January 2000

Highlights

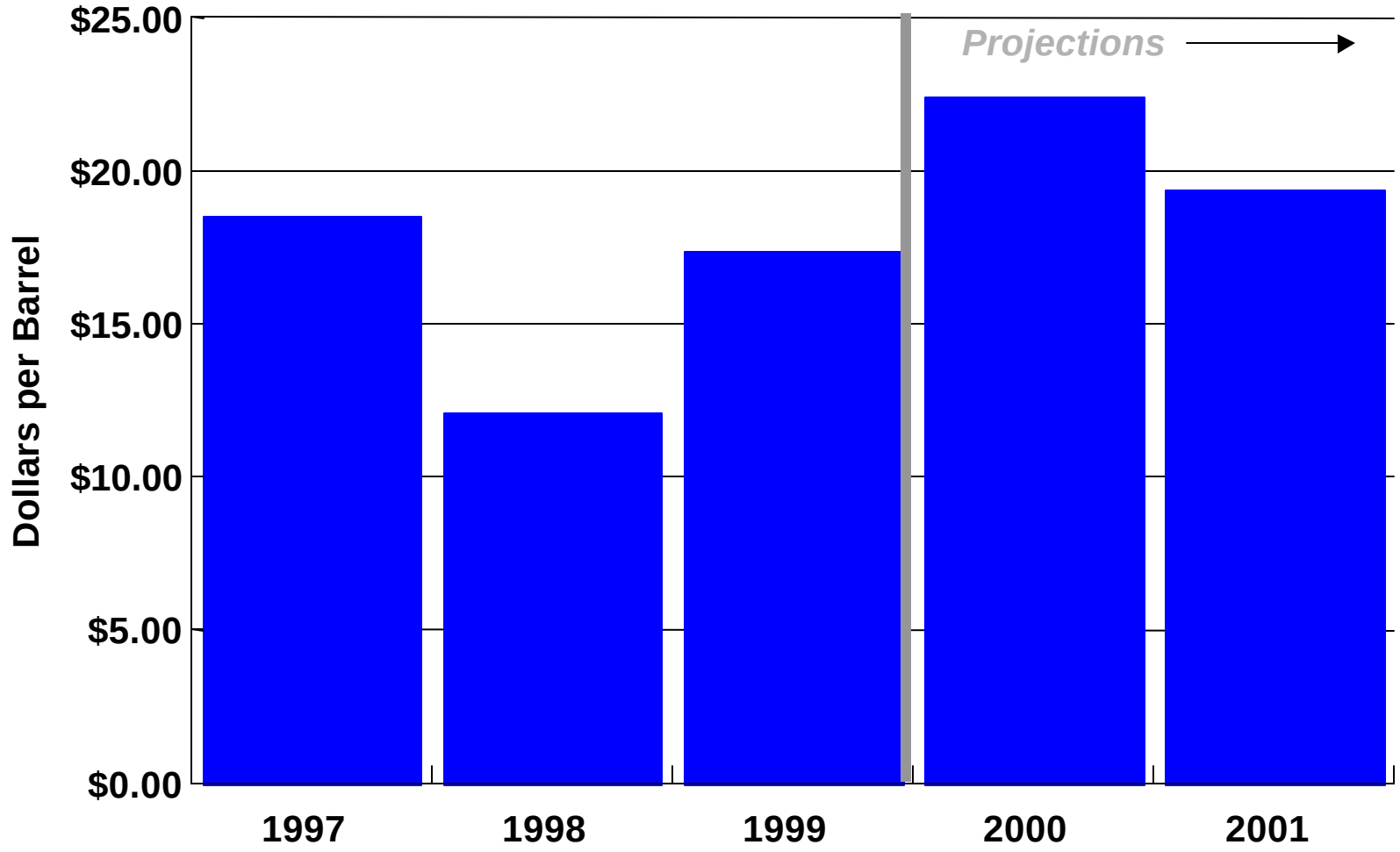
International Oil Markets

Prices. We have found little need to adjust our oil price forecast from last month's report, since no evidence of significantly more bullish (or bearish) sentiment on the world oil market has arisen since last month. Our estimate from the December Outlook for the November imported oil cost still looks good at $23.50 and our current estimate for December's price at $24.75 is only slightly above last month's expected December level ($24.50). Thus, annual average prices remain, in our view, on a pace to show $5-per-barrel increases in both 1999 and 2000 (Figure 1). This pattern masks the more salient aspect of the forecast, which calls for steadily (but gradually) declining prices through 2000 and into 2001 when looking ahead by month from where we are today (Figure 2). This general pattern seems to be widely accepted, with most disagreements on the outlook having to do with the speed and likely extent of the price decline in 2000. In contrast to some other projections that have been circulating, we maintain a relatively strong price outlook in 2000 in the base case. Our current projections imply about a $4-per-barrel drop from December 1999 to December 2000. We think that the continued strength of world demand relative to likely world production implies a somewhat stronger position for crude oil this year than many analysts and forecasters seem willing to support.

OPEC Production. EIA is currently forecasting OPEC compliance with agreed-upon production cuts, begun this past April, to remain relatively strong through the end of the current agreement, which expires at the end of March 2000. Although OPEC compliance is still expected to decline over the coming months, overall adherence to stated production targets is expected to hold up well compared to previous agreements (Figure 3). OPEC has tentatively scheduled another ministerial meeting for March 27, 2000, but it is unclear what OPEC will decide to do in relation to their quotas at that meeting. Given our world demand and non-OPEC production forecasts, EIA is assuming that OPEC production will increase in 2000, whether from an increased quota or a decrease in compliance. Our forecast assumes that OPEC oil production in 2000 will average about 1.4 million barrels per day higher than average 1999 levels. An increase of 1.2 million barrels per day is expected from OPEC in 2001 on the assumption of stabilized average world oil stock levels.

Non-OPEC Production. EIA estimates that non-OPEC oil production was about 200,000 barrels per day less in 1999 than it was in 1998, mainly as a result of reduced development expenditures engendered by very low oil prices in 1998 and early 1999. However, EIA is expecting non-OPEC production to increase by more than 800,000 barrels per day in 2000 as higher oil prices counteract some of the same forces that caused non-OPEC oil production to decline in 1999 (Figure 4). This trend is expected to continue in 2001, with EIA forecasting an increase in non-OPEC production of about 900,000 per day. A significant amount of the increase in non-OPEC production is expected to come from the North Sea. After remaining relatively flat between 1996 and 1999, North Sea oil production is expected to increase by about 400,000 barrels per day

Figure 1. Annual Average Imported Crude Costs



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

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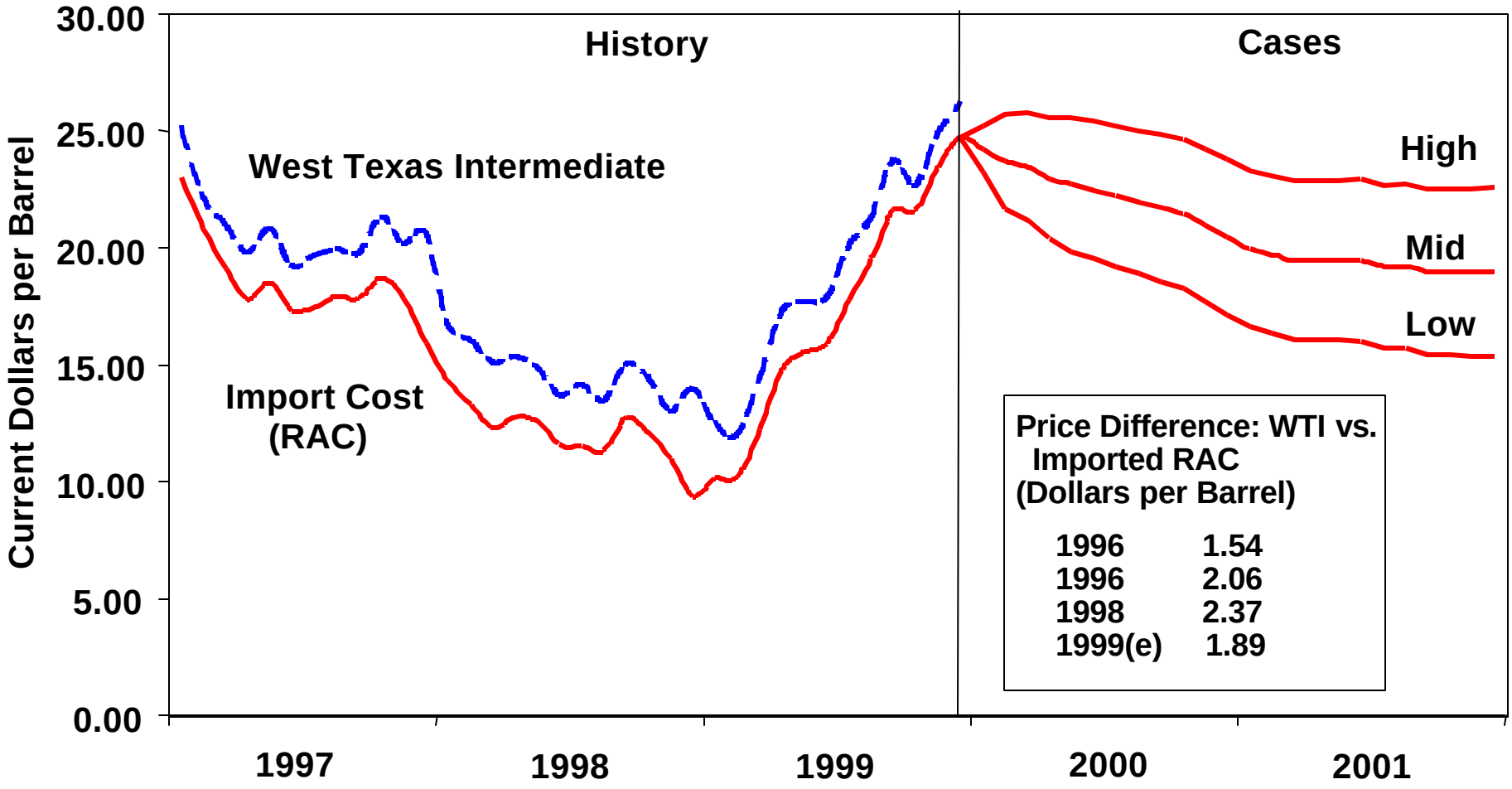
Figure 2. U.S. Monthly Crude Oil Prices



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

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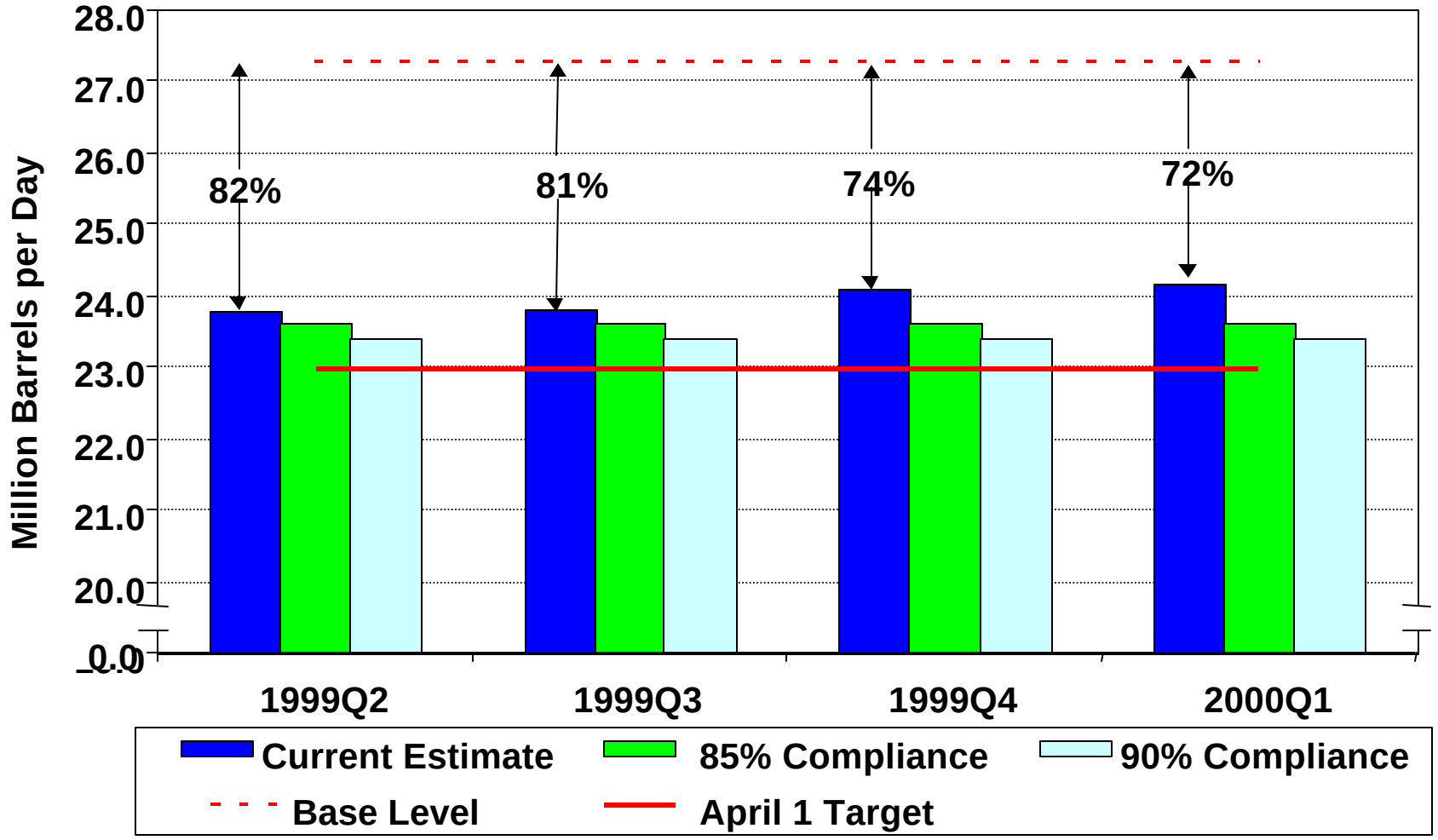
Figure 3. OPEC Compliance to Agreed Upon Cuts in Production



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

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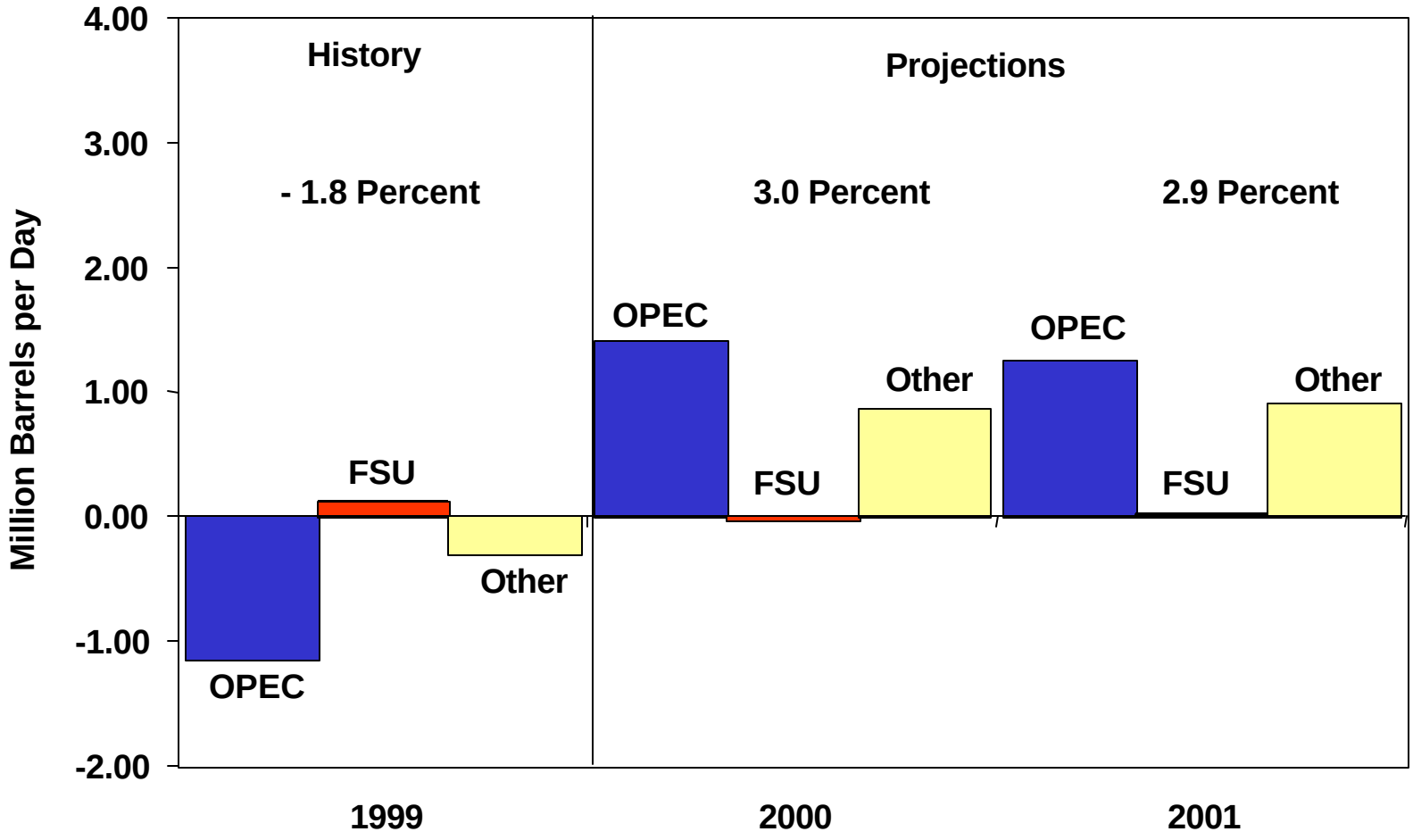
Figure 4. World Oil Supply
(Changes from Previous Year)



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

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in 2000, and by another 300,000 barrels per day in 2001, with the increase split evenly between Norway and the United Kingdom. Another major increase of about 100,000 barrels per day is expected to come from Australia, as production continues to boost output from the low levels at the end of 1998, which were caused by an accident in the Gippsland Basin.

Demand. EIA estimates that world oil demand grew by about 1.0 million barrels per day in 1999, and projects an additional 1.4 million barrels per day (1.9 percent growth) in 2000 (Figure 5 and Table 3). The 2000 world oil demand estimate is unchanged from last month's forecast and assumes that overall Asian demand continues the slow but steady recovery into next year. After growing by about 900,000 barrels per day each year between 1991 and 1996, oil demand in Asia (Japan, China, and other non-OECD Asia) grew by less than 800,000 barrels per day in 1997 before actually declining by over 300,000 barrels per day in 1998. However, in 1999, oil demand in this region is once again expected to grow (by about 400,000 barrels per day). By 2000, Asian oil demand growth is expected to grow by over 500,000 barrels per day, or over 60% of the 1991-1996 average annual growth. An additional 2.0 million barrels per day is seen for 2001, with most of the new consumption centered in the United States (500,000 barrels per day), Latin America (300,000 barrels per day), OECD Europe (200,000 barrels per day), and Asia (700,000 barrels per day).

Inventories. A factor that has bolstered support for crude prices in recent weeks is the continued decline in domestic oil inventories, particularly crude oil stocks. We now estimate that U.S. crude stocks ended 1999 at 291 million barrels (excluding the Strategic Petroleum Reserve). This level of crude stocks in the U.S. is the lowest since December 1996, when crude oil stocks bottomed out at 284 million barrels (the lowest point since early 1977) (Figure 6). We do expect stocks to rebuild some in 2000 before stabilizing in 2001. The situation does, however, support some skepticism about crude prices falling rapidly in the near term.

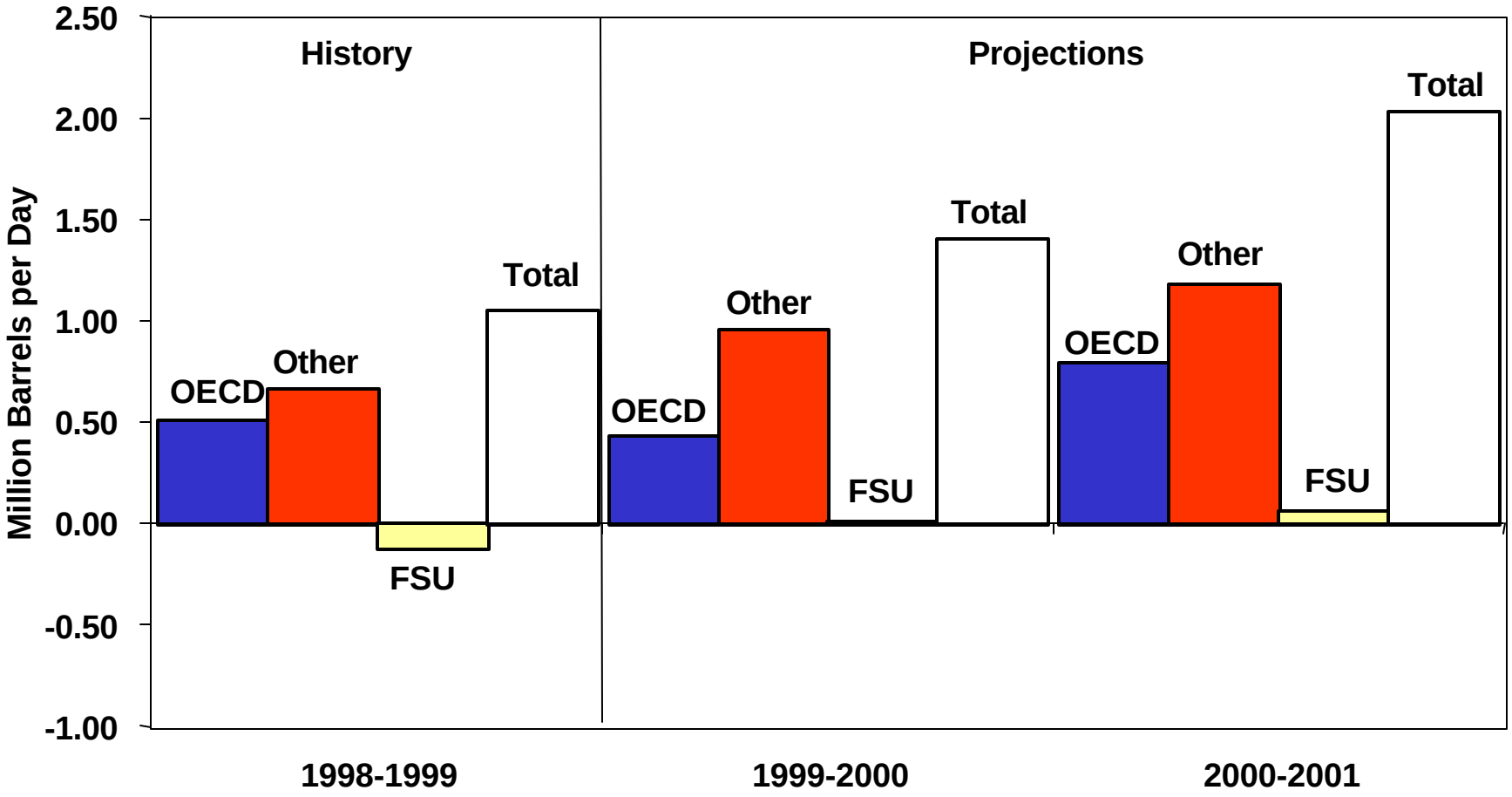
Y2K. While there was a lot of uncertainty about the impact any Y2K glitches might have on world oil production, it is now expected that any impact on world oil production will be minimal. EIA's forecast assumes no significant Y2K problems related to world oil production.

