*67.6*	*61.2*	*50.8*	*77.8*	*69.6*	*62.7*	*215.1*	*253.3*	*260.9*
Demand															
Retail Sales [g]															
Residential	**322.8**	**263.2**	**353.8**	**262.8**	*303.9*	*264.2*	*358.5*	*287.4*	*325.7*	*267.8*	*368.9*	*293.2*	*1202.5*	*1214.1*	*1255.6*
Commercial	**256.9**	**264.8**	**305.6**	**258.4**	*256.6*	*269.2*	*308.9*	*266.0*	*264.8*	*274.4*	*317.7*	*273.7*	*1085.7*	*1100.6*	*1130.6*
Industrial	**248.3**	**253.3**	**253.1**	**241.3**	*232.7*	*246.6*	*257.5*	*247.1*	*239.4*	*251.3*	*261.5*	*250.9*	*996.0*	*983.9*	*1003.1*
Other	**27.3**	**28.5**	**33.8**	**28.3**	*28.5*	*28.9*	*31.8*	*29.4*	*29.1*	*29.2*	*32.3*	*29.8*	*117.9*	*118.6*	*120.4*
Subtotal	**855.3**	**809.8**	**946.3**	**790.7**	*821.7*	*808.9*	*956.8*	*829.8*	*859.0*	*822.7*	*980.4*	*847.6*	*3402.1*	*3417.2*	*3509.7*
Nonutility Use/Sales [h]	**46.7**	**45.0**	**49.2**	**41.0**	*41.0*	*40.7*	*45.8*	*41.3*	*44.0*	*44.0*	*49.1*	*44.5*	*182.0*	*168.7*	*181.5*
Total Demand	**902.0**	**854.8**	**995.5**	**831.8**	*862.7*	*849.6*	*1002.6*	*871.1*	*903.0*	*866.7*	*1029.5*	*892.1*	*3584.1*	*3585.9*	*3691.2*
Memo:															
Nonutility Sales to Electric Utilities [b]	**228.2**	**219.5**	**259.4**	**226.9**	*237.4*	*225.1*	*260.2*	*207.2*	*243.3*	*224.7*	*262.7*	*209.7*	*934.0*	*929.9*	*940.3*

[a]"Other" includes generation from wind, wood, waste, and solar sources.
[b]Electricity(net Generation) from nonutility sources, including cogenerators and small power producers.
[c]Includes refinery still gas and other process or waste gases and liquefied petroleum gases.
[d]Includes geothermal, solar, wind, wood, waste, hydrogen, sulfur, batteries, chemicals and spent sulfite liquor.
[e]Data for 2000 are estimates.
[f]Balancing item, mainly transmission and distribution losses.
[g]Total of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA'S Electric Power Monthly and Electric Power Annual. Power marketers' sales are reported annually in Appendix C of EIA's Electric Sales and Revenue. Quarterly data for power marketers (and thus retail sales totals) are imputed. Data for 2000 are estimated.
[h]Defined 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**	**2.020**	*2.460*	*2.813*	**-22.3**	*21.8*	*14.3*
Geothermal, Solar and Wind Energy [b]	**0.004**	**0.004**	*0.004*	*0.005*	**0.0**	*0.0*	*25.0*
Biofuels [c]	**0.021**	**0.021**	*0.021*	*0.021*	**0.0**	*0.0*	*0.0*
Total	**2.625**	**2.046**	*2.486*	*2.839*	**-22.1**	*21.5*	*14.2*
Nonutility Power Generators							
Hydroelectric Power [a]	**0.149**	**0.190**	*0.241*	*0.282*	**27.5**	*26.8*	*17.0*
Geothermal, Solar and Wind Energy [b]	**0.355**	**0.375**	*0.361*	*0.366*	**5.6**	*-3.7*	*1.4*
Biofuels [c]	**0.523**	**0.663**	*0.659*	*0.659*	**26.8**	*-0.6*	*0.0*
Total	**1.027**	**1.228**	*1.261*	*1.307*	**19.6**	*2.7*	*3.6*
Total Power Generation	**3.652**	**3.274**	*3.747*	*4.146*	**-10.4**	*14.4*	*10.6*
Other Sectors [d]							
Residential and Commercial [e]	**0.570**	**0.560**	*0.560*	*0.590*	**-1.8**	*0.0*	*5.4*
Industrial [f]	**2.410**	**2.410**	*2.470*	*2.540*	**0.0**	*2.5*	*2.8*
Transportation [g]	**0.114**	**0.122**	*0.127*	*0.143*	**7.0**	*4.1*	*12.6*
Total	**3.094**	**3.092**	*3.157*	*3.273*	**-0.1**	*2.1*	*3.7*
Net Imported Electricity [h]	**0.244**	**0.146**	*0.181*	*0.225*	**-40.2**	*24.0*	*24.3*
Total Renewable Energy Demand	**6.990**	**6.512**	*7.085*	*7.644*	**-6.8**	*8.8*	*7.9*

[a]Conventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.

