August 6, 1999

Highlights

World Oil Markets/Prices

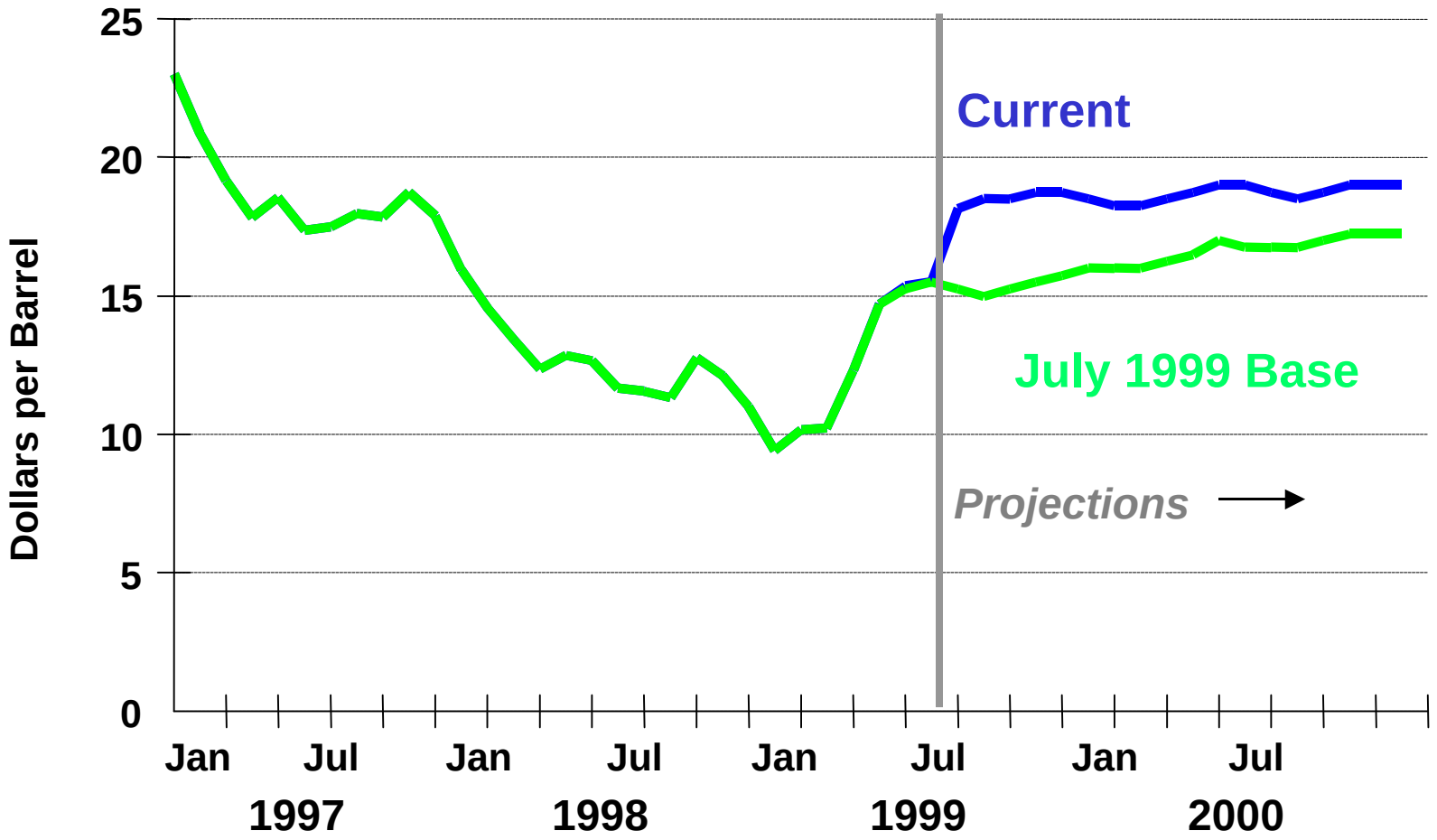
Prices. World oil prices for the remainder of 1999 and all of 2000 are now forecasted to be $2-$3 per barrel higher than they were in last month's forecast (Figure 1). This reflects a change in our assumptions concerning OPEC crude oil production. Previously, we had expected compliance with OPEC agreed cuts to peak in May or June 1999, before falling as higher prices triggered more production. Although we still expect this to occur, we have delayed the timing and are now forecasting that OPEC compliance will be relatively strong throughout the summer, before declining much more gradually than we had earlier forecasted. Increased compliance with cuts in OPEC production will not only keep prices from falling in the near-term but they should also reduce inventories, thus putting pressure on prices to remain at current levels, or even increase, next year. Prices are expected to stay around $18.50 per barrel (the average price paid for imported crude oil by U.S. refiners) for the remainder of 1999 (which would translate into a WTI crude price of about $20.50-$21.00 per barrel). Then, throughout most of 2000, monthly world oil prices are expected to be between $18.50-$19.00 per barrel (which would translate into a WTI crude price of about $20.50-$21.50 per barrel. Our normal uncertainty range for crude oil prices suggest that expected end-2000 prices would be within about $3-$4 of the $19.00 per barrel level with a high degree of probability (Figure 2).

Demand. EIA estimates that world oil demand will grow by about 1.1 million barrels per day in 1999, and by another 1.7 million barrels per day in 2000 (Figure 3 and Table 3), essentially unchanged from last month's forecast. This assumes that overall Asian oil demand begins recovering this year from the sharp slowdown seen in 1998 and the recovery continues through 2000. However, it is not expected that petroleum demand growth in Asia will return to rates seen prior to the recent regional economic crisis until at least sometime after 2000.

Supply. By our calculations, OPEC compliance with the previous 3 agreements (the one on March 23, 1999 and the two in 1998) will peak at about 81-82 percent of the total 4.3 million barrels per day of agreed OPEC cuts in the 2nd and 3rd quarters of 1999, before gradually declining in the 4th quarter. As higher prices increase the incentive for countries to increase production, OPEC compliance is expected to decline throughout 2000. While EIA is not forecasting the outcome of either the September 1999 or March

