

June 2000

Highlights

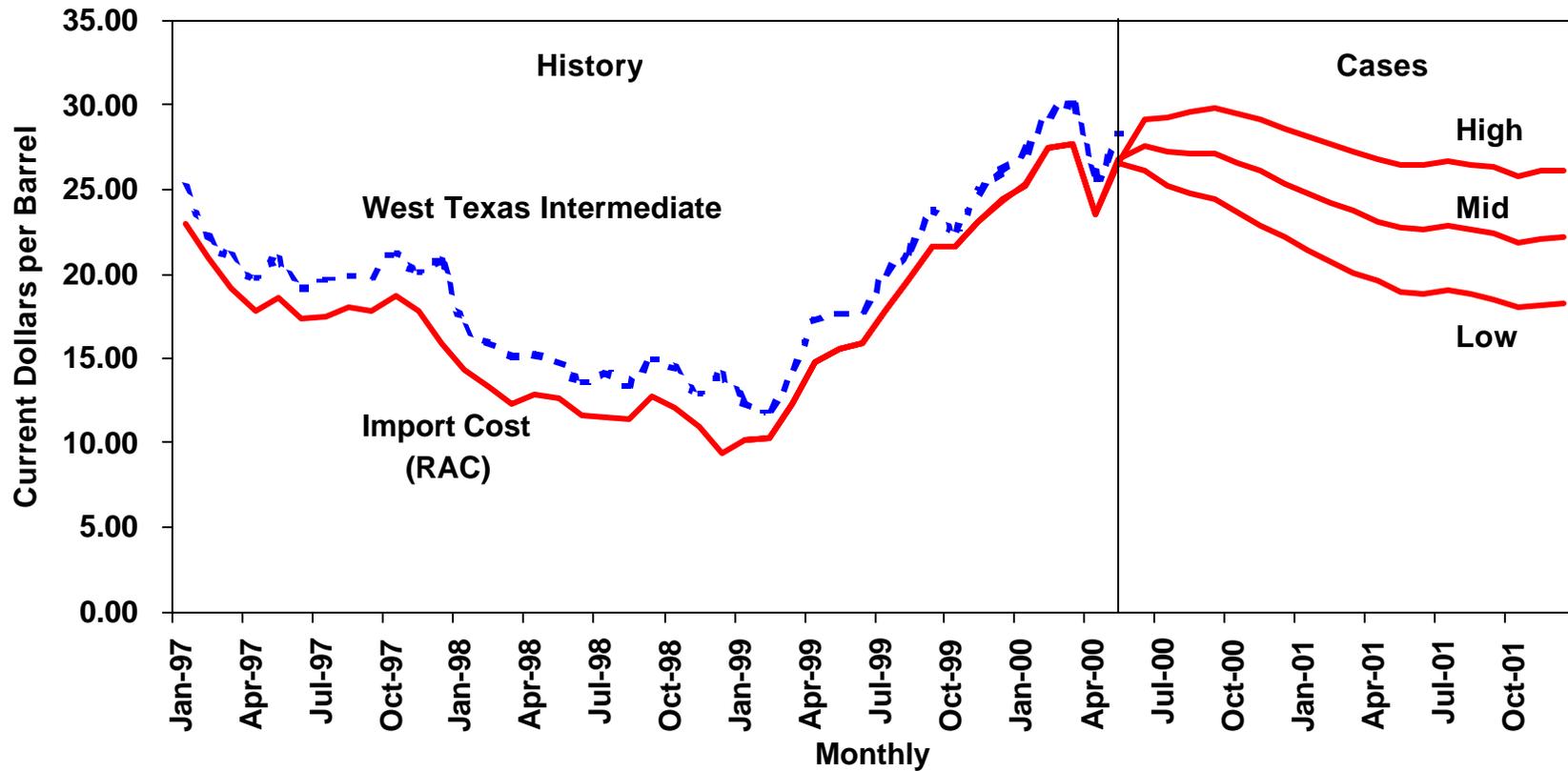
Overview

Renewed strength in world oil prices following a short-lived slump in April and a dramatic rally in domestic natural gas prices in response to weak storage injection performance and general worries about near-term gas supplies has prompted us to sharply increase expected levels for energy prices in the short term. Given our general expectations about growth in world oil demand and supply, the oil price adjustment for this Outlook is a shift in the expected level and not a move away from the conviction that prices should trend downward from current levels by year end. Meanwhile, as higher crude oil prices have intervened, and as generally low inventories have resulted in some greater-than-expected tightness in gasoline markets, particularly in the Midwest, we now recognize that hopes for an early peak in pump prices this year have given way to expectations of some continued increases in June and possibly July. For natural gas prices, the possibility that some surprisingly strong growth in electricity demand so far this year may be followed by robust growth this summer has enhanced concerns about gas supply keeping up with demand during the storage injection season. Continued wide swings in natural gas prices are likely to be a feature of this summer as long as the vagaries of the weather play such an important role in the outlook for gas supply over the next 6 to 9 months.

International Oil Markets

Crude Oil Prices: The monthly U.S. imported crude oil price rebounded in May to an estimated \$26.75 per barrel level (\$28.82 West Texas Intermediate crude oil), about \$1 per barrel below the previous peak seen in March ([Figure 1](#)). It is apparent that the \$4-per-barrel dip in April, following OPEC production increases, was an over-correction and that the current higher price range for world oil prices is more in line with world oil market fundamentals. An additional \$0.80 per barrel increase is likely in June, and persistence at or near the \$27.50-per-barrel range is expected through the summer without an unexpected change in oil supply. Our estimates of world oil supply and demand lead us to believe that world oil prices should remain at or above \$26 per barrel (\$28 per barrel for West Texas Intermediate crude oil) for most of the remainder of 2000. Prices are then expected to gradually decline in 2001 as supply increases

Figure 1. U.S. Monthly Crude Oil Prices



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2000.



faster than demand, such that the average world oil price in 2001 will be about \$23 per barrel, more than \$3.50 below the annual average for 2000.

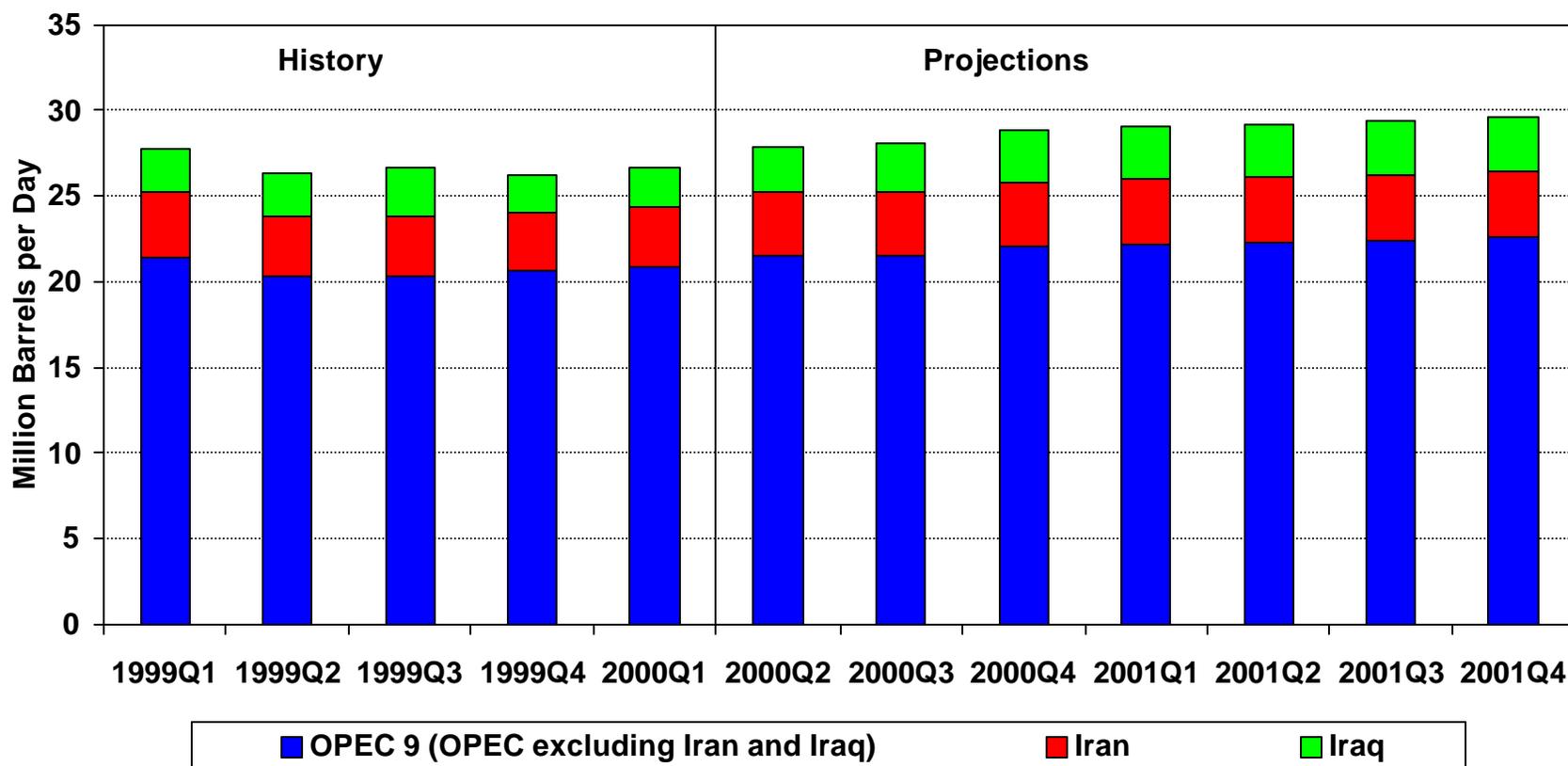
However, at the OPEC meeting in March, there was an informal agreement to decrease OPEC 10 (Organization of Petroleum Exporting Countries excluding Iraq) supply by 500,000 barrels per day if the OPEC Basket price averages less than \$22 per barrel over a 20-day period. Conversely, if the OPEC Basket price averages over \$28 per barrel over a 20-day period, OPEC has stated their intention to increase OPEC 10 supply by 500,000 barrels per day. At the time of this publication it appears that the OPEC Basket price may average over \$28 per barrel during a 20-day period ending sometime in early June. However, additional OPEC 10 output under this scheme is not included in our base case. If the OPEC 10 countries do increase actual output by 500,000 barrels per day in early June, we would expect oil prices to end up about \$1-\$2 per barrel less than assumed in our forecast. If on the other hand, the OPEC 10 countries fail to increase production in the third or fourth quarters of 2000 as assumed in this forecast, higher oil prices would be expected.

International Oil Supply: This forecast assumes that OPEC 10 crude oil production will be 25.2 million barrels per day in the second quarter, 0.8 million barrels per day above first quarter production levels ([Figure 2](#)). This is about 0.5 million barrels per day above their production target of 24.69 million barrels per day. The forecast then assumes another 0.1 million barrels per day increase in OPEC 10 crude oil production in the third quarter and an additional 0.5 million barrel per day increase in the fourth quarter of 2000. Continued steady production increases by the OPEC 10 countries are expected throughout 2001.

Iraqi crude oil production is assumed to average over 2.3 million barrels per day in the first quarter of 2000 and increase through the remainder of the year to average about 3.0 million barrels per day in the fourth quarter of 2000. This is not as much as the Iraqis have said they will be producing by the end of the year, but it is our best guess about what Iraq will actually be producing. Iraqi oil production is assumed to increase even more in 2001. These projections of Iraqi crude oil production are merely assumptions and do not reflect any official U.S. Government view on the future of Iraqi oil exports.

Non-OPEC production is expected to increase by 1.2 million barrels per day in 2000 and by another 0.8 million barrels per day in 2001, primarily from the North Sea, the former Soviet Union, Mexico, South America and Africa ([Table 3](#)). Oil production from the former Soviet Union countries in the first quarter of 2000 was the most since the third quarter of 1993.

Figure 2. OPEC Crude Oil Production 1999-2001



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2000.

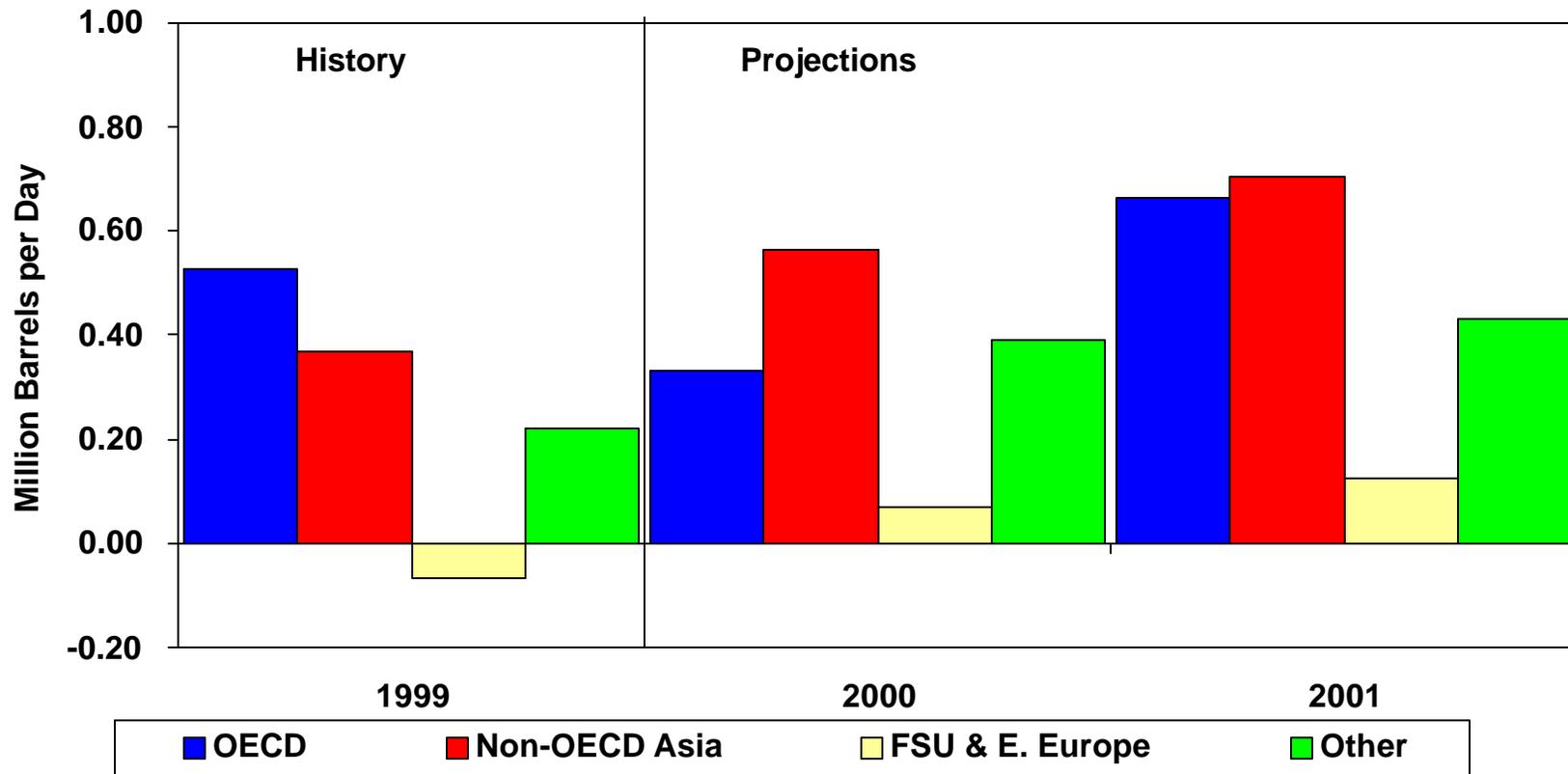
International Oil Demand: This month's forecast assumes growth in world oil demand in 2000 of 1.4 million barrels per day (about 1.8 percent), to average about 76 million barrels per day ([Table 3](#)). In 1999, world oil demand grew by 1.1 million barrels per day (1.4 percent). World oil demand growth in 2001 is expected to be about 1.9 million barrels per day, similar to the growth that was seen in the 1995-1997 period. The U.S., which accounted for more than half of the growth in world oil demand in 1998 and 1999, is expected to account for only 8 percent of world oil demand growth in 2000 and about 20 percent in 2001. As Asia continues to recover from the economic crisis of 1997-1998, it is expected to once again become an important engine for world oil demand growth. However, overall demand growth in 2000 is expected to be weaker in the face of high oil prices despite the inelastic nature of oil demand. By 2001, oil demand is expected to be more than 78 million barrels per day.

In 1999, world oil demand growth was mainly concentrated in OECD countries, particularly the United States. In 2000, non-OECD Asia is expected once again to be the predominant region for oil demand growth, although near-term growth rates there are unlikely to match those seen in the early to mid 1990s. By 2001, not only is non-OECD oil demand expected to grow even more, but OECD oil demand growth is expected to be strong as well ([Figure 3](#)).

World Oil Inventories: While EIA does not attempt to estimate oil inventory levels on a global basis, we can discern the direction oil inventories are headed from our world oil supply and demand estimates. Following a 0.7 million barrel per day implied draw on world inventories in 1999 (based on world oil consumption averaging 74.7 million barrels per day while world oil supply averaged 74.0 million barrels per day), oil inventories are expected to be built by 0.2 million barrels per day in 2000, as non-OPEC oil production increases substantially. However, this still leaves global oil inventories in a precarious position, particularly when viewed on a forward-cover or days-supply basis. In 2001, we expect a 0.1 million barrel per day build in world oil inventories, as supply exceeds demand once again.

OECD stock levels, which we do estimate, are expected to remain well below average 1990-1995 levels throughout 2000 ([Figure 4](#)). The difference between normal OECD oil inventories and 2000 levels is expected to widen after the first quarter, even if OPEC 10 crude oil production increases by 0.8 million barrels per day in the second quarter of 2000 as assumed in our forecast. This is because the assumed increase in production is insufficient to build inventories during the second and third quarters relative to the normal pattern. This would lead to extremely low inventories by the end of the year, leaving little flexibility in the world oil system to react to a cutoff in oil supplies somewhere or an extreme cold snap during next winter.