U.S. Energy Prices

Average crude oil prices are estimated to have increased by over $5.00 per barrel from 1998 to 1999 and are expected to increase by another $5.00 per barrel in the year 2000. This represents an almost doubling of the price in two years. However, it should be remembered that crude oil prices, when adjusted for inflation, were at near record lows in 1998. The rising crude prices, in turn, pushed up petroleum product prices in 1999. For the year 2000, we should expect to see additional petroleum product price increases, averaging around 12-15 cents per gallon, due to the higher crude prices (Table 4). However, in 2001, we project falling crude oil prices that would lead to lower petroleum product prices.

Heating Oil**.** Last winter, residential heating oil prices averaged about 80 cents per gallon--a bonanza to heating oil customers. For this heating season, which is now about half over, customers will see considerably higher heating bills compared to last winter, even though weather has been relatively mild so far. On average, they can expect to pay about 25 cents per gallon more to heat their homes (Figure 7 and Table 4). While the

Figure 5. World Oil Demand
(Changes from Previous Year)



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

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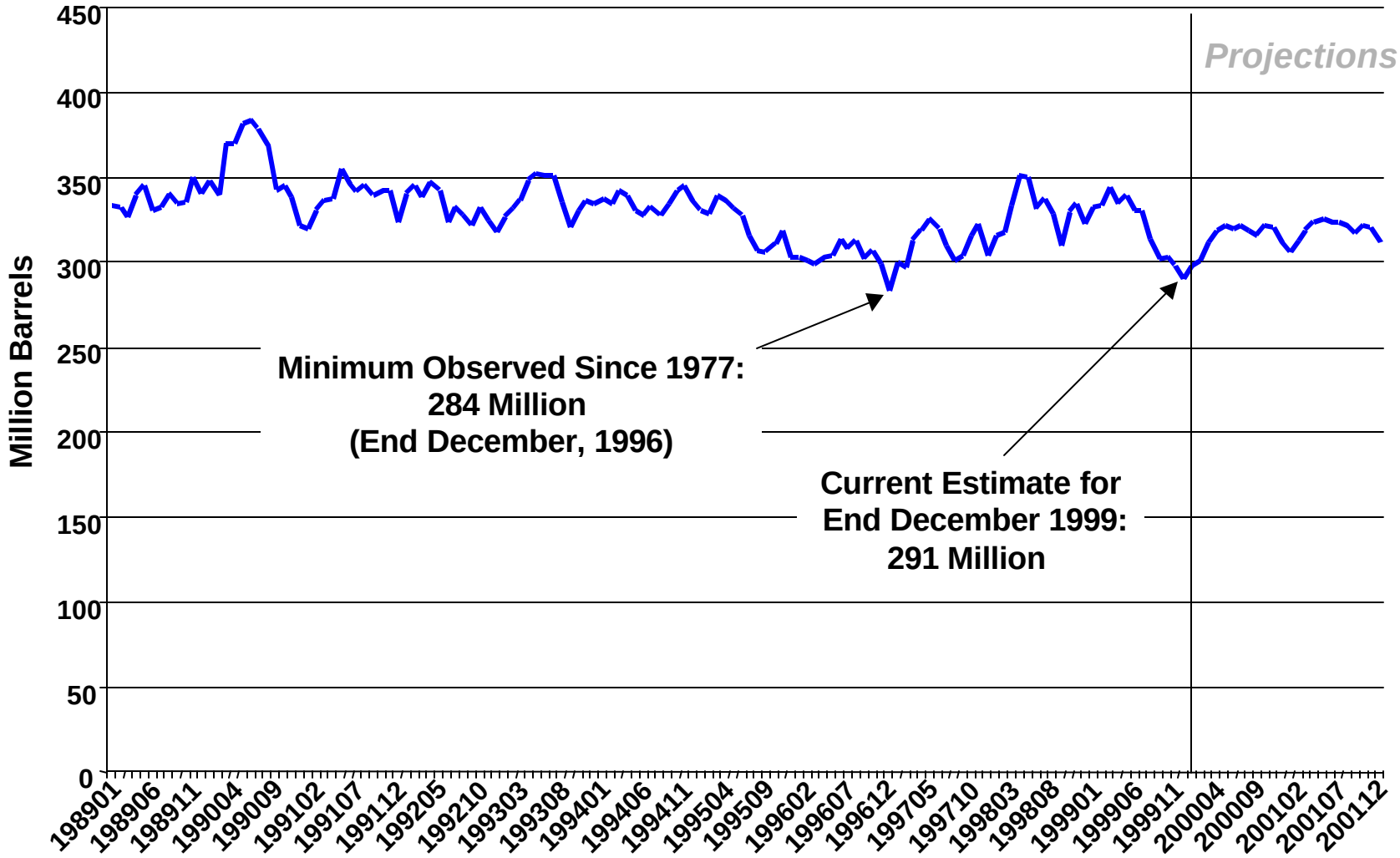
Figure 6. U.S. Crude Oil Stocks (Excl. SPR)



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

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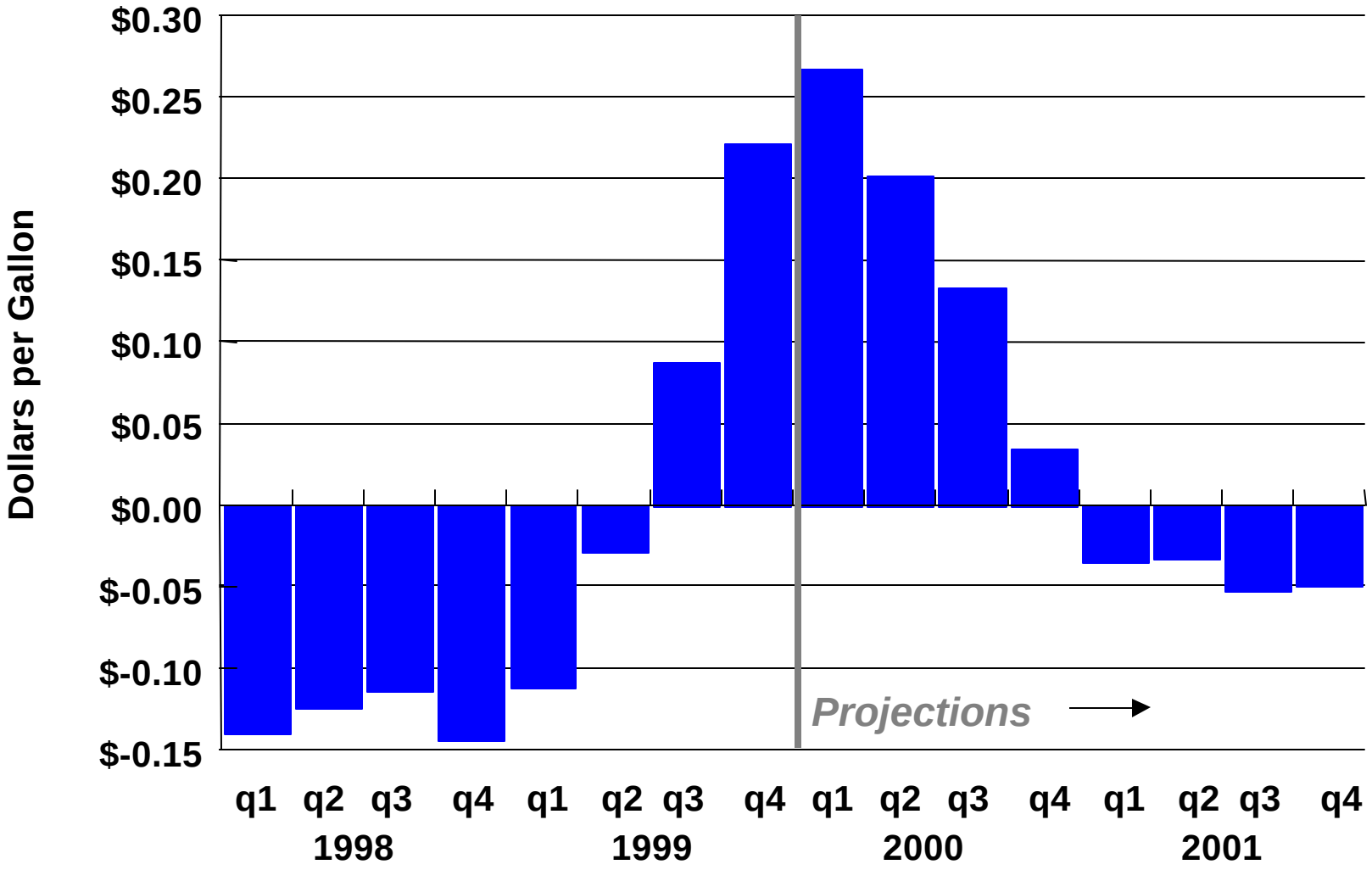
Figure 7. Quarterly Retail Heating Oil Prices

(Change from Year Ago)



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

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price increase may seem high, it is due almost entirely to higher projected crude costs. The very warm weather that appeared this past November and much of December muted actual distillate demand and acted as a moderating influence on prices. As a result of this weather effect, we have modified our residential heating oil price projections slightly downward from the previous report (Figure 8).

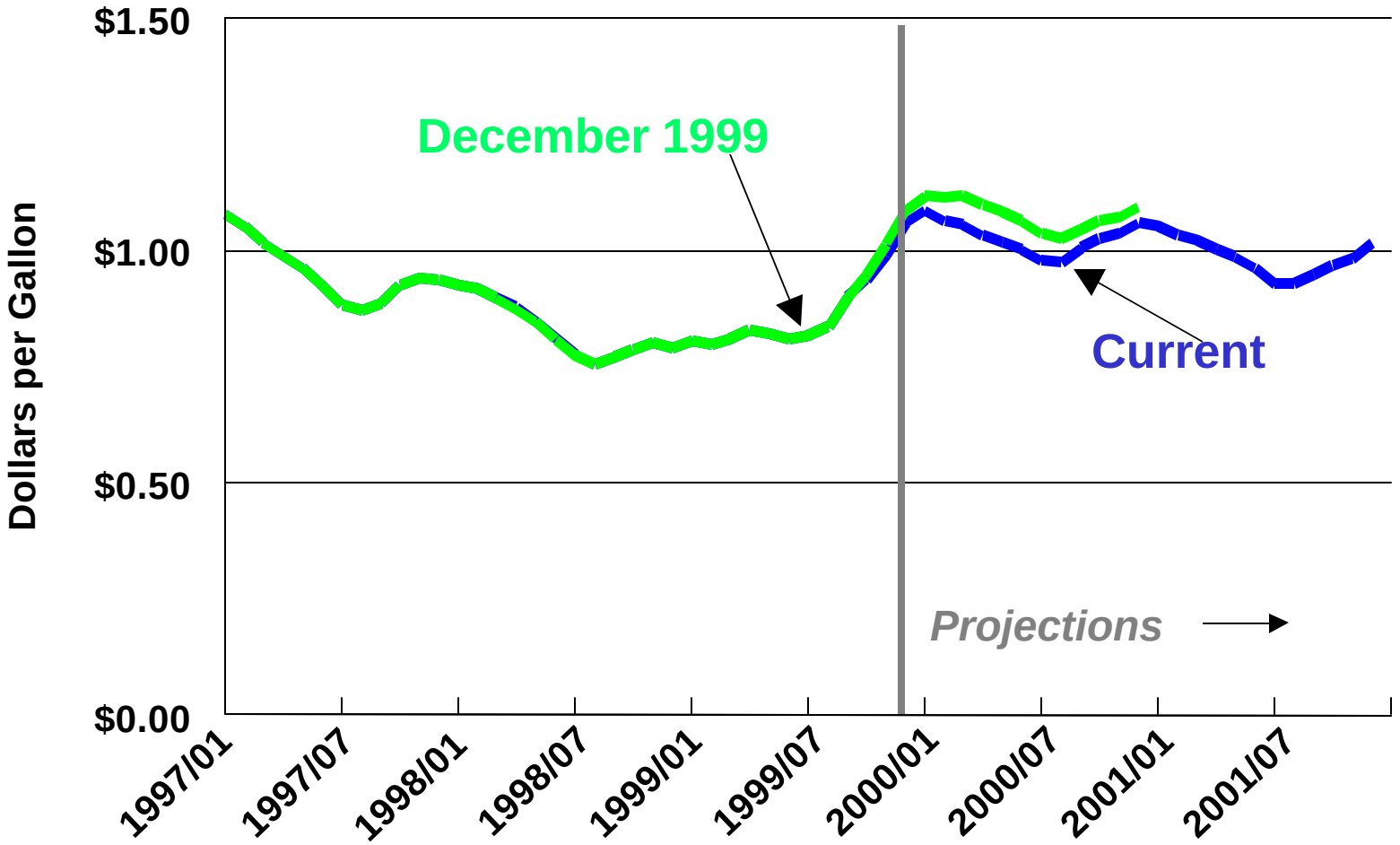
Interestingly, despite the generally mild weather so far this heating season, primary distillate fuel stocks have nonetheless fallen sharply and are now approaching levels below what is normally considered comfortable with peak demand months yet to come. (EIA's December 29 release of the Weekly Petroleum Status Report shows primary distillate stock levels at 123 million barrels as of December 24, already below the 128-million-barrel year-end level assumed for this report and 33 million barrels below the same time in 1998). The decline in primary stocks (absent strong demand indicators) is at least consistent with precautionary building of secondary and tertiary stocks for purposes related to Y2K concerns. In any case, the associated surge in primary shipments of distillate in recent weeks does not seem to be propelled by increases in actual fuel oil consumption. Otherwise, we would have expected to see some incremental strength in wholesale prices relative to crude costs. As it is, wholesale margins for distillate fuel in the United States generally remain mired in below-average ranges (Figure 9).

Motor Gasoline. Retail motor gasoline prices peaked in December for the year 1999, concurrent with rising crude oil prices. The average price at the pump increased by 35 cents per gallon from the February low price of 92 cents per gallon. It should be pointed out, though, that in inflation-adjusted terms, that price was the lowest U.S. monthly national average retail gasoline price on record. Pump prices are projected to inch up next spring during the peak of the driving season, reaching $1.34 cents per gallon in the second quarter for regular unleaded self-service (Figure 10). In quarterly terms, this represents a 20 cents per gallon increase from the same period a year earlier (Figure 11) . However, nearly 90 percent of that change (17.5 cents per gallon) is the result of the higher crude oil costs projected (Table 4). Diesel fuel oil prices are projected to follow the general price path of motor gasoline, but with seasonal variation.

Natural Gas. The spot price for natural gas at the wellhead peaked last August, then dropped, then hit another peak in October as concern over the level of underground storage going into the heating season fluctuated (Figure 12). The unusually mild weather in November resulted in net injections to underground storage, a phenomenon usually not seen that late in the year. The increased storage levels, in turn, sent spot prices tumbling. Presently, the level of natural gas in storage is below the high levels seen last December but still not abnormally low (Figure 13). We should note that the latest survey of storage facilities by the American Gas Association (released December 29, too late to be incorporated in this forecast) indicated a very rapid draw on storage (over 24 billion cubic feet per day) for the week ending December 24. This implies that end-year 1999 working gas levels may sink to more than 200 billion cubic feet below the year-ago level.
Still, we project only moderate price increases at the wellhead over the next few months even after assuming normal weather for the remainder of the heating season. Nevertheless, because of the depressed gas prices seen last winter, the average wellhead price this winter will be notably higher (about 25-30 percent) than last winter's price of about $1.80 per thousand cubic feet (Figure 14). It should be noted that not only was last winter one of the warmest on record, but also crude oil prices were in the doldrums. Thus both the weather and competitive price of oil acted in tandem to hold down the

Figure 8. Retail Heating Oil Prices

(Monthly: Current vs Previous Outlook)



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

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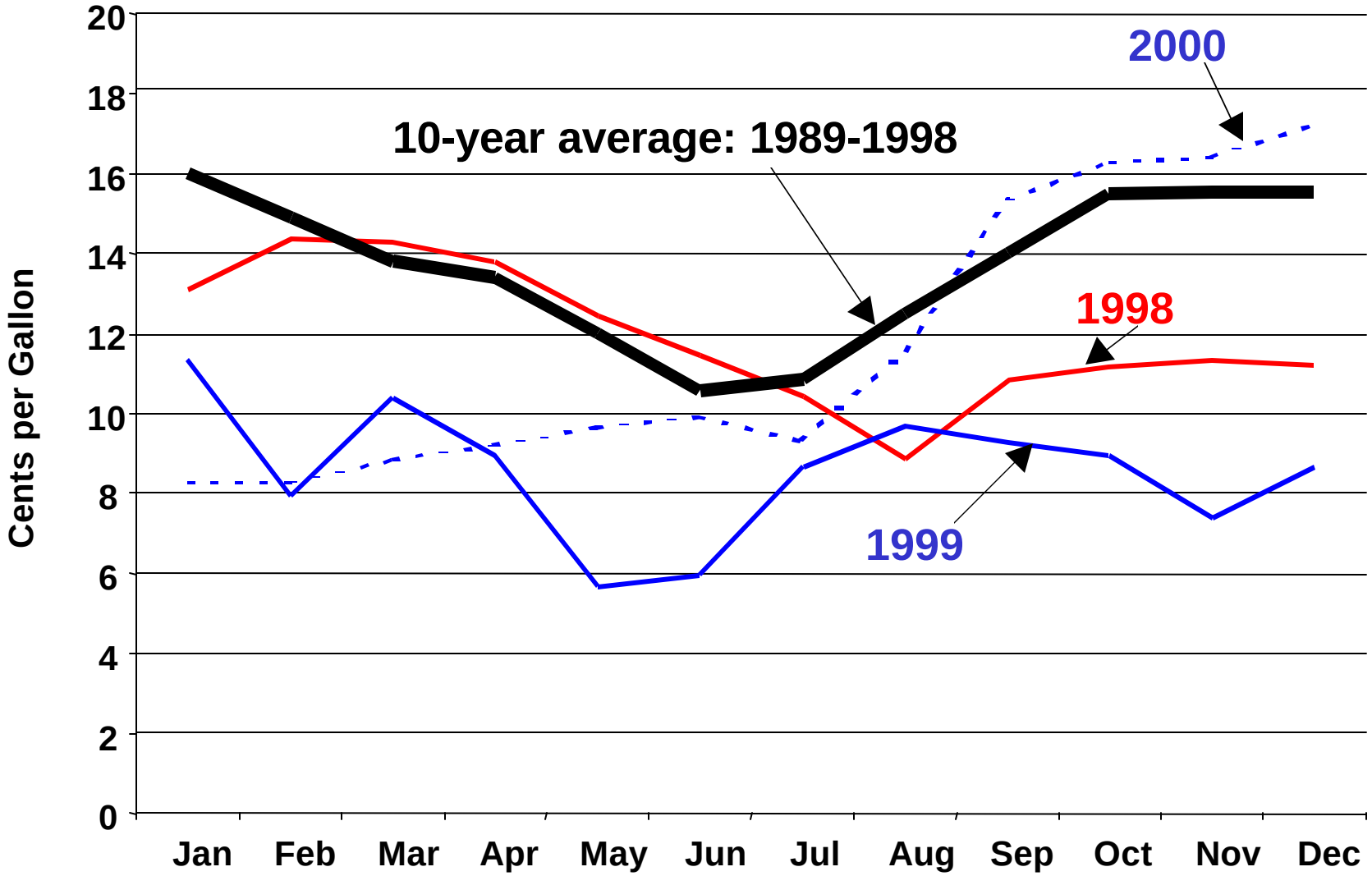
Figure 9. Refiner Heating Oil Margins



