



September 2000

Summary

Our short-term outlook for a wide array of energy prices has been adjusted upward as international and domestic energy supply conditions have tightened. We think that crude oil prices are as likely as not to end the year \$2 to \$3 per barrel higher than our previous projections. Thus, we think that the probability of West Texas Intermediate costing an average of \$30 per barrel or more at midwinter is about 50 percent. On their current track, heating oil prices are likely to be about 30 percent above year-ago levels in the fourth quarter. Prices for Q1 2001 seem more likely now to match or exceed the high level seen in Q1 2000.

Tight oil markets this year and an inherent propensity for high gas utilization in incremental power supply have resulted in rising North American natural gas prices. The impact here has been exacerbated by declining or stagnant natural gas production over the last few years.

Average natural gas wellhead prices this coming winter are likely to be nearly double the level seen last year, a development that would generate an average increase in the unit cost of gas delivered to residential consumers of about 25 percent.

A break in the current general strength of fuel prices could come if winter weather is mild. However, assuming normal winter temperatures, the combination of higher expected consumption and higher prices would be expected to yield average increases in heating fuel expenditures of 20 to 40 percent this heating season, depending on the heating fuel used.

Below-normal cooling degree-days have kept third quarter electricity demand growth below the pace seen in the first half of the year. This was particularly true of July, when cooling degree-days were 22 percent below the national level posted in July 1999, and about 11 percent below normal. Temperatures in the South and West have remained high this summer, so the cooling off nationally has not been evenly distributed. Still, with cooling degree-days running about normal in August, chances are good that third-quarter electricity demand this year will be down about 1.3 percent from Q3 1999.

International

Crude Oil Prices. The monthly U.S. imported crude oil price rose in August to an estimated \$28.68 per barrel (\$31.26 estimated for West Texas Intermediate crude oil), about \$1.60 more than in July ([Figure 1](#)) and only slightly less than June's price of \$29.11 per barrel, which was the highest level in the decade since the Gulf War. On August 14, the average OPEC basket price over a 20-day period rose above the \$28 level that OPEC had set as an upper limit for its target price band during the March OPEC meeting, and stayed above it throughout August. Barring a dip in prices, the OPEC basket price will have exceeded the \$28 level for 20 business days on September 8 - two days before OPEC's next scheduled meeting on September 10.

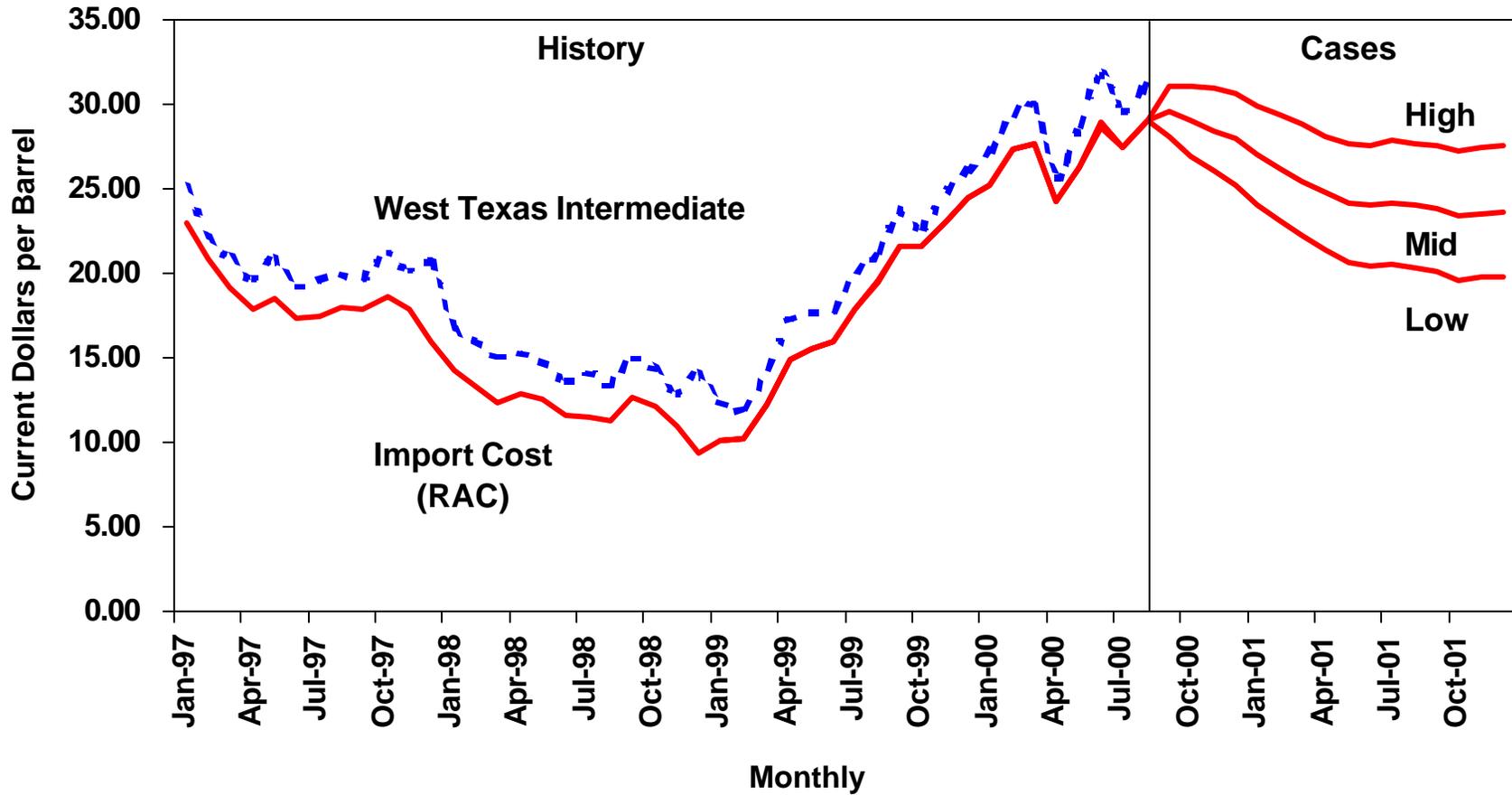
EIA estimates of world oil supply and demand suggest that the monthly U.S. imported crude oil price will remain above \$28 per barrel for the remainder of the year (corresponding to over \$30 for West Texas Intermediate crude oil). Prices are then expected to gradually decline in 2001 and average a little less than \$25 per barrel, about \$3.00 below the annual average for 2000. This 2001 price projection is about \$2 per barrel higher than the August Outlook projection.

International Oil Supply. At its June meeting, the OPEC 10 (Organization of Petroleum Exporting Countries excluding Iraq) agreed to increase their production quotas by 708,000 barrels per day beginning July 1. After this latest round of quota adjustments and production increases, only Saudi Arabia, Kuwait and, to a lesser degree, the United Arab Emirates will have significant capacity to expand production.

Concerns that this quota adjustment would not be sufficient to significantly lower prices led Saudi Arabia to announce on July 3 that it wanted to bring the OPEC basket price down to \$25 per barrel and that crude oil supplies would be increased by an additional 500,000 barrels per day if oil prices remained high. Additional increases of that magnitude have not been apparent in the third quarter, but EIA assumes that OPEC will decide to enhance production at their September 10 meeting by about this amount. The forecast assumes that OPEC 10 production in the fourth quarter of 2000 will be 0.5 million barrels per day higher than in the previous quarter, but does not assume further increases in OPEC 10 production ([Figure 2](#)).

Iraqi crude oil production is estimated to have increased from 2.3 million barrels per day in the first quarter to 2.8 million barrels per day in the second quarter of 2000. Although Iraqi production fell during June-July as a result of logistical and marketing problems, Iraqi oil production is projected to increase to 3.0 - 3.1 million barrels per day through the remainder of the year, and increase to 3.3

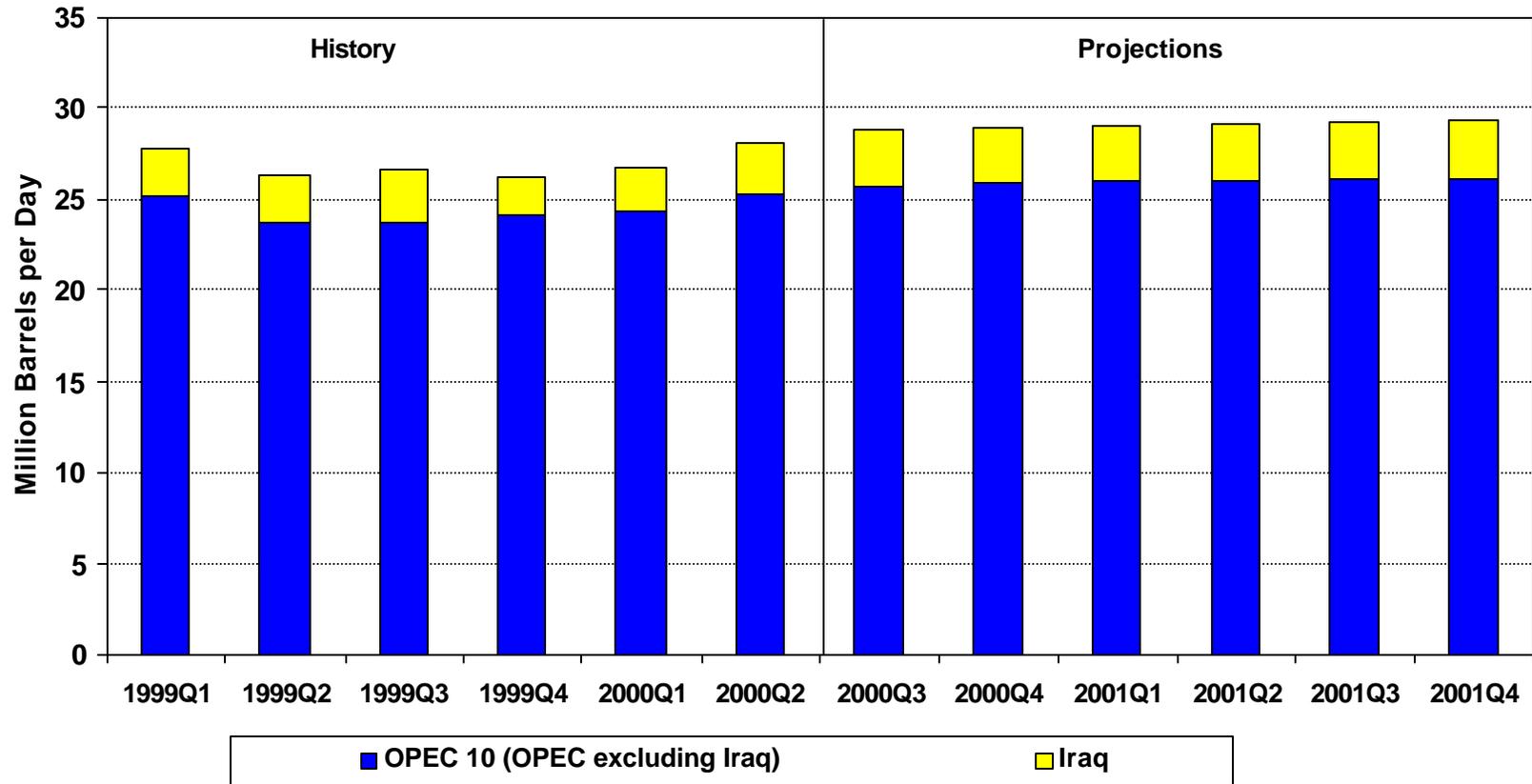
Figure 1. U.S. Monthly Crude Oil Prices



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



Figure 2. OPEC Crude Oil Production 1999-2001



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

million barrels per day by end-2001. These projections of Iraqi crude oil production are assumptions that do not reflect any official U.S. Government view, and are less than Iraq's own estimate that production could reach as high as 3.5 million barrels per day in 2001.

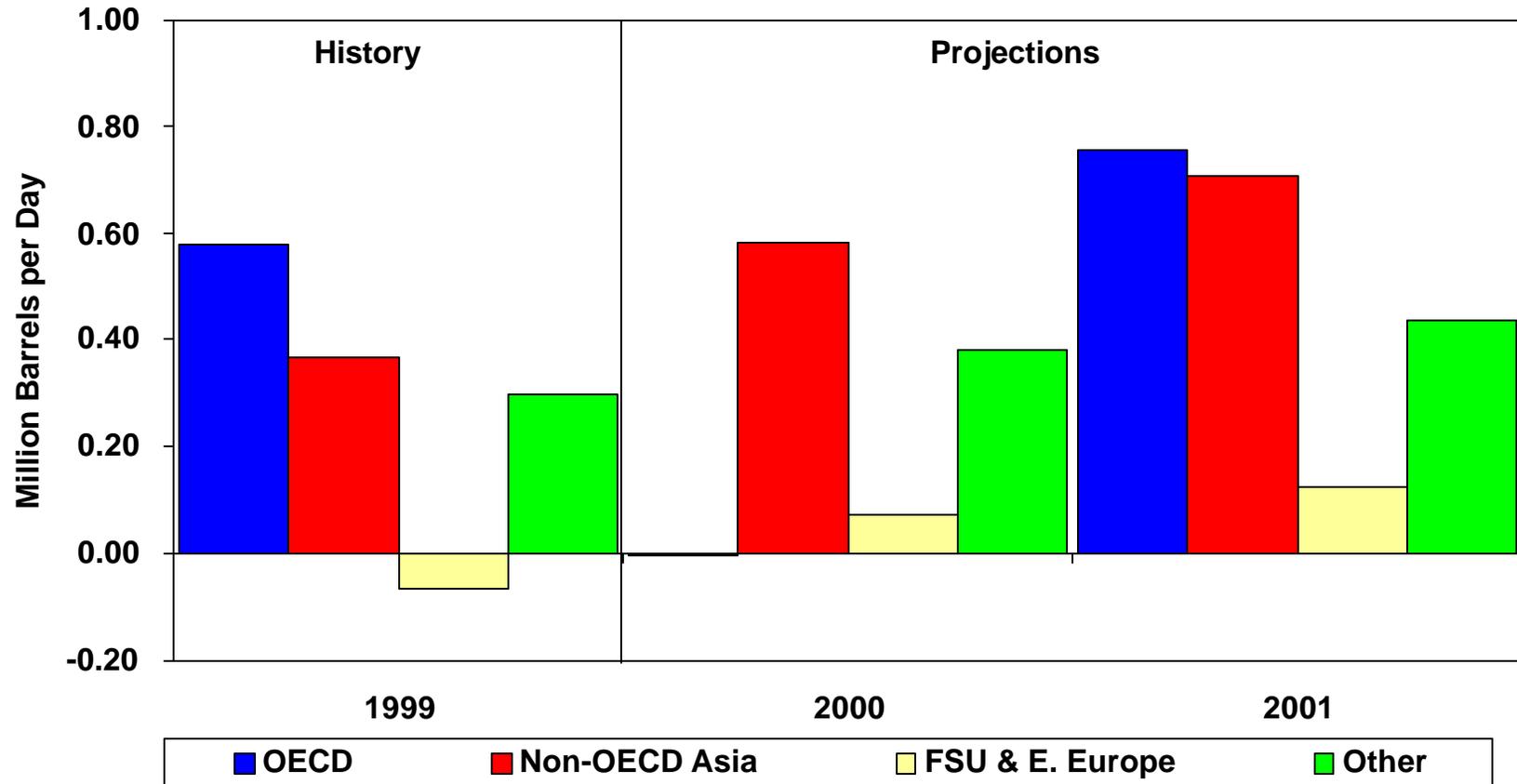
Non-OPEC production is expected to increase by 1.1 million barrels per day in 2000 and by another 0.6 million barrels per day in 2001, primarily from the former Soviet Union, with smaller increases from other regions ([Table 3](#)). Oil production from the former Soviet Union has risen as Russian production has recovered, and further increases are expected at end-2001 with the opening of the Caspian Pipeline Consortium (CPC)'s pipeline to transport oil from Kazakhstan to world oil markets. No further increases are expected in the North Sea in 2001 as output from new fields is not expected to outstrip declines in maturing fields.

International Oil Demand. This month's Outlook assumes growth in world oil demand in 2000 of about 1 million barrels per day (about 1.3 percent), to average almost 76 million barrels per day for the year ([Figure 3](#)). This is the lowest growth rate since 1993 with the exception of 1998, when Asian economies were suffering from a financial crisis. World oil demand growth in 2001 is expected to be about 2 million barrels per day, similar to the growth that was seen in the 1995-1997 period.

Non-OECD Asia is expected once again to be the predominant region for oil demand growth this year, 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.

World Oil Inventories. While EIA does not attempt to estimate oil inventory levels on a global basis, the direction oil inventories are headed is discerned from EIA's world oil supply and demand estimates. Following a 0.8-million-barrel-per-day implied draw on world inventories in 1999, stocks reached very low levels when viewed on a forward-cover or days-supply basis. The projected 2000 oil inventory build of only 0.7 million barrels per day in 2000 and 0.6 million barrels per day in 2001 suggest that days supply will continue to remain at low levels as world oil demand continues to grow. OECD stock levels, which EIA does estimate, will also remain at low levels, leaving world oil markets vulnerable to a cutoff in oil supplies somewhere or an extreme cold snap during next winter ([Figure 4](#)).