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

[c]Biofuels are fuelwood, wood byproducts, waste wood, municipal solid waste, manufacturing process waste, and alcohol fuels.

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

[e]Includes biofuels and solar energy consumed in the residential and commercial sectors.

[f]consists primarily of biofuels for use other than in electricity cogeneration.

[g]Ethanol blended into gasoline.

[h]Represents 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**	*9334*	*9528*	*9883*
Imported Crude Oil Price [a]															
(nominal dollars per barrel)	**18.08**	**21.75**	**18.70**	**18.20**	**16.14**	**15.52**	**17.14**	**20.61**	**18.50**	**12.08**	**17.22**	**27.72**	*22.03*	*22.49*	*25.18*
Petroleum Supply															
Crude Oil Production [b]															
(million barrels per day)	**7.61**	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	**6.56**	**6.46**	**6.45**	**6.25**	**5.88**	**5.82**	*5.85*	*5.90*	*5.93*
Total Petroleum Net Imports (including SPR)															
(million barrels per day)	**7.20**	**7.16**	**6.63**	**6.94**	**7.62**	**8.05**	**7.89**	**8.50**	**9.16**	**9.76**	**9.91**	**10.42**	*10.87*	*10.41*	*11.00*
Energy Demand															
World Petroleum															
(million barrels per day)	**65.9**	**66.0**	**66.6**	**66.8**	**67.0**	**68.3**	**69.9**	**71.4**	**72.9**	**73.6**	**75.0**	**76.0**	*76.0*	*76.6*	*77.9*
U.S. Petroleum															
(million barrels per day)	**17.37**	**17.04**	**16.77**	**17.10**	**17.24**	**17.72**	**17.72**	**18.31**	**18.62**	**18.92**	**19.52**	**19.70**	*19.63*	*19.62*	*20.26*
Natural Gas															
(trillion cubic feet)	**18.80**	**18.72**	**19.03**	**19.54**	**20.28**	**20.71**	**21.58**	**21.96**	**21.95**	**21.26**	**21.61**	**22.54**	*21.47*	*22.07*	*23.00*
Coal															
(million short tons)	**889**	**896**	**893**	**901**	**943**	**950**	**962**	**1006**	**1030**	**1038**	**1045**	**1081**	*1063*	*1099*	*1120*
Electricity (billion kilowatthours)															
Retail Sales [c]	**2647**	**2713**	**2762**	**2763**	**2861**	**2935**	**3013**	**3101**	**3146**	**3264**	**3312**	**3421**	*3402*	*3417*	*3510*
Nonutility Own Use [d]	**NA**	**104**	**111**	**122**	**127**	**141**	**149**	**149**	**149**	**160**	**189**	**185**	*182*	*169*	*182*
Total	**2747**	**2817**	**2873**	**2885**	**2988**	**3075**	**3162**	**3250**	**3295**	**3424**	**3501**	**3606**	*3584*	*3586*	*3691*
Total Energy Demand [e]															
(quadrillion Btu)	**84.2**	**84.2**	**84.5**	**85.6**	**87.4**	**89.2**	**90.9**	**93.9**	**94.2**	**95.2**	**97.1**	**99.6**	*97.4*	*99.2*	*102.5*
Total Energy Demand per Dollar of GDP															
(thousand Btu per 1996 Dollar)	**NA**	**12.55**	**12.66**	**12.44**	**12.37**	**12.14**	**12.05**	**12.04**	**11.54**	**11.19**	**10.96**	**10.80**	*10.43*	*10.41*	*10.37*

[a]Refers to the imported cost of crude oil to U.S. refiners.
[b]Includes lease condensate.
[c]Total of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA's Electric Power Monthly and Electric Power Annual. Power marketers' sales for historical periods are reported in EIA's Electric Sales and Revenue, Appendix C. Data for 2000 are estimates.
[d]Defined 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 compehensive 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 CONTROL0402.

