EIA Energy Information Administration

Short-Term Energy Outlook

September, 1999

Highlights

What's New This Month

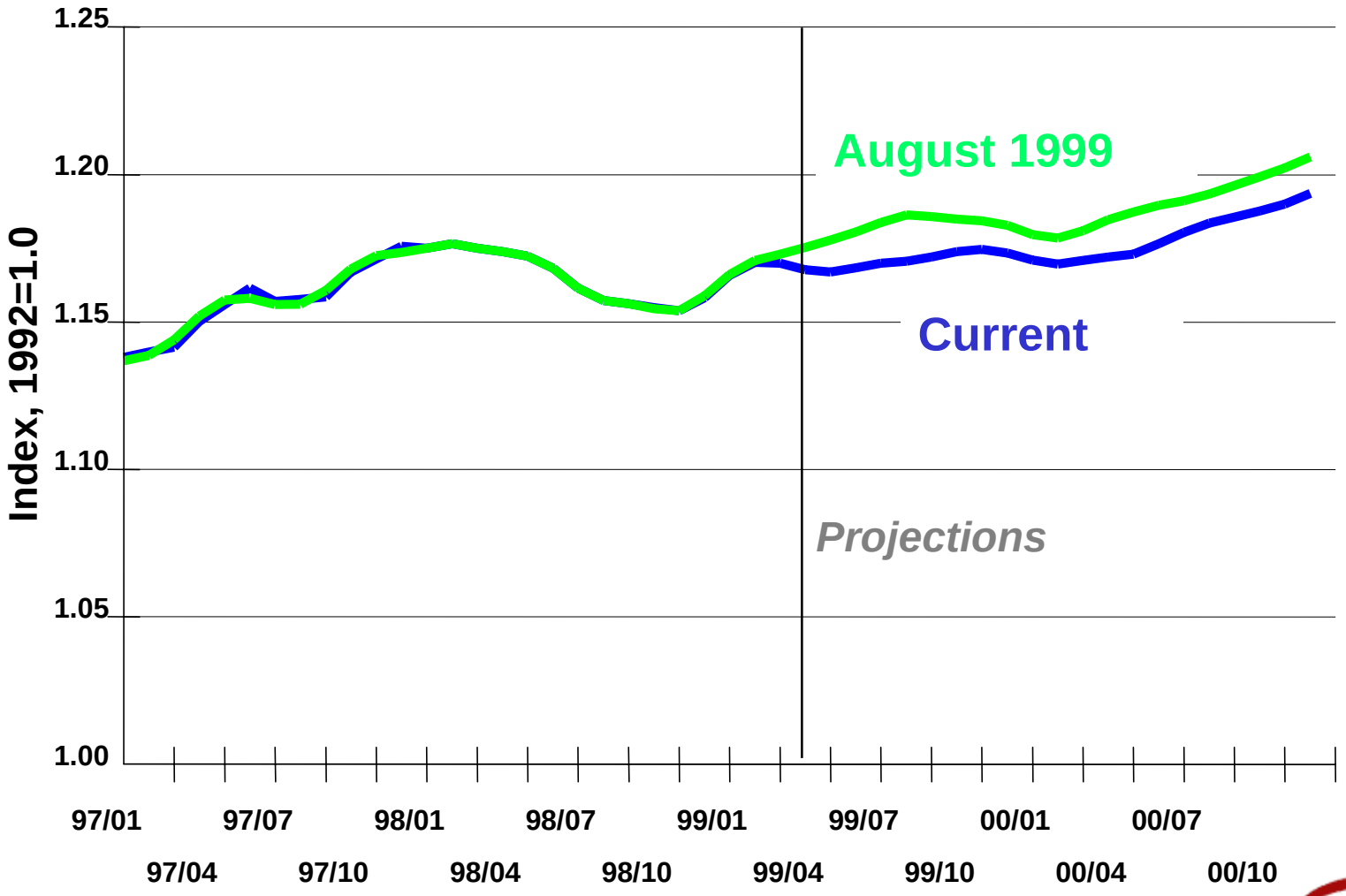
Weather Assumptions. Beginning with this issue of the Outlook, we have changed our assumptions about expected weather conditions (degree-days) in the forecast. The new methodology adopts the implications of apparent temperature trends identified in recently published research by the National Oceanographic and Atmospheric Administration. The methodology change is discussed in "The Impact of Temperature Trends on Short-Term Energy Demand," a technical paper released by EIA on September 2, 1999. The net effect of this change is that, all else the same, energy consumption on an annual basis is expected to be about 0.3 percent lower in our short-term forecast than would otherwise have been the case. This result follows from adopting lower expected values for heating degree-days in the forecast than we have been using up until now. While the overall difference is small on an annual basis, most of the shift is in natural gas demand and is concentrated in the winter. Natural gas demand growth this winter, while still expected to be significant, would be moderated by about 1.4 percent under the new assumptions.

The Economy. For this month's forecast, while overall GDP growth remains about the same, some of the energy-intensive sectors of the economy are expected to grow at a somewhat slower rate than previously projected. For example, our gas-weighted industrial production index is expected to exhibit growth about 1 percent below last month's forecast (Figure 1). Also, real disposable income growth is expected to be off slightly from our previous forecast, perhaps slowing by about 0.5 percent in 2000 compared to our August Outlook. On balance, with the new weather and economic growth assumptions, combined with higher price projections (see below), we have reduced expected total U.S. energy demand by about 0.4 percent this year and by about 0.6 percent in 2000.

World Oil Markets / Prices

Prices. World oil prices for the remainder of 1999 and all of 2000 are now forecast to be $1-$2.50 per barrel higher than they were in last month's forecast (Figure 2). The price implications of strong OPEC compliance with agreed-upon production cuts have aparently been greater than expected. With our assumption that OPEC compliance will remain strong through at least September, before declining somewhat during the winter, EIA believes that prices will rise from average August levels (an estimated

Figure 1. Gas-Weighted Industrial Output

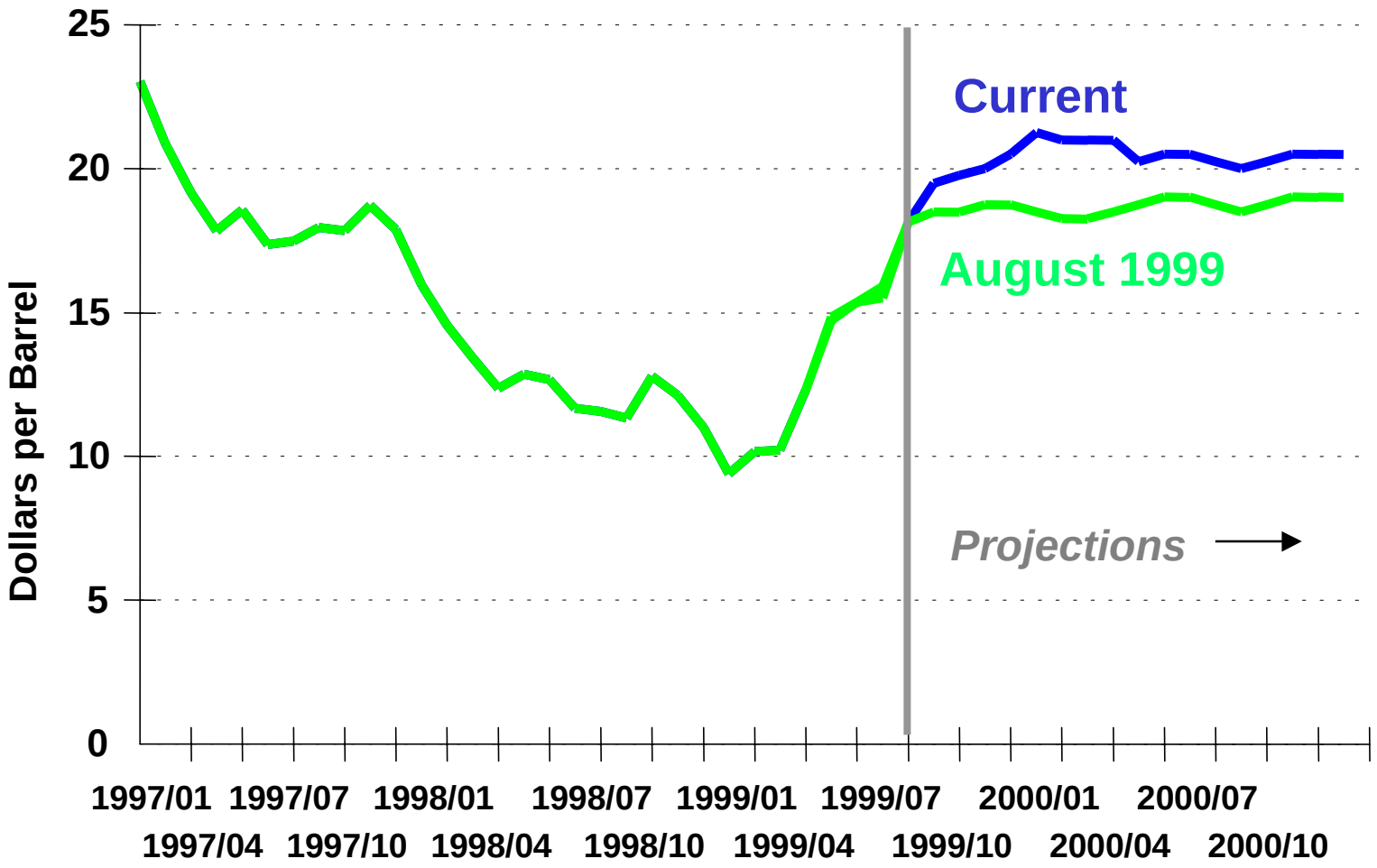


www.eia.doe.gov

Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

Figure 2. Imported Crude Oil Prices

(Current vs Previous Outlook)



www.eia.doe.gov

Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

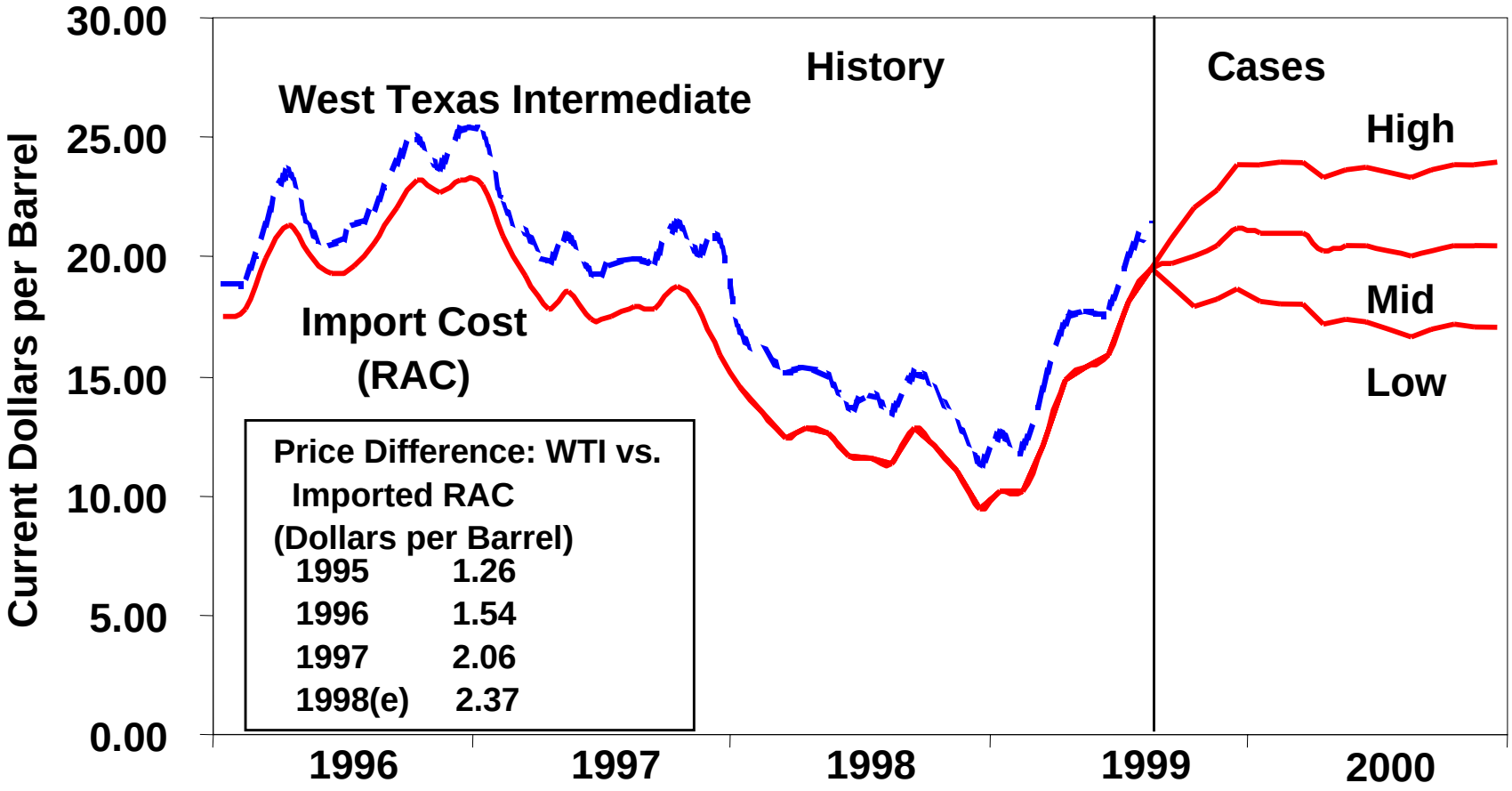
$19.50 per barrel for the price paid by U.S. refiners for imported crude oil or $21.28 per barrel for West Texas Intermediate crude oil) by $1.50 to $2 per barrel by the December through March 2000 period. This forecast assumes that OPEC does not increase its production quota at their September 22 meeting, but that OPEC production begins to creep up slowly during the winter leading up to OPEC's scheduled ministerial meeting in March 2000. This production profile should draw down world oil stocks to well below normal levels by the end of the winter period. While it is impossible to predict whether OPEC will increase production quotas at the March 2000 meeting, this forecast assumes continued increases in OPEC production over the course of 2000. The increases are not expected to be large enough to allow the average price paid by refiners for imported crude oil remains to slip below $20 per barrel (equivalent to a West Texas Intermediate crude oil price of over $22 per barrel). Of course, if OPEC production in 2000 exceeds this forecast, lower prices would be expected. Our normal uncertainty range for crude oil prices suggest that expected end-2000 prices would be within about $3-$3.50 of the $20.50 per barrel level with a high degree of probability (Figure 3).

Demand. EIA estimates that world oil demand will grow by about 1.1 million barrels per day in 1999, and by an additional 1.6 million barrels per day (2.2 percent growth) in 2000 (Figure 4 and Table 3). The 2000 world oil demand estimate is down slightly from last month's forecast, and assumes that overall Asian demand continues the slow but steady recovery into next year. However, EIA continues to expect Asian petroleum demand growth to be lower in 2000 than the growth seen prior to the 1997/98 economic crisis in that part of the world.

Non-OPEC Production. Non-OPEC oil production is expected to be slightly lower 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 about 1.1 million barrels per day in 2000 as higher oil prices counteract some of the same forces that caused oil production to decline in 1999 (Figure 5). The forecast for non-OPEC production in 1999 was reduced by about 0.2 million barrels per day in 1999 from last month's forecast with data from the 2nd quarter of 1999 now available. The latest data indicated continued declines in many non-OPEC countries, and these declines were carried through into the forecast for the rest of 1999.

OPEC Production and World Inventories. As OPEC oil ministers prepare for their September 22 ministerial meeting, there has been a lot of speculation on whether or not OPEC will increase its production quotas, since oil prices are currently higher than they have been since early 1997. Our projections are based on the assumption that OPEC will maintain current quotas at the upcoming meeting. Whatever decision OPEC makes will ultimately be a major factor in determining the level of oil prices this winter. EIA is currently forecasting OPEC compliance with agreed upon production cuts beginning this April to remain strong through at least the 3rd quarter of the year. Then, beginning in the 4th quarter of 1999 and continuing into the 1st quarter of 2000, the last quarter of