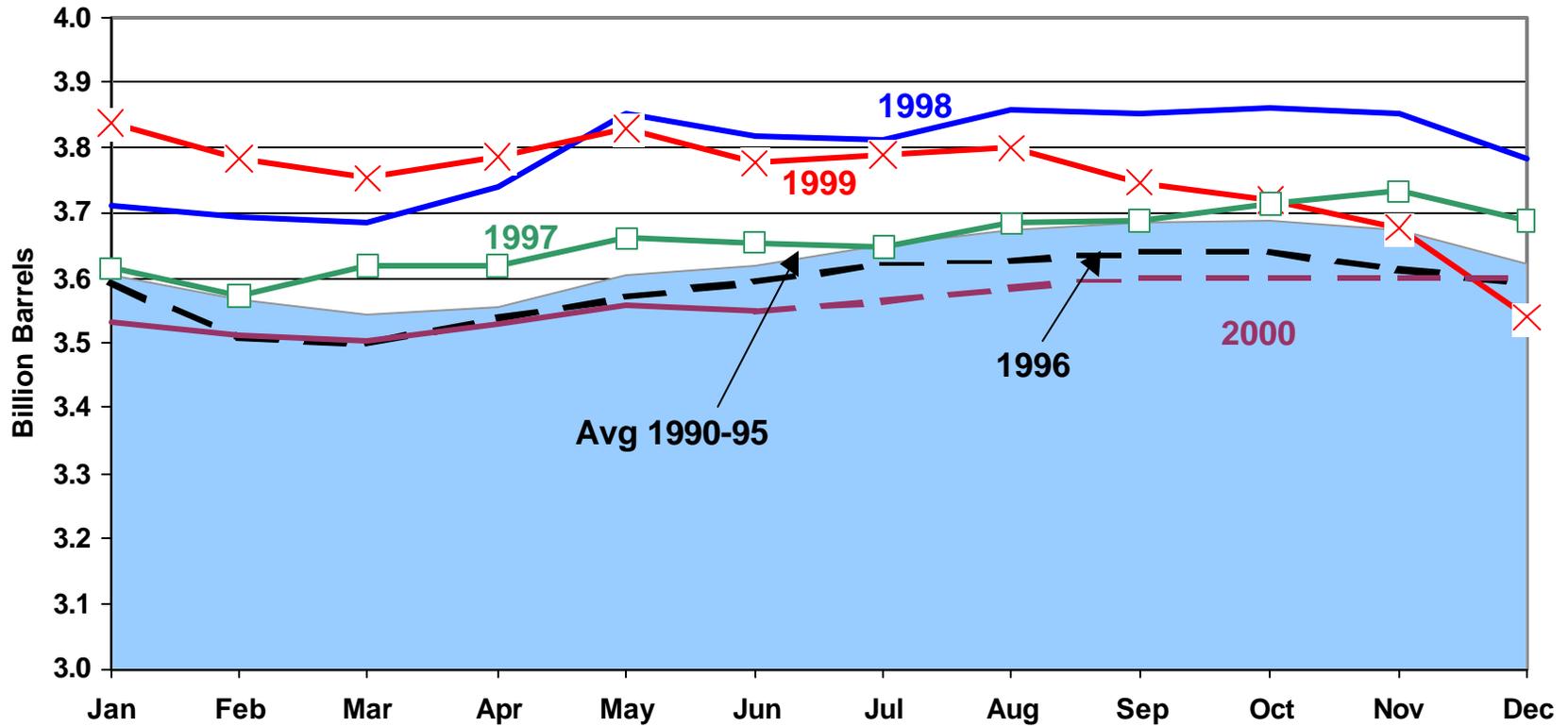
Figure 3. Annual World Oil Demand (Changes from Previous Year)



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



Figure 4. Total OECD Oil Stocks*



*Total includes commercial and government stocks

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



U. S. Energy Prices

Distillate Fuel (Heating Oil and Diesel Fuel). Spot prices for distillate fuel oil have been climbing steadily since late July, gaining about 25 cents per gallon in a period of 5 weeks. Over the same period, crude oil prices have risen about 15 cents per gallon ([Figure 5](#)). The low level of inventories for distillate fuel explains the rest of the price gain. Now that the summer is nearly over, if the currently depressed level of distillate stocks continues into the heating season, the result would be a high level of price volatility for the distillate fuels this fall and winter. Last February, a period of very cold weather in the Northeast, in combination with notably low stocks of distillate fuel, led to heating oil and diesel fuel prices that averaged more than \$2.00 per gallon in New England and other areas in the Northeast.

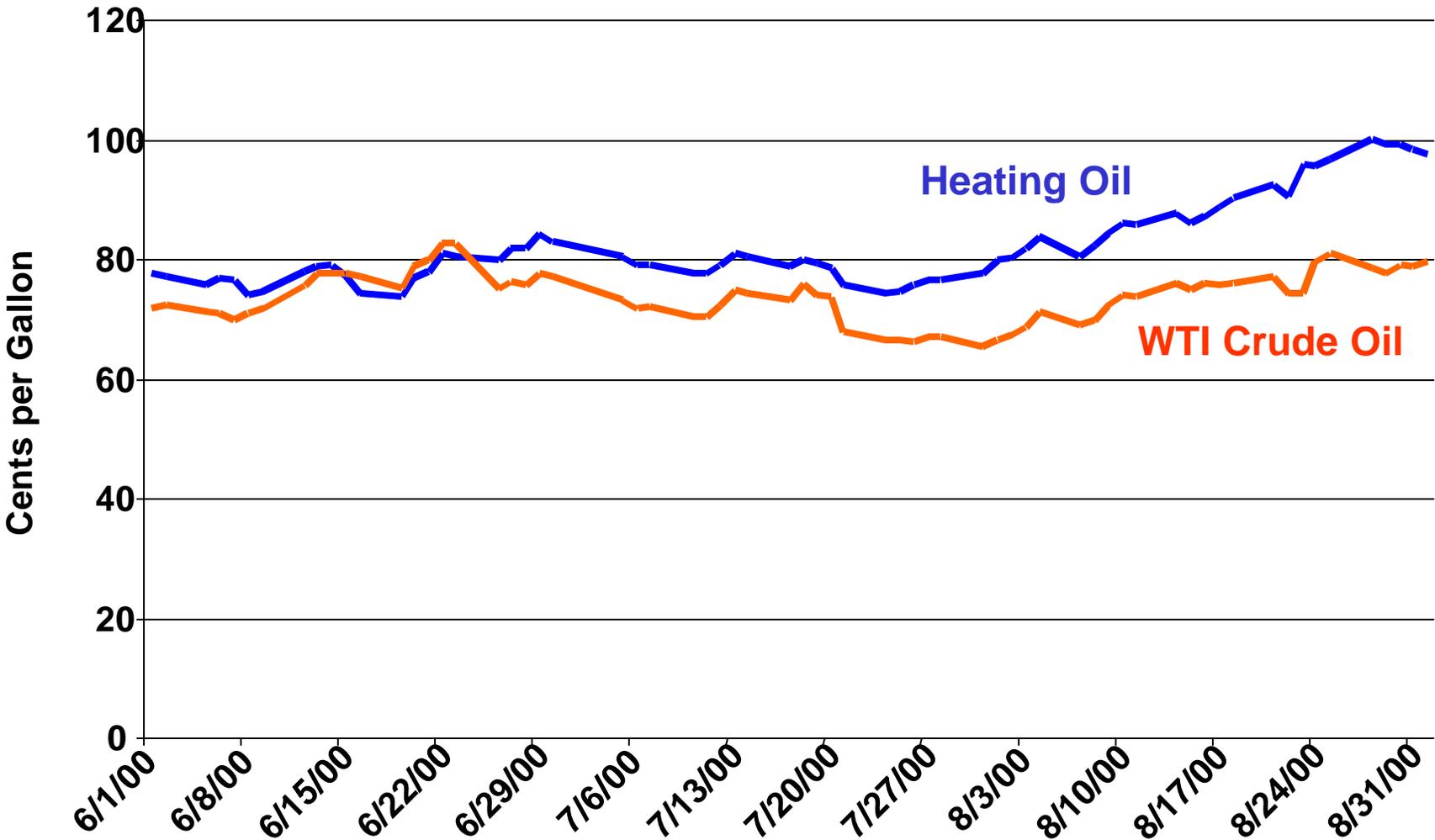
As we have stated in the last several *Outlooks*, a risk exists for price spikes of distillate fuels similar to last February unless inventories of distillate fuels are built to sufficient levels by the end of the year. Stocks of high-sulfur distillate fuel oil (heating oil) particularly in the Northeast, where most of the nation's heating oil is consumed, have been at considerably low levels since the beginning of the year ([Figure 6](#)).

For the U.S., distillate stocks are currently about 25 million barrels below the low end of the average distillate stock range ([Figure 7](#)). While it is true that EIA's definition of the average range for petroleum product stocks are based on only 3 years of monthly data (January 1997- December 1999), and that the end-of-August distillate stock levels for those three years were unusually high by historical standards, the supply of distillate fuel is currently quite low relative to expected demand and this situation will require close monitoring over the next few months. We are projecting that distillate inventories will increase through November but the mid-winter levels are not likely to be sufficient to provide much of a cushion if severe weather conditions occur in the Northeast. Unless the winter in the Northeast is unusually mild and/or world crude oil prices collapse, substantial price strength gains for heating oil and diesel fuel are highly likely.

Assuming normal heating demand, with tight stocks and somewhat higher crude oil prices, we expect that in the fourth quarter, residential heating oil prices are projected to average \$1.31 per gallon, or about 30 cents more per gallon compared to the same period last year ([Table 4](#)). That level of heating oil prices is projected to continue through the first quarter of 2001.

Motor Gasoline. The retail price of regular unleaded (self-service) motor gasoline reached the highest level recorded by EIA (in nominal, not inflation-

Figure 5. Recent Crude Oil and Distillate Spot Prices

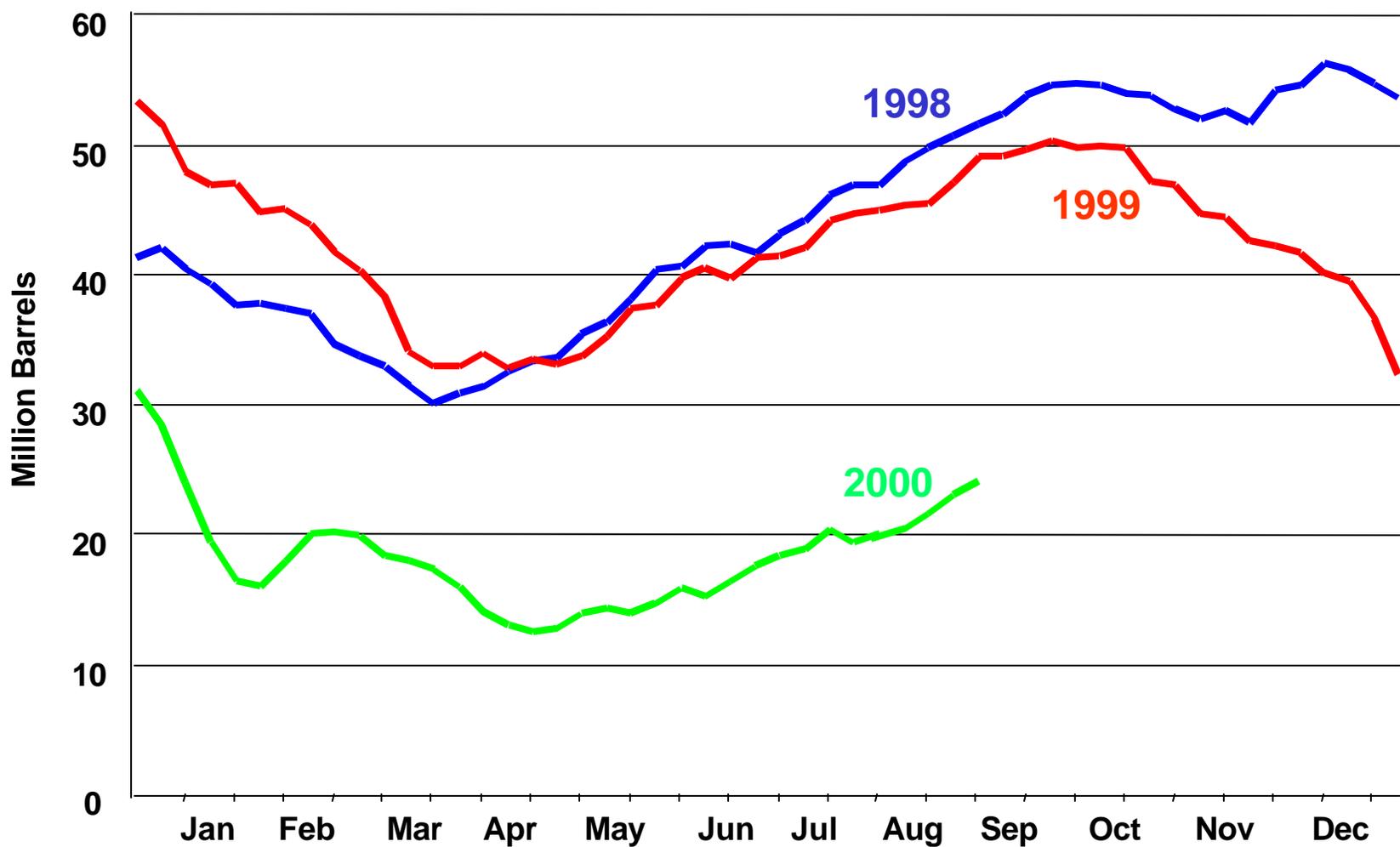


*New York Spot Prices for Heating Oil and West Texas Intermediate Crude Oil

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



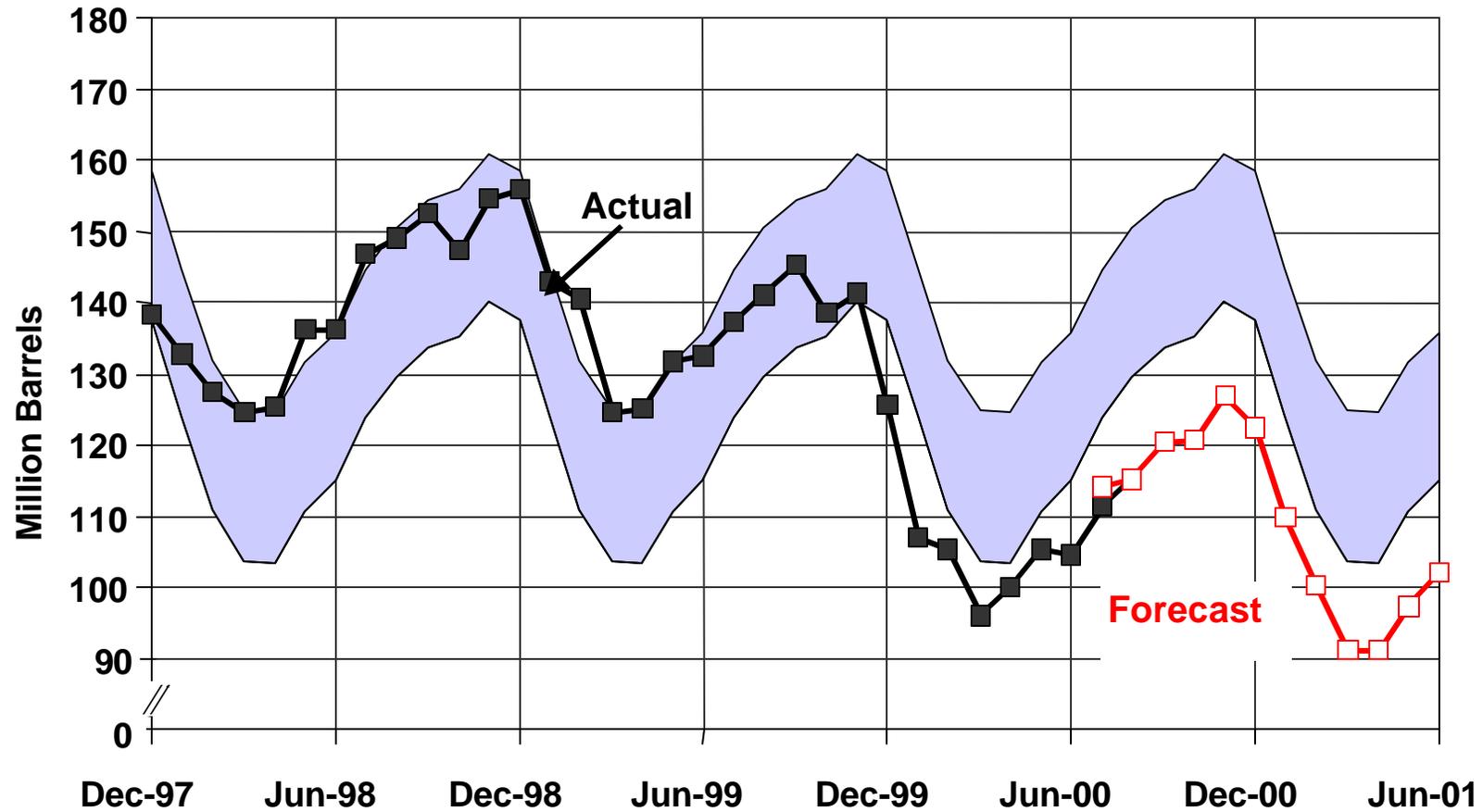
Figure 6. Weekly East Coast Heating Oil Stocks



Source: EIA, Weekly Petroleum Status Report.



Figure 7. U.S. Total Distillate Fuel Stocks



NOTE: Colored Band is Normal Stock Range

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



adjusted terms) in the third week of June at \$1.68 per gallon. (It should be noted that, in year 2000 dollars, gasoline prices averaged \$2.69 per gallon in March, 1981, the high water mark for gasoline prices in U.S. history.) After peaking, the average pump price for regular gasoline fell by 23 cents per gallon by the middle of August ([Figure 8](#)). Toward the end of the month, pump prices picked up a few cents per gallon due to the higher crude costs and the end-of-summer gasoline demand bump. Assuming that our base case crude oil price path holds, we project that retail motor gasoline prices will recede in October and continue to decline through the end of the year, a typical pattern for gasoline prices as the peak gasoline demand season passes into fall and winter. By year's end, the monthly average retail price of regular unleaded (self-service) motor gasoline is projected to be about \$1.41 per gallon ([Figure 9](#)).