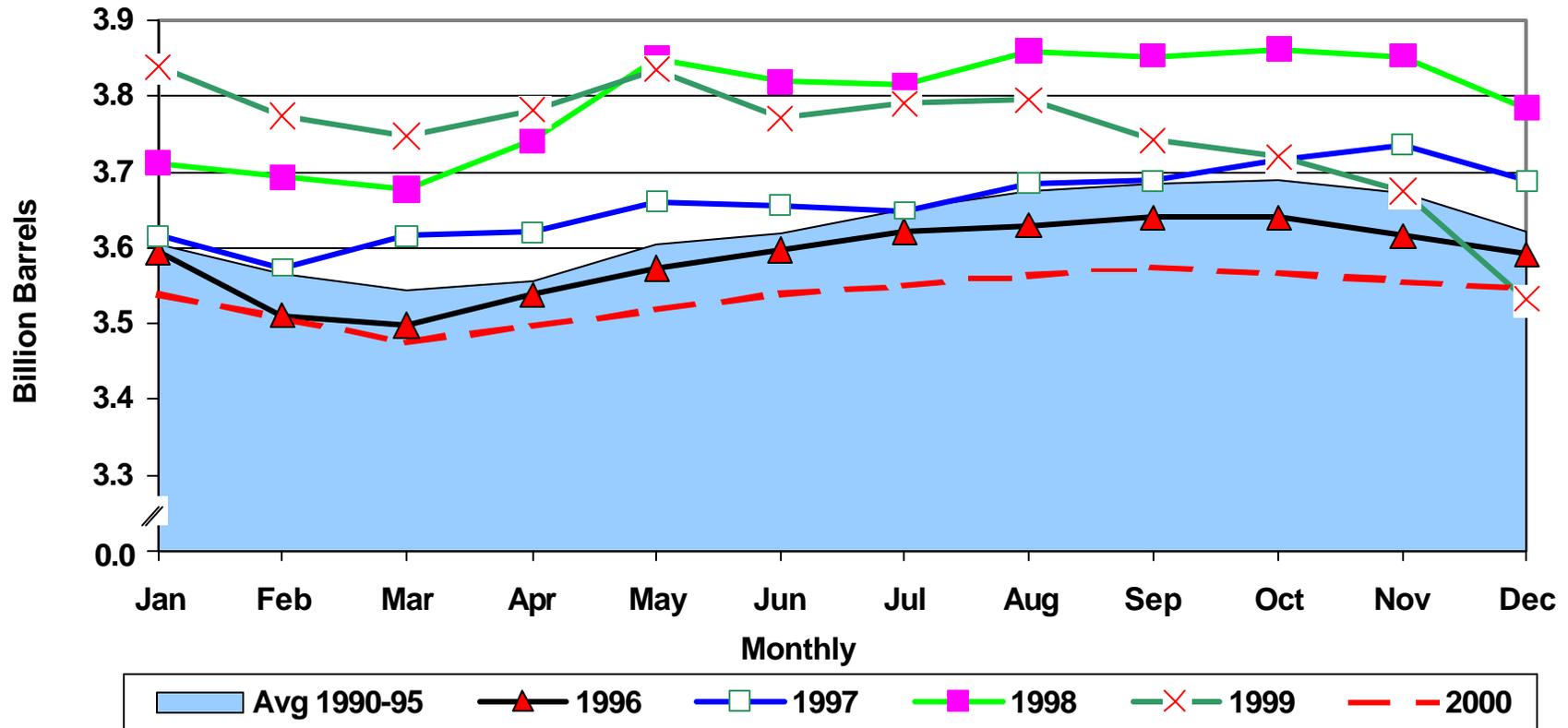
Figure 3. Annual World Oil Demand (Changes from Previous Year)



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2000.



Figure 4. Total OECD Oil Stocks*



*Total includes commercial and government stocks.

Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2000.



U. S. Energy Prices

Motor Gasoline. After initially reaching of \$1.53 per gallon in the third week of March, the price of regular unleaded, self-service retail motor gasoline fell but then rose again to an average of \$1.54 per gallon in late May. The most recent price increase followed a period which began at the end of March when the pump price started receding in response to lower worldcrude oil prices, and had declined by 11 cents by the beginning of May. At the time, it seemed that the driving season's peak prices were behind us. Declining pump prices were projected for the remainder of the year. However, this optimism turned out to be short-lived. Several important factors have caused this turnabout. First of all, world crude oil prices have staged substantial gains since April, increasing by nearly \$4.00 per barrel. Some of this increase may be tied to strong U.S. gasoline demand, which accounts for over 10 percent of total world petroleum demand. Looking backward, it appears that the rapid fall in the world oil price that followed the OPEC meeting in March (see world oil discussion above) was an overreaction to the promise of new supplies from OPEC countries. The incremental increase in production simply wasn't enough to satisfy the increasing demands for petroleum and to make demonstrable headway against sharply reduced world oil inventories. Low inventories for gasoline is the other major factor causing the high gasoline prices.

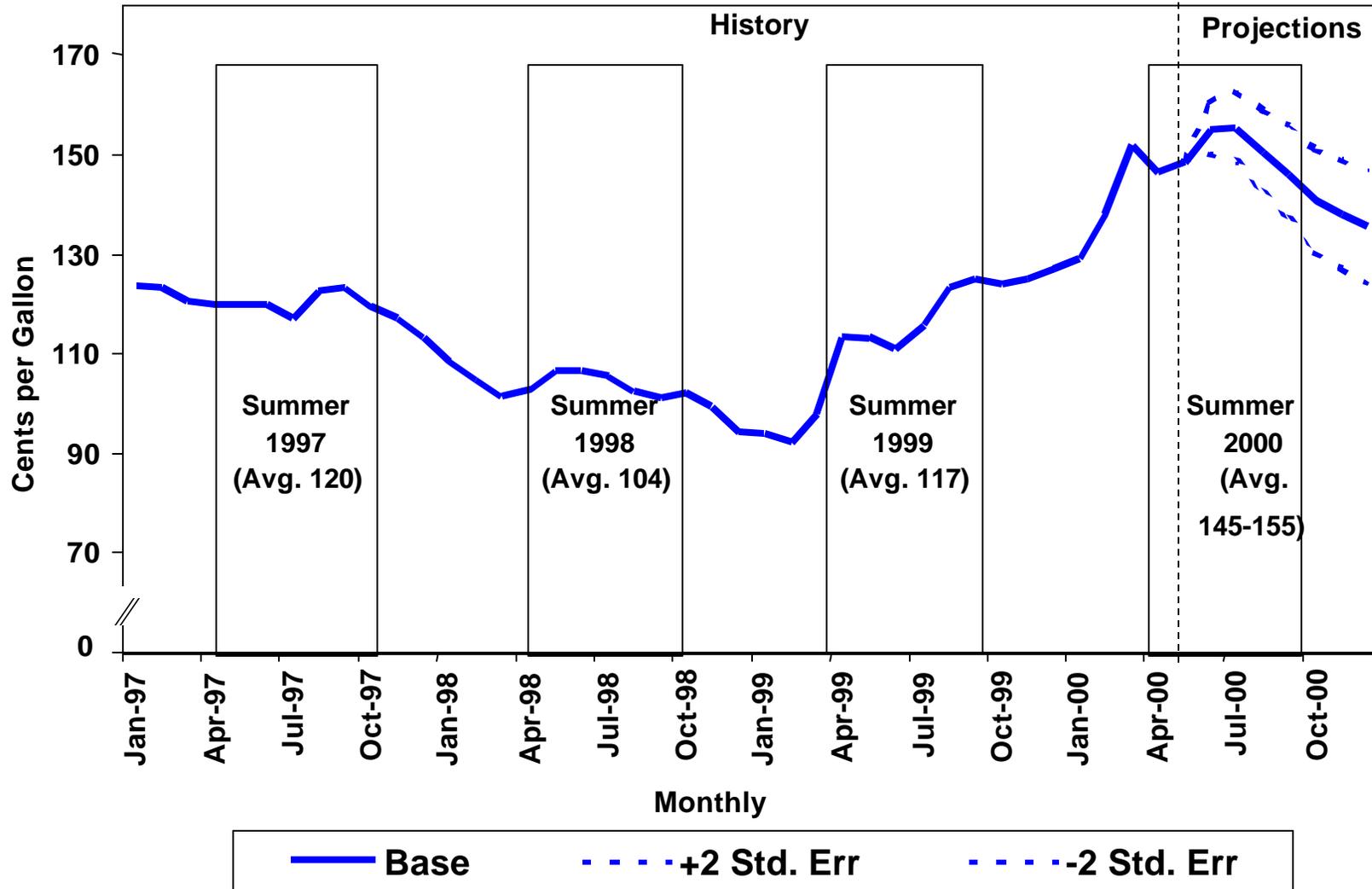
We now project that monthly average retail gasoline prices will peak in July, the height of the driving season, at \$1.55 per gallon, and that prices will average about \$1.50 per gallon for the summer driving season ([Figure 5](#) and [Table 4](#)). For 2001, we expect a drop in gasoline prices, assuming that our declining crude oil price path holds.

The retail price movements over the last few weeks have varied among the regions. The West Coast, which normally has had the highest prices, has experienced steady price declines since April. However, in the Midwest, supply difficulties, particularly for reformulated gasoline, have resulted in noticeable sharp price spikes in some local areas.

There is, as always, significant uncertainty about the price of gasoline for the summer. An approximate 95-percent confidence range for the average pump price for regular self-service gasoline is illustrated in [Figure 5](#). (The range is based on the normal error distributions associated with the Short-Term Integrated Forecasting System model.) The probability of prices ranging above or below these curves is, for any month, approximately 5 percent. This range is, in effect, conditional on more-or-less smooth operating conditions for refineries and pipelines throughout the summer.

Figure 5. Retail Gasoline Price Cases*

(Base Case and 95 Percent Confidence Range)



* Regular gasoline, self-serve cash.

Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2000.



Reformulated Gasoline. About a third of gasoline sold in the U.S. must meet Federal reformulated gasoline (RFG) specifications. The Federal RFG program transitioned from Phase 1 to Phase 2 on January 1, 2000, with new requirements for reducing toxic air pollutants (TAP) and nitrogen oxides (NOx). While refiners were able to meet these new year-round TAP and NOx requirements, there are also new, more stringent, summer requirements for reductions in volatile organic compounds (VOC) and NOx. This Phase 2 Summer RFG had to be in place at distribution terminals by May 1 and at retail outlets by June 1.

The wholesale (Platt's U.S. Gulf Coast waterborne cargoes and New York Harbor barges) price premium for RFG over conventional gasoline has averaged about 2.5 cents per gallon since it was first introduced in 1995. This summer's Phase 2 RFG price premium is expected to increase to about 4 cents per gallon. (See "[Demand and Price Outlook for Phase 2 Reformulated Gasoline, 2000.](#)")

Refiners have begun producing the new Summer Phase 2 reformulated gasoline. But the price premium for the Summer Phase 2 RFG has averaged about 8 cents per gallon in April. While we expect the price premium to decline as the program fully phases in, there is a significant new uncertainty in RFG pricing. On March 29, 2000, the Federal Circuit Court upheld the validity of Unocal Corporation's reformulated motor gasoline patent (Patent No. 5,288,393 awarded by the U.S. Patent and Trademark office on Feb. 22, 1994), confirming an earlier Federal District Court jury award of damages of 5.75 cents per gallon against six refiners that had infringed on the patent in California. Roger C. Beach, Unocal chairman and chief executive officer, suggested in a news release that "Unocal's patents may have application throughout the United States."

Diesel Fuel Oil. Diesel fuel oil prices tend to mirror the seasonal motor gasoline price path, but can also be strongly affected by the heating oil situation, particularly during the winter months. Last February for example, a combination of factors, including severe weather in the Northeast and extremely low inventories of distillate fuel led to diesel prices that topped \$2.00 per gallon in New England and other portions of the Northeast. Prices in that region remained quite robust through the winter, then abated in the spring. During this period in much of the rest of the country where residential heating oil is generally not used, the prices were considerably calmer. In general, the prices were mostly effected by the crude oil price. In California, however the prices followed a different path. Short-lived refinery problems exacerbated the normally tight California diesel market. As a result, diesel prices in the Golden State increased at winter's end and stayed relatively high through March until the production disruptions were resolved.

Diesel prices have been fairly stable over the last 2 months and are not expected to change much through the driving season. They appear to be relatively normal compared to gasoline prices. However, distillate stocks are currently quite low and there is some risk of price spikes similar to last winter in the Northeast, for heating oil as well as for diesel fuel, if inventories are not built to adequate levels by the end of the year.

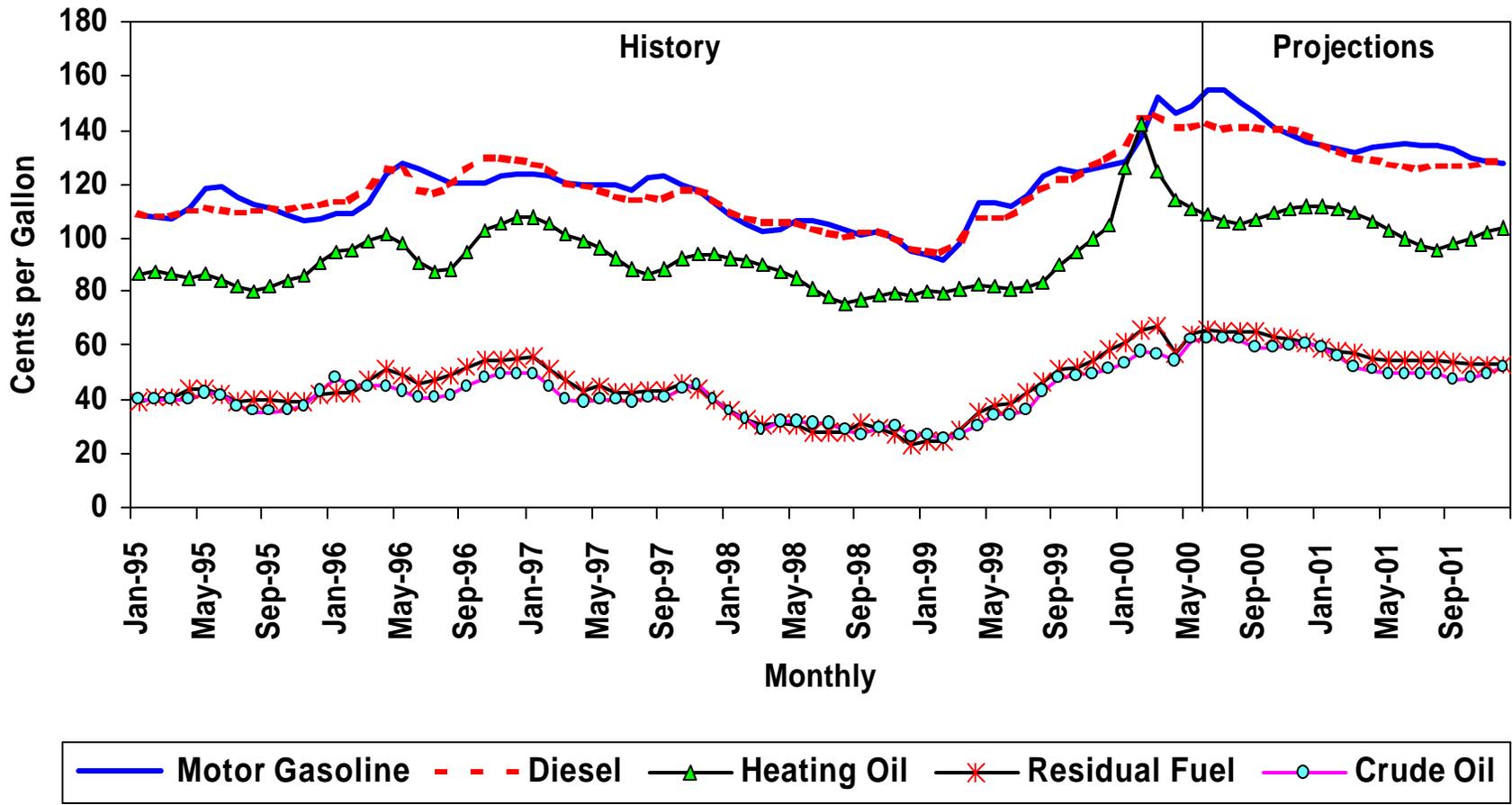
For the summer, the retail price is expected to average \$1.42 per gallon, or close to 30 cents per gallon more than one year ago ([Figure 6](#) and [Table 4](#)). In our current projection, we have the retail price falling by the fourth quarter in response to stock gains and falling crude oil prices.

Natural Gas. Spot wellhead prices had been averaging over \$4.00 per thousand cubic feet since late May, nearly doubling since the beginning of the year ([Figure 7](#)). Although rising crude oil prices have encouraged gas prices to climb, by far the major determinant for these robust gas prices has been the fragile supply situation. Simply put, the injection rate for gas into storage has been too slow to comfort the market for next winter's heating season. Underground working gas storage levels are currently about 20 percent below year-ago levels ([Figure 8](#)). At present rates of injection, the availability of gas for next winter has become uncertain, as reflected in the volatility and levels of current prices. Another factor contributing to this rapid price jump has been the recent hot weather in portions of the country that consume large amounts of gas-generated electricity. Gas that would otherwise be injected into storage is now being used (indirectly through electric utilities) to run air conditioners. In addition, there has been growing demand for natural gas resulting from the expanding economy over the last 7-8 years and the increasing role of gas generation at power facilities.

While natural gas imports have generally been rising significantly in recent years, the United States may be running into some short-term supply constraints. Several years of relatively low prices have slowed down exploration and drilling for new sources of supply. Recent higher prices have caused drilling to rebound, but new supplies may not begin to yield significant improvements in actual production until after this summer.