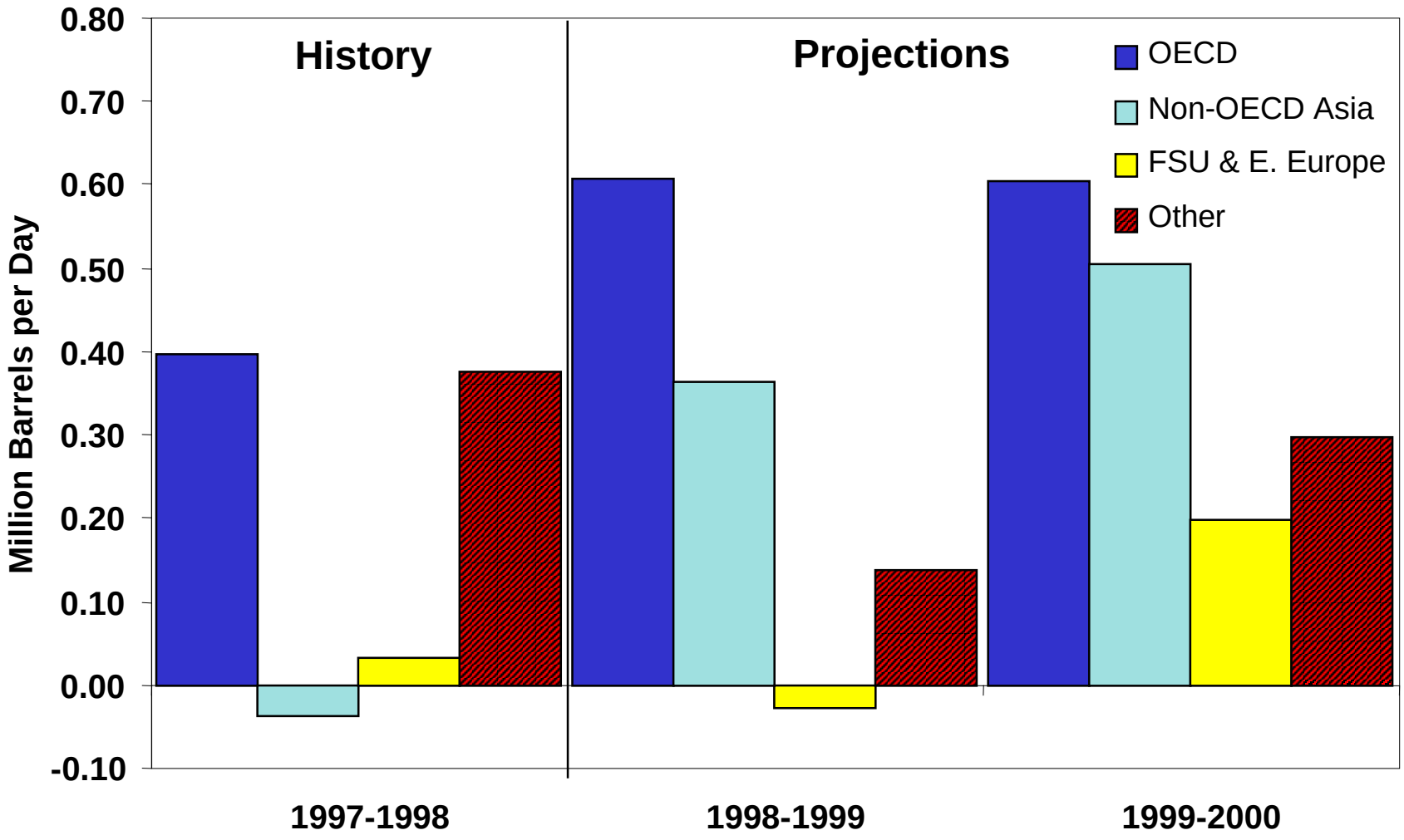
Figure 3. Monthly Crude Oil Price Cases



Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

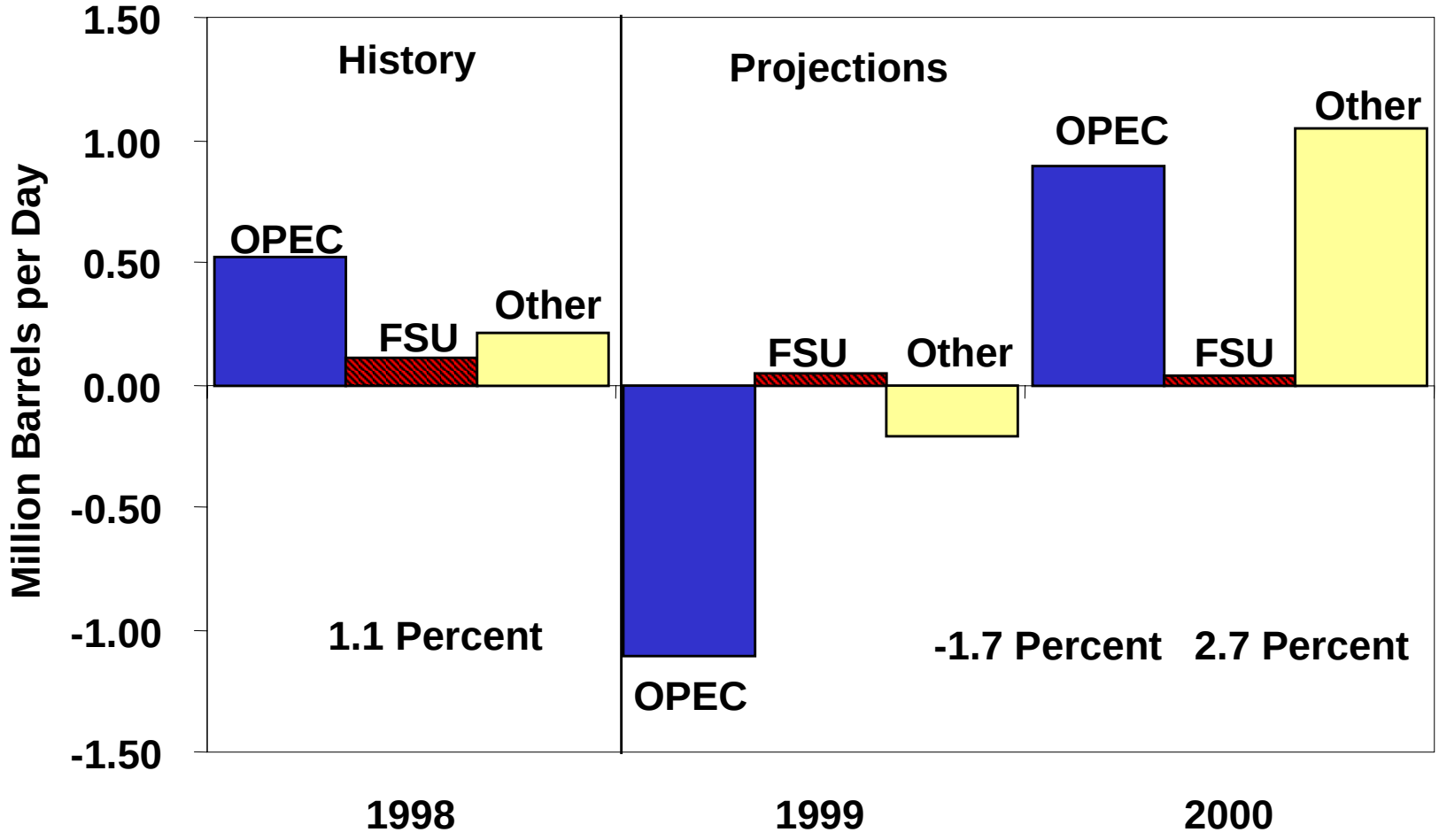
Figure 4. World Oil Demand
(Change from Year Ago)



Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

Figure 5. World Oil Production
(Change from Year Ago)



Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

the current OPEC agreement, OPEC production is expected to increase slightly, as higher oil prices prompt some OPEC countries to produce more oil (Figure 6). OPEC has tentatively scheduled another ministerial meeting at the end of March 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 continue to increase in 2000 such that OPEC production in 2000 will average about 0.9 million barrels per day higher than average 1999 OPEC oil production.

OPEC production will have a large impact on world oil inventories. There are various estimates of world oil stock levels and the amount of excess global oil stocks that existed this summer and different analysts peg the excess global oil inventories between 200 and 400 million barrels. Beginning in the 2nd quarter of 1999, the EIA forecast expects about 350 million barrels to be drawn down by the end of 1999. This draw is already larger than some estimates of the excess inventories and nearly as much as the largest estimate of excess global oil stocks (Figure 7). This implies that by the end of 1999, the global oil stock situation will either be at or below normal levels. By the end of the 1st quarter of 2000 (the end of the 1999/2000 winter), global oil inventories will have been drawn down well below the excess level of global inventories, regardless of whose estimates you assume. As stated above, this global oil inventory situation reflects slight increases in OPEC production over the winter. If OPEC compliance remains flat or even increases, excess global oil inventories could be drawn down by as early as the end of this year, and prices would likely be at least $2-$3 per barrel higher than our base case forecast during the winter of 1999/2000).

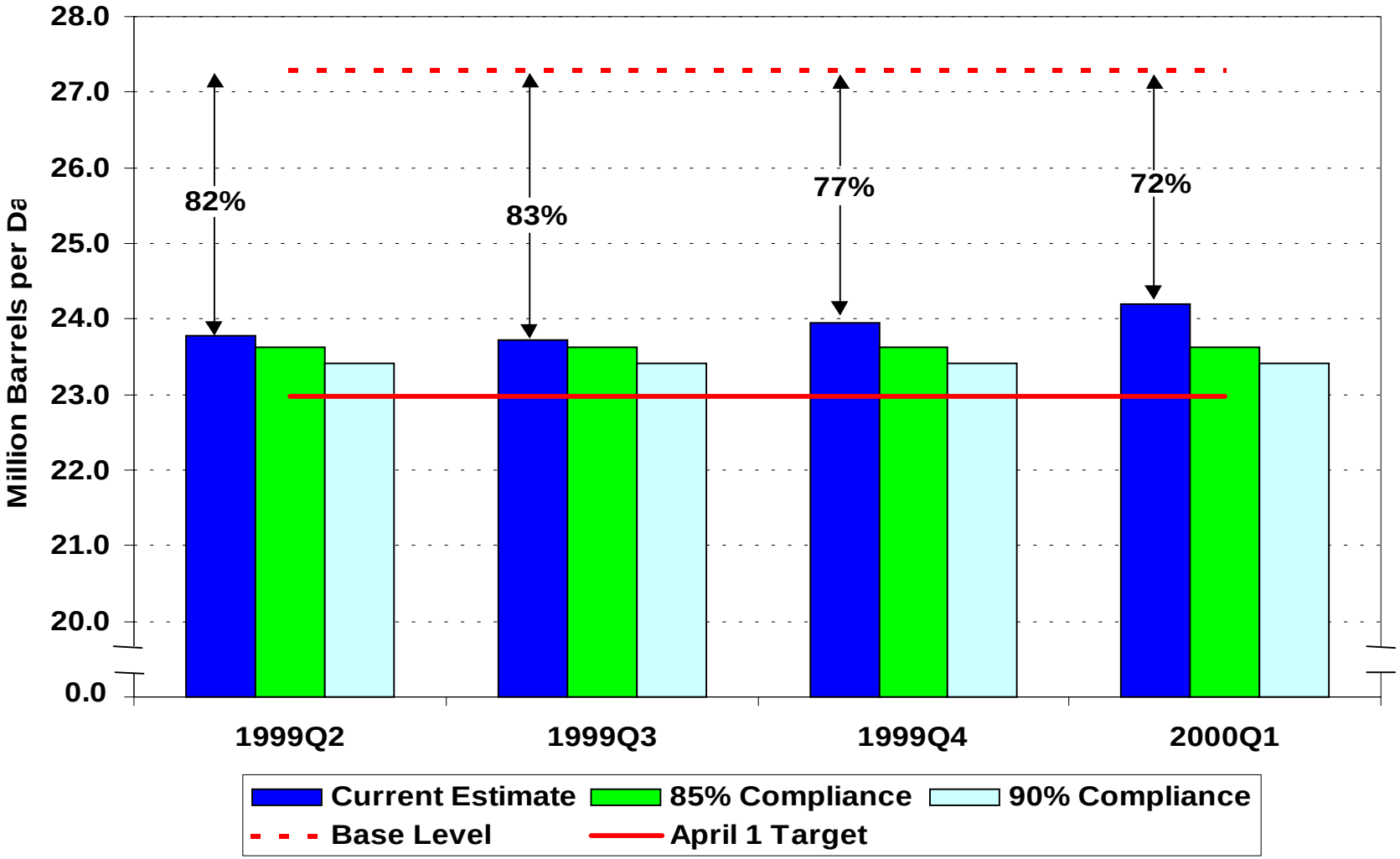
This analysis of OPEC production and global oil inventories is a major reason why EIA is forecasting increasing oil prices for the remainder of 1999 and remaining at relatively high levels throughout 2000. Obviously, any change in either OPEC production, or in what OPEC does with their quotas over the forecast period will have a large influence on oil prices, particularly in 2000. But as of now, EIA is forecasting crude oil prices this winter at levels not seen since the winter of 1996/97.

Energy Prices

Crude Oil. As noted above, crude oil prices are now expected to average over $20 per barrel for the remainder of this year and throughout the year 2000. This is approximately a 2 dollars per barrel upward revision from our previous report. Higher prices are therefor expected for petroleum products across the board, relative to our August Outlook.

Motor Gasoline. In the *August 1999 Short-Term Energy Outlook*, unleaded regular motor gasoline prices were projected to peak for the year in August at $1.20 per gallon. In our current report, pump prices are expected to continue to rise and peak for the year in September, at $1.26 per gallon, with virtually all of the difference due to higher crude oil costs (Figure 8). Motorists may see these prices slip a little after the Labor Day

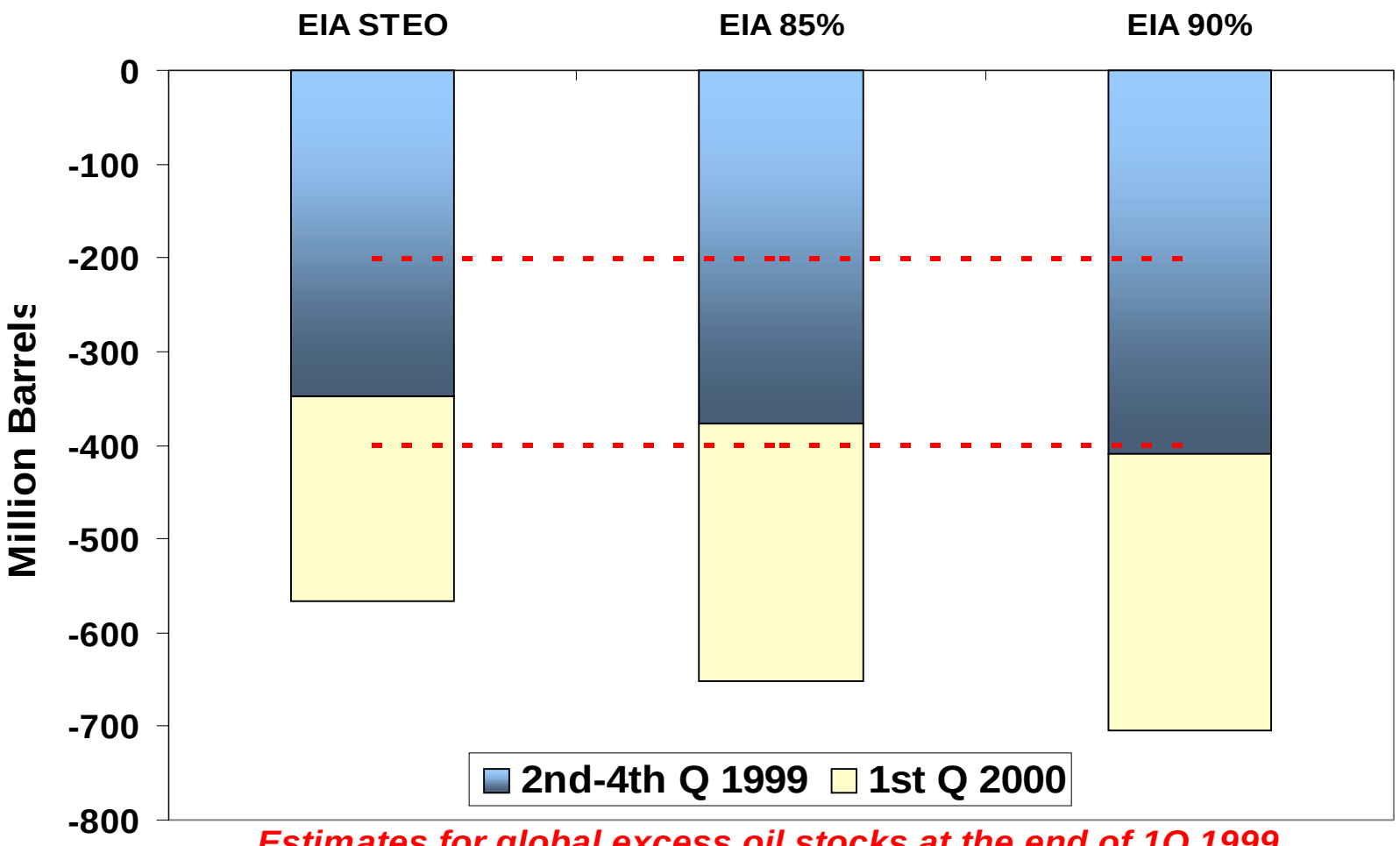
Figure 6. OPEC Compliance to Agreed Upon Cuts in Production



Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

Figure 7. 12-Month Net Stock Change Since OPEC Agreement (2Q 1999 - 1Q 2000)



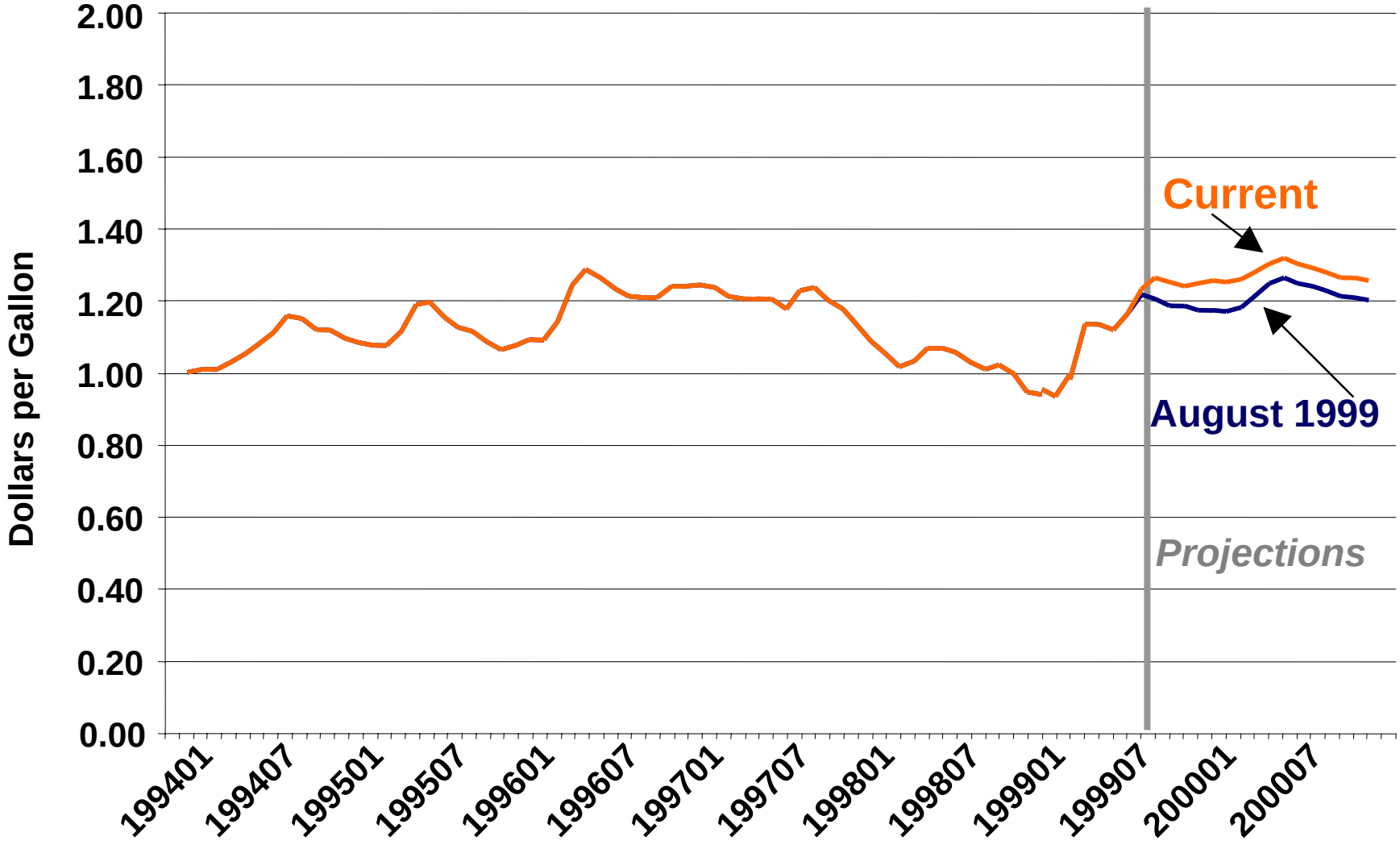
Estimates for global excess oil stocks at the end of 1Q 1999 range from 200 to 400 million barrels.

Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

Figure 8. Retail Motor Gasoline Prices*

(Monthly: 1994-2000)



*Regular Unleaded, Self-Service Cash

Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

holidays, when summer driving season is over. However next year, if the higher crude costs hold as projected, summer pump prices could gain another an additional 11-12 cents per gallon (Table 4 and Figure 9).

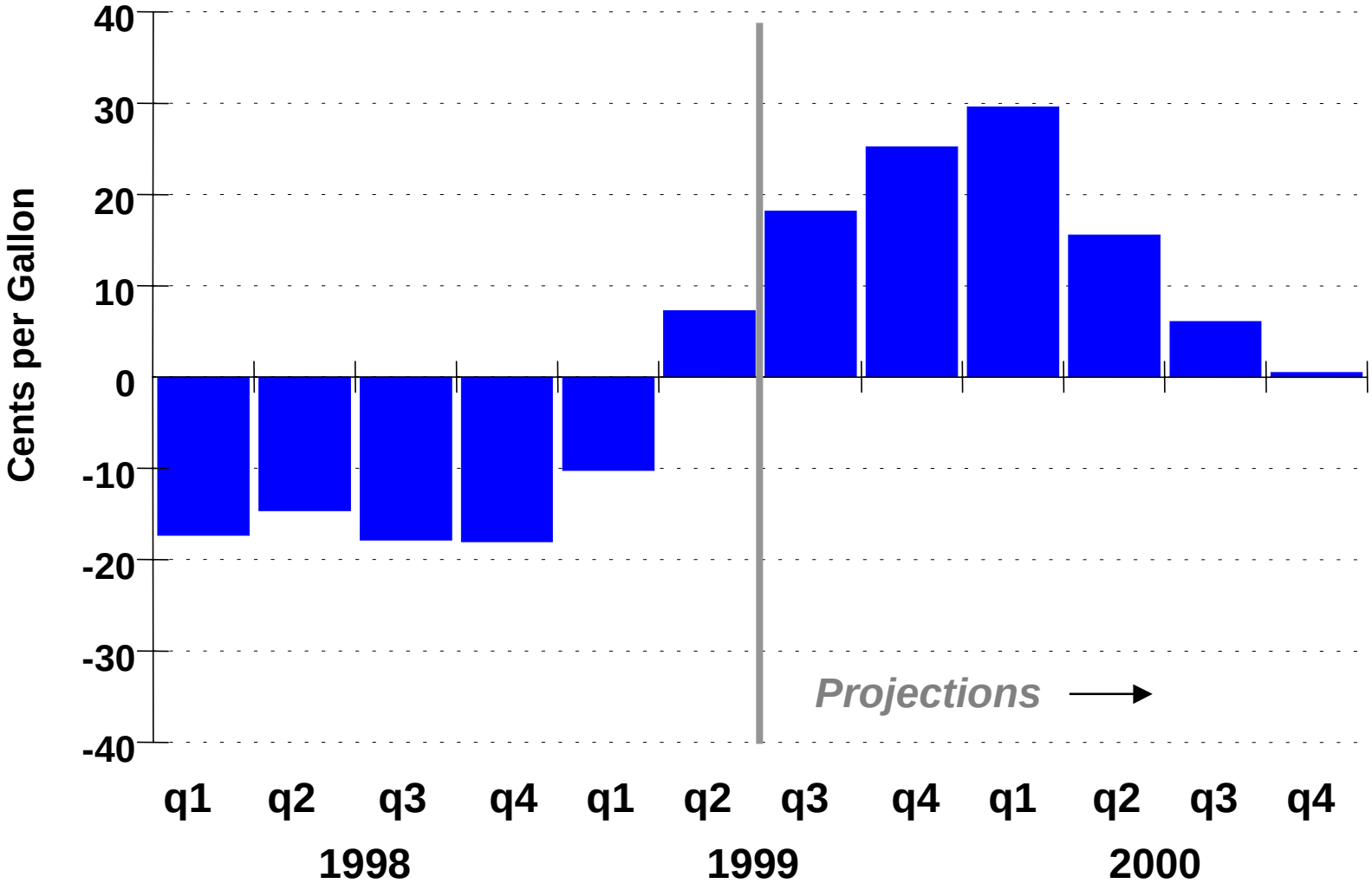
Heating Oil. Given our base case oil price projection, residential heating oil prices, like all petroleum product prices, are expected to increase by a hefty amount this winter. Not only are we projecting higher crude oil prices this winter, but we are also assuming "normal" weather, which would be colder than the relatively mild weather of last winter. Cold weather, of course, would increase demand for heating oil, putting upward pressure on prices. For the coming winter, residential heating oil customers may be expected to pay an average of 24 cents per gallon more this upcoming winter than they did last winter (Figure 10).