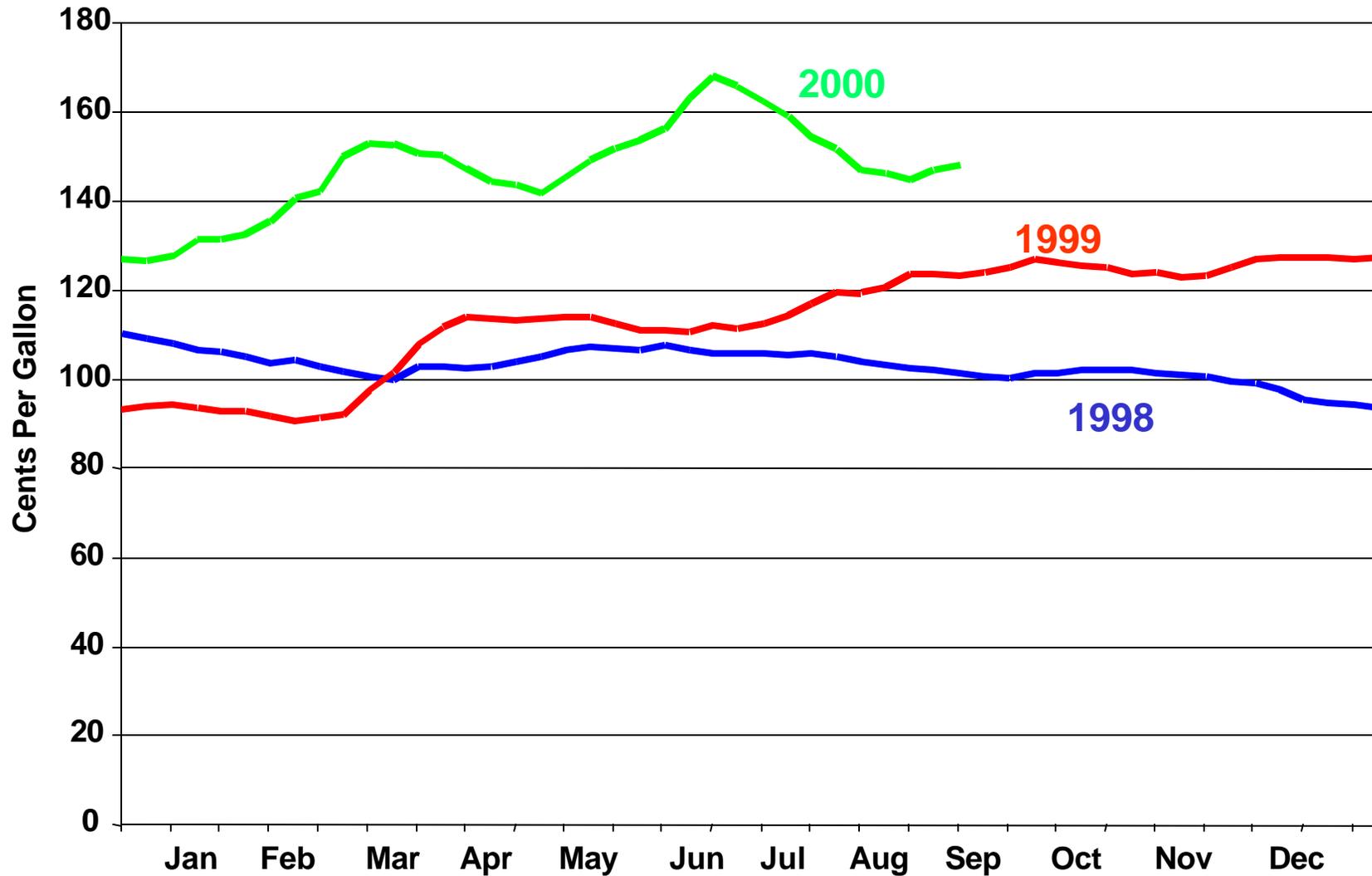
For 2001, we expect an annual average price dip of about 10 cents per gallon at the pump again, assuming that our base case crude oil price path holds.

Natural Gas. Since June, spot wellhead prices have been averaging over \$4.00 per thousand cubic feet. Nominal spot prices for gas have reached these levels in the recent past for a day or even a few weeks. Not only is this price double the price from one year ago, it also represents a more than \$2.00 per thousand cubic feet increase since the beginning of the year ([Figure 10](#)). In inflation-adjusted terms, gas prices today are comparable to those seen in the mid-1980's, but less than those seen in the early 1980's, when real prices were high and gas deregulation was not yet in place ([Figure 11](#)).

Although high oil prices have contributed to the current strength in gas prices, the predominant reason for these high (and sustained) gas prices has been the insecure supply situation. In short, the injection rate for gas into storage still continues to be too gradual to calm the market for next winter's heating season. Underground working gas storage levels are currently about 18 percent below year-ago levels ([Figure 12](#)). At current injection rates, it is becoming increasingly uncertain whether or not ready supplies of gas will be available during the heating season in sufficient quantities to avoid sharp upward price pressure if winter weather turns out to be very cold. This is reflected in the volatility and levels of spot prices over the last three months. Hot summer weather in portions of the country, particularly Texas and California (States which consumes large amounts of gas-generated electricity), has contributed to sub-par storage injections. If the sweltering heat continues in the Southern Plains regions through September, the gas storage situation may continue to be strained right up into the beginning of the heating season.

Overall, demand for natural gas has been gaining due to the growing economy over the last 8 years and due to the increasing use of gas generation at power

Figure 8. Weekly Gasoline Prices



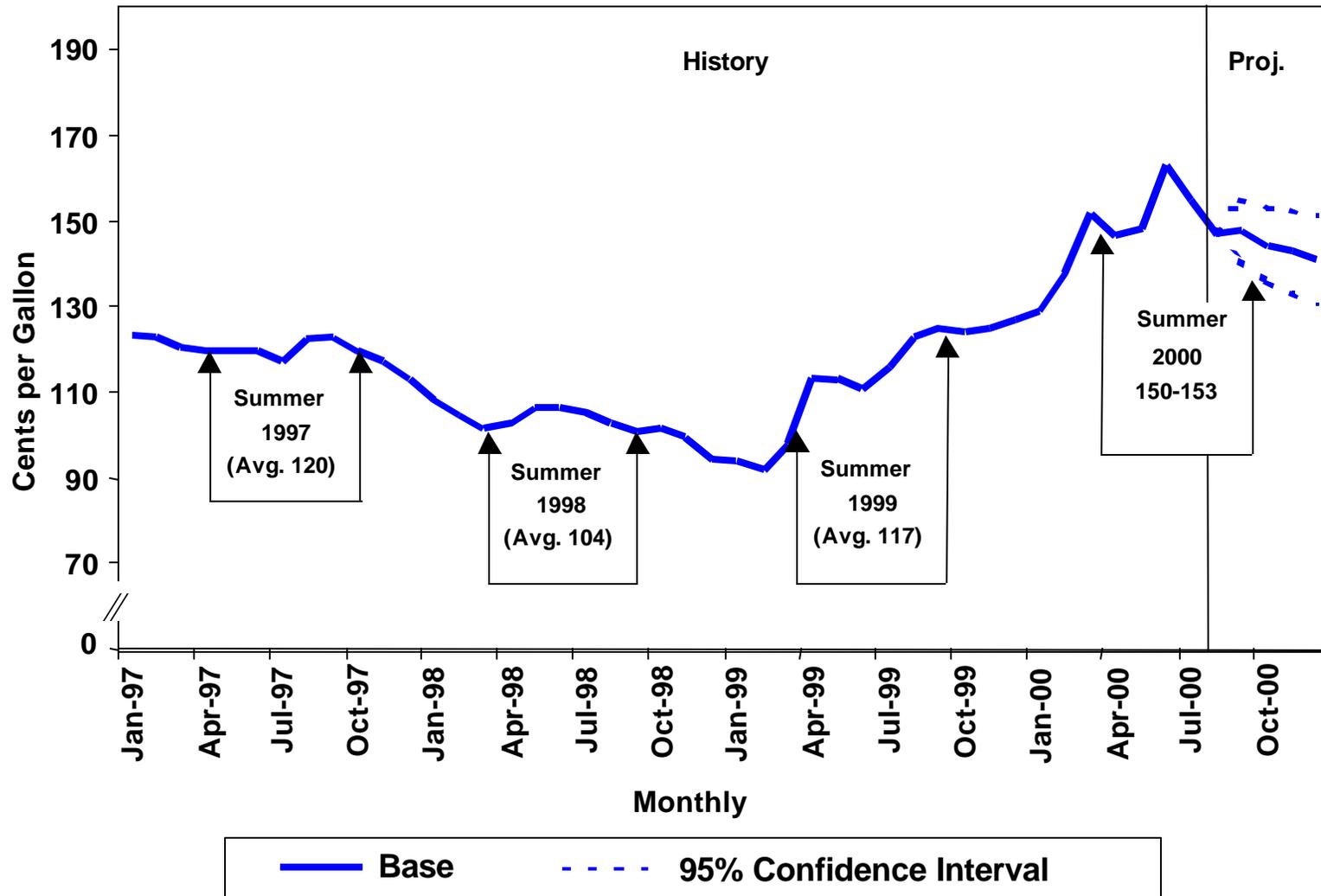
*Regular Unleaded Self-Service Cash

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



Figure 9. Retail Gasoline Price Cases*

(Base Case and 95 Percent Confidence Range)

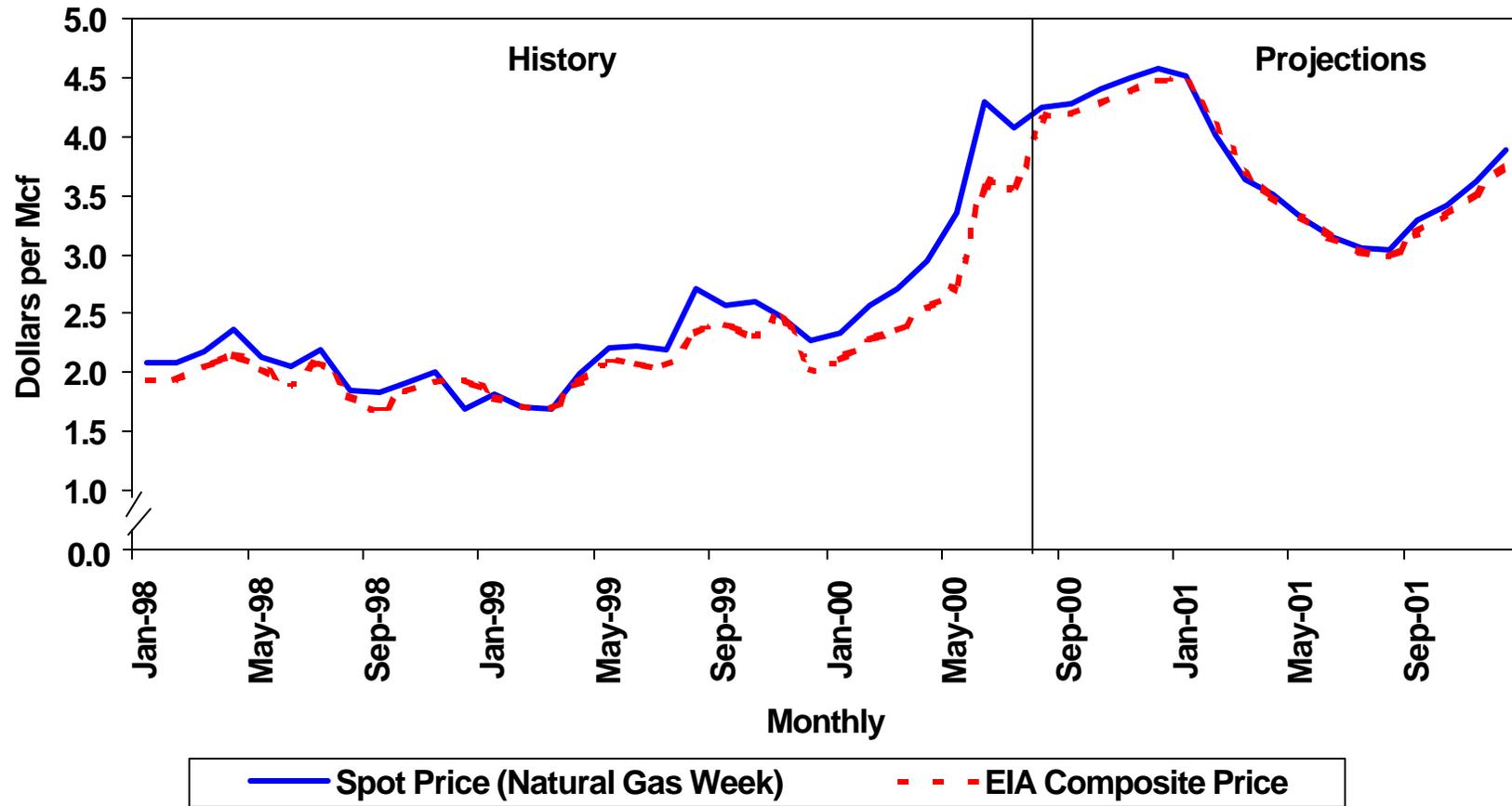


* Regular gasoline, self-serve cash

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



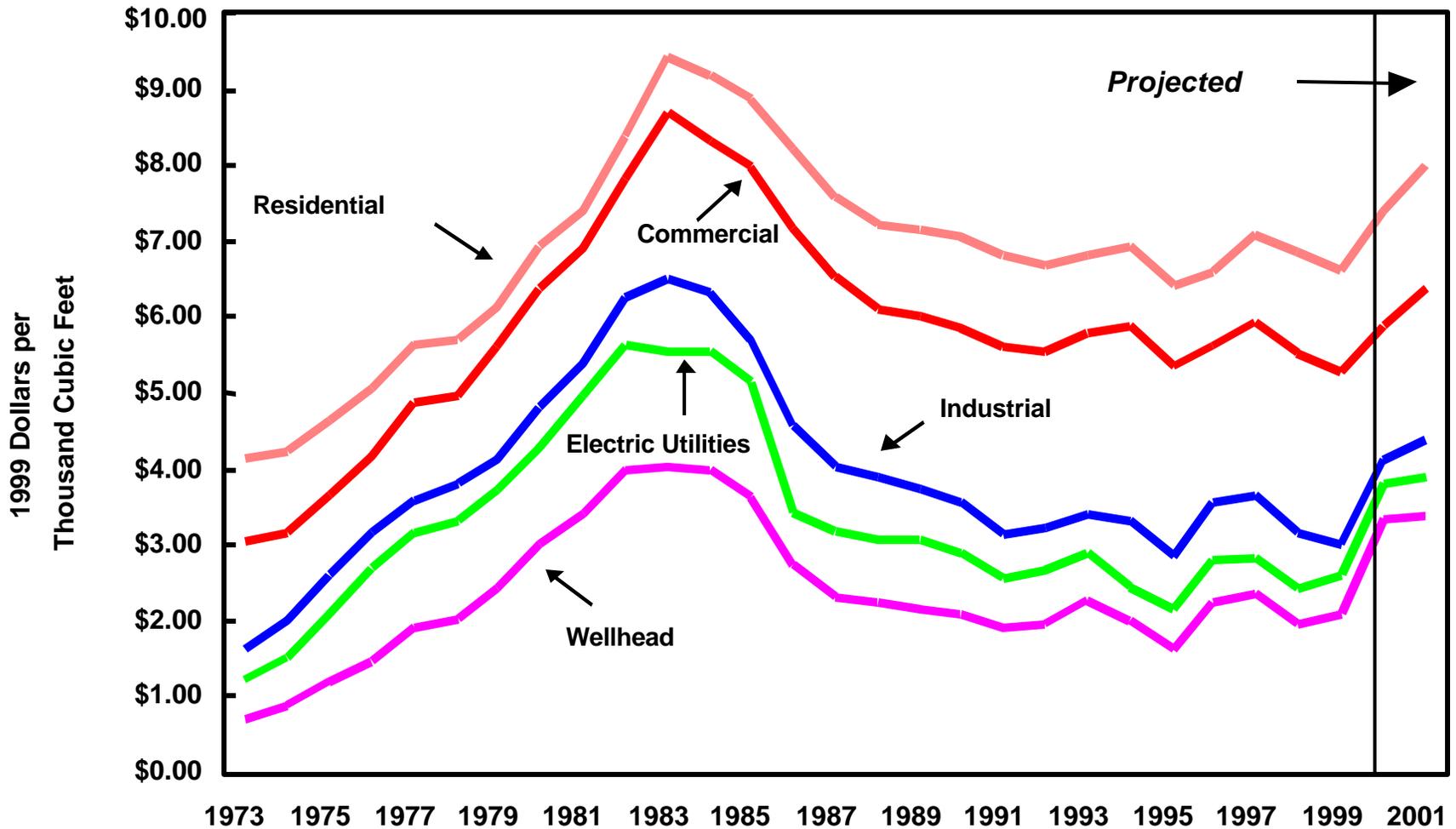
Figure 10. Natural Gas Wellhead Prices: Composite and Spot



Sources: History: EIA and Natural Gas Week;
 Projections: Short-Term Energy Outlook, September 2000.