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**	*9334*	*9528*	*9883*
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*	*1.112*	*1.136*
Real Disposable Personal Income (billion chained 1996 Dollars)	**4907**	**5014**	**5033**	**5189**	**5261**	**5397**	**5539**	**5678**	**5854**	**6169**	**6320**	**6539**	*6772*	*6986*	*7201*
Manufacturing Production (Index, 1996=1.000)	**0.816**	**0.812**	**0.792**	**0.824**	**0.853**	**0.905**	**0.953**	**1.000**	**1.079**	**1.142**	**1.191**	**1.247**	*1.194*	*1.187*	*1.265*
Real Fixed Investment (billion chained 1996 dollars)	**911**	**895**	**833**	**886**	**958**	**1046**	**1109**	**1213**	**1329**	**1480**	**1595**	**1716**	*1683*	*1628*	*1721*
Real Exchange Rate (Index, 1996=1.000)	**NA**	**0.913**	**0.915**	**0.923**	**0.958**	**0.938**	**0.875**	**0.919**	**0.990**	**1.039**	**1.039**	**1.076**	*1.131*	*1.184*	*1.109*
Business Inventory Change (billion chained 1996 dollars)	**14.2**	**8.9**	**-6.8**	**-4.7**	**3.6**	**12.1**	**14.1**	**10.1**	**14.8**	**27.2**	**13.3**	**13.1**	*-35.4*	*-9.9*	*12.1*
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*	*1.307*	*1.336*
Consumer Price Index (index, 1982-1984=1.000)	**1.240**	**1.308**	**1.363**	**1.404**	**1.445**	**1.482**	**1.524**	**1.569**	**1.605**	**1.630**	**1.666**	**1.722**	*1.771*	*1.806*	*1.855*
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*	*0.768*	*0.874*
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*	*131.5*	*133.5*
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*	*93.0*	*94.8*
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**	*4223*	*4249*	*4456*
New England	**6887**	**5848**	**5960**	**6844**	**6728**	**6672**	**6559**	**6679**	**6662**	**5680**	**5952**	**6489**	*6059*	*5987*	*6457*
Middle Atlantic	**6134**	**4998**	**5177**	**5964**	**5948**	**5934**	**5831**	**5986**	**5809**	**4812**	**5351**	**5774**	*5297*	*5208*	*5693*
U.S. Gas-Weighted	**4856**	**4139**	**4337**	**4458**	**4754**	**4659**	**4707**	**4980**	**4802**	**4183**	**4399**	**4680**	*4451*	*4496*	*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*	*1265.4*	*1238.3*

[a]Population-weighted degree-days. A degree-day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 1990 population.

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

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, Statistical Release G.17(419); U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on DRI-WEFA Forecast CONTROL0402.

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*	*19.6*	*20.3*
Europe [b]	**13.2**	**13.3**	**13.3**	**14.0**	**14.2**	**14.1**	**14.2**	**14.8**	**15.0**	**15.3**	**15.2**	**15.1**	*15.2*	*15.3*	*15.4*
Japan	**5.0**	**5.1**	**5.3**	**5.4**	**5.4**	**5.7**	**5.7**	**5.9**	**5.7**	**5.5**	**5.6**	**5.5**	*5.4*	*5.4*	*5.4*
Other OECD	**5.2**	**5.4**	**5.6**	**5.9**	**6.2**	**6.6**	**6.8**	**6.9**	**7.3**	**7.1**	**7.4**	**7.6**	*7.4*	*7.5*	*7.6*
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*	*48.8*
Non-OECD															
Former Soviet Union	**8.7**	**8.4**	**8.4**	**6.8**	**5.6**	**4.8**	**4.6**	**4.0**	**3.9**	**3.8**	**3.7**	**3.7**	*3.6*	*3.7*	*3.7*
Europe	**1.3**	**1.0**	**0.8**	**0.7**	**0.7**	**0.6**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**	**0.6**	*0.6*	*0.6*	*0.6*
China	**2.4**	**2.3**	**2.5**	**2.7**	**3.0**	**3.2**	**3.4**	**3.6**	**3.9**	**4.1**	**4.3**	**4.8**	*4.9*	*5.1*	*5.3*
Other Asia	**4.0**	**4.3**	**4.5**	**4.7**	**5.1**	**5.5**	**5.9**	**6.3**	**6.6**	**6.7**	**6.9**	**7.3**	*7.3*	*7.4*	*7.4*
Other Non-OECD	**8.6**	**8.9**	**8.9**	**9.3**	**9.7**	**10.0**	**10.4**	**10.7**	**11.1**	**11.4**	**11.6**	**11.7**	*11.8*	*11.9*	*12.0*
Total Non-OECD	**25.1**	**24.9**	**25.0**	**24.2**	**24.0**	**24.1**	**24.9**	**25.3**	**26.2**	**26.7**	**27.3**	**28.1**	*28.3*	*28.7*	*29.1*
Total World Demand	**65.9**	**65.7**	**66.6**	**66.8**	**67.0**	**68.3**	**69.9**	**71.4**	**72.9**	**73.6**	**75.0**	**76.0**	*76.0*	*76.6*	*77.9*
Supply [c]															
OECD															
U.S. (50 States)	**9.9**	**9.7**	**9.9**	**9.8**	**9.6**	**9.4**	**9.4**	**9.4**	**9.5**	**9.3**	**9.0**	**9.1**	*9.0*	*9.1*	*9.2*
Canada	**2.0**	**2.0**	**2.0**	**2.1**	**2.2**	**2.3**	**2.4**	**2.5**	**2.6**	**2.7**	**2.6**	**2.7**	*2.8*	*3.0*	*3.1*
Mexico	**2.9**	**3.0**	**3.2**	**3.2**	**3.2**	**3.2**	**3.1**	**3.3**	**3.4**	**3.5**	**3.4**	**3.5**	*3.6*	*3.7*	*3.9*
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**	*5.7*	*5.7*	*5.7*
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**	*2.2*	*2.2*	*2.2*
Total OECD	**20.0**	**20.2**	**20.8**	**21.1**	**21.2**	**21.9**	**22.4**	**22.7**	**23.1**	**23.6**	**22.9**	**23.4**	*23.3*	*23.7*	*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*	*28.1*	*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**	*11.2*	*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*	*52.3*	*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*	*75.9*	*77.9*
Total Stock Withdrawals	**0.0**	**-0.8**	**-0.1**	**-0.3**	**-0.4**	**0.0**	**0.0**	**-0.4**	**-1.2**	**-1.3**	**0.8**	**-0.8**	*-0.8*	*0.6*	*-0.1*
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*	*2.5*	*2.4*
Net Exports from Former Soviet Union	**3.4**	**3.0**	**2.1**	**2.1**	**2.3**	**2.4**	**2.6**	**3.0**	**3.3**	**3.5**	**3.9**	**4.5**	*5.2*	*5.5*	*5.9*