Natural Gas. Compared to our previous report, the natural gas wellhead price forecast has been raised, but just barely, and primarily for the period of September through December (Figure 11). There are two primary reasons for this revision. First, the higher (revised) crude oil price path will allow the price ceiling for natural gas to rise, particularly in the areas where both fuels are competitors, namely the industrial and electric utility sectors. In addition, the hot weather that occurred this summer increased gas demand for power generation (for air-conditioning) and in turn, slowed the rate of gas injected into underground storage at a rate less than normally expected. As a result, concern whether underground storage levels would be satisfactory to meet the winter needs sent spot wellhead prices rising by over 70 cents per million Btu from July to early September. It is our belief that this bump in prices will carry over partially, through the end of the year. Although the recent (summer) and current rates of injections to storage are somewhat down from the same period last year, it is projected that the injection rate will accelerate to levels comparable that of last year, by the end of October. This would be likely to temper wellhead prices increases over the next few months to within moderate levels. Also, net imports of Canadian gas, accounting for 15 percent of total gas demand have grown by over 13 percent this year. To some extent, the high volume of gas imports will help (directly or indirectly) to shape underground storage to sufficient levels for the upcoming winter. In spite of that, winter wellhead prices are projected to be roughly 42 percent greater than prices from last winter since the weather then was generally mild, particularly in the early part of the heating season (Figure 12).

Fossil Fuel Prices to Electric Utilities. As a fuel to electric utilities, residual fuel oil will have lost any remaining price advantage over natural gas by the third quarter of this year (Figure 13). Falling world oil prices in 1998 and the first quarter of 1999 gave the advantage to oil, but that advantage has rapidly diminished with rising world oil prices despite sharply rising spot gas prices this summer. Early September has brought spot gas prices that are considerably lower than mid-summer highs as somewhat weaker electricity demand in August, signs of a return to more normal (stronger) gas storage injections, and (at least temporarily) a receding threat of storm-related interruptions in

Figure 9. Quarterly Retail Motor Gasoline Prices*

(Change from Year Ago)



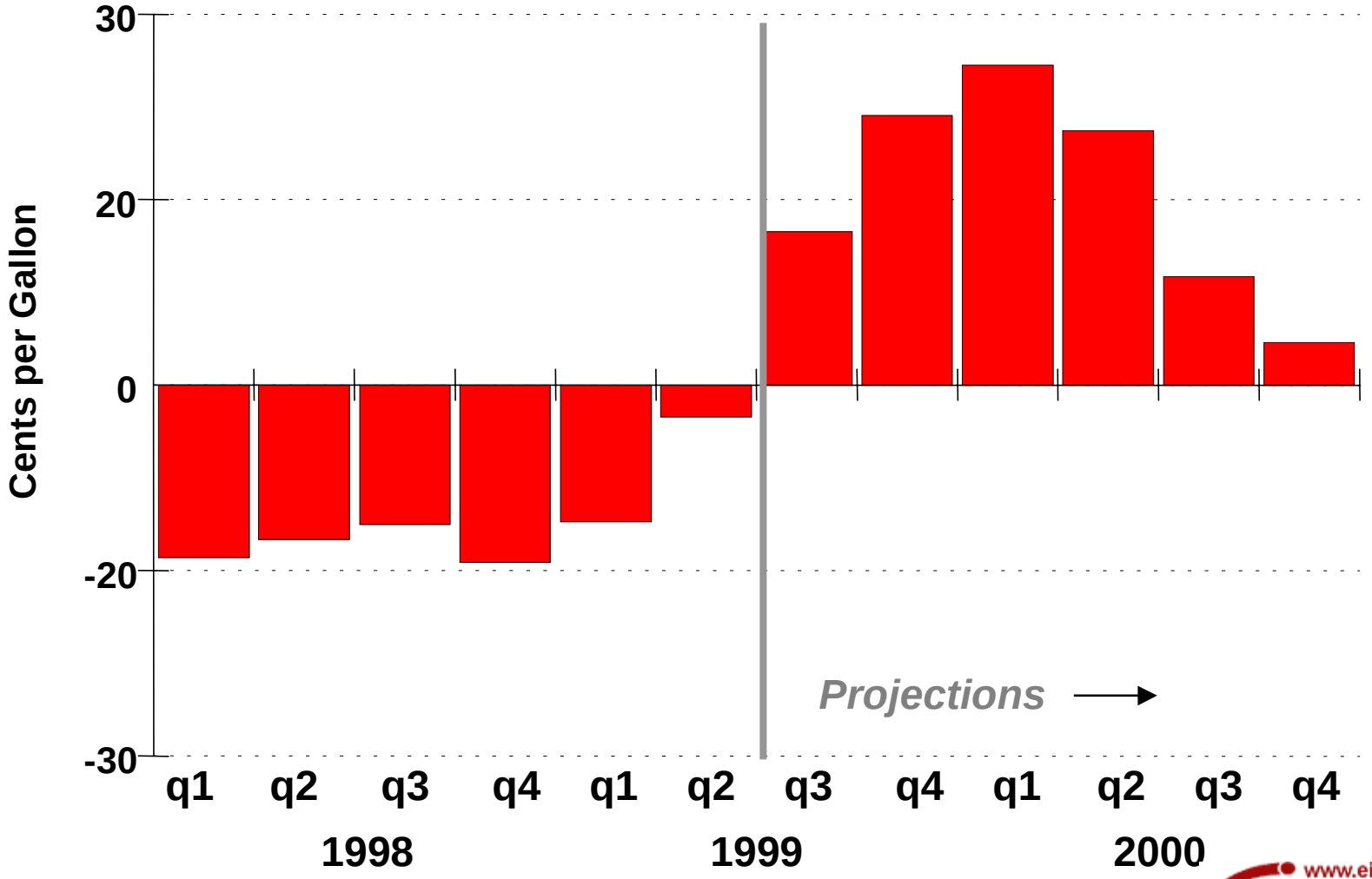
*Regular Unleaded, Self-Service Cash

Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

Figure 10. Quarterly Retail Heating Oil Prices

(Change from Year Ago)

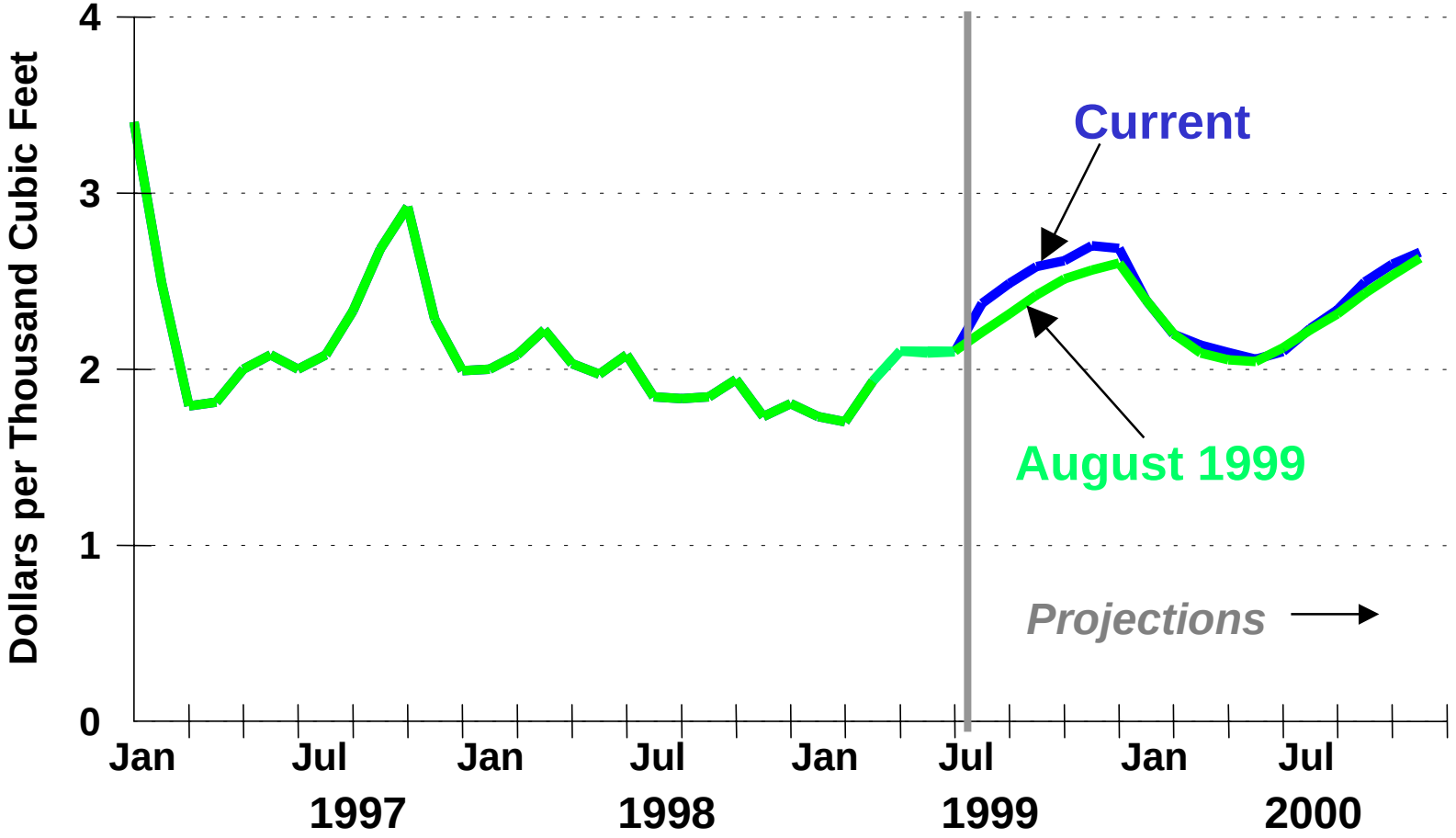


Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

Figure 11. Natural Gas Wellhead Prices

(Current vs Previous Outlook)

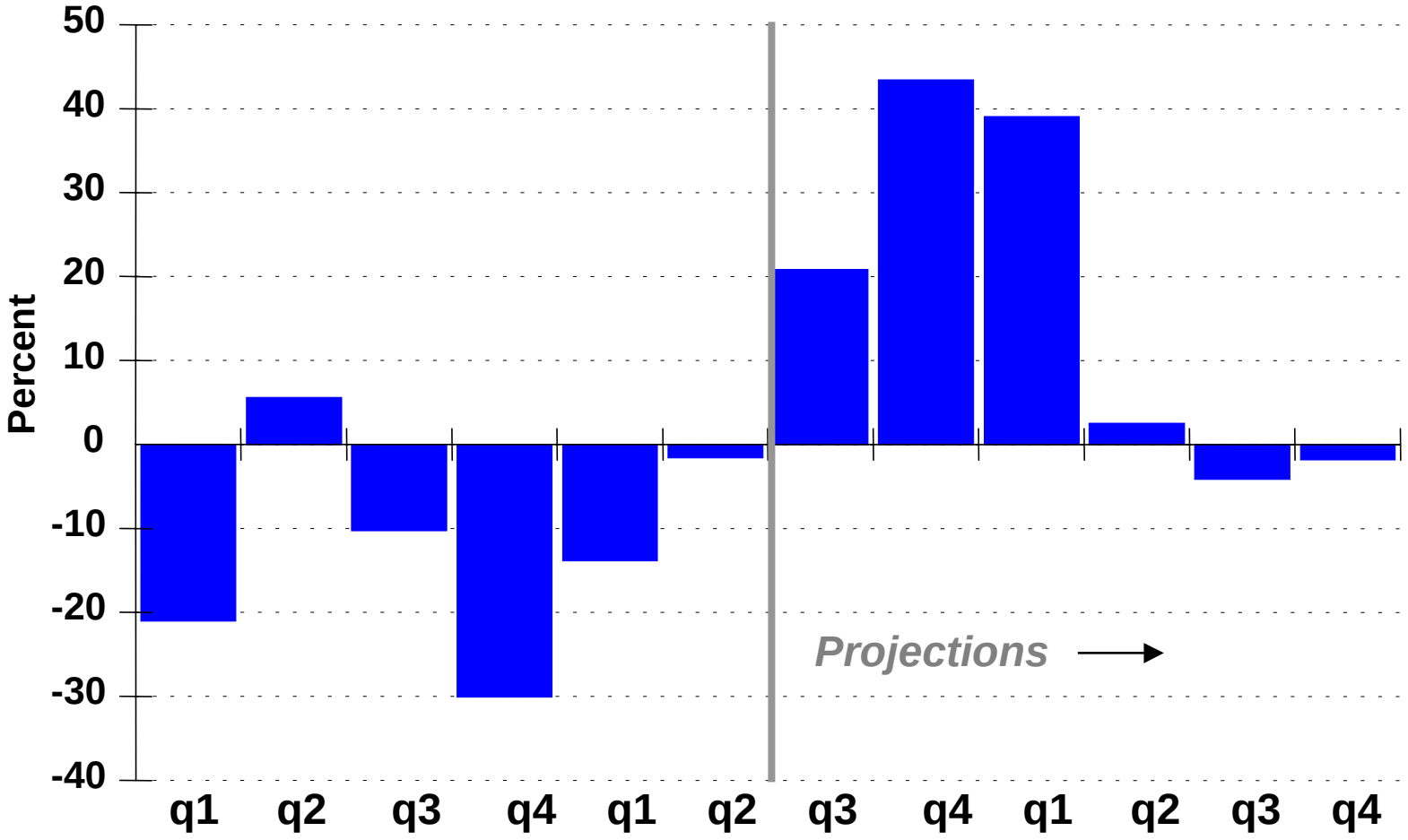


Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

Figure 12. Quarterly Natural Gas Wellhead Prices

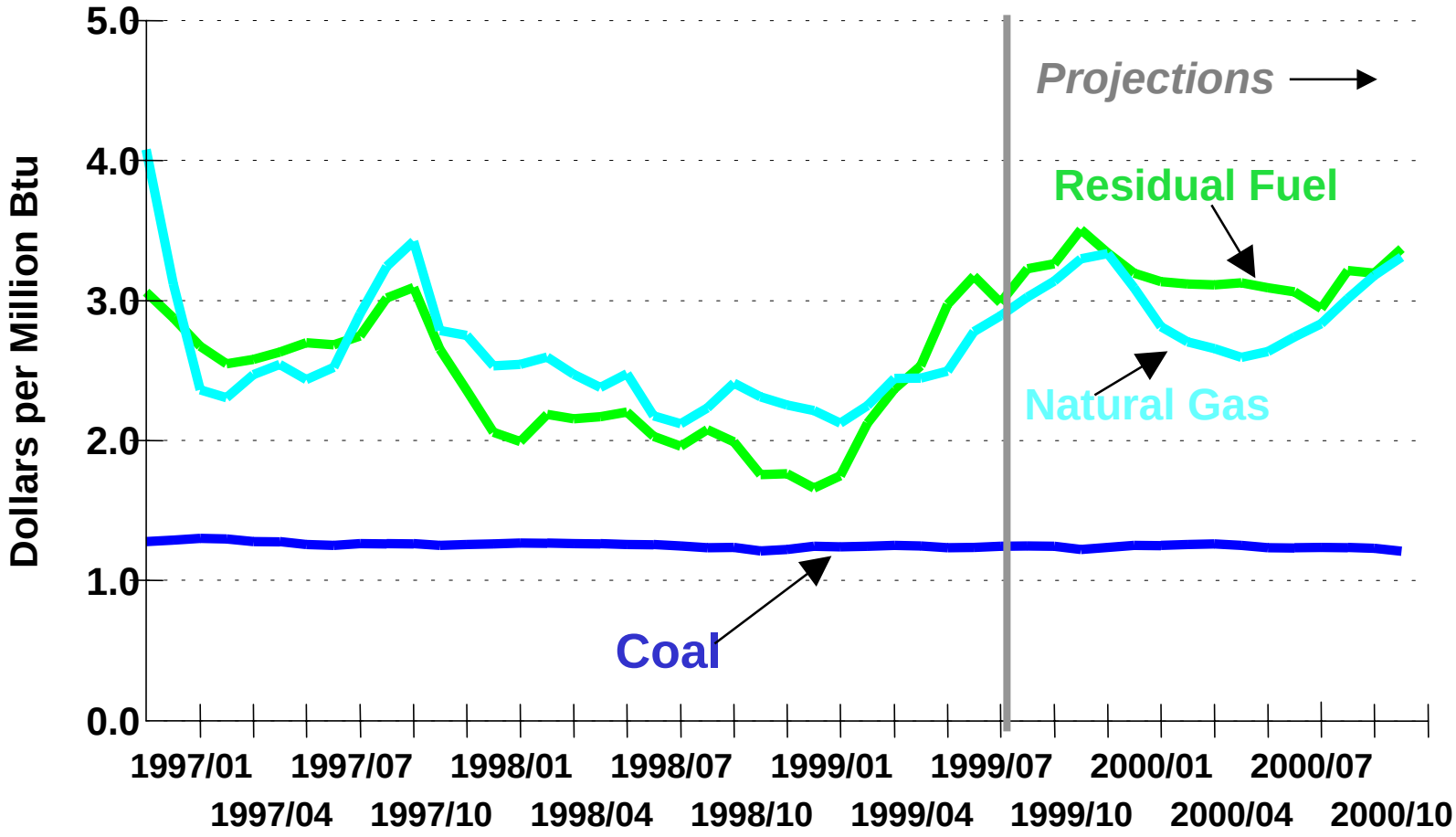
(Percent Change from Year Ago)



Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

Figure 13. Fossil Fuel Prices to Electric Utilities



Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

U.S. Gulf production allayed some fears about very tight gas supply this fall. Still, natural gas prices are expected to increase by about 9 percent per year annually from 1998-2000. Meanwhile, heavy oil prices are projected increase by about 24 percent per year over the same time period. In the last half of this year and for all of the next year 2000, gas should be the cheaper of the two fuels, as it has been historically. Coal is by far and away the cheapest of the fossil fuels. The average price of coal keeps declining as marginal (generally underground) mines close while a growing share of the coal comes from the less- expensive-to-produce surface mines.

U.S. Petroleum Demand

Total petroleum consumption in 1999 is projected to increase 310,000 barrels per day, or 1.7 percent, from the previous year and a further 200,000 barrels per day, or 1.1 percent, in 2000 (Table 5 and Figure 14). Continued projected increases in transportation fuels demand are expected to be the dominant factor, although growth in liquefied petroleum gases demand has been strong this year. Motor gasoline demand growth is expected to average 2 percent, reflecting an average growth in highway travel of 2.6 percent (Figure 15). The continuing recovery in international air travel from last year's weakness as well as accelerated growth in domestic air travel are expected to result in jet fuel demand growth of 2 percent. That projection reflects the impact of almost 4-percent growth in capacity and utilization and almost 2 percent growth in fuel efficiency resulting from continued aircraft replacement. Diesel fuel demand growth is also expected to be robust, averaging 4 percent. Space heating is also expected to contribute to growth in petroleum demand during the forecast interval. The sizable growth in residential/commercial heating oil demand in 1999 assumes normal winter compared to the unusually mild first and fourth quarters of 1998. Despite growth in electricity demand, utility consumption of residual fuel is expected to continue to decline as a result of recent large price increases for that fuel, enabling other fossil fuels to increase their market share of the electricity generation market.