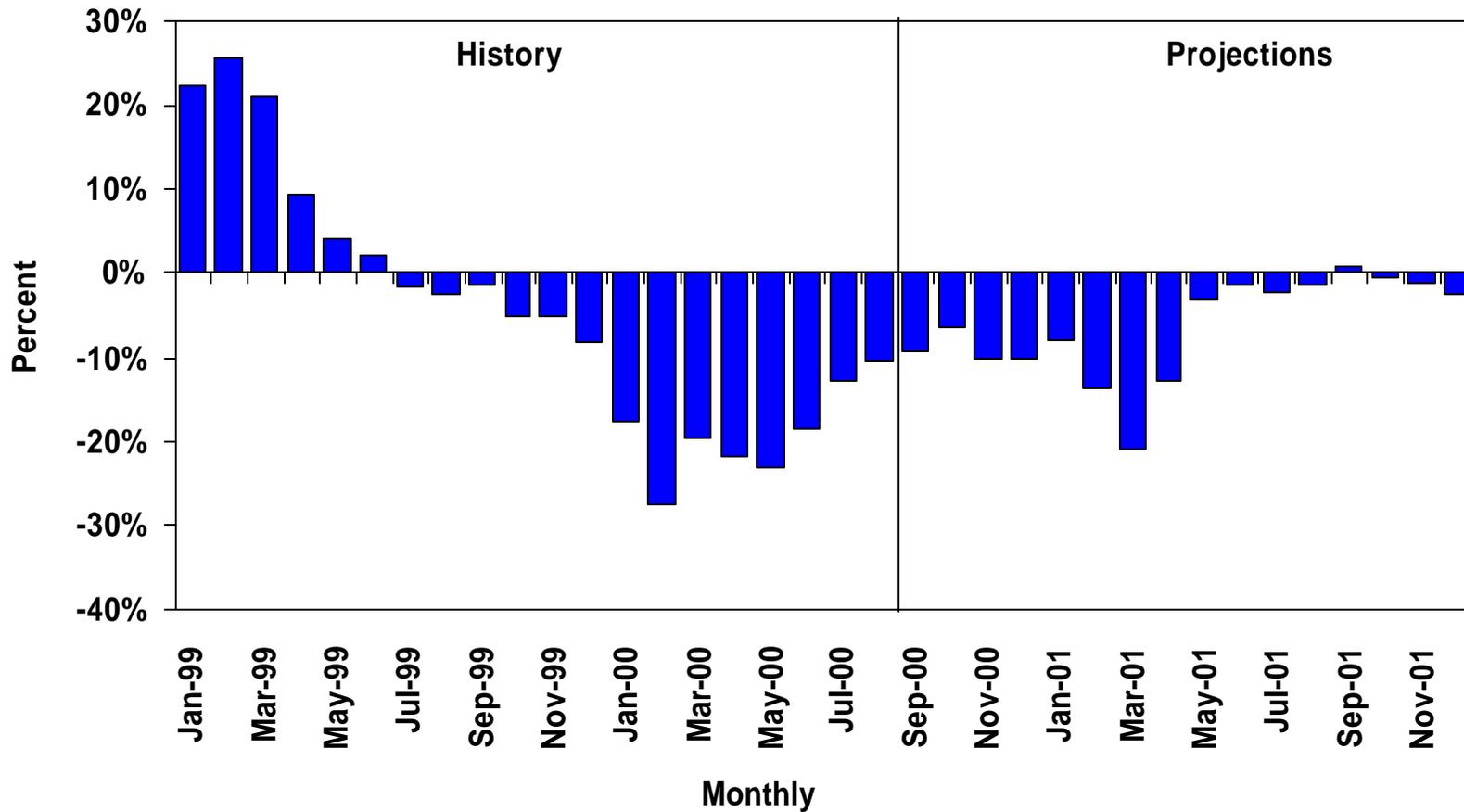
Figure 11. Annual Average Real Natural Gas Prices by Sector



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



Figure 12. Working Gas in Underground Storage (Percent Change from Year Ago)



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



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. These recent higher prices have caused exploration and drilling to rebound, but, at this point, we believe that additional supplies are not likely to expand production in any significant way before the heating season begins.

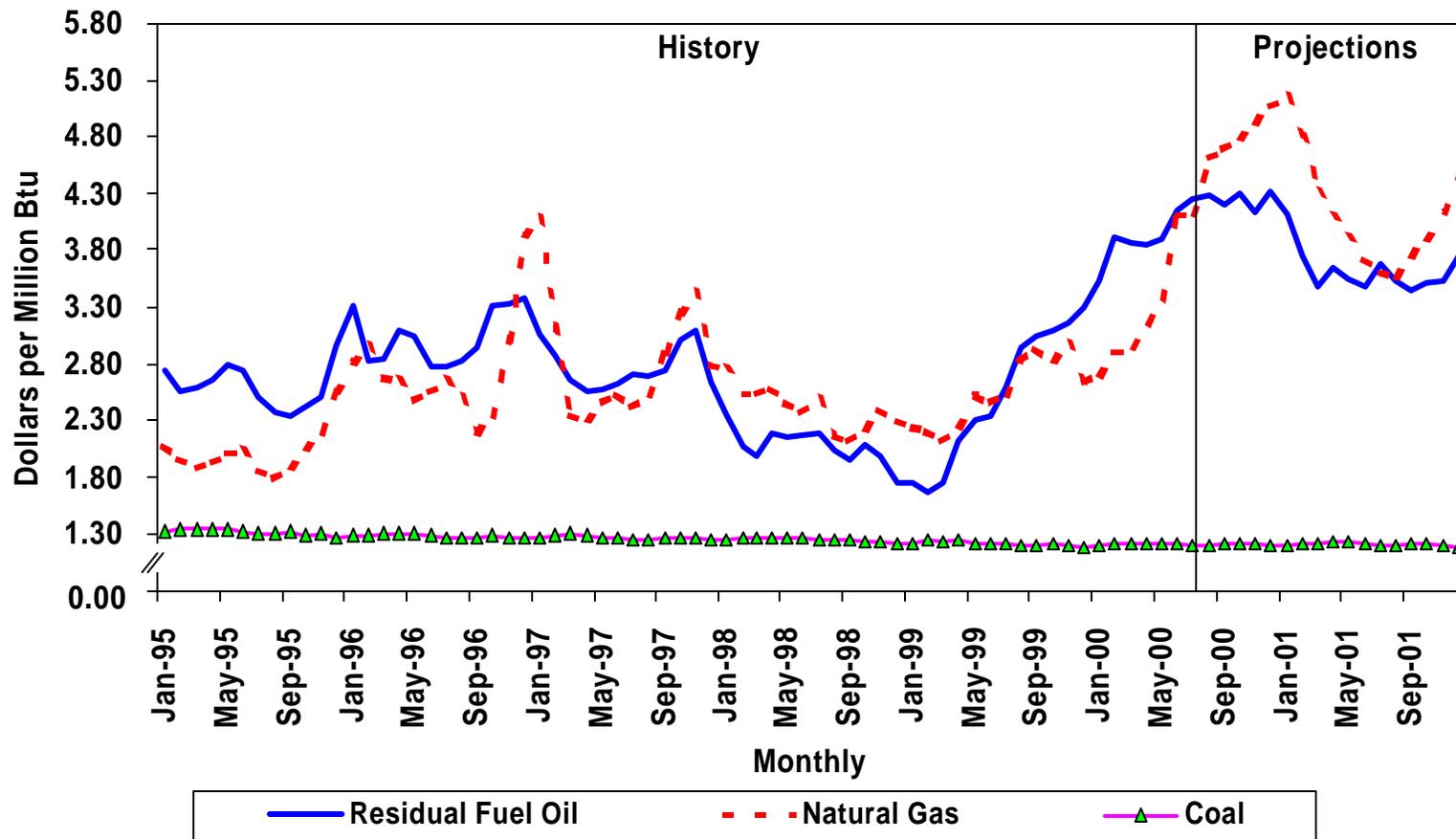
We are projecting that natural gas prices at the wellhead will increase by about 87 percent this winter (October-March) compared to last winter. Of course, higher end-use prices will result from higher projected wellhead prices. If our base case projections hold, residential prices for natural gas would be about 27 percent higher than last year during that period. For the entire year 2000, the average wellhead price for natural gas is projected to average \$3.40 per thousand cubic feet ([Table 4](#)). In nominal terms, this projected price would be the highest annual wellhead price on record; in real (inflation-adjusted) terms, this projected price represents the highest annual average price since 1985 ([Figure 11](#)).

Electric Utility Fuels. Despite the continued strength in oil prices in general, the rapid rise in gas prices this spring and summer has probably pulled delivered gas prices above heavy fuel oil prices, on a cost per Btu basis ([Figure 13](#)). As this situation is likely to persist, we anticipate some recovery in the amount of oil used for power generation over the very low levels seen since late 1999.

Domestic Oil Demand

Minimal growth (about 0.2 percent) over the 1999 level continues to emerge for U.S. oil demand in 2000 ([Figure 14](#)). Price-sensitive sectors have demonstrated responsiveness to high oil prices through the first half of the year. The industrial and power generation sectors, directly or indirectly, substituted away from oil, with sharply higher gas consumption the result. Based on the data available so far for 2000, motor gasoline demand may not post any growth this year. If that happens, 2000 will be the first year gasoline demand did not rise since the recession-burdened year of 1991. Available preliminary Federal Highway Administration data indicate year-to-year declines in highway travel activity in recent months, underscoring the possible cumulative impact of the price trend that began in early 1999. Solid economic growth has maintained strength in the less price-sensitive transportation sectors (particularly commercial aviation and freight trucking), resulting in expected growth in distillate and jet fuel demand in 2000 of a combined 130,000 barrels per day (about 2.5 percent) over 1999 levels. Relative strength for direct heating fuel demand (as well as electric power-driven increases in fuel requirements) in the fourth quarter, assuming normal weather, should provide a significant boost to overall petroleum demand in 2000.

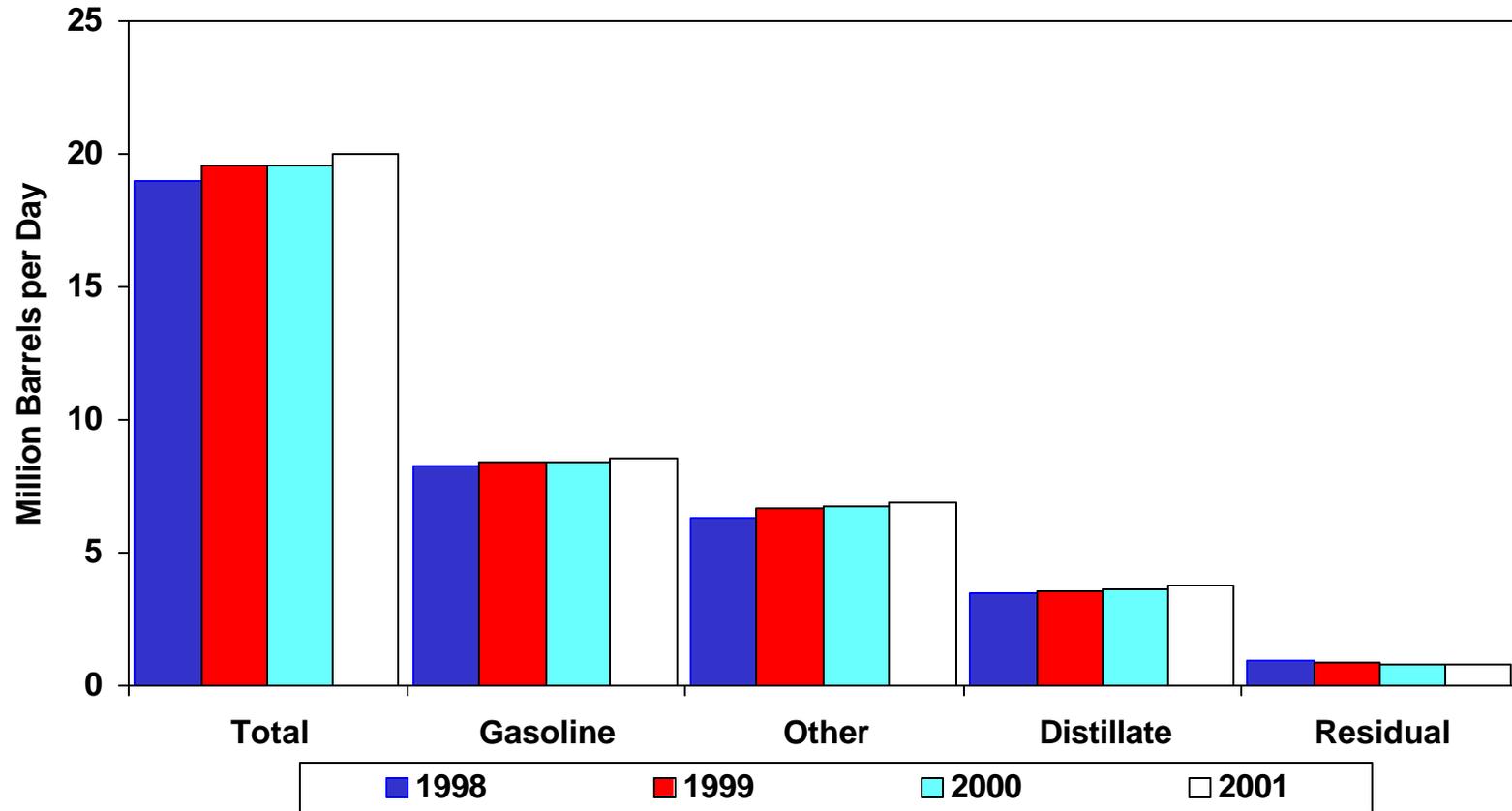
Figure 13. Fossil Fuel Prices to Electric Utilities



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



Figure 14. Annual Petroleum Demand by Product



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



Ultimately, however, this would only serve to keep total demand growth for the year out of negative territory.

We believe that continued (if less torrid) growth in the economy next year, along with somewhat lower prices, will generate a modest increase in gasoline demand (about 1.7 percent) to go along with travel demand- and weather-related increases in other fuels. This should be sufficient to result in petroleum demand growth of about 430,000 barrels per day in 2001. That amount of growth next year would be about equal to the annual average annual increase seen between 1995 and 1999.

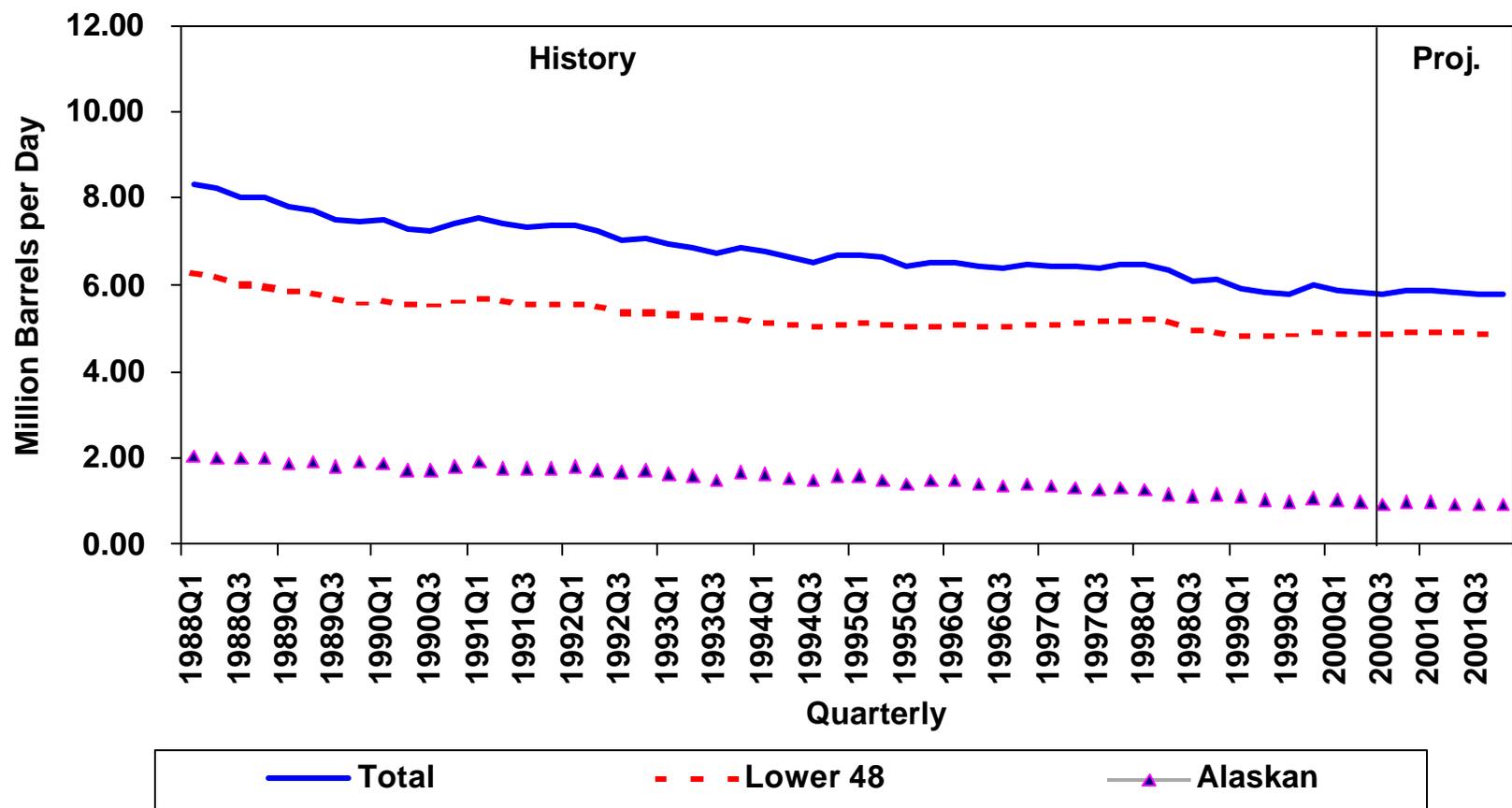
Domestic Oil Supply

Average domestic oil production is expected to decrease by 35,000 barrels per day, or 0.6 percent, in 2000 to a level of 5.85 million barrels of oil per day. For 2001, a 0.3 percent decrease is expected and results in an average production rate of 5.83 million barrels of oil per day for the year ([Figure 15](#)).