We are projecting that natural gas prices will increase by 50 percent this summer (April-September) compared to last summer and by 60 percent this winter (October-March) compared to last winter. Naturally, higher end-use prices will result from higher projected wellhead prices. The wellhead price for the year is projected to average over \$3.00 per thousand cubic feet. Next year, we project a slight easing of the price. Our projections assume normal weather for both the summer and winter. However, these projections could unravel if weather turns

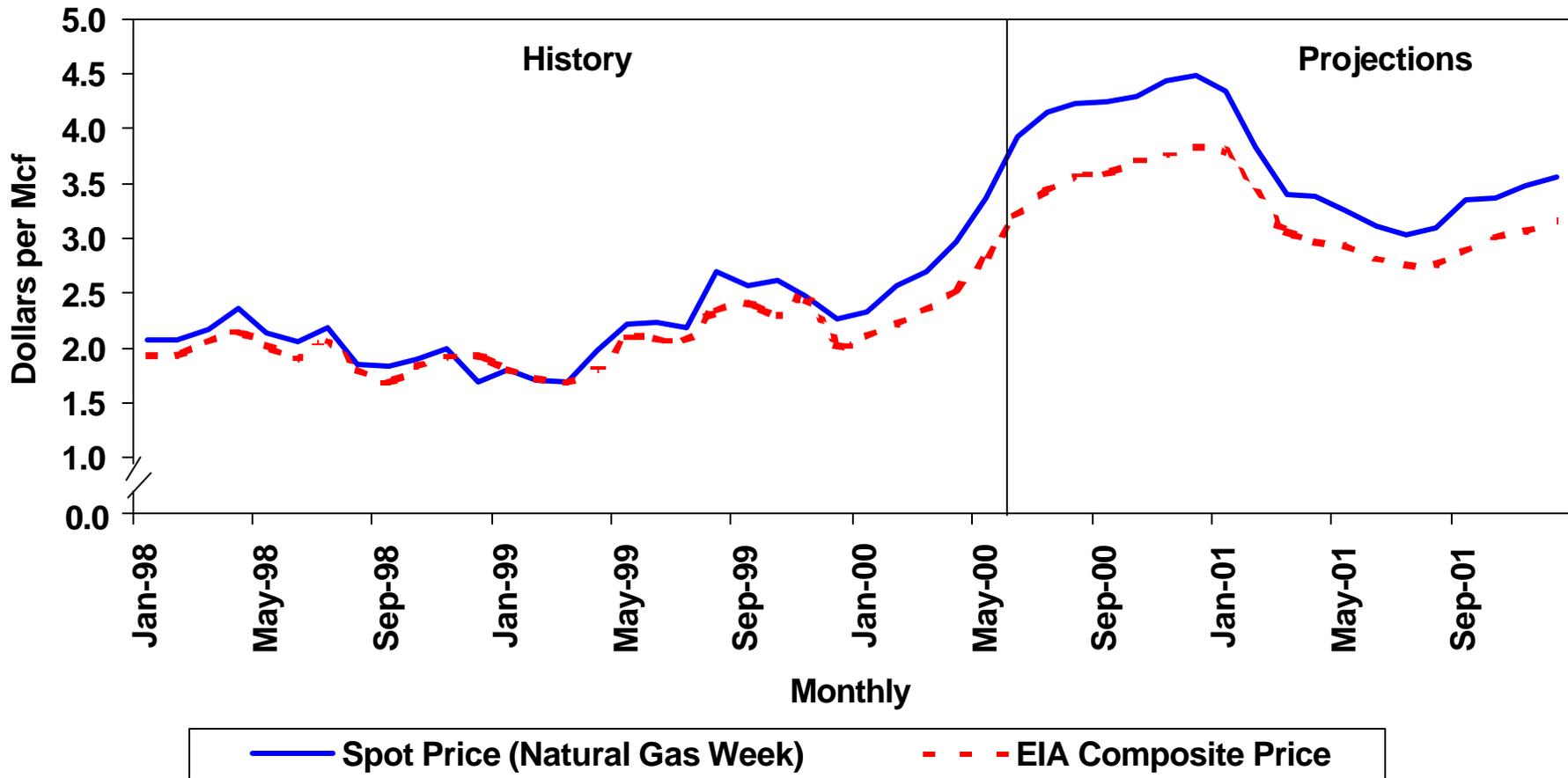
Figure 6. Petroleum Product Prices



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2000.



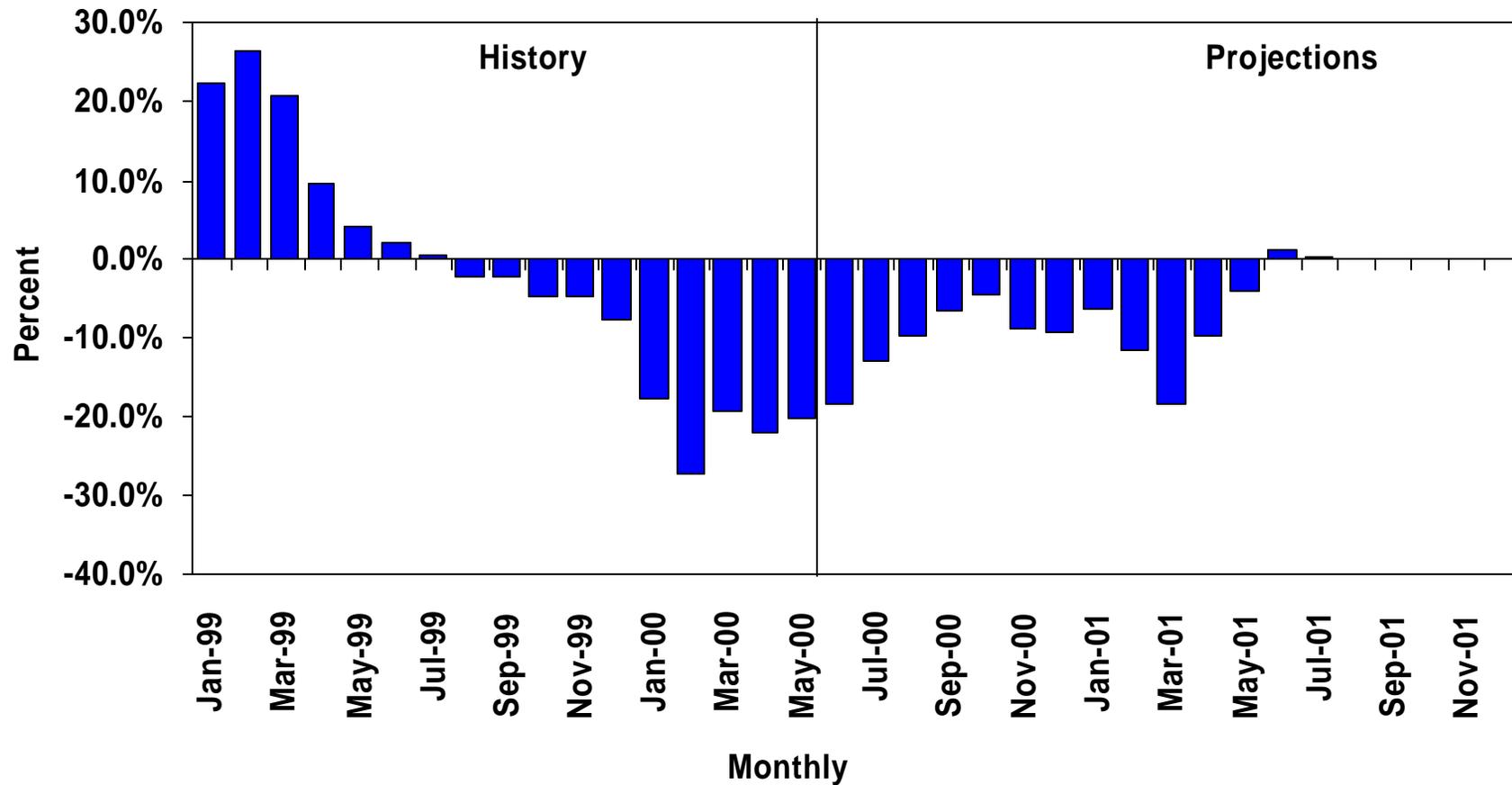
Figure 7. Natural Gas wellhead Prices: Composite and Spot



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2000.



Figure 8. Working Gas in Underground Storage (Percent Change from Year Ago)



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2000.



out to be mild for sustained periods of time in the gas consuming regions of the nation.

Electric Utility Fuels. Natural gas is projected to yield its price advantage over residual fuel oil by the fourth quarter of this year as a fuel input for power generation ([Figure 9](#) and [Table 4](#)). Oil is projected to be the cheaper of the two fuels until the second half of the year 2001, when natural gas is projected to regain its price advantage.

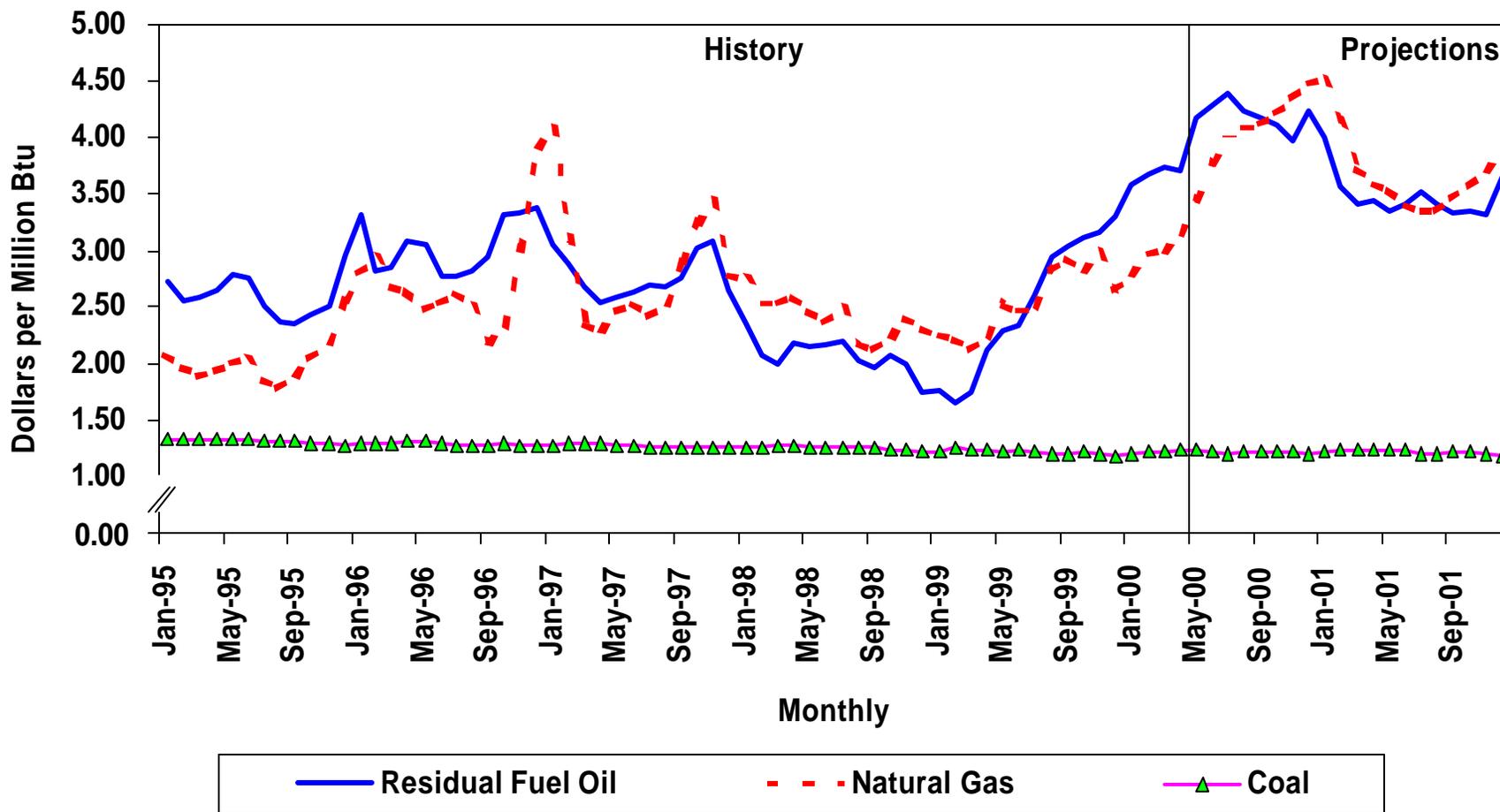
U.S. Petroleum Demand

Total petroleum products demand in 1999 grew by 607,000 barrels per day, or 3.2 percent, the largest year-to-year growth since 1988. Transportation demand accounted for more than half that growth, and liquefied petroleum products accounted for much of the rest of that increase. Despite the recent highs in product prices and little prospect of any easing of those prices to levels observed in previous years, total U.S. petroleum demand is still projected to rise throughout the forecast period. Consumption, however, is expected to grow by only 100,000 barrels per day in 2000 (0.5 percent) but by a further 380,000 barrels per day (1.9 percent) in 2001 ([Figure 10](#)).

Several factors are believed to account for much of the substantial projected moderation in growth in 2000 from that of the previous year. Price increases are the most important factor. Although prices eased briefly from their recent spring highs, they have once again increased during the last two months. For the year as a whole, retail product price increases are expected to range from 26 percent (diesel fuel and motor gasoline) to 49 percent (jet fuel kerosene). For the summer, retail regular motor gasoline prices are projected to average \$1.50 per gallon, up 33 cents from last year. *Transportation sector* fuels demand growth is therefore projected to be 220,000 barrels per day, or 1.6 percent, down from the 360,000 barrels-per-day growth estimated for 1999. Higher prices are projected to bring about fuel substitution in the *electric utility and industrial sectors*. Total residual fuel oil demand, having shrunk 6 percent in 1999, is projected to contract a further 15 percent this year, with electric power generation demand declining by 40 percent to less than 200,000 barrels per day, a record low. In contrast to last year's robust growth, little change is expected for petrochemical demand for LPG as a result of hikes in energy prices.

Weather patterns are an additional factor dampening growth in the current year in both peak seasons. For the winter quarter, weather (in terms of population-weighted heating-degree days) was 7 percent (leap year-adjusted) milder than that in 1999. As a result, first-quarter space-heating demand for petroleum products declined as much as 200,000 barrels per day from that of the previous

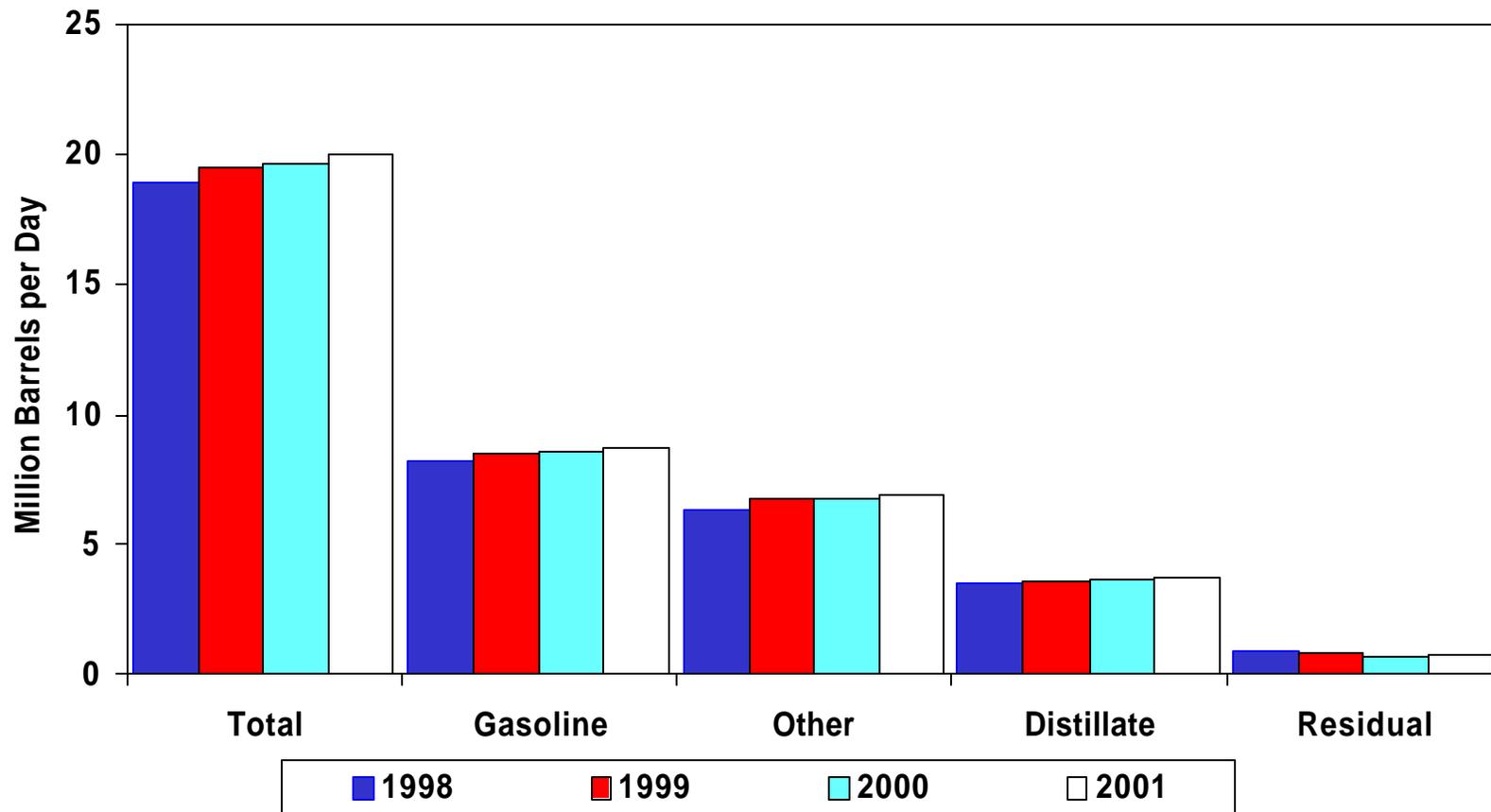
Figure 9. Fossil Fuel Prices to Electric Utilities



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2000.



Figure 10. Annual Petroleum Demand by Product



Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2000.



winter quarter, the dramatic spike in Northeast demand in late January notwithstanding. The projection also assumes normal weather patterns during the summer quarter compared to the 6-percent warmer-than-normal summer in 1999. Although electricity demand is expected to increase for the year as a whole, it is projected to decline slightly for the third quarter. A third quarter as warm as those of the two previous years would, of course, result in higher petroleum products demand. Distillate fuel demand as a peaking fuel during that quarter could increase by an additional 50,000 barrels per day under such conditions.

Delivery patterns are also believed to have dampened growth in the current year. Last December's shipments of total petroleum products was more than 1.1 million barrels per day higher than in 1998. In contrast, January 2000 shipments were 420,000 barrels per day less than in January 1999. Even after adjusting changes resulting from underlying growth, price shifts and inherent volatility in monthly shipments, the data clearly suggest a measurable increase in deliveries brought about by Y2K-related concerns that reduced overall deliveries by about 0.25 percent for the year as a whole.

The year 2001's accelerated increase in petroleum demand growth assumes a return to normal weather patterns during the first quarter, and a steady decline in product prices. The lack of unusual end-of-year delivery patterns is also projected to contribute to demand growth from that of 2000. Transportation demand is projected to accelerate, as prices continue to decline. Residual fuel oil is projected to stage a price-induced recovery in the electric utility and industrial sectors but is likely to recapture only part of the market share lost during the prior two years.

U.S. Petroleum Supply

Average domestic crude oil production is expected to decrease by about 130,000 barrels per day (bpd), or 2.2 percent, in 2000 to a level of 5.79 million bpd. For 2001, a 0.8 percent decrease is expected and results in an average production rate of 5.75 million bpd for the year .

Lower 48 States oil production is expected to decrease minimally (about 20-25,000 bpd) in 2000 to a rate of 4.85 million bpd. A decrease of about 30,000 bpd is expected in 2001.