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

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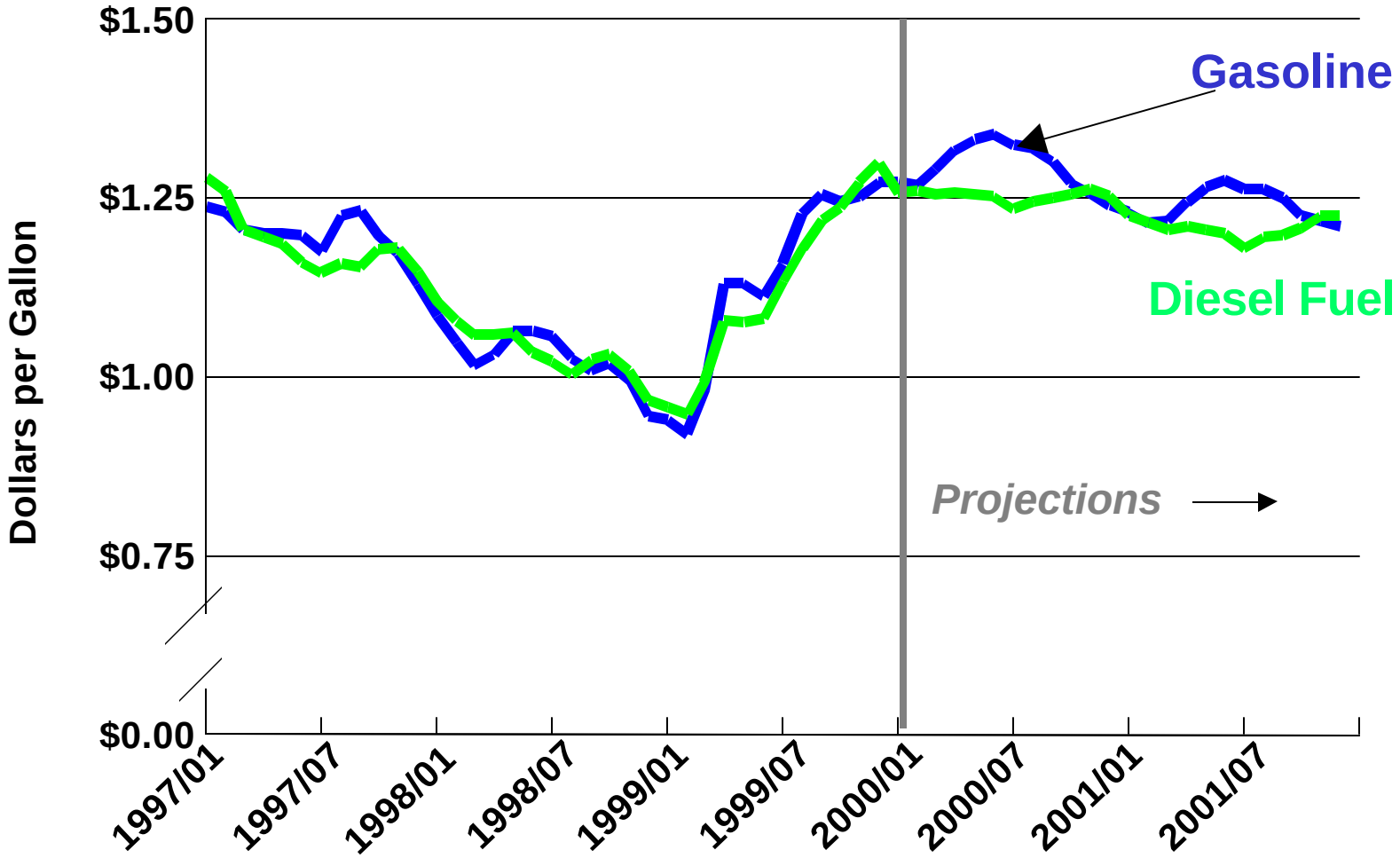
Figure 10. Retail Gasoline and Diesel Prices*

(Monthly: 1997-2001)



*Gasoline is Regular Unleaded, Self-Service Cash

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

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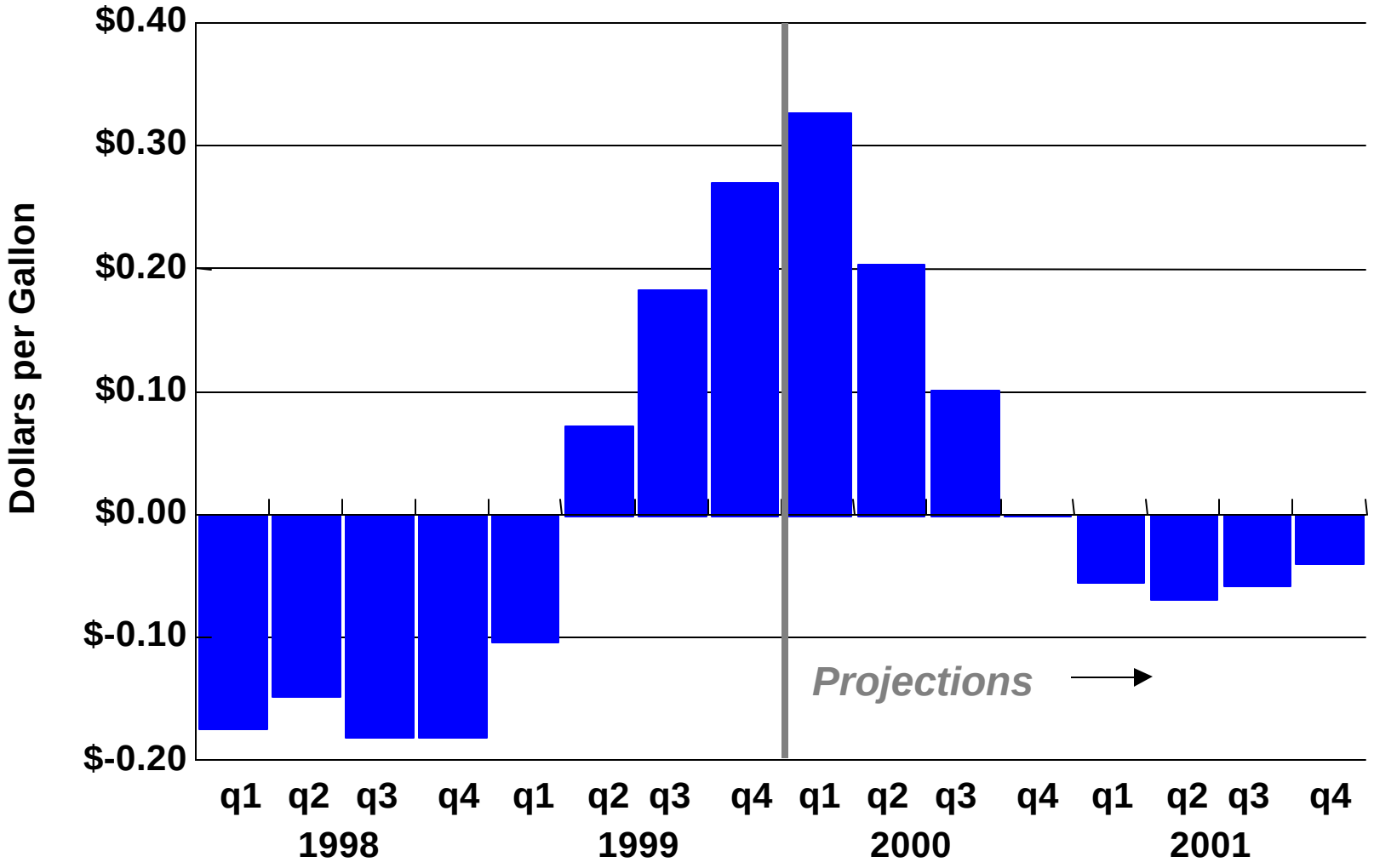
Figure 11. Quarterly Retail Motor Gasoline Prices*

(Change from Year Ago)



*Regular Unleaded, Self-Service Cash

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

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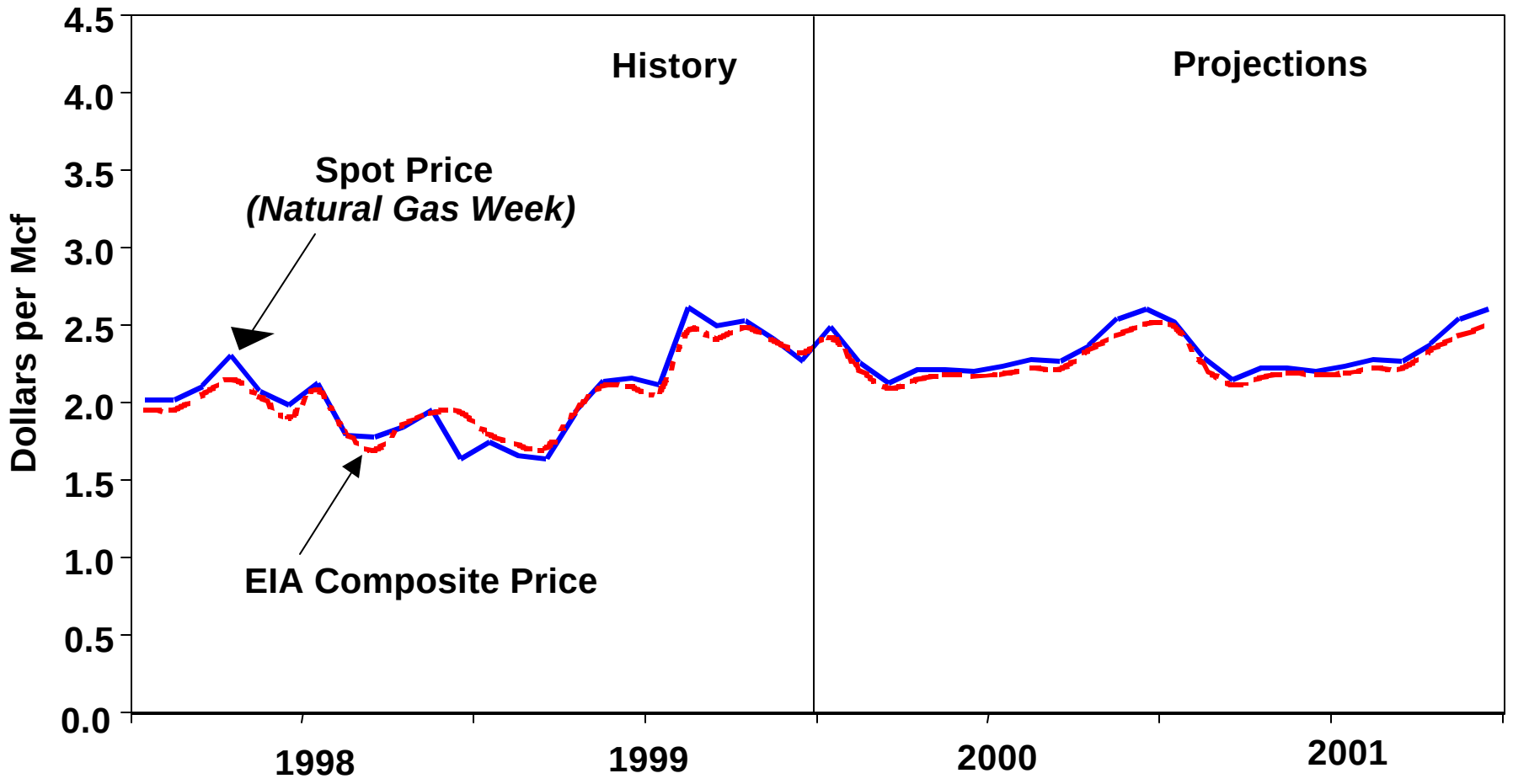
Figure 12. Natural Gas Wellhead Prices

(Composite and Spot)



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

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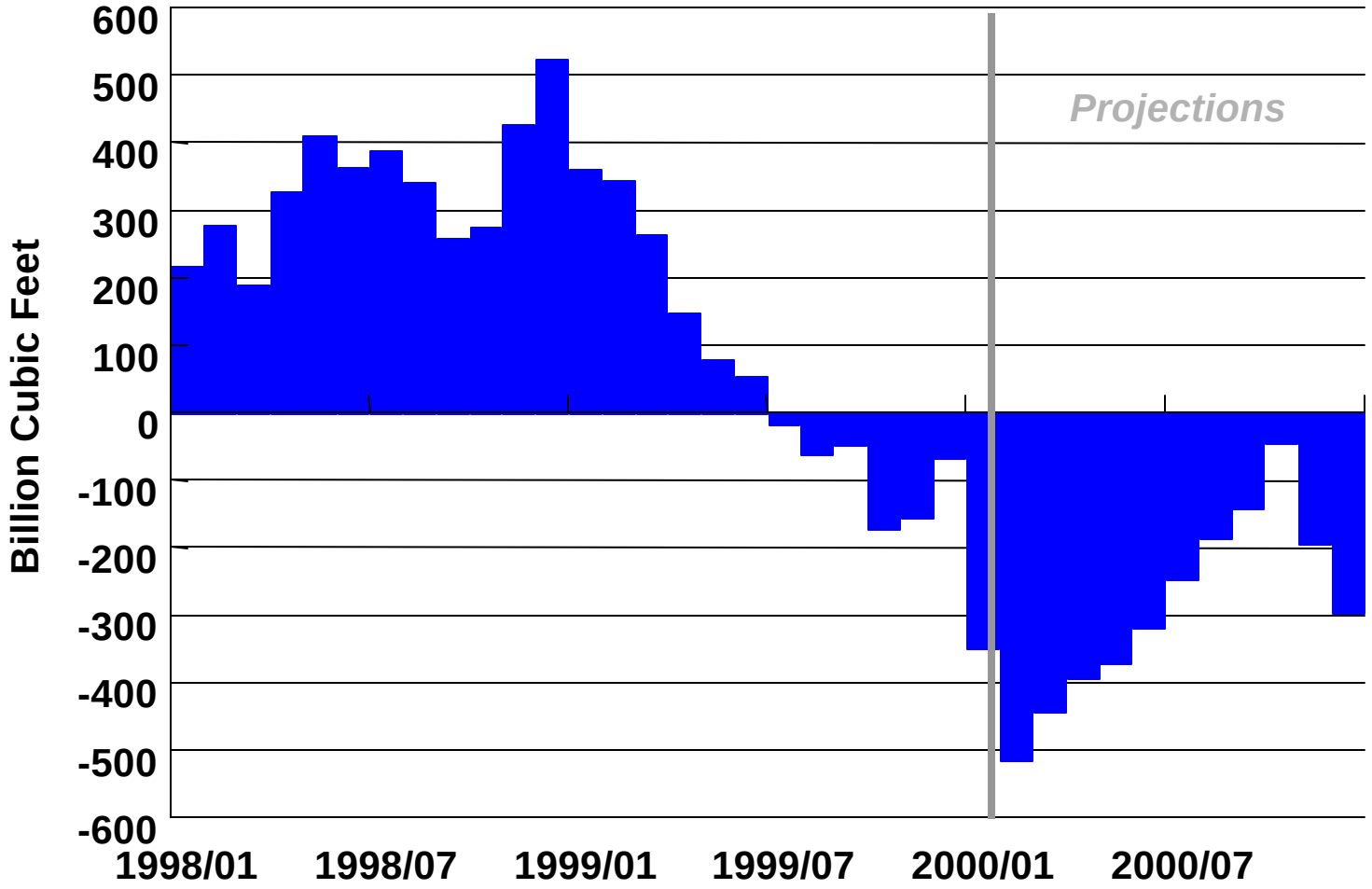
Figure 13. Working Gas in Storage

(Change from Year Ago)



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

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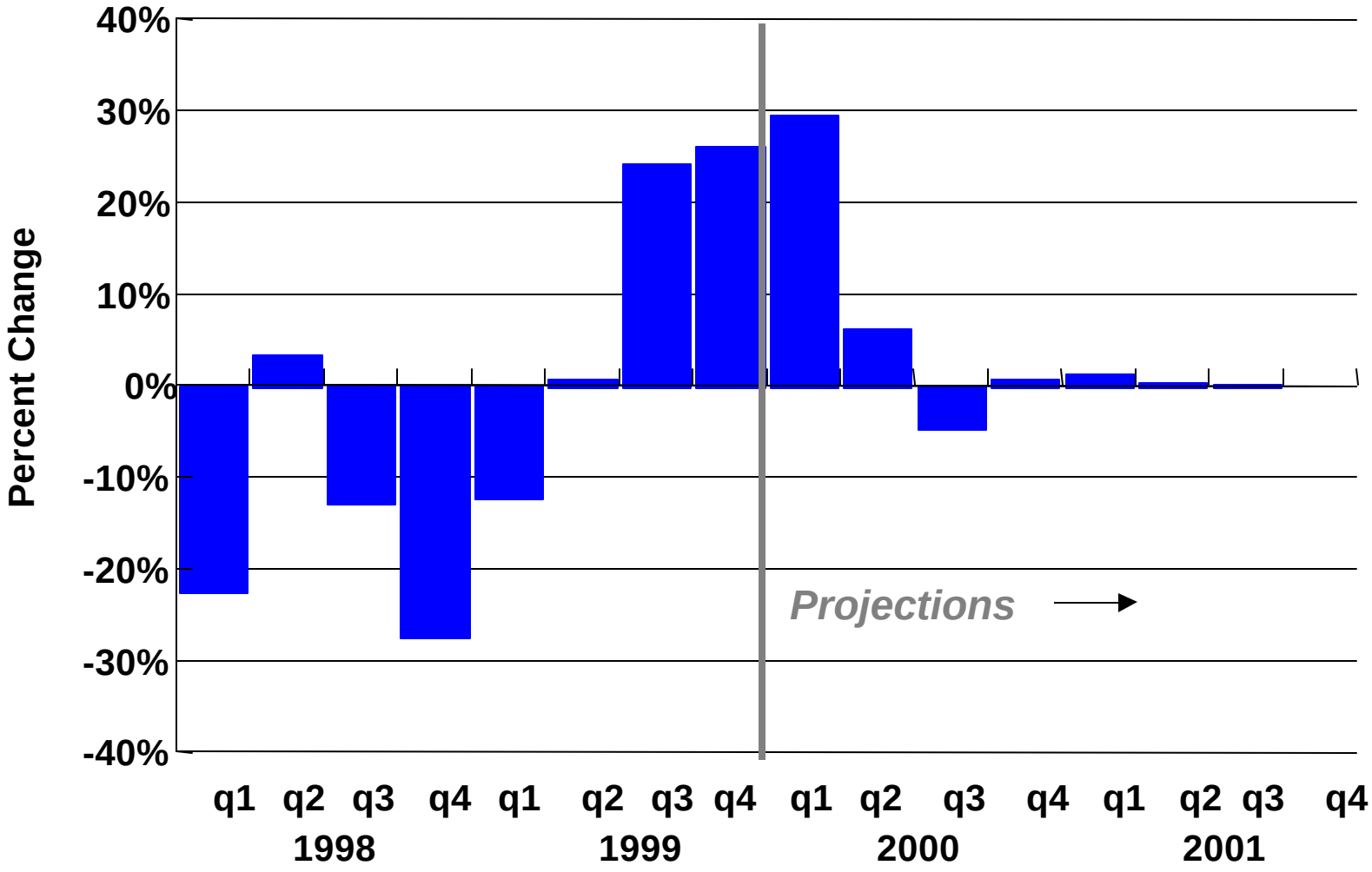
Figure 14. Quarterly Natural Gas Wellhead Prices

(Percent Change from Year Ago)



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

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price of natural gas. Residential natural gas prices over the same period are projected to be just under 10 percent higher (Table 4).

Electric Utility Fuels. Natural gas is projected to maintain its price advantage over residual fuel oil as a fuel input for electric utility generation throughout the forecast period (Figure 15 and Table 4). However, this advantage is expected to narrow in 2001, as crude oil prices are projected to decline while gas prices stay fairly flat over the same period. Coal remains by far the least expensive fossil fuel for electric utilities. Coal prices are expected to decline through 2000, even after costs associated with compliance with the Clean Air Act Amendments of 1990 are included. Continued increases in mining productivity, including longwall mining, as well as the closing of costly marginal mines, particularly those East of the Mississippi, have kept coal supply costs on a gradually declining trend for many years.

U.S. Petroleum Demand

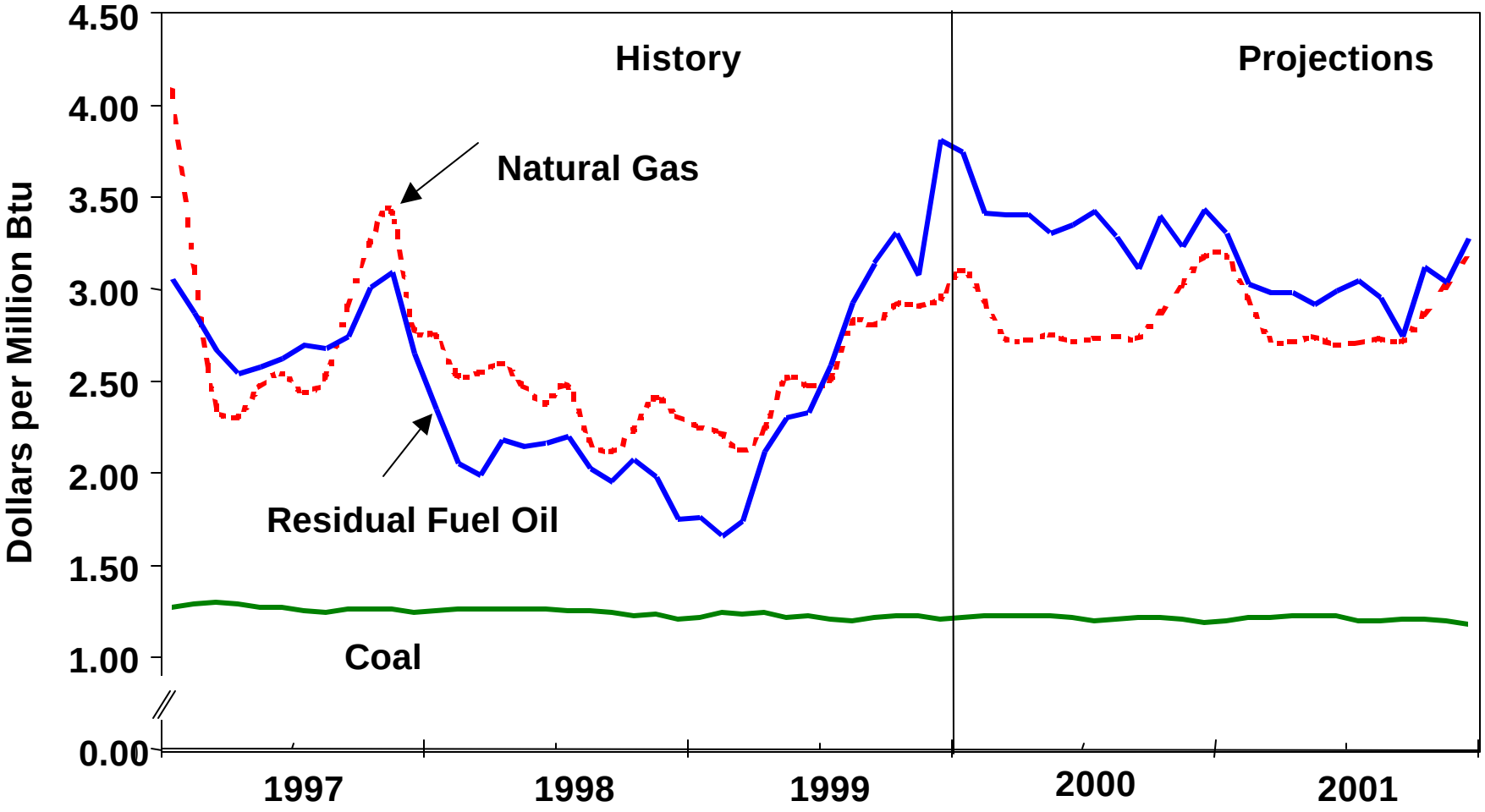
Available data (including at least preliminary estimates through December) indicate that U.S. petroleum demand in 1999 grew by more than 500,000 barrels per day, or about 2.7 percent, from 1998 demand (Figure 16). That rate of growth outstripped the 1.6-percent rate seen in 1998 despite the substantial rise in both crude oil and products prices. Part of the acceleration of that growth, however, stems from a recovery in products whose demand was weak in 1998. Jet fuel demand was adversely affected by economic turndowns in developing countries, and heating oil and propane demand was affected by warm winter weather.