Lower 48 States oil production is expected to increase by 46,000 barrels per day, to a rate of 4.88 million barrels per day in 2000 followed by an increase of 6,000 barrels per day in 2001. Shell started production in 1999 in their Ursa field, which will peak in production this year. Exxon's Diana and Hoover fields will produce together and have started production. Additional production has started on Texaco's Petroneus and Shell's Europa fields. Oil production from the Mars, Auger, Troika Ursa and Diana Hoover Federal Offshore fields is expected to account for about 9.2 percent of the Lower-48 oil production by the 4th quarter of 2001.

Alaska is expected to account for 16.19 percent of total U.S. oil production in 2001. Its oil production is expected to decrease by 7.8 percent in 2000 and again by 2.6 percent in 2001. A substantial portion of the oil production from Alaska comes from the giant Prudhoe Bay Field. Other than routine maintenance, no major investments are planned for this field during the forecast period. Therefore, the field is expected to follow a steeper decline during this period. Oil production from recent discoveries such as Sambuca and Midnight Sun are expected to partially offset the decline in oil production from the Prudhoe Bay and other fields in the North Slope in 2000. Production from the Kuparuk River field plus like production from West Sak, Tabasco and Tarn fields is expected to stay at an average of 237,000 barrels per day in 2000-2001 forecast period. The Alpine field is expected to come on in the last quarter of 2000 at an initial rate of 40,000 barrels per day, peaking at 80,000 barrels per day in mid-2001. Alaska production is anticipated to remain below 1.0 million barrels per day starting in May 2000.

Figure 15. U.S. Crude Oil Production



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



Natural Gas Demand and Supply

The forecast for overall natural gas demand in 2000 remains approximately at the level previously forecasted in our August Outlook. This is a 4.2 percent annual growth rate. In 2001, the forecast has been revised downward somewhat to a 2.5 percent growth rate ([Figure 16](#)), principally due to higher expected gas prices. The industrial sector is the leading sector for demand increases in 2000 at 9.3 percent, while electric utility demand is expected to decline by 4.0 percent. This dichotomy is due in part to sales of electric generating plants by electric utilities to unregulated generating companies, fuel consumption by which is recorded by EIA in the industrial sector.

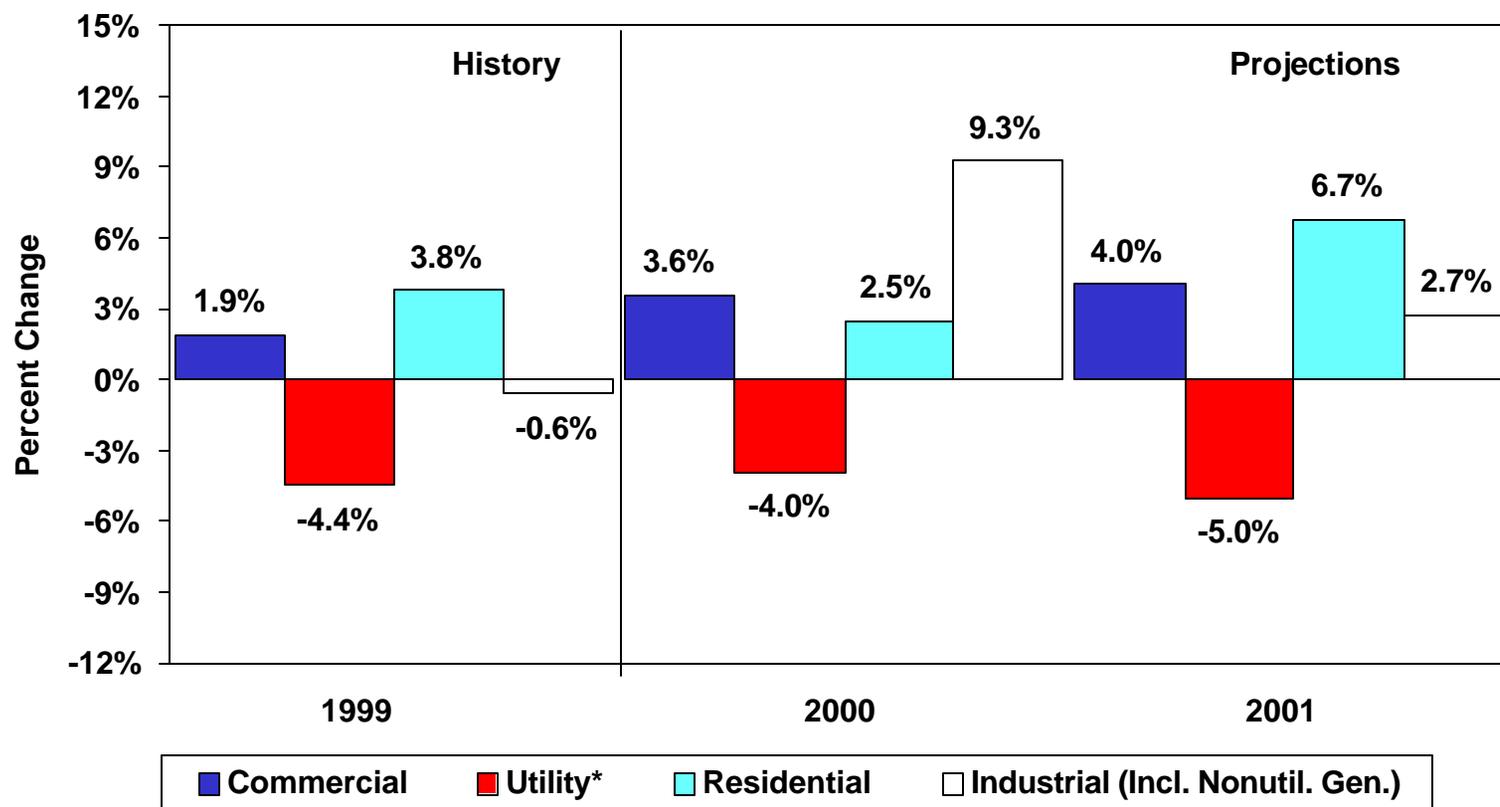
For the power generation sector as a whole, gas demand is expected to be 6.5 percent above its 1999 level in 2000 and 1.5 percent above its 2000 level in 2001. The reduced growth rate next year is largely due to the reversal in relative prices of fuel oil and natural gas, which began in August, with fuel oil gaining the price advantage as gas prices continued to rise.

This winter, (October 2000 through March 2001) natural gas demand is expected to be up by 5.7 percent over last winter's demand under normal weather assumptions. Normal weather implies a 12 percent rise in heating degree-days compared with last winter, which was much warmer than normal.

Several factors have come together to push spot gas prices up sharply and they are expected to derail the general downward trend in real gas prices (evident since the mid-1980's) over the next year or so: U.S. gas production has slipped; expected demand is high under normal weather assumptions; gas storage levels are below normal, and alternative fuel (oil) markets are tight. Concerns focus particularly on gas storage levels, which could be about 8 percent below the 5-year average of about 3,000 billion cubic feet (bcf) if net injections continue at 10 percent below historically average rates through the remainder of the refill season ([Figure 12](#)). The high price of natural gas reflects the intense competition between current and future uses of gas supplies and has been a disincentive to increasing storage injections.

The American Gas Association (AGA) reported that during the week ending August 25 the total amount of working gas in storage was 2,144 bcf, or 65 percent full. This implies that stocks are now about 377 bcf (18 percent) lower than at the same time last year, the equivalent of about 5 days of total U.S. gas consumption during the peak heating month (January). Working gas in all Canadian storage facilities were 382 bcf as of August 25 compared with 428.6 bcf a year ago.

Figure 16. 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, September 2000.



For now, we are continuing to maintain a conservative view of possible increases in domestic gas production for 2000 and 2001, with assumed increases of 0.5 percent and 1.0 percent, respectively, for this year and next. The effects of increased drilling for gas are not expected to appear in the form of significantly increased production until after the next heating season. On the other hand, the U.S. natural gas rig count on August 25 was at a recent high of 794 rigs. Exploration and production budgets for many natural gas producers are expected to increase sharply in 2000 and 2001, spurred by higher prices and greatly improved current and expected revenues from producing assets. Also on the positive side, data from the Texas Railroad Commission suggest that, through May, year 2000 gas production increased, if only slightly (0.4 percent). This signifies a turnaround (however modest) in a key producing region. Very high gas drilling rates, including a record-setting pace in deep offshore Gulf of Mexico, confirm that increasingly positive results for domestic gas production are under way.

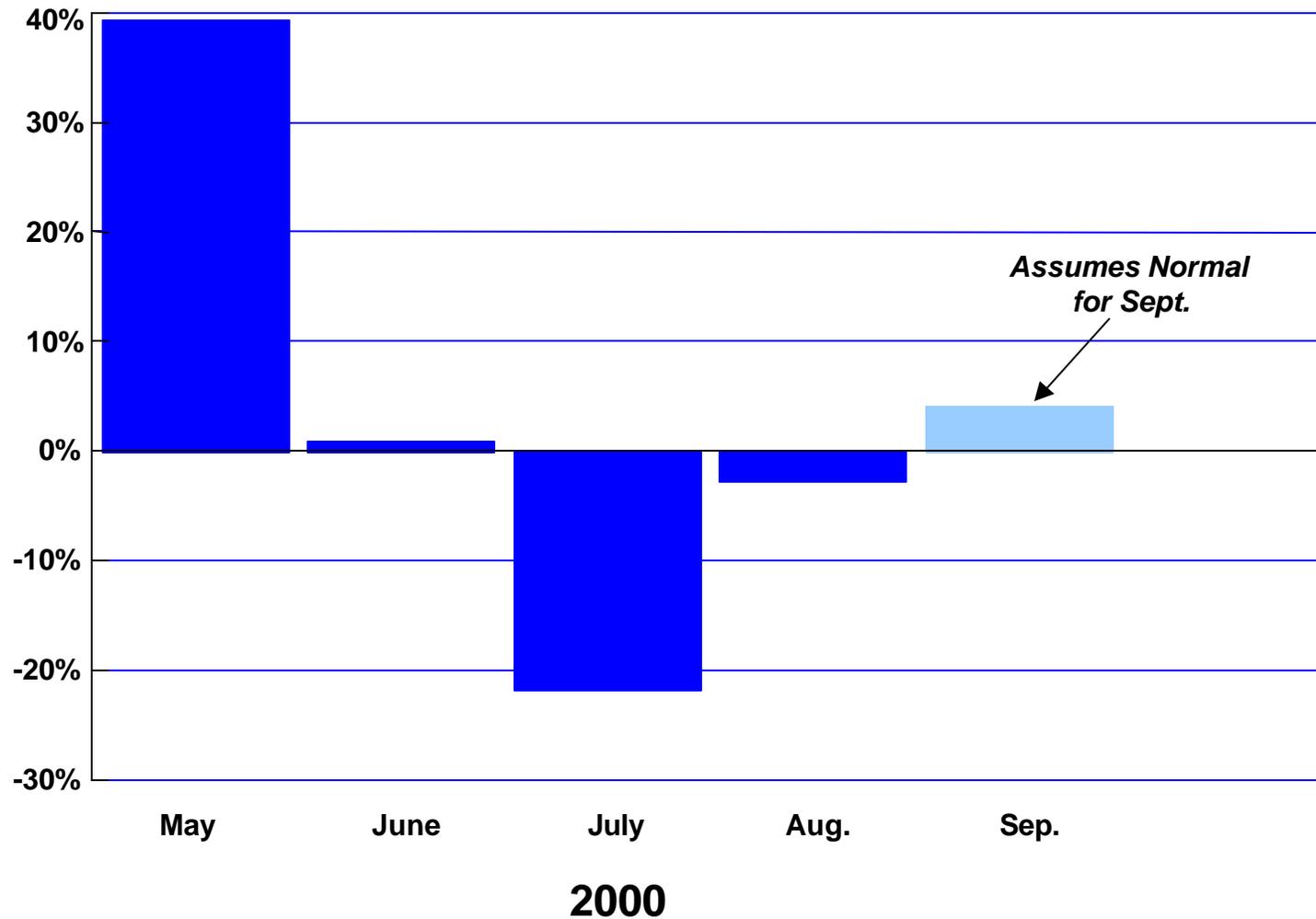
Net imports of natural gas are projected to rise by about 12 percent in 2001. A primary factor precipitating this increase is the opening of the Alliance pipeline from northeast British Columbia to near Chicago, with an initial capacity of 1.35 billion cubic feet per day, to expand to 1.83 billion cubic feet per day in the future. Other factors are, of course, increased U.S. demand together with increased Canadian supply response to higher wellhead prices.

Electricity Demand and Supply

Total electricity demand in 2000 has been revised downward slightly compared with the August Outlook due to the generally cooler than normal summer temperatures overall, despite periods of high temperatures in the South and West. Annual electricity demand growth is now projected to be 1.9 percent in 2000. Demand is expected to be 2.3 percent in 2001.

This summer's cooling degree-days (CDD) are expected to be 4.5 percent below last summer's CDD ([Figure 17](#)). In August, overall CDD was at about normal. This winter, total electricity demand is expected to be up by 2.7 percent under normal weather assumptions, driven by increased demand in the residential and commercial sectors, up by 4.6 percent and 3.0 percent, respectively.

Figure 17. U.S. Population-Weighted Cooling Degree-Days (Percent Change from Year Ago)



Source: Degree-days: National Oceanographic and Atmospheric Administration.

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	8876	<i>9346</i>	<i>9744</i>	4.2	5.3	4.3
Imported Crude Oil Price ^a (nominal dollars per barrel)	12.08	17.21	<i>27.69</i>	<i>24.53</i>	42.5	60.9	-11.4
Petroleum Supply (million barrels per day)							
Crude Oil Production ^b	6.25	5.88	<i>5.85</i>	<i>5.83</i>	-5.9	-0.5	-0.3
Total Petroleum Net Imports (including SPR)	9.76	9.91	<i>10.17</i>	<i>10.74</i>	1.5	2.6	5.6
Energy Demand							
World Petroleum (million barrels per day)	73.6	74.8	<i>75.8</i>	<i>77.8</i>	1.6	1.3	2.6
Petroleum (million barrels per day)	18.92	19.52	<i>19.56</i>	<i>19.99</i>	3.2	0.2	2.2
Natural Gas (trillion cubic feet)	21.26	21.36	<i>22.27</i>	<i>22.83</i>	0.5	4.3	2.5
Coal ^c (million short tons)	1039	1039	<i>1066</i>	<i>1096</i>	0.0	2.6	2.8
Electricity (billion kilowatthours)							
Utility Sales ^d	3240	3296	<i>3350</i>	<i>3426</i>	1.7	1.6	2.3
Nonutility/Sales ^e	156	173	<i>186</i>	<i>191</i>	10.9	7.5	2.7
Total	3396	3469	<i>3536</i>	<i>3617</i>	2.1	1.9	2.3
Total Energy Demand ^f (quadrillion Btu)	94.4	96.2	<i>97.7</i>	<i>99.6</i>	1.9	1.5	2.0
Total Energy Demand per Dollar of GDP (thousand Btu per 1996 Dollar)	11.09	10.84	<i>10.45</i>	<i>10.22</i>	-2.3	-3.6	-2.2
Renewable Energy as Percent of Total ^g ...	7.0	7.0	<i>6.8</i>	<i>6.7</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 CONTROL0600.