Oil production from the Mars, Ram Powell, Auger, Troika ,Ursa, Diana, Hoover and Baldpate Federal Offshore fields is expected to account for about 11.4 percent of the lower 48 oil production by the 4th quarter of 2001. Shell started production in 1999 in their Ursa field which will peak in production in the year

2000. Exxon's Diana and Hoover fields will produce together and will start production in mid 2000 at a rate of 30,000 bpd increasing to 100,000 bpd in early 2001. There have been shut-ins on the Mars platform in December and January in order to connect production from Shell's Europa satellite field

Alaska is expected to account for 15.8 percent of the total U.S. oil production in 2001. Its oil production is expected to decrease by 10.5 percent in 2000 and again by 4.1 percent in 2001.

Natural Gas Supply and Demand

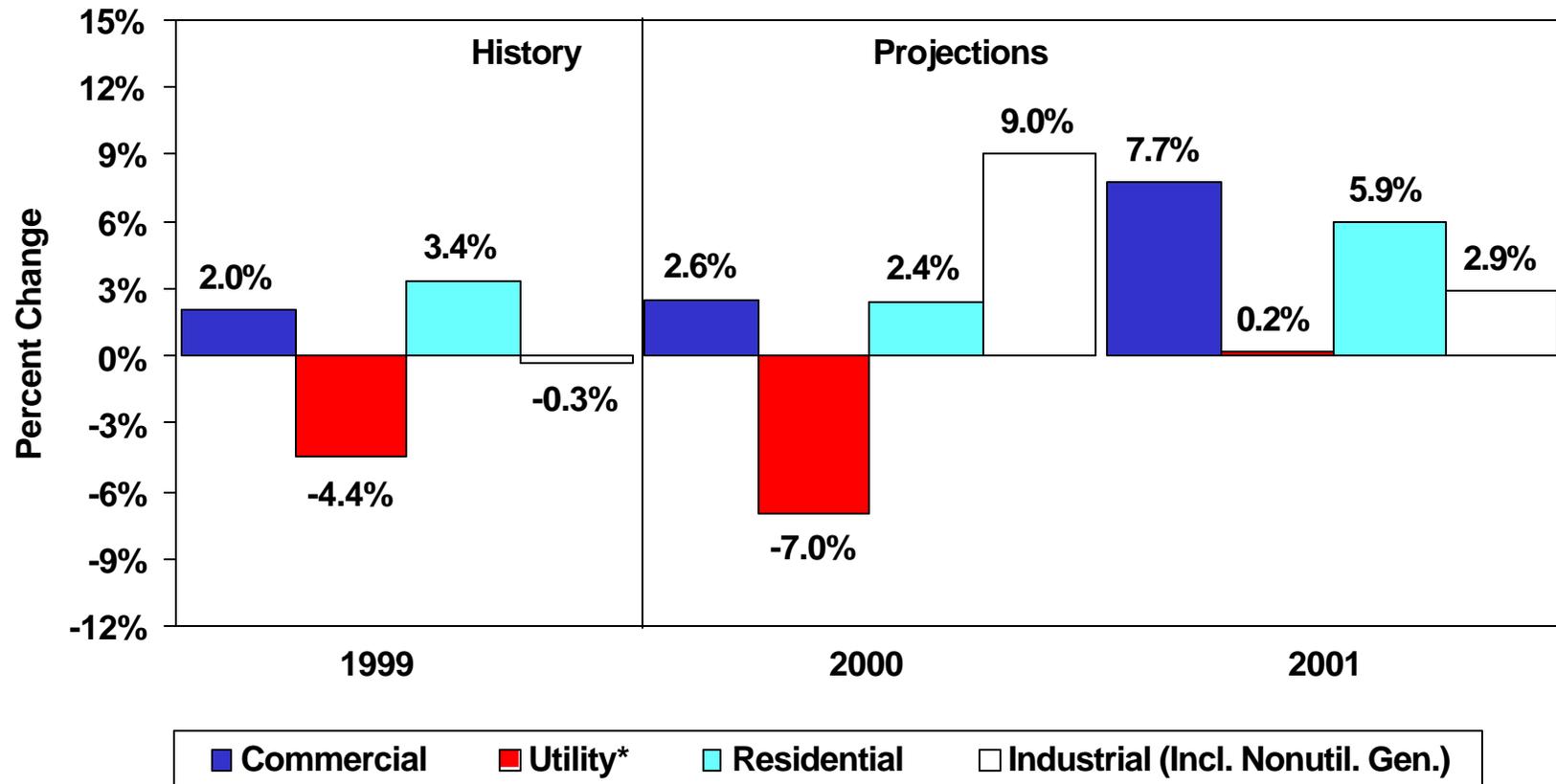
The forecast for overall natural gas demand in 2000 and 2001 remains at about the levels previously forecast in our May Outlook, although the balance of demand between the industrial and utility sectors has been revised. Projections of utility sector demand have been revised somewhat downward due to data revisions for the first quarter of 2000. Likewise, industrial gas demand has been revised somewhat higher for the same reason ([Figure 11](#)). This is due to the fact that more electric power is being generated by the nonutility sector, due to purchases of generating units under deregulation, than previously estimated. Gas purchases by nonutility generators appear in the industrial sector in EIA's gas market accounting system. Our projections show that natural gas prices will become higher than fuel oil prices in the utility sector by the fourth quarter of 2000 and through 2001 ([Figure 9](#) and [Table 4](#)). Concern regarding the natural gas supply and demand balance in the rest of 2000 and in early 2001, even if weather is normal, is the primary factor driving gas prices upward.

Projections of US dry gas production and projections of net natural gas imports are unchanged from May's outlook. Storage levels remain in the lower half of the normal range. The ability of the domestic industry to push gas storage to comfortable levels by the beginning of autumn is in question at this time.

On the plus side for gas supply, the US gas rig count reached 662 for the week ending May 26, its highest level since the count began to be kept in March 1987. Still, the American Gas Association (AGA) said that U.S. working gas during the week ending May 19 was 37 percent full, or 1,218 billion cubic feet, which was 414 billion cubic feet lower than a year ago. Storage holders have been unable or unwilling under the current pricing conditions to make any significant additions to storage. Canadian storage facilities were at 34.4 percent of capacity as of May 19, according to the Canadian Gas Association, compared with 44.9 percent full at the same time last year.

Futures gas prices for the next 12 months are very high, averaging \$4.20 per mmbtu, reflecting market concerns about gas deliverability being able to meet gas demand. Among the factors behind this unprecedented gas price rise are: the

Figure 11. Annual Changes in Natural Gas Demand by Sector



* Electric utility gas demand changes in recent years in part reflect sale of assets to the nonutility sector.

Sources: History: EIA; Projections: Short-Term Energy Outlook, June 2000.



expectation of continuing increases in gas demand, a relatively slow stock buildup thus far, strong crude oil prices, and fears of a repeat of last summer's heat wave in key consuming regions.

Electricity Demand and Supply

Total annual electricity demand for 2000 and 2001 has been revised upward slightly compared with the May Outlook. From our own estimates and from weekly data available from the Edison Electric Institute, it is apparent that electricity use in the United States through May of this year has increased by more than 4 percent compared to the same period in 1999. Aside from the sharp cold spell in the Northeast in late January and early February, weather did not seem to be responsible for much of this growth, as heating demand was generally weak. May was quite warm, however, which gave a strong start to the cooling season. We would be surprised, however, to see third quarter 2000 electricity demand growth to exceed or even match last year's level. Thus, we expect a relatively low growth rate in mid summer to offset the apparent growth seen to date.

Expectations of growth in non-utility power generation for 2000 and 2001 has been revised upward, while utility generation growth has been revised downward. As mentioned above, this is due to the fact that more electric power is being generated by the nonutility sector, due to purchases of generating units under deregulation, than previously estimated.

Fears of electric power reliability for this summer persist as a result of the power outages and other problems of last summer. The summer of 1999 (second and third quarters) was 5.0% hotter than normal. The month of July, in particular, was a record 14.4 percent hotter than normal. However, our forecast is based on the assumption of normal weather, which implies that this summer's cooling degree-days (CDD) would be 1.9 percent below last summer's CDD. Still, summer (second and third quarter) electricity demand is expected to be up by 1.3 percent compared with last summer's demand, and shortages cannot be ruled out if there is a repeat of last summer's record heat. Major concerns for utilities are the possibility of severely spiking power prices and transmission equipment failure during hot spells.

The North American Electric Reliability Council (NERC) said recently that peak power demand this summer will be 1.8 percent higher than it was last summer. New England, New York and the southwestern US were noted as areas of concern.

The Federal Energy Regulatory Commission (FERC) on May 17, 2000 issued a summertime policy, effective until Sept. 30, that will enable owners of on-site generation facilities to sell wholesale electricity to nonaffiliates without prior Commission notice during peak use periods. During a heat wave or time of tight supply, industrial facilities could sell their excess electricity back to the grid. FERC has likewise waived prior notice requirements in order for utilities and their customers to negotiate arrangements to reduce load requirements at certain times or obtain power from an industrial generator. FERC has also encouraged demand side transactions by clarifying pricing formulas, enabling utilities to use price incentives to compensate customers for voluntary curtailment of power use during peak demand periods. These policies are aimed at supporting the industry's efforts to ensure continued reliability of the nation's electric supply system during the summer high demand period (<http://www.ferc.fed.us>).

Table HL1. U. S. Energy Supply and Demand

	Year				Annual Percentage Change		
	1998	1999	2000	2001	1998-1999	1999-2000	2000-2001
Real Gross Domestic Product (GDP) (billion chained 1996 dollars)	8516	8867	<i>9219</i>	<i>9514</i>	4.1	<i>4.0</i>	<i>3.2</i>
Imported Crude Oil Price ^a (nominal dollars per barrel)	12.08	17.22	<i>26.49</i>	<i>22.93</i>	42.5	<i>53.8</i>	<i>-13.4</i>
Petroleum Supply (million barrels per day)							
Crude Oil Production ^b	6.25	5.93	<i>5.79</i>	<i>5.75</i>	-5.1	<i>-2.4</i>	<i>-0.7</i>
Total Petroleum Net Imports (including SPR)	9.76	9.91	<i>10.44</i>	<i>10.89</i>	1.5	<i>5.3</i>	<i>4.3</i>
Energy Demand							
World Petroleum (million barrels per day)	73.6	74.7	<i>76.1</i>	<i>78.0</i>	1.5	<i>1.9</i>	<i>2.5</i>
Petroleum (million barrels per day)	18.92	19.52	<i>19.63</i>	<i>20.01</i>	3.2	<i>0.6</i>	<i>1.9</i>
Natural Gas (trillion cubic feet)	21.26	21.38	<i>22.11</i>	<i>22.96</i>	0.6	<i>3.4</i>	<i>3.8</i>
Coal ^c (million short tons)	1039	1038	<i>1070</i>	<i>1098</i>	-0.1	<i>3.1</i>	<i>2.6</i>
Electricity (billion kilowatthours)							
Utility Sales ^d	3240	3296	<i>3360</i>	<i>3420</i>	1.7	<i>1.9</i>	<i>1.8</i>
Nonutility/Sales ^e	156	165	<i>184</i>	<i>185</i>	5.8	<i>11.5</i>	<i>0.5</i>
Total	3396	3461	<i>3544</i>	<i>3605</i>	1.9	<i>2.4</i>	<i>1.7</i>
Total Energy Demand ^f (quadrillion Btu)	94.4	96.1	<i>97.7</i>	<i>99.7</i>	1.8	<i>1.7</i>	<i>2.0</i>
Total Energy Demand per Dollar of GDP (thousand Btu per 1996 Dollar)	11.09	10.84	<i>10.60</i>	<i>10.48</i>	-2.3	<i>-2.2</i>	<i>-1.1</i>
Renewable Energy as Percent of Total ^g ...	7.0	6.9	<i>6.8</i>	<i>6.6</i>			

^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 annual electric utility sales for historical periods are initially derived from the sum of monthly sales figures based on submissions by electric utilities of Form EIA-826, "Monthly Electric Utility Sales and Revenue Report with State Distributions." Final annual totals are taken from compilations from Form EIA -861, "Annual Electric Utility Report."

^e Defined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA-867, "Annual Nonutility Power Producer Report." Data for 1999 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 Statistics Report* DOE/EIA-0520; *Weekly Petroleum Status Report*, DOE/EIA-0208. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0300.

Table 1. U.S. Macroeconomic and Weather Assumptions

	1999				2000				2001				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1999	2000	2001
Macroeconomic^a															
Real Gross Domestic Product (billion chained 1996 dollars - SAAR)	8738	8779	8901	9051	<i>9133</i>	<i>9191</i>	<i>9244</i>	<i>9306</i>	<i>9393</i>	<i>9472</i>	<i>9555</i>	<i>9637</i>	8867	<i>9219</i>	<i>9514</i>
Percentage Change from Prior Year	3.9	3.8	4.3	4.5	<i>4.5</i>	<i>4.7</i>	<i>3.9</i>	<i>2.8</i>	<i>2.8</i>	<i>3.1</i>	<i>3.4</i>	<i>3.6</i>	4.1	<i>4.0</i>	<i>3.2</i>
Annualized Percent Change from Prior Quarter.....	3.6	1.9	5.6	6.8	<i>3.6</i>	<i>2.6</i>	<i>2.3</i>	<i>2.7</i>	<i>3.7</i>	<i>3.4</i>	<i>3.5</i>	<i>3.4</i>			
GDP Implicit Price Deflator (Index, 1996=1.000)	1.038	1.041	1.044	1.049	<i>1.056</i>	<i>1.059</i>	<i>1.063</i>	<i>1.067</i>	<i>1.072</i>	<i>1.075</i>	<i>1.079</i>	<i>1.084</i>	1.043	<i>1.061</i>	<i>1.077</i>
Percentage Change from Prior Year	1.3	1.4	1.3	1.6	<i>1.7</i>	<i>1.7</i>	<i>1.8</i>	<i>1.7</i>	<i>1.5</i>	<i>1.4</i>	<i>1.5</i>	<i>1.6</i>	1.4	<i>1.7</i>	<i>1.5</i>
Real Disposable Personal Income (billion chained 1996 Dollars - SAAR)	6289	6339	6385	6455	<i>6528</i>	<i>6596</i>	<i>6653</i>	<i>6702</i>	<i>6779</i>	<i>6846</i>	<i>6919</i>	<i>6974</i>	6367	<i>6620</i>	<i>6880</i>
Percentage Change from Prior Year	4.3	4.1	3.7	3.7	<i>3.8</i>	<i>4.1</i>	<i>4.2</i>	<i>3.8</i>	<i>3.8</i>	<i>3.8</i>	<i>4.0</i>	<i>4.1</i>	4.0	<i>4.0</i>	<i>3.9</i>
Manufacturing Production (Index, 1992=1.000)	1.392	1.409	1.425	1.448	<i>1.463</i>	<i>1.463</i>	<i>1.462</i>	<i>1.466</i>	<i>1.476</i>	<i>1.493</i>	<i>1.513</i>	<i>1.532</i>	1.418	<i>1.464</i>	<i>1.504</i>
Percentage Change from Prior Year	3.5	4.1	4.4	4.7	<i>5.1</i>	<i>3.9</i>	<i>2.6</i>	<i>1.2</i>	<i>0.9</i>	<i>2.1</i>	<i>3.5</i>	<i>4.5</i>	4.2	<i>3.2</i>	<i>2.7</i>
OECD Economic Growth (percent) ^b													2.6	<i>2.7</i>	<i>2.7</i>
Weather^c															
Heating Degree-Days															
U.S.	2153	489	79	1456	<i>2025</i>	<i>496</i>	<i>85</i>	<i>1622</i>	<i>2235</i>	<i>522</i>	<i>85</i>	<i>1622</i>	4177	<i>4229</i>	<i>4464</i>
New England	3040	784	86	2097	<i>3055</i>	<i>898</i>	<i>167</i>	<i>2240</i>	<i>3179</i>	<i>893</i>	<i>167</i>	<i>2239</i>	6007	<i>6360</i>	<i>6478</i>
Middle Atlantic	2816	628	68	1822	<i>2725</i>	<i>686</i>	<i>104</i>	<i>2004</i>	<i>2897</i>	<i>708</i>	<i>104</i>	<i>2004</i>	5334	<i>5519</i>	<i>5712</i>
U.S. Gas-Weighted.....	2275	517	84	1533	<i>2079</i>	<i>513</i>	<i>95</i>	<i>1714</i>	<i>2348</i>	<i>545</i>	<i>96</i>	<i>1714</i>	4409	<i>4402</i>	<i>4703</i>
Cooling Degree-Days (U.S.)	35	353	831	58	<i>36</i>	<i>379</i>	<i>783</i>	<i>75</i>	<i>31</i>	<i>345</i>	<i>783</i>	<i>75</i>	1277	<i>1272</i>	<i>1234</i>

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

^bOECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

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

SAAR: Seasonally-adjusted annualized rate.

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

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, *Statistical Release G.17(419)*. Projections of OECD growth are based on WEFA Group, "World Economic Outlook," Volume 1. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0300.

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

	1999				2000				2001				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1999	2000	2001
Macroeconomic^a															
Real Fixed Investment															
(billion chained 1996 dollars-SAAR)	1556	1581	1607	1616	1673	1700	1710	1724	1749	1772	1788	1810	1590	1702	1780
Real Exchange Rate															
(index)	1.134	1.170	1.163	1.145	1.169	1.153	1.159	1.156	1.136	1.111	1.090	1.071	1.153	1.159	1.102
Business Inventory Change															
(billion chained 1996 dollars-SAAR)	0.0	-8.3	1.7	10.2	11.7	11.3	9.8	6.7	7.0	9.7	14.3	18.9	0.9	9.9	12.5
Producer Price Index															
(index, 1982=1.000)	1.228	1.245	1.268	1.278	1.299	1.304	1.304	1.304	1.308	1.306	1.308	1.311	1.255	1.303	1.308
Consumer Price Index															
(index, 1982-1984=1.000).....	1.649	1.662	1.672	1.684	1.699	1.711	1.719	1.725	1.734	1.740	1.750	1.760	1.667	1.714	1.746
Petroleum Product Price Index															
(index, 1982=1.000)	0.446	0.591	0.682	0.719	0.839	0.842	0.838	0.800	0.796	0.753	0.726	0.715	0.610	0.830	0.747
Non-Farm Employment															
(millions)	127.7	128.2	128.9	129.6	130.3	131.0	131.5	131.8	132.3	132.7	133.3	133.8	128.6	131.2	133.0
Commercial Employment															
(millions)	88.5	89.2	89.8	90.4	91.0	91.5	92.1	92.7	93.3	93.8	94.3	94.9	89.5	91.8	94.1
Total Industrial Production															
(index, 1992=1.000)	1.346	1.361	1.377	1.396	1.412	1.415	1.414	1.418	1.428	1.442	1.459	1.475	1.370	1.415	1.451
Housing Stock															
(millions)	115.4	115.8	116.0	116.1	116.5	116.8	117.1	117.5	117.8	118.1	118.4	118.7	115.8	117.0	118.3
Miscellaneous															
Gas Weighted Industrial Production															
(index, 1992=1.000)	1.179	1.176	1.186	1.210	1.212	1.214	1.207	1.206	1.211	1.221	1.232	1.241	1.188	1.210	1.226
Vehicle Miles Traveled ^b															
(million miles/day).....	6731	7556	7706	7358	6848	7712	7885	7393	7138	7837	7979	7534	7341	7461	7624
Vehicle Fuel Efficiency															
(index, 1999=1.000)	0.988	0.992	1.006	1.010	1.001	1.006	1.010	0.996	1.001	1.004	1.013	1.009	0.999	1.003	1.007
Real Vehicle Fuel Cost															
(cents per mile).....	2.99	3.35	3.52	3.75	4.14	4.26	4.21	4.05	3.88	3.74	3.65	3.65	3.40	4.17	3.73
Air Travel Capacity															
(mill. available ton-miles/day).....	431.0	452.4	467.2	452.2	452.1	472.9	488.4	477.5	473.1	491.8	508.9	499.1	450.8	472.8	493.3
Aircraft Utilization															
(mill. revenue ton-miles/day).....	242.2	263.4	276.3	260.6	259.8	277.2	289.8	273.9	269.3	287.7	302.8	289.2	260.7	275.2	287.4
Airline Ticket Price Index															
(index, 1982-1984=1.000).....	2.130	2.186	2.180	2.254	2.309	2.371	2.354	2.367	2.394	2.393	2.391	2.413	2.188	2.350	2.398
Raw Steel Production															
(millions tons)	25.11	25.97	26.26	26.37	26.61	26.64	26.47	26.79	27.01	27.30	27.15	27.54	103.72	106.51	109.00

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

^bIncludes all highway travel.