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

[b]OECD Europe includes the former East Germany.

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

[d]Includes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

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

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

SPR: Strategic Petroleum Reserve

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

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

Sources: Energy Information Administration: latest data available from EIA databases supporting the following reports: International Petroleum Monthly, DOE/EIA-0520, 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*	*22.49*	*25.18*
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*	*25.52*	*28.36*
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*	*2.80*	*3.10*
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*	*1.39*	*1.50*
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*	*1.36*	*1.47*
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*	*1.30*	*1.42*
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*	*0.71*	*0.81*
No. 2 Heating Oil, Retail (dollars per gallon)	0.90	1.06	1.02	0.93	0.91	0.88	0.87	0.99	0.99	0.85	0.88	1.31	*1.24*	*1.15*	*1.26*
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	*22.21*	*22.31*	*24.08*
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*	*1.20*	*1.19*
Heavy Fuel Oil [d] (dollars per million Btu)	2.85	3.22	2.49	2.46	2.36	2.40	2.60	3.01	2.79	2.07	2.38	4.26	*3.72*	*3.56*	*3.89*
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	*4.42*	*3.28*	*3.52*
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	*9.64*	*7.30*	*7.99*
Electricity (cents per kilowatthour)	7.64	7.85	8.05	8.23	8.34	8.40	8.40	8.36	8.43	8.26	8.16	8.24	*8.48*	*8.65*	*8.60*