Figure 1. Imported Crude Oil Prices

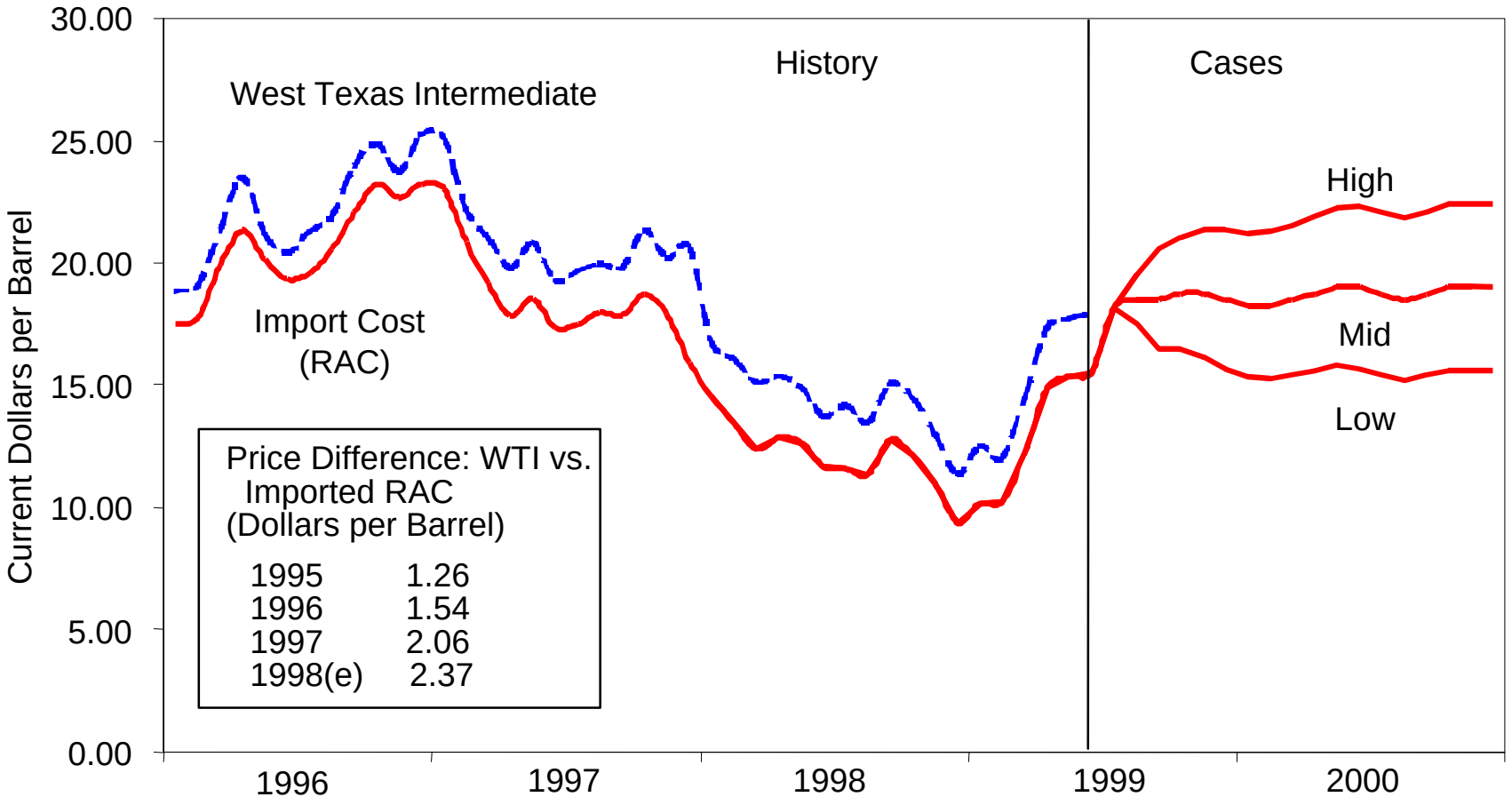
(Current vs Previous Outlook)



www.eia.doe.gov

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

Figure 2. Monthly Crude Oil Price Cases

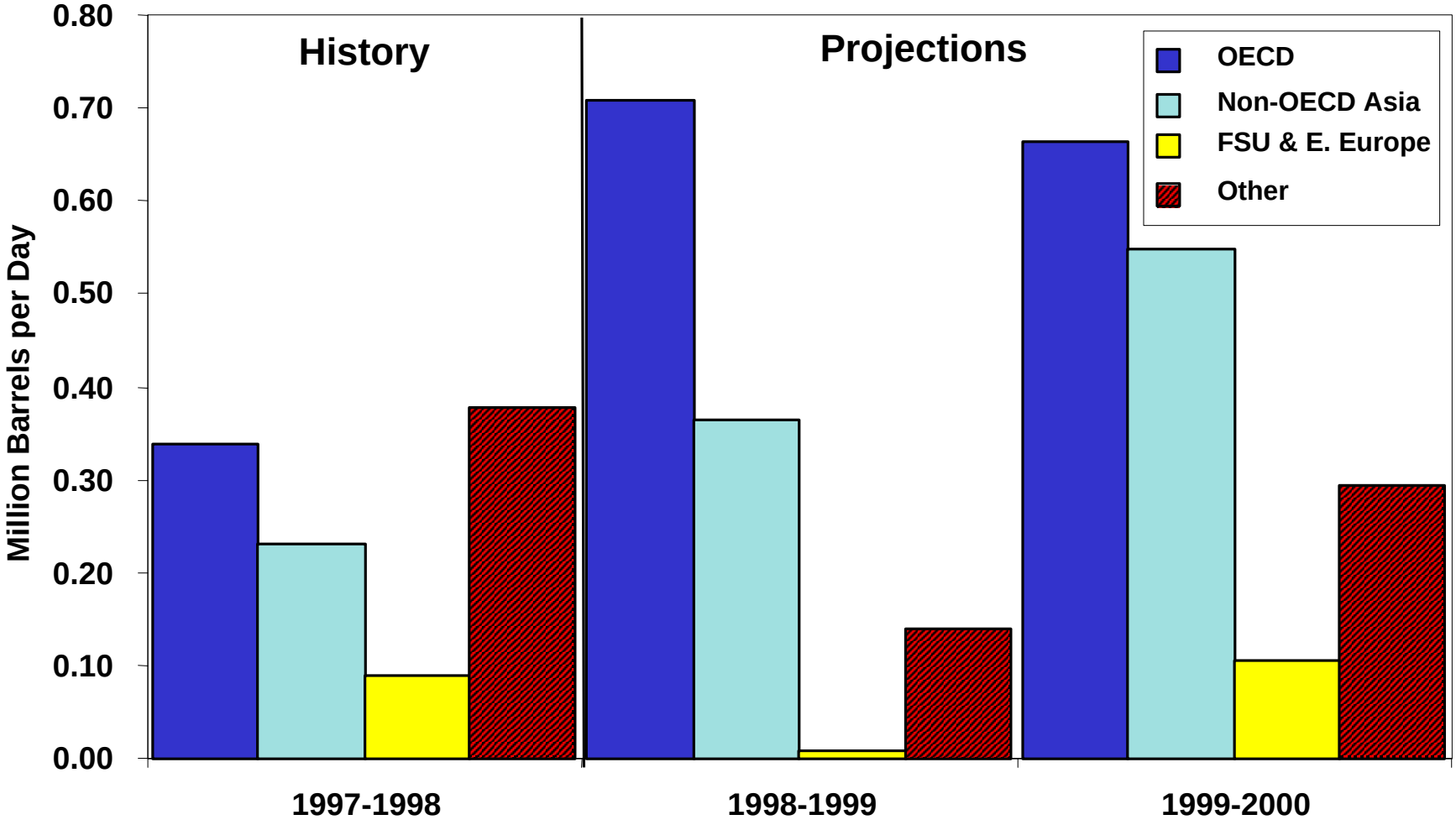


www.eia.doe.gov

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

Figure 3. World Oil Demand

(Change from Year Ago)



www.eia.doe.gov

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

2000 OPEC ministerial meetings, our forecast does call for increasing OPEC production beginning in the fourth quarter of 1999. Iraqi oil production is expected to increase to 3 million barrels per day by the second half of 2000.