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)*; U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0300.

Table 3. International Petroleum Supply and Demand: Mid World Oil Price Case

(Million Barrels per Day, Except OECD Commercial Stocks)

	1999				2000				2001				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1999	2000	2001
Demand ^a															
OECD															
U.S. (50 States)	19.3	19.2	19.8	19.8	<i>19.0</i>	<i>19.6</i>	<i>19.9</i>	<i>20.1</i>	<i>19.8</i>	<i>19.8</i>	<i>20.1</i>	<i>20.3</i>	19.5	<i>19.6</i>	<i>20.0</i>
U.S. Territories	0.3	0.3	0.3	0.4	<i>0.4</i>	0.3	<i>0.4</i>	<i>0.4</i>							
Canada.....	1.9	1.8	1.9	1.9	<i>1.9</i>	<i>1.8</i>	<i>2.0</i>	<i>2.0</i>	<i>1.9</i>	<i>1.9</i>	<i>2.0</i>	<i>2.0</i>	1.9	<i>1.9</i>	<i>1.9</i>
Europe.....	15.3	13.8	14.1	14.9	<i>14.5</i>	<i>14.2</i>	<i>14.7</i>	<i>15.3</i>	<i>15.1</i>	<i>14.2</i>	<i>14.7</i>	<i>15.4</i>	14.5	<i>14.7</i>	<i>14.9</i>
Japan	6.2	5.0	5.2	5.9	<i>5.7</i>	<i>5.3</i>	<i>5.4</i>	<i>5.8</i>	<i>6.2</i>	<i>5.1</i>	<i>5.3</i>	<i>5.7</i>	5.6	<i>5.5</i>	<i>5.6</i>
Australia and New Zealand.....	1.0	1.0	1.0	1.0	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.1</i>	<i>1.0</i>	<i>1.1</i>	1.0	<i>1.0</i>	<i>1.0</i>
Total OECD.....	43.9	41.2	42.4	43.9	<i>42.5</i>	<i>42.2</i>	<i>43.3</i>	<i>44.6</i>	<i>44.5</i>	<i>42.3</i>	<i>43.5</i>	<i>44.9</i>	42.8	<i>43.2</i>	<i>43.8</i>
Non-OECD															
Former Soviet Union.....	3.8	3.5	3.6	3.7	<i>3.8</i>	<i>3.6</i>	<i>3.6</i>	<i>3.6</i>	<i>3.8</i>	<i>3.7</i>	<i>3.7</i>	<i>3.7</i>	3.6	<i>3.7</i>	<i>3.7</i>
Europe.....	1.6	1.6	1.5	1.6	<i>1.6</i>	<i>1.6</i>	<i>1.6</i>	<i>1.6</i>	<i>1.7</i>	<i>1.7</i>	<i>1.7</i>	<i>1.7</i>	1.6	<i>1.6</i>	<i>1.7</i>
China.....	4.4	4.3	4.3	4.3	<i>4.6</i>	<i>4.5</i>	<i>4.5</i>	<i>4.5</i>	<i>4.8</i>	<i>4.8</i>	<i>4.7</i>	<i>4.8</i>	4.3	<i>4.5</i>	<i>4.8</i>
Other Asia.....	8.8	8.8	8.7	9.0	<i>9.1</i>	<i>9.2</i>	<i>9.0</i>	<i>9.4</i>	<i>9.7</i>	<i>9.7</i>	<i>9.4</i>	<i>9.8</i>	8.8	<i>9.2</i>	<i>9.7</i>
Other Non-OECD.....	13.3	13.6	13.6	13.6	<i>13.7</i>	<i>14.0</i>	<i>14.0</i>	<i>14.0</i>	<i>14.1</i>	<i>14.4</i>	<i>14.5</i>	<i>14.4</i>	13.5	<i>13.9</i>	<i>14.3</i>
Total Non-OECD	31.8	31.8	31.7	32.2	<i>32.8</i>	<i>33.0</i>	<i>32.7</i>	<i>33.1</i>	<i>34.1</i>	<i>34.2</i>	<i>33.9</i>	<i>34.4</i>	31.9	<i>32.9</i>	<i>34.2</i>
Total World Demand.....	75.7	72.9	74.0	76.1	<i>75.3</i>	<i>75.2</i>	<i>76.0</i>	<i>77.7</i>	<i>78.7</i>	<i>76.5</i>	<i>77.5</i>	<i>79.3</i>	74.7	<i>76.1</i>	<i>78.0</i>
Supply ^b															
OECD															
U.S. (50 States)	8.9	9.0	9.0	9.2	<i>9.2</i>	<i>9.0</i>	<i>8.9</i>	<i>9.0</i>	<i>9.0</i>	<i>9.0</i>	<i>8.9</i>	<i>9.0</i>	9.0	<i>9.0</i>	<i>9.0</i>
Canada.....	2.6	2.6	2.6	2.7	<i>2.7</i>	<i>2.7</i>	<i>2.7</i>	<i>2.8</i>	<i>2.8</i>	<i>2.8</i>	<i>2.8</i>	<i>2.8</i>	2.6	<i>2.7</i>	<i>2.8</i>
North Sea ^c	6.3	6.0	6.2	6.7	<i>6.7</i>	<i>6.5</i>	<i>6.7</i>	<i>6.8</i>	<i>6.8</i>	<i>6.6</i>	<i>6.7</i>	<i>6.8</i>	6.3	<i>6.6</i>	<i>6.7</i>
Other OECD.....	1.5	1.5	1.5	1.6	<i>1.7</i>	<i>1.8</i>	1.5	<i>1.7</i>	<i>1.7</i>						
Total OECD.....	19.3	19.1	19.4	20.1	<i>20.3</i>	<i>20.0</i>	<i>20.0</i>	<i>20.3</i>	<i>20.2</i>	<i>20.0</i>	<i>20.1</i>	<i>20.3</i>	19.5	<i>20.1</i>	<i>20.1</i>
Non-OECD															
OPEC.....	30.4	28.9	29.2	28.7	<i>29.3</i>	<i>30.4</i>	<i>30.7</i>	<i>31.4</i>	<i>31.7</i>	<i>31.8</i>	<i>32.0</i>	<i>32.3</i>	29.3	<i>30.4</i>	<i>31.9</i>
Former Soviet Union.....	7.3	7.3	7.5	7.5	<i>7.6</i>	<i>7.6</i>	<i>7.6</i>	<i>7.6</i>	<i>7.7</i>	<i>7.7</i>	<i>7.7</i>	<i>7.7</i>	7.4	<i>7.6</i>	<i>7.7</i>
China.....	3.2	3.2	3.2	3.2	<i>3.3</i>	3.2	<i>3.3</i>	<i>3.3</i>							
Mexico.....	3.6	3.4	3.3	3.3	<i>3.5</i>	<i>3.6</i>	<i>3.6</i>	<i>3.6</i>	<i>3.6</i>	<i>3.6</i>	<i>3.6</i>	<i>3.7</i>	3.4	<i>3.6</i>	<i>3.6</i>
Other Non-OECD.....	11.3	11.1	11.2	11.2	<i>11.3</i>	<i>11.2</i>	<i>11.3</i>	<i>11.4</i>	<i>11.4</i>	<i>11.4</i>	<i>11.5</i>	<i>11.5</i>	11.2	<i>11.3</i>	<i>11.5</i>
Total Non-OECD	55.7	53.9	54.4	53.9	<i>54.9</i>	<i>56.0</i>	<i>56.4</i>	<i>57.3</i>	<i>57.6</i>	<i>57.7</i>	<i>58.0</i>	<i>58.5</i>	54.5	<i>56.2</i>	<i>58.0</i>
Total World Supply	75.0	73.0	73.8	74.1	<i>75.2</i>	<i>76.0</i>	<i>76.5</i>	<i>77.5</i>	<i>77.8</i>	<i>77.7</i>	<i>78.1</i>	<i>78.7</i>	74.0	<i>76.3</i>	<i>78.1</i>
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR).....	0.3	-0.3	0.3	1.3	<i>0.1</i>	<i>-0.6</i>	<i>-0.4</i>	<i>0.4</i>	<i>0.2</i>	<i>-0.6</i>	<i>-0.2</i>	<i>0.4</i>	0.4	<i>-0.1</i>	<i>-0.1</i>
Other.....	0.4	0.2	-0.1	0.7	<i>0.0</i>	<i>-0.2</i>	<i>-0.1</i>	<i>-0.1</i>	<i>0.7</i>	<i>-0.6</i>	<i>-0.4</i>	<i>0.1</i>	0.3	<i>-0.1</i>	<i>-0.1</i>
Total Stock Withdrawals	0.7	-0.1	0.3	2.0	<i>0.1</i>	<i>-0.8</i>	<i>-0.5</i>	<i>0.2</i>	<i>0.9</i>	<i>-1.2</i>	<i>-0.7</i>	<i>0.5</i>	0.7	<i>-0.2</i>	<i>-0.1</i>
OECD Comm. Stocks, End (bill. bbls.).....	2.8	2.8	2.8	2.6	<i>2.5</i>	<i>2.6</i>	<i>2.6</i>	<i>2.6</i>	<i>2.5</i>	<i>2.6</i>	<i>2.6</i>	<i>2.6</i>	2.6	<i>2.6</i>	<i>2.6</i>
Non-OPEC Supply	44.6	44.1	44.5	45.3	<i>45.9</i>	<i>45.6</i>	<i>45.8</i>	<i>46.1</i>	<i>46.1</i>	<i>45.9</i>	<i>46.1</i>	<i>46.4</i>	44.6	<i>45.8</i>	<i>46.1</i>
Net Exports from Former Soviet Union...	3.5	3.8	3.9	3.8	<i>3.9</i>	<i>4.0</i>	<i>4.0</i>	<i>4.0</i>	<i>3.8</i>	<i>4.0</i>	<i>4.0</i>	<i>4.0</i>	3.8	<i>4.0</i>	<i>3.9</i>

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

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

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

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

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 Statistics Report*, DOE/EIA-0520; Organization for Economic Cooperation and Development, Annual and Monthly Oil Statistics Database.

Table 4. U. S. Energy Prices
(Nominal Dollars)

	1999				2000				2001				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1999	2000	2001
Imported Crude Oil ^a															
(dollars per barrel).....	10.91	15.44	19.62	23.01	26.83	25.99	27.19	25.99	24.22	22.85	22.65	22.06	17.22	26.49	22.93
Natural Gas Wellhead															
(dollars per thousand cubic feet).....	1.74	2.00	2.27	2.26	2.23	2.87	3.53	3.78	3.43	2.92	2.81	3.09	2.07	3.10	3.06
Petroleum Products															
Gasoline Retail ^b (dollars per gallon)															
All Grades.....	0.99	1.17	1.25	1.30	1.44	1.55	1.55	1.42	1.37	1.38	1.37	1.32	1.18	1.49	1.36
Regular Unleaded.....	0.95	1.13	1.21	1.26	1.40	1.50	1.51	1.38	1.33	1.34	1.34	1.29	1.14	1.45	1.32
No. 2 Diesel Oil, Retail															
(dollars per gallon).....	0.97	1.08	1.18	1.26	1.42	1.42	1.41	1.40	1.32	1.28	1.27	1.28	1.12	1.41	1.29
No. 2 Heating Oil, Wholesale															
(dollars per gallon).....	0.36	0.44	0.56	0.65	0.85	0.74	0.78	0.77	0.72	0.67	0.66	0.67	0.51	0.79	0.68
No. 2 Heating Oil, Retail															
(dollars per gallon).....	0.80	0.83	0.84	1.01	1.27	1.12	1.06	1.11	1.11	1.04	0.97	1.02	0.87	1.15	1.06
No. 6 Residual Fuel Oil, Retail ^c															
(dollars per barrel).....	11.28	14.02	17.96	21.06	23.56	25.13	25.83	25.35	23.65	21.06	20.68	21.15	15.92	24.97	21.68
Electric Utility Fuels															
Coal															
(dollars per million Btu).....	1.24	1.23	1.21	1.19	1.21	1.23	1.21	1.21	1.22	1.23	1.21	1.20	1.22	1.22	1.22
Heavy Fuel Oil ^d															
(dollars per million Btu).....	1.72	2.26	2.82	3.17	3.65	4.16	4.28	4.12	3.68	3.41	3.44	3.45	2.38	4.09	3.49
Natural Gas															
(dollars per million Btu).....	2.19	2.42	2.74	2.82	2.92	3.51	4.06	4.34	4.10	3.50	3.38	3.71	2.57	3.75	3.60
Other Residential															
Natural Gas															
(dollars per thousand cubic feet).....	6.06	6.84	8.58	6.84	6.27	7.43	9.45	8.09	7.71	7.96	9.17	7.62	6.61	7.23	7.82
Electricity															
(cents per kilowatthour).....	7.76	8.25	8.40	8.10	7.70	8.30	8.48	7.95	7.46	8.05	8.30	7.83	8.14	8.12	7.92

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

^b Average self-service cash prices.

^c Average for all sulfur contents.

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

Notes: Data are estimated for the first quarter of 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)

	1999				2000				2001				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1999	2000	2001
Supply															
Crude Oil Supply															
Domestic Production ^a	6.00	5.95	5.87	5.89	5.86	5.78	5.73	5.79	5.80	5.73	5.74	5.73	5.93	5.79	5.75
Alaska.....	1.13	1.04	0.98	1.05	1.02	0.94	0.89	0.92	0.91	0.87	0.91	0.91	1.05	0.94	0.90
Lower 48.....	4.86	4.91	4.89	4.84	4.84	4.85	4.84	4.87	4.88	4.86	4.83	4.82	4.88	4.85	4.85
Net Imports (including SPR) ^b	8.43	8.90	8.85	8.28	8.04	9.38	9.70	9.37	9.07	9.69	9.71	9.39	8.62	9.13	9.47
Other SPR Supply.....	0.00	0.00	0.07	0.10	0.03	0.04	0.07	0.07	0.00	0.00	0.00	0.00	0.04	0.05	0.00
SPR Stock Withdrawn or Added (-)	-0.01	-0.03	-0.01	0.09	-0.02	-0.06	-0.14	-0.14	0.00	0.00	0.00	0.00	0.01	-0.09	0.00
Other Stock Withdrawn or Added (-).....	-0.24	0.15	0.31	0.21	-0.14	-0.07	0.19	0.05	-0.19	-0.02	0.17	0.02	0.11	0.01	0.00
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.....	0.24	0.01	0.20	0.20	0.41	0.43	0.22	0.21	0.21	0.22	0.22	0.21	0.16	0.32	0.22
Total Crude Oil Supply	14.42	15.01	15.22	14.57	14.16	15.44	15.64	15.22	14.89	15.62	15.83	15.36	14.80	15.12	15.43
Other Supply															
NGL Production	1.72	1.80	1.89	1.94	1.97	1.94	1.93	1.94	1.95	1.95	1.93	1.94	1.84	1.94	1.94
Other Hydrocarbon and Alcohol Inputs...	0.37	0.37	0.38	0.38	0.39	0.36	0.36	0.38	0.37	0.36	0.36	0.38	0.37	0.37	0.37
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.....	0.85	0.88	0.90	0.98	0.95	0.92	0.91	0.90	0.86	0.91	0.92	0.90	0.90	0.92	0.90
Net Product Imports ^c	1.32	1.52	1.42	0.92	1.22	1.37	1.45	1.21	1.43	1.52	1.46	1.30	1.30	1.31	1.43
Product Stock Withdrawn or Added (-) ^c	0.58	-0.39	0.04	1.00	0.31	-0.48	-0.41	0.44	0.34	-0.57	-0.41	0.42	0.31	-0.03	-0.05
Total Supply	19.27	19.20	19.84	19.79	18.99	19.56	19.88	20.08	19.84	19.80	20.10	20.30	19.53	19.63	20.01
Demand															
Motor Gasoline.....	7.98	8.60	8.62	8.52	8.01	8.66	8.79	8.67	8.35	8.82	8.87	8.72	8.43	8.53	8.69
Jet Fuel.....	1.69	1.61	1.69	1.69	1.64	1.71	1.75	1.77	1.76	1.72	1.77	1.80	1.67	1.72	1.76
Distillate Fuel Oil.....	3.71	3.38	3.45	3.74	3.69	3.66	3.50	3.72	3.91	3.58	3.52	3.78	3.57	3.64	3.70
Residual Fuel Oil.....	0.94	0.77	0.85	0.78	0.71	0.67	0.72	0.72	0.81	0.73	0.74	0.71	0.83	0.70	0.75
Other Oils ^d	4.94	4.83	5.23	5.06	4.94	4.87	5.12	5.20	5.01	4.95	5.19	5.30	5.02	5.03	5.12
Total Demand.....	19.26	19.20	19.84	19.79	18.98	19.56	19.88	20.08	19.84	19.80	20.10	20.30	19.52	19.63	20.01
Total Petroleum Net Imports.....	9.76	10.42	10.26	9.21	9.26	10.75	11.15	10.58	10.50	11.21	11.17	10.69	9.91	10.44	10.89
Closing Stocks (million barrels)															
Crude Oil (excluding SPR).....	345	332	304	284	297	303	286	281	298	299	284	282	284	281	282
Total Motor Gasoline.....	215	215	204	193	204	202	195	198	201	200	195	200	193	198	200
Finished Motor Gasoline.....	167	171	159	154	157	161	154	158	157	159	153	158	154	158	158
Blending Components.....	48	43	44	39	47	41	40	40	45	41	41	41	39	40	41
Jet Fuel.....	42	47	49	41	40	43	45	43	41	43	45	43	41	43	43
Distillate Fuel Oil.....	124	132	145	125	96	105	128	129	102	113	131	133	125	129	133
Residual Fuel Oil.....	40	43	41	36	36	35	37	39	36	37	39	40	36	39	40
Other Oils ^e	279	298	293	244	235	269	287	243	241	280	301	255	244	243	255
Total Stocks (excluding SPR).....	1045	1066	1035	924	908	958	978	932	918	971	994	953	924	932	953
Crude Oil in SPR.....	572	575	575	567	569	575	588	601	601	601	601	601	567	601	601
Total Stocks (including SPR).....	1616	1641	1610	1491	1478	1533	1565	1533	1519	1572	1594	1554	1491	1533	1554

^aIncludes lease condensate.