[a]Refiner acquisition cost (RAC) of imported crude oil.
[b]West Texas Intermediate.
[c]Average self -service cash prices.
[d]Average for all sulfur contents.[e]Includes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.
Notes: 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*	*5.90*	*5.93*
Alaska	**1.87**	**1.77**	**1.80**	**1.71**	**1.58**	**1.56**	**1.48**	**1.39**	**1.30**	**1.17**	**1.05**	**0.97**	*0.97*	*0.99*	*1.05*
Lower 48	**5.74**	**5.58**	**5.62**	**5.46**	**5.26**	**5.10**	**5.08**	**5.07**	**5.16**	**5.08**	**4.83**	**4.85**	*4.88*	*4.91*	*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**	*9.30*	*9.12*	*9.57*
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*	*0.04*	*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**	*0.07*	*0.17*	*0.15*
Total Crude Oil Supply	**13.40**	**13.41**	**13.30**	**13.41**	**13.61**	**13.87**	**13.97**	**14.19**	**14.66**	**14.89**	**14.80**	**15.07**	*15.13*	*15.07*	*15.55*
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*	*1.86*	*1.92*
Other Hydrocarbon and Alcohol Inputs	**0.11**	**0.13**	**0.15**	**0.20**	**0.25**	**0.26**	**0.30**	**0.31**	**0.34**	**0.38**	**0.38**	**0.38**	*0.39*	*0.40*	*0.41*
Crude Oil Product Supplied	**0.03**	**0.02**	**0.02**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.00*
Processing Gain	**0.66**	**0.68**	**0.71**	**0.77**	**0.77**	**0.77**	**0.77**	**0.84**	**0.85**	**0.89**	**0.89**	**0.95**	*0.91*	*0.93*	*0.92*
Net Product Imports [c]	**1.50**	**1.38**	**0.96**	**0.94**	**0.93**	**1.09**	**0.75**	**1.10**	**1.04**	**1.17**	**1.30**	**1.40**	*1.56*	*1.29*	*1.43*
Product Stock Withdrawn	**0.13**	**-0.14**	**-0.04**	**0.06**	**-0.05**	**0.00**	**0.15**	**0.03**	**-0.09**	**-0.17**	**0.30**	**0.00**	*-0.23*	*0.07*	*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**	*19.63*	*19.63*	*20.26*
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*	*8.74*	*8.94*
Jet Fuel	**1.49**	**1.52**	**1.47**	**1.45**	**1.47**	**1.53**	**1.51**	**1.58**	**1.60**	**1.62**	**1.67**	**1.73**	*1.66*	*1.63*	*1.73*
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*	*3.72*	*3.90*
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**	*0.86*	*0.75*	*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**	*4.70*	*4.78*	*4.88*
Total Demand	**17.37**	**17.04**	**16.77**	**17.10**	**17.24**	**17.72**	**17.72**	**18.31**	**18.62**	**18.92**	**19.52**	**19.70**	*19.63*	*19.62*	*20.26*
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**	*10.87*	*10.41*	*11.00*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**341**	**323**	**325**	**318**	**335**	**337**	**303**	**284**	**305**	**324**	**284**	**286**	*312*	*297*	*294*
Total Motor Gasoline	**213**	**220**	**219**	**216**	**226**	**215**	**202**	**195**	**210**	**216**	**193**	**196**	*209*	*205*	*204*
Jet Fuel	**41**	**52**	**49**	**43**	**40**	**47**	**40**	**40**	**44**	**45**	**41**	**45**	*42*	*43*	*43*
Distillate Fuel Oil	**106**	**132**	**144**	**141**	**141**	**145**	**130**	**127**	**138**	**156**	**125**	**118**	*144*	*142*	*137*
Residual Fuel Oil	**44**	**49**	**50**	**43**	**44**	**42**	**37**	**46**	**40**	**45**	**36**	**36**	*41*	*39*	*40*
Other Oils [f]	**257**	**261**	**267**	**263**	**273**	**275**	**258**	**250**	**259**	**291**	**246**	**247**	*288*	*269*	*263*

[a]Includes lease condensate.

[b]Net imports equals gross imports plus SPR imports minus exports.

[c]Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

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

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

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

SPR: Strategic Petroleum Reserve. NGL: Natural Gas Liquids

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

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: Petroleum Supply Monthly, DOE/EIA-0109, and Weekly Petroleum Status Report, DOE/EIA-0208.

Table A6. Annual U.S. Natural Gas Supply and Demand

(Trillion Cubic Feet)