Non-OPEC production is expected to remain relatively flat in 1999, mainly as a result of reduced development expenditures engendered by very low oil prices in 1998 and early 1999. However, EIA is projecting that non-OPEC oil production will increase in 2000 as higher oil prices counteract some of the same forces that caused oil production to lag in 1999 (Figure 4).

U.S. Petroleum Supply

Average domestic oil production is expected to decrease by 234,000 barrels per day, or 3.74 percent, in 1999 to a level of 6.02 million barrels of oil per day. For 2000, a 1.11-percent decline is expected, which results in a production rate of 5.95 million barrels of oil per day average for the year. The projected rate of decline for domestic production is not as steep in this report as in the previous *Outlook* since our higher projections for crude oil prices should lead to gains in exploration, drilling, and production (Figure 5).

Lower-48 States oil production is expected to decrease by 136,000 barrels per day to a rate of 4.94 million barrels per day in 1999 followed by an increase of 48,000 barrels per day in 2000. Oil production from the Mars, Ram Powell, Auger, Troika, Ursa, Diana-Hoover and Baldpate Federal Offshore fields is expected to account for about 11.46 percent of the lower-48 oil production by the 4th quarter of 2000.

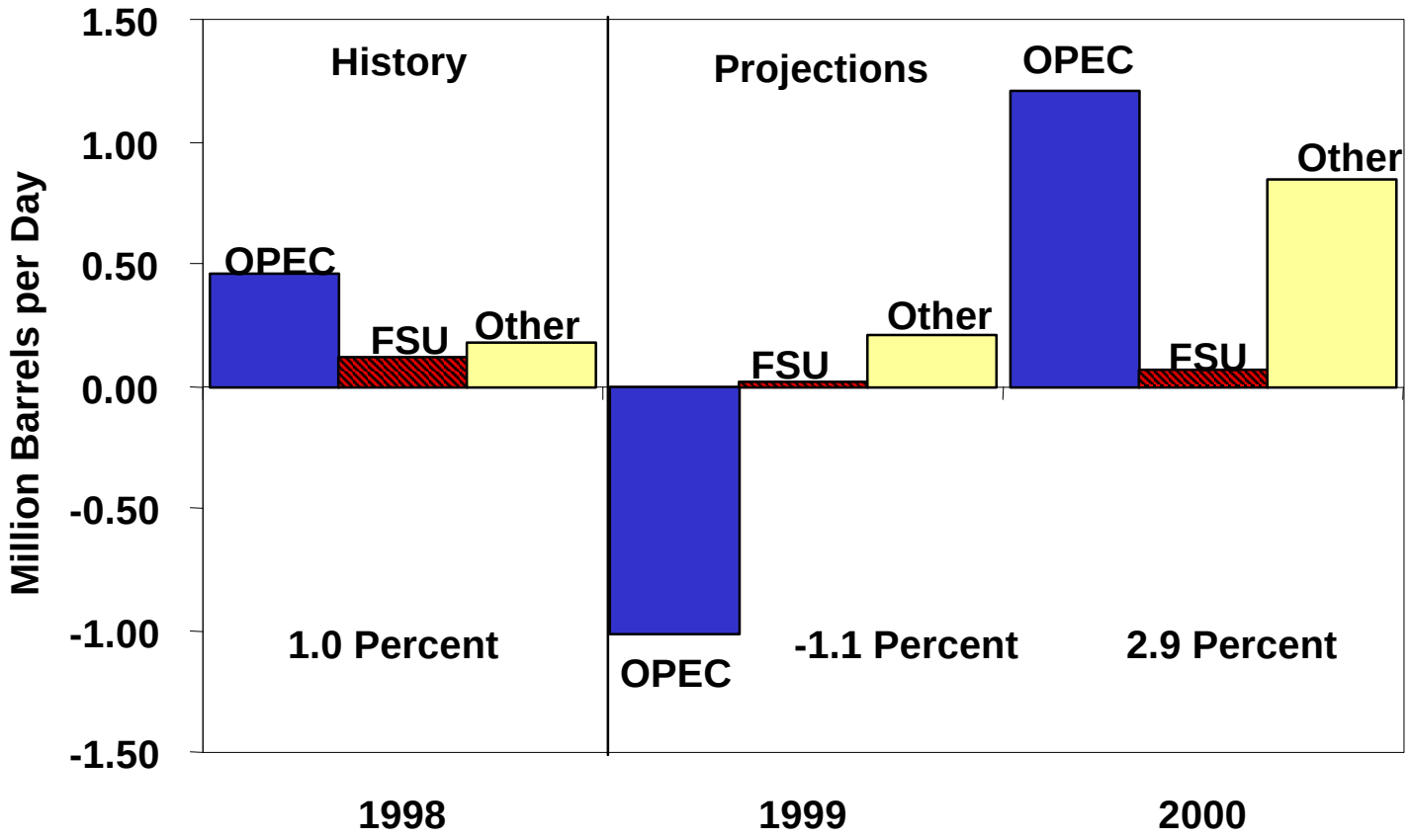
Oil production from Alaska is expected to decrease by 8.03 percent in 1999 and again by 10.70 percent in 2000. A substantial portion of the oil production from Alaska comes from the giant Prudhoe Bay Field. Other than routine maintenance, no major investments are planned for this field during the forecast period. Therefore, the field is expected to follow a steeper decline during this period. Oil production from recent discoveries, such as Sambuca and Midnight Sun, is expected to partially offset the decline in oil production from the Prudhoe Bay and other fields in the North Slope in 1999. A large-scale enhanced oil recovery (LSEOR) project was initiated in September 1996 in the Kuparuk River field, the second largest producing field in the U.S. This field's production, plus like production from West Sak, Tabasco and Tarn, is expected to stay at an average of 287,500 barrels per day in the 1999-2000 forecast period. Alaska is expected to account for 16.16 percent of total U.S. oil production in 2000.

U. S. Petroleum Demand

The assumption of continued, but slowing, growth in personal incomes and industrial output underpins the expectation of continued growth in petroleum demand. Despite

Figure 4. World Oil Production

(Change from Year Ago)