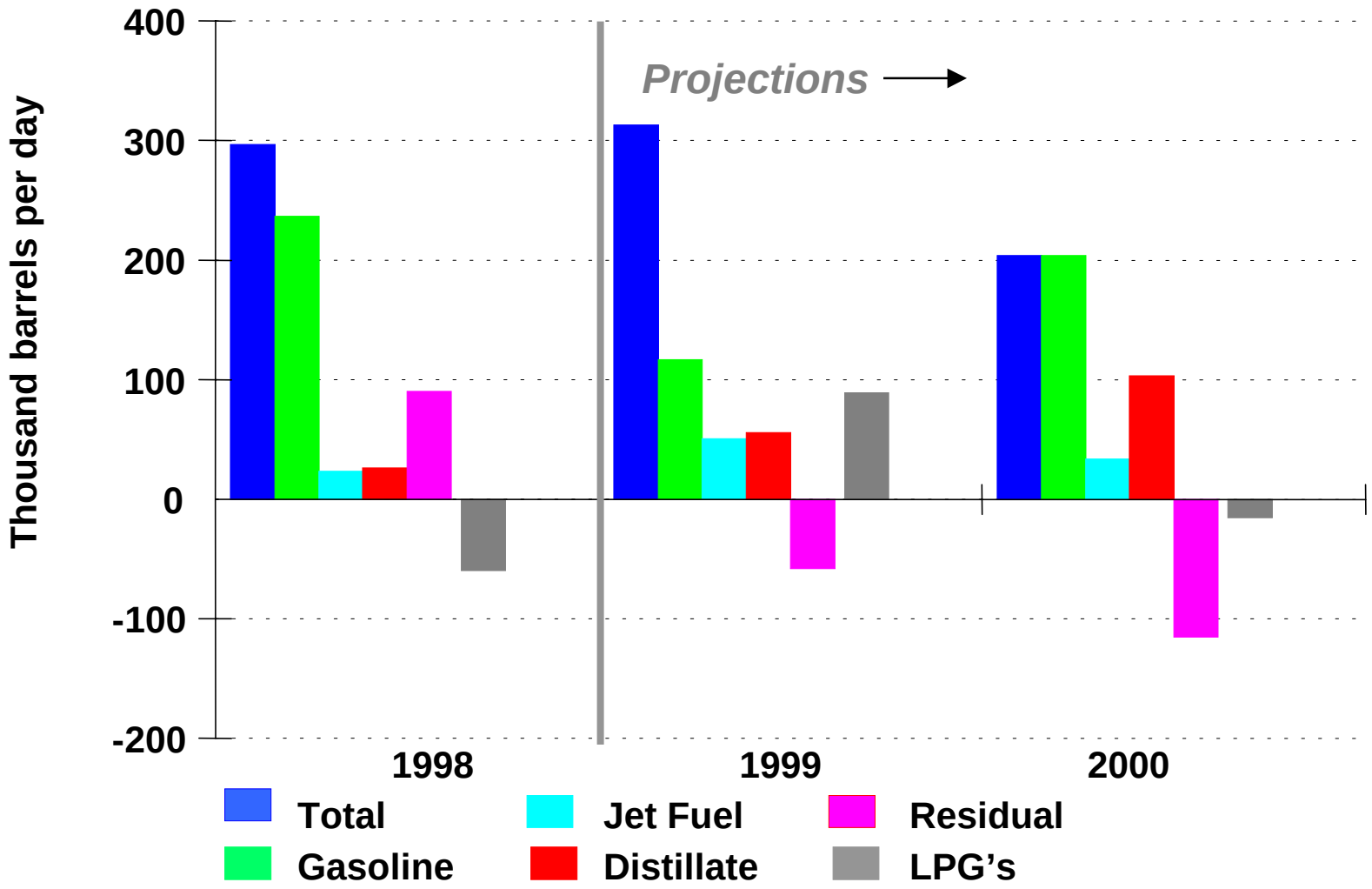
Natural Gas Demand and Supply

Demand. Natural gas demand has been revised slightly downwards for 1999 and in 2000 compared with our last outlook. This is mainly because of expected lower electric utility demand for natural gas. Also, industrial gas demand has been revised slightly downwards for both 1999 and 2000 (Figure 16).

Supply. Dry gas production is expected to remain at our previously projected levels through the forecast period. Natural gas net imports for 1999 are expected to be at the same levels as projected in the August forecast. However, we have increased our expectations for net imports in 2000 by 4.5 percent to 3.5 trillion cubic feet.

Gas storage levels, which were generally been above year-earlier levels for most of 1999,

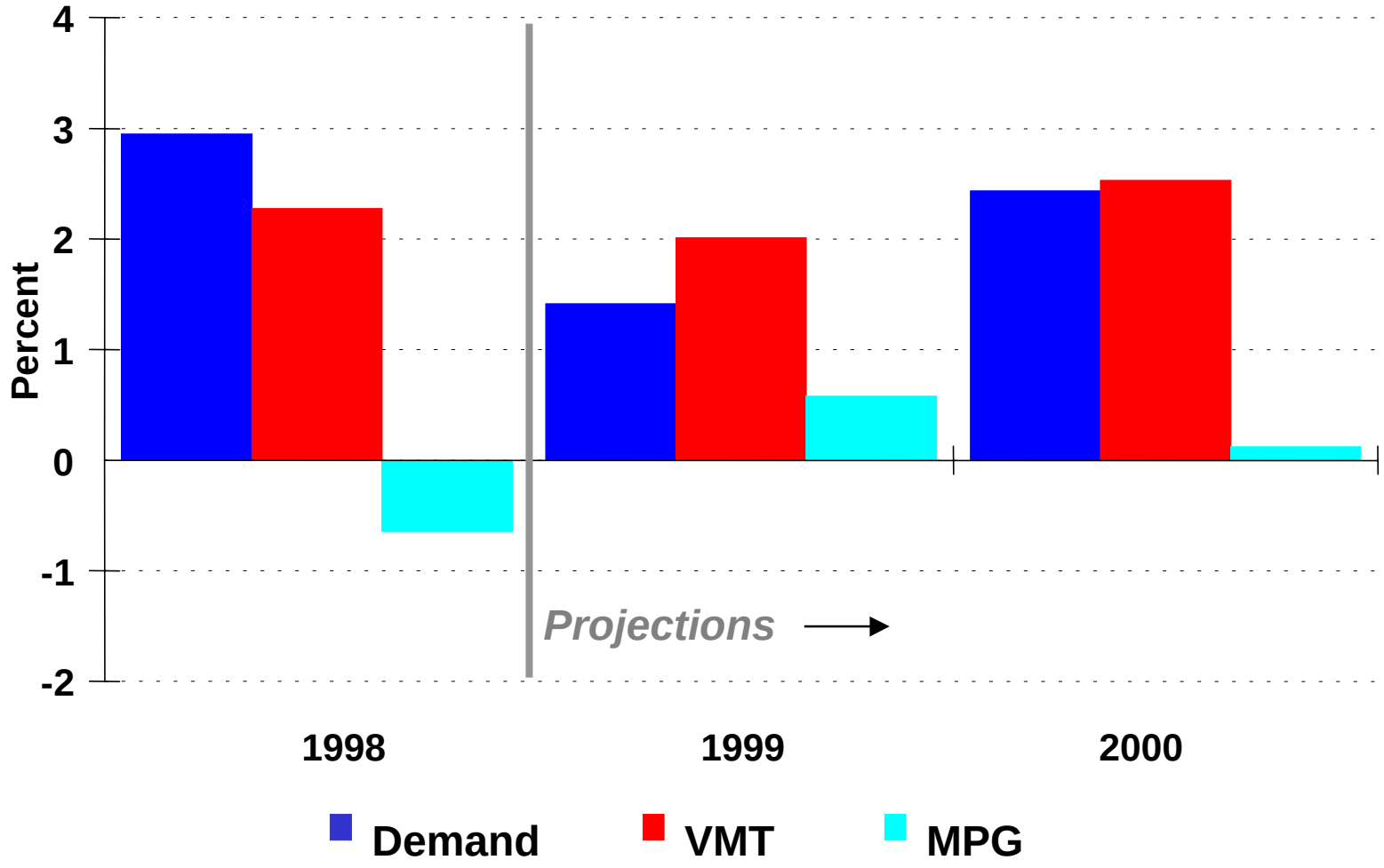
Figure 14. Year-to-Year Changes in Petroleum Demand



Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

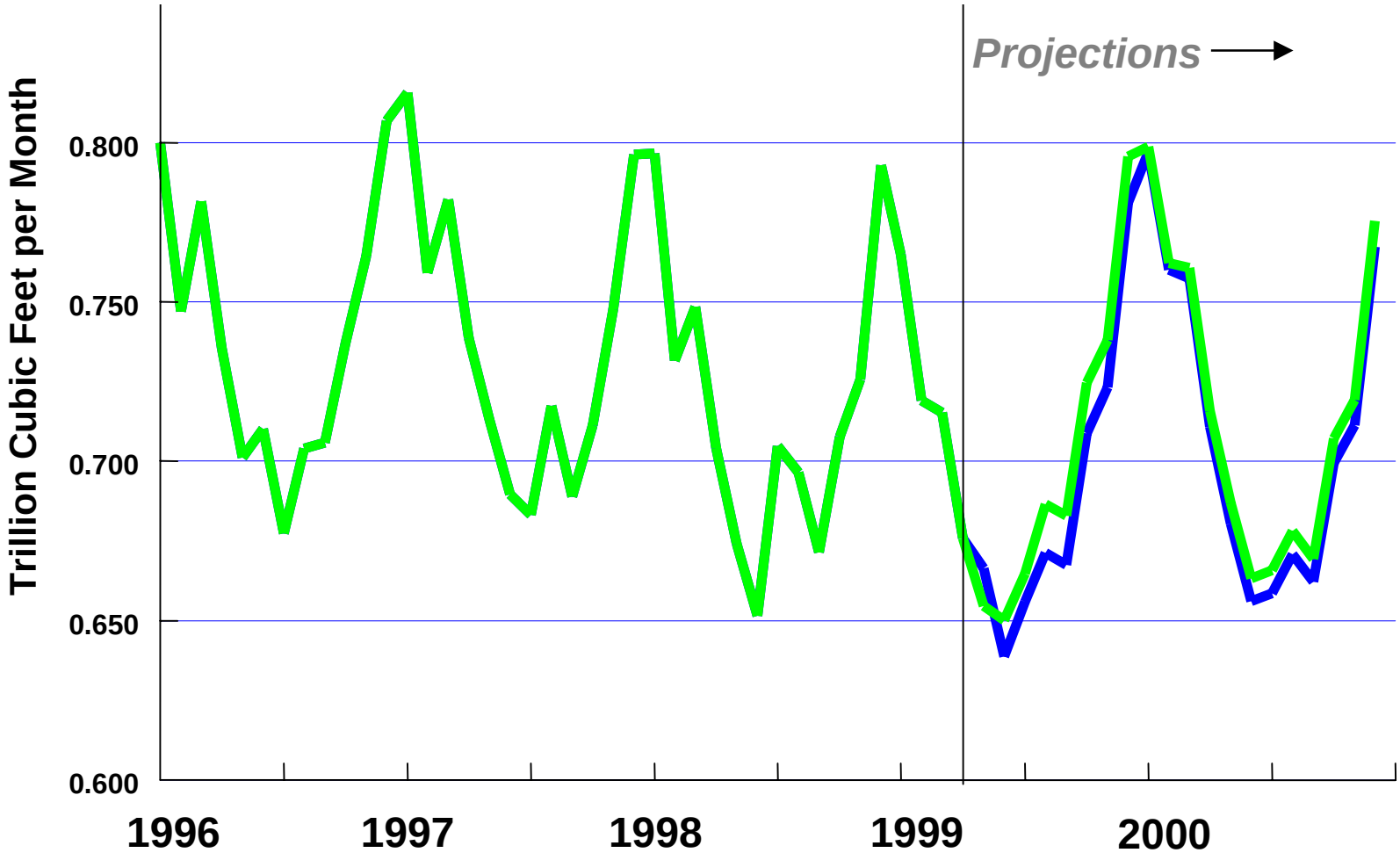
Figure 15. Year-to-Year Changes in the Gasoline Market



Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

Figure 16. Industrial Natural gas Demand



Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

fell below comparable 1998 levels some time in August, as expected, due to the continuation of high cooling demand. Storage is still expected to be lower than the abnormally high year-ago levels by the fourth quarter of this year if normal heating demand develops, and to continue to drop below year-ago levels in first quarter 2000 (Table 8 and Figure 17).

Electricity Demand and Supply

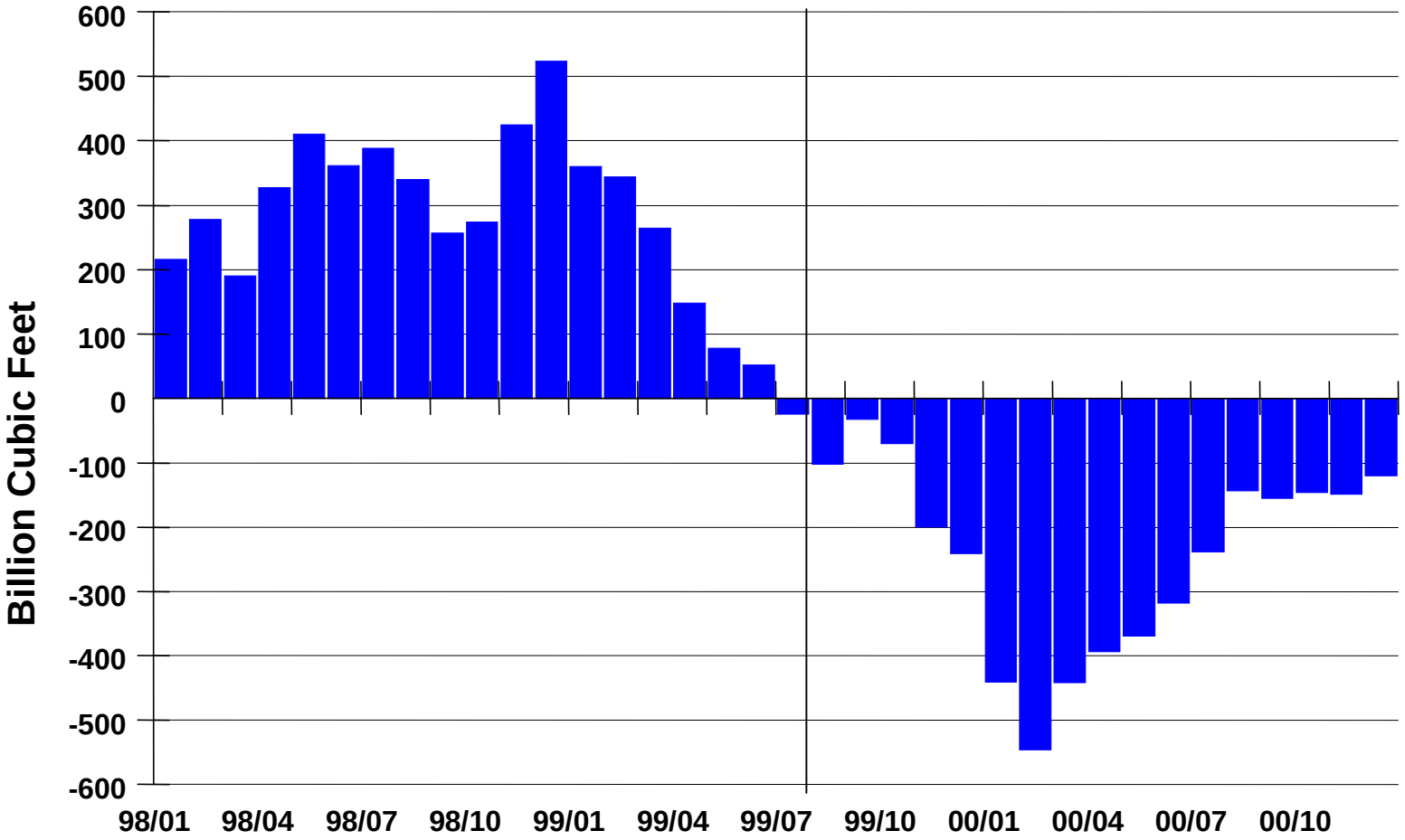
Demand. Electricity growth for all of 1999 is now expected to be 1.4 percent, somewhat higher than projected in the last outlook, while in 2000 demand is expected to be 1.6 percent, somewhat lower than projected in the last outlook.

Supply. Total electric utility generation for 1999 is now expected to be 0.7 percent lower than it was last year and 2.0 percent lower in 2000. Accordingly, the fuel mix at electric utilities has been noticeably changed, in particular, expected coal-fired output has been revised significantly downward in both 1999 and 2000. Oil-fired generation has also been revised downward due to the increases in world petroleum prices.

Model and Data Notes

Electricity Adjustments. Some significant divestment of electric power generating assets by electric utilities since 1998 has moved approximately 70 billion kilowatt-hours (about 2 percent of the electric utility total) of electricity production out of the regulated sector and into the non-regulated (nonutility) sector. This trend is expected to continue as deregulation moves ahead, although we do not assume anything about further divestments in this Outlook. For the plants divested since 1998, about 38 percent of the associated electricity production was from coal-fired plants. In previous Outlooks we had introduced some adjustments to nonutility coal use that reflected these changes in the ownership of the divested plants. Apparently, we did not correctly adjust the calculations for electric utility coal-fired generation associated with those changes and thus overstated total demand for coal for power generation. We have made corrections in the current Outlook and they are reflected in the coal balance shown in Table 9. Although we believe that we have the right combined utility plus nonutility totals for oil- and gas-fired generation, we have not explicitly moved the recently divested plants out of the utility category for these fuel sources. We expect to make estimates in this regard for next month's Outlook.

Figure 17. Gas in Underground Storage
(Change from Year Ago)



Sources: History: EIA; Projections: Short-Term Energy Outlook, September 1999

www.eia.doe.gov

Table HL1. U. S. Energy Supply and Demand

	Year				Annual Percentage Change		
	1997	1998	1999	2000	1997-1998	1998-1999	1999-2000
Real Gross Domestic Product (GDP) (billion chained 1992 dollars)	**7270**	**7552**	*7843*	*8018*	**3.9**	*3.9*	*2.2*
Imported Crude Oil Price [a] (nominal dollars per barrel)	**18.50**	**12.12**	*16.57*	*20.51*	**-34.5**	*36.7*	*23.8*
Petroleum Supply (million barrels per day)							
Crude Oil Production [b]	**6.45**	**6.25**	*6.01*	*5.97*	**-3.1**	*-3.8*	*-0.7*
Total Petroleum Net Imports (including SPR)	**9.16**	**9.76**	*9.85*	*10.20*	**6.6**	*0.9*	*3.6*
Energy Demand							
World Petroleum (million barrels per day)	**73.0**	**73.8**	*74.9*	*76.5*	**1.1**	*1.5*	*2.1*
Petroleum (million barrels per day)	**18.62**	**18.92**	*19.23*	*19.43*	**1.6**	*1.6*	*1.0*
Natural Gas (trillion cubic feet)	**21.97**	**21.35**	*21.76*	*22.38*	**-2.8**	*1.9*	*2.8*
Coal (million short tons)	**1029**	**1044**	*1054*	*1085*	**1.5**	*1.0*	*2.9*
Electricity (billion kilowatthours)							
Utility Sales [c]	**3140**	**3220**	*3266*	*3320*	**2.5**	*1.4*	*1.7*
Nonutility Own Use [d]	**161**	**164**	*166*	*168*	**1.9**	*1.2*	*1.2*
Total	**3301**	**3384**	*3432*	*3489*	**2.5**	*1.4*	*1.7*
Total Energy Demand [e] (quadrillion Btu)	**94.2**	**94.7**	*96.1*	*97.6*	**0.5**	*1.4*	*1.6*
Total Energy Demand per Dollar of GDP (thousand Btu per 1992 Dollar)	**12.96**	**12.55**	*12.25*	*12.17*	**-3.2**	*-2.4*	*-0.7*
Renewable Energy as Percent of Total [f]	**7.5**	**7.1**	*6.9*	*6.6*			

[a] Refers to the refiner acquisition cost (RAC) of imported crude oil.

[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, ":Annual Electric Utility Report," 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] 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)*.

[f] 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 CONTROL0299.