	Year														
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Supply															
Total Dry Gas Production	**17.31**	**17.81**	**17.70**	**17.84**	**18.10**	**18.82**	**18.60**	**18.85**	**18.90**	**18.71**	**18.83**	**18.99**	*19.36*	*18.97*	*19.77*
Net Imports	**1.27**	**1.45**	**1.64**	**1.92**	**2.21**	**2.46**	**2.69**	**2.78**	**2.84**	**2.99**	**3.42**	**3.54**	*3.63*	*3.41*	*3.61*
Supplemental Gaseous Fuels	**0.11**	**0.12**	**0.11**	**0.12**	**0.12**	**0.11**	**0.11**	**0.11**	**0.10**	**0.10**	**0.10**	**0.09**	*0.08*	*0.08*	*0.08*
Total New Supply	**18.69**	**19.38**	**19.45**	**19.88**	**20.42**	**21.39**	**21.40**	**21.75**	**21.84**	**21.80**	**22.35**	**22.61**	*23.07*	*22.46*	*23.47*
Working Gas in Storage															
Opening	**2.85**	**2.51**	**3.07**	**2.82**	**2.60**	**2.32**	**2.61**	**2.15**	**2.17**	**2.17**	**2.73**	**2.51**	*1.72*	*2.90*	*2.59*
Closing	**2.51**	**3.07**	**2.82**	**2.60**	**2.32**	**2.61**	**2.15**	**2.17**	**2.17**	**2.73**	**2.51**	**1.72**	*2.90*	*2.59*	*2.57*
Net Withdrawals	**0.34**	**-0.56**	**0.24**	**0.23**	**0.28**	**-0.28**	**0.45**	**-0.02**	**0.00**	**-0.56**	**0.22**	**0.79**	*-1.18*	*0.31*	*0.03*
Total Supply	**19.03**	**18.82**	**19.70**	**20.11**	**20.70**	**21.11**	**21.85**	**21.73**	**21.84**	**21.25**	**22.57**	**23.40**	*21.88*	*22.77*	*23.49*
Balancing Item[a]	**-0.23**	**-0.11**	**-0.66**	**-0.56**	**-0.42**	**-0.40**	**-0.27**	**0.24**	**0.11**	**0.01**	**-0.96**	**-0.86**	*-0.41*	*-0.70*	*-0.49*
Total Primary Supply	**18.80**	**18.72**	**19.03**	**19.54**	**20.28**	**20.71**	**21.58**	**21.96**	**21.95**	**21.26**	**21.61**	**22.54**	*21.47*	*22.07*	*23.00*
Demand															
Lease and Plant Fuel	**1.07**	**1.24**	**1.13**	**1.17**	**1.17**	**1.12**	**1.22**	**1.25**	**1.20**	**1.16**	**1.08**	**1.13**	*1.15*	*1.16*	*1.19*
Pipeline Use	**0.63**	**0.66**	**0.60**	**0.59**	**0.62**	**0.69**	**0.70**	**0.71**	**0.75**	**0.64**	**0.65**	**0.64**	*0.61*	*0.60*	*0.63*
Residential	**4.78**	**4.39**	**4.56**	**4.69**	**4.96**	**4.85**	**4.85**	**5.24**	**4.98**	**4.52**	**4.73**	**4.99**	*4.81*	*4.96*	*5.16*
Commercial	**2.72**	**2.62**	**2.73**	**2.80**	**2.86**	**2.90**	**3.03**	**3.16**	**3.21**	**3.00**	**3.04**	**3.22**	*3.25*	*3.36*	*3.48*
Industrial (Incl. Nonutilities)	**6.82**	**7.02**	**7.23**	**7.53**	**7.98**	**8.17**	**8.58**	**8.87**	**8.83**	**8.69**	**9.01**	**9.51**	*8.97*	*9.30*	*9.78*
Electric Utilities	**2.79**	**2.79**	**2.79**	**2.77**	**2.68**	**2.99**	**3.20**	**2.73**	**2.97**	**3.26**	**3.11**	**3.04**	*2.68*	*2.69*	*2.75*
Total Demand	**18.80**	**18.72**	**19.03**	**19.54**	**20.28**	**20.71**	**21.58**	**21.96**	**21.95**	**21.26**	**21.61**	**22.54**	*21.47*	*22.07*	*23.00*