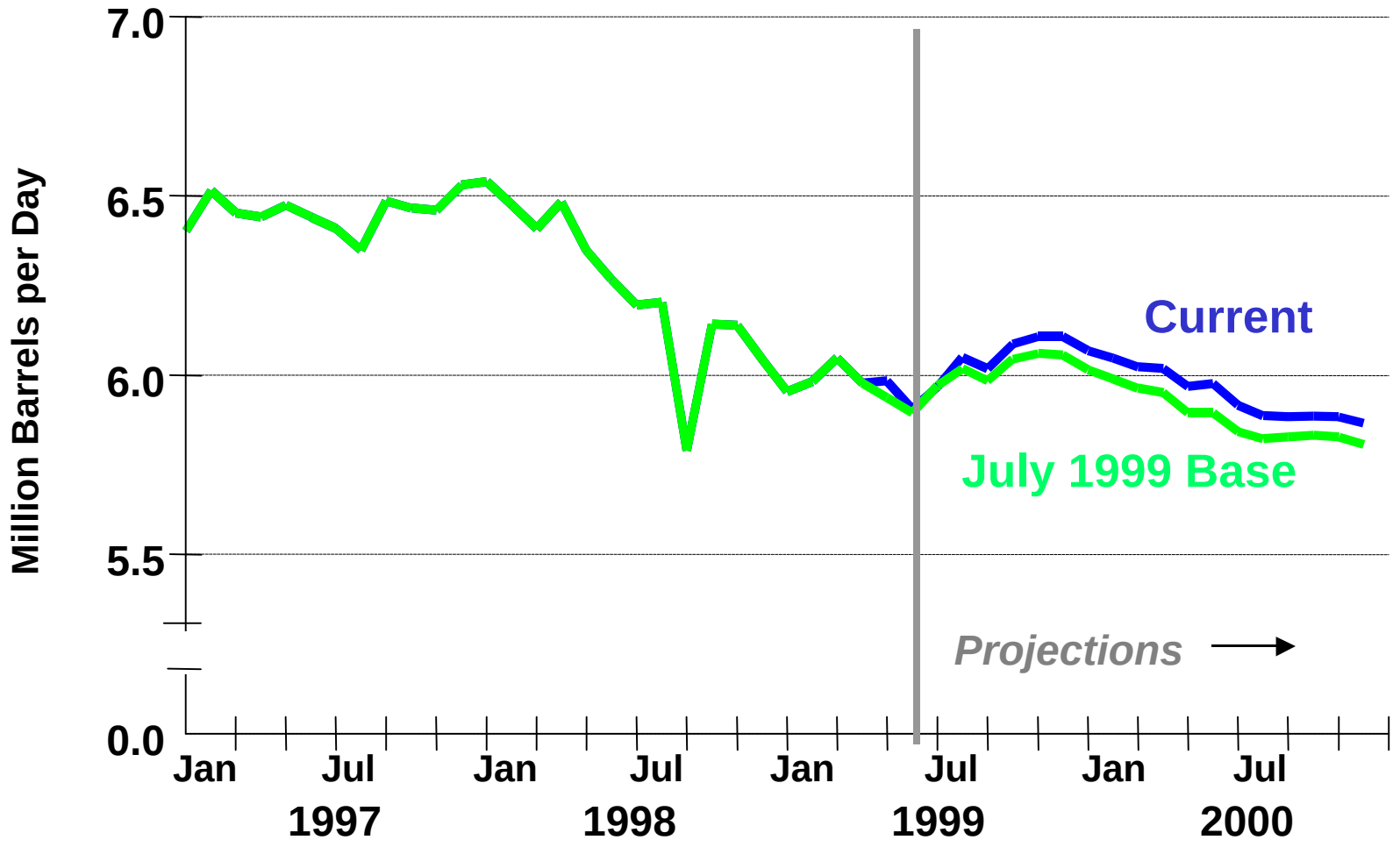


www.eia.doe.gov

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

Figure 5. Domestic Crude Oil Production

(Current vs Previous Outlook)



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

www.eia.doe.gov

recent increases in energy costs (and further smaller hikes projected during the forecast interval), domestic petroleum demand is projected to climb 300,000 barrels per day, or 1.5 percent, in 1999, and a further 280,000 barrels per day, or 1.4 percent, in 2000 (Figure 6 and Table 5). Only heavy fuel oil is expected to experience a decline in demand as natural gas continues to gain in the price-sensitive electric utility and industrial sectors.

Transportation demand is expected to continue to dominate domestic petroleum markets. Having chalked up a 3-percent hike in 1998, ***motor gasoline*** demand growth for the first half of 1999 slowed to 1.5 percent, partly as a result of the recent spate of price increases that constrained travel growth to 1.8 percent. In the second half, growth is expected to accelerate to 2.2 percent, brought about by a 2.5-percent increase in travel. In 2000, a 2.2-percent increase in gasoline demand, buoyed by a 2.7-percent growth in travel, is projected (Figure 7). Travel growth, however, is projected to continue to lag growth of personal disposable income. ***Diesel*** demand is projected to register a 4-percent rate of growth between now and mid-2000 before slowing to a more moderate 2.8 percent during the remainder of that year. ***Jet fuel*** growth is expected to average 4 percent during the second half of 1999 before slowing to a more moderate 2.2 percent in 2000. Economic growth is also expected to bring about increases in industrial demand for distillate fuel oil.

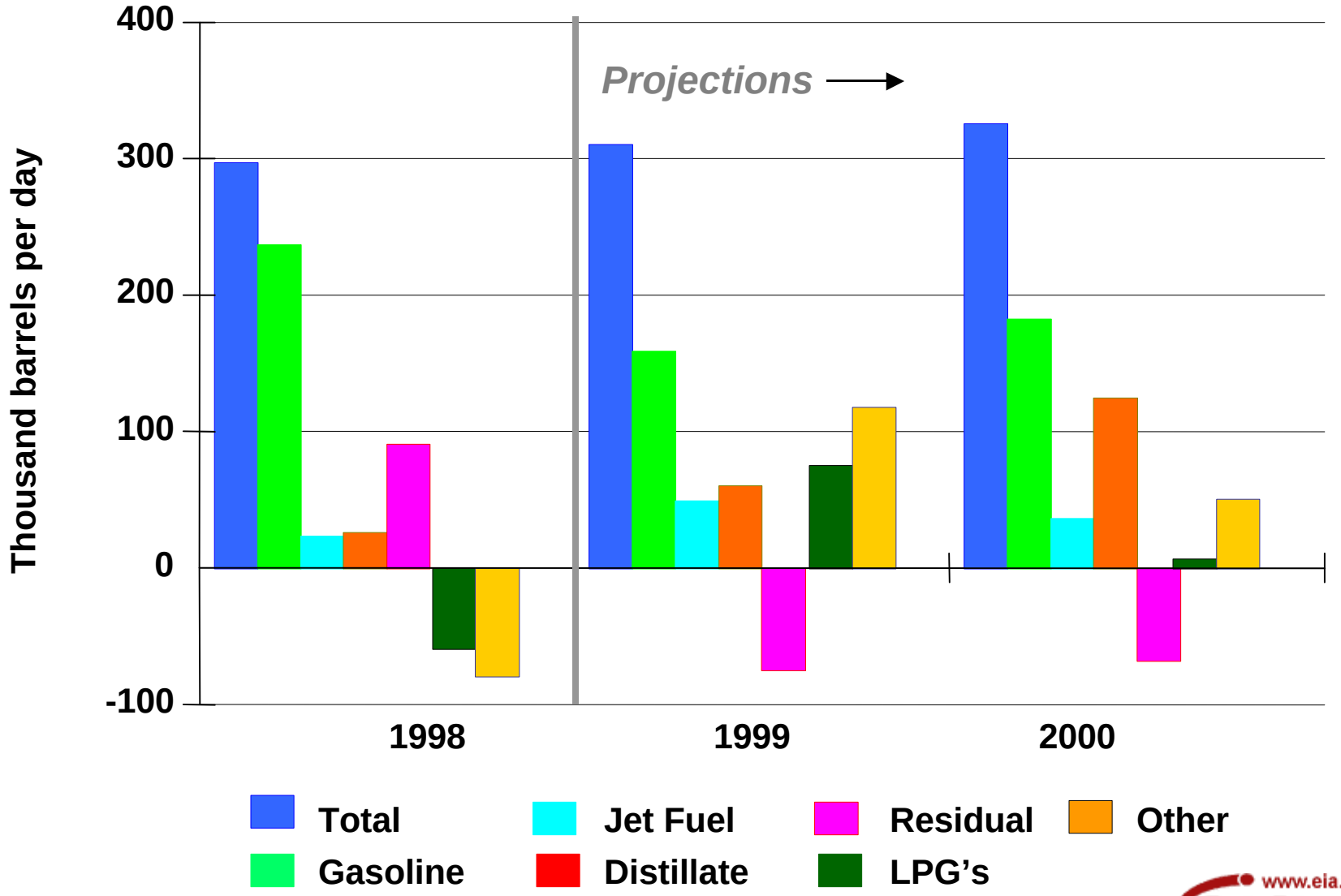
Weather-related and electric utility demand for petroleum products, however, is not expected to contribute to growth over the forecast period. ***Heating oil*** demand is expected to decline slightly despite the assumption of normal weather compared to the last winter's mild temperatures. ***Residual fuel oil*** demand by electric utilities for the rest of this year is expected to plunge an average of 170,000 barrels per day compared to the same period last year as a result of the substantial shift in the price of fuel oil relative to natural gas (Figure 8).