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)	8730	8783	8906	9084	9192	<i>9309</i>	<i>9398</i>	<i>9486</i>	<i>9608</i>	<i>9700</i>	<i>9788</i>	<i>9879</i>	8876	<i>9346</i>	<i>9744</i>
Percentage Change from Prior Year	3.9	3.8	4.3	5.0	5.3	<i>6.0</i>	<i>5.5</i>	<i>4.4</i>	<i>4.5</i>	<i>4.2</i>	<i>4.1</i>	<i>4.1</i>	4.2	<i>5.3</i>	<i>4.3</i>
Annualized Percent Change from Prior Quarter.....	3.5	2.4	5.6	8.0	4.7	<i>5.1</i>	<i>3.8</i>	<i>3.7</i>	<i>5.1</i>	<i>3.9</i>	<i>3.6</i>	<i>3.7</i>			
GDP Implicit Price Deflator (Index, 1996=1.000)	1.043	1.046	1.049	1.053	1.062	<i>1.068</i>	<i>1.073</i>	<i>1.079</i>	<i>1.085</i>	<i>1.088</i>	<i>1.092</i>	<i>1.096</i>	1.048	<i>1.071</i>	<i>1.090</i>
Percentage Change from Prior Year	1.5	1.5	1.5	1.5	1.8	<i>2.1</i>	<i>2.3</i>	<i>2.5</i>	<i>2.2</i>	<i>1.9</i>	<i>1.7</i>	<i>1.6</i>	1.5	<i>2.2</i>	<i>1.8</i>
Real Disposable Personal Income (billion chained 1996 Dollars - SAAR)	6264	6307	6342	6412	6443	<i>6497</i>	<i>6570</i>	<i>6643</i>	<i>6747</i>	<i>6838</i>	<i>6915</i>	<i>6988</i>	6331	<i>6538</i>	<i>6872</i>
Percentage Change from Prior Year	3.7	3.2	2.9	3.1	2.9	<i>3.0</i>	<i>3.6</i>	<i>3.6</i>	<i>4.7</i>	<i>5.2</i>	<i>5.3</i>	<i>5.2</i>	3.2	<i>3.3</i>	<i>5.1</i>
Manufacturing Production (Index, 1996=1.000)	1.148	1.162	1.175	1.195	1.216	<i>1.237</i>	<i>1.254</i>	<i>1.276</i>	<i>1.291</i>	<i>1.306</i>	<i>1.318</i>	<i>1.324</i>	1.170	<i>1.246</i>	<i>1.310</i>
Percentage Change from Prior Year	3.5	4.1	4.4	4.8	6.0	<i>6.5</i>	<i>6.7</i>	<i>6.8</i>	<i>6.2</i>	<i>5.6</i>	<i>5.1</i>	<i>3.8</i>	4.2	<i>6.5</i>	<i>5.2</i>
OECD Economic Growth (percent) ^b													2.6	<i>3.5</i>	<i>3.1</i>
Weather ^c															
Heating Degree-Days															
U.S.	2153	489	79	1448	2023	<i>500</i>	<i>79</i>	<i>1623</i>	<i>2236</i>	<i>519</i>	<i>86</i>	<i>1622</i>	4169	<i>4225</i>	<i>4463</i>
New England	3040	784	86	2042	3007	<i>964</i>	<i>169</i>	<i>2239</i>	<i>3177</i>	<i>885</i>	<i>167</i>	<i>2238</i>	5952	<i>6379</i>	<i>6467</i>
Middle Atlantic	2816	628	68	1839	2713	<i>710</i>	<i>93</i>	<i>2004</i>	<i>2895</i>	<i>701</i>	<i>105</i>	<i>2003</i>	5351	<i>5520</i>	<i>5703</i>
U.S. Gas-Weighted.....	2275	517	85	1522	2115	<i>522</i>	<i>83</i>	<i>1714</i>	<i>2354</i>	<i>555</i>	<i>90</i>	<i>1714</i>	4399	<i>4435</i>	<i>4714</i>
Cooling Degree-Days (U.S.)	35	353	831	78	45	<i>383</i>	<i>748</i>	<i>75</i>	<i>32</i>	<i>346</i>	<i>781</i>	<i>76</i>	1297	<i>1252</i>	<i>1235</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 CONTROL0800.

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)	1574	1607	1638	1667	1731	<i>1794</i>	<i>1850</i>	<i>1885</i>	<i>1918</i>	<i>1949</i>	<i>1971</i>	<i>1986</i>	1621	<i>1815</i>	<i>1956</i>
Real Exchange Rate															
(index)	1.120	1.160	1.168	1.167	1.221	<i>1.279</i>	<i>1.282</i>	<i>1.295</i>	<i>1.290</i>	<i>1.274</i>	<i>1.250</i>	<i>1.219</i>	1.154	<i>1.270</i>	<i>1.258</i>
Business Inventory Change															
(billion chained 1996 dollars-SAAR)	-1.1	-9.5	3.5	7.6	10.3	<i>7.4</i>	<i>9.2</i>	<i>9.4</i>	<i>8.6</i>	<i>8.5</i>	<i>8.4</i>	<i>6.4</i>	0.1	<i>9.1</i>	<i>8.0</i>
Producer Price Index															
(index, 1982=1.000)	1.230	1.245	1.268	1.276	1.302	<i>1.319</i>	<i>1.346</i>	<i>1.346</i>	<i>1.346</i>	<i>1.338</i>	<i>1.332</i>	<i>1.334</i>	1.255	<i>1.328</i>	<i>1.338</i>
Consumer Price Index															
(index, 1982-1984=1.000).....	1.648	1.662	1.672	1.684	1.701	<i>1.716</i>	<i>1.727</i>	<i>1.733</i>	<i>1.738</i>	<i>1.741</i>	<i>1.746</i>	<i>1.753</i>	1.667	<i>1.719</i>	<i>1.745</i>
Petroleum Product Price Index															
(index, 1982=1.000)	0.446	0.591	0.682	0.716	0.833	<i>0.906</i>	<i>0.900</i>	<i>0.892</i>	<i>0.875</i>	<i>0.806</i>	<i>0.768</i>	<i>0.761</i>	0.609	<i>0.883</i>	<i>0.803</i>
Non-Farm Employment															
(millions)	127.8	128.4	129.1	129.8	130.6	<i>131.5</i>	<i>131.7</i>	<i>132.7</i>	<i>133.2</i>	<i>133.6</i>	<i>134.0</i>	<i>134.3</i>	128.8	<i>131.6</i>	<i>133.8</i>
Commercial Employment															
(millions)	88.6	89.2	89.8	90.5	91.2	<i>91.7</i>	<i>92.1</i>	<i>93.1</i>	<i>93.6</i>	<i>94.1</i>	<i>94.5</i>	<i>94.9</i>	89.5	<i>92.0</i>	<i>94.3</i>
Total Industrial Production															
(index, 1996=1.000)	1.127	1.139	1.153	1.168	1.186	<i>1.207</i>	<i>1.224</i>	<i>1.244</i>	<i>1.258</i>	<i>1.271</i>	<i>1.281</i>	<i>1.286</i>	1.147	<i>1.215</i>	<i>1.274</i>
Housing Stock															
(millions)	115.4	115.8	116.0	116.1	116.3	<i>116.8</i>	<i>117.1</i>	<i>117.5</i>	<i>117.8</i>	<i>118.1</i>	<i>118.4</i>	<i>118.7</i>	115.8	<i>116.9</i>	<i>118.3</i>
Miscellaneous															
Gas Weighted Industrial Production															
(index, 1996=1.000)	1.062	1.060	1.068	1.091	1.096	<i>1.096</i>	<i>1.101</i>	<i>1.111</i>	<i>1.122</i>	<i>1.133</i>	<i>1.142</i>	<i>1.153</i>	1.070	<i>1.101</i>	<i>1.137</i>
Vehicle Miles Traveled ^b															
(million miles/day)	6731	7556	7706	7358	6820	<i>7545</i>	<i>7754</i>	<i>7371</i>	<i>6934</i>	<i>7707</i>	<i>7921</i>	<i>7502</i>	7341	<i>7374</i>	<i>7519</i>
Vehicle Fuel Efficiency															
(index, 1999=1.000)	0.991	0.992	1.007	1.006	0.996	<i>1.006</i>	<i>1.010</i>	<i>1.009</i>	<i>1.002</i>	<i>1.008</i>	<i>1.015</i>	<i>1.010</i>	0.999	<i>1.005</i>	<i>1.009</i>
Real Vehicle Fuel Cost															
(cents per mile).....	2.98	3.35	3.51	3.76	4.16	<i>4.30</i>	<i>4.17</i>	<i>4.12</i>	<i>3.97</i>	<i>3.84</i>	<i>3.74</i>	<i>3.77</i>	3.40	<i>4.19</i>	<i>3.83</i>
Air Travel Capacity															
(mill. available ton-miles/day).....	431.0	453.8	469.4	462.1	452.9	<i>479.8</i>	<i>495.5</i>	<i>482.7</i>	<i>480.0</i>	<i>503.0</i>	<i>521.4</i>	<i>512.0</i>	454.2	<i>477.8</i>	<i>504.2</i>
Aircraft Utilization															
(mill. revenue ton-miles/day).....	242.2	264.2	277.5	266.0	254.9	<i>281.5</i>	<i>293.6</i>	<i>278.9</i>	<i>275.9</i>	<i>296.3</i>	<i>311.4</i>	<i>297.3</i>	262.6	<i>277.3</i>	<i>295.3</i>
Airline Ticket Price Index															
(index, 1982-1984=1.000).....	2.130	2.186	2.180	2.254	2.309	<i>2.419</i>	<i>2.450</i>	<i>2.454</i>	<i>2.475</i>	<i>2.471</i>	<i>2.459</i>	<i>2.471</i>	2.188	<i>2.408</i>	<i>2.469</i>
Raw Steel Production															
(millions tons)	25.11	25.97	26.26	28.54	29.02	<i>29.32</i>	<i>29.26</i>	<i>29.48</i>	<i>29.52</i>	<i>29.64</i>	<i>29.04</i>	<i>29.32</i>	105.88	<i>117.08</i>	<i>117.53</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.

^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 CONTROL0800.

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)	19.2	19.2	19.8	19.8	19.1	<i>19.3</i>	<i>19.9</i>	<i>20.0</i>	<i>19.7</i>	<i>19.8</i>	<i>20.2</i>	<i>20.4</i>	19.5	<i>19.6</i>	<i>20.0</i>
U.S. Territories	0.3	0.3	0.3	0.4	0.4	<i>0.4</i>	0.3	<i>0.4</i>	<i>0.4</i>						
Canada.....	1.9	1.9	2.0	2.0	1.9	<i>1.9</i>	<i>2.0</i>	<i>2.0</i>	<i>1.9</i>	<i>1.9</i>	<i>2.1</i>	<i>2.0</i>	1.9	<i>1.9</i>	<i>2.0</i>
Europe.....	15.2	13.8	14.1	15.0	14.5	<i>13.7</i>	<i>14.4</i>	<i>15.1</i>	<i>14.9</i>	<i>13.9</i>	<i>14.5</i>	<i>15.1</i>	14.5	<i>14.4</i>	<i>14.6</i>
Japan	6.2	5.0	5.2	5.9	6.0	<i>5.1</i>	<i>5.3</i>	<i>5.7</i>	<i>6.2</i>	<i>5.0</i>	<i>5.3</i>	<i>5.7</i>	5.6	<i>5.5</i>	<i>5.5</i>
Australia and New Zealand.....	1.0	1.0	1.0	1.0	1.0	<i>1.0</i>	<i>1.0</i>	<i>1.1</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.1</i>	1.0	<i>1.0</i>	<i>1.0</i>
Total OECD.....	43.8	41.2	42.4	44.0	42.8	<i>41.2</i>	<i>43.0</i>	<i>44.3</i>	<i>44.1</i>	<i>42.1</i>	<i>43.4</i>	<i>44.7</i>	42.8	<i>42.8</i>	<i>43.6</i>
Non-OECD															
Former Soviet Union.....	3.8	3.5	3.6	3.7	3.8	<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	1.6	<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	4.6	<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	9.2	<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>9.9</i>	8.8	<i>9.2</i>	<i>9.7</i>
Other Non-OECD.....	13.4	13.6	13.7	13.7	13.7	<i>14.0</i>	<i>14.1</i>	<i>14.0</i>	<i>14.2</i>	<i>14.4</i>	<i>14.5</i>	<i>14.5</i>	13.6	<i>14.0</i>	<i>14.4</i>
Total Non-OECD	31.9	31.8	31.7	32.3	32.9	<i>33.0</i>	<i>32.8</i>	<i>33.2</i>	<i>34.2</i>	<i>34.3</i>	<i>34.0</i>	<i>34.5</i>	31.9	<i>33.0</i>	<i>34.2</i>
Total World Demand.....	75.7	73.1	74.1	76.3	75.7	<i>74.3</i>	<i>75.8</i>	<i>77.4</i>	<i>78.4</i>	<i>76.4</i>	<i>77.4</i>	<i>79.2</i>	74.8	<i>75.8</i>	<i>77.8</i>
Supply ^b															
OECD															
U.S. (50 States)	8.8	8.9	9.0	9.3	9.1	<i>9.1</i>	<i>9.0</i>	<i>9.2</i>	<i>9.1</i>	<i>9.1</i>	<i>9.0</i>	<i>9.1</i>	9.0	<i>9.1</i>	<i>9.1</i>
Canada.....	2.6	2.6	2.6	2.7	2.7	<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	6.6	<i>6.2</i>	<i>6.5</i>	<i>6.5</i>	<i>6.5</i>	<i>6.5</i>	<i>6.5</i>	<i>6.6</i>	6.3	<i>6.5</i>	<i>6.5</i>
Other OECD.....	1.5	1.5	1.5	1.6	1.7	<i>1.7</i>	<i>1.7</i>	<i>1.7</i>	<i>1.7</i>	<i>1.8</i>	<i>1.8</i>	<i>1.8</i>	1.5	<i>1.7</i>	<i>1.8</i>
Total OECD.....	19.2	19.0	19.3	20.2	20.2	<i>19.7</i>	<i>19.9</i>	<i>20.2</i>	<i>20.1</i>	<i>20.1</i>	<i>20.1</i>	<i>20.3</i>	19.4	<i>20.0</i>	<i>20.1</i>
Non-OECD															
OPEC.....	30.4	28.9	29.2	28.7	29.3	<i>30.7</i>	<i>31.4</i>	<i>31.6</i>	<i>31.7</i>	<i>31.8</i>	<i>31.9</i>	<i>32.0</i>	29.3	<i>30.8</i>	<i>31.9</i>
Former Soviet Union.....	7.3	7.3	7.5	7.5	7.6	<i>7.7</i>	<i>7.7</i>	<i>7.7</i>	<i>7.8</i>	<i>7.8</i>	<i>7.9</i>	<i>8.0</i>	7.4	<i>7.7</i>	<i>7.9</i>
China.....	3.2	3.2	3.2	3.2	3.3	<i>3.3</i>	3.2	<i>3.3</i>	<i>3.3</i>						
Mexico.....	3.6	3.4	3.3	3.3	3.5	<i>3.5</i>	<i>3.6</i>	<i>3.6</i>	<i>3.7</i>	<i>3.7</i>	<i>3.7</i>	<i>3.7</i>	3.4	<i>3.5</i>	<i>3.7</i>
Other Non-OECD.....	11.3	11.2	11.2	11.2	11.2	<i>11.2</i>	<i>11.2</i>	<i>11.3</i>	<i>11.3</i>	<i>11.4</i>	<i>11.4</i>	<i>11.5</i>	11.2	<i>11.2</i>	<i>11.4</i>
Total Non-OECD	55.7	54.0	54.5	54.0	54.8	<i>56.4</i>	<i>57.2</i>	<i>57.5</i>	<i>57.7</i>	<i>57.9</i>	<i>58.2</i>	<i>58.5</i>	54.5	<i>56.5</i>	<i>58.1</i>
Total World Supply	74.9	72.9	73.8	74.2	75.0	<i>76.1</i>	<i>77.1</i>	<i>77.6</i>	<i>77.8</i>	<i>77.9</i>	<i>78.2</i>	<i>78.8</i>	73.9	<i>76.5</i>	<i>78.2</i>
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR).....	0.3	-0.2	0.3	1.3	0.2	<i>-0.6</i>	<i>-0.2</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>0.0</i>
Other.....	0.5	0.4	0.0	0.8	0.5	<i>-1.2</i>	<i>-1.1</i>	<i>-0.5</i>	<i>0.3</i>	<i>-0.9</i>	<i>-0.6</i>	<i>0.0</i>	0.4	<i>-0.6</i>	<i>-0.3</i>
Total Stock Withdrawals	0.8	0.1	0.3	2.1	0.7	<i>-1.8</i>	<i>-1.2</i>	<i>-0.2</i>	<i>0.5</i>	<i>-1.5</i>	<i>-0.8</i>	<i>0.4</i>	0.8	<i>-0.6</i>	<i>-0.4</i>
OECD Comm. Stocks, End (bill. bbls.).....	2.8	2.8	2.8	2.6	2.6	<i>2.6</i>	<i>2.7</i>	<i>2.6</i>	<i>2.6</i>	<i>2.7</i>	<i>2.7</i>	<i>2.7</i>	2.6	<i>2.6</i>	<i>2.7</i>
Non-OPEC Supply	44.6	44.0	44.5	45.4	45.7	<i>45.4</i>	<i>45.6</i>	<i>46.0</i>	<i>46.1</i>	<i>46.2</i>	<i>46.3</i>	<i>46.8</i>	44.6	<i>45.7</i>	<i>46.3</i>
Net Exports from Former Soviet Union...	3.5	3.8	3.9	3.8	3.9	<i>4.1</i>	<i>4.1</i>	<i>4.1</i>	<i>3.9</i>	<i>4.1</i>	<i>4.2</i>	<i>4.3</i>	3.8	<i>4.0</i>	<i>4.2</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	19.63	23.01	26.84	26.56	28.74	28.51	26.25	24.34	24.02	23.61	17.21	27.69	24.53
Natural Gas Wellhead															
(dollars per thousand cubic feet).....	1.74	2.04	2.27	2.26	2.26	2.96	3.97	4.40	4.08	3.33	3.07	3.54	2.08	3.40	3.50
Petroleum Products															
Gasoline Retail ^b (dollars per gallon)															
All Grades.....	0.99	1.17	1.25	1.30	1.44	1.57	1.54	1.47	1.41	1.42	1.40	1.36	1.18	1.50	1.40
Regular Unleaded.....	0.95	1.13	1.21	1.26	1.40	1.53	1.50	1.43	1.36	1.39	1.37	1.32	1.14	1.46	1.36
No. 2 Diesel Oil, Retail															
(dollars per gallon).....	0.97	1.08	1.18	1.26	1.42	1.41	1.48	1.52	1.46	1.37	1.34	1.36	1.12	1.46	1.38
No. 2 Heating Oil, Wholesale															
(dollars per gallon).....	0.36	0.44	0.56	0.65	0.85	0.78	0.88	0.90	0.84	0.74	0.71	0.72	0.51	0.86	0.76
No. 2 Heating Oil, Retail															
(dollars per gallon).....	0.80	0.82	0.86	1.01	1.31	1.17	1.23	1.31	1.32	1.17	1.07	1.13	0.88	1.28	1.21
No. 6 Residual Fuel Oil, Retail ^c															
(dollars per barrel).....	11.28	14.03	17.94	21.06	23.62	24.44	25.60	26.34	24.63	21.93	21.43	22.30	15.92	25.04	22.62
Electric Utility Fuels															
Coal															
(dollars per million Btu).....	1.24	1.23	1.21	1.20	1.21	1.21	1.20	1.20	1.22	1.23	1.21	1.20	1.22	1.21	1.21
Heavy Fuel Oil ^d															
(dollars per million Btu).....	1.73	2.26	2.82	3.17	3.74	4.00	4.25	4.25	3.80	3.55	3.57	3.61	2.39	4.11	3.63
Natural Gas															
(dollars per million Btu).....	2.19	2.42	2.74	2.82	2.85	3.62	4.46	4.91	4.73	3.88	3.64	4.13	2.57	3.99	3.97
Other Residential															
Natural Gas															
(dollars per thousand cubic feet).....	6.07	6.86	8.64	6.85	6.48	7.73	9.71	8.59	8.29	8.57	9.56	7.92	6.63	7.57	8.32
Electricity															
(cents per kilowatthour).....	7.76	8.25	8.40	8.10	7.76	8.34	8.61	8.25	7.82	8.41	8.65	8.21	8.14	8.25	8.28