Although it is apparently difficult now to make the case for motor gasoline or jet fuel, overall it seems clear that preliminary estimates for end-year 1999 petroleum demand growth show above-normal strength. In October, we began including in our projections additional demand in the fourth quarter of 1999 (between 150,000 and 200,000 barrels per day) that represented assumed additional supply from primary sources related to downstream accumulation of inventories as a precaution against potential Y2K problems. EIA's current estimate for Q4 1999 demand (19.81 million barrels per day) is actually higher than what we projected in October (19.60 million barrels per day) which had the incremental Y2K-related demand included. Some of this higher demand comes from increased economic growth in the United States over what was expected at the end of the summer. However, some of it was probably related to precautionary downstream purchases of product (perhaps most notable for distillate fuel) and thus we maintain the general view that year-2000 demand growth will be somewhat muted compared to what would normally be expected.

Despite continued steady growth projected in both gross domestic product and disposable personal income, averaging well over 3 percent throughout the forecast interval and assumptions of normal weather, petroleum products demand growth in 2000 is expected to moderate somewhat but accelerate once again in 2001. Petroleum demand is projected to climb 150,000 barrels per day, or 0.8 percent, in 2000. Among factors contributing to the relatively weak projected growth in 2000 are: the expected continuation of the decline in petroleum for power generation under continued high oil prices; lagged effects of price increases since last spring (affecting ticket prices and, hence, jet fuel demand); some (modest) impact from downstream stockpiling in late 1999, particularly in distillate fuel and other products besides gasoline or jet fuel. It should be noted that transportation-related fuel growth is expected to continue to increase by more than 2 percent.

Figure 15. Fossil Fuel Prices to Electric Utilities

(Monthly: 1997-2001)



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

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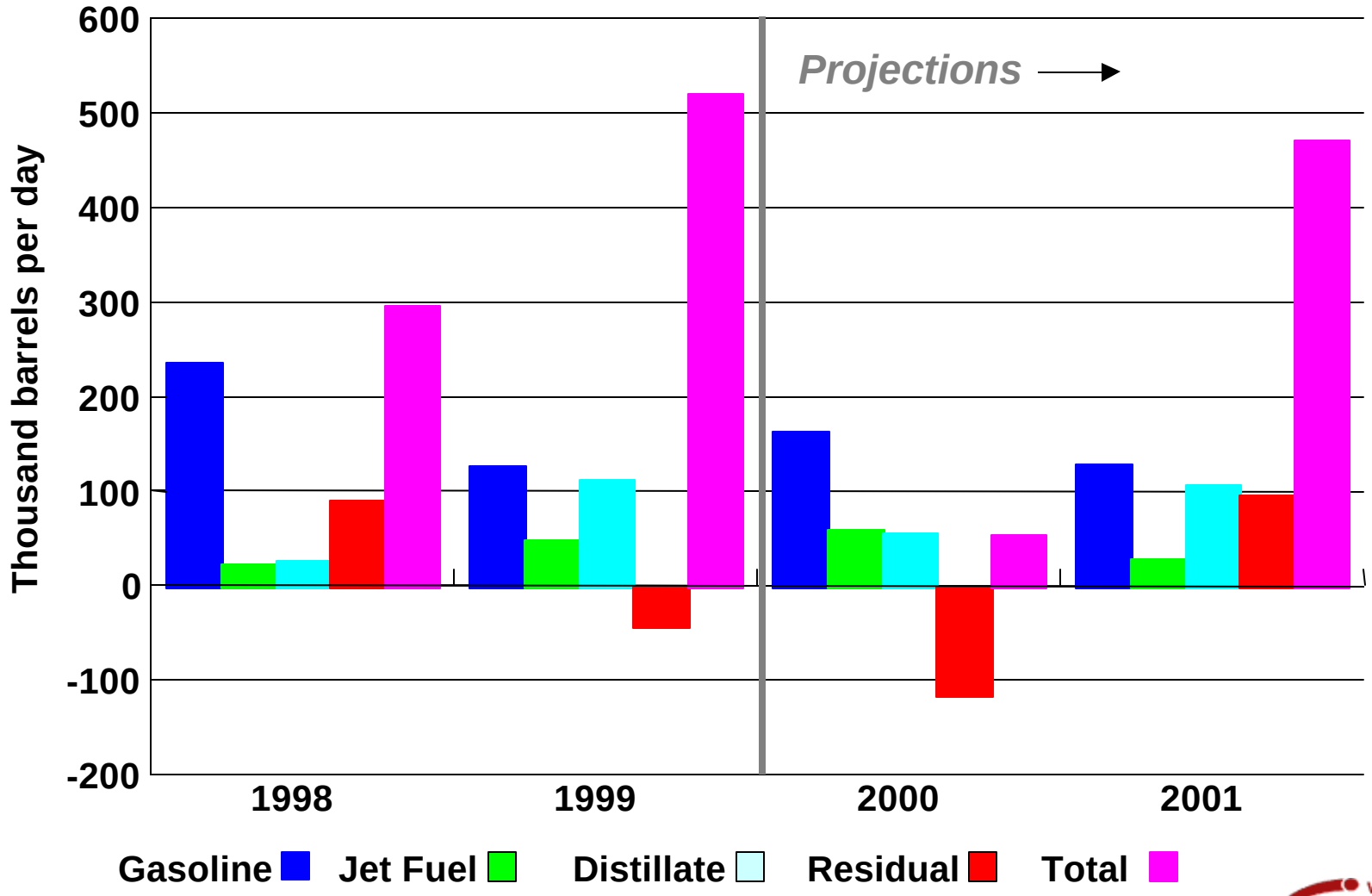
Figure 16. Year-to-Year Changes in Petroleum Demand



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

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In 2001, total demand is expected to climb by 480,000 barrels per day, or 2.4 percent. In response to decline in oil prices, residual fuel oil is projected to recover its previous year's decline. In addition to continued high growth in real disposable income, manufacturing and petrochemical activity is expected to display accelerated growth, bringing about increases in transportation diesel growth and a recovery in LPG demand.

U.S. Petroleum Supply

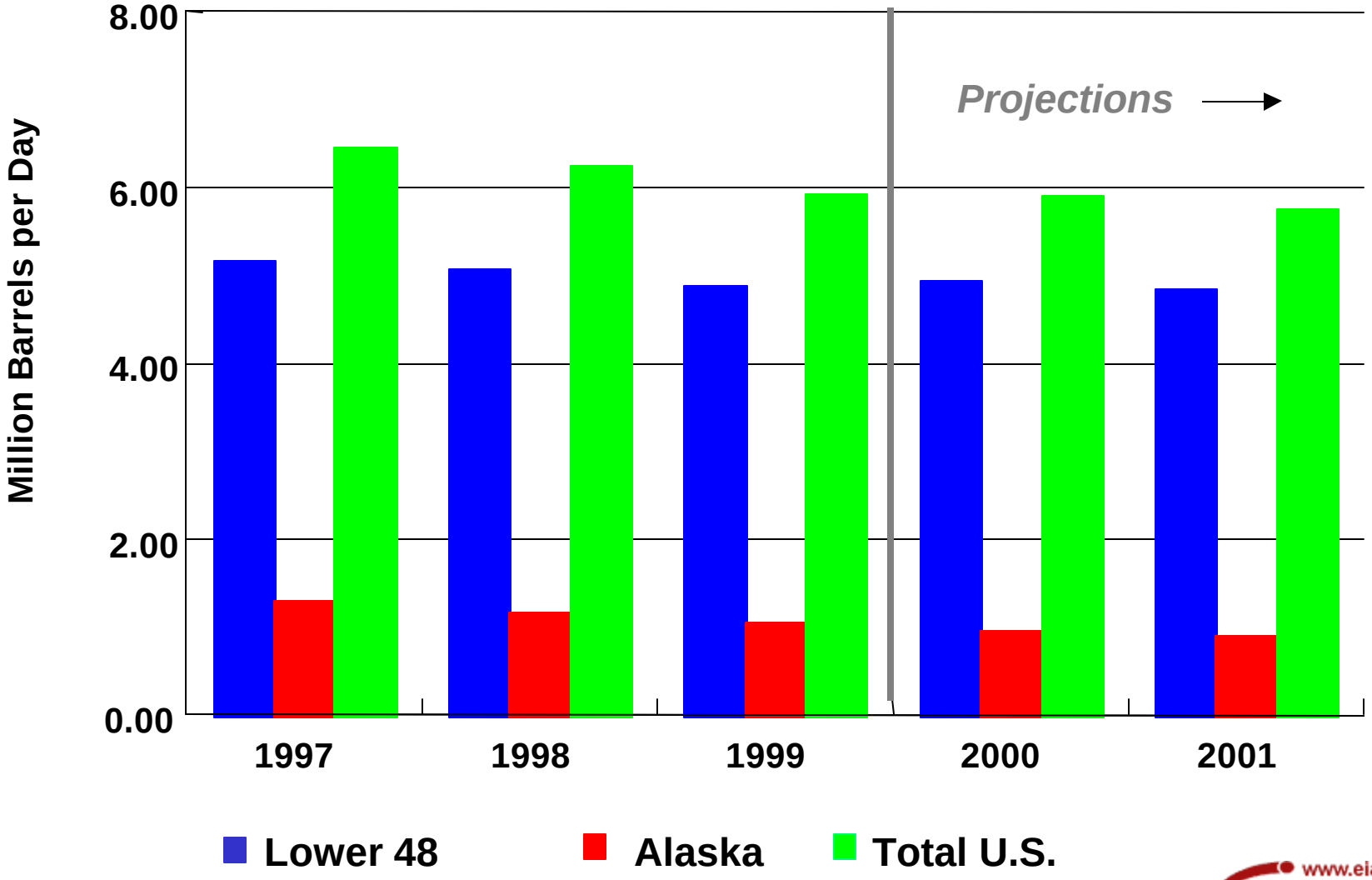
Total crude oil production for 1999 averaged an estimated 5.94 million barrels per day, a decline of more than 320,000 barrels per day, or 5.2 percent, from that of the previous year (Figure 17). In contrast, the decline in 1998 was 200,000 barrels per day. Part of the acceleration in the decline rate was brought about by the low crude oil prices at the beginning of the year and the lags associated with a rise in those prices. Production during the first half of 1999 was 450,000 barrels per day lower than during the same period in 1998. The cumulative impact of the increases in crude oil prices contributed to the muted, temporary, increases in Lower-48 output during the second half of 1999, narrowing the decline rate to less than 200,000 barrels per day compared to the same period in the previous year. Alaskan crude oil output during that interval, however, was constrained by several factors. Production during the third quarter declined to less than 1 million barrels per day due to fire- and repair-related refinery outages on the West Coast, pipeline explosions, and lack of storage capacity in Valdez. As these bottlenecks abated, production in October briefly rose to almost 1.1 million barrels per day, but weather problems reduced Alaskan production to an estimated 1.0 million barrels per day for the remainder of the year.

In 2000, total crude oil output is projected to average 5.899 million barrels per day, only 30,000 barrels per day lower than in 1999. The substantial increase in oil prices is expected to temporarily slow the decline rate, especially in the Lower-48 region, by increasing output from existing fields. Lower-48 output is expected to increase by 68,000 barrels per day, but Alaskan output is expected to contract by 97,000 barrels per day. Much of the increase in Lower-48 output is expected to come from continued development of existing fields. Part of that increase, however, stems from production from new sources in 1999, such as that from Chevron's Genesis platform, and anticipated production from Exxon's Diana and Hoover fields in 2000. Nonetheless, the low levels of exploration activity during the past few years are expected to result in little new on-stream production from new fields. Although new Alaskan fields, such as the Alpine field, are expected to come on-stream in 2000, they are not expected to offset the continued decline in production from the Prudhoe Bay field, the largest in Alaska.

In 2001, total crude oil production is expected to average 5.753 million barrels per day, a decline of almost 150,000 barrels per day. The low exploration activity in previous years, combined with a softening of oil prices, is expected to result in a resumption of the decline in Lower-48 output. The decline in that region is projected to be 100,000 barrels-per-day; the decline in Alaska is projected to be 50,000 barrels-per-day.

Primary inventories of both crude oil and products have continued their substantial drawdown to levels below seasonal norms based on the previous three years of stock data. Some concerns about Y2K may have contributed. However, data for the last several months have indicated a substantial stock draw since the spring, largely as a result of the increase in petroleum prices. Moreover, primary stocks are projected to remain below seasonal norms. Although they are projected to stabilize in 2000 and rise slowly

Figure 17. U.S. Crude Oil Production



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

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during 2001 (after adjusting for seasonal patterns), they are not expected to rise to the levels observed in 1998.

Natural Gas Supply and Demand

Total gas demand in 1999 rose by an estimated 0.8 percent from 1998 levels, after sinking more than 3 percent in 1998 due to weak heating demand. Scant improvement in the residential and commercial markets in 1999 was evident, particularly with the arrival of another warm fall quarter. Demand in 2000 is projected to rise by 4.6 percent to 22.4 trillion cubic feet, a jump of 1 trillion cubic feet over 1999's level. This, of course, would require normal heating demand in the first and fourth quarters. Gas demand is projected to continue to rise in 2001 by another 1 percent to 22.6 trillion cubic feet. Natural gas demand is expected to rise across all sectors in 2000 and 2001, led by the residential and electric utility sectors, which are expected to be up by 7.3 percent and 8.4 percent, respectively in 2000 (Figure 18).

Weather factors are largely behind the expected rise in residential and commercial demand, as 1998 and 1999 saw milder-than-normal winters (gas-weighted heating degree-days were 11.1 percent below normal in first quarter 1998 and 3.1 percent below normal in first quarter 1999). In 2000 and 2001 weather is assumed to be normal. The expected jump in electric utility demand in 2000 and continuing into 2001 is due largely to assumptions of higher average fuel oil prices relative to natural gas prices in the utility sector. Relatively high oil prices are expected to lead to an average annual utility gas price advantage of 57 cents per million Btu over fuel oil in 2000, and a 24 cents price advantage for gas in 2001. Also, as overall demand for electricity rises, gas is taking an increasing share of the power generation market, exemplified by utilities' plans for the construction of more gas-fired units.

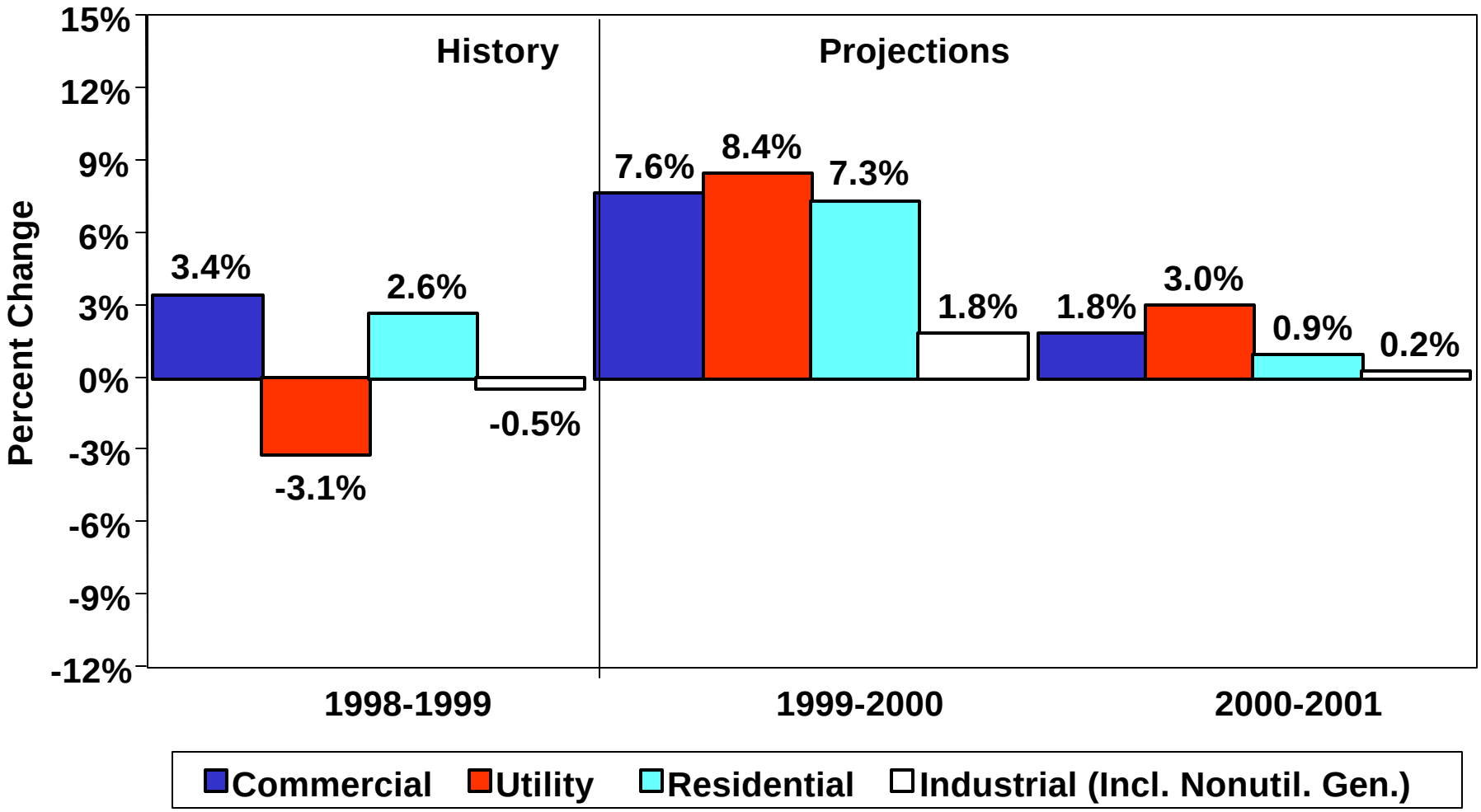
Natural gas production, estimated to have been 18.75 in 1999 due to the drop in gas prices in 1998 to below $2 per thousand cubic feet, is expected to improve somewhat in 2000 and 2001 as gas prices rise by 15 percent since 1998 on an annual basis. In 2000 gas production is projected to increase by 0.7 percent, and by another 0.3 percent in 2001 as gas prices continue to rise. Although gas drilling levels were high (on average) in 1998, they were significantly lower for much of 1999 and gas demand is expected to continue to increase at a faster pace than the amount of gas being replaced by new discoveries.

Natural gas imports, estimated to have risen by 11 percent in 1999, are projected to continue to rise by another 7.3 percent in 2000 and by almost 4 percent in 2001 as new pipeline capacity from Canada continues to increase. Total gas in storage is expected to end the heating season in March 31, 2000 at a lower level than it was in the previous year at the same time, as storage must meet incremental demand. Gas storage is expected to be generally lower over the forecast period than was seen in 1999, when storage was relatively higher than in the preceding 3 years.