Prices

The surprisingly swift and sustained rise in world oil prices that began last month is expected to hold throughout the forecast period. In the previous report we had assumed that crude oil prices would not rise in July (Figure 1). In fact, crude oil prices increased by $2.65 per barrel, or more than 6 cents per gallon, from June to July. Moreover, we continue to believe that crude costs are likely to drift upward over the next year and a half. Naturally, price increases will follow for virtually every petroleum product. Accordingly, we have substantially revised our price projections for all of these products since the previous outlook.

Motor Gasoline. In the previous outlook, unleaded regular motor gasoline prices were projected to peak for the year in August at $1.13 per gallon. In our current report, pump prices are still expected to peak this August, but at $1.20 per gallon, with virtually all of the difference due to higher crude oil costs (Figure 9). During this rapid rise in crude oil

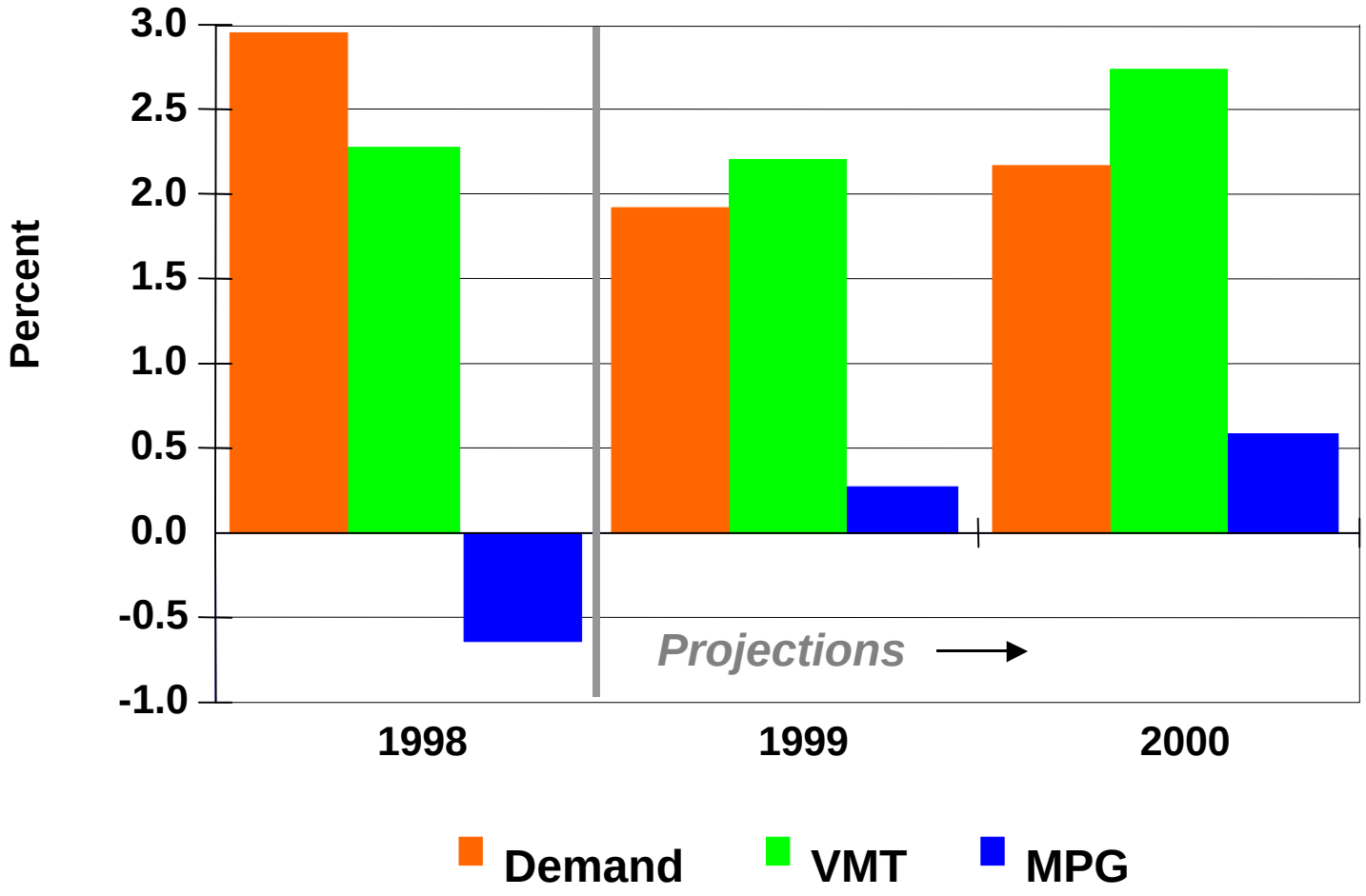
Figure 6. Year-to-Year Changes in Petroleum Demand