^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	5.94	5.84	5.79	5.96	5.86	<i>5.84</i>	<i>5.79</i>	<i>5.89</i>	<i>5.87</i>	<i>5.83</i>	<i>5.79</i>	<i>5.81</i>	5.88	<i>5.85</i>	<i>5.83</i>
Alaska.....	1.13	1.04	0.98	1.05	1.02	<i>0.96</i>	<i>0.91</i>	<i>0.98</i>	<i>0.96</i>	<i>0.94</i>	<i>0.93</i>	<i>0.94</i>	1.05	<i>0.97</i>	<i>0.94</i>
Lower 48.....	4.80	4.80	4.82	4.91	4.84	<i>4.87</i>	<i>4.89</i>	<i>4.91</i>	<i>4.91</i>	<i>4.89</i>	<i>4.86</i>	<i>4.87</i>	4.83	<i>4.88</i>	<i>4.88</i>
Net Imports (including SPR) ^b	8.43	8.90	8.85	8.27	8.12	<i>9.09</i>	<i>9.42</i>	<i>9.01</i>	<i>8.83</i>	<i>9.54</i>	<i>9.56</i>	<i>9.22</i>	8.61	<i>8.91</i>	<i>9.29</i>
Other SPR Supply.....	0.00	0.00	0.00	0.00	0.00	<i>0.17</i>	<i>0.07</i>	<i>0.07</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	0.00	<i>0.08</i>	<i>0.00</i>
SPR Stock Withdrawn or Added (-)	-0.01	-0.03	-0.01	0.09	-0.02	<i>0.01</i>	<i>-0.05</i>	<i>-0.07</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	0.01	<i>-0.03</i>	<i>0.00</i>
Other Stock Withdrawn or Added (-).....	-0.24	0.15	0.31	0.21	-0.14	<i>0.03</i>	<i>0.17</i>	<i>0.02</i>	<i>-0.20</i>	<i>-0.05</i>	<i>0.16</i>	<i>0.02</i>	0.11	<i>0.02</i>	<i>-0.02</i>
Product Supplied and Losses	0.00	0.00	0.00	0.00	0.00	<i>0.00</i>	0.00	<i>0.00</i>	<i>0.00</i>						
Unaccounted-for Crude Oil.....	0.30	0.15	0.27	0.05	0.14	<i>0.45</i>	<i>0.36</i>	<i>0.21</i>	<i>0.21</i>	<i>0.22</i>	<i>0.22</i>	<i>0.21</i>	0.19	<i>0.29</i>	<i>0.21</i>
Total Crude Oil Supply	14.42	15.01	15.22	14.57	14.16	<i>15.42</i>	<i>15.69</i>	<i>15.07</i>	<i>14.70</i>	<i>15.53</i>	<i>15.73</i>	<i>15.27</i>	14.80	<i>15.08</i>	<i>15.31</i>
Other Supply															
NGL Production	1.72	1.82	1.90	1.95	1.97	<i>1.94</i>	<i>1.92</i>	<i>1.96</i>	<i>1.98</i>	<i>1.97</i>	<i>1.96</i>	<i>2.01</i>	1.85	<i>1.95</i>	<i>1.98</i>
Other Hydrocarbon and Alcohol Inputs...	0.37	0.37	0.38	0.38	0.37	<i>0.40</i>	<i>0.37</i>	<i>0.40</i>	<i>0.38</i>	<i>0.37</i>	<i>0.36</i>	<i>0.39</i>	0.38	<i>0.38</i>	<i>0.37</i>
Crude Oil Product Supplied.....	0.00	0.00	0.00	0.00	0.00	<i>0.00</i>	0.00	<i>0.00</i>	<i>0.00</i>						
Processing Gain.....	0.82	0.86	0.90	0.97	0.94	<i>0.95</i>	<i>0.93</i>	<i>0.91</i>	<i>0.86</i>	<i>0.91</i>	<i>0.93</i>	<i>0.90</i>	0.89	<i>0.93</i>	<i>0.90</i>
Net Product Imports ^c	1.34	1.52	1.41	0.92	1.34	<i>1.18</i>	<i>1.26</i>	<i>1.26</i>	<i>1.34</i>	<i>1.49</i>	<i>1.56</i>	<i>1.41</i>	1.30	<i>1.26</i>	<i>1.45</i>
Product Stock Withdrawn or Added (-) ^c	0.54	-0.36	0.00	1.03	0.32	<i>-0.64</i>	<i>-0.28</i>	<i>0.42</i>	<i>0.40</i>	<i>-0.53</i>	<i>-0.37</i>	<i>0.40</i>	0.30	<i>-0.04</i>	<i>-0.03</i>
Total Supply	19.21	19.23	19.80	19.83	19.10	<i>19.26</i>	<i>19.89</i>	<i>20.01</i>	<i>19.66</i>	<i>19.76</i>	<i>20.16</i>	<i>20.38</i>	19.52	<i>19.57</i>	<i>19.99</i>
Demand															
Motor Gasoline.....	7.95	8.60	8.61	8.55	8.01	<i>8.47</i>	<i>8.64</i>	<i>8.54</i>	<i>8.10</i>	<i>8.63</i>	<i>8.79</i>	<i>8.68</i>	8.43	<i>8.41</i>	<i>8.55</i>
Jet Fuel.....	1.69	1.63	1.68	1.69	1.64	<i>1.66</i>	<i>1.74</i>	<i>1.78</i>	<i>1.77</i>	<i>1.74</i>	<i>1.80</i>	<i>1.82</i>	1.67	<i>1.71</i>	<i>1.78</i>
Distillate Fuel Oil.....	3.71	3.38	3.45	3.75	3.76	<i>3.55</i>	<i>3.56</i>	<i>3.76</i>	<i>3.98</i>	<i>3.65</i>	<i>3.59</i>	<i>3.84</i>	3.57	<i>3.66</i>	<i>3.77</i>
Residual Fuel Oil.....	0.93	0.78	0.84	0.78	0.71	<i>0.74</i>	<i>0.85</i>	<i>0.73</i>	<i>0.82</i>	<i>0.75</i>	<i>0.74</i>	<i>0.70</i>	0.83	<i>0.76</i>	<i>0.75</i>
Other Oils ^d	4.93	4.84	5.23	5.05	4.98	<i>4.84</i>	<i>5.11</i>	<i>5.18</i>	<i>4.99</i>	<i>4.99</i>	<i>5.25</i>	<i>5.34</i>	5.01	<i>5.03</i>	<i>5.14</i>
Total Demand.....	19.21	19.23	19.80	19.83	19.10	<i>19.26</i>	<i>19.89</i>	<i>19.99</i>	<i>19.66</i>	<i>19.76</i>	<i>20.16</i>	<i>20.38</i>	19.52	<i>19.56</i>	<i>19.99</i>
Total Petroleum Net Imports.....	9.77	10.43	10.27	9.19	9.46	<i>10.28</i>	<i>10.68</i>	<i>10.27</i>	<i>10.17</i>	<i>11.03</i>	<i>11.12</i>	<i>10.64</i>	9.91	<i>10.17</i>	<i>10.74</i>
Closing Stocks (million barrels)															
Crude Oil (excluding SPR).....	345	332	304	284	297	<i>294</i>	<i>279</i>	<i>277</i>	<i>295</i>	<i>300</i>	<i>285</i>	<i>283</i>	284	<i>277</i>	<i>283</i>
Total Motor Gasoline.....	217	217	207	193	205	<i>211</i>	<i>204</i>	<i>206</i>	<i>209</i>	<i>206</i>	<i>200</i>	<i>204</i>	193	<i>206</i>	<i>204</i>
Finished Motor Gasoline.....	169	173	162	154	158	<i>165</i>	<i>161</i>	<i>165</i>	<i>163</i>	<i>165</i>	<i>159</i>	<i>162</i>	154	<i>165</i>	<i>162</i>
Blending Components.....	48	44	45	39	47	<i>45</i>	<i>43</i>	<i>42</i>	<i>46</i>	<i>41</i>	<i>41</i>	<i>41</i>	39	<i>42</i>	<i>41</i>
Jet Fuel.....	42	46	49	41	40	<i>44</i>	<i>45</i>	<i>43</i>	<i>41</i>	<i>44</i>	<i>45</i>	<i>43</i>	41	<i>43</i>	<i>43</i>
Distillate Fuel Oil.....	125	133	145	125	96	<i>106</i>	<i>121</i>	<i>122</i>	<i>91</i>	<i>102</i>	<i>122</i>	<i>125</i>	125	<i>122</i>	<i>125</i>
Residual Fuel Oil.....	40	42	41	36	36	<i>37</i>	<i>36</i>	<i>38</i>	<i>35</i>	<i>36</i>	<i>38</i>	<i>39</i>	36	<i>38</i>	<i>39</i>
Other Oils ^e	280	298	294	246	235	<i>271</i>	<i>290</i>	<i>247</i>	<i>245</i>	<i>282</i>	<i>299</i>	<i>256</i>	246	<i>247</i>	<i>256</i>
Total Stocks (excluding SPR).....	1048	1068	1039	926	909	<i>964</i>	<i>974</i>	<i>934</i>	<i>916</i>	<i>969</i>	<i>988</i>	<i>950</i>	926	<i>934</i>	<i>950</i>
Crude Oil in SPR.....	572	575	575	567	569	<i>568</i>	<i>573</i>	<i>579</i>	<i>579</i>	<i>579</i>	<i>579</i>	<i>579</i>	567	<i>579</i>	<i>579</i>
Total Stocks (including SPR).....	1620	1642	1615	1493	1478	<i>1532</i>	<i>1547</i>	<i>1513</i>	<i>1495</i>	<i>1548</i>	<i>1568</i>	<i>1529</i>	1493	<i>1513</i>	<i>1529</i>

^aIncludes lease condensate.