[a]The balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

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**	*1121.3*	*1100.6*	*1128.0*
Appalachia	**464.8**	**489.0**	**457.8**	**456.6**	**409.7**	**445.4**	**434.9**	**451.9**	**467.8**	**460.4**	**425.6**	**419.4**	*428.9*	*409.7*	*413.3*
Interior	**198.1**	**205.8**	**195.4**	**195.7**	**167.2**	**179.9**	**168.5**	**172.8**	**170.9**	**168.4**	**162.5**	**143.5**	*147.7*	*138.8*	*134.4*
Western	**317.9**	**334.3**	**342.8**	**345.3**	**368.5**	**408.3**	**429.6**	**439.1**	**451.3**	**488.8**	**512.3**	**510.7**	*544.7*	*552.2*	*580.2*
Primary Stock Levels [a]															
Opening	**30.4**	**29.0**	**33.4**	**33.0**	**34.0**	**25.3**	**33.2**	**34.4**	**28.6**	**34.0**	**36.5**	**39.5**	*31.9*	*33.9*	*32.5*
Closing	**29.0**	**33.4**	**33.0**	**34.0**	**25.3**	**33.2**	**34.4**	**28.6**	**34.0**	**36.5**	**39.5**	**31.9**	*33.9*	*32.5*	*32.7*
Net Withdrawals	**1.4**	**-4.4**	**0.4**	**-1.0**	**8.7**	**-7.9**	**-1.2**	**5.8**	**-5.3**	**-2.6**	**-2.9**	**7.6**	*-2.0*	*1.4*	*-0.2*
Imports	**2.9**	**2.7**	**3.4**	**3.8**	**7.3**	**7.6**	**7.2**	**7.1**	**7.5**	**8.7**	**9.1**	**12.5**	*19.8*	*19.9*	*19.7*
Exports	**100.8**	**105.8**	**109.0**	**102.5**	**74.5**	**71.4**	**88.5**	**90.5**	**83.5**	**78.0**	**58.5**	**58.5**	*48.7*	*48.1*	*49.1*
Total Net Domestic Supply	**884.2**	**921.6**	**890.9**	**897.8**	**886.9**	**961.8**	**950.4**	**986.3**	**1008.5**	**1045.7**	**1048.1**	**1035.2**	*1090.4*	*1073.7*	*1098.4*
Secondary Stock Levels [b]															
Opening	**158.4**	**146.1**	**168.2**	**167.7**	**163.7**	**120.5**	**136.1**	**134.6**	**123.0**	**106.4**	**129.4**	**144.0**	*108.1*	*138.5*	*127.2*
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**	*138.5*	*127.2*	*116.7*
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**	*-30.4*	*11.4*	*10.5*
Waste Coal Supplied to IPPs [c]	**0.0**	**0.0**	**0.0**	**6.0**	**6.4**	**7.9**	**8.5**	**8.8**	**8.1**	**9.0**	**9.6**	**10.1**	*10.6*	*11.1*	*11.6*
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**	*1070.6*	*1096.2*	*1120.5*
Demand															
Coke Plants	**40.5**	**38.9**	**33.9**	**32.4**	**31.3**	**31.7**	**33.0**	**31.7**	**30.2**	**28.2**	**28.1**	**28.9**	*26.1*	*25.4*	*25.6*
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**	*818.4*	*853.8*	*871.8*
Nonutilities (Excl. Cogen.) [d]	**5.7**	**7.4**	**11.4**	**15.0**	**17.5**	**19.9**	**21.2**	**22.2**	**21.6**	**26.9**	**52.7**	**123.3**	*150.6*	*154.1*	*157.5*
Retail and General Industry	**76.1**	**76.3**	**75.4**	**74.1**	**81.1**	**81.2**	**78.9**	**77.7**	**78.0**	**72.3**	**69.6**	**69.3**	*67.9*	*65.3*	*65.6*
Total Demand [e]	**889.2**	**896.2**	**893.0**	**901.2**	**943.5**	**950.1**	**962.0**	**1006.3**	**1030.1**	**1038.3**	**1044.5**	**1080.9**	*1063.0*	*1098.6*	*1120.5*
Discrepancy [f]	**7.3**	**3.3**	**-1.6**	**6.6**	**-7.0**	**3.9**	**-1.6**	**0.4**	**3.1**	**-6.7**	**-1.5**	**0.4**	*7.6*	*-2.4*	*0.0*

[a]Primary stocks are held at the mines, preparation plants, and distribution points.

[b]Secondary stocks are held by users. It includes an estimate of stocks held at utility plants sold to nonutility generators.

[c]Estimated independent power producers (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes.

[d]Estimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA). Quarterly coal consumption estimates for 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).

[e]Total Demand includes estimated IPP consumption.