www.eia.doe.gov

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

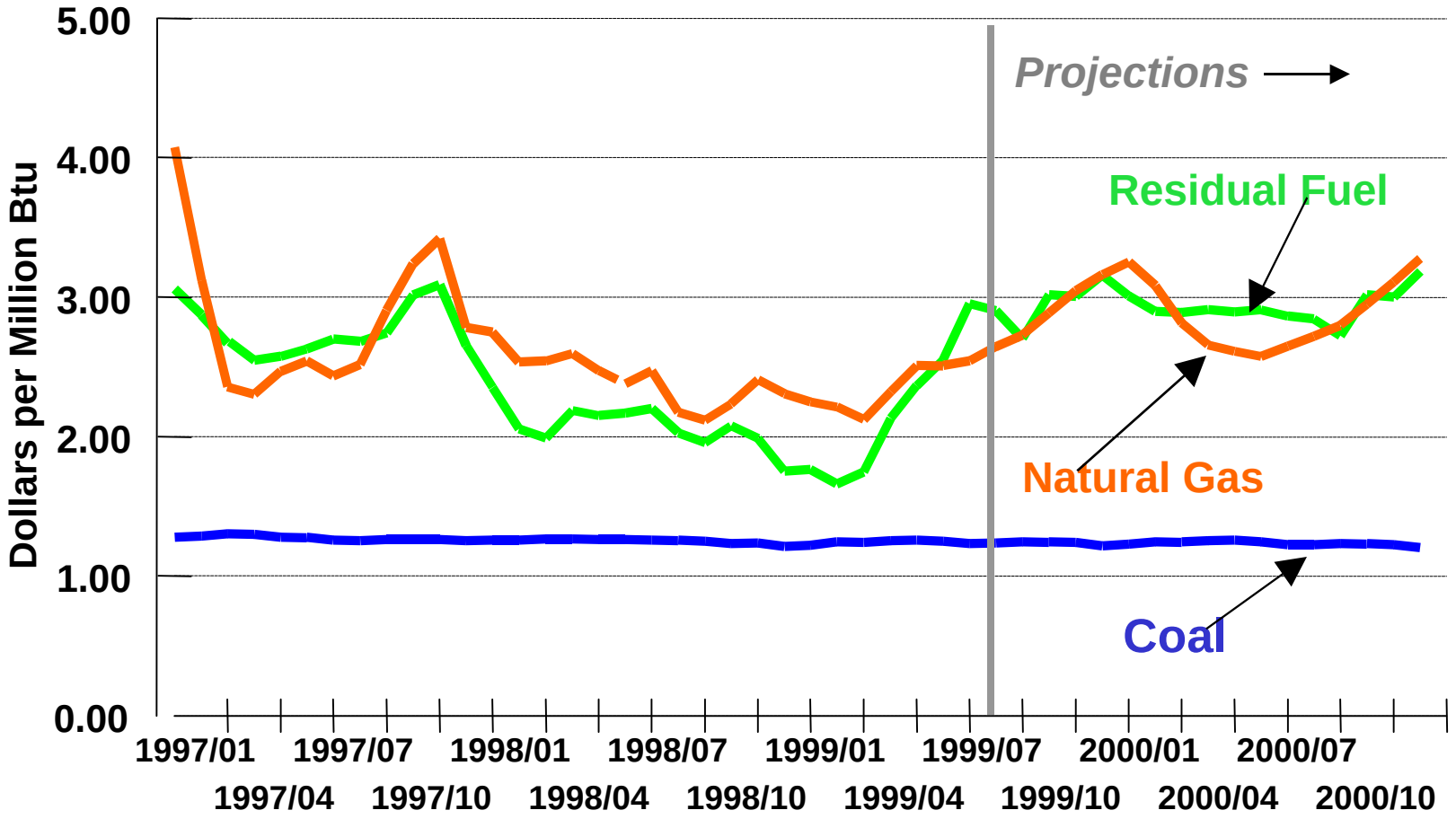
Figure 7. Year-to-Year Changes in the Gasoline Market



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

www.eia.doe.gov

Figure 8. Fossil Fuel Prices to Electric Utilities

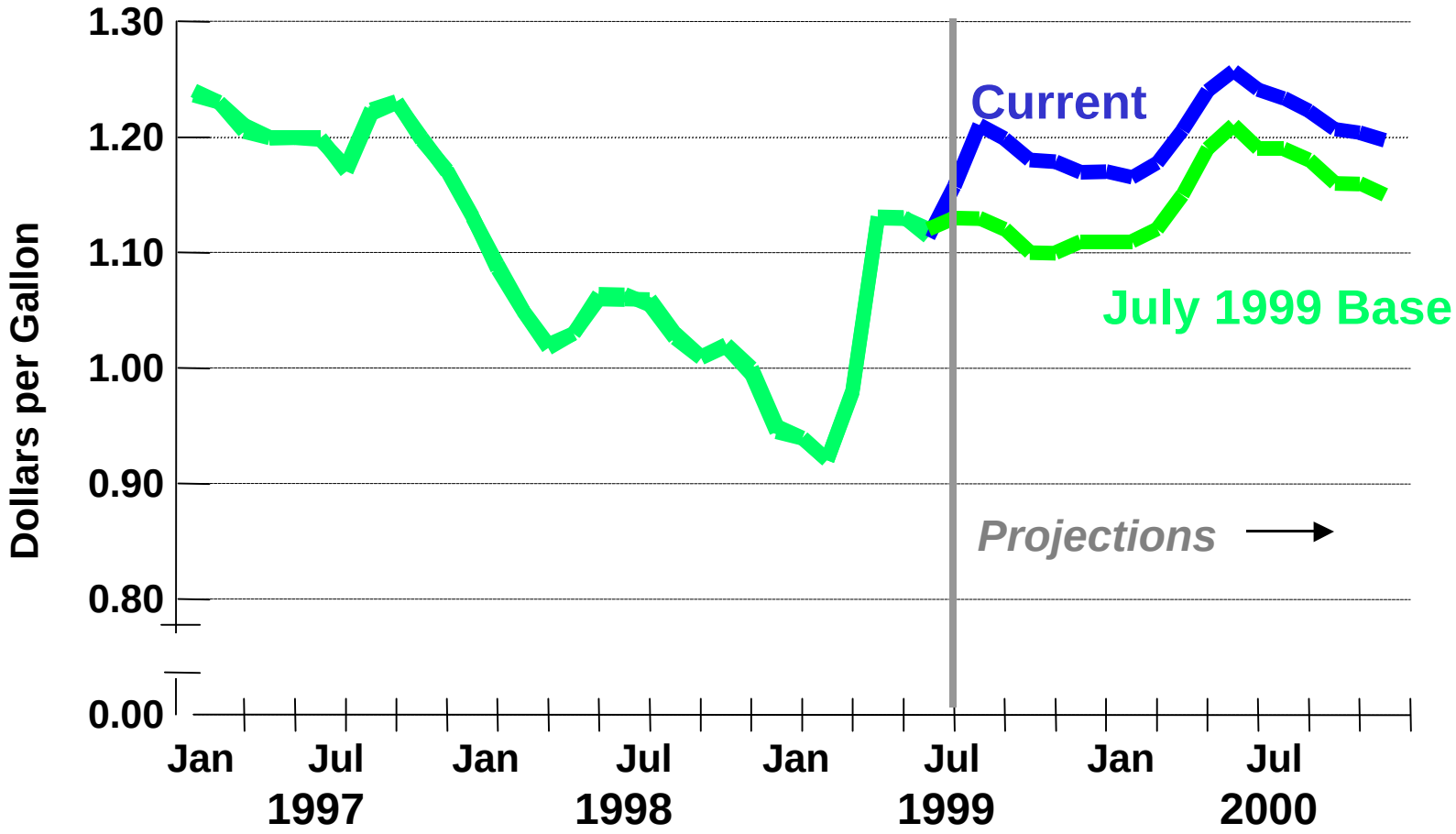


www.eia.doe.gov

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

Figure 9. Retail Motor Gasoline Prices*

(Current vs Previous Outlook)



*Regular Unleaded, Self-Service Cash

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

www.eia.doe.gov

prices, refiner margins (the difference between the refiner price of gasoline and the price of crude oil) did not appear to have gained. Retail margins (the pump price less the refiner price and taxes) actually shrank in July as the bulk of the higher crude costs, and thus the higher refiner prices for motor gasoline, weren't fully realized at the pump this month (Figure 10). Motorists may see these prices slip a little after the summer driving season ends next month. However next year, if crude costs rise as projected, summer retail prices could gain another an additional 8 cents per gallon (Figure 11 and Table 4).