Table 1. U.S. Macroeconomic and Weather Assumptions

	1998				1999				2000				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Macroeconomic [a]															
Real Gross Domestic Product (billion chained 1992 dollars - SAAR)	**7465**	**7499**	**7566**	**7678**	**7760**	*7804*	*7870*	*7939*	*7954*	*7989*	*8042*	*8087*	**7552**	*7843*	*8018*
Percentage Change from Prior Year	**4.2**	**3.6**	**3.5**	**4.3**	**4.0**	*4.1*	*4.0*	*3.4*	*2.5*	*2.4*	*2.2*	*1.9*	**3.9**	*3.9*	*2.2*
Annualized Percent Change from Prior Quarter	**5.4**	**1.8**	**3.6**	**5.9**	**4.3**	*2.3*	*3.4*	*3.5*	*0.7*	*1.8*	*2.7*	*2.2*			
GDP Implicit Price Deflator (Index, 1992=1.000)	**1.123**	**1.126**	**1.129**	**1.131**	**1.135**	*1.140*	*1.143*	*1.147*	*1.153*	*1.156*	*1.160*	*1.165*	**1.127**	*1.141*	*1.158*
Percentage Change from Prior Year	**1.2**	**1.0**	**1.0**	**0.9**	**1.1**	*1.2*	*1.3*	*1.5*	*1.5*	*1.4*	*1.4*	*1.5*	**1.0**	*1.3*	*1.5*
Real Disposable Personal Income (billion chained 1992 Dollars - SAAR)	**5287**	**5322**	**5364**	**5421**	**5468**	*5500*	*5530*	*5555*	*5617*	*5671*	*5704*	*5732*	**5348**	*5513*	*5681*
Percentage Change from Prior Year	**3.0**	**3.0**	**3.2**	**3.5**	**3.4**	*3.4*	*3.1*	*2.5*	*2.7*	*3.1*	*3.2*	*3.2*	**3.2**	*3.1*	*3.0*
Manufacturing Production (Index, 1992=1.000)	**1.338**	**1.347**	**1.348**	**1.364**	**1.369**	*1.383*	*1.393*	*1.404*	*1.400*	*1.405*	*1.421*	*1.435*	**1.349**	*1.388*	*1.415*
Percentage Change from Prior Year	**6.0**	**5.0**	**3.1**	**2.5**	**2.3**	*2.7*	*3.4*	*2.9*	*2.2*	*1.6*	*2.0*	*2.2*	**4.1**	*2.8*	*2.0*
OECD Economic Growth (percent) [b]													**3.0**	*2.6*	*2.5*
Weather [c]															
Heating Degree-Days															
U.S.	**1984**	**481**	**42**	**1444**	**2144**	*541*	*80*	*1623*	*2264*	*522*	*85*	*1622*	**3951**	*4388*	*4494*
New England	**2768**	**770**	**104**	**2038**	**3064**	*882*	*179*	*2241*	*3219*	*894*	*167*	*2240*	**5680**	*6366*	*6520*
Middle Atlantic	**2406**	**570**	**57**	**1779**	**2823**	*703*	*92*	*2005*	*2934*	*709*	*104*	*2004*	**4812**	*5623*	*5751*
U.S. Gas-Weighted	**2078**	**548**	**66**	**1555**	**2267**	*554*	*82*	*1715*	*2378*	*546*	*95*	*1714*	**4247**	*4618*	*4734*
Cooling Degree-Days (U.S.)	**29**	**386**	**948**	**93**	**18**	*328*	*898*	*74*	*31*	*344*	*783*	*74*	**1456**	*1319*	*1233*

[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 CONTROL0299.

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

	1998				1999				2000				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Macroeconomic [a]															
Real Fixed Investment (billion chained 1992 dollars-SAAR)	**1225**	**1264**	**1271**	**1311**	**1344**	*1374*	*1379*	*1392*	*1406*	*1407*	*1409*	*1421*	**1268**	*1372*	*1411*
Real Exchange Rate (index)	**1.142**	**1.162**	**1.182**	**1.120**	**1.134**	*1.171*	*1.192*	*1.172*	*1.160*	*1.147*	*1.146*	*1.160*	**1.152**	*1.167*	*1.153*
Business Inventory Change (billion chained 1992 dollars-SAAR)	**30.2**	**23.9**	**19.2**	**6.2**	**-3.3**	*-2.7*	*5.7*	*18.4*	*5.8*	*2.1*	*1.9*	*0.6*	**19.9**	*4.5*	*2.6*
Producer Price Index (index, 1982=1.000)	**1.252**	**1.250**	**1.243**	**1.233**	**1.229**	*1.244*	*1.259*	*1.266*	*1.273*	*1.273*	*1.274*	*1.279*	**1.244**	*1.250*	*1.275*
Consumer Price Index (index, 1982-1984=1.000)	**1.621**	**1.628**	**1.635**	**1.642**	**1.648**	*1.662*	*1.674*	*1.684*	*1.697*	*1.706*	*1.714*	*1.725*	**1.631**	*1.667*	*1.710*
Petroleum Product Price Index (index, 1982=1.000)	**0.541**	**0.536**	**0.503**	**0.473**	**0.444**	*0.588*	*0.675*	*0.686*	*0.722*	*0.713*	*0.702*	*0.685*	**0.513**	*0.598*	*0.706*
Non-Farm Employment (millions)	**124.8**	**125.5**	**126.1**	**126.9**	**127.7**	*128.2*	*128.8*	*129.2*	*129.6*	*130.0*	*130.4*	*130.9*	**125.8**	*128.5*	*130.2*
Commercial Employment (millions)	**85.6**	**86.3**	**87.0**	**87.7**	**88.5**	*89.2*	*89.8*	*90.2*	*90.5*	*90.7*	*91.2*	*91.7*	**86.6**	*89.4*	*91.0*
Total Industrial Production (index, 1992=1.000)	**1.303**	**1.312**	**1.316**	**1.323**	**1.327**	*1.340*	*1.350*	*1.360*	*1.359*	*1.365*	*1.379*	*1.392*	**1.314**	*1.344*	*1.374*
Housing Stock (millions)	**113.7**	**113.9**	**114.4**	**115.0**	**115.4**	*115.7*	*116.0*	*116.4*	*116.7*	*117.0*	*117.3*	*117.6*	**114.3**	*115.9*	*117.2*
Miscellaneous															
Gas Weighted Industrial Production (index, 1992=1.000)	**1.175**	**1.171**	**1.158**	**1.156**	**1.169**	*1.168*	*1.171*	*1.174*	*1.170*	*1.174*	*1.183*	*1.190*	**1.165**	*1.170*	*1.179*
Vehicle Miles Traveled [b] (million miles/day)	**6629**	**7424**	**7602**	**7032**	**6707**	*7593*	*7747*	*7218*	*7011*	*7713*	*7885*	*7403*	**7174**	*7319*	*7504*
Vehicle Fuel Efficiency (index, 1997=1.0)	**0.993**	**0.999**	**0.991**	**0.991**	**0.988**	*1.011*	*1.001*	*0.996*	*1.004*	*1.011*	*0.990*	*0.997*	**0.994**	*0.999*	*1.000*
Real Vehicle Fuel Cost (cents per mile)	**3.34**	**3.18**	**3.08**	**3.11**	**2.97**	*3.28*	*3.49*	*3.76*	*3.69*	*3.61*	*3.59*	*3.67*	**3.18**	*3.37*	*3.64*
Air Travel Capacity (mill. available ton-miles/day)	**423.5**	**439.1**	**443.0**	**439.5**	**428.8**	*448.3*	*466.8*	*468.4*	*464.3*	*466.6*	*482.1*	*471.1*	**436.3**	*453.2*	*471.1*
Aircraft Utilization (mill. revenue ton-miles/day)	**237.7**	**259.0**	**260.5**	**247.1**	**240.8**	*268.3*	*277.7*	*262.0*	*255.6*	*273.2*	*288.5*	*273.3*	**251.1**	*262.3*	*272.7*
Airline Ticket Price Index (index, 1982-1984=1.000)	**2.058**	**2.053**	**2.070**	**2.029**	**2.130**	*2.186*	*2.225*	*2.245*	*2.285*	*2.296*	*2.304*	*2.327*	**2.053**	*2.196*	*2.303*
Raw Steel Production (millions tons)	**28.75**	**27.87**	**26.57**	**24.40**	**25.11**	*26.31*	*26.35*	*27.00*	*26.68*	*26.47*	*26.19*	*26.70*	**107.28**	*104.77*	*106.05*

[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 CONTROL0299.

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

(Million Barrels per Day, Except OECD Commercial Stocks)

	1998				1999				2000				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Demand [a]															
OECD															
U.S. (50 States)	**18.5**	**18.9**	**19.2**	**19.1**	**19.2**	*18.9*	*19.3*	*19.5*	*19.3*	*19.0*	*19.6*	*19.9*	**18.9**	*19.2*	*19.4*
U.S. Territories	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	**0.3**	*0.3*	*0.3*
Canada	**1.8**	**1.8**	**1.9**	**1.9**	**1.9**	*1.8*	*2.0*	*2.0*	*1.9*	*1.9*	*2.0*	*2.0*	**1.9**	*1.9*	*2.0*
Europe	**14.9**	**14.2**	**14.6**	**15.2**	**15.2**	*14.2*	*14.8*	*15.4*	*15.5*	*14.5*	*15.1*	*15.7*	**14.7**	*14.9*	*15.2*
Japan	**6.2**	**5.0**	**5.2**	**5.7**	**6.2**	*5.1*	*5.2*	*5.7*	*6.2*	*5.1*	*5.3*	*5.8*	**5.5**	*5.5*	*5.6*
Australia and New Zealand	**0.9**	**1.0**	**0.9**	**1.0**	**1.0**	*1.0*	*0.9*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	**0.9**	*1.0*	*1.0*
Total OECD	**42.6**	**41.0**	**42.2**	**43.2**	**43.7**	*41.3*	*42.6*	*43.9*	*44.2*	*41.8*	*43.3*	*44.7*	**42.2**	*42.9*	*43.5*
Non-OECD															
Former Soviet Union	**4.5**	**4.2**	**4.2**	**4.2**	**4.3**	*4.0*	*4.1*	*4.2*	*4.4*	*4.2*	*4.2*	*4.2*	**4.2**	*4.2*	*4.3*
Europe	**1.5**	**1.5**	**1.5**	**1.5**	**1.6**	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	**1.5**	*1.6*	*1.6*
China	**4.0**	**3.9**	**3.9**	**3.9**	**4.1**	*4.1*	*4.1*	*4.1*	*4.3*	*4.3*	*4.3*	*4.3*	**3.9**	*4.1*	*4.3*
Other Asia	**8.7**	**8.6**	**8.6**	**8.8**	**8.8**	*8.8*	*8.7*	*9.0*	*9.2*	*9.2*	*8.9*	*9.3*	**8.7**	*8.8*	*9.1*
Other Non-OECD	**13.0**	**13.3**	**13.4**	**13.2**	**13.2**	*13.4*	*13.4*	*13.5*	*13.4*	*13.7*	*13.8*	*13.7*	**13.2**	*13.4*	*13.7*
Total Non-OECD	**31.7**	**31.5**	**31.4**	**31.5**	**32.0**	*31.9*	*31.8*	*32.4*	*33.0*	*33.1*	*32.8*	*33.2*	**31.5**	*32.0*	*33.0*
Total World Demand	**74.3**	**72.6**	**73.6**	**74.7**	**75.7**	*73.2*	*74.4*	*76.2*	*77.2*	*74.8*	*76.0*	*77.9*	**73.8**	*74.9*	*76.5*
Supply [b]															
OECD															
U.S. (50 States)	**9.5**	**9.4**	**9.0**	**9.1**	**8.9**	*9.0*	*9.0*	*9.1*	*9.0*	*9.0*	*9.0*	*9.0*	**9.3**	*9.0*	*9.0*
Canada	**2.7**	**2.6**	**2.8**	**2.7**	**2.6**	*2.6*	*2.6*	*2.6*	*2.6*	*2.6*	*2.6*	*2.7*	**2.7**	*2.6*	*2.6*
North Sea [c]	**6.4**	**6.2**	**5.9**	**6.3**	**6.3**	*6.1*	*6.1*	*6.4*	*6.6*	*6.4*	*6.6*	*6.9*	**6.2**	*6.2*	*6.6*
Other OECD	**1.6**	**1.6**	**1.6**	**1.4**	**1.5**	*1.5*	*1.5*	*1.5*	*1.6*	*1.6*	*1.6*	*1.7*	**1.6**	*1.5*	*1.6*
Total OECD	**20.2**	**19.9**	**19.2**	**19.6**	**19.3**	*19.1*	*19.1*	*19.6*	*19.9*	*19.7*	*19.8*	*20.2*	**19.7**	*19.3*	*19.9*
Non-OECD															
OPEC	**30.9**	**30.8**	**30.1**	**30.0**	**30.3**	*28.9*	*28.9*	*29.2*	*29.5*	*29.9*	*30.5*	*30.9*	**30.4**	*29.3*	*30.2*
Former Soviet Union	**7.3**	**7.2**	**7.2**	**7.3**	**7.2**	*7.3*	*7.3*	*7.4*	*7.4*	*7.3*	*7.3*	*7.4*	**7.2**	*7.3*	*7.3*
China	**3.2**	**3.2**	**3.2**	**3.2**	**3.2**	*3.2*	*3.2*	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*	**3.2**	*3.2*	*3.3*
Mexico	**3.6**	**3.6**	**3.5**	**3.5**	**3.6**	*3.4*	*3.4*	*3.5*	*3.6*	*3.6*	*3.6*	*3.6*	**3.5**	*3.5*	*3.6*
Other Non-OECD	**10.7**	**10.8**	**10.8**	**11.0**	**11.1**	*10.9*	*11.1*	*11.2*	*11.3*	*11.3*	*11.4*	*11.4*	**10.8**	*11.1*	*11.3*
Total Non-OECD	**55.7**	**55.5**	**54.7**	**54.9**	**55.4**	*53.7*	*53.9*	*54.5*	*55.0*	*55.3*	*56.0*	*56.6*	**55.2**	*54.4*	*55.7*
Total World Supply	**75.9**	**75.3**	**74.0**	**74.5**	**74.7**	*72.8*	*73.0*	*74.2*	*74.8*	*75.0*	*75.8*	*76.8*	**74.9**	*73.7*	*75.6*
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR)	**-0.3**	**-0.7**	**0.0**	**0.1**	**0.4**	*-0.2*	*0.0*	*0.3*	*0.5*	*-0.6*	*-0.3*	*0.5*	**-0.2**	*0.1*	*0.0*
Other	**-1.4**	**-2.1**	**-0.4**	**0.1**	**0.7**	*0.6*	*1.4*	*1.7*	*1.9*	*0.4*	*0.5*	*0.6*	**-0.9**	*1.1*	*0.8*
Total Stock Withdrawals	**-1.7**	**-2.8**	**-0.4**	**0.2**	**1.0**	*0.4*	*1.4*	*2.0*	*2.4*	*-0.2*	*0.2*	*1.1*	**-1.1**	*1.2*	*0.9*
OECD Comm. Stocks, End (bill. bbls.)	**2.7**	**2.9**	**2.9**	**2.8**	**2.8**	*2.8*	*2.7*	*2.6*	*2.5*	*2.5*	*2.5*	*2.5*	**2.8**	*2.6*	*2.5*
Non-OPEC Supply	**45.0**	**44.6**	**43.9**	**44.5**	**44.4**	*43.9*	*44.1*	*45.0*	*45.3*	*45.1*	*45.4*	*45.9*	**44.5**	*44.3*	*45.4*
Net Exports from Former Soviet Union	**2.8**	**3.0**	**3.1**	**3.1**	**2.9**	*3.3*	*3.2*	*3.1*	*2.9*	*3.0*	*3.1*	*3.2*	**3.0**	*3.1*	*3.0*

[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)

	1998				1999				2000				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Imported Crude Oil [a]															
(dollars per barrel)	**13.44**	**12.40**	**11.87**	**10.86**	**10.92**	*15.37*	*19.13*	*20.58*	*21.00*	*20.42*	*20.17*	*20.50*	**12.12**	*16.57*	*20.51*
Natural Gas Wellhead															
(dollars per thousand cubic feet)	**2.02**	**2.07**	**1.92**	**1.84**	**1.74**	*2.04*	*2.32*	*2.63*	*2.42*	*2.09*	*2.22*	*2.58*	**1.96**	*2.19*	*2.33*
Petroleum Products															
Gasoline Retail [b] (dollars per gallon)															
All Grades	**1.10**	**1.10**	**1.07**	**1.03**	**0.99**	*1.17*	*1.25*	*1.28*	*1.28*	*1.32*	*1.31*	*1.28*	**1.07**	*1.18*	*1.30*
Regular Unleaded	**1.05**	**1.05**	**1.03**	**0.99**	**0.95**	*1.13*	*1.21*	*1.24*	*1.24*	*1.28*	*1.27*	*1.24*	**1.03**	*1.14*	*1.26*
No. 2 Diesel Oil, Retail															
(dollars per gallon)	**1.08**	**1.05**	**1.02**	**1.00**	**0.97**	*1.08*	*1.17*	*1.23*	*1.23*	*1.22*	*1.20*	*1.24*	**1.04**	*1.11*	*1.22*
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	**0.47**	**0.43**	**0.39**	**0.38**	**0.36**	*0.44*	*0.55*	*0.62*	*0.64*	*0.62*	*0.62*	*0.65*	**0.42**	*0.50*	*0.63*
No. 2 Heating Oil, Retail															
(dollars per gallon)	**0.91**	**0.85**	**0.77**	**0.79**	**0.80**	*0.82*	*0.89*	*1.01*	*1.06*	*1.03*	*0.98*	*1.04*	**0.85**	*0.87*	*1.04*
No. 6 Residual Fuel Oil, Retail [c]															
(dollars per barrel)	**13.58**	**13.27**	**12.32**	**11.77**	**11.27**	*14.43*	*18.64*	*20.29*	*20.84*	*19.18*	*18.50*	*19.82*	**12.73**	*15.97*	*19.66*
Electric Utility Fuels															
Coal															
(dollars per million Btu)	**1.26**	**1.26**	**1.25**	**1.23**	**1.24**	*1.25*	*1.24*	*1.24*	*1.25*	*1.26*	*1.23*	*1.23*	**1.25**	*1.24*	*1.24*
Heavy Fuel Oil [d]															
(dollars per million Btu)	**2.12**	**2.17**	**2.07**	**1.93**	**1.72**	*2.36*	*3.05*	*3.34*	*3.23*	*3.12*	*3.04*	*3.27*	**2.07**	*2.55*	*3.17*
Natural Gas															
(dollars per million Btu)	**2.61**	**2.46**	**2.26**	**2.31**	**2.19**	*2.39*	*2.71*	*3.14*	*3.07*	*2.64*	*2.73*	*3.16*	**2.38**	*2.63*	*2.84*
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	**6.38**	**7.33**	**8.90**	**6.64**	**6.09**	*6.85*	*8.93*	*7.09*	*7.10*	*7.64*	*8.69*	*7.01*	**6.82**	*6.73*	*7.28*
Electricity															
(cents per kilowatthour)	**7.96**	**8.43**	**8.55**	**8.09**	**7.79**	*8.24*	*8.46*	*8.08*	*7.71*	*8.11*	*8.37*	*7.92*	**8.28**	*8.16*	*8.04*

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

[b] Average self-service cash prices.

[c] Average for all sulfur contents.