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

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

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

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

SPR: Strategic Petroleum Reserve

NGL: Natural Gas Liquids

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

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

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

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

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

^bShort-Term Integrated Forecasting System.

^cRefiner acquisitions cost of imported crude oil.

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

^eRefers to percent changes in degree-days.

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

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

	High Price Case	Low Price Case	Difference		
			Total	Uncertainty	Price Impact
United States	6.20	5.27	0.93	0.08	0.85
Lower 48 States.....	5.27	4.37	0.90	0.07	0.83
Alaska.....	0.93	0.90	0.03	0.02	0.02

Note: Components provided are for the fourth quarter 2001. 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)

	1999				2000				2001				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1999	2000	2001
Supply															
Total Dry Gas Production	4.69	4.66	4.64	4.67	<i>4.74</i>	<i>4.71</i>	<i>4.72</i>	<i>4.72</i>	<i>4.72</i>	<i>4.73</i>	<i>4.75</i>	<i>4.75</i>	18.66	<i>18.89</i>	<i>18.94</i>
Net Imports	0.83	0.79	0.87	0.89	<i>0.85</i>	<i>0.85</i>	<i>0.92</i>	<i>0.93</i>	<i>0.93</i>	<i>0.94</i>	<i>0.95</i>	<i>0.95</i>	3.39	<i>3.54</i>	<i>3.77</i>
Supplemental Gaseous Fuels.....	0.03	0.02	0.02	0.03	<i>0.03</i>	<i>0.03</i>	<i>0.03</i>	<i>0.03</i>	<i>0.04</i>	<i>0.03</i>	<i>0.03</i>	<i>0.03</i>	0.10	<i>0.12</i>	<i>0.13</i>
Total New Supply	5.55	5.48	5.53	5.59	<i>5.62</i>	<i>5.58</i>	<i>5.66</i>	<i>5.68</i>	<i>5.68</i>	<i>5.71</i>	<i>5.72</i>	<i>5.73</i>	22.15	<i>22.55</i>	<i>22.84</i>
Total Underground Storage															
Opening	7.04	5.79	6.50	7.24	<i>6.88</i>	<i>5.52</i>	<i>6.12</i>	<i>7.06</i>	<i>6.64</i>	<i>5.30</i>	<i>6.14</i>	<i>7.06</i>	7.04	<i>6.88</i>	<i>6.64</i>
Closing.....	5.79	6.50	7.24	6.88	<i>5.52</i>	<i>6.12</i>	<i>7.06</i>	<i>6.64</i>	<i>5.30</i>	<i>6.14</i>	<i>7.06</i>	<i>6.64</i>	6.88	<i>6.64</i>	<i>6.64</i>
Net Withdrawals.....	1.25	-0.71	-0.74	0.36	<i>1.37</i>	<i>-0.60</i>	<i>-0.94</i>	<i>0.42</i>	<i>1.33</i>	<i>-0.83</i>	<i>-0.92</i>	<i>0.42</i>	0.16	<i>0.25</i>	<i>0.00</i>
Total Supply.....	6.80	4.77	4.79	5.96	<i>6.99</i>	<i>4.98</i>	<i>4.73</i>	<i>6.10</i>	<i>7.01</i>	<i>4.87</i>	<i>4.80</i>	<i>6.15</i>	22.31	<i>22.79</i>	<i>22.84</i>
Balancing Item ^a	-0.03	-0.06	-0.26	-0.59	<i>-0.14</i>	<i>-0.17</i>	<i>-0.15</i>	<i>-0.22</i>	<i>0.29</i>	<i>0.09</i>	<i>-0.11</i>	<i>-0.15</i>	-0.94	<i>-0.68</i>	<i>0.12</i>
Total Primary Supply.....	6.77	4.71	4.53	5.37	<i>6.85</i>	<i>4.81</i>	<i>4.57</i>	<i>5.88</i>	<i>7.30</i>	<i>4.97</i>	<i>4.69</i>	<i>6.00</i>	21.38	<i>22.11</i>	<i>22.96</i>
Demand															
Lease and Plant Fuel.....	0.31	0.31	0.31	0.31	<i>0.31</i>	<i>0.31</i>	<i>0.31</i>	<i>0.31</i>	<i>0.31</i>	<i>0.31</i>	<i>0.31</i>	<i>0.31</i>	1.23	<i>1.23</i>	<i>1.23</i>
Pipeline Use.....	0.20	0.14	0.14	0.16	<i>0.19</i>	<i>0.13</i>	<i>0.13</i>	<i>0.17</i>	<i>0.21</i>	<i>0.14</i>	<i>0.13</i>	<i>0.18</i>	0.64	<i>0.62</i>	<i>0.66</i>
Residential.....	2.24	0.81	0.38	1.25	<i>2.22</i>	<i>0.80</i>	<i>0.32</i>	<i>1.45</i>	<i>2.46</i>	<i>0.83</i>	<i>0.33</i>	<i>1.46</i>	4.67	<i>4.79</i>	<i>5.07</i>
Commercial.....	1.25	0.58	0.43	0.80	<i>1.23</i>	<i>0.59</i>	<i>0.43</i>	<i>0.89</i>	<i>1.40</i>	<i>0.63</i>	<i>0.45</i>	<i>0.91</i>	3.06	<i>3.14</i>	<i>3.38</i>
Industrial (Incl. Nonutility Use)	2.24	2.02	2.13	2.27	<i>2.35</i>	<i>2.23</i>	<i>2.35</i>	<i>2.51</i>	<i>2.45</i>	<i>2.28</i>	<i>2.40</i>	<i>2.58</i>	8.66	<i>9.44</i>	<i>9.71</i>
Electric Utilities.....	0.53	0.85	1.15	0.59	<i>0.55</i>	<i>0.76</i>	<i>1.03</i>	<i>0.55</i>	<i>0.48</i>	<i>0.78</i>	<i>1.08</i>	<i>0.56</i>	3.11	<i>2.90</i>	<i>2.90</i>
Total Demand.....	6.77	4.71	4.53	5.37	<i>6.85</i>	<i>4.81</i>	<i>4.57</i>	<i>5.88</i>	<i>7.30</i>	<i>4.97</i>	<i>4.69</i>	<i>6.00</i>	21.38	<i>22.11</i>	<i>22.96</i>

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

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

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

Table 9. U.S. Coal Supply and Demand: Mid World Oil Price Case
(Million Short Tons)

	1999				2000				2001				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1999	2000	2001
Supply															
Production	283.5	264.0	273.9	272.6	<i>275.4</i>	<i>270.9</i>	<i>277.5</i>	<i>287.4</i>	<i>281.0</i>	<i>284.7</i>	<i>277.5</i>	<i>285.0</i>	1094.0	<i>1111.3</i>	<i>1128.3</i>
Appalachia	114.8	103.4	103.0	102.1	<i>109.7</i>	<i>103.9</i>	<i>101.9</i>	<i>105.3</i>	<i>110.1</i>	<i>107.0</i>	<i>99.6</i>	<i>102.2</i>	423.3	<i>420.9</i>	<i>418.9</i>
Interior	40.4	40.8	42.4	38.9	<i>37.6</i>	<i>40.4</i>	<i>41.2</i>	<i>39.2</i>	<i>36.8</i>	<i>40.8</i>	<i>39.5</i>	<i>37.0</i>	162.5	<i>158.3</i>	<i>154.1</i>
Western.....	128.3	119.8	128.5	131.6	<i>128.1</i>	<i>126.6</i>	<i>134.5</i>	<i>142.9</i>	<i>134.1</i>	<i>137.0</i>	<i>138.4</i>	<i>145.7</i>	508.2	<i>532.1</i>	<i>555.3</i>
Primary Stock Levels ^a															
Opening.....	36.5	42.4	41.5	35.1	<i>36.4</i>	<i>41.3</i>	<i>41.9</i>	<i>35.5</i>	<i>36.4</i>	<i>41.3</i>	<i>41.9</i>	<i>35.5</i>	36.5	<i>36.4</i>	<i>36.4</i>
Closing.....	42.4	41.5	35.1	36.4	<i>41.3</i>	<i>41.9</i>	<i>35.5</i>	<i>36.4</i>	<i>41.3</i>	<i>41.9</i>	<i>35.5</i>	<i>34.6</i>	36.4	<i>36.4</i>	<i>34.6</i>
Net Withdrawals.....	-5.8	0.8	6.5	-1.3	<i>-4.9</i>	<i>-0.6</i>	<i>6.4</i>	<i>-0.9</i>	<i>-4.9</i>	<i>-0.6</i>	<i>6.4</i>	<i>0.9</i>	0.2	<i>(S)</i>	<i>1.7</i>
Imports.....	2.2	2.1	2.4	2.4	<i>2.6</i>	<i>2.5</i>	<i>2.5</i>	<i>2.6</i>	<i>2.9</i>	<i>2.9</i>	<i>2.9</i>	<i>2.9</i>	9.1	<i>10.2</i>	<i>11.6</i>
Exports.....	13.0	14.4	16.1	15.0	<i>13.6</i>	<i>15.0</i>	<i>15.2</i>	<i>15.2</i>	<i>14.9</i>	<i>15.1</i>	<i>15.3</i>	<i>15.2</i>	58.5	<i>59.0</i>	<i>60.5</i>
Total Net Domestic Supply.....	267.0	252.5	266.6	258.7	<i>259.5</i>	<i>257.8</i>	<i>271.2</i>	<i>274.0</i>	<i>264.1</i>	<i>272.0</i>	<i>271.5</i>	<i>273.6</i>	1044.8	<i>1062.5</i>	<i>1081.1</i>
Secondary Stock Levels ^b															
Opening.....	129.4	143.3	151.9	139.7	<i>143.5</i>	<i>144.2</i>	<i>154.3</i>	<i>140.5</i>	<i>148.7</i>	<i>142.3</i>	<i>154.7</i>	<i>138.9</i>	129.4	<i>143.5</i>	<i>148.7</i>
Closing.....	143.3	151.9	139.7	143.5	<i>144.2</i>	<i>154.3</i>	<i>140.5</i>	<i>148.7</i>	<i>142.3</i>	<i>154.7</i>	<i>138.9</i>	<i>144.0</i>	143.5	<i>148.7</i>	<i>144.0</i>
Net Withdrawals.....	-13.9	-8.6	12.2	-3.8	<i>-0.7</i>	<i>-10.1</i>	<i>13.8</i>	<i>-8.1</i>	<i>6.4</i>	<i>-12.5</i>	<i>15.8</i>	<i>-5.0</i>	-14.1	<i>-5.2</i>	<i>4.7</i>
Waste Coal Supplied to IPPs ^c	2.1	2.2	2.6	2.8	<i>3.1</i>	9.7	<i>12.2</i>	<i>12.2</i>							
Total Supply.....	255.2	246.1	281.4	257.6	<i>261.8</i>	<i>250.8</i>	<i>288.1</i>	<i>268.9</i>	<i>273.5</i>	<i>262.5</i>	<i>290.4</i>	<i>271.6</i>	1040.4	<i>1069.6</i>	<i>1098.1</i>
Demand															
Coke Plants.....	6.8	7.1	7.0	7.0	<i>7.2</i>	<i>6.9</i>	<i>6.9</i>	<i>7.0</i>	<i>7.2</i>	<i>7.0</i>	<i>7.0</i>	<i>7.1</i>	27.9	<i>28.1</i>	<i>28.3</i>
Electricity Production															
Electric Utilities.....	216.4	213.8	247.3	216.7	<i>213.3</i>	<i>204.1</i>	<i>238.2</i>	<i>217.7</i>	<i>223.6</i>	<i>215.4</i>	<i>240.0</i>	<i>219.6</i>	894.1	<i>873.4</i>	<i>898.5</i>
Nonutilities (Excl. Cogen.) ^d	8.4	10.3	12.3	15.0	<i>23.2</i>	<i>22.3</i>	<i>25.5</i>	<i>24.2</i>	<i>23.8</i>	<i>22.8</i>	<i>26.1</i>	<i>24.8</i>	45.9	<i>95.2</i>	<i>97.6</i>
Retail and General Industry.....	18.6	17.1	16.9	17.6	<i>18.1</i>	<i>17.4</i>	<i>17.5</i>	<i>19.9</i>	<i>19.0</i>	<i>17.3</i>	<i>17.3</i>	<i>20.1</i>	70.3	<i>73.0</i>	<i>73.7</i>
Total Demand ^e.....	250.2	248.3	283.6	256.3	<i>261.8</i>	<i>250.8</i>	<i>288.1</i>	<i>268.9</i>	<i>273.5</i>	<i>262.5</i>	<i>290.4</i>	<i>271.6</i>	1038.3	<i>1069.6</i>	<i>1098.1</i>
Discrepancy ^f.....	5.0	-2.1	-2.1	1.3	<i>0.0</i>	2.1	<i>0.0</i>	<i>0.0</i>							

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

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

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

^dEstimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA).

Quarterly coal consumption estimates for 1999 and projections for 2000 and 2001 are based on (1) estimated consumption by utility power plants sold to nonutility generators during 1998 and 1999, and (2) annual coal-fired generation at nonutilities from Form EIA-867 (Annual Nonutility Power Producer Report).

^eTotal Demand includes estimated IPP consumption.

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

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)

	1999				2000				2001				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1999	2000	2001
Supply															
Net Utility Generation															
Coal.....	430.0	423.8	487.6	426.2	<i>426.6</i>	<i>413.9</i>	<i>478.5</i>	<i>434.3</i>	<i>446.6</i>	<i>430.4</i>	<i>479.3</i>	<i>435.8</i>	1767.7	<i>1753.2</i>	<i>1792.0</i>
Petroleum.....	25.7	22.2	27.4	11.7	<i>11.1</i>	<i>9.0</i>	<i>19.5</i>	<i>13.3</i>	<i>18.9</i>	<i>17.9</i>	<i>21.9</i>	<i>14.9</i>	86.9	<i>52.9</i>	<i>73.6</i>
Natural Gas.....	51.5	80.7	107.5	56.7	<i>52.3</i>	<i>73.0</i>	<i>98.7</i>	<i>52.6</i>	<i>45.9</i>	<i>74.8</i>	<i>102.7</i>	<i>53.8</i>	296.4	<i>276.6</i>	<i>277.3</i>
Nuclear.....	181.2	166.1	195.0	182.6	<i>185.4</i>	<i>184.0</i>	<i>184.2</i>	<i>166.1</i>	<i>180.8</i>	<i>164.1</i>	<i>192.7</i>	<i>173.7</i>	725.0	<i>719.8</i>	<i>711.2</i>
Hydroelectric.....	83.4	79.8	69.9	60.9	<i>67.4</i>	<i>77.3</i>	<i>65.3</i>	<i>61.9</i>	<i>72.8</i>	<i>74.5</i>	<i>62.0</i>	<i>61.1</i>	293.9	<i>272.0</i>	<i>270.4</i>
Geothermal and Other ^a	1.6	1.0	0.6	0.5	<i>0.5</i>	<i>0.5</i>	<i>0.6</i>	<i>0.6</i>	<i>0.5</i>	<i>0.5</i>	<i>0.6</i>	<i>0.6</i>	3.7	<i>2.2</i>	<i>2.2</i>
Subtotal.....	773.4	773.6	888.0	738.7	<i>743.3</i>	<i>757.7</i>	<i>846.9</i>	<i>728.7</i>	<i>765.5</i>	<i>762.1</i>	<i>859.2</i>	<i>739.9</i>	3173.7	<i>3076.7</i>	<i>3126.7</i>
Nonutility Generation ^b															
Coal.....	20.6	24.7	33.6	38.2	<i>55.8</i>	<i>51.8</i>	<i>60.2</i>	<i>57.6</i>	<i>56.2</i>	<i>53.1</i>	<i>61.7</i>	<i>59.0</i>	117.2	<i>225.4</i>	<i>230.0</i>
Petroleum.....	6.5	7.2	7.4	4.8	<i>9.3</i>	<i>7.5</i>	<i>8.1</i>	<i>9.1</i>	<i>7.7</i>	<i>7.5</i>	<i>8.1</i>	<i>9.1</i>	25.9	<i>33.9</i>	<i>32.5</i>
Natural Gas.....	52.0	57.1	73.4	65.9	<i>67.1</i>	<i>74.7</i>	<i>91.8</i>	<i>81.2</i>	<i>66.8</i>	<i>78.2</i>	<i>96.2</i>	<i>85.0</i>	248.4	<i>314.9</i>	<i>326.2</i>
Other Gaseous Fuels ^c	1.9	2.1	2.7	2.4	<i>2.3</i>	<i>1.9</i>	<i>2.0</i>	<i>2.3</i>	<i>2.0</i>	<i>1.9</i>	<i>2.1</i>	<i>2.3</i>	9.1	<i>8.5</i>	<i>8.2</i>
Nuclear.....	0.0	0.0	1.1	2.1	<i>4.4</i>	<i>3.1</i>	<i>3.1</i>	<i>2.8</i>	<i>3.0</i>	<i>2.7</i>	<i>3.2</i>	<i>2.9</i>	3.1	<i>13.3</i>	<i>11.8</i>
Hydroelectric.....	3.4	3.4	2.4	2.6	<i>3.4</i>	<i>2.8</i>	<i>2.7</i>	<i>3.2</i>	<i>2.8</i>	<i>2.8</i>	<i>2.8</i>	<i>3.2</i>	11.9	<i>12.1</i>	<i>11.7</i>
Geothermal and Other ^d	18.7	20.1	21.0	19.6	<i>23.5</i>	<i>20.6</i>	<i>22.7</i>	<i>25.3</i>	<i>21.8</i>	<i>20.9</i>	<i>23.0</i>	<i>25.6</i>	79.4	<i>92.1</i>	<i>91.4</i>
Subtotal.....	103.2	114.7	141.6	135.6	<i>165.8</i>	<i>162.3</i>	<i>190.7</i>	<i>181.5</i>	<i>160.4</i>	<i>167.2</i>	<i>197.1</i>	<i>187.2</i>	495.1	<i>700.3</i>	<i>711.8</i>
Total Generation.....	876.5	888.3	1029.6	874.3	<i>909.1</i>	<i>920.1</i>	<i>1037.6</i>	<i>910.2</i>	<i>925.9</i>	<i>929.3</i>	<i>1056.3</i>	<i>927.1</i>	3668.7	<i>3777.0</i>	<i>3838.6</i>
Net Imports ^e	2.0	7.6	11.5	8.2	<i>6.7</i>	<i>7.6</i>	<i>9.0</i>	<i>7.2</i>	<i>6.2</i>	<i>7.7</i>	<i>10.5</i>	<i>7.0</i>	29.3	<i>30.5</i>	<i>31.4</i>
Total Supply.....	878.5	895.9	1041.1	882.5	<i>915.8</i>	<i>927.6</i>	<i>1046.6</i>	<i>917.4</i>	<i>932.1</i>	<i>937.0</i>	<i>1066.7</i>	<i>934.1</i>	3698.1	<i>3807.5</i>	<i>3869.9</i>
Losses and Unaccounted for ^f	51.7	75.0	57.2	52.8	<i>55.2</i>	<i>80.7</i>	<i>64.5</i>	<i>63.2</i>	<i>53.8</i>	<i>81.3</i>	<i>65.8</i>	<i>64.4</i>	236.6	<i>263.7</i>	<i>265.3</i>
Demand															
Electric Utility Sales															
Residential.....	287.7	251.0	350.9	256.1	<i>292.9</i>	<i>263.8</i>	<i>341.3</i>	<i>268.2</i>	<i>306.8</i>	<i>266.3</i>	<i>349.6</i>	<i>273.6</i>	1145.7	<i>1166.3</i>	<i>1196.3</i>
Commercial.....	227.8	238.6	279.6	236.8	<i>236.9</i>	<i>244.3</i>	<i>282.0</i>	<i>243.9</i>	<i>243.9</i>	<i>248.1</i>	<i>288.2</i>	<i>248.8</i>	982.9	<i>1007.0</i>	<i>1028.9</i>
Industrial.....	252.1	267.7	277.6	265.7	<i>260.6</i>	<i>270.2</i>	<i>279.7</i>	<i>268.2</i>	<i>260.1</i>	<i>271.8</i>	<i>282.7</i>	<i>272.2</i>	1063.3	<i>1078.7</i>	<i>1086.8</i>
Other.....	24.7	25.3	28.4	25.7	<i>26.6</i>	<i>26.0</i>	<i>28.9</i>	<i>26.1</i>	<i>25.9</i>	<i>26.1</i>	<i>29.3</i>	<i>26.5</i>	104.2	<i>107.6</i>	<i>107.8</i>
Subtotal.....	792.4	782.6	936.6	784.4	<i>817.0</i>	<i>804.3</i>	<i>931.9</i>	<i>806.4</i>	<i>836.7</i>	<i>812.3</i>	<i>949.8</i>	<i>821.1</i>	3296.0	<i>3359.5</i>	<i>3419.8</i>
Nonutility Use/Sales ^b	34.5	38.3	47.3	45.3	<i>43.6</i>	<i>42.7</i>	<i>50.2</i>	<i>47.7</i>	<i>41.6</i>	<i>43.4</i>	<i>51.2</i>	<i>48.6</i>	165.4	<i>184.2</i>	<i>184.8</i>
Total Demand.....	826.8	820.9	983.9	829.7	<i>860.6</i>	<i>847.0</i>	<i>982.1</i>	<i>854.2</i>	<i>878.3</i>	<i>855.7</i>	<i>1001.0</i>	<i>869.7</i>	3461.4	<i>3543.8</i>	<i>3604.6</i>
Memo:															
Nonutility Sales to															
Electric Utilities ^b	68.7	76.4	94.3	90.3	<i>122.2</i>	<i>119.6</i>	<i>140.5</i>	<i>133.7</i>	<i>118.8</i>	<i>123.8</i>	<i>145.9</i>	<i>138.6</i>	329.7	<i>516.0</i>	<i>527.0</i>