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

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

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: Quarterly Coal Report, DOE/EIA-0121, and Electric Power Monthly, DOE/EIA-0226. Projections: Energy Inf ormation 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															
Total Utility and Nonutility Net Generation															
Coal	**1583.8**	**1590.3**	**1589.9**	**1621.1**	**1685.7**	**1691.7**	**1710.2**	**1795.7**	**1844.1**	**1873.9**	**1884.3**	**1967.7**	*1942.8*	*1948.1*	*1993.6*
Petroleum	**163.9**	**124.0**	**119.0**	**99.4**	**111.3**	**105.5**	**75.3**	**81.7**	**93.0**	**126.9**	**123.6**	**108.8**	*127.8*	*99.9*	*105.2*
Natural Gas	**363.9**	**378.3**	**392.6**	**418.3**	**428.4**	**465.9**	**498.5**	**455.8**	**485.4**	**540.6**	**556.6**	**596.6**	*621.1*	*631.2*	*644.0*
Nuclear	**529.4**	**577.0**	**612.6**	**618.8**	**610.4**	**640.5**	**673.4**	**674.7**	**628.6**	**673.7**	**728.3**	**753.9**	*767.3*	*771.9*	*777.2*
Hydroelectric	**273.7**	**289.5**	**285.0**	**248.9**	**275.5**	**256.8**	**308.3**	**344.4**	**354.9**	**318.9**	**313.4**	**273.1**	*211.3*	*258.2*	*295.8*
Geothermal and Other [a]	**57.2**	**65.7**	**72.2**	**76.8**	**85.7**	**93.4**	**92.2**	**94.7**	**88.1**	**83.8**	**98.5**	**99.8**	*106.8*	*104.6*	*104.9*
Total Generation	**2971.9**	**3024.9**	**3071.3**	**3083.4**	**3196.9**	**3253.8**	**3357.8**	**3447.0**	**3494.2**	**3617.9**	**3704.5**	**3799.9**	*3777.0*	*3813.9*	*3920.6*
Net Imports [c]	**11.0**	**2.3**	**19.6**	**25.4**	**27.8**	**44.8**	**39.2**	**38.0**	**36.6**	**27.6**	**30.6**	**34.0**	*20.3*	*25.3*	*31.4*
Total Supply	**2982.8**	**3027.2**	**3091.0**	**3108.8**	**3224.7**	**3298.6**	**3397.1**	**3485.0**	**3530.8**	**3645.5**	**3735.1**	**3834.0**	*3797.4*	*3839.2*	*3952.1*
Losses and Unaccounted for [d]	**235.6**	**210.4**	**217.9**	**223.6**	**236.4**	**223.2**	**234.6**	**234.9**	**236.2**	**221.4**	**234.2**	**227.8**	*213.2*	*253.3*	*260.9*
Demand															
Retail Sales [e]															
Residential	**905.5**	**924.0**	**955.4**	**935.9**	**994.8**	**1008.5**	**1042.5**	**1082.5**	**1075.9**	**1130.1**	**1144.9**	**1192.4**	*1202.5*	*1214.1*	*1255.6*
Commercial	**725.9**	**751.0**	**765.7**	**761.3**	**794.6**	**820.3**	**862.7**	**887.4**	**928.6**	**979.4**	**1002.0**	**1055.2**	*1085.7*	*1100.6*	*1130.6*
Industrial	**925.7**	**945.5**	**946.6**	**972.7**	**977.2**	**1008.0**	**1012.7**	**1033.6**	**1038.2**	**1051.2**	**1058.2**	**1064.2**	*996.0*	*983.9*	*1003.1*
Other	**89.8**	**92.0**	**94.3**	**93.4**	**94.9**	**97.8**	**95.4**	**97.5**	**102.9**	**103.5**	**107.0**	**109.5**	*117.9*	*118.6*	*120.4*
Subtotal	**2646.8**	**2712.6**	**2762.0**	**2763.4**	**2861.5**	**2934.6**	**3013.3**	**3101.1**	**3145.6**	**3264.2**	**3312.1**	**3421.4**	*3402.1*	*3417.2*	*3509.7*
Nonutility Use/Sales [f]	**100.4**	**104.2**	**111.0**	**121.8**	**126.9**	**140.9**	**149.2**	**148.9**	**149.0**	**159.8**	**188.8**	**184.8**	*182.0*	*168.7*	*181.5*
Total Demand	**2747.2**	**2816.7**	**2873.0**	**2885.1**	**2988.4**	**3075.5**	**3162.4**	**3250.1**	**3294.6**	**3424.0**	**3500.9**	**3606.2**	*3584.1*	*3585.9*	*3691.2*
Memos:															
Nonutility Sales to Electric Utilities	**87.1**	**112.5**	**135.3**	**164.4**	**187.5**	**202.2**	**214.2**	**220.6**	**222.7**	**245.9**	**342.0**	**599.8**	*934.0*	*929.9*	*940.3*
Electric Utility Generation	**2784.3**	**2808.2**	**2825.0**	**2797.2**	**2882.5**	**2910.7**	**2994.5**	**3077.4**	**3122.5**	**3212.2**	**3173.7**	**3015.4**	*2661.0*	*2715.3*	*2798.8*
Nonutility Generation	**187.6**	**216.7**	**246.3**	**286.1**	**314.4**	**343.1**	**363.3**	**369.6**	**371.7**	**405.7**	**530.9**	**784.6**	*1116.0*	*1098.6*	*1121.8*

[a]Other includes generation from wind, wood, waste, and solar sources.
[b]Net generation.
[c]Data for 2000 are estimates.
[d]Balancing item, mainly transmission and distribution losses.
[e]Total of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA's Electric Power Monthly and Electric Power Annual. Power marketers' sales for historical periods are reported in EIA's Electric Sales and Revenue, Appendix C. Data for 2000 are estimates.
[f]Defined 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.