Coal Demand and Supply

An increase in our estimates and forecasts of non-utility electricity generation resulted in our lowering of utility coal generation/consumption forecasts. Our current estimates/forecasts for total non-utility generation (500.8 Billion Kilowatt-hours in 1999 and 534.4 Billion Kilowatt-hours in 2000) (Figure 19) average 65.2 Billion Kilowatt-hours higher than our previous forecast. Although declines (relative to our previous

Figure 18. Changes in Natural Gas Demand by Sector



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

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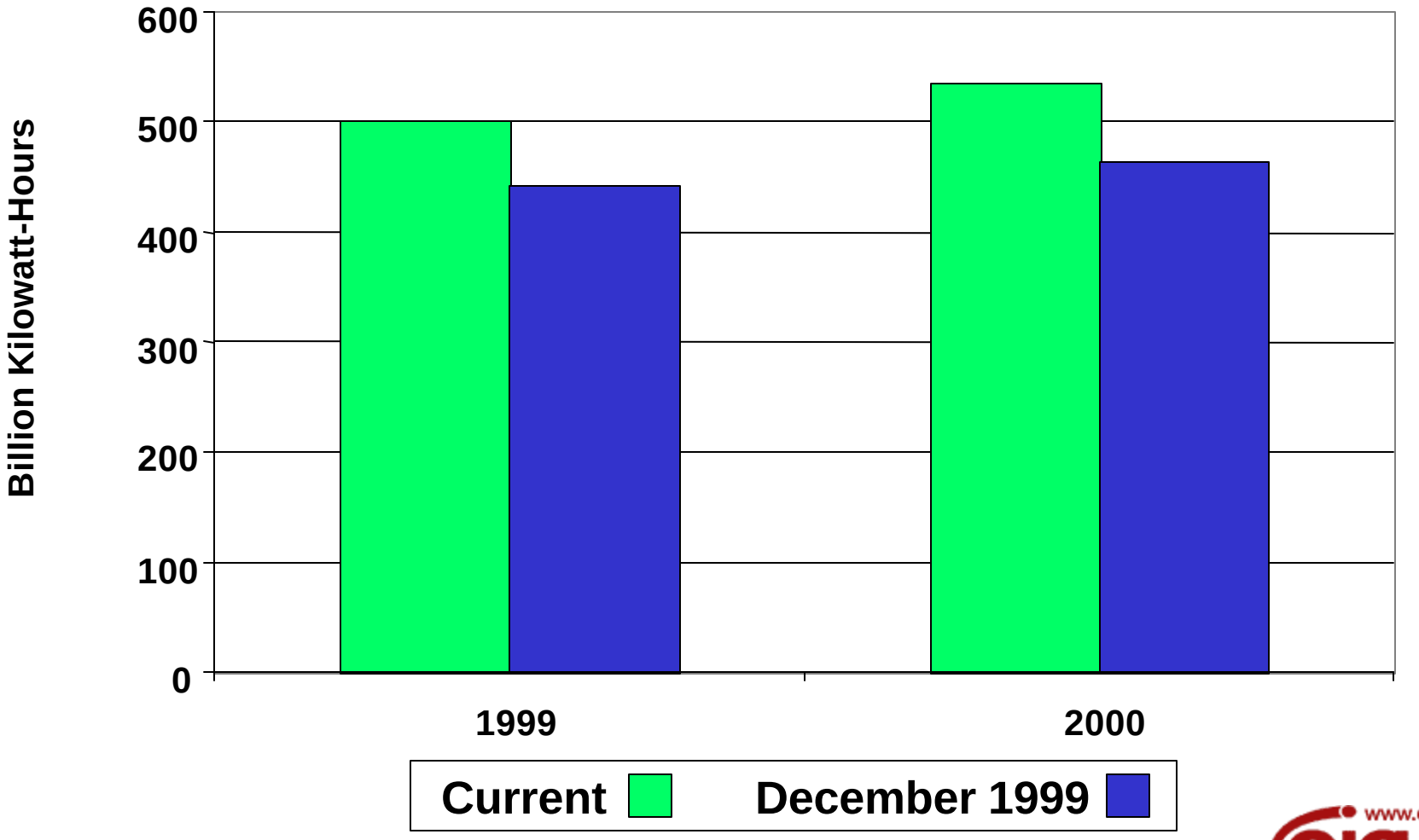
Figure 19. Non-Utility Electricity Generation

(Annual: Current vs Previous Outlook)



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

Outlook) in utility oil, natural gas and hydroelectric generation negated the effects of the new non-utility estimates on coal-fired generation in 1999, nearly 35 Billion Kilowatt-hours were shifted out of the 2000 forecast for utility coal-fired generation (Figure 20). The utility generation reduction led to a reduction in the utility coal consumption forecast of approximately 15 million short tons of coal in 2000 (it reduced growth nearly in half from 3.9 percent in our previous forecast to 2.1 percent currently).

The reduction in coal demand in the forecast has led to a similar reduction in our coal production forecast. Previously we had forecasted coal production to grow 2.7 percent in 2000, but now the growth in coal production has been reduced to 0.7 percent in 2000.

Electricity Demand and Supply

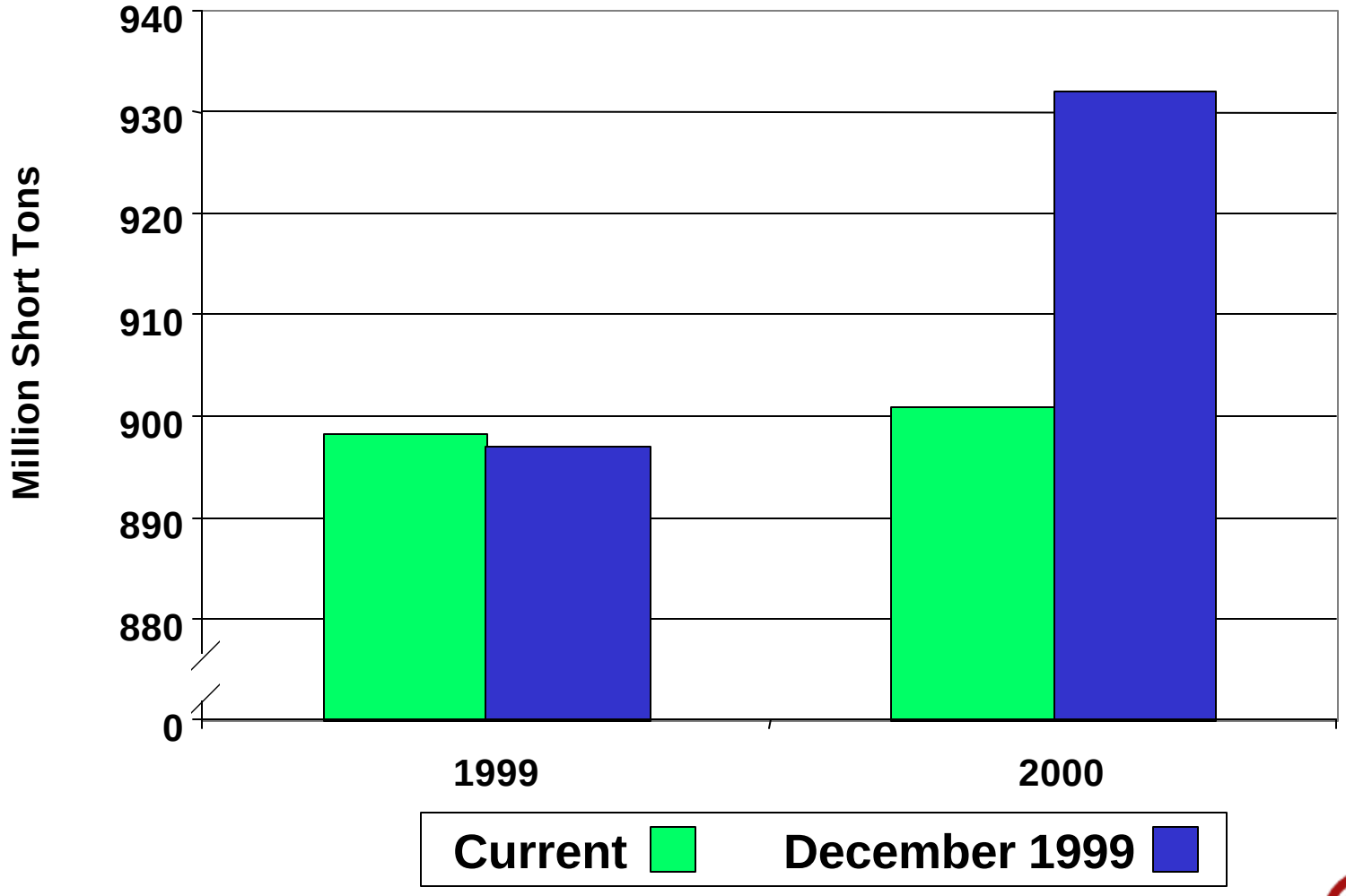
Total demand for electricity is projected to increase by 2.5 percent in 2000 and by 1.5 percent in 2001, based on assumptions regarding economic and weather factors. GDP is assumed to continue to rise during the forecast period, albeit at a slower pace than in 1999 and 1998. Heating degree-days in 2000 are also assumed to be 8 percent higher (colder weather) than they were in milder-than-normal 1999, which is reflected in the higher residential and commercial sector demand in 2000.

The fuel mix at electric utilities is projected to change significantly from what it was in 1999 (Figure 21). Coal and natural gas fired generation is projected to rise by 2.3 percent and 9.0 percent, respectively, in 2000, and continue to rise in 2001. However, oil-fired generation is projected to be down by 14.5 percent in 2000 due to oil prices that remain high relative to other fossil fuels. However, oil-fired generation is expected to recover somewhat in 2001 as world oil prices come down below $20 per barrel. Hydropower generation is projected to continue to fall in both forecast years. Nuclear generation is expected to be close to 1999 levels in 2000, then fall somewhat in 2001.

Data note. In this edition we have incorporated the latest information that EIA has on electricity supply from facilities other than those belonging to electric utilities. The details on historical electricity generation in Table 10 are consistent with those reported in EIA's December 1999 Electric Power Monthly. The nonutility electric output information is now stated in terms of net generation (we previously showed gross generation for this sector). Much of the growth in nonutility generation since 1997 has been the result of plant divestitures by electric utilities. The plant sales were largely responsible for an actual decline in reported electric output by utilities in 1999. Rather than try to anticipate the nature and magnitude of continuing plant sales in 2000 and beyond, we have assumed no additional divestitures for the forecast beyond what apparently occurred through this summer. This will tend to bias the electric utility output numbers up in the forecast, vice versa for the nonutility sector. We are nevertheless confident that the overall fuel use implications of the forecast are reasonable. In the future, we intend to combine electric utility and independent power producers for the purpose of electric supply representation, with additional output from industrial and commercial facilities treated as a separate category (or set of categories).

Figure 20. Utility Coal Consumption

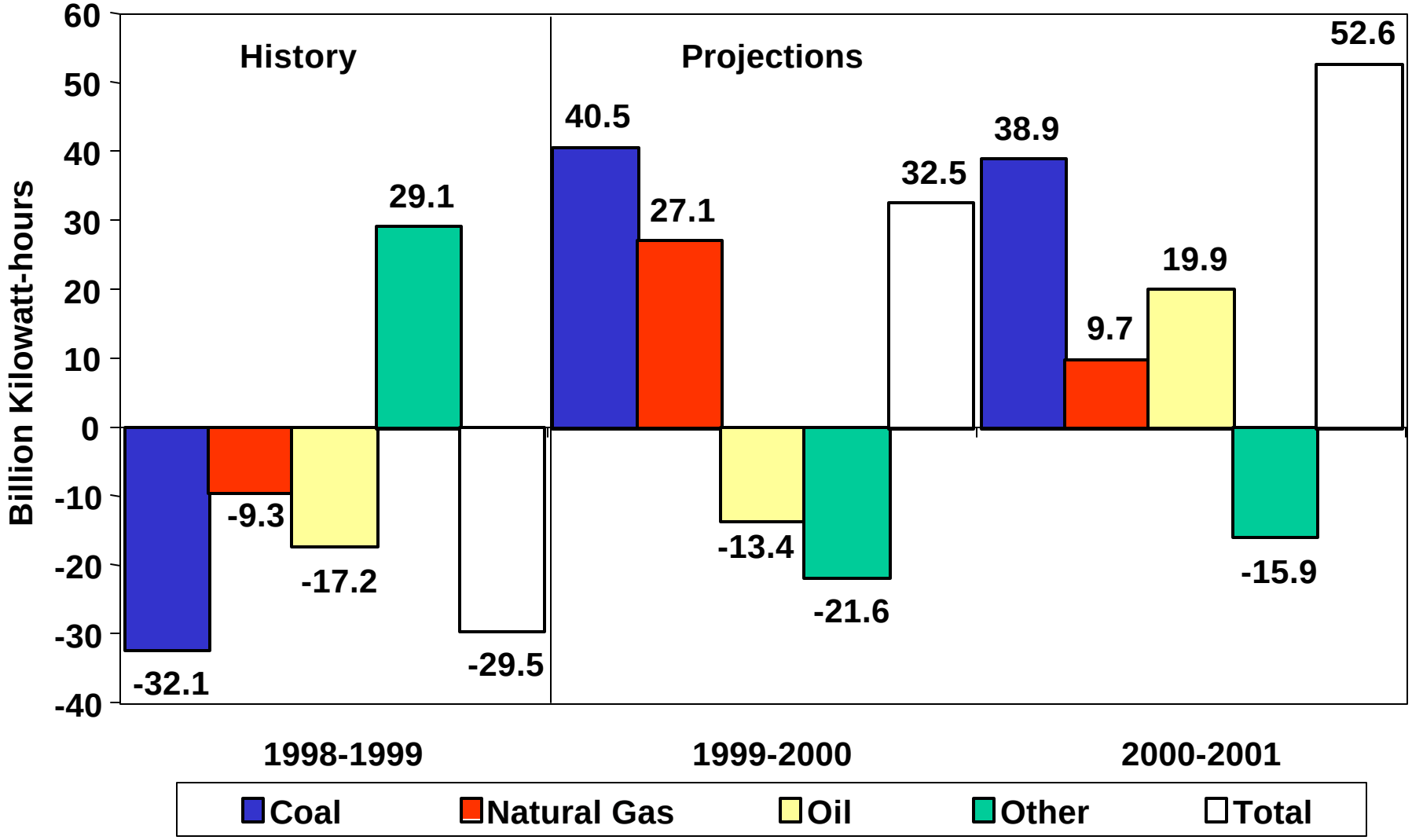
(Annual: Current vs Previous Outlook)



www.eia.doe.gov

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

Figure 21. Year-to-Year Changes in Electric Utility Generation by Fuel



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

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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 1992 dollars)	**7810**	**8122**	*8403*	*8672*	**4.0**	*3.5*	*3.2*
Imported Crude Oil Price [a] (nominal dollars per barrel)	**12.08**	**17.30**	*22.38*	*19.35*	**43.2**	*29.4*	*-13.5*
Petroleum Supply (million barrels per day)							
Crude Oil Production [b]	**6.25**	**5.93**	*5.90*	*5.75*	**-5.1**	*-0.5*	*-2.5*
Total Petroleum Net Imports (including SPR)	**9.76**	**9.75**	*10.47*	*11.06*	**-0.1**	*7.4*	*5.6*
Energy Demand							
World Petroleum (million barrels per day)	**73.6**	**74.7**	*76.1*	*78.1*	**1.5**	*1.9*	*2.6*
Petroleum (million barrels per day)	**18.92**	**19.44**	*19.59*	*20.08*	**2.7**	*0.8*	*2.5*
Natural Gas (trillion cubic feet)	**21.26**	**21.42**	*22.39*	*22.61*	**0.8**	*4.5*	*1.0*
Coalc (million short tons)	**1044**	**1047**	*1074*	*1094*	**0.3**	*2.6*	*1.9*
Electricity (billion kilowatthours)							
Utility Sales [d]	**3235**	**3267**	*3351*	*3403*	**1.0**	*2.6*	*1.6*
Nonutility/Sales [d]	**156**	**172**	*176*	*176*	**10.3**	*2.3*	*0.0*
Total	**3391**	**3439**	*3526*	*3579*	**1.4**	*2.5*	*1.5*
Total Energy Demand [f] (quadrillion Btu)	**94.5**	**96.1**	*98.0*	*99.3*	**1.6**	*1.9*	*1.4*
Total Energy Demand per Dollar of GDP (thousand Btu per 1992 Dollar)	**12.11**	**11.83**	*11.66*	*11.46*	**-2.3**	*-1.4*	*-1.7*
Renewable Energy as Percent of Total [g]	**7.0**	**6.9**	*6.7*	*6.6*			

[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 1998 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 CONTROL1299.

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 1992 dollars - SAAR)	**8013**	**8050**	**8159**	*8265*	*8304*	*8372*	*8435*	*8500*	*8577*	*8642*	*8699*	*8769*	**8122**	*8403*	*8672*
Percentage Change from Prior Year	**3.9**	**3.8**	**4.2**	*4.1*	*3.6*	*4.0*	*3.4*	*2.8*	*3.3*	*3.2*	*3.1*	*3.2*	**4.0**	*3.5*	*3.2*
Annualized Percent Change from Prior Quarter	**3.6**	**1.9**	**5.4**	*5.2*	*1.9*	*3.3*	*3.0*	*3.1*	*3.6*	*3.1*	*2.6*	*3.2*			
GDP Implicit Price Deflator (Index, 1992=1.000)	**1.132**	**1.136**	**1.139**	*1.141*	*1.148*	*1.151*	*1.155*	*1.160*	*1.165*	*1.168*	*1.172*	*1.176*	**1.137**	*1.153*	*1.170*
Percentage Change from Prior Year	**1.3**	**1.4**	**1.3**	*1.3*	*1.4*	*1.4*	*1.4*	*1.6*	*1.5*	*1.5*	*1.5*	*1.4*	**1.3**	*1.5*	*1.5*
Real Disposable Personal Income (billion chained 1992 Dollars - SAAR)	**5751**	**5796**	**5834**	*5892*	*5953*	*6012*	*6059*	*6099*	*6168*	*6220*	*6265*	*6309*	**5818**	*6031*	*6241*
Percentage Change from Prior Year	**4.3**	**4.1**	**3.7**	*3.5*	*3.5*	*3.7*	*3.9*	*3.5*	*3.6*	*3.5*	*3.4*	*3.4*	**3.9**	*3.7*	*3.5*
Manufacturing Production (Index, 1992=1.000)	**1.392**	**1.409**	**1.423**	*1.438*	*1.435*	*1.444*	*1.453*	*1.467*	*1.485*	*1.504*	*1.521*	*1.539*	**1.415**	*1.450*	*1.512*
Percentage Change from Prior Year	**3.5**	**4.1**	**4.3**	*4.0*	*3.1*	*2.5*	*2.1*	*2.1*	*3.5*	*4.2*	*4.7*	*4.9*	**4.0**	*2.4*	*4.3*
OECD Economic Growth (percent) [b]													**2.6**	*2.7*	*2.7*
Weather [c]															
Heating Degree-Days															
U.S.	**2154**	**490**	**82**	*1432*	*2264*	*522*	*85*	*1622*	*2235*	*522*	*85*	*1622*	**4158**	*4494*	*4464*
New England	**3039**	**786**	**133**	*2025*	*3219*	*894*	*167*	*2240*	*3179*	*893*	*167*	*2239*	**5983**	*6520*	*6478*
Middle Atlantic	**2819**	**629**	**60**	*1810*	*2934*	*709*	*104*	*2004*	*2897*	*708*	*104*	*2004*	**5318**	*5751*	*5712*
U.S. Gas-Weighted	**2275**	**517**	**84**	*1512*	*2379*	*546*	*95*	*1714*	*2348*	*545*	*96*	*1714*	**4388**	*4734*	*4703*
Cooling Degree-Days (U.S.)	**35**	**354**	**847**	*81*	*31*	*344*	*783*	*75*	*31*	*345*	*783*	*75*	**1317**	*1233*	*1234*

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

[b] OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, 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.

[c] Population-weighted degree days. A degree day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 1990 population. Normal is used for the forecast period and is defined as the average number of degree days between 1961 and 1990 for a given period.

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 CONTROL1299.

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 1992 dollars-SAAR)	**1495**	**1519**	**1549**	*1579*	*1610*	*1621*	*1629*	*1642*	*1660*	*1676*	*1687*	*1702*	**1535**	*1626*	*1681*
Real Exchange Rate (index)	**1.134**	**1.170**	**1.165**	*1.145*	*1.139*	*1.137*	*1.137*	*1.135*	*1.118*	*1.095*	*1.076*	*1.059*	**1.154**	*1.137*	*1.087*
Business Inventory Change (billion chained 1992 dollars-SAAR)	**0.0**	**-8.3**	**0.5**	*12.3*	*5.6*	*3.3*	*3.3*	*3.2*	*5.9*	*8.3*	*10.6*	*12.3*	**1.1**	*3.8*	*9.3*
Producer Price Index (index, 1982=1.000)	**1.228**	**1.245**	**1.267**	*1.280*	*1.294*	*1.294*	*1.295*	*1.297*	*1.295*	*1.296*	*1.300*	*1.304*	**1.255**	*1.295*	*1.299*
Consumer Price Index (index, 1982-1984=1.000)	**1.648**	**1.662**	**1.673**	*1.684*	*1.696*	*1.702*	*1.711*	*1.720*	*1.728*	*1.737*	*1.747*	*1.757*	**1.667**	*1.707*	*1.742*
Petroleum Product Price Index (index, 1982=1.000)	**0.446**	**0.591**	**0.684**	*0.723*	*0.792*	*0.776*	*0.742*	*0.711*	*0.713*	*0.695*	*0.673*	*0.660*	**0.611**	*0.755*	*0.685*
Non-Farm Employment (millions)	**127.7**	**128.2**	**128.9**	*129.6*	*129.8*	*130.5*	*131.0*	*131.4*	*131.9*	*132.2*	*132.5*	*132.8*	**128.6**	*130.7*	*132.4*
Commercial Employment (millions)	**88.5**	**89.2**	**89.8**	*90.4*	*90.7*	*91.1*	*91.6*	*92.2*	*92.7*	*93.0*	*93.3*	*93.6*	**89.5**	*91.4*	*93.2*
Total Industrial Production (index, 1992=1.000)	**1.346**	**1.361**	**1.375**	*1.389*	*1.388*	*1.397*	*1.406*	*1.418*	*1.434*	*1.451*	*1.466*	*1.482*	**1.368**	*1.402*	*1.458*
Housing Stock (millions)	**115.5**	**115.8**	**116.3**	*116.7*	*117.0*	*117.3*	*117.7*	*118.0*	*118.3*	*118.6*	*118.9*	*119.2*	**116.1**	*117.5*	*118.8*
Miscellaneous															
Gas Weighted Industrial Production (index, 1992=1.000)	**1.179**	**1.176**	**1.185**	*1.199*	*1.186*	*1.190*	*1.195*	*1.203*	*1.215*	*1.225*	*1.230*	*1.236*	**1.185**	*1.193*	*1.226*
Vehicle Miles Traveled [b] (million miles/day)	**6712**	**7545**	**7694**	*7195*	*6989*	*7685*	*7862*	*7388*	*7144*	*7859*	*8050*	*7588*	**7289**	*7482*	*7663*
Vehicle Fuel Efficiency (index, 1997=1.0)	**0.994**	**0.998**	**1.006**	*1.005*	*1.017*	*1.010*	*0.998*	*1.008*	*1.028*	*1.016*	*1.005*	*1.018*	**1.001**	*1.008*	*1.017*
Real Vehicle Fuel Cost (cents per mile)	**2.97**	**3.33**	**3.51**	*3.82*	*3.77*	*3.76*	*3.72*	*3.71*	*3.50*	*3.47*	*3.45*	*3.47*	**3.41**	*3.74*	*3.47*
Air Travel Capacity (mill. available ton-miles/day)	**431.0**	**452.4**	**467.2**	*466.7*	*464.1*	*466.6*	*483.1*	*473.3*	*485.9*	*486.7*	*504.4*	*494.6*	**454.5**	*471.8*	*492.9*
Aircraft Utilization (mill. revenue ton-miles/day)	**242.2**	**263.4**	**276.3**	*260.7*	*257.3*	*275.6*	*290.1*	*275.7*	*269.9*	*286.8*	*302.3*	*288.5*	**260.8**	*274.7*	*287.0*
Airline Ticket Price Index (index, 1982-1984=1.000)	**2.130**	**2.186**	**2.180**	*2.261*	*2.300*	*2.310*	*2.314*	*2.339*	*2.373*	*2.378*	*2.380*	*2.405*	**2.189**	*2.316*	*2.384*
Raw Steel Production (millions tons)	**25.39**	**25.97**	**26.26**	*26.34*	*26.12*	*26.17*	*26.07*	*26.47*	*26.72*	*27.03*	*26.86*	*27.22*	**103.68**	*104.82*	*107.83*

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

[b] Includes 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 CONTROL1299.