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

Notes: Data are estimated for the first quarter of 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)

	1998				1999				2000				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Supply															
Crude Oil Supply															
Domestic Production [a]	**6.47**	**6.37**	**6.07**	**6.11**	**6.00**	*5.96*	*6.00*	*6.10*	*6.05*	*5.99*	*5.92*	*5.92*	**6.25**	*6.01*	*5.97*
Alaska	**1.23**	**1.17**	**1.13**	**1.17**	**1.13**	*1.05*	*1.05*	*1.07*	*1.02*	*0.96*	*0.92*	*0.95*	**1.17**	*1.08*	*0.96*
Lower 48	**5.25**	**5.20**	**4.94**	**4.93**	**4.86**	*4.91*	*4.95*	*5.02*	*5.03*	*5.02*	*5.00*	*4.97*	**5.08**	*4.94*	*5.01*
Net Imports (including SPR) [b]	**8.00**	**8.80**	**9.00**	**8.57**	**8.39**	*8.65*	*9.00*	*8.58*	*8.28*	*9.13*	*9.43*	*8.87*	**8.60**	*8.66*	*8.93*
Other SPR Supply	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.03*	*0.08*	*0.10*	*0.00*	*0.00*	*0.00*	*0.00*	**0.00**	*0.05*	*0.00*
SPR Stock Withdrawn or Added (-)	**0.00**	**0.00**	**0.00**	**-0.09**	**-0.01**	*-0.03*	*-0.05*	*0.02*	*0.00*	*0.00*	*0.00*	*0.00*	**-0.02**	*-0.02*	*0.00*
Other Stock Withdrawn or Added (-)	**-0.33**	**0.02**	**0.24**	**-0.15**	**-0.21**	*0.15*	*0.14*	*-0.10*	*0.03*	*-0.04*	*0.05*	*0.05*	**-0.05**	*0.00*	*0.02*
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	**0.20**	**0.11**	**0.07**	**0.09**	**0.30**	*0.28*	*0.29*	*0.21*	*0.20*	*0.21*	*0.22*	*0.21*	**0.11**	*0.27*	*0.21*
Total Crude Oil Supply	**14.34**	**15.30**	**15.38**	**14.53**	**14.47**	*14.98*	*15.38*	*14.80*	*14.57*	*15.28*	*15.61*	*15.06*	**14.89**	*14.91*	*15.13*
Other Supply															
NGL Production	**1.84**	**1.82**	**1.67**	**1.71**	**1.72**	*1.79*	*1.76*	*1.77*	*1.78*	*1.78*	*1.77*	*1.76*	**1.76**	*1.76*	*1.77*
Other Hydrocarbon and Alcohol Inputs	**0.39**	**0.37**	**0.37**	**0.39**	**0.37**	*0.39*	*0.35*	*0.38*	*0.37*	*0.35*	*0.36*	*0.38*	**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**	**0.89**	**0.93**	**0.82**	*0.88*	*0.89*	*0.87*	*0.85*	*0.90*	*0.92*	*0.89*	**0.89**	*0.86*	*0.89*
Net Product Imports [c]	**1.03**	**1.22**	**1.18**	**1.24**	**1.26**	*1.25*	*1.05*	*1.23*	*1.22*	*1.23*	*1.29*	*1.35*	**1.17**	*1.20*	*1.27*
Product Stock Withdrawn or Added (-) [d]	**0.03**	**-0.72**	**-0.26**	**0.30**	**0.58**	*-0.37*	*-0.11*	*0.43*	*0.49*	*-0.52*	*-0.39*	*0.42*	**-0.17**	*0.13*	*0.00*
Total Supply	**18.46**	**18.86**	**19.24**	**19.10**	**19.21**	*18.92*	*19.32*	*19.47*	*19.28*	*19.03*	*19.56*	*19.86*	**18.92**	*19.23*	*19.43*
Demand															
Motor Gasoline	**7.78**	**8.37**	**8.52**	**8.33**	**7.91**	*8.46*	*8.59*	*8.51*	*8.13*	*8.59*	*8.84*	*8.72*	**8.25**	*8.37*	*8.57*
Jet Fuel	**1.58**	**1.61**	**1.61**	**1.68**	**1.71**	*1.62*	*1.65*	*1.72*	*1.72*	*1.66*	*1.71*	*1.74*	**1.62**	*1.67*	*1.71*
Distillate Fuel Oil	**3.59**	**3.43**	**3.37**	**3.45**	**3.70**	*3.34*	*3.39*	*3.64*	*3.86*	*3.49*	*3.45*	*3.69*	**3.46**	*3.52*	*3.62*
Residual Fuel Oil	**0.85**	**0.88**	**0.99**	**0.83**	**0.95**	*0.76*	*0.84*	*0.76*	*0.82*	*0.65*	*0.66*	*0.73*	**0.89**	*0.83*	*0.71*
Other Oils [e]	**4.65**	**4.57**	**4.75**	**4.80**	**4.93**	*4.73*	*4.85*	*4.85*	*4.76*	*4.64*	*4.90*	*4.98*	**4.69**	*4.84*	*4.82*
Total Demand	**18.46**	**18.86**	**19.24**	**19.10**	**19.21**	*18.91*	*19.32*	*19.47*	*19.28*	*19.03*	*19.56*	*19.86*	**18.92**	*19.23*	*19.43*
Total Petroleum Net Imports	**9.02**	**10.02**	**10.19**	**9.82**	**9.65**	*9.90*	*10.05*	*9.81*	*9.51*	*10.36*	*10.72*	*10.22*	**9.76**	*9.85*	*10.20*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**334**	**332**	**310**	**324**	**342**	*328*	*315*	*324*	*322*	*326*	*321*	*316*	**324**	*324*	*316*
Total Motor Gasoline	**216**	**222**	**207**	**216**	**216**	*216*	*205*	*210*	*213*	*212*	*208*	*209*	**216**	*210*	*209*
Finished Motor Gasoline	**167**	**177**	**164**	**172**	**167**	*172*	*162*	*167*	*167*	*170*	*166*	*168*	**172**	*167*	*168*
Blending Components	**49**	**45**	**43**	**44**	**48**	*44*	*43*	*43*	*47*	*42*	*42*	*41*	**44**	*43*	*41*
Jet Fuel	**43**	**44**	**46**	**45**	**41**	*44*	*45*	*43*	*40*	*41*	*45*	*46*	**45**	*43*	*46*
Distillate Fuel Oil	**125**	**136**	**153**	**156**	**126**	*133*	*141*	*141*	*107*	*116*	*135*	*141*	**156**	*141*	*141*
Residual Fuel Oil	**41**	**40**	**40**	**45**	**40**	*43*	*41*	*42*	*35*	*40*	*41*	*44*	**45**	*42*	*44*
Other Oils [e]	**265**	**313**	**334**	**291**	**279**	*297*	*312*	*269*	*264*	*298*	*313*	*264*	**291**	*269*	*264*
Total Stocks (excluding SPR)	**1024**	**1087**	**1089**	**1076**	**1042**	*1061*	*1059*	*1028*	*981*	*1032*	*1063*	*1020*	**1076**	*1028*	*1020*
Crude Oil in SPR	**563**	**563**	**563**	**571**	**572**	*575*	*580*	*578*	*578*	*578*	*578*	*578*	**571**	*578*	*578*
Total Stocks (including SPR)	**1587**	**1651**	**1653**	**1647**	**1614**	*1636*	*1638*	*1606*	*1559*	*1610*	*1641*	*1598*	**1647**	*1606*	*1598*

[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. 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	*6.24*	*5.50*	*0.74*	*0.09*	*0.66*
Lower 48 States	*5.29*	*4.57*	*0.72*	*0.07*	*0.64*
Alaska	*0.96*	*0.93*	*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)

	1998				1999				2000				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Supply															
Total Dry Gas Production	**4.72**	**4.71**	**4.74**	**4.72**	**4.63**	*4.69*	*4.71*	*4.71*	*4.77*	*4.72*	*4.74*	*4.74*	**18.89**	*18.74*	*18.97*
Net Imports	**0.75**	**0.71**	**0.75**	**0.77**	**0.83**	*0.80*	*0.87*	*0.86*	*0.89*	*0.86*	*0.92*	*0.92*	**2.98**	*3.36*	*3.60*
Supplemental Gaseous Fuels	**0.03**	**0.02**	**0.03**	**0.03**	**0.03**	*0.03*	*0.03*	*0.03*	*0.04*	*0.03*	*0.03*	*0.03*	**0.12**	*0.13*	*0.13*
Total New Supply	**5.50**	**5.45**	**5.51**	**5.52**	**5.49**	*5.52*	*5.61*	*5.61*	*5.70*	*5.61*	*5.69*	*5.70*	**21.98**	*22.23*	*22.70*
Underground Working Gas Storage															
Opening	**6.52**	**5.53**	**6.45**	**7.29**	**7.04**	*5.79*	*6.50*	*7.26*	*6.80*	*5.35*	*6.18*	*7.10*	**6.52**	*7.04*	*6.80*
Closing	**5.53**	**6.45**	**7.29**	**7.04**	**5.79**	*6.50*	*7.26*	*6.80*	*5.35*	*6.18*	*7.10*	*6.68*	**7.04**	*6.80*	*6.68*
Net Withdrawals	**0.99**	**-0.92**	**-0.84**	**0.25**	**1.25**	*-0.71*	*-0.76*	*0.45*	*1.45*	*-0.83*	*-0.92*	*0.42*	**-0.52**	*0.24*	*0.12*
Total Supply	**6.49**	**4.53**	**4.67**	**5.77**	**6.75**	*4.81*	*4.86*	*6.06*	*7.15*	*4.78*	*4.77*	*6.12*	**21.46**	*22.47*	*22.82*
Balancing Item [a]	**0.16**	**0.19**	**-0.03**	**-0.43**	**0.02**	*-0.07*	*-0.21*	*-0.45*	*0.04*	*0.16*	*-0.13*	*-0.51*	**-0.11**	*-0.71*	*-0.44*
Total Primary Supply	**6.66**	**4.72**	**4.64**	**5.34**	**6.77**	*4.74*	*4.64*	*5.61*	*7.19*	*4.93*	*4.64*	*5.61*	**21.35**	*21.76*	*22.38*
Demand															
Lease and Plant Fuel	**0.31**	**0.31**	**0.31**	**0.31**	**0.30**	*0.31*	*0.31*	*0.31*	*0.31*	*0.31*	*0.31*	*0.31*	**1.24**	*1.24*	*1.24*
Pipeline Use	**0.23**	**0.16**	**0.16**	**0.18**	**0.23**	*0.16*	*0.16*	*0.20*	*0.24*	*0.17*	*0.16*	*0.19*	**0.73**	*0.75*	*0.75*
Residential	**2.13**	**0.78**	**0.37**	**1.20**	**2.24**	*0.81*	*0.38*	*1.36*	*2.40*	*0.83*	*0.38*	*1.37*	**4.48**	*4.78*	*4.98*
Commercial	**1.21**	**0.57**	**0.45**	**0.81**	**1.25**	*0.60*	*0.44*	*0.88*	*1.38*	*0.63*	*0.45*	*0.90*	**3.04**	*3.17*	*3.36*
Industrial (Incl. Cogenerators)	**2.23**	**1.99**	**2.03**	**2.18**	**2.16**	*1.94*	*1.95*	*2.16*	*2.23*	*1.97*	*1.92*	*2.11*	**8.43**	*8.20*	*8.23*
Cogenerators	**0.51**	**0.49**	**0.54**	**0.60**	**0.53**	*0.50*	*0.55*	*0.61*	*0.54*	*0.51*	*0.56*	*0.63*	**2.14**	*2.19*	*2.23*
Electricity Production															
Electric Utilities	**0.50**	**0.86**	**1.29**	**0.61**	**0.54**	*0.88*	*1.35*	*0.65*	*0.59*	*0.98*	*1.38*	*0.67*	**3.26**	*3.43*	*3.63*
Nonutilities (Excl. Cogen.) [b]	**0.04**	**0.04**	**0.05**	**0.05**	**0.04**	*0.04*	*0.05*	*0.05*	*0.05*	*0.04*	*0.05*	*0.05*	**0.18**	*0.18*	*0.19*
Total Demand	**6.66**	**4.72**	**4.64**	**5.34**	**6.77**	*4.74*	*4.64*	*5.61*	*7.19*	*4.93*	*4.64*	*5.61*	**21.35**	*21.76*	*22.38*

[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.

[b] Quarterly estimates and projections for gas consumption by nonutility generators are based on estimates for quarterly gas-fired generation at nonutilities, supplied by the Office of Coal, Nuclear, Electric and Alternate Fuels (CNEAF), Energy Information Administration (EIA), based on annual data reported to EIA on Form EIA-867 (Annual Nonutility Power Producer Report). Annual projections for nonutility gas consumption, as well as the detail on independent power producers' share of gas consumption, are provided by CNEAF.

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)

	1998				1999				2000				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Supply															
Production	**281.6**	**275.4**	**278.6**	**282.6**	**282.3**	*258.5*	*279.4*	*275.7*	*277.3*	*278.0*	*276.2*	*276.3*	**1118.1**	*1095.8*	*1107.8*
Appalachia	**119.5**	**114.0**	**113.2**	**113.6**	**118.2**	*109.7*	*111.3*	*113.5*	*114.1*	*116.1*	*107.7*	*111.9*	**460.4**	*452.8*	*449.9*
Interior	**43.1**	**42.4**	**41.5**	**41.4**	**41.5**	*36.1*	*39.8*	*39.9*	*39.1*	*37.1*	*37.5*	*38.2*	**168.4**	*157.3*	*151.8*
Western	**119.0**	**119.0**	**123.8**	**127.6**	**122.5**	*112.6*	*128.3*	*122.3*	*124.1*	*124.8*	*131.0*	*126.2*	**489.4**	*485.8*	*506.1*
Primary Stock Levels [a]															
Opening	**34.0**	**41.0**	**38.3**	**34.2**	**36.1**	*42.4*	*41.4*	*39.0*	*36.6*	*42.7*	*43.0*	*34.6*	**34.0**	*36.1*	*36.6*
Closing	**41.0**	**38.3**	**34.2**	**36.1**	**42.4**	*41.4*	*39.0*	*36.6*	*42.7*	*43.0*	*34.6*	*33.6*	**36.1**	*36.6*	*33.6*
Net Withdrawals	**-7.0**	**2.7**	**4.2**	**-2.0**	**-6.2**	*1.0*	*2.4*	*2.4*	*-6.0*	*-0.3*	*8.4*	*1.0*	**-2.2**	*-0.5*	*3.1*
Imports	**1.8**	**2.2**	**2.1**	**2.5**	**2.2**	*1.9*	*2.3*	*2.3*	*2.2*	*2.2*	*2.2*	*2.3*	**8.7**	*8.8*	*9.0*
Exports	**18.6**	**20.7**	**19.9**	**18.8**	**13.0**	*14.8*	*17.8*	*17.8*	*15.4*	*15.6*	*15.9*	*15.8*	**78.0**	*63.4*	*62.7*
Total Net Domestic Supply	**257.8**	**259.5**	**265.0**	**264.4**	**265.3**	*246.5*	*266.3*	*262.6*	*258.0*	*264.3*	*271.0*	*263.9*	**1046.6**	*1040.8*	*1057.1*
Secondary Stock Levels [b]															
Opening	**106.4**	**114.5**	**124.3**	**111.8**	**133.6**	*149.1*	*149.7*	*132.3*	*132.4*	*122.9*	*135.5*	*123.4*	**106.4**	*133.6*	*132.4*
Closing	**114.5**	**124.3**	**111.8**	**133.6**	**149.1**	*149.7*	*132.3*	*132.4*	*122.9*	*135.5*	*123.4*	*120.2*	**133.6**	*132.4*	*120.2*
Net Withdrawals	**-8.1**	**-9.8**	**12.5**	**-21.7**	**-15.6**	*-0.6*	*17.4*	*0.0*	*9.5*	*-12.7*	*12.1*	*3.2*	**-27.2**	*1.2*	*12.2*
Waste Coal Supplied to IPPs [c]	**2.4**	**2.4**	**2.4**	**2.3**	**2.3**	*2.5*	*3.2*	*3.6*	*4.0*	*4.0*	*4.0*	*4.0*	**9.5**	*11.6*	*15.8*
Total Supply	**252.0**	**252.2**	**279.8**	**244.9**	**252.1**	*248.5*	*286.8*	*266.2*	*271.5*	*255.6*	*287.1*	*271.1*	**1028.9**	*1053.6*	*1085.2*
Demand															
Coke Plants	**6.7**	**7.2**	**7.3**	**7.0**	**6.8**	*6.8*	*6.9*	*7.2*	*7.2*	*6.9*	*6.8*	*7.0*	**28.2**	*27.6*	*27.9*
Electricity Production															
Electric Utilities	**220.4**	**218.4**	**252.3**	**219.7**	**217.2**	*213.2*	*249.3*	*225.8*	*231.0*	*218.3*	*249.0*	*230.2*	**910.9**	*905.5*	*928.5*
Nonutilities (Excl. Cogen.) [d]	**6.4**	**6.5**	**7.8**	**8.4**	**8.8**	*10.7*	*12.7*	*12.7*	*12.8*	*12.5*	*13.3*	*13.3*	**29.1**	*44.9*	*51.9*
Retail and General Industry [e]	**20.1**	**18.3**	**17.8**	**19.5**	**19.3**	*17.8*	*17.9*	*20.6*	*20.5*	*17.9*	*17.9*	*20.5*	**75.7**	*75.6*	*76.8*
Total Demand	**253.6**	**250.4**	**285.2**	**254.7**	**252.1**	*248.5*	*286.8*	*266.2*	*271.5*	*255.6*	*287.1*	*271.1*	**1043.9**	*1053.6*	*1085.2*
Discrepancy [f]	**-1.6**	**1.7**	**-5.3**	**-9.8**	**0.0**	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	***-15.0***	*0.0*	*0.0*

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

[b] Secondary stocks are held by users.

[c] Estimated independent power producers (IPPs) consumption of waste coal for 1994 is 7.9 million tons, 8.5 million tons in 1995, and 8.8 million tons in 1996. This item includes waste coal and coal slurry reprocessed into briquettes.

[d] Estimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA). Quarterly coal consumption estimates for 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 in 1994, 1995, 1996, 1997 and 1998.

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

(S) indicates amounts of less than 50,000 tons in absolute value.

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)

	1998				1999				2000				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Supply															
Net Utility Generation															
Coal	**437.6**	**435.0**	**500.3**	**434.5**	**431.6**	*422.7*	*492.6*	*444.7*	*459.9*	*434.3*	*492.4*	*455.2*	**1807.5**	*1791.5*	*1841.8*
Petroleum	**20.8**	**28.5**	**37.2**	**23.7**	**26.9**	*24.4*	*25.8*	*19.6*	*23.3*	*17.6*	*21.5*	*19.9*	**110.2**	*96.6*	*82.4*
Natural Gas	**48.0**	**80.8**	**121.1**	**59.3**	**52.0**	*84.1*	*129.3*	*62.6*	*56.8*	*93.9*	*131.7*	*64.5*	**309.2**	*327.9*	*346.9*
Nuclear	**162.6**	**154.7**	**179.1**	**177.3**	**181.1**	*165.0*	*190.8*	*167.1*	*177.1*	*160.8*	*188.8*	*169.5*	**673.7**	*704.0*	*696.1*
Hydroelectric	**86.5**	**88.1**	**69.6**	**60.2**	**83.4**	*79.7*	*70.7*	*65.4*	*77.3*	*79.2*	*64.6*	*63.8*	**304.4**	*299.1*	*284.9*
Geothermal and Other [a]	**1.9**	**1.4**	**1.9**	**2.0**	**1.6**	*1.0*	*0.6*	*0.6*	*0.5*	*0.5*	*0.6*	*0.6*	**7.2**	*3.7*	*2.2*
Subtotal	**757.3**	**788.6**	**909.3**	**757.0**	**776.5**	*776.9*	*909.7*	*759.8*	*794.9*	*786.3*	*899.6*	*773.6*	**3212.2**	*3222.9*	*3254.4*
Nonutility Generation [b]															
Coal	**16.2**	**16.2**	**19.4**	**22.1**	**21.3**	*24.8*	*29.6*	*30.6*	*29.2*	*28.3*	*30.6*	*31.6*	**73.9**	*106.3*	*119.7*
Petroleum	**3.9**	**3.8**	**4.1**	**4.6**	**4.0**	*3.9*	*4.2*	*4.7*	*4.1*	*4.0*	*4.3*	*4.8*	**16.4**	*16.8*	*17.2*
Natural Gas	**49.8**	**47.7**	**51.9**	**58.1**	**50.9**	*48.7*	*53.0*	*59.4*	*51.9*	*49.8*	*54.1*	*60.6*	**207.6**	*212.0*	*216.5*
Other Gaseous Fuels [c]	**3.0**	**2.9**	**3.1**	**3.5**	**2.9**	*2.8*	*3.1*	*3.4*	*2.9*	*2.7*	*3.0*	*3.3*	**12.5**	*12.2*	*11.9*
Hydroelectric	**4.2**	**4.0**	**4.3**	**4.9**	**4.3**	*4.1*	*4.5*	*5.0*	*4.5*	*4.3*	*4.7*	*5.2*	**17.4**	*18.0*	*18.7*
Geothermal and Other [d]	**15.1**	**19.4**	**12.9**	**3.3**	**17.8**	*17.5*	*21.3*	*23.8*	*20.0*	*18.9*	*21.3*	*23.7*	**50.7**	*80.3*	*83.8*
Subtotal	**92.3**	**94.0**	**95.8**	**96.5**	**101.3**	*101.9*	*115.7*	*126.9*	*112.6*	*107.9*	*118.0*	*129.4*	**378.6**	*445.7*	*467.9*
Total Generation	**849.6**	**882.6**	**1005.0**	**853.5**	**877.8**	*878.7*	*1025.4*	*886.7*	*907.5*	*894.2*	*1017.6*	*902.9*	**3590.7**	*3668.6*	*3722.2*
Net Imports [e]	**5.8**	**6.9**	**10.9**	**5.2**	**1.2**	*7.5*	*9.3*	*7.6*	*5.5*	*6.5*	*8.4*	*6.0*	**28.8**	*25.6*	*26.4*
Total Supply	**855.4**	**889.5**	**1015.9**	**858.6**	**879.0**	*886.3*	*1034.6*	*894.4*	*913.0*	*900.7*	*1026.0*	*908.9*	**3619.5**	*3694.3*	*3748.6*
Losses and Unaccounted for [f]	**52.8**	**85.0**	**57.9**	**40.1**	**54.7**	*78.7*	*66.2*	*62.7*	*49.8*	*77.0*	*67.3*	*65.7*	**235.8**	*262.3*	*259.8*
Demand															
Electric Utility Sales															
Residential	**273.5**	**248.9**	**346.6**	**255.0**	**286.0**	*245.9*	*347.5*	*262.4*	*304.1*	*258.3*	*338.0*	*267.7*	**1124.0**	*1141.8*	*1168.1*
Commercial	**216.5**	**230.2**	**271.9**	**230.2**	**226.0**	*235.3*	*278.4*	*234.7*	*236.8*	*236.8*	*275.1*	*237.2*	**948.9**	*974.5*	*985.8*
Industrial	**249.7**	**263.6**	**271.6**	**262.4**	**248.5**	*263.9*	*273.6*	*262.4*	*255.9*	*264.4*	*275.4*	*265.0*	**1047.3**	*1048.4*	*1060.8*
Other	**23.6**	**24.1**	**27.0**	**25.1**	**23.9**	*24.4*	*27.4*	*25.6*	*26.0*	*25.3*	*28.1*	*26.1*	**99.9**	*101.3*	*105.6*
Subtotal	**763.4**	**766.9**	**917.1**	**772.7**	**784.4**	*769.5*	*926.9*	*785.2*	*822.8*	*784.9*	*916.5*	*796.0*	**3220.1**	*3266.0*	*3320.3*
Nonutility Gener. for Own Use [b]	**39.2**	**37.6**	**40.9**	**45.8**	**39.8**	*38.1*	*41.5*	*46.5*	*40.4*	*38.7*	*42.1*	*47.2*	**163.6**	*166.0*	*168.5*
Total Demand	**802.7**	**804.5**	**958.0**	**818.6**	**824.3**	*807.6*	*968.4*	*831.7*	*863.3*	*823.7*	*958.7*	*843.2*	**3383.7**	*3431.9*	*3488.8*
Memo:															
Nonutility Sales to Electric Utilities [b]	**51.8**	**52.8**	**53.8**	**54.2**	**61.2**	*63.0*	*72.9*	*79.8*	*70.6*	*67.6*	*74.3*	*81.3*	**212.7**	*276.9*	*293.7*