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

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

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

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

^eData for 1999 are estimates.

^fBalancing item, mainly transmission and distribution losses.

^gDefined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA-867, "Annual Nonutility Power Producer Report." Data for 1999 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		
	1998	1999	2000	2001	1998-1999	1999-2000	2000-2001
Electric Utilities							
Hydroelectric Power ^a	3.178	3.069	<i>2.839</i>	<i>2.823</i>	-3.4	<i>-7.5</i>	<i>-0.6</i>
Geothermal, Solar and Wind Energy ^b	0.109	0.036	<i>0.004</i>	<i>0.004</i>	-67.0	<i>-88.9</i>	<i>0.0</i>
Biofuels ^c	0.021	0.021	<i>0.021</i>	<i>0.021</i>	0.0	<i>0.0</i>	<i>0.0</i>
Total	3.307	3.125	<i>2.864</i>	<i>2.847</i>	-5.5	<i>-8.4</i>	<i>-0.6</i>
Nonutility Power Generators							
Hydroelectric Power ^a	0.149	0.122	<i>0.125</i>	<i>0.120</i>	-18.1	<i>2.5</i>	<i>-4.0</i>
Geothermal, Solar and Wind Energy ^b	0.240	0.303	<i>0.434</i>	<i>0.436</i>	26.3	<i>43.2</i>	<i>0.5</i>
Biofuels ^c	0.523	0.649	<i>0.710</i>	<i>0.700</i>	24.1	<i>9.4</i>	<i>-1.4</i>
Total	0.912	1.075	<i>1.269</i>	<i>1.257</i>	17.9	<i>18.0</i>	<i>-0.9</i>
Total Power Generation.....	4.219	4.200	<i>4.133</i>	<i>4.104</i>	-0.5	<i>-1.6</i>	<i>-0.7</i>
Other Sectors ^d							
Residential and Commercial ^e	0.568	0.574	<i>0.583</i>	<i>0.583</i>	1.1	<i>1.6</i>	<i>0.0</i>
Industrial ^f	1.515	1.542	<i>1.569</i>	<i>1.569</i>	1.8	<i>1.8</i>	<i>0.0</i>
Transportation ^g	0.095	0.101	<i>0.100</i>	<i>0.100</i>	6.3	<i>-1.0</i>	<i>0.0</i>
Total	2.178	2.217	<i>2.252</i>	<i>2.253</i>	1.8	<i>1.6</i>	<i>0.0</i>
Net Imported Electricity ^h	0.224	0.237	<i>0.247</i>	<i>0.254</i>	5.8	<i>4.2</i>	<i>2.8</i>
Total Renewable Energy Demand	6.621	6.654	<i>6.632</i>	<i>6.611</i>	0.5	<i>-0.3</i>	<i>-0.3</i>

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

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

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

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

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

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

^gEthanol blended into gasoline.

^hRepresents 78.6 percent of total electricity net imports, which is the proportion of total 1994 net imported electricity (0.459 quadrillion Btu) attributable to renewable sources (0.361 quadrillion Btu).

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														
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Real Gross Domestic Product (GDP) (billion chained 1996 dollars).....	6093	6349	6569	6684	6669	6891	7054	7338	7537	7813	8165	8516	8867	<i>9219</i>	<i>9514</i>
Imported Crude Oil Price ^a (nominal dollars per barrel)	18.13	14.57	18.08	21.75	18.70	18.20	16.14	15.52	17.14	20.61	18.50	12.08	17.22	<i>26.49</i>	<i>22.93</i>
Petroleum Supply															
Crude Oil Production ^b (million barrels per day)	8.35	8.14	7.61	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.93	<i>5.79</i>	<i>5.75</i>
Total Petroleum Net Imports (including SPR) (million barrels per day)	5.91	6.59	7.20	7.16	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	<i>10.44</i>	<i>10.89</i>
Energy Demand															
World Petroleum (million barrels per day)	63.1	64.9	65.9	66.0	66.6	66.8	67.0	68.3	69.9	71.4	73.1	73.6	74.7	<i>76.1</i>	<i>78.0</i>
U.S. Petroleum (million barrels per day)	16.72	17.34	17.37	17.04	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	<i>19.63</i>	<i>20.01</i>
Natural Gas (trillion cubic feet)	17.21	18.03	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.95	21.26	21.38	<i>22.11</i>	<i>22.96</i>
Coal (million short tons).....	830	877	891	897	898	907	943	950	962	1006	1029	1039	1038	<i>1070</i>	<i>1098</i>
Electricity (billion kilowatthours)															
Utility Sales ^c	2457	2578	2647	2713	2762	2763	2861	2935	3013	3098	3140	3240	3296	<i>3360</i>	<i>3420</i>
Nonutility Own Use ^d	NA	NA	91	113	119	122	127	138	145	145	148	156	165	<i>184</i>	<i>185</i>
Total	NA	NA	2738	2826	2881	2885	2988	3073	3159	3243	3288	3396	3461	<i>3544</i>	<i>3605</i>
Total Energy Demand ^e (quadrillion Btu)	NA	NA	84.2	84.2	84.5	85.6	87.4	89.2	90.9	93.9	94.2	94.4	96.1	<i>97.7</i>	<i>99.7</i>
Total Energy Demand per Dollar of GDP (thousand Btu per 1992 Dollar).....	NA	NA	12.82	12.60	12.67	12.42	12.39	12.16	12.07	12.02	11.54	11.09	10.84	<i>10.60</i>	<i>10.48</i>

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

^b Includes lease condensate.

^c Total annual electric utility sales for historical periods are derived from the sum of monthly sales figures based on submissions by electric utilities of Form EIA-826, "Monthly Electric Utility Sales and Revenue Report with State Distributions." These historical values differ from annual sales totals based on Form EIA-861, reported in several EIA publications, but match alternate annual totals reported in EIA's *Electric Power Monthly*, DOE/EIA-0226.

^d Defined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA-867, "Annual Nonutility Power Producer Report." Data for 1999 are estimates.

^e "Total Energy Demand" refers to the aggregate energy concept presented in Energy Information Administration, *Annual Energy Review*, 1997, DOE/EIA-0384(97) (AER), Table 1.1. Prior to 1990, some components of renewable energy consumption, particularly relating to consumption at nonutility electric generating facilities, were not available. For those years, a less comprehensive measure of total energy demand can be found in EIA's *AER*. The conversion from physical units to Btu is calculated using a subset of conversion factors used in the calculations performed for gross energy consumption in Energy Information Administration, *Monthly Energy Review (MER)*. Consequently, the historical data may not precisely match those published in the *MER* or the *AER*.

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

Sources: Historical data: Latest data available from Bureau of Economic Analysis; Energy Information Administration; latest data available from EIA databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109; *Petroleum Supply Annual*, DOE/EIA-0340/2; *Natural Gas Monthly*, DOE/EIA-0130; *Electric Power Monthly*, DOE/EIA-0226; *Quarterly Coal Report*, DOE/EIA-0121; *International Petroleum Statistics Report* DOE/EIA-520, and *Weekly Petroleum Status Report* DOE/EIA-0208. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0300.

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

	Year														
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Macroeconomic															
Real Gross Domestic Product (billion chained 1996 dollars)	6093	6349	6569	6684	6669	6891	7054	7338	7537	7813	8165	8516	8867	<i>9219</i>	<i>9514</i>
GDP Implicit Price Deflator (Index, 1996=1.000).....	0.779	0.805	0.835	0.868	0.897	0.917	0.942	0.961	0.982	1.000	1.017	1.029	1.043	<i>1.061</i>	<i>1.077</i>
Real Disposable Personal Income (billion chained 1996 Dollars).....	4563	4766	4885	4991	5026	5200	5254	5388	5533	5678	5885	6125	6367	<i>6620</i>	<i>6880</i>
Manufacturing Production (Index, 1992=1.000).....	0.928	0.971	0.990	0.985	0.962	1.000	1.037	1.100	1.159	1.213	1.298	1.361	1.418	<i>1.464</i>	<i>1.504</i>
Real Fixed Investment (billion chained 1996 dollars)	856	887	911	895	833	887	958	1046	1109	1213	1316	1472	1590	<i>1702</i>	<i>1780</i>
Real Exchange Rate (Index, 1990=1.000).....	NA	NA	NA	0.999	1.007	1.013	1.057	1.034	0.961	1.017	1.104	1.152	1.153	<i>1.159</i>	<i>1.102</i>
Business Inventory Change (billion chained 1996 dollars)	8.4	16.9	14.2	8.9	-6.8	-4.7	3.6	12.1	14.1	10.1	22.1	25.1	0.9	<i>9.9</i>	<i>12.5</i>
Producer Price Index (index, 1982=1.000).....	1.028	1.069	1.122	1.163	1.165	1.172	1.189	1.205	1.248	1.277	1.276	1.244	1.255	<i>1.303</i>	<i>1.308</i>
Consumer Price Index (index, 1982-1984=1.000)	1.137	1.184	1.240	1.308	1.363	1.404	1.446	1.483	1.525	1.570	1.606	1.631	1.667	<i>1.714</i>	<i>1.746</i>
Petroleum Product Price Index (index, 1982=1.000).....	0.568	0.539	0.612	0.748	0.671	0.647	0.620	0.591	0.608	0.701	0.680	0.513	0.610	<i>0.830</i>	<i>0.747</i>
Non-Farm Employment (millions).....	102.0	105.2	107.9	109.4	108.3	108.6	110.7	114.1	117.2	119.6	122.7	125.8	128.6	<i>131.2</i>	<i>133.0</i>
Commercial Employment (millions).....	65.2	67.8	70.0	71.3	70.8	71.2	73.2	76.1	78.8	81.1	83.9	86.6	89.5	<i>91.8</i>	<i>94.1</i>
Total Industrial Production (index, 1992=1.000).....	0.932	0.974	0.991	0.989	0.970	1.000	1.034	1.091	1.144	1.195	1.270	1.324	1.370	<i>1.415</i>	<i>1.451</i>
Housing Stock (millions).....	99.8	101.6	102.9	103.5	104.5	105.5	106.8	108.2	109.6	111.0	112.5	114.3	115.8	<i>117.0</i>	<i>118.3</i>
Weather ^a															
Heating Degree-Days															
U.S.	4334	4653	4726	4016	4200	4441	4700	4483	4531	4713	4542	3951	4177	<i>4229</i>	<i>4464</i>
New England.....	6546	6715	6887	5848	5960	6844	6728	6672	6559	6679	6662	5680	6007	<i>6360</i>	<i>6478</i>
Middle Atlantic.....	5699	6088	6134	4998	5177	5964	5948	5934	5831	5986	5809	4812	5334	<i>5519</i>	<i>5712</i>
U.S. Gas-Weighted	4391	4804	4856	4139	4337	4458	4754	4659	4707	4980	4802	4185	4409	<i>4402</i>	<i>4703</i>
Cooling Degree-Days (U.S.).....	1269	1283	1156	1260	1331	1040	1218	1220	1293	1180	1156	1410	1277	<i>1272</i>	<i>1234</i>

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

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

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, *Statistical Release G.17(419)*; U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0300.

Table A3. Annual International Petroleum Supply and Demand Balance

(Millions Barrels per Day, Except OECD Commercial Stocks)

	Year														
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Demand ^a															
OECD															
U.S. (50 States)	16.7	17.3	17.4	17.0	16.8	17.1	17.2	17.7	17.7	18.3	18.6	18.9	19.5	19.6	20.0
Europe ^b	12.3	12.4	12.5	12.6	13.4	13.6	13.5	13.6	14.1	14.3	14.4	14.7	14.5	14.7	14.9
Japan	4.5	4.8	5.0	5.1	5.3	5.4	5.4	5.7	5.7	5.9	5.7	5.5	5.6	5.5	5.6
Other OECD	2.5	2.6	2.7	2.7	2.7	2.7	2.8	2.9	3.0	3.0	3.1	3.1	3.2	3.3	3.4
Total OECD	36.0	37.1	37.6	37.5	38.1	38.8	39.0	39.9	40.6	41.4	41.8	42.3	42.8	43.2	43.8
Non-OECD															
Former Soviet Union	9.0	8.9	8.7	8.4	8.3	6.8	5.6	4.8	4.6	4.0	3.9	3.8	3.6	3.7	3.7
Europe	2.2	2.2	2.1	1.9	1.4	1.3	1.3	1.3	1.3	1.4	1.5	1.5	1.6	1.6	1.7
China	2.1	2.3	2.4	2.3	2.5	2.7	3.0	3.2	3.4	3.6	3.9	4.1	4.3	4.5	4.8
Other Asia	4.1	4.4	4.9	5.3	5.7	6.2	6.8	7.3	7.9	8.5	9.0	8.7	8.8	9.2	9.7
Other Non-OECD	9.7	10.0	10.3	10.5	10.6	11.0	11.4	11.8	12.1	12.4	13.0	13.3	13.5	13.9	14.3
Total Non-OECD	27.1	27.7	28.3	28.5	28.5	28.0	28.0	28.4	29.3	30.0	31.3	31.3	31.9	32.9	34.2
Total World Demand	63.1	64.9	66.0	66.0	66.6	66.8	67.0	68.3	69.9	71.4	73.1	73.6	74.7	76.1	78.0
Supply ^c															
OECD															
U.S. (50 States)	10.7	10.5	9.9	9.7	9.9	9.8	9.6	9.4	9.4	9.4	9.5	9.3	9.0	9.0	9.0
Canada	2.0	2.0	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
North Sea ^d	3.8	3.8	3.7	3.9	4.1	4.5	4.8	5.5	5.9	6.3	6.2	6.2	6.3	6.6	6.7
Other OECD	1.4	1.5	1.4	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.5	1.7	1.7
Total OECD	17.9	17.8	17.1	17.1	17.5	17.9	18.0	18.7	19.2	19.7	19.9	19.7	19.5	20.1	20.1
Non-OECD															
OPEC	19.6	21.5	23.3	24.5	24.6	25.8	26.6	27.0	27.6	28.3	29.9	30.4	29.3	30.4	31.9
Former Soviet Union	12.5	12.5	12.1	11.4	10.4	8.9	8.0	7.3	7.1	7.1	7.1	7.2	7.4	7.6	7.7
China	2.7	2.7	2.8	2.8	2.8	2.8	2.9	2.9	3.0	3.1	3.2	3.2	3.2	3.3	3.3
Mexico	2.9	2.9	2.9	3.0	3.2	3.2	3.2	3.2	3.1	3.3	3.4	3.5	3.4	3.6	3.6
Other Non-OECD	6.9	11.7	7.7	8.0	8.1	8.4	8.7	9.2	9.9	10.2	10.5	10.8	11.2	11.3	11.5
Total Non-OECD	44.6	47.0	48.9	49.7	49.1	49.1	49.4	49.6	50.7	52.0	54.2	55.2	54.5	56.2	58.0
Total World Supply	62.5	64.8	65.9	66.8	66.7	67.0	67.4	68.3	69.9	71.8	74.1	74.9	74.0	76.3	78.1
Total Stock Withdrawals	0.6	0.1	0.0	-0.8	-0.1	-0.2	-0.4	0.0	0.0	-0.4	-1.0	-1.3	0.7	-0.2	-0.1
OECD Comm. Stocks, End (bill. bbls.)	2.7	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.7	2.7	2.7	2.8	2.6	2.6	2.6
Net Exports from Former Soviet Union	3.5	3.6	3.4	3.0	2.1	2.1	2.3	2.4	2.6	3.0	3.3	3.5	3.8	4.0	3.9

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

^bOECD Europe includes the former East Germany.