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**	**19.1**	**19.7**	*19.8*	*19.3*	*19.2*	*19.7*	*20.1*	*19.8*	*19.7*	*20.2*	*20.6*	**19.4**	*19.6*	*20.1*
U.S. Territories	**0.3**	**0.3**	**0.3**	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.4*	*0.3*	*0.3*	*0.4*	**0.3**	*0.3*	*0.3*
Canada	**1.9**	**1.8**	**1.9**	*2.0*	*1.9*	*1.9*	*2.0*	*2.0*	*1.9*	*1.9*	*2.0*	*2.0*	**1.9**	*1.9*	*2.0*
Europe	**15.2**	**13.8**	**14.3**	*15.4*	*15.1*	*14.2*	*14.7*	*15.4*	*15.3*	*14.3*	*14.9*	*15.6*	**14.7**	*14.9*	*15.0*
Japan	**6.2**	**5.0**	**5.2**	*5.7*	*6.1*	*5.0*	*5.2*	*5.7*	*6.1*	*5.0*	*5.3*	*5.7*	**5.5**	*5.5*	*5.5*
Australia and New Zealand	**1.0**	**1.0**	**1.0**	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.1*	**1.0**	*1.0*	*1.0*
Total OECD	**43.7**	**41.0**	**42.3**	*44.3*	*43.8*	*41.6*	*43.0*	*44.5*	*44.6*	*42.4*	*43.8*	*45.3*	**42.8**	*43.2*	*44.0*
Non-OECD															
Former Soviet Union	**3.8**	**3.5**	**3.6**	*3.7*	*3.8*	*3.6*	*3.6*	*3.6*	*3.8*	*3.7*	*3.7*	*3.7*	**3.6**	*3.7*	*3.7*
Europe	**1.6**	**1.6**	**1.5**	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	*1.7*	*1.7*	*1.7*	*1.7*	**1.6**	*1.6*	*1.7*
China	**4.4**	**4.3**	**4.3**	*4.3*	*4.6*	*4.5*	*4.5*	*4.5*	*4.8*	*4.8*	*4.7*	*4.8*	**4.3**	*4.5*	*4.8*
Other Asia	**8.8**	**8.9**	**8.7**	*9.0*	*9.2*	*9.2*	*8.9*	*9.3*	*9.7*	*9.7*	*9.3*	*9.8*	**8.9**	*9.2*	*9.6*
Other Non-OECD	**13.3**	**13.6**	**13.6**	*13.6*	*13.7*	*13.9*	*14.0*	*13.9*	*14.1*	*14.4*	*14.5*	*14.4*	**13.5**	*13.9*	*14.3*
Total Non-OECD	**31.9**	**31.8**	**31.7**	*32.2*	*32.8*	*32.9*	*32.6*	*33.0*	*34.1*	*34.2*	*33.9*	*34.3*	**31.9**	*32.9*	*34.1*
Total World Demand	**75.5**	**72.8**	**74.0**	*76.5*	*76.7*	*74.5*	*75.7*	*77.6*	*78.7*	*76.5*	*77.7*	*79.6*	**74.7**	*76.1*	*78.1*
Supply [b]															
OECD															
U.S. (50 States)	**8.9**	**9.0**	**9.0**	*9.1*	*9.1*	*9.0*	*8.9*	*8.9*	*8.9*	*8.9*	*8.9*	*8.8*	**9.0**	*9.0*	*8.9*
Canada	**2.6**	**2.6**	**2.6**	*2.6*	*2.7*	*2.7*	*2.7*	*2.7*	*2.7*	*2.7*	*2.7*	*2.7*	**2.6**	*2.7*	*2.7*
North Sea [c]	**6.3**	**6.0**	**6.2**	*6.4*	*6.6*	*6.4*	*6.6*	*6.8*	*6.9*	*6.7*	*7.0*	*7.2*	**6.2**	*6.6*	*6.9*
Other OECD	**1.5**	**1.5**	**1.5**	*1.5*	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	*1.7*	**1.5**	*1.6*	*1.6*
Total OECD	**19.3**	**19.1**	**19.4**	*19.7*	*19.9*	*19.7*	*19.8*	*20.0*	*20.1*	*19.9*	*20.2*	*20.4*	**19.4**	*19.9*	*20.1*
Non-OECD															
OPEC	**30.3**	**28.9**	**29.2**	*28.8*	*29.7*	*30.8*	*31.1*	*31.2*	*31.6*	*31.6*	*32.1*	*32.5*	**29.3**	*30.7*	*31.9*
Former Soviet Union	**7.2**	**7.3**	**7.4**	*7.5*	*7.4*	*7.3*	*7.3*	*7.4*	*7.4*	*7.3*	*7.4*	*7.4*	**7.4**	*7.4*	*7.4*
China	**3.2**	**3.2**	**3.2**	*3.2*	*3.2*	*3.2*	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*	**3.2**	*3.2*	*3.3*
Mexico	**3.6**	**3.4**	**3.3**	*3.4*	*3.4*	*3.5*	*3.6*	*3.6*	*3.7*	*3.7*	*3.7*	*3.8*	**3.4**	*3.5*	*3.7*
Other Non-OECD	**11.1**	**10.9**	**10.9**	*11.1*	*11.1*	*11.2*	*11.2*	*11.4*	*11.5*	*11.6*	*11.7*	*11.8*	**11.0**	*11.2*	*11.6*
Total Non-OECD	**55.4**	**53.7**	**54.1**	*53.9*	*54.7*	*55.9*	*56.5*	*56.8*	*57.3*	*57.4*	*58.1*	*58.8*	**54.3**	*56.0*	*57.9*
Total World Supply	**74.7**	**72.7**	**73.5**	*73.6*	*74.6*	*75.6*	*76.4*	*76.9*	*77.5*	*77.3*	*78.3*	*79.1*	**73.6**	*75.9*	*78.1*
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR)	**0.3**	**-0.2**	**0.3**	*1.0*	*0.0*	*-0.6*	*-0.3*	*0.6*	*0.1*	*-0.7*	*-0.3*	*0.5*	**0.4**	*-0.1*	*-0.1*
Other	**0.5**	**0.2**	**0.2**	*1.8*	*2.0*	*-0.5*	*-0.4*	*0.1*	*1.1*	*-0.1*	*-0.4*	*0.0*	**0.7**	*0.3*	*0.1*
Total Stock Withdrawals	**0.8**	**0.0**	**0.6**	*2.9*	*2.0*	*-1.1*	*-0.7*	*0.7*	*1.3*	*-0.8*	*-0.7*	*0.5*	**1.1**	*0.2*	*0.1*
OECD Comm. Stocks, End (bill. bbls.)	**2.8**	**2.8**	**2.8**	*2.6*	*2.6*	*2.6*	*2.7*	*2.6*	*2.6*	*2.6*	*2.7*	*2.6*	**2.6**	*2.6*	*2.6*
Non-OPEC Supply	**44.4**	**43.9**	**44.3**	*44.8*	*45.0*	*44.9*	*45.2*	*45.7*	*45.9*	*45.7*	*46.3*	*46.6*	**44.3**	*45.2*	*46.1*
Net Exports from Former Soviet Union	**3.4**	**3.8**	**3.9**	*3.8*	*3.6*	*3.7*	*3.7*	*3.8*	*3.6*	*3.6*	*3.7*	*3.7*	**3.7**	*3.7*	*3.7*

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

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

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

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, 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)	**10.92**	**15.44**	**19.64**	*23.27*	*23.83*	*22.75*	*22.00*	*21.01*	*19.75*	*19.50*	*19.17*	*19.00*	**17.30**	*22.38*	*19.35*
Natural Gas Wellhead															
(dollars per thousand cubic feet)	**1.74**	**2.04**	**2.31**	*2.40*	*2.24*	*2.16*	*2.20*	*2.42*	*2.29*	*2.17*	*2.21*	*2.42*	**2.13**	*2.26*	*2.27*
Petroleum Products															
Gasoline Retail [b] (dollars per gallon)															
All Grades	**0.99**	**1.17**	**1.25**	*1.30*	*1.32*	*1.37*	*1.35*	*1.29*	*1.26*	*1.29*	*1.29*	*1.25*	**1.18**	*1.33*	*1.27*
Regular Unleaded	**0.95**	**1.13**	**1.21**	*1.26*	*1.28*	*1.33*	*1.31*	*1.26*	*1.22*	*1.26*	*1.25*	*1.21*	**1.14**	*1.29*	*1.24*
No. 2 Diesel Oil, Retail															
(dollars per gallon)	**0.97**	**1.08**	**1.18**	*1.27*	*1.26*	*1.25*	*1.24*	*1.26*	*1.22*	*1.21*	*1.19*	*1.22*	**1.13**	*1.25*	*1.21*
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	**0.36**	**0.44**	**0.56**	*0.64*	*0.66*	*0.64*	*0.65*	*0.67*	*0.61*	*0.60*	*0.59*	*0.61*	**0.51**	*0.66*	*0.61*
No. 2 Heating Oil, Retail															
(dollars per gallon)	**0.80**	**0.82**	**0.86**	*1.01*	*1.08*	*1.03*	*0.99*	*1.05*	*1.03*	*0.99*	*0.94*	*1.00*	**0.87**	*1.05*	*1.01*
No. 6 Residual Fuel Oil, Retail [c]															
(dollars per barrel)	**11.28**	**14.05**	**17.73**	*20.91*	*22.76*	*20.66*	*19.91*	*20.60*	*20.07*	*18.23*	*17.69*	*19.32*	**15.77**	*21.04*	*18.90*
Electric Utility Fuels															
Coal															
(dollars per million Btu)	**1.24**	**1.23**	**1.21**	*1.23*	*1.23*	*1.23*	*1.21*	*1.21*	*1.22*	*1.23*	*1.21*	*1.20*	**1.23**	*1.22*	*1.21*
Heavy Fuel Oil [d]															
(dollars per million Btu)	**1.72**	**2.26**	**2.84**	*3.42*	*3.54*	*3.35*	*3.30*	*3.36*	*3.12*	*2.97*	*2.93*	*3.16*	**2.45**	*3.39*	*3.05*
Natural Gas															
(dollars per million Btu)	**2.19**	**2.42**	**2.70**	*2.92*	*2.92*	*2.73*	*2.74*	*3.01*	*2.94*	*2.71*	*2.72*	*3.00*	**2.58**	*2.82*	*2.81*
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	**6.06**	**6.84**	**8.48**	*7.23*	*6.67*	*7.30*	*8.64*	*6.95*	*6.77*	*7.39*	*8.73*	*7.03*	**6.70**	*7.00*	*7.09*
Electricity															
(cents per kilowatthour)	**7.79**	**8.28**	**8.43**	*7.96*	*7.63*	*8.04*	*8.30*	*7.85*	*7.45*	*8.05*	*8.31*	*7.85*	**8.13**	*7.97*	*7.93*

[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 third quarter of 1999. Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: *Petroleum Marketing Monthly*, DOE/EIA-0380; *Natural Gas Monthly*, DOE/EIA-0130; *Monthly Energy Review*, DOE/EIA-0035; *Electric Power Monthly*, DOE/EIA-0226.

Table 5. U.S. Petroleum Supply and Demand: Mid World Oil Price Case

(Million Barrels per Day, Except Closing Stocks)

	1999				2000				2001				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1999	2000	2001
Supply															
Crude Oil Supply															
Domestic Production [a]	**6.00**	**5.95**	**5.87**	*5.90*	*5.99*	*5.92*	*5.85*	*5.84*	*5.82*	*5.76*	*5.73*	*5.69*	**5.93**	*5.90*	*5.75*
Alaska	**1.13**	**1.04**	**0.98**	*1.04*	*1.02*	*0.94*	*0.91*	*0.94*	*0.92*	*0.88*	*0.91*	*0.92*	**1.05**	*0.95*	*0.91*
Lower 48	**4.86**	**4.91**	**4.89**	*4.86*	*4.97*	*4.98*	*4.94*	*4.90*	*4.90*	*4.88*	*4.83*	*4.78*	**4.88**	*4.95*	*4.85*
Net Imports (including SPR) [b]	**8.40**	**8.69**	**8.69**	*8.27*	*8.67*	*9.24*	*9.50*	*9.02*	*9.02*	*9.66*	*9.83*	*9.45*	**8.51**	*9.11*	*9.49*
Other SPR Supply	**0.00**	**0.00**	**0.07**	*0.10*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.04**	*0.00*	*0.00*
SPR Stock Withdrawn or Added (-)	**-0.01**	**-0.03**	**-0.01**	*0.08*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.01**	*0.00*	*0.00*
Other Stock Withdrawn or Added (-)	**-0.23**	**0.15**	**0.31**	*0.13*	*-0.23*	*-0.09*	*0.05*	*0.04*	*-0.08*	*-0.06*	*0.08*	*0.05*	**0.09**	*-0.06*	*0.00*
Product Supplied and Losses	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.00**	*0.00*	*0.00*
Unaccounted-for Crude Oil	**0.26**	**0.00**	**0.15**	*0.40*	*0.20*	*0.21*	*0.22*	*0.21*	*0.21*	*0.22*	*0.22*	*0.22*	**0.20**	*0.21*	*0.22*
Total Crude Oil Supply	**14.42**	**15.01**	**15.21**	*14.76*	*14.63*	*15.28*	*15.62*	*15.11*	*14.97*	*15.58*	*15.87*	*15.41*	**14.85**	*15.16*	*15.46*
Other Supply															
NGL Production	**1.72**	**1.79**	**1.88**	*1.87*	*1.85*	*1.83*	*1.81*	*1.80*	*1.84*	*1.85*	*1.83*	*1.83*	**1.82**	*1.82*	*1.84*
Other Hydrocarbon and Alcohol Inputs	**0.37**	**0.37**	**0.38**	*0.39*	*0.37*	*0.36*	*0.37*	*0.39*	*0.38*	*0.36*	*0.37*	*0.40*	**0.38**	*0.37*	*0.37*
Crude Oil Product Supplied	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.00**	*0.00*	*0.00*
Processing Gain	**0.84**	**0.88**	**0.90**	*0.96*	*0.88*	*0.91*	*0.92*	*0.89*	*0.87*	*0.92*	*0.94*	*0.91*	**0.90**	*0.90*	*0.91*
Net Product Imports [c]	**1.29**	**1.34**	**1.26**	*1.05*	*1.34*	*1.35*	*1.39*	*1.35*	*1.54*	*1.59*	*1.57*	*1.57*	**1.24**	*1.36*	*1.57*
Product Stock Withdrawn or Added (-) [d]	**0.53**	**-0.33**	**0.04**	*0.80*	*0.23*	*-0.53*	*-0.36*	*0.56*	*0.22*	*-0.59*	*-0.34*	*0.45*	**0.26**	*-0.03*	*-0.07*
Total Supply	**19.17**	**19.07**	**19.67**	*19.83*	*19.31*	*19.19*	*19.74*	*20.10*	*19.82*	*19.70*	*20.24*	*20.56*	**19.44**	*19.59*	*20.08*
Demand															
Motor Gasoline	**7.93**	**8.52**	**8.58**	*8.49*	*8.06*	*8.58*	*8.83*	*8.69*	*8.15*	*8.72*	*8.98*	*8.83*	**8.38**	*8.54*	*8.67*
Jet Fuel	**1.70**	**1.62**	**1.68**	*1.69*	*1.72*	*1.67*	*1.73*	*1.75*	*1.77*	*1.71*	*1.77*	*1.79*	**1.67**	*1.72*	*1.76*
Distillate Fuel Oil	**3.70**	**3.36**	**3.40**	*3.83*	*3.85*	*3.51*	*3.46*	*3.70*	*3.95*	*3.61*	*3.57*	*3.82*	**3.57**	*3.63*	*3.74*
Residual Fuel Oil	**0.97**	**0.78**	**0.87**	*0.76*	*0.83*	*0.68*	*0.69*	*0.83*	*0.98*	*0.79*	*0.80*	*0.90*	**0.84**	*0.76*	*0.87*
Other Oils [e]	**4.88**	**4.80**	**5.15**	*5.05*	*4.84*	*4.75*	*5.03*	*5.14*	*4.97*	*4.86*	*5.12*	*5.22*	**4.97**	*4.94*	*5.05*
Total Demand	**19.17**	**19.08**	**19.68**	*19.81*	*19.31*	*19.19*	*19.74*	*20.10*	*19.82*	*19.70*	*20.24*	*20.56*	**19.44**	*19.59*	*20.08*
Total Petroleum Net Imports	**9.70**	**10.03**	**9.96**	*9.32*	*10.01*	*10.59*	*10.89*	*10.37*	*10.56*	*11.25*	*11.41*	*11.02*	**9.75**	*10.47*	*11.06*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**345**	**331**	**303**	*291*	*312*	*321*	*316*	*312*	*319*	*325*	*317*	*312*	**291**	*312*	*312*
Total Motor Gasoline	**217**	**215**	**204**	*195*	*207*	*208*	*203*	*196*	*209*	*209*	*203*	*202*	**195**	*196*	*202*
Finished Motor Gasoline	**169**	**171**	**159**	*154*	*162*	*167*	*162*	*155*	*164*	*169*	*162*	*161*	**154**	*155*	*161*
Blending Components	**48**	**44**	**45**	*41*	*45*	*41*	*41*	*41*	*45*	*41*	*41*	*41*	**41**	*41*	*41*
Jet Fuel	**42**	**46**	**48**	*41*	*38*	*39*	*42*	*42*	*38*	*41*	*44*	*44*	**41**	*42*	*44*
Distillate Fuel Oil	**126**	**133**	**145**	*128*	*99*	*104*	*120*	*124*	*101*	*112*	*130*	*138*	**128**	*124*	*138*
Residual Fuel Oil	**40**	**43**	**39**	*38*	*34*	*38*	*41*	*44*	*37*	*40*	*40*	*42*	**38**	*44*	*42*
Other Oils [e]	**280**	**298**	**294**	*255*	*259*	*295*	*312*	*260*	*261*	*298*	*314*	*264*	**255**	*260*	*264*
Total Stocks (excluding SPR)	**1049**	**1065**	**1033**	*947*	*948*	*1004*	*1033*	*978*	*965*	*1024*	*1048*	*1002*	**947**	*978*	*1002*
Crude Oil in SPR	**572**	**575**	**575**	*568*	*568*	*568*	*568*	*568*	*568*	*568*	*568*	*568*	**568**	*568*	*568*
Total Stocks (including SPR)	**1621**	**1640**	**1608**	*1515*	*1515*	*1572*	*1601*	*1546*	*1533*	*1592*	*1616*	*1570*	**1515**	*1546*	*1570*

[a] Includes lease condensate.