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

[b] Electricity 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 reports: *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		
	1997	1998	1999	2000	1997-1998	1998-1999	1999-2000
Electric Utilities							
Hydroelectric Power [a]	**3.521**	**3.178**	*3.123*	*2.975*	**-9.7**	*-1.7*	*-4.7*
Geothermal, Solar and Wind Energy [b]	**0.115**	**0.109**	*0.036*	*0.004*	**-5.2**	*-67.0*	*-88.9*
Biofuels [c]	**0.020**	**0.021**	*0.021*	*0.021*	**5.0**	*0.0*	*0.0*
Total	**3.656**	**3.307**	*3.179*	*2.999*	**-9.5**	*-3.9*	*-5.7*
Nonutility Power Generators							
Hydroelectric Power [a]	**0.185**	**0.179**	*0.186*	*0.192*	**-3.2**	*3.9*	*3.2*
Geothermal, Solar and Wind Energy [b]	**0.235**	**0.253**	*0.254*	*0.255*	**7.7**	*0.4*	*0.4*
Biofuels [c]	**0.576**	**0.584**	*0.580*	*0.578*	**1.4**	*-0.7*	*-0.3*
Total	**0.996**	**1.016**	*1.020*	*1.025*	**2.0**	*0.4*	*0.5*
Total Power Generation	**4.652**	**4.323**	*4.199*	*4.024*	**-7.1**	*-2.9*	*-4.2*
Other Sectors [d]							
Residential and Commercial [e]	**0.553**	**0.568**	*0.574*	*0.583*	**2.7**	*1.1*	*1.6*
Industrial [f]	**1.498**	**1.515**	*1.542*	*1.569*	**1.1**	*1.8*	*1.8*
Transportation [g]	**0.087**	**0.095**	*0.093*	*0.095*	**9.2**	*-2.1*	*2.2*
Total	**2.138**	**2.178**	*2.209*	*2.247*	**1.9**	*1.4*	*1.7*
Net Imported Electricity [h]	**0.259**	**0.233**	*0.208*	*0.214*	**-10.0**	*-10.7*	*2.9*
Total Renewable Energy Demand	**7.048**	**6.734**	*6.616*	*6.485*	**-4.5**	*-1.8*	*-2.0*

[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. SPR: Strategic Petroleum Reserve.

[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).

(S) Less than 500 billion Btu.

NM indicates percent change calculations are not meaningful or undefined at the precision level of this table.

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														
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Real Gross Domestic Product (GDP)															
(billion chained 1992 dollars)	**5488**	**5649**	**5865**	**6062**	**6136**	**6079**	**6244**	**6390**	**6611**	**6762**	**6995**	**7270**	**7552**	*7843*	*8018*
Imported Crude Oil Price [a]															
(nominal dollars per barrel)	**14.00**	**18.13**	**14.57**	**18.08**	**21.75**	**18.70**	**18.20**	**16.14**	**15.52**	**17.14**	**20.61**	**18.50**	**12.12**	*16.57*	*20.51*
Petroleum Supply															
Crude Oil Production [b]															
(million barrels per day)	**8.68**	**8.35**	**8.14**	**7.61**	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	**6.56**	**6.46**	**6.45**	**6.25**	*6.01*	*5.97*
Total Petroleum Net Imports (including SPR)															
(million barrels per day)	**5.44**	**5.91**	**6.59**	**7.20**	**7.16**	**6.63**	**6.94**	**7.62**	**8.05**	**7.89**	**8.50**	**9.16**	**9.76**	*9.85*	*10.20*
Energy Demand															
World Petroleum															
(million barrels per day)	**61.8**	**63.1**	**64.9**	**65.9**	**66.0**	**66.6**	**66.8**	**67.0**	**68.3**	**69.9**	**71.3**	**73.0**	**73.8**	*74.9*	*76.5*
U.S. Petroleum															
(million barrels per day)	**16.33**	**16.72**	**17.34**	**17.37**	**17.04**	**16.77**	**17.10**	**17.24**	**17.72**	**17.72**	**18.31**	**18.62**	**18.92**	*19.23*	*19.43*
Natural Gas															
(trillion cubic feet)	**16.22**	**17.21**	**18.03**	**18.80**	**18.72**	**19.03**	**19.54**	**20.28**	**20.71**	**21.58**	**21.96**	**21.97**	**21.35**	*21.76*	*22.38*
Coal															
(million short tons)	**797**	**830**	**877**	**891**	**897**	**898**	**907**	**943**	**950**	**962**	**1006**	**1029**	**1044**	*1054*	*1085*
Electricity (billion kilowatthours)															
Utility Sales [c]	**2369**	**2457**	**2578**	**2647**	**2713**	**2762**	**2763**	**2861**	**2935**	**3013**	**3098**	**3140**	**3220**	*3266*	*3320*
Nonutility Own Use [d]	**NA**	**NA**	**NA**	**97**	**113**	**122**	**137**	**138**	**150**	**158**	**158**	**161**	**164**	*166*	*168*
Total	**2369**	**2457**	**2578**	**2744**	**2826**	**2884**	**2901**	**2999**	**3085**	**3171**	**3256**	**3301**	**3384**	*3432*	*3489*
Total Energy Demand [e]															
(quadrillion Btu)	**NA**	**NA**	**NA**	**NA**	**84.2**	**84.3**	**85.6**	**87.4**	**89.3**	**91.0**	**94.0**	**94.2**	**94.7**	*96.1*	*97.6*
Total Energy Demand per Dollar of GDP															
(thousand Btu per 1992 Dollar)	**NA**	**NA**	**NA**	**NA**	**13.72**	**13.86**	**13.71**	**13.68**	**13.50**	**13.45**	**13.43**	**12.96**	**12.55**	*12.25*	*12.17*

[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.

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

	Year														
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Macroeconomic															
Real Gross Domestic Product (billion chained 1992 dollars)	**5488**	**5649**	**5865**	**6062**	**6136**	**6079**	**6244**	**6390**	**6611**	**6762**	**6995**	**7270**	**7552**	*7843*	*8018*
GDP Implicit Price Deflator (Index, 1992=1.000)	**0.806**	**0.831**	**0.861**	**0.897**	**0.936**	**0.973**	**1.000**	**1.026**	**1.051**	**1.075**	**1.096**	**1.116**	**1.127**	*1.141*	*1.158*
Real Disposable Personal Income (billion chained 1992 Dollars)	**4077**	**4155**	**4325**	**4412**	**4490**	**4484**	**4605**	**4667**	**4773**	**4906**	**5043**	**5183**	**5348**	*5513*	*5681*
Manufacturing Production (Index, 1987=1.000)	**0.881**	**0.928**	**0.971**	**0.990**	**0.985**	**0.962**	**1.000**	**1.037**	**1.099**	**1.159**	**1.214**	**1.296**	**1.349**	*1.388*	*1.415*
Real Fixed Investment (billion chained 1992 dollars)	**805**	**799**	**818**	**832**	**806**	**741**	**783**	**843**	**916**	**966**	**1051**	**1138**	**1268**	*1372*	*1411*
Real Exchange Rate (Index, 1990=1.000)	**NA**	**NA**	**NA**	**NA**	**0.999**	**1.007**	**1.013**	**1.057**	**1.034**	**0.961**	**1.017**	**1.105**	**1.152**	*1.167*	*1.153*
Business Inventory Change (billion chained 1992 dollars)	**-4.2**	**5.1**	**9.5**	**19.2**	**6.6**	**-6.1**	**-9.2**	**6.1**	**11.1**	**11.2**	**12.0**	**20.1**	**19.9**	*4.5*	*2.6*
Producer Price Index (index, 1982=1.000)	**1.002**	**1.028**	**1.069**	**1.122**	**1.163**	**1.165**	**1.172**	**1.189**	**1.205**	**1.248**	**1.277**	**1.276**	**1.244**	*1.250*	*1.275*
Consumer Price Index (index, 1982-1984=1.000)	**1.097**	**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*	*1.710*
Petroleum Product Price Index (index, 1982=1.000)	**0.532**	**0.568**	**0.539**	**0.612**	**0.748**	**0.671**	**0.647**	**0.620**	**0.591**	**0.608**	**0.701**	**0.680**	**0.513**	*0.598*	*0.706*
Non-Farm Employment (millions)	**99.3**	**102.0**	**105.2**	**107.9**	**109.4**	**108.3**	**108.6**	**110.7**	**114.1**	**117.2**	**119.6**	**122.7**	**125.8**	*128.5*	*130.2*
Commercial Employment (millions)	**62.9**	**65.2**	**67.8**	**70.0**	**71.3**	**70.8**	**71.2**	**73.2**	**76.1**	**78.8**	**81.1**	**83.9**	**86.6**	*89.4*	*91.0*
Total Industrial Production (index, 1987=1.000)	**0.890**	**0.932**	**0.974**	**0.991**	**0.989**	**0.970**	**1.000**	**1.035**	**1.091**	**1.144**	**1.196**	**1.267**	**1.314**	*1.344*	*1.374*
Housing Stock (millions)	**98.0**	**99.8**	**101.6**	**102.9**	**103.5**	**104.5**	**105.5**	**106.8**	**108.2**	**109.6**	**111.0**	**112.5**	**114.3**	*115.9*	*117.2*
Weather [a]															
Heating Degree-Days															
U.S.	**4295**	**4334**	**4653**	**4726**	**4016**	**4200**	**4441**	**4700**	**4483**	**4531**	**4713**	**4542**	**3951**	*4388*	*4494*
New England	**6517**	**6546**	**6715**	**6887**	**5848**	**5960**	**6844**	**6728**	**6672**	**6559**	**6679**	**6662**	**5680**	*6366*	*6520*
Middle Atlantic	**5665**	**5699**	**6088**	**6134**	**4998**	**5177**	**5964**	**5948**	**5934**	**5831**	**5986**	**5809**	**4812**	*5623*	*5751*
U.S. Gas-Weighted	**4442**	**4391**	**4804**	**4856**	**4139**	**4337**	**4458**	**4754**	**4659**	**4707**	**5040**	**4886**	**4247**	*4618*	*4734*
Cooling Degree-Days (U.S.)	**1249**	**1269**	**1283**	**1156**	**1260**	**1331**	**1040**	**1218**	**1220**	**1293**	**1180**	**1156**	**1456**	*1319*	*1233*

[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. 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.

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 CONTROL0299.

Table A3. Annual International Petroleum Supply and Demand Balance

(Millions Barrels per Day, Except OECD Commercial Stocks)

	Year														
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Demand [a]															
OECD															
U.S. (50 States)	**16.3**	**16.7**	**17.3**	**17.4**	**17.0**	**16.8**	**17.1**	**17.2**	**17.7**	**17.7**	**18.3**	**18.6**	**18.9**	*19.2*	*19.4*
Europe [b]	**12.1**	**12.3**	**12.4**	**12.5**	**12.6**	**13.4**	**13.6**	**13.5**	**13.6**	**14.1**	**14.3**	**14.4**	**14.7**	*14.9*	*15.2*
Japan	**4.4**	**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*	*5.6*
Other OECD	**2.5**	**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*
Total OECD	**35.3**	**36.0**	**37.1**	**37.6**	**37.5**	**38.1**	**38.8**	**39.0**	**39.9**	**40.6**	**41.4**	**41.8**	**42.2**	*42.9*	*43.5*
Non-OECD															
Former Soviet Union	**9.0**	**9.0**	**8.9**	**8.7**	**8.4**	**8.3**	**6.8**	**5.6**	**4.8**	**4.6**	**4.0**	**4.3**	**4.2**	*4.2*	*4.3*
Europe	**2.2**	**2.2**	**2.2**	**2.1**	**1.9**	**1.4**	**1.3**	**1.3**	**1.3**	**1.3**	**1.4**	**1.4**	**1.5**	*1.6*	*1.6*
China	**2.0**	**2.1**	**2.3**	**2.4**	**2.3**	**2.5**	**2.7**	**3.0**	**3.1**	**3.3**	**3.5**	**3.8**	**3.9**	*4.1*	*4.3*
Other Asia	**3.8**	**4.1**	**4.4**	**4.9**	**5.3**	**5.7**	**6.2**	**6.8**	**7.9**	**7.9**	**8.5**	**8.8**	**8.7**	*8.8*	*9.1*
Other Non-OECD	**9.5**	**9.7**	**10.0**	**10.3**	**10.5**	**10.6**	**11.0**	**11.4**	**11.8**	**12.1**	**12.4**	**12.8**	**13.2**	*13.4*	*13.7*
Total Non-OECD	**26.5**	**27.1**	**27.7**	**28.3**	**28.5**	**28.5**	**28.0**	**28.1**	**29.0**	**29.3**	**29.9**	**31.2**	**31.5**	*32.0*	*33.0*
Total World Demand	**61.8**	**63.1**	**64.9**	**66.0**	**66.0**	**66.6**	**66.8**	**67.0**	**68.9**	**69.9**	**71.3**	**73.0**	**73.8**	*74.9*	*76.5*
Supply [c]															
OECD															
U.S. (50 States)	**11.0**	**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*
Canada	**1.8**	**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*	*2.6*
North Sea [d]	**3.8**	**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*
Other OECD	**1.4**	**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*
Total OECD	**17.9**	**17.9**	**17.8**	**17.1**	**17.1**	**17.5**	**17.9**	**18.0**	**18.7**	**19.2**	**19.7**	**19.9**	**19.7**	*19.3*	*19.9*
Non-OECD															
OPEC	**19.3**	**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*	*30.2*
Former Soviet Union	**12.3**	**12.5**	**12.5**	**12.1**	**11.4**	**10.4**	**8.9**	**8.0**	**7.3**	**7.1**	**7.1**	**7.1**	**7.2**	*7.3*	*7.3*
China	**2.6**	**2.7**	**2.7**	**2.8**	**2.8**	**2.8**	**2.8**	**2.9**	**2.9**	**3.0**	**3.1**	**3.2**	**3.2**	*3.2*	*3.3*
Mexico	**2.8**	**2.9**	**2.9**	**2.9**	**3.0**	**3.2**	**3.2**	**3.2**	**3.2**	**3.1**	**3.3**	**3.4**	**3.5**	*3.5*	*3.6*
Other Non-OECD	**6.8**	**11.3**	**7.3**	**7.7**	**8.0**	**8.1**	**8.4**	**8.7**	**9.2**	**9.9**	**10.2**	**10.5**	**10.8**	*11.1*	*11.3*
Total Non-OECD	**43.9**	**44.6**	**47.0**	**48.9**	**49.7**	**49.1**	**49.1**	**49.4**	**49.6**	**50.7**	**52.0**	**54.2**	**55.2**	*54.4*	*55.7*
Total World Supply	**61.8**	**62.5**	**64.8**	**65.9**	**66.8**	**66.7**	**67.0**	**67.4**	**68.3**	**69.9**	**71.8**	**74.1**	**74.9**	*73.7*	*75.6*
Total Stock Withdrawals	**0.0**	**0.6**	**0.1**	**0.0**	**-0.8**	**-0.1**	**-0.2**	**-0.3**	**0.1**	**0.0**	**-0.4**	**-1.1**	**-1.1**	*1.2*	*0.9*
OECD Comm. Stocks, End (bill. bbls.)	**2.7**	**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*	*2.5*
Net Exports from Former Soviet Union	**3.4**	**3.5**	**3.6**	**3.4**	**3.0**	**2.1**	**2.1**	**2.3**	**2.4**	**2.5**	**3.0**	**2.9**	**3.0**	*3.1*	*3.0*

[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														
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Imported Crude Oil [a]															
(dollars per barrel)	**14.00**	**18.13**	**14.57**	**18.08**	**21.75**	**18.70**	**18.20**	**16.14**	**15.52**	**17.14**	**20.61**	**18.50**	**12.12**	*16.57*	*20.51*
Natural Gas Wellhead															
(dollars per thousand cubic feet)	**1.94**	**1.66**	**1.69**	**1.69**	**1.71**	**1.64**	**1.74**	**2.04**	**1.85**	**1.55**	**2.16**	**2.32**	**1.96**	*2.19*	*2.33*
Petroleum Products															
Gasoline Retail [b] (dollars per gallon)															
All Grades	**0.88**	**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*	*1.30*
Regular Unleaded	**0.88**	**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*	*1.26*
No. 2 Diesel Oil, Retail (dollars per gallon)	**0.88**	**0.93**	**0.91**	**0.99**	**1.16**	**1.12**	**1.10**	**1.11**	**1.11**	**1.10**	**1.22**	**1.19**	**1.04**	*1.11*	*1.22*
No. 2 Heating Oil, Wholesale (dollars per gallon)	**0.49**	**0.53**	**0.47**	**0.56**	**0.70**	**0.62**	**0.58**	**0.54**	**0.51**	**0.51**	**0.64**	**0.59**	**0.42**	*0.50*	*0.63*
No. 2 Heating Oil, Retail (dollars per gallon)	**0.84**	**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*	*1.04*
No. 6 Residual Fuel Oil, Retail [c] (dollars per barrel)	**14.46**	**17.76**	**14.04**	**16.20**	**18.66**	**14.32**	**14.21**	**14.00**	**14.79**	**16.49**	**19.01**	**17.82**	**12.73**	*15.97*	*19.66*
Electric Utility Fuels															
Coal (dollars per million Btu)	**1.58**	**1.51**	**1.47**	**1.44**	**1.45**	**1.45**	**1.41**	**1.38**	**1.36**	**1.32**	**1.29**	**1.27**	**1.25**	*1.24*	*1.24*
Heavy Fuel Oil [d] (dollars per million Btu)	**2.40**	**2.98**	**2.41**	**2.85**	**3.22**	**2.49**	**2.46**	**2.36**	**2.40**	**2.60**	**3.01**	**2.79**	**2.07**	*2.55*	*3.17*
Natural Gas (dollars per million Btu)	**2.35**	**2.24**	**2.26**	**2.36**	**2.32**	**2.15**	**2.33**	**2.56**	**2.23**	**1.98**	**2.64**	**2.76**	**2.38**	*2.63*	*2.84*
Other Residential															
Natural Gas (dollars per thousand cubic feet)	**5.83**	**5.55**	**5.47**	**5.64**	**5.80**	**5.82**	**5.89**	**6.17**	**6.41**	**6.06**	**6.35**	**6.95**	**6.82**	*6.73*	*7.28*
Electricity (cents per kilowatthour)	**7.4**	**7.4**	**7.5**	**7.6**	**7.8**	**8.1**	**8.2**	**8.3**	**8.4**	**8.4**	**8.4**	**8.4**	**8.3**	*8.2*	*8.0*