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

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

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

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 Statistics Report*, 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														
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Imported Crude Oil ^a															
(dollars per barrel)	18.13	14.57	18.08	21.75	18.70	18.20	16.14	15.52	17.14	20.61	18.50	12.08	17.22	26.49	22.93
Natural Gas Wellhead															
(dollars per thousand cubic feet)	1.66	1.69	1.69	1.71	1.64	1.74	2.04	1.85	1.55	2.17	2.32	1.95	2.07	3.10	3.06
Petroleum Products															
Gasoline Retail ^b (dollars per gallon)															
All Grades	0.91	0.92	1.02	1.17	1.15	1.14	1.13	1.13	1.16	1.25	1.24	1.07	1.18	1.49	1.36
Regular Unleaded.....	0.91	0.91	0.99	1.13	1.10	1.09	1.07	1.08	1.11	1.20	1.20	1.03	1.14	1.45	1.32
No. 2 Diesel Oil, Retail															
(dollars per gallon).....	0.93	0.91	0.99	1.16	1.12	1.10	1.11	1.11	1.10	1.22	1.19	1.04	1.12	1.41	1.29
No. 2 Heating Oil, Wholesale															
(dollars per gallon).....	0.53	0.47	0.56	0.70	0.62	0.58	0.54	0.51	0.51	0.64	0.59	0.42	0.51	0.79	0.68
No. 2 Heating Oil, Retail															
(dollars per gallon).....	0.80	0.81	0.90	1.06	1.02	0.93	0.91	0.89	0.87	0.99	0.99	0.85	0.87	1.15	1.06
No. 6 Residual Fuel Oil, Retail ^c															
(dollars per barrel)	17.76	14.04	16.20	18.66	14.32	14.21	14.00	14.79	16.49	19.01	17.82	12.83	15.92	24.97	21.68
Electric Utility Fuels															
Coal															
(dollars per million Btu).....	1.51	1.47	1.44	1.45	1.45	1.41	1.38	1.36	1.32	1.29	1.27	1.25	1.22	1.22	1.22
Heavy Fuel Oil ^d															
(dollars per million Btu).....	2.98	2.41	2.85	3.22	2.49	2.46	2.36	2.40	2.60	3.01	2.79	2.07	2.38	4.09	3.49
Natural Gas															
(dollars per million Btu).....	2.24	2.26	2.36	2.32	2.15	2.33	2.56	2.23	1.98	2.64	2.76	2.38	2.57	3.75	3.60
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	5.55	5.47	5.64	5.80	5.82	5.89	6.17	6.41	6.06	6.35	6.95	6.83	6.61	7.23	7.82
Electricity															
(cents per kilowatthour)	7.4	7.5	7.6	7.8	8.1	8.2	8.3	8.4	8.4	8.4	8.4	8.3	8.1	8.1	7.9

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

^b Average self-service cash prices.

^c Average for all sulfur contents.

^d 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														
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Supply															
Crude Oil Supply															
Domestic Production ^a	8.35	8.14	7.61	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.93	5.79	5.75
Alaska	1.96	2.02	1.87	1.77	1.80	1.71	1.58	1.56	1.48	1.39	1.30	1.17	1.05	0.94	0.90
Lower 48	6.39	6.12	5.74	5.58	5.62	5.46	5.26	5.10	5.08	5.07	5.16	5.08	4.88	4.85	4.85
Net Imports (including SPR) ^b	4.52	4.95	5.70	5.79	5.67	5.99	6.69	6.96	7.14	7.40	8.12	8.60	8.62	9.13	9.47
Other SPR Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.05	0.00
Stock Draw (Including SPR)	-0.12	0.00	-0.09	0.02	-0.01	0.01	-0.06	-0.02	0.09	0.05	-0.06	-0.05	0.11	-0.04	0.00
Product Supplied and Losses	-0.03	-0.04	-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
Unaccounted-for Crude Oil	0.14	0.20	0.20	0.26	0.20	0.26	0.17	0.27	0.19	0.22	0.14	0.11	0.16	0.32	0.22
Total Crude Oil Supply	12.85	13.25	13.40	13.41	13.30	13.41	13.61	13.87	13.97	14.19	14.66	14.89	14.80	15.12	15.43
Other Supply															
NGL Production	1.59	1.62	1.55	1.56	1.66	1.70	1.74	1.73	1.76	1.83	1.82	1.76	1.84	1.94	1.94
Other Hydrocarbon and Alcohol Inputs ..	0.12	0.11	0.11	0.13	0.15	0.20	0.25	0.26	0.30	0.31	0.34	0.38	0.37	0.37	0.37
Crude Oil Product Supplied	0.03	0.04	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
Processing Gain	0.64	0.66	0.66	0.68	0.71	0.77	0.77	0.77	0.77	0.84	0.85	0.89	0.90	0.92	0.90
Net Product Imports ^c	1.39	1.63	1.50	1.38	0.96	0.94	0.93	1.09	0.75	1.10	1.04	1.17	1.30	1.31	1.43
Product Stock Withdrawn	0.09	0.03	0.13	-0.14	-0.04	0.06	-0.05	0.00	0.15	0.03	-0.09	-0.17	0.31	-0.03	-0.05
Total Supply	16.72	17.33	17.37	17.04	16.76	17.10	17.26	17.72	17.72	18.31	18.62	18.92	19.53	19.63	20.01
Demand															
Motor Gasoline ^d	7.19	7.36	7.40	7.31	7.23	7.38	7.48	7.60	7.79	7.89	8.02	8.25	8.43	8.53	8.69
Jet Fuel	1.38	1.45	1.49	1.52	1.47	1.45	1.47	1.53	1.51	1.58	1.60	1.62	1.67	1.72	1.76
Distillate Fuel Oil	2.98	3.12	3.16	3.02	2.92	2.98	3.04	3.16	3.21	3.37	3.44	3.46	3.57	3.64	3.70
Residual Fuel Oil	1.26	1.38	1.37	1.23	1.16	1.09	1.08	1.02	0.85	0.85	0.80	0.89	0.83	0.70	0.75
Other Oils ^e	3.90	4.03	3.95	3.95	3.99	4.20	4.17	4.41	4.36	4.63	4.77	4.69	5.02	5.03	5.12
Total Demand	16.72	17.34	17.37	17.04	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	19.63	20.01
Total Petroleum Net Imports	5.91	6.59	7.20	7.16	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	10.44	10.89
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	349	330	341	323	325	318	335	337	303	284	305	324	284	281	282
Total Motor Gasoline	226	228	213	220	219	216	226	215	202	195	210	216	193	198	200
Jet Fuel	50	44	41	52	49	43	40	47	40	40	44	45	41	43	43
Distillate Fuel Oil	134	124	106	132	144	141	145	130	127	138	156	125	129	133	133
Residual Fuel Oil	47	45	44	49	50	43	44	42	37	46	40	45	36	39	40
Other Oils	260	267	257	261	267	263	273	275	258	250	259	291	244	243	255

^aIncludes lease condensate.

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

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

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

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

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

(Trillion Cubic Feet)

	Year														
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Supply															
Total Dry Gas Production.....	16.62	17.10	17.31	17.81	17.70	17.84	18.10	18.82	18.60	18.85	18.90	18.71	18.66	18.89	18.94
Net Imports.....	0.94	1.22	1.27	1.45	1.64	1.92	2.21	2.46	2.69	2.78	2.84	2.99	3.39	3.56	3.77
Supplemental Gaseous Fuels.....	0.10	0.10	0.11	0.12	0.11	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.12	0.13
Total New Supply.....	17.66	18.42	18.69	19.38	19.45	19.88	20.42	21.39	21.40	21.75	21.84	21.80	22.15	22.56	22.84
Total Underground Storage															
Opening.....	6.57	6.55	6.65	6.33	6.94	6.78	6.64	6.65	6.97	6.50	6.51	6.52	7.04	6.88	6.71
Closing.....	6.55	6.65	6.33	6.94	6.78	6.64	6.65	6.97	6.50	6.51	6.52	7.04	6.88	6.71	6.74
Net Withdrawals.....	0.02	-0.10	0.33	-0.61	0.16	0.14	-0.01	-0.32	0.46	-0.01	-0.01	-0.52	0.16	0.17	-0.03
Total Supply.....	17.68	18.32	19.02	18.77	19.61	20.02	20.42	21.08	21.86	21.74	21.84	21.28	22.31	22.73	22.81
Balancing Item ^a	-0.47	-0.29	-0.22	-0.05	-0.58	-0.47	-0.14	-0.37	-0.28	0.23	0.12	-0.02	-0.94	-0.70	0.04
Total Primary Supply.....	17.21	18.03	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.95	21.26	21.38	22.03	22.85
Demand															
Lease and Plant Fuel.....	1.15	1.10	1.07	1.24	1.13	1.17	1.17	1.12	1.22	1.25	1.20	1.16	1.23	1.24	1.23
Pipeline Use.....	0.52	0.61	0.63	0.66	0.60	0.59	0.62	0.69	0.70	0.71	0.75	0.64	0.64	0.62	0.66
Residential.....	4.31	4.63	4.78	4.39	4.56	4.69	4.96	4.85	4.85	5.24	4.98	4.52	4.67	4.73	5.04
Commercial.....	2.43	2.67	2.72	2.62	2.73	2.80	2.86	2.90	3.03	3.16	3.21	3.00	3.06	3.18	3.37
Industrial (Incl. Nonutilities).....	5.95	6.38	6.82	7.02	7.23	7.53	7.98	8.17	8.58	8.87	8.83	8.69	8.66	9.11	9.33
Electric Utilities.....	2.84	2.64	2.79	2.79	2.79	2.77	2.68	2.99	3.20	2.73	2.97	3.26	3.11	3.14	3.22
Total Demand.....	17.21	18.03	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.95	21.26	21.38	22.03	22.85

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

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

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

Table A7. Annual U.S. Coal Supply and Demand
(Million Short Tons)

	Year														
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Supply															
Production.....	918.8	950.3	980.7	1029.	996.0	997.5	945.4	1033.5	1033.0	1063.9	1089.9	1117.5	1094.0	<i>1111.3</i>	<i>1128.3</i>
Appalachia.....	NA	NA	464.8	489.0	457.8	456.6	409.7	445.4	434.9	451.9	467.8	460.4	423.3	420.9	418.9
Interior.....	NA	NA	198.1	205.8	195.4	195.7	167.2	179.9	168.5	172.8	170.9	168.4	162.5	158.3	154.1
Western.....	NA	NA	317.9	334.3	342.8	345.3	368.5	408.3	429.6	439.1	451.3	488.8	508.2	532.1	555.3
Primary Stock Levels ^a															
Opening.....	32.1	28.3	30.4	29.0	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	36.4	36.4
Closing.....	28.3	30.4	29.0	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	36.4	36.4	34.6
Net Withdrawals.....	3.8	-2.1	1.4	-4.4	0.4	-1.0	8.7	-7.9	-1.2	5.8	-5.3	-2.6	0.2	S	1.7
Imports.....	1.7	2.1	2.9	2.7	3.4	3.8	7.3	7.6	7.2	7.1	7.5	8.7	9.1	10.2	11.6
Exports.....	79.6	95.0	100.8	105.8	109.0	102.5	74.5	71.4	88.5	90.5	83.5	78.0	58.5	59.0	60.5
Total Net Domestic Supply.....	844.7	855.3	884.2	921.6	890.9	897.8	886.9	961.8	950.4	986.3	1008.5	1045.7	1044.8	<i>1062.5</i>	<i>1081.1</i>
Secondary Stock Levels ^b															
Opening.....	175.2	185.5	158.4	146.1	168.2	167.7	163.7	120.5	136.1	134.6	123.0	106.4	129.4	143.5	148.7
Closing.....	185.5	158.4	146.1	168.2	167.7	163.7	120.5	136.1	134.6	123.0	106.4	129.4	143.5	148.7	144.0
Net Withdrawals.....	-10.2	27.0	12.3	-22.1	0.5	4.0	43.2	-15.7	1.5	11.7	16.6	-23.0	-14.1	-5.2	4.7
Waste Coal Supplied to IPPs ^c	0.0	0.0	0.0	0.0	0.0	6.0	6.4	7.9	8.5	8.8	8.1	8.6	9.7	12.2	12.2
Total Supply.....	834.4	882.3	896.5	899.4	891.4	907.8	936.5	954.0	960.4	1006.7	1033.2	1031.3	1040.4	<i>1069.6</i>	<i>1098.1</i>
Demand															
Coke Plants.....	37.0	41.9	40.5	38.9	33.9	32.4	31.3	31.7	33.0	31.7	30.2	28.2	27.9	28.1	28.3
Electricity Production															
Electric Utilities.....	717.9	758.4	766.9	773.5	772.3	779.9	813.5	817.3	829.0	874.7	900.4	910.9	894.1	873.4	898.5
Nonutilities (Excl. CoGen.) ^d	NA	NA	0.9	1.6	10.2	14.6	17.1	19.5	20.8	22.2	21.6	26.9	45.9	95.2	97.6
Retail and General Industry.....	75.2	76.3	82.3	83.1	81.5	80.2	81.1	81.2	78.9	76.9	77.1	73.0	70.3	73.0	73.7
Total Demand ^e	830.0	876.5	890.6	897.1	897.8	907.0	943.1	949.7	961.7	1005.6	1029.2	1039.0	1038.3	<i>1069.6</i>	<i>1098.1</i>
Discrepancy ^f	4.4	5.8	5.9	2.4	-6.4	0.8	-6.6	4.3	-1.3	1.2	4.0	-7.7	2.1	0.0	0.0

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

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

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

^dEstimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA). Quarterly coal consumption estimates for 1999 and projections for 2000 and 2001 are based on (1) estimated consumption by utility power plants sold to nonutility generators during 1999, and (2) annual coal-fired generation at nonutilities from Form EIA-867 (Annual Nonutility Power Producer Report).

^eTotal Demand includes estimated IPP consumption.

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

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

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

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

	Year														
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Supply															
Net Utility Generation															
Coal.....	1463.8	1540.7	1553.7	1559.6	1551.2	1575.9	1639.2	1635.5	1652.9	1737.5	1787.8	1807.5	1767.7	1753.2	1792.0
Petroleum	118.5	148.9	158.3	117.0	111.5	88.9	99.5	91.0	60.8	67.3	77.8	110.2	86.9	52.9	73.6
Natural Gas.....	272.6	252.8	266.6	264.1	264.2	263.9	258.9	291.1	307.3	262.7	283.6	309.2	296.4	276.6	277.3
Nuclear.....	455.3	527.0	529.4	576.9	612.6	618.8	610.3	640.4	673.4	674.7	628.6	673.7	725.0	719.8	711.2
Hydroelectric.....	249.7	222.9	265.1	279.9	275.5	239.6	265.1	243.7	293.7	328.0	337.2	304.4	293.9	272.0	270.4
Geothermal and Other ^a	12.3	12.0	11.3	10.7	10.1	10.2	9.6	8.9	6.4	7.2	7.5	7.2	3.7	2.2	2.2
Subtotal.....	2572.1	2704.3	2784.3	2808.2	2825.0	2797.2	2882.5	2910.7	2994.5	3077.4	3122.5	3212.2	3173.7	3076.7	3126.7
Nonutility Generation ^b	0.0	0.0	187.6	216.7	246.3	286.1	314.4	343.1	363.3	369.6	371.7	405.7	495.1	700.3	711.8
Total Generation.....	2572.1	2704.3	2971.9	3024.9	3071.3	3083.4	3196.9	3253.8	3357.8	3447.0	3494.2	3617.9	3668.7	3777.0	3838.6
Net Imports ^c	46.3	31.8	11.0	2.3	19.6	25.4	27.8	44.8	39.2	38.0	36.6	27.6	29.3	30.5	31.4
Total Supply	2618.5	2736.0	2982.8	3027.2	3091.0	3108.8	3224.7	3298.6	3397.1	3485.0	3530.8	3645.5	3698.1	3807.5	3869.9
Losses and Unaccounted for ^d	NA	NA	243.1	207.3	215.0	223.6	236.3	225.7	238.4	242.3	242.9	249.4	236.6	263.7	265.3
Demand															
Electric Utility Sales															
Residential.....	850.4	892.9	905.5	924.0	955.4	935.9	994.8	1008.5	1042.5	1082.5	1075.8	1127.7	1145.7	1166.3	1196.3
Commercial.....	660.4	699.1	725.9	751.0	765.7	761.3	794.6	820.3	862.7	887.4	928.4	968.5	982.9	1007.0	1028.9
Industrial.....	858.2	896.5	925.7	945.5	946.6	972.7	977.2	1008.0	1012.7	1030.4	1032.7	1040.0	1063.3	1078.7	1086.8
Other.....	88.2	89.6	89.8	92.0	94.3	93.4	94.9	97.8	95.4	97.5	102.9	103.5	104.2	107.6	107.8
Subtotal.....	2457.3	2578.1	2646.8	2712.6	2762.0	2763.4	2861.5	2934.6	3013.3	3097.8	3139.8	3239.8	3296.0	3359.5	3419.8
Nonutility Own Use ^e	NA	NA	94.7	101.5	108.0	121.8	126.9	138.4	145.4	144.9	148.2	156.2	165.4	184.2	184.8
Total Demand.....	NA	NA	2739.7	2819.9	2875.9	2885.1	2988.4	3073.0	3158.7	3242.7	3287.9	3396.0	3461.4	3543.8	3604.6
Memo:															
Nonutility Sales															
to Electric Utilities	NA	NA	92.9	115.2	138.3	164.4	187.5	204.7	217.9	224.6	223.5	249.5	329.7	516.0	527.0

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

^bNet generation.

^cData for 1999 are estimates.

^dBalancing item, mainly transmission and distribution losses.

^eDefined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA-867, "Annual Nonutility Power Producer Report." Data for 1999 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.