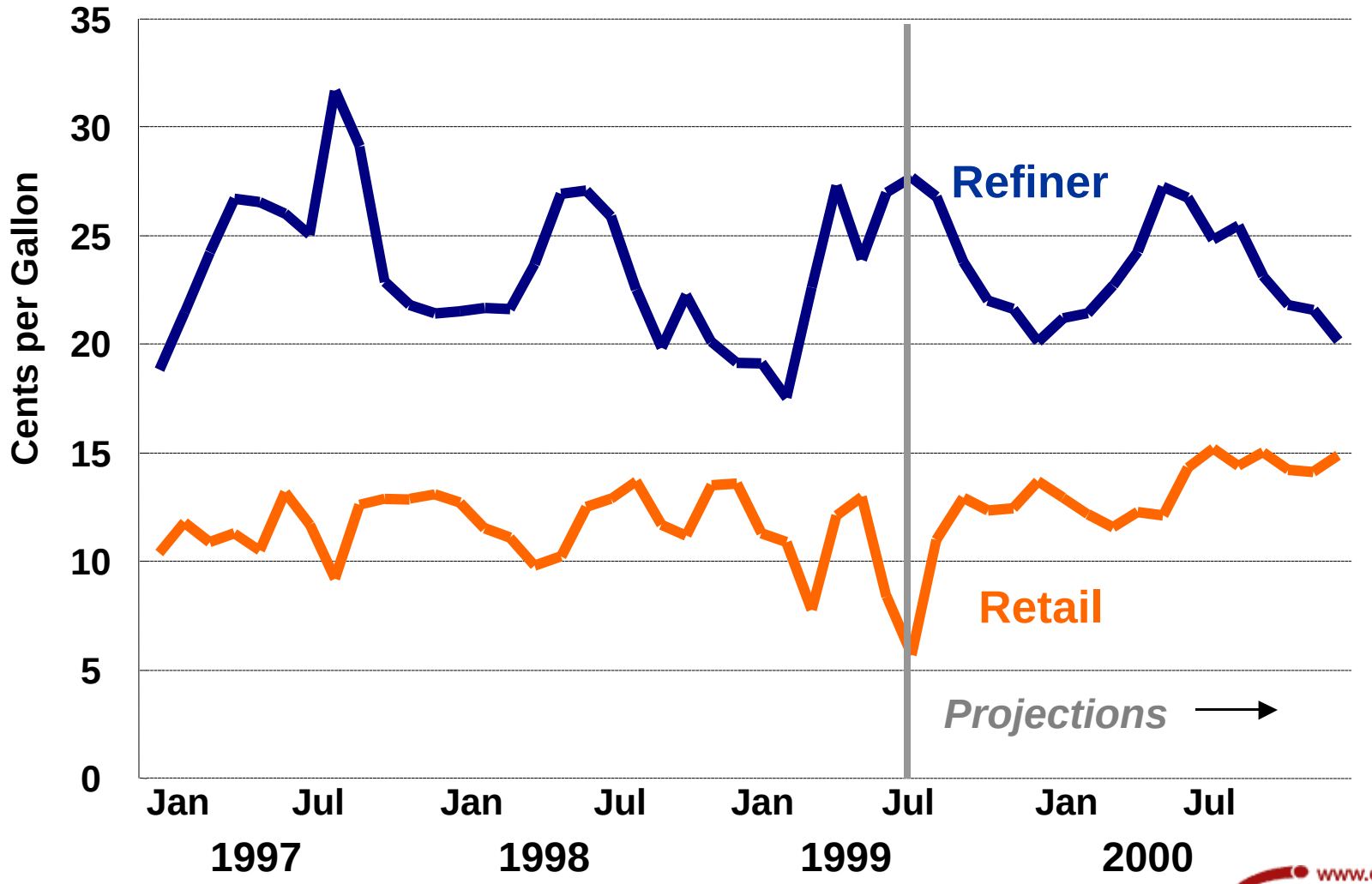
Spot gasoline price increases have been noticeably sharp in California, which requires a more specialized and cleaner type of motor gasoline. The normally tight gasoline market in California became even tighter when a fire shut down a Mobil refinery at Torrance, California on July 28th. Los Angeles spot prices for reformulated gasoline shot up overnight by 16 cents per gallon. It is estimated that this refinery will be back in operation within 1-3 weeks. As a result, California prices should cool down.

Heating Oil. Given our base case oil price projection, residential heating oil prices, like all petroleum product prices, are expected to increase by a large amount this winter. Residential heating oil customers may be expected to pay an average of 17 cents per gallon more this upcoming winter than they did last winter (Figure 12).

Natural Gas. Our natural gas wellhead price forecast remains fundamentally unchanged from our previous forecast. Currently there is much volatility in the spot and futures markets due to the extremely hot weather in much of the country. Very high demand for air conditioning has in turn increased gas demand at electric utilities causing some concern about storage levels. Partly as a result of the heavy use of gas for electricity generation so far this summer, gas injected into storage in recent weeks has been less than normally expected. From the latest storage statistics (through the week ending 7/30/1999) net injections were evidently well below normal for July (approximately 230 billion cubic feet as opposed to an average of about 300 billion cubic feet for the ten year period 1989 to 1998). On the other hand, working gas storage *levels* at the end of July were about normal (approximately 2,400-2,420 billion cubic feet compared to an average of 2,381 for the 1989 to 1998 period). Meanwhile, net imports of Canadian gas, which account for 15 percent of total gas demand have grown by about 10 percent this year. Partly as a result of the high volume of gas imports, underground storage levels should be adequate during the upcoming winter. Nevertheless, winter wellhead prices are projected to be around 37 percent greater than prices from last winter since the weather then was considerably milder than normal (Figure 13).

Electric Utility Fuels. In the last *Outlook*, residual fuel oil prices to electric utilities were projected to maintain their price advantage over natural gas prices throughout the forecast period. However, given the revised crude oil price path, this difference narrows considerably. Natural gas prices are expected to increase by about 9 percent per year annually from 1998-2000, while heavy oil prices are projected to be more than double that over the same time period. By the year 2000, gas is expected to become the cheaper