[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														
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Supply															
Crude Oil Supply															
Domestic Production [a]	**8.68**	**8.35**	**8.14**	**7.61**	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	**6.56**	**6.46**	**6.45**	**6.25**	*6.01*	*5.97*
Alaska	**1.87**	**1.96**	**2.02**	**1.87**	**1.77**	**1.80**	**1.71**	**1.58**	**1.56**	**1.48**	**1.39**	**1.30**	**1.17**	*1.08*	*0.96*
Lower 48	**6.81**	**6.39**	**6.12**	**5.74**	**5.58**	**5.62**	**5.46**	**5.26**	**5.10**	**5.08**	**5.07**	**5.16**	**5.08**	*4.94*	*5.01*
Net Imports (including SPR) [b]	**4.02**	**4.52**	**4.95**	**5.70**	**5.79**	**5.67**	**5.99**	**6.69**	**6.96**	**7.14**	**7.40**	**8.12**	**8.60**	*8.66*	*8.93*
Other SPR Supply	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.05*	*0.00*
Stock Draw (Including SPR)	**-0.08**	**-0.12**	**0.00**	**-0.09**	**0.02**	**-0.01**	**0.01**	**-0.06**	**-0.02**	**0.09**	**0.05**	**-0.06**	**-0.05**	*0.00*	*0.02*
Product Supplied and Losses	**-0.05**	**-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*
Unaccounted-for Crude Oil	**0.14**	**0.14**	**0.20**	**0.20**	**0.26**	**0.20**	**0.26**	**0.17**	**0.27**	**0.19**	**0.22**	**0.14**	**0.11**	*0.27*	*0.21*
Total Crude Oil Supply	**12.72**	**12.85**	**13.25**	**13.40**	**13.41**	**13.30**	**13.41**	**13.61**	**13.87**	**13.97**	**14.19**	**14.66**	**14.89**	*14.91*	*15.13*
Other Supply															
NGL Production	**1.55**	**1.59**	**1.62**	**1.55**	**1.56**	**1.66**	**1.70**	**1.74**	**1.73**	**1.76**	**1.83**	**1.82**	**1.76**	*1.76*	*1.77*
Other Hydrocarbon and Alcohol Inputs	**0.11**	**0.12**	**0.11**	**0.11**	**0.13**	**0.15**	**0.20**	**0.25**	**0.26**	**0.30**	**0.31**	**0.34**	**0.38**	*0.37*	*0.37*
Crude Oil Product Supplied	**0.05**	**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*
Processing Gain	**0.62**	**0.64**	**0.66**	**0.66**	**0.68**	**0.71**	**0.77**	**0.77**	**0.77**	**0.77**	**0.84**	**0.85**	**0.89**	*0.86*	*0.89*
Net Product Imports [c]	**1.41**	**1.39**	**1.63**	**1.50**	**1.38**	**0.96**	**0.94**	**0.93**	**1.09**	**0.75**	**1.10**	**1.04**	**1.17**	*1.20*	*1.27*
Product Stock Withdrawn	**-0.12**	**0.09**	**0.03**	**0.13**	**-0.14**	**-0.04**	**0.06**	**-0.05**	**0.00**	**0.15**	**0.03**	**-0.09**	**-0.17**	*0.13*	*0.00*
Total Supply	**16.33**	**16.72**	**17.33**	**17.37**	**17.04**	**16.76**	**17.10**	**17.26**	**17.72**	**17.72**	**18.31**	**18.62**	**18.92**	*19.23*	*19.43*
Demand															
Motor Gasoline [d]	**6.94**	**7.19**	**7.36**	**7.40**	**7.31**	**7.23**	**7.38**	**7.48**	**7.60**	**7.79**	**7.89**	**8.02**	**8.25**	*8.37*	*8.57*
Jet Fuel	**1.31**	**1.38**	**1.45**	**1.49**	**1.52**	**1.47**	**1.45**	**1.47**	**1.53**	**1.51**	**1.58**	**1.60**	**1.62**	*1.67*	*1.71*
Distillate Fuel Oil	**2.91**	**2.98**	**3.12**	**3.16**	**3.02**	**2.92**	**2.98**	**3.04**	**3.16**	**3.21**	**3.37**	**3.44**	**3.46**	*3.52*	*3.62*
Residual Fuel Oil	**1.42**	**1.26**	**1.38**	**1.37**	**1.23**	**1.16**	**1.09**	**1.08**	**1.02**	**0.85**	**0.85**	**0.80**	**0.89**	*0.83*	*0.71*
Other Oils [e]	**3.75**	**3.90**	**4.03**	**3.95**	**3.95**	**3.99**	**4.20**	**4.17**	**4.41**	**4.36**	**4.63**	**4.77**	**4.69**	*4.84*	*4.82*
Total Demand	**16.33**	**16.72**	**17.34**	**17.37**	**17.04**	**16.77**	**17.10**	**17.24**	**17.72**	**17.72**	**18.31**	**18.62**	**18.92**	*19.23*	*19.43*
Total Petroleum Net Imports	**5.44**	**5.91**	**6.59**	**7.20**	**7.16**	**6.63**	**6.94**	**7.62**	**8.05**	**7.89**	**8.50**	**9.16**	**9.76**	*9.85*	*10.20*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**331**	**349**	**330**	**341**	**323**	**325**	**318**	**335**	**337**	**303**	**284**	**305**	**324**	*324*	*316*
Total Motor Gasoline	**233**	**226**	**228**	**213**	**220**	**219**	**216**	**226**	**215**	**202**	**195**	**210**	**216**	*210*	*209*
Jet Fuel	**50**	**50**	**44**	**41**	**52**	**49**	**43**	**40**	**47**	**40**	**40**	**44**	**45**	*43*	*46*
Distillate Fuel Oil	**155**	**134**	**124**	**106**	**132**	**144**	**141**	**141**	**145**	**130**	**127**	**138**	**156**	*141*	*141*
Residual Fuel Oil	**47**	**47**	**45**	**44**	**49**	**50**	**43**	**44**	**42**	**37**	**46**	**40**	**45**	*42*	*44*
Other Oils [f]	**265**	**260**	**267**	**257**	**261**	**267**	**263**	**273**	**275**	**258**	**250**	**259**	**291**	*269*	*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. 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														
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Supply															
Total Dry Gas Production	**16.06**	**16.62**	**17.10**	**17.31**	**17.81**	**17.70**	**17.84**	**18.10**	**18.82**	**18.60**	**18.79**	**18.90**	**18.89**	*18.74*	*18.97*
Net Imports	**0.69**	**0.94**	**1.22**	**1.27**	**1.45**	**1.64**	**1.92**	**2.21**	**2.46**	**2.69**	**2.78**	**2.84**	**2.98**	*3.36*	*3.60*
Supplemental Gaseous Fuels	**0.11**	**0.10**	**0.10**	**0.11**	**0.12**	**0.11**	**0.12**	**0.12**	**0.11**	**0.11**	**0.11**	**0.10**	**0.12**	*0.13*	*0.13*
Total New Supply	**16.86**	**17.66**	**18.42**	**18.69**	**19.38**	**19.45**	**19.88**	**20.42**	**21.39**	**21.40**	**21.69**	**21.84**	**21.98**	*22.23*	*22.70*
Total Underground Storage															
Opening	**6.45**	**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*	*6.80*
Closing	**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**	*6.80*	*6.68*
Net Withdrawals	**-0.12**	**0.02**	**-0.10**	**0.33**	**-0.61**	**0.16**	**0.14**	**-0.01**	**-0.32**	**0.46**	**-0.01**	**-0.01**	**-0.52**	*0.24*	*0.12*
Total Supply	**16.74**	**17.68**	**18.32**	**19.02**	**18.77**	**19.61**	**20.02**	**20.42**	**21.08**	**21.86**	**21.68**	**21.84**	**21.46**	*22.47*	*22.82*
Balancing Item [a]	**-0.52**	**-0.47**	**-0.29**	**-0.22**	**-0.05**	**-0.58**	**-0.47**	**-0.14**	**-0.37**	**-0.28**	**0.29**	**0.13**	**-0.11**	*-0.71*	*-0.44*
Total Primary Supply	**16.22**	**17.21**	**18.03**	**18.80**	**18.72**	**19.03**	**19.54**	**20.28**	**20.71**	**21.58**	**21.96**	**21.97**	**21.35**	*21.76*	*22.38*
Demand															
Lease and Plant Fuel	**0.92**	**1.15**	**1.10**	**1.07**	**1.24**	**1.13**	**1.17**	**1.17**	**1.12**	**1.22**	**1.25**	**1.20**	**1.24**	*1.24*	*1.24*
Pipeline Use	**0.49**	**0.52**	**0.61**	**0.63**	**0.66**	**0.60**	**0.59**	**0.62**	**0.69**	**0.70**	**0.71**	**0.75**	**0.73**	*0.75*	*0.75*
Residential	**4.31**	**4.31**	**4.63**	**4.78**	**4.39**	**4.56**	**4.69**	**4.96**	**4.85**	**4.85**	**5.24**	**4.98**	**4.48**	*4.78*	*4.98*
Commercial	**2.32**	**2.43**	**2.67**	**2.72**	**2.62**	**2.73**	**2.80**	**2.86**	**2.90**	**3.03**	**3.16**	**3.22**	**3.04**	*3.17*	*3.36*
Industrial (Incl. Nonutilities)	**5.58**	**5.95**	**6.38**	**6.82**	**7.02**	**7.23**	**7.53**	**7.98**	**8.17**	**8.58**	**8.87**	**8.84**	**8.61**	*8.38*	*8.42*
Cogenerators [b]	**NA**	**NA**	**NA**	**NA**	**1.30**	**1.41**	**1.70**	**1.80**	**1.98**	**2.18**	**2.30**	**2.16**	**2.14**	*2.19*	*2.23*
Other Nonutil. Gen. [b]	**NA**	**NA**	**NA**	**NA**	**0.09**	**0.16**	**0.18**	**0.22**	**0.16**	**0.17**	**0.16**	**0.18**	**0.18**	*0.18*	*0.19*
Electric Utilities	**2.60**	**2.84**	**2.64**	**2.79**	**2.79**	**2.79**	**2.77**	**2.68**	**2.99**	**3.20**	**2.73**	**2.97**	**3.26**	*3.43*	*3.63*
Total Demand	**16.22**	**17.21**	**18.03**	**18.80**	**18.72**	**19.03**	**19.54**	**20.28**	**20.71**	**21.58**	**21.96**	**21.97**	**21.35**	*21.76*	*22.38*

[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.

[b] Annual projections for nonutility gas consumption, as well as the detail on independent power producers' share of gas consumption, are provided by the office of Coal, Nuclear, Electric and Alternative Fuels, Energy Information Administration.

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														
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Supply															
Production	**890.3**	**918.8**	**950.3**	**980.7**	**1029.1**	**996.0**	**997.5**	**945.4**	**1033.5**	**1033.0**	**1063.9**	**1089.9**	**1118.1**	*1113.8*	*1128.6*
Appalachia	**NA**	**NA**	**NA**	**464.8**	**489.0**	**457.8**	**456.6**	**409.7**	**445.4**	**434.9**	**451.9**	**467.8**	**460.4**	*460.2*	*457.8*
Interior	**NA**	**NA**	**NA**	**198.1**	**205.8**	**195.4**	**195.7**	**167.2**	**179.9**	**168.5**	**172.8**	**170.9**	**168.4**	*159.8*	*154.5*
Western	**NA**	**NA**	**NA**	**317.9**	**334.3**	**342.8**	**345.3**	**368.5**	**408.3**	**429.6**	**439.1**	**451.3**	**489.4**	*493.8*	*516.3*
Primary Stock Levels [a]															
Opening	**33.1**	**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*
Closing	**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*
Net Withdrawals	**1.0**	**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*
Imports	**2.2**	**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*
Exports	**85.5**	**79.6**	**95.0**	**100.8**	**105.8**	**109.0**	**102.5**	**74.5**	**71.4**	**88.5**	**90.5**	**83.5**	**78.0**	*63.0*	*62.7*
Total Net Domestic Supply	**808.0**	**844.7**	**855.3**	**884.2**	**921.6**	**890.9**	**897.8**	**886.9**	**961.8**	**950.4**	**986.3**	**1008.5**	**1046.6**	*1061.6*	*1075.8*
Secondary Stock Levels [b]															
Opening	**170.2**	**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*	*143.7*
Closing	**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**	*143.7*	*150.0*
Net Withdrawals	**-5.0**	**-10.2**	**27.0**	**12.3**	**-22.1**	**0.5**	**4.0**	**43.2**	**-15.7**	**1.5**	**11.7**	**16.6**	**-23.1**	*-14.2*	*-6.3*
Waste Coal Supplied to IPPs [c]	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**6.0**	**6.4**	**7.9**	**8.5**	**8.8**	**8.1**	**9.5**	*11.6*	*15.8*
Total Supply	**803.1**	**834.4**	**882.3**	**896.5**	**899.4**	**891.4**	**907.8**	**936.5**	**954.0**	**960.4**	**1006.7**	**1033.2**	**1033.0**	*1058.9*	*1085.3*
Demand															
Coke Plants	**35.9**	**37.0**	**41.9**	**40.5**	**38.9**	**33.9**	**32.4**	**31.3**	**31.7**	**33.0**	**31.7**	**30.2**	**28.2**	*27.9*	*27.9*
Electricity Production															
Electric Utilities	**685.1**	**717.9**	**758.4**	**766.9**	**773.5**	**772.3**	**779.9**	**813.5**	**817.3**	**829.0**	**874.7**	**900.4**	**910.9**	*909.3*	*928.7*
Nonutilities (Excl. Cogen.) [d]	**NA**	**NA**	**NA**	**0.9**	**1.6**	**10.2**	**14.6**	**17.1**	**19.5**	**20.8**	**22.2**	**21.6**	**29.1**	*44.9*	*51.9*
Retail and General Industry [e]	**75.6**	**75.2**	**76.3**	**82.3**	**83.1**	**81.5**	**80.2**	**81.1**	**81.2**	**78.9**	**76.9**	**77.1**	**75.7**	*76.0*	*76.8*
Total Demand	**796.6**	**830.0**	**876.5**	**890.6**	**897.1**	**897.8**	**907.0**	**943.1**	**949.7**	**961.7**	**1005.6**	**1029.2**	**1043.9**	*1058.2*	*1085.3*
Discrepancy [f]	**6.5**	**4.4**	**5.8**	**5.9**	**2.4**	**-6.4**	**0.8**	**-6.6**	**4.3**	**-1.3**	**1.2**	**4.0**	***-10.9***	*0.8*	*0.0*

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

[b] Secondary stocks are held by users.

[c] Estimated independent power producers (IPPs) consumption of waste coal for 1994 is 7.9 million tons, 8.5 million tons in 1995, and 8.8 million tons in 1996. This item includes waste coal and coal slurry reprocessed into briquettes.

[d] Estimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA). Quarterly coal consumption estimates for 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 in 1994, 1995, 1996, 1997 and 1998.

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

(S) indicates amounts of less than 50,000 tons in absolute value.

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														
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Supply															
Net Utility Generation															
Coal	**1385.8**	**1463.8**	**1540.7**	**1553.7**	**1559.6**	**1551.2**	**1575.9**	**1639.2**	**1635.5**	**1652.9**	**1737.5**	**1787.8**	**1807.5**	*1791.5*	*1841.8*
Petroleum	**136.6**	**118.5**	**148.9**	**158.3**	**117.0**	**111.5**	**88.9**	**99.5**	**91.0**	**60.8**	**67.3**	**77.8**	**110.2**	*96.6*	*82.4*
Natural Gas	**248.5**	**272.6**	**252.8**	**266.6**	**264.1**	**264.2**	**263.9**	**258.9**	**291.1**	**307.3**	**262.7**	**283.6**	**309.2**	*327.9*	*346.9*
Nuclear	**414.0**	**455.3**	**527.0**	**529.4**	**576.9**	**612.6**	**618.8**	**610.3**	**640.4**	**673.4**	**674.7**	**628.6**	**673.7**	*704.0*	*696.1*
Hydroelectric	**290.8**	**249.7**	**222.9**	**265.1**	**279.9**	**275.5**	**239.6**	**265.1**	**243.7**	**293.7**	**328.0**	**337.2**	**304.4**	*299.1*	*284.9*
Geothermal and Other [a]	**11.5**	**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*
Subtotal	**2487.3**	**2572.1**	**2704.3**	**2784.3**	**2808.2**	**2825.0**	**2797.2**	**2882.5**	**2910.7**	**2994.5**	**3077.4**	**3122.5**	**3212.2**	*3222.9*	*3254.4*
Nonutility Generation [b]	**NA**	**NA**	**NA**	**NA**	**221.5**	**253.3**	**301.8**	**325.2**	**354.9**	**375.9**	**382.4**	**384.7**	**378.6**	*445.7*	*467.9*
Total Generation	**NA**	**NA**	**NA**	**NA**	**3029.6**	**3078.3**	**3099.0**	**3207.8**	**3265.6**	**3370.4**	**3459.9**	**3507.2**	**3590.7**	*3668.6*	*3722.2*
Net Imports	**35.9**	**46.3**	**31.8**	**11.0**	**2.0**	**22.3**	**28.3**	**28.4**	**44.6**	**37.6**	**38.0**	**36.6**	**28.8**	*25.6*	*26.4*
Total Supply	**NA**	**NA**	**NA**	**NA**	**3031.6**	**3100.6**	**3127.3**	**3236.2**	**3310.3**	**3408.0**	**3497.9**	**3543.8**	**3619.5**	*3694.3*	*3748.6*
Losses and Unaccounted for [c]	**NA**	**NA**	**NA**	**NA**	**205.8**	**216.9**	**226.6**	**237.0**	**225.5**	**236.8**	**242.3**	**242.8**	**235.8**	*262.3*	*259.8*
Demand															
Electric Utility Sales															
Residential	**819.1**	**850.4**	**892.9**	**905.5**	**924.0**	**955.4**	**935.9**	**994.8**	**1008.5**	**1042.5**	**1082.5**	**1075.8**	**1124.0**	*1141.8*	*1168.1*
Commercial	**630.5**	**660.4**	**699.1**	**725.9**	**751.0**	**765.7**	**761.3**	**794.6**	**820.3**	**862.7**	**887.4**	**928.4**	**948.9**	*974.5*	*985.8*
Industrial	**830.5**	**858.2**	**896.5**	**925.7**	**945.5**	**946.6**	**972.7**	**977.2**	**1008.0**	**1012.7**	**1030.4**	**1032.7**	**1047.3**	*1048.4*	*1060.8*
Other	**88.6**	**88.2**	**89.6**	**89.8**	**92.0**	**94.3**	**93.4**	**94.9**	**97.8**	**95.4**	**97.5**	**102.9**	**99.9**	*101.3*	*105.6*
Subtotal	**2368.8**	**2457.3**	**2578.1**	**2646.8**	**2712.6**	**2762.0**	**2763.4**	**2861.5**	**2934.6**	**3013.3**	**3097.8**	**3139.8**	**3220.1**	*3266.0*	*3320.3*
Nonutility Own Use [b]	**NA**	**NA**	**NA**	**97.2**	**113.2**	**121.7**	**137.3**	**137.8**	**150.2**	**158.0**	**157.8**	**161.2**	**163.6**	*166.0*	*168.5*
Total Demand	**NA**	**NA**	**NA**	**2744.0**	**2825.8**	**2883.7**	**2900.7**	**2999.2**	**3084.8**	**3171.3**	**3255.6**	**3301.0**	**3383.7**	*3431.9*	*3488.8*
Memo:															
Nonutility Sales to Electric Utilities [d]	**39.9**	**50.0**	**68.0**	**NA**	**108.2**	**131.6**	**164.4**	**187.5**	**204.7**	**217.9**	**224.6**	**223.5**	**212.7**	*276.9*	*293.7*

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

[b] For 1989 to 1991, estimates for nonutility generation are estimates made by the Energy Markets and Contingency Information Division, based on Form EIA-867 (Annual Nonutility Power Producer Report) data. Historical data and Projections for the same items are from the Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration, based on Form EIA-867.

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

[d] Historical data for nonutility sales to electric utilities are from the Energy Information Administration, *Annual Energy Review*, DOE/EIA-0389, Table 8.1, for 1982 to 1988; from Form EIA-867 (Annual Nonutility Power Producer Report) for 1989 to 1996.

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.