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

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

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

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

SPR: Strategic Petroleum Reserve

NGL: Natural Gas Liquids

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

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

Table 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%

[a]Percent change in demand quantity resulting from specified percent changes in model inputs.
[b]Short-Term Integrated Forecasting System.
[c]Refiner acquisitions cost of imported crude oil.
[d]Average unit value of marketed natural gas production reported by States.
[e]Refers to percent changes in degree-days.
[f]Response during fall/winter period(first and fourth calendar quarters) refers to change in heating degree-days. Response during the spring/summer period 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	*6.25*	*5.61*	*0.64*	*0.09*	*0.56*
Lower 48 States	*5.29*	*4.67*	*0.62*	*0.07*	*0.54*
Alaska	*0.97*	*0.94*	*0.03*	*0.01*	*0.01*

Note: Components provided are for the fourth quarter 2000. 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	**4.67**	**4.66**	**4.71**	*4.70*	*4.74*	*4.71*	*4.72*	*4.72*	*4.72*	*4.73*	*4.75*	*4.75*	**18.75**	*18.88*	*18.94*
Net Imports	**0.83**	**0.79**	**0.86**	*0.84*	*0.89*	*0.85*	*0.92*	*0.91*	*0.91*	*0.90*	*0.95*	*0.94*	**3.32**	*3.56*	*3.71*
Supplemental Gaseous Fuels	**0.03**	**0.03**	**0.03**	*0.03*	*0.04*	*0.03*	*0.03*	*0.03*	*0.04*	*0.03*	*0.03*	*0.03*	**0.12**	*0.13*	*0.13*
Total New Supply	**5.54**	**5.48**	**5.60**	*5.58*	*5.66*	*5.59*	*5.66*	*5.66*	*5.67*	*5.66*	*5.72*	*5.72*	**22.20**	*22.58*	*22.78*
Total Underground Storage															
Opening	**7.04**	**5.79**	**6.50**	*7.24*	*6.98*	*5.35*	*6.18*	*7.10*	*6.68*	*5.35*	*6.19*	*7.11*	**7.04**	*6.98*	*6.68*
Closing	**5.79**	**6.50**	**7.24**	*6.98*	*5.35*	*6.18*	*7.10*	*6.68*	*5.35*	*6.19*	*7.11*	*6.69*	**6.98**	*6.68*	*6.69*
Net Withdrawals	**1.25**	**-0.71**	**-0.74**	*0.27*	*1.63*	*-0.83*	*-0.92*	*0.42*	*1.33*	*-0.83*	*-0.92*	*0.42*	**0.07**	*0.29*	*-0.01*
Total Supply	**6.80**	**4.77**	**4.85**	*5.84*	*7.29*	*4.76*	*4.74*	*6.08*	*7.00*	*4.83*	*4.80*	*6.14*	**22.26**	*22.87*	*22.77*
Balancing Item [a]	**0.01**	**-0.03**	**-0.34**	*-0.49*	*-0.06*	*0.15*	*-0.16*	*-0.40*	*0.23*	*0.15*	*-0.14*	*-0.40*	**-0.85**	*-0.48*	*-0.16*
Total Primary Supply	**6.80**	**4.75**	**4.52**	*5.35*	*7.22*	*4.90*	*4.58*	*5.68*	*7.23*	*4.98*	*4.67*	*5.74*	**21.42**	*22.39*	*22.61*
Demand															
Lease and Plant Fuel	**0.31**	**0.31**	**0.31**	*0.30*	*0.30*	*0.30*	*0.30*	*0.30*	*0.30*	*0.30*	*0.30*	*0.30*	**1.22**	*1.20*	*1.20*
Pipeline Use	**0.20**	**0.14**	**0.14**	*0.17*	*0.21*	*0.14*	*0.13*	*0.17*	*0.21*	*0.14*	*0.13*	*0.17*	**0.65**	*0.65*	*0.65*
Residential	**2.24**	**0.81**	**0.37**	*1.22*	*2.39*	*0.83*	*0.36*	*1.40*	*2.41*	*0.84*	*0.37*	*1.41*	**4.64**	*4.98*	*5.02*
Commercial	**1.27**	**0.60**	**0.43**	*0.80*	*1.37*	*0.62*	*0.44*	*0.90*	*1.40*	*0.64*	*0.45*	*0.92*	**3.10**	*3.34*	*3.40*
Industrial (Incl. Nonutility Use)	**2.24**	**2.04**	**2.12**	*2.25*	*2.37*	*2.11*	*2.07*	*2.26*	*2.33*	*2.12*	*2.09*	*2.28*	**8.65**	*8.80*	*8.82*
Electric Utilities	***0.54***	***0.85***	***1.15***	*0.62*	*0.58*	*0.91*	*1.28*	*0.65*	*0.59*	*0.94*	*1.33*	*0.66*	**3.16**	*3.42*	*3.52*
Total Demand	**6.80**	**4.75**	**4.52**	*5.35*	*7.22*	*4.90*	*4.58*	*5.68*	*7.23*	*4.98*	*4.67*	*5.74*	**21.42**	*22.39*	*22.61*

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

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

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

Table 9. U.S. Coal Supply and Demand: Mid World Oil Price Case

(Million Short Tons)

	1999				2000				2001				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1999	2000	2001
Supply															
Production	**282.3**	**263.3**	**277.5**	*286.6*	*277.8*	*281.7*	*273.2*	*285.3*	*275.7*	*283.3*	*279.3*	*289.8*	**1109.6**	*1117.9*	*1128.0*
Appalachia	**113.9**	**102.7**	**110.5**	*118.1*	*114.5*	*117.7*	*106.6*	*115.5*	*115.9*	*118.6*	*108.2*	*118.2*	**445.3**	*454.3*	*460.8*
Interior	**40.1**	**40.8**	**39.5**	*41.5*	*39.2*	*37.5*	*37.1*	*39.4*	*36.7*	*35.1*	*34.9*	*37.3*	**162.0**	*153.2*	*144.0*
Western	**128.2**	**119.8**	**127.4**	*127.0*	*124.1*	*126.4*	*129.5*	*130.4*	*124.4*	*126.8*	*130.8*	*132.0*	**502.4**	*510.4*	*514.0*
Primary Stock Levels [a]															
Opening	**36.1**	**42.4**	**41.5**	*35.1*	*34.4*	*41.3*	*41.9*	*35.5*	*34.6*	*41.3*	*41.9*	*35.5*	**36.1**	*34.4*	*34.6*
Closing	**42.4**	**41.5**	**35.1**	*34.4*	*41.3*	*41.9*	*35.5*	*34.6*	*41.3*	*41.9*	*35.5*	*34.6*	**34.4**	*34.6*	*34.6*
Net Withdrawals	**-6.2**	**0.8**	**6.5**	*0.7*	*-6.9*	*-0.6*	*6.4*	*0.9*	*-6.6*	*-0.6*	*6.4*	*0.9*	**1.8**	*-0.3*	*(S)*
Imports	**2.2**	**2.1**	**2.4**	*2.3*	*2.5*	*2.5*	*2.5*	*2.6*	*2.9*	*2.9*	*2.9*	*2.9*	**9.0**	*10.2*	*11.6*
Exports	**13.0**	**14.4**	**16.1**	*17.8*	*15.4*	*15.6*	*15.9*	*15.8*	*15.6*	*15.8*	*16.1*	*16.0*	**61.2**	*62.7*	*63.5*
Total Net Domestic Supply	**265.4**	**251.8**	**270.3**	*271.8*	*258.0*	*268.0*	*266.2*	*273.0*	*256.3*	*269.7*	*272.5*	*277.6*	**1059.2**	*1065.2*	*1076.1*
Secondary Stock Levels [b]															
Opening	**129.5**	**144.2**	**152.9**	*139.8*	*155.6*	*150.7*	*166.5*	*149.7*	*159.6*	*149.5*	*161.4*	*145.1*	**129.5**	*155.6*	*159.6*
Closing	**144.2**	**152.9**	**139.8**	*155.6*	*150.7*	*166.5*	*149.7*	*159.6*	*149.5*	*161.4*	*145.1*	*154.6*	**155.6**	*159.6*	*154.6*
Net Withdrawals	**-14.7**	**-8.7**	**13.1**	*-15.8*	*4.9*	*-15.7*	*16.8*	*-10.0*	*10.1*	*-11.9*	*16.3*	*-9.4*	**-26.2**	*-4.0*	*5.1*
Waste Coal Supplied to IPPs [c]	**2.3**	**2.4**	**2.7**	*2.9*	*3.2*	*3.2*	*3.2*	*3.2*	*3.3*	*3.3*	*3.3*	*3.3*	**10.3**	*12.7*	*13.2*
Total Supply	**252.9**	**245.5**	**286.1**	*258.9*	*266.0*	*255.5*	*286.2*	*266.2*	*269.7*	*261.1*	*292.1*	*271.4*	**1043.4**	*1073.9*	*1094.4*
Demand															
Coke Plants	**6.8**	**7.1**	**6.7**	*7.0*	*7.0*	*6.8*	*6.8*	*7.0*	*7.1*	*6.9*	*6.9*	*7.0*	**27.6**	*27.6*	*28.0*
Electricity Production															
Electric Utilities	**217.3**	**214.7**	**247.9**	*218.4*	*226.4*	*217.9*	*247.9*	*225.1*	*229.7*	*223.1*	*253.3*	*229.7*	**898.2**	*917.4*	*935.9*
Nonutilities (Excl. Cogen.) [d]	**8.8**	**10.7**	**12.7**	*12.9*	*13.1*	*12.8*	*13.5*	*13.5*	*13.6*	*13.3*	*14.1*	*14.0*	**45.1**	*52.9*	*55.0*
Retail and General Industry [e]	**19.4**	**17.7**	**18.1**	*20.6*	*19.6*	*18.0*	*17.9*	*20.6*	*19.3*	*17.8*	*17.8*	*20.6*	**75.8**	*76.1*	*75.5*
Total Demand	**252.2**	**250.2**	**285.4**	*258.9*	*266.0*	*255.5*	*286.2*	*266.2*	*269.7*	*261.1*	*292.1*	*271.4*	**1046.6**	*1073.9*	*1094.4*
Discrepancy [f]	**0.7**	**-4.7**	**0.7**	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	***-3.2***	*0.0*	*0.0*

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

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

[c] Estimated independent power producers (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes, 1.2 million tons in 1999 and 3.1 million tons in 2000.

[d] Estimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA). Quarterly coal consumption estimates for 1998 and projections for 1999 and 2000 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).

[e] Synfuels plant demand in 1993 was 1.7 million tons per quarter and is assumed to remain at that level.

[f] Total Demand includes estimated IPP consumption.

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

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

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

Table 10. U.S. Electricity Supply and Demand: Mid World Oil Price Case

(Billion Kilowatt-hours)

	1999				2000				2001				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1999	2000	2001
Supply															
Net Utility Generation															
Coal	**431.7**	**426.5**	**489.0**	*428.3*	*449.4*	*433.3*	*489.6*	*443.6*	*455.9*	*443.8*	*501.4*	*453.7*	**1775.4**	*1815.9*	*1854.8*
Petroleum	**26.9**	**23.0**	**27.8**	*15.3*	*21.3*	*16.5*	*21.7*	*20.1*	*26.6*	*21.8*	*27.1*	*24.0*	**93.0**	*79.5*	*99.5*
Natural Gas	**52.0**	**81.3**	**107.7**	*59.0*	*55.3*	*87.0*	*122.7*	*61.9*	*56.0*	*90.2*	*127.2*	*63.2*	**299.9**	*327.0*	*336.7*
Nuclear	**181.2**	**166.1**	**195.0**	*175.5*	*182.3*	*165.1*	*193.9*	*174.7*	*178.7*	*162.2*	*190.5*	*171.7*	**717.9**	*716.0*	*703.0*
Hydroelectric	**83.4**	**79.8**	**69.8**	*59.7*	*73.4*	*76.1*	*63.5*	*61.5*	*71.7*	*75.4*	*62.5*	*62.0*	**292.8**	*274.6*	*271.6*
Geothermal and Other [a]	**1.6**	**1.0**	**0.5**	*0.6*	*0.5*	*0.5*	*0.6*	*0.6*	*0.5*	*0.5*	*0.6*	*0.6*	**3.7**	*2.2*	*2.2*
Subtotal	**776.8**	**777.7**	**889.9**	*738.3*	*782.3*	*778.6*	*892.0*	*762.5*	*789.5*	*793.9*	*909.3*	*775.2*	**3182.7**	*3215.2*	*3267.9*
Nonutility Generation [b]															
Coal	**20.6**	**24.7**	**33.6**	*33.6*	*30.4*	*29.5*	*31.8*	*32.9*	*30.9*	*30.0*	*32.3*	*33.4*	**112.6**	*124.6*	*126.6*
Petroleum	**6.5**	**7.2**	**7.4**	*7.4*	*7.8*	*7.5*	*8.1*	*9.1*	*7.7*	*7.5*	*8.1*	*9.1*	**28.5**	*32.5*	*32.5*
Natural Gas	**52.4**	**57.5**	**74.0**	*74.0*	*64.3*	*61.6*	*67.0*	*75.0*	*64.2*	*62.2*	*67.7*	*75.8*	**257.9**	*267.9*	*269.9*
Other Gaseous Fuels [c]	**1.5**	**1.7**	**2.1**	*2.1*	*2.0*	*1.9*	*2.0*	*2.3*	*2.0*	*1.9*	*2.1*	*2.3*	**7.4**	*8.1*	*8.2*
Hydroelectric	**3.4**	**3.4**	**2.4**	*2.4*	*2.4*	*2.3*	*2.5*	*2.8*	*2.4*	*2.3*	*2.5*	*2.8*	**11.6**	*10.0*	*10.1*
Geothermal and Other [d]	**18.7**	**20.1**	**21.8**	*22.2*	*21.8*	*20.9*	*23.0*	*25.6*	*22.1*	*21.2*	*23.3*	*25.9*	**82.8**	*91.2*	*92.5*
Subtotal	**103.2**	**114.7**	**141.3**	*141.6*	*128.6*	*123.6*	*134.5*	*147.7*	*129.3*	*125.2*	*136.1*	*149.4*	**500.8**	*534.4*	*539.9*
Total Generation	**879.9**	**892.4**	**1031.2**	*880.0*	*910.9*	*902.1*	*1026.4*	*910.1*	*918.7*	*919.1*	*1045.4*	*924.5*	**3683.5**	*3749.6*	*3807.8*
Net Imports [e]	**2.0**	**7.6**	**11.5**	*8.2*	*6.7*	*6.9*	*9.6*	*7.2*	*6.8*	*7.3*	*9.0*	*7.0*	**29.3**	*30.4*	*30.0*
Total Supply	**881.9**	**900.0**	**1042.7**	*888.2*	*917.6*	*909.0*	*1036.0*	*917.3*	*925.5*	*926.4*	*1054.4*	*931.5*	**3712.8**	*3780.0*	*3837.8*
Losses and Unaccounted for [f]	**62.0**	**85.9**	**65.1**	*60.6*	*48.1*	*75.8*	*65.1*	*64.6*	*49.0*	*77.4*	*66.3*	*65.7*	**273.6**	*253.7*	*258.4*
Demand															
Electric Utility Sales															
Residential	**286.0**	**249.2**	**349.5**	*255.5*	*303.8*	*259.9*	*341.4*	*269.2*	*307.8*	*266.4*	*349.2*	*274.5*	**1140.1**	*1174.3*	*1197.9*
Commercial	**226.0**	**236.5**	**277.6**	*236.3*	*241.1*	*242.8*	*282.1*	*244.2*	*243.3*	*247.2*	*286.4*	*246.8*	**976.4**	*1010.2*	*1023.7*
Industrial	**248.5**	**264.6**	**274.6**	*261.6*	*256.2*	*264.2*	*274.6*	*264.0*	*256.2*	*267.9*	*278.5*	*268.0*	**1049.3**	*1059.0*	*1070.6*
Other	**23.9**	**24.4**	**27.4**	*25.5*	*26.2*	*25.6*	*28.6*	*26.7*	*27.1*	*26.7*	*29.7*	*27.7*	**101.1**	*107.1*	*111.2*
Subtotal	**784.4**	**774.6**	**929.0**	*778.9*	*827.2*	*792.5*	*926.7*	*804.1*	*834.3*	*808.2*	*943.8*	*817.1*	**3266.9**	*3350.5*	*3403.4*
Nonutility Use/Sales [b]	**35.5**	**39.5**	**48.6**	*48.7*	*42.3*	*40.7*	*44.2*	*48.6*	*42.1*	*40.8*	*44.4*	*48.7*	**172.3**	*175.8*	*176.0*
Total Demand	**819.9**	**814.0**	**977.6**	*827.6*	*869.5*	*833.2*	*971.0*	*852.7*	*876.5*	*849.0*	*988.1*	*865.8*	**3439.2**	*3526.3*	*3579.4*
Memo:															
Nonutility Sales to Electric Utilities [b]	**67.7**	**75.2**	**92.7**	*92.9*	*86.3*	*82.9*	*90.2*	*99.1*	*87.1*	*84.4*	*91.7*	*100.7*	**328.5**	*358.6*	*363.9*

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

[b] Electricity(net generation) from nonutility sources, including cogenerators and small power producers. Quarterly estimates and projections for nonutility net sales, own use, and generation by fuel source supplied by the Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration (EIA), based on annual data reported to EIA on Form EIA-867, "Annual Nonutility Power Producer Report."

[c] Includes refinery still gas and other process or waste gases and liquefied petroleum gases.

[d] Includes geothermal, solar, wind, wood, waste, nuclear, hydrogen, sulfur, batteries, chemicals and spent sulfite liquor.

[e] Data for 1998 are estimates.

[f] Balancing item, mainly transmission and distribution losses.

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

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

Table 11. U.S. Renewable Energy Use by Sector: Mid World Oil Price Case

(Quadrillion Btu)

	Year				Annual Percentage Change		
	1998	1999	2000	2001	1998-1999	1999-2000	2000-2001
Electric Utilities							
Hydroelectric Power [a]	**3.178**	**3.056**	*2.867*	*2.836*	**-3.8**	*-6.2*	*-1.1*
Geothermal, Solar and Wind Energy [b]	**0.109**	**0.036**	*0.004*	*0.004*	**-67.0**	*-88.9*	*0.0*
Biofuels [c]	**0.021**	**0.021**	*0.021*	*0.021*	**0.0**	*0.0*	*0.0*
Total	**3.307**	**3.113**	*2.891*	*2.860*	**-5.9**	*-7.1*	*-1.1*
Nonutility Power Generators							
Hydroelectric Power [a]	**0.149**	**0.120**	*0.103*	*0.105*	**-19.5**	*-14.2*	*1.9*
Geothermal, Solar and Wind Energy [b]	**0.240**	**0.312**	*0.430*	*0.436*	**30.0**	*37.8*	*1.4*
Biofuels [c]	**0.528**	**0.656**	*0.653*	*0.663*	**24.2**	*-0.5*	*1.5*
Total	**0.918**	**1.087**	*1.187*	*1.203*	**18.4**	*9.2*	*1.3*
Total Power Generation	**4.225**	**4.200**	*4.078*	*4.064*	**-0.6**	*-2.9*	*-0.3*
Other Sectors [d]							
Residential and Commercial [e]	**0.568**	**0.574**	*0.583*	*0.583*	**1.1**	*1.6*	*0.0*
Industrial [f]	**1.515**	**1.542**	*1.569*	*1.569*	**1.8**	*1.8*	*0.0*
Transportation [g]	**0.095**	**0.096**	*0.095*	*0.095*	**1.1**	*-1.0*	*0.0*
Total	**2.178**	**2.212**	*2.247*	*2.247*	**1.6**	*1.6*	*0.0*
Net Imported Electricity [h]	**0.233**	**0.237**	*0.246*	*0.243*	**1.7**	*3.8*	*-1.2*
Total Renewable Energy Demand	**6.636**	**6.649**	*6.572*	*6.555*	**0.2**	*-1.2*	*-0.3*

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

[b] Also includes photovoltaic and solar thermal energy.

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

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

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

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

[g] Ethanol blended into gasoline.

[h] Represents 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 1992 dollars)	**5587**	**5822**	**6024**	**6129**	**6116**	**6319**	**6469**	**6729**	**6912**	**7165**	**7488**	**7810**	**8122**	*8403*	*8672*
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**	**17.30**	*22.38*	*19.35*
Petroleum Supply															
Crude Oil Production [b]															
(million barrels per day)	**8.35**	**8.14**	**7.61**	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	**6.56**	**6.46**	**6.45**	**6.25**	**5.93**	*5.90*	*5.75*
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**	**9.75**	*10.47*	*11.06*
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**	**71.3**	**73.1**	**73.6**	**74.7**	*76.1*	*78.1*
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**	**19.44**	*19.59*	*20.08*
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**	**21.42**	*22.39*	*22.61*
Coal															
(million short tons)	**830**	**877**	**891**	**897**	**898**	**907**	**943**	**950**	**962**	**1006**	**1029**	**1044**	**1047**	*1074*	*1094*
Electricity (billion kilowatthours)															
Utility Sales [c]	**2457**	**2578**	**2647**	**2713**	**2762**	**2763**	**2861**	**2935**	**3013**	**3098**	**3140**	**3235**	**3267**	*3351*	*3403*
Nonutility Own Use [d]	**NA**	**NA**	**NA**	**104**	**111**	**122**	**127**	**138**	**145**	**145**	**148**	**156**	**172**	*176*	*176*
Total	**NA**	**NA**	**NA**	**2817**	**2873**	**2885**	**2988**	**3073**	**3159**	**3243**	**3288**	**3391**	**3439**	*3526*	*3579*
Total Energy Demand [e]															
(quadrillion Btu)	**NA**	**NA**	**NA**	**84.2**	**84.3**	**85.6**	**87.4**	**89.2**	**90.9**	**93.9**	**94.2**	**94.5**	**96.1**	*98.0*	*99.3*
Total Energy Demand per Dollar of GDP															
(thousand Btu per 1992 Dollar)	**NA**	**NA**	**NA**	**13.74**	**13.78**	**13.54**	**13.51**	**13.26**	**13.16**	**13.11**	**12.58**	**12.11**	**11.83**	*11.66*	*11.46*

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

[b] Includes lease condensate.

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

[d] Defined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA-867, "Annual Nonutility Power Producer Report." Data for 1998 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 compehensive measure of total energy demand can be found in EIA's *AER*. The conversion from physical units to Btu is calculated using a subset of conversion factors used in the calculations performed for gross energy consumption in Energy Information Administration, *Monthly Energy Review (MER)*. Consequently, the historical data may not precisely match those published in the *MER* or the *AER*.

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

Sources: Historical data: Latest data available from Bureau of Economic Analysis; Energy Information Administration; latest data available from EIA databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109; *Petroleum Supply Annual*, DOE/EIA-0340/2; *Natural Gas Monthly*, DOE/EIA-0130*; Electric Power Monthly*, DOE/EIA-0226; *Quarterly Coal Report*, DOE/EIA-0121; *International Petroleum Statistics Report* DOE/EIA-520, and Weekly Petroleum *Status Report* DOE/EIA-0208. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL1299.