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

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

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

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

SPR: Strategic Petroleum Reserve

NGL: Natural Gas Liquids

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

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

Table 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	6.28	5.34	0.93	0.08	0.85
Lower 48 States.....	5.32	4.42	0.90	0.07	0.83
Alaska.....	0.95	0.92	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	4.61	<i>4.71</i>	<i>4.72</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>18.76</i>	<i>18.94</i>
Net Imports	0.83	0.79	0.87	0.88	0.87	<i>0.80</i>	<i>0.87</i>	<i>0.92</i>	<i>0.95</i>	<i>0.93</i>	<i>1.00</i>	<i>1.00</i>	3.38	<i>3.46</i>	<i>3.88</i>	
Supplemental Gaseous Fuels.....	0.03	0.02	0.02	0.03	0.03	<i>0.02</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>0.11</i>	<i>0.12</i>	
Total New Supply	5.55	5.48	5.54	5.58	5.51	<i>5.53</i>	<i>5.62</i>	<i>5.67</i>	<i>5.70</i>	<i>5.69</i>	<i>5.78</i>	<i>5.78</i>	22.14	<i>22.33</i>	<i>22.95</i>	
Total Underground Storage																
Opening	7.06	5.79	6.50	7.24	6.88	<i>5.51</i>	<i>6.12</i>	<i>6.98</i>	<i>6.62</i>	<i>5.27</i>	<i>6.09</i>	<i>7.00</i>	7.06	<i>6.88</i>	<i>6.62</i>	
Closing.....	5.79	6.50	7.24	6.88	5.51	<i>6.12</i>	<i>6.98</i>	<i>6.62</i>	<i>5.27</i>	<i>6.09</i>	<i>7.00</i>	<i>6.56</i>	6.88	<i>6.62</i>	<i>6.56</i>	
Net Withdrawals.....	1.26	-0.71	-0.74	0.36	1.37	<i>-0.61</i>	<i>-0.86</i>	<i>0.36</i>	<i>1.34</i>	<i>-0.82</i>	<i>-0.91</i>	<i>0.44</i>	0.17	<i>0.27</i>	<i>0.05</i>	
Total Supply.....	6.81	4.77	4.79	5.94	6.88	<i>4.93</i>	<i>4.76</i>	<i>6.03</i>	<i>7.04</i>	<i>4.87</i>	<i>4.87</i>	<i>6.22</i>	22.31	<i>22.59</i>	<i>23.00</i>	
Balancing Item ^a	-0.08	-0.04	-0.32	-0.55	0.01	<i>0.09</i>	<i>-0.13</i>	<i>-0.28</i>	<i>0.19</i>	<i>0.09</i>	<i>-0.10</i>	<i>-0.35</i>	-1.00	<i>-0.32</i>	<i>-0.17</i>	
Total Primary Supply.....	6.73	4.72	4.47	5.39	6.88	<i>5.02</i>	<i>4.63</i>	<i>5.75</i>	<i>7.23</i>	<i>4.97</i>	<i>4.77</i>	<i>5.87</i>	21.31	<i>22.28</i>	<i>22.83</i>	
Demand																
Lease and Plant Fuel.....	0.31	0.31	0.31	0.31	0.30	<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	0.13	0.16	0.21	<i>0.14</i>	<i>0.13</i>	<i>0.17</i>	<i>0.21</i>	<i>0.14</i>	<i>0.13</i>	<i>0.17</i>	0.64	<i>0.64</i>	<i>0.65</i>	
Residential.....	2.24	0.80	0.38	1.27	2.20	<i>0.81</i>	<i>0.37</i>	<i>1.43</i>	<i>2.45</i>	<i>0.86</i>	<i>0.37</i>	<i>1.45</i>	4.69	<i>4.81</i>	<i>5.13</i>	
Commercial.....	1.25	0.58	0.42	0.80	1.24	<i>0.62</i>	<i>0.44</i>	<i>0.86</i>	<i>1.36</i>	<i>0.62</i>	<i>0.43</i>	<i>0.88</i>	3.06	<i>3.17</i>	<i>3.29</i>	
Industrial (Incl. Nonutility Use)	2.24	2.03	2.10	2.27	2.36	<i>2.28</i>	<i>2.36</i>	<i>2.44</i>	<i>2.45</i>	<i>2.26</i>	<i>2.46</i>	<i>2.52</i>	8.63	<i>9.44</i>	<i>9.69</i>	
Electric Utilities.....	0.53	0.85	1.15	0.59	0.56	<i>0.86</i>	<i>1.02</i>	<i>0.54</i>	<i>0.45</i>	<i>0.78</i>	<i>1.07</i>	<i>0.55</i>	3.11	<i>2.99</i>	<i>2.84</i>	
Total Demand.....	6.77	4.70	4.49	5.40	6.87	<i>5.02</i>	<i>4.63</i>	<i>5.75</i>	<i>7.23</i>	<i>4.97</i>	<i>4.77</i>	<i>5.87</i>	21.36	<i>22.27</i>	<i>22.83</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	274.1	<i>262.8</i>	<i>275.9</i>	<i>285.4</i>	<i>274.1</i>	<i>284.9</i>	<i>277.7</i>	<i>284.9</i>	1094.0	<i>1098.1</i>	<i>1121.7</i>
Appalachia	114.8	103.4	103.0	102.1	109.5	<i>100.9</i>	<i>101.3</i>	<i>104.5</i>	<i>107.4</i>	<i>107.0</i>	<i>99.7</i>	<i>102.2</i>	423.3	<i>416.3</i>	<i>416.3</i>
Interior	40.4	40.8	42.4	38.9	36.1	<i>39.2</i>	<i>41.0</i>	<i>38.9</i>	<i>35.9</i>	<i>40.8</i>	<i>39.6</i>	<i>37.0</i>	162.5	<i>155.1</i>	<i>153.3</i>
Western.....	128.3	119.8	128.5	131.6	128.5	<i>122.8</i>	<i>133.5</i>	<i>142.0</i>	<i>130.8</i>	<i>137.0</i>	<i>138.5</i>	<i>145.7</i>	508.2	<i>526.8</i>	<i>552.1</i>
Primary Stock Levels ^a															
Opening.....	36.5	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>	36.5	<i>36.4</i>	<i>36.4</i>
Closing.....	42.4	41.5	35.1	36.4	41.3	<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	-4.9	<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	2.8	<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>10.5</i>	<i>11.6</i>
Exports.....	13.0	14.4	16.1	15.0	13.6	<i>13.6</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>57.6</i>	<i>60.5</i>
Total Net Domestic Supply.....	267.0	252.5	266.6	258.7	258.4	<i>251.2</i>	<i>269.5</i>	<i>271.9</i>	<i>257.2</i>	<i>272.1</i>	<i>271.7</i>	<i>273.5</i>	1044.8	<i>1051.0</i>	<i>1074.5</i>
Secondary Stock Levels ^b															
Opening.....	129.4	143.3	151.9	139.7	143.5	<i>139.8</i>	<i>144.8</i>	<i>132.7</i>	<i>138.7</i>	<i>127.4</i>	<i>139.3</i>	<i>124.3</i>	129.4	<i>143.5</i>	<i>138.7</i>
Closing.....	143.3	151.9	139.7	143.5	139.8	<i>144.8</i>	<i>132.7</i>	<i>138.7</i>	<i>127.4</i>	<i>139.3</i>	<i>124.3</i>	<i>129.8</i>	143.5	<i>138.7</i>	<i>129.8</i>
Net Withdrawals.....	-13.9	-8.6	12.2	-3.8	3.7	<i>-5.0</i>	<i>12.1</i>	<i>-6.1</i>	<i>11.3</i>	<i>-11.9</i>	<i>15.0</i>	<i>-5.5</i>	-14.1	<i>4.8</i>	<i>8.9</i>
Waste Coal Supplied to IPPs ^c	2.1	2.2	2.6	2.8	3.1	<i>3.1</i>	9.7	<i>12.2</i>	<i>12.2</i>						
Total Supply.....	255.2	246.1	281.4	257.6	265.2	<i>249.3</i>	<i>284.7</i>	<i>268.9</i>	<i>271.5</i>	<i>263.3</i>	<i>289.7</i>	<i>271.1</i>	1040.4	<i>1068.1</i>	<i>1095.7</i>
Demand															
Coke Plants.....	6.8	7.1	7.0	7.2	7.3	<i>7.5</i>	<i>7.2</i>	<i>7.4</i>	<i>7.4</i>	<i>7.4</i>	<i>7.3</i>	<i>7.5</i>	28.1	<i>29.4</i>	<i>29.7</i>
Electricity Production															
Electric Utilities.....	216.4	213.8	247.3	216.7	214.1	<i>203.3</i>	<i>235.0</i>	<i>217.8</i>	<i>221.7</i>	<i>216.0</i>	<i>239.3</i>	<i>219.0</i>	894.1	<i>870.3</i>	<i>896.0</i>
Nonutilities (Excl. Cogen.) ^d	8.4	10.3	12.3	15.0	23.2	<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	18.1	<i>16.7</i>	<i>17.0</i>	<i>19.5</i>	<i>18.5</i>	<i>17.0</i>	<i>17.1</i>	<i>19.8</i>	70.3	<i>71.4</i>	<i>72.4</i>
Total Demand ^e	250.2	248.3	283.6	256.5	262.7	<i>249.8</i>	<i>284.7</i>	<i>268.9</i>	<i>271.5</i>	<i>263.3</i>	<i>289.7</i>	<i>271.1</i>	1038.5	<i>1066.2</i>	<i>1095.7</i>
Discrepancy ^f	5.0	-2.1	-2.1	1.2	2.4	<i>-0.5</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	1.9	<i>1.9</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	425.7	406.1	468.8	434.2	442.8	432.2	478.0	434.7	1767.7	1734.8	1787.7
Petroleum.....	25.7	22.1	27.4	11.7	11.0	16.3	22.9	15.5	19.7	19.1	22.2	15.1	86.9	65.7	75.9
Natural Gas.....	51.5	80.7	107.5	56.7	54.4	82.6	97.1	51.2	42.5	73.8	101.3	51.8	296.4	285.2	269.4
Nuclear.....	181.2	166.1	195.0	182.6	185.0	179.9	184.2	166.1	180.8	164.1	192.7	173.7	725.0	715.2	711.2
Hydroelectric.....	83.4	79.8	69.9	60.9	66.9	76.4	65.3	61.9	72.8	74.5	62.0	61.1	293.9	270.6	270.4
Geothermal and Other ^a	1.6	1.0	0.6	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.6	0.6	3.7	2.3	2.2
Subtotal.....	773.4	773.6	888.0	738.7	743.4	761.9	838.9	729.5	759.1	764.1	856.7	737.0	3173.7	3073.7	3116.9
Nonutility Generation ^b															
Coal.....	19.4	22.9	32.4	39.2	55.2	54.9	60.2	57.6	56.2	53.1	61.7	59.0	113.9	227.8	230.0
Petroleum.....	7.8	8.7	8.7	6.9	11.1	7.7	8.1	9.1	7.7	7.5	8.1	9.1	32.1	36.0	32.5
Natural Gas.....	53.2	58.6	77.7	69.9	66.9	71.4	88.6	79.7	75.4	76.0	101.0	90.8	259.5	306.6	343.3
Other Gaseous Fuels ^c	2.0	2.2	2.9	2.6	2.5	2.4	2.0	2.3	2.0	1.9	2.1	2.3	9.5	9.1	8.2
Nuclear.....	0.0	0.0	1.1	2.1	5.2	4.4	3.1	2.8	3.0	2.7	3.2	2.9	3.2	15.5	11.8
Hydroelectric.....	3.7	3.8	2.9	3.1	3.9	4.3	2.7	3.2	2.8	2.8	2.8	3.2	13.5	14.1	11.7
Geothermal and Other ^d	19.6	21.4	23.5	21.2	21.8	22.4	25.0	27.9	24.0	23.4	25.1	26.3	85.7	97.1	98.8
Subtotal.....	105.6	117.6	149.2	145.0	166.6	167.4	189.7	182.5	171.2	167.5	204.0	193.7	517.4	706.2	736.3
Total Generation.....	879.0	891.2	1037.2	883.6	910.0	929.3	1028.6	912.0	930.3	931.6	1060.7	930.7	3691.1	3779.9	3853.3
Net Imports ^e	2.0	7.6	11.5	8.2	6.7	7.6	9.0	7.2	6.2	7.7	10.5	7.0	29.3	30.5	31.4
Total Supply.....	881.0	898.8	1048.7	891.9	916.7	936.9	1037.6	919.1	936.5	939.3	1071.2	937.7	3720.4	3810.3	3884.6
Losses and Unaccounted for ^f	53.3	76.9	62.3	59.0	57.8	88.2	64.2	63.9	54.4	82.0	66.4	65.1	251.5	274.1	267.9
Demand															
Electric Utility Sales															
Residential.....	287.7	251.0	350.9	256.1	292.5	263.4	335.9	267.8	306.2	265.9	349.5	273.1	1145.7	1159.6	1194.7
Commercial.....	227.8	238.6	279.6	236.8	236.2	245.8	279.1	243.8	243.4	247.4	287.2	247.3	982.9	1005.0	1025.3
Industrial.....	252.1	267.7	277.6	265.7	260.0	269.4	279.2	269.0	261.6	273.8	285.1	274.9	1063.3	1077.6	1095.5
Other.....	24.7	25.3	28.4	25.7	26.4	26.0	29.3	26.5	26.4	26.7	29.9	27.0	104.2	108.3	110.0
Subtotal.....	792.4	782.6	936.6	784.4	815.1	804.6	923.5	807.2	837.7	813.8	951.8	822.3	3296.0	3350.4	3425.5
Nonutility Use/Sales ^b	35.3	39.3	49.8	48.4	43.8	44.0	49.9	48.0	44.4	43.5	53.0	50.3	172.8	185.8	191.2
Total Demand.....	827.7	821.9	986.5	832.8	858.9	848.7	973.4	855.2	882.1	857.3	1004.7	872.5	3468.9	3536.2	3616.7
Memo:															
Nonutility Sales to Electric Utilities ^b															
	70.4	78.3	99.4	96.5	122.8	123.4	139.8	134.5	126.7	124.0	151.0	143.4	344.5	520.4	545.2

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

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

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

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

^eData for 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	3.189	3.079	<i>2.834</i>	<i>2.832</i>	-3.4	<i>-8.0</i>	<i>-0.1</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>0.022</i>	<i>0.021</i>	0.0	<i>4.8</i>	<i>-4.5</i>
Total	3.319	3.136	<i>2.859</i>	<i>2.857</i>	-5.5	<i>-8.8</i>	<i>-0.1</i>
Nonutility Power Generators							
Hydroelectric Power ^a	0.149	0.140	<i>0.146</i>	<i>0.121</i>	-6.0	<i>4.3</i>	<i>-17.1</i>
Geothermal, Solar and Wind Energy ^b	0.240	0.313	<i>0.403</i>	<i>0.438</i>	30.4	<i>28.8</i>	<i>8.7</i>
Biofuels ^c	0.523	0.705	<i>0.721</i>	<i>0.703</i>	34.8	<i>2.3</i>	<i>-2.5</i>
Total	0.912	1.157	<i>1.270</i>	<i>1.261</i>	26.9	<i>9.8</i>	<i>-0.7</i>
Total Power Generation.....	4.231	4.293	<i>4.130</i>	<i>4.118</i>	1.5	<i>-3.8</i>	<i>-0.3</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	0.100	<i>0.108</i>	<i>0.106</i>	5.3	<i>8.0</i>	<i>-1.9</i>
Total	2.178	2.216	<i>2.261</i>	<i>2.258</i>	1.7	<i>2.0</i>	<i>-0.1</i>
Net Imported Electricity ^h	0.214	0.238	<i>0.248</i>	<i>0.255</i>	11.2	<i>4.2</i>	<i>2.8</i>
Total Renewable Energy Demand	6.623	6.747	<i>6.638</i>	<i>6.631</i>	1.9	<i>-1.6</i>	<i>-0.1</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)	6113	6368	6592	6708	6676	6880	7063	7348	7544	7813	8159	8516	8876	<i>9346</i>	<i>9744</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	17.21	<i>27.69</i>	<i>24.53</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	5.88	<i>5.85</i>	<i>5.83</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>10.17</i>	<i>10.74</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	74.8	<i>75.8</i>	<i>77.8</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>19.56</i>	<i>19.99</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	21.36	<i>22.27</i>	<i>22.83</i>
Coal (million short tons).....	830	877	891	897	898	907	943	950	962	1006	1029	1039	1039	<i>1066</i>	<i>1096</i>
Electricity (billion kilowatthours)															
Utility Sales ^c	2457	2578	2647	2713	2762	2763	2861	2935	3013	3098	3140	3240	3296	<i>3350</i>	<i>3426</i>
Nonutility Own Use ^d	NA	NA	91	113	119	122	127	138	145	145	148	156	173	<i>186</i>	<i>191</i>
Total	NA	NA	2738	2826	2881	2885	2988	3073	3159	3243	3288	3396	3469	<i>3536</i>	<i>3617</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	96.2	<i>97.7</i>	<i>99.6</i>
Total Energy Demand per Dollar of GDP (thousand Btu per 1996 Dollar).....	NA	NA	12.77	12.55	12.66	12.44	12.37	12.14	12.07	12.02	11.54	11.09	10.84	<i>10.45</i>	<i>10.22</i>

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

^bIncludes lease condensate.

^cTotal 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.

^dDefined 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 CONTROL0800.

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)	6113	6368	6592	6708	6676	6880	7063	7348	7544	7813	8159	8516	8876	<i>9346</i>	<i>9744</i>
GDP Implicit Price Deflator (Index, 1996=1.000).....	0.776	0.802	0.833	0.865	0.897	0.919	0.941	0.960	0.981	1.000	1.020	1.032	1.048	<i>1.071</i>	<i>1.090</i>
Real Disposable Personal Income (billion chained 1996 Dollars).....	4582	4784	4907	5014	5033	5189	5261	5397	5539	5678	5854	6134	6331	<i>6538</i>	<i>6872</i>
Manufacturing Production (Index, 1996=1.000).....	0.765	0.801	0.816	0.812	0.793	0.825	0.855	0.907	0.955	1.000	1.070	1.123	1.170	<i>1.246</i>	<i>1.310</i>
Real Fixed Investment (billion chained 1996 dollars)	856	887	911	895	833	886	958	1046	1109	1213	1329	1485	1621	<i>1815</i>	<i>1956</i>
Real Exchange Rate (Index, 1996=1.000).....	NA	NA	NA	0.963	0.966	0.960	1.001	0.981	0.927	1.000	1.102	1.137	1.154	<i>1.270</i>	<i>1.258</i>
Business Inventory Change (billion chained 1996 dollars)	8.5	17.0	14.2	8.9	-6.8	-4.7	3.6	12.1	14.1	10.1	15.2	25.6	0.1	<i>9.1</i>	<i>8.0</i>
Producer Price Index (index, 1982=1.000).....	1.028	1.069	1.122	1.163	1.165	1.172	1.189	1.205	1.247	1.277	1.275	1.244	1.255	<i>1.328</i>	<i>1.338</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>1.719</i>	<i>1.745</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	0.609	<i>0.883</i>	<i>0.803</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	128.8	<i>131.6</i>	<i>133.8</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>92.0</i>	<i>94.3</i>
Total Industrial Production (index, 1996=1.000).....	0.780	0.815	0.830	0.828	0.812	0.837	0.866	0.914	0.958	1.000	1.063	1.108	1.147	<i>1.215</i>	<i>1.274</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>116.9</i>	<i>118.3</i>
Weather ^a															
Heating Degree-Days															
U.S.	4334	4653	4726	4016	4200	4441	4700	4483	4531	4713	4542	3951	4169	<i>4225</i>	<i>4463</i>
New England.....	6546	6715	6887	5848	5960	6844	6728	6672	6559	6679	6662	5680	5952	<i>6379</i>	<i>6467</i>
Middle Atlantic.....	5699	6088	6134	4998	5177	5964	5948	5934	5831	5986	5809	4812	5351	<i>5520</i>	<i>5703</i>
U.S. Gas-Weighted	4391	4804	4856	4139	4337	4458	4754	4659	4707	4980	4802	4183	4399	<i>4435</i>	<i>4714</i>
Cooling Degree-Days (U.S.).....	1269	1283	1156	1260	1331	1040	1218	1220	1293	1180	1156	1410	1297	<i>1252</i>	<i>1235</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 CONTROL0800.

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	14.4	14.6
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	5.5
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	42.8	43.6
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	13.6	14.0	14.4
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	33.0	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	74.8	75.8	77.8
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	9.1	9.1
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	6.5	6.5
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	1.8
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	19.4	20.0	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	30.8	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	7.7	7.9
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	3.5	3.7
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	11.2	11.4
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	56.5	58.1
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	73.9	76.5	78.2
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	0.8	-0.6	-0.4
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	2.7
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	4.2

^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	17.21	27.69	24.53
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	2.08	3.40	3.50
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	1.50	1.40
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	1.46	1.36
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	1.46	1.38
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	0.86	0.76
No. 2 Heating Oil, Retail															
(dollars per gallon).....	0.80	0.81	0.90	1.06	1.02	0.93	0.91	0.88	0.87	0.99	0.99	0.85	0.88	1.28	1.21
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	25.04	22.62
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	1.21	1.21
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	2.39	4.11	3.63
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	3.99	3.97
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	6.63	7.57	8.32
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	8.2	8.3

^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	5.88	5.85	5.83
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	0.97	0.94
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	4.83	4.88	4.88
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	8.61	8.91	9.29
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	0.00	0.08	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	0.10	0.02	-0.02
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	0.19	0.29	0.21
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	15.08	15.31
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	1.85	1.95	1.98
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	0.38	0.38	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	0.89	0.93	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	1.26	1.45
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	0.30	-0.04	-0.03
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	19.52	19.57	19.99
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	8.41	8.55
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	1.71	1.78
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	3.66	3.77
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	0.76	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	5.01	5.03	5.14
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	19.56	19.99
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	10.17	10.74
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	349	330	341	323	325	318	335	337	303	284	305	324	284	277	283
Total Motor Gasoline	226	228	213	220	219	216	226	215	202	195	210	216	193	206	204
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	141	145	130	127	138	156	125	122	125
Residual Fuel Oil	47	45	44	49	50	43	44	42	37	46	40	45	36	38	39
Other Oils	260	267	257	261	267	263	273	275	258	250	259	291	246	247	256

^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.

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	18.76	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	3.38	3.46	3.88
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	0.11	0.12
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	22.14	22.33	22.95
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	7.06	6.88	6.62
Closing.....	6.55	6.65	6.33	6.94	6.78	6.64	6.65	6.97	6.50	6.51	6.52	7.06	6.88	6.62	6.56
Net Withdrawals.....	0.02	-0.10	0.33	-0.61	0.16	0.14	-0.01	-0.32	0.46	-0.01	-0.01	-0.53	0.17	0.27	0.05
Total Supply.....	17.68	18.32	19.02	18.77	19.61	20.02	20.42	21.08	21.86	21.74	21.83	21.27	22.31	22.59	23.00
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	-0.95	-0.33	-0.17
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	21.36	22.27	22.83
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	1.23	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	0.64	0.65
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	4.69	4.81	5.13
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	3.17	3.29
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	8.63	9.44	9.69
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	2.99	2.84
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	21.36	22.27	22.83

^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>1098.1</i>	<i>1121.7</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	416.3	416.3
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	155.1	153.3
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	526.8	552.1
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	10.5	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	57.6	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>1051.0</i>	<i>1074.5</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	138.7
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	138.7	129.8
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	4.8	8.9
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>1068.1</i>	<i>1095.7</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	28.1	29.4	29.7
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	870.3	896.0
Nonutilities (Excl. Co-gen.) ^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	71.4	72.4
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	1038.5	<i>1066.2</i>	<i>1095.7</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	1.9	1.9	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	1734.8	1787.7
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	65.7	75.9
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	285.2	269.4
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	715.2	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	270.6	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	2.3	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	3073.7	3116.9
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	517.4	706.2	736.3
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	3691.1	3779.9	3853.3
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	3720.4	3810.3	3884.6
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	251.5	274.1	267.9
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	1159.6	1194.7
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	1005.0	1025.3
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	1077.6	1095.5
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	108.3	110.0
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	3350.4	3425.5
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	172.8	185.8	191.2
Total Demand.....	NA	NA	2739.7	2819.9	2875.9	2885.1	2988.4	3073.0	3158.7	3242.7	3287.9	3396.0	3468.9	3536.2	3616.7
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	344.5	520.4	545.2

^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.