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 1992 dollars)	**5587**	**5822**	**6024**	**6129**	**6116**	**6319**	**6469**	**6729**	**6912**	**7165**	**7488**	**7810**	**8122**	*8403*	*8672*
GDP Implicit Price Deflator (Index, 1992=1.000)	**0.849**	**0.878**	**0.911**	**0.947**	**0.979**	**1.000**	**1.027**	**1.048**	**1.071**	**1.091**	**1.109**	**1.122**	**1.137**	*1.153*	*1.170*
Real Disposable Personal Income (billion chained 1992 Dollars)	**4172**	**4358**	**4466**	**4564**	**4596**	**4754**	**4804**	**4927**	**5059**	**5191**	**5381**	**5600**	**5818**	*6031*	*6241*
Manufacturing Production (Index, 1987=1.000)	**0.928**	**0.971**	**0.990**	**0.985**	**0.962**	**1.000**	**1.037**	**1.100**	**1.159**	**1.213**	**1.298**	**1.361**	**1.415**	*1.450*	*1.512*
Real Fixed Investment (billion chained 1992 dollars)	**822**	**852**	**875**	**859**	**800**	**852**	**921**	**1005**	**1066**	**1165**	**1264**	**1414**	**1535**	*1626*	*1681*
Real Exchange Rate (Index, 1990=1.000)	**NA**	**NA**	**NA**	**0.999**	**1.007**	**1.013**	**1.057**	**1.034**	**0.961**	**1.017**	**1.105**	**1.152**	**1.154**	*1.137*	*1.087*
Business Inventory Change (billion chained 1992 dollars)	**8.4**	**17.0**	**14.2**	**8.9**	**-6.8**	**-4.7**	**3.7**	**12.1**	**14.1**	**10.1**	**22.2**	**25.1**	**1.1**	*3.8*	*9.3*
Producer Price Index (index, 1982=1.000)	**1.028**	**1.069**	**1.122**	**1.163**	**1.165**	**1.172**	**1.189**	**1.205**	**1.248**	**1.277**	**1.276**	**1.244**	**1.255**	*1.295*	*1.299*
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**	*1.707*	*1.742*
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**	**0.611**	*0.755*	*0.685*
Non-Farm Employment (millions)	**102.0**	**105.2**	**107.9**	**109.4**	**108.3**	**108.6**	**110.7**	**114.1**	**117.2**	**119.6**	**122.7**	**125.8**	**128.6**	*130.7*	*132.4*
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**	*91.4*	*93.2*
Total Industrial Production (index, 1987=1.000)	**0.932**	**0.974**	**0.991**	**0.989**	**0.970**	**1.000**	**1.034**	**1.091**	**1.144**	**1.195**	**1.270**	**1.324**	**1.368**	*1.402*	*1.458*
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**	**116.1**	*117.5*	*118.8*
Weather [a]															
Heating Degree-Days															
U.S.	**4334**	**4653**	**4726**	**4016**	**4200**	**4441**	**4700**	**4483**	**4531**	**4713**	**4542**	**3951**	**4158**	*4494*	*4464*
New England	**6546**	**6715**	**6887**	**5848**	**5960**	**6844**	**6728**	**6672**	**6559**	**6679**	**6662**	**5680**	**5983**	*6520*	*6478*
Middle Atlantic	**5699**	**6088**	**6134**	**4998**	**5177**	**5964**	**5948**	**5934**	**5831**	**5986**	**5809**	**4812**	**5318**	*5751*	*5712*
U.S. Gas-Weighted	**4391**	**4804**	**4856**	**4139**	**4337**	**4458**	**4754**	**4659**	**4707**	**4980**	**4802**	**4185**	**4388**	*4734*	*4703*
Cooling Degree-Days (U.S.)	**1269**	**1283**	**1156**	**1260**	**1331**	**1040**	**1218**	**1220**	**1293**	**1180**	**1156**	**1411**	**1317**	*1233*	*1234*

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

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

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, *Statistical Release* G.17(419); U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL1299.

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**	**19.4**	*19.6*	*20.1*
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**	**14.7**	*14.9*	*15.0*
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**	**5.5**	*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**	*43.2*	*44.0*
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**	**3.1**	**3.3**	**3.5**	**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**	**7.9**	**7.9**	**8.5**	**9.0**	**8.7**	**8.9**	*9.2*	*9.6*
Other Non-OECD	**9.7**	**10.0**	**10.3**	**10.5**	**10.6**	**11.0**	**11.4**	**11.8**	**12.1**	**12.4**	**13.0**	**13.3**	**13.5**	*13.9*	*14.3*
Total Non-OECD	**27.1**	**27.7**	**28.3**	**28.5**	**28.5**	**28.0**	**28.1**	**29.0**	**29.3**	**29.9**	**31.3**	**31.3**	**31.9**	*32.9*	*34.1*
Total World Demand	**63.1**	**64.9**	**66.0**	**66.0**	**66.6**	**66.8**	**67.0**	**68.9**	**69.9**	**71.3**	**73.1**	**73.6**	**74.7**	*76.1*	*78.1*
Supply [c]															
OECD															
U.S. (50 States)	**10.7**	**10.5**	**9.9**	**9.7**	**9.9**	**9.8**	**9.6**	**9.4**	**9.4**	**9.4**	**9.5**	**9.3**	**9.0**	*9.0*	*8.9*
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*	*2.7*
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**	**6.2**	*6.6*	*6.9*
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**	*1.6*	*1.6*
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**	*19.9*	*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**	*30.7*	*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**	*7.4*	*7.4*
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**	*3.2*	*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**	**11.0**	*11.2*	*11.6*
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**	**54.3**	*56.0*	*57.9*
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**	**73.6**	*75.9*	*78.1*
Total Stock Withdrawals	**0.6**	**0.1**	**0.0**	**-0.8**	**-0.1**	**-0.2**	**-0.3**	**0.1**	**0.0**	**-0.4**	**-0.9**	**-1.3**	**1.1**	*0.2*	*0.1*
OECD Comm. Stocks, End (bill. bbls.)	**2.7**	**2.6**	**2.6**	**2.7**	**2.7**	**2.7**	**2.8**	**2.8**	**2.7**	**2.7**	**2.7**	**2.8**	**2.6**	*2.6*	*2.6*
Net Exports from Former Soviet Union	**3.5**	**3.6**	**3.4**	**3.0**	**2.1**	**2.1**	**2.3**	**2.4**	**2.5**	**3.0**	**3.3**	**3.5**	**3.7**	*3.7*	*3.7*

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

[b] OECD Europe includes the former East Germany.

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

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

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, 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)	**14.00**	**14.57**	**18.08**	**21.75**	**18.70**	**18.20**	**16.14**	**15.52**	**17.14**	**20.61**	**18.50**	**12.08**	**17.30**	*22.38*	*19.35*
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**	**2.16**	**2.32**	**1.95**	**2.13**	*2.26*	*2.27*
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**	*1.33*	*1.27*
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**	*1.29*	*1.24*
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**	**1.13**	*1.25*	*1.21*
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**	*0.66*	*0.61*
No. 2 Heating Oil, Retail (dollars per gallon)	**0.80**	**0.81**	**0.90**	**1.06**	**1.02**	**0.93**	**0.91**	**0.89**	**0.87**	**0.99**	**0.99**	**0.85**	**0.87**	*1.05*	*1.01*
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**	**15.77**	*21.04*	*18.90*
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**	**1.23**	*1.22*	*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**	**2.45**	*3.39*	*3.05*
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**	**2.58**	*2.82*	*2.81*
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**	**6.70**	*7.00*	*7.09*
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**	*8.0*	*7.9*

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

[b] Average self-service cash prices.

[c] Average for all sulfur contents.

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

Notes: Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: *Petroleum Marketing Monthly*, DOE/EIA-0380; *Natural Gas Monthly*, DOE/EIA-0130; *Monthly Energy Review*, DOE/EIA-0035; *Electric Power Monthly*, DOE/EIA-0226.

Table A5. Annual U.S. Petroleum Supply and Demand

(Million Barrels per Day, Except Closing Stocks)

	Year														
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Supply															
Crude Oil Supply															
Domestic Production [a]	**8.35**	**8.14**	**7.61**	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	**6.56**	**6.46**	**6.45**	**6.25**	**5.93**	*5.90*	*5.75*
Alaska	**1.96**	**2.02**	**1.87**	**1.77**	**1.80**	**1.71**	**1.58**	**1.56**	**1.48**	**1.39**	**1.30**	**1.17**	**1.05**	*0.95*	*0.91*
Lower 48	**6.39**	**6.12**	**5.74**	**5.58**	**5.62**	**5.46**	**5.26**	**5.10**	**5.08**	**5.07**	**5.16**	**5.08**	**4.88**	*4.95*	*4.85*
Net Imports (including SPR) [b]	**4.52**	**4.95**	**5.70**	**5.79**	**5.67**	**5.99**	**6.69**	**6.96**	**7.14**	**7.40**	**8.12**	**8.60**	**8.51**	*9.11*	*9.49*
Other SPR Supply	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.04**	*0.00*	*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**	**0.09**	*-0.06*	*0.00*
Product Supplied and Losses	**-0.03**	**-0.04**	**-0.03**	**-0.02**	**-0.02**	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*
Unaccounted-for Crude Oil	**0.14**	**0.20**	**0.20**	**0.26**	**0.20**	**0.26**	**0.17**	**0.27**	**0.19**	**0.22**	**0.14**	**0.11**	**0.20**	*0.21*	*0.22*
Total Crude Oil Supply	**12.85**	**13.25**	**13.40**	**13.41**	**13.30**	**13.41**	**13.61**	**13.87**	**13.97**	**14.19**	**14.66**	**14.89**	**14.85**	*15.16*	*15.46*
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**	**1.82**	*1.82*	*1.84*
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**	*0.37*	*0.37*
Crude Oil Product Supplied	**0.03**	**0.04**	**0.03**	**0.02**	**0.02**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*
Processing Gain	**0.64**	**0.66**	**0.66**	**0.68**	**0.71**	**0.77**	**0.77**	**0.77**	**0.77**	**0.84**	**0.85**	**0.89**	**0.90**	*0.90*	*0.91*
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**	**1.24**	*1.36*	*1.57*
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**	**0.26**	*-0.03*	*-0.07*
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**	**19.44**	*19.59*	*20.08*
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**	**8.38**	*8.54*	*8.67*
Jet Fuel	**1.38**	**1.45**	**1.49**	**1.52**	**1.47**	**1.45**	**1.47**	**1.53**	**1.51**	**1.58**	**1.60**	**1.62**	**1.67**	*1.72*	*1.76*
Distillate Fuel Oil	**2.98**	**3.12**	**3.16**	**3.02**	**2.92**	**2.98**	**3.04**	**3.16**	**3.21**	**3.37**	**3.44**	**3.46**	**3.57**	*3.63*	*3.74*
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**	**0.84**	*0.76*	*0.87*
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**	**4.97**	*4.94*	*5.05*
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**	**19.44**	*19.59*	*20.08*
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**	**9.75**	*10.47*	*11.06*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**349**	**330**	**341**	**323**	**325**	**318**	**335**	**337**	**303**	**284**	**305**	**324**	**291**	*312*	*312*
Total Motor Gasoline	**226**	**228**	**213**	**220**	**219**	**216**	**226**	**215**	**202**	**195**	**210**	**216**	**195**	*196*	*202*
Jet Fuel	**50**	**44**	**41**	**52**	**49**	**43**	**40**	**47**	**40**	**40**	**44**	**45**	**41**	*42*	*44*
Distillate Fuel Oil	**134**	**124**	**106**	**132**	**144**	**141**	**141**	**145**	**130**	**127**	**138**	**156**	**128**	*124*	*138*
Residual Fuel Oil	**47**	**45**	**44**	**49**	**50**	**43**	**44**	**42**	**37**	**46**	**40**	**45**	**38**	*44*	*42*
Other Oils [f]	**260**	**267**	**257**	**261**	**267**	**263**	**273**	**275**	**258**	**250**	**259**	**291**	**255**	*260*	*264*

[a] Includes lease condensate.

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

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

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

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

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

SPR: Strategic Petroleum Reserve. NGL: Natural Gas Liquids

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

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

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

(Trillion Cubic Feet)

	Year														
	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**	**18.79**	**18.90**	**18.71**	**18.75**	*18.88*	*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**	**3.32**	*3.56*	*3.71*
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**	**0.12**	**0.12**	*0.13*	*0.13*
Total New Supply	**17.66**	**18.42**	**18.69**	**19.38**	**19.45**	**19.88**	**20.42**	**21.39**	**21.40**	**21.69**	**21.84**	**21.82**	**22.20**	*22.58*	*22.78*
Total Underground Storage															
Opening	**6.57**	**6.55**	**6.65**	**6.33**	**6.94**	**6.78**	**6.64**	**6.65**	**6.97**	**6.50**	**6.51**	**6.52**	**7.04**	*6.98*	*6.68*
Closing	**6.55**	**6.65**	**6.33**	**6.94**	**6.78**	**6.64**	**6.65**	**6.97**	**6.50**	**6.51**	**6.52**	**7.04**	**6.98**	*6.68*	*6.69*
Net Withdrawals	**0.02**	**-0.10**	**0.33**	**-0.61**	**0.16**	**0.14**	**-0.01**	**-0.32**	**0.46**	**-0.01**	**-0.01**	**-0.52**	**0.07**	*0.29*	*-0.01*
Total Supply	**17.68**	**18.32**	**19.02**	**18.77**	**19.61**	**20.02**	**20.42**	**21.08**	**21.86**	**21.68**	**21.84**	**21.30**	**22.26**	*22.87*	*22.77*
Balancing Item [a]	**-0.47**	**-0.29**	**-0.22**	**-0.05**	**-0.58**	**-0.47**	**-0.14**	**-0.37**	**-0.28**	**0.29**	**0.12**	**-0.04**	**-0.85**	*-0.48*	*-0.16*
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**	**21.42**	*22.39*	*22.61*
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**	**1.22**	*1.20*	*1.20*
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**	**0.65**	*0.65*	*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**	**4.64**	*4.98*	*5.02*
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**	**3.10**	*3.34*	*3.40*
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**	**8.65**	*8.80*	*8.82*
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**	**3.16**	*3.42*	*3.52*
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**	**21.42**	*22.39*	*22.61*

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

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

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

Table A7. Annual U.S. Coal Supply and Demand

(Million Short Tons)

	Year														
	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**	**1118.1**	**1109.6**	*1117.9*	*1128.0*
Appalachia	**NA**	**NA**	**464.8**	**489.0**	**457.8**	**456.6**	**409.7**	**445.4**	**434.9**	**451.9**	**467.8**	**460.4**	**445.3**	*454.3*	*460.8*
Interior	**NA**	**NA**	**198.1**	**205.8**	**195.4**	**195.7**	**167.2**	**179.9**	**168.5**	**172.8**	**170.9**	**168.4**	**162.0**	*153.2*	*144.0*
Western	**NA**	**NA**	**317.9**	**334.3**	**342.8**	**345.3**	**368.5**	**408.3**	**429.6**	**439.1**	**451.3**	**489.4**	**502.4**	*510.4*	*514.0*
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**	**36.1**	*34.4*	*34.6*
Closing	**28.3**	**30.4**	**29.0**	**33.4**	**33.0**	**34.0**	**25.3**	**33.2**	**34.4**	**28.6**	**34.0**	**36.1**	**34.4**	*34.6*	*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**	**-2.2**	**1.8**	*-0.3*	*S*
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**	**9.0**	*10.2*	*11.6*
Exports	**79.6**	**95.0**	**100.8**	**105.8**	**109.0**	**102.5**	**74.5**	**71.4**	**88.5**	**90.5**	**83.5**	**78.0**	**61.2**	*62.7*	*63.5*
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**	**1046.6**	**1059.2**	*1065.2*	*1076.1*
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**	**129.5**	*155.6*	*159.6*
Closing	**185.5**	**158.4**	**146.1**	**168.2**	**167.7**	**163.7**	**120.5**	**136.1**	**134.6**	**123.0**	**106.4**	**129.5**	**155.6**	*159.6*	*154.6*
Net Withdrawals	**-10.2**	**27.0**	**12.3**	**-22.1**	**0.5**	**4.0**	**43.2**	**-15.7**	**1.5**	**11.7**	**16.6**	**-23.1**	**-26.2**	*-4.0*	*5.1*
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**	**9.5**	**10.3**	*12.7*	*13.2*
Total Supply	**834.4**	**882.3**	**896.5**	**899.4**	**891.4**	**907.8**	**936.5**	**954.0**	**960.4**	**1006.7**	**1033.2**	**1033.0**	**1043.4**	*1073.9*	*1094.4*
Demand															
Coke Plants	**37.0**	**41.9**	**40.5**	**38.9**	**33.9**	**32.4**	**31.3**	**31.7**	**33.0**	**31.7**	**30.2**	**28.2**	**27.6**	*27.6*	*28.0*
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**	**898.2**	*917.4*	*935.9*
Nonutilities (Excl. Cogen.) [d]	**NA**	**NA**	**0.9**	**1.6**	**10.2**	**14.6**	**17.1**	**19.5**	**20.8**	**22.2**	**21.6**	**29.1**	**45.1**	*52.9*	*55.0*
Retail and General Industry [e]	**75.2**	**76.3**	**82.3**	**83.1**	**81.5**	**80.2**	**81.1**	**81.2**	**78.9**	**76.9**	**77.1**	**75.7**	**75.8**	*76.1*	*75.5*
Total Demand	**830.0**	**876.5**	**890.6**	**897.1**	**897.8**	**907.0**	**943.1**	**949.7**	**961.7**	**1005.6**	**1029.2**	**1043.9**	**1046.6**	*1073.9*	*1094.4*
Discrepancy [f]	**4.4**	**5.8**	**5.9**	**2.4**	**-6.4**	**0.8**	**-6.6**	**4.3**	**-1.3**	**1.2**	**4.0**	**-10.9**	***-3.2***	*0.0*	*0.0*

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

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

[c] Estimated independent power producers (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes, 1.2 million tons in 1999 and 3.1 million tons in 2000.

[d] Estimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA). Quarterly coal consumption estimates for 1998 and projections for 1999 and 2000 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).

[e] Synfuels plant demand in 1993 was 1.7 million tons per quarter and is assumed to remain at that level.

[f] Total Demand includes estimated IPP consumption.

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

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

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: *Quarterly Coal Report*, DOE/EIA-0121, and *Electric Power Monthly*, DOE/EIA-0226. Projections: Energy 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**	**1775.4**	*1815.9*	*1854.8*
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**	**93.0**	*79.5*	*99.5*
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**	**299.9**	*327.0*	*336.7*
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**	**717.9**	*716.0*	*703.0*
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**	**292.8**	*274.6*	*271.6*
Geothermal and Other [a]	**12.3**	**12.0**	**11.3**	**10.7**	**10.1**	**10.2**	**9.6**	**8.9**	**6.4**	**7.2**	**7.5**	**7.2**	**3.7**	*2.2*	*2.2*
Subtotal	**2572.1**	**2704.3**	**2784.3**	**2808.2**	**2825.0**	**2797.2**	**2882.5**	**2910.7**	**2994.5**	**3077.4**	**3122.5**	**3212.2**	**3182.7**	*3215.2*	*3267.9*
Nonutility Generation [b]	**NA**	**NA**	**NA**	**210.4**	**240.3**	**286.1**	**314.4**	**343.1**	**363.3**	**369.6**	**371.7**	**405.7**	**500.8**	*534.4*	*539.9*
Total Generation	**NA**	**NA**	**NA**	**3018.6**	**3065.3**	**3083.4**	**3196.9**	**3253.8**	**3357.8**	**3447.0**	**3494.2**	**3617.9**	**3683.5**	*3749.6*	*3807.8*
Net Imports	**46.3**	**31.8**	**11.0**	**2.3**	**19.6**	**25.4**	**27.8**	**44.8**	**39.2**	**38.0**	**36.6**	**28.8**	**29.3**	*30.4*	*30.0*
Total Supply	**NA**	**NA**	**NA**	**3020.9**	**3084.9**	**3108.8**	**3224.7**	**3298.6**	**3397.1**	**3485.0**	**3530.8**	**3646.7**	**3712.8**	*3780.0*	*3837.8*
Losses and Unaccounted for [c]	**NA**	**NA**	**NA**	**204.1**	**211.8**	**223.6**	**236.3**	**225.7**	**238.4**	**242.3**	**242.9**	**255.2**	**273.6**	*253.7*	*258.4*
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**	**1126.8**	**1140.1**	*1174.3*	*1197.9*
Commercial	**660.4**	**699.1**	**725.9**	**751.0**	**765.7**	**761.3**	**794.6**	**820.3**	**862.7**	**887.4**	**928.4**	**964.0**	**976.4**	*1010.2*	*1023.7*
Industrial	**858.2**	**896.5**	**925.7**	**945.5**	**946.6**	**972.7**	**977.2**	**1008.0**	**1012.7**	**1030.4**	**1032.7**	**1041.8**	**1049.3**	*1059.0*	*1070.6*
Other	**88.2**	**89.6**	**89.8**	**92.0**	**94.3**	**93.4**	**94.9**	**97.8**	**95.4**	**97.5**	**102.9**	**102.7**	**101.1**	*107.1*	*111.2*
Subtotal	**2457.3**	**2578.1**	**2646.8**	**2712.6**	**2762.0**	**2763.4**	**2861.5**	**2934.6**	**3013.3**	**3097.8**	**3139.8**	**3235.2**	**3266.9**	*3350.5*	*3403.4*
Nonutility Use/Sales [b]	**NA**	**NA**	**NA**	**104.2**	**111.2**	**121.8**	**126.9**	**138.4**	**145.4**	**144.9**	**148.2**	**156.2**	**172.3**	*175.8*	*176.0*
Total Demand	**NA**	**NA**	**NA**	**2816.8**	**2873.2**	**2885.1**	**2988.4**	**3073.0**	**3158.7**	**3242.7**	**3287.9**	**3391.4**	**3439.2**	*3526.3*	*3579.4*
Memo:															
Nonutility Sales to Electric Utilities	**NA**	**NA**	**NA**	**NA**	**129.1**	**164.4**	**187.5**	**204.7**	**217.9**	**224.6**	**223.5**	**249.5**	**328.5**	*358.6*	*363.9*

[a] Other includes generation from wind, wood, waste, and solar sources.
[b] Net generation.
[c] Balancing item, mainly transmission and distribution losses.

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.