Figure 10. Motor Gasoline Margins

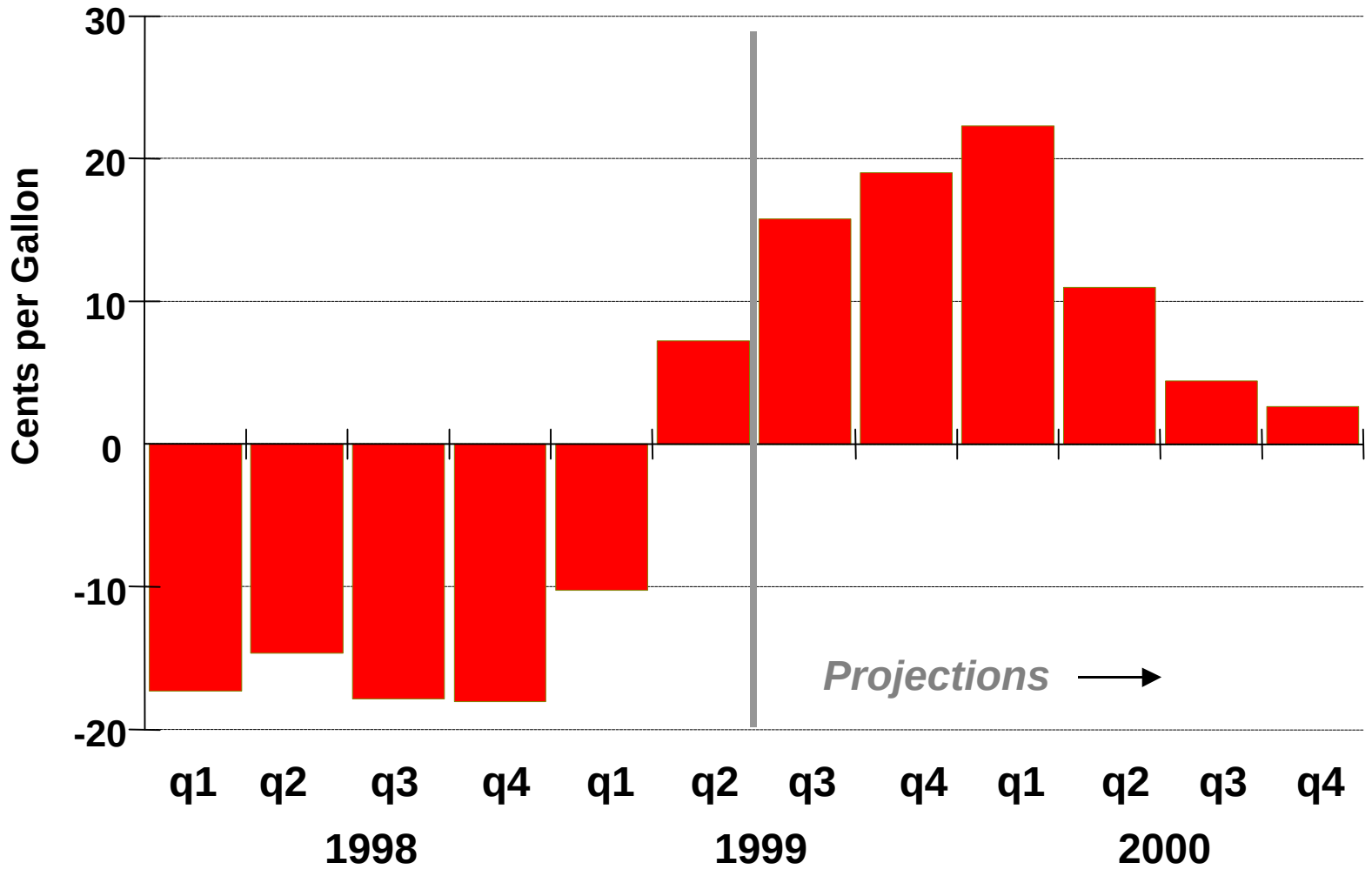


www.eia.doe.gov

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

Figure 11. Quarterly Retail Motor Gasoline Prices*

(Change from Year Ago)



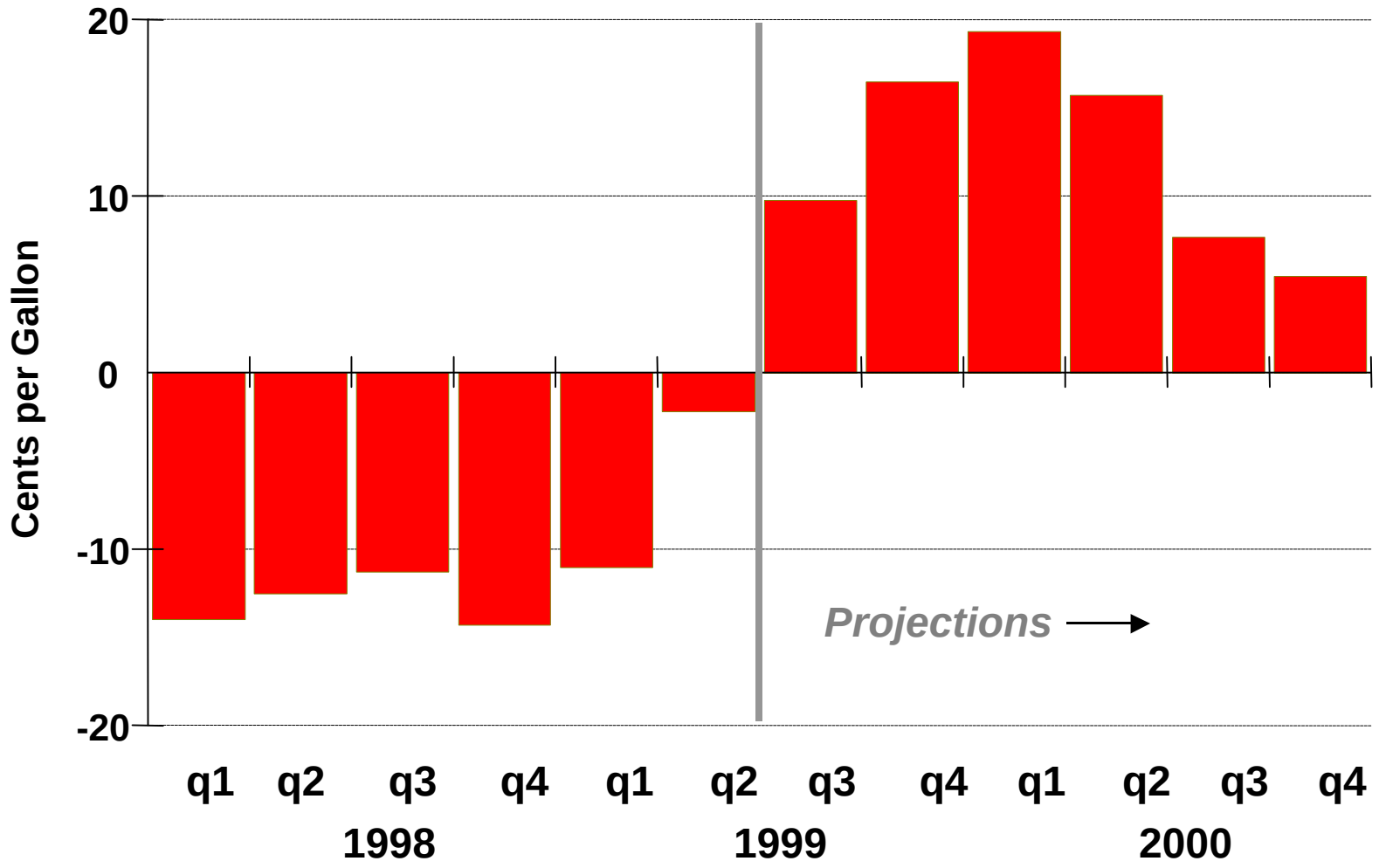
*Regular Unleaded, Self-Service Cash

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

www.eia.doe.gov

Figure 12. Quarterly Retail Heating Oil Prices

(Change from Year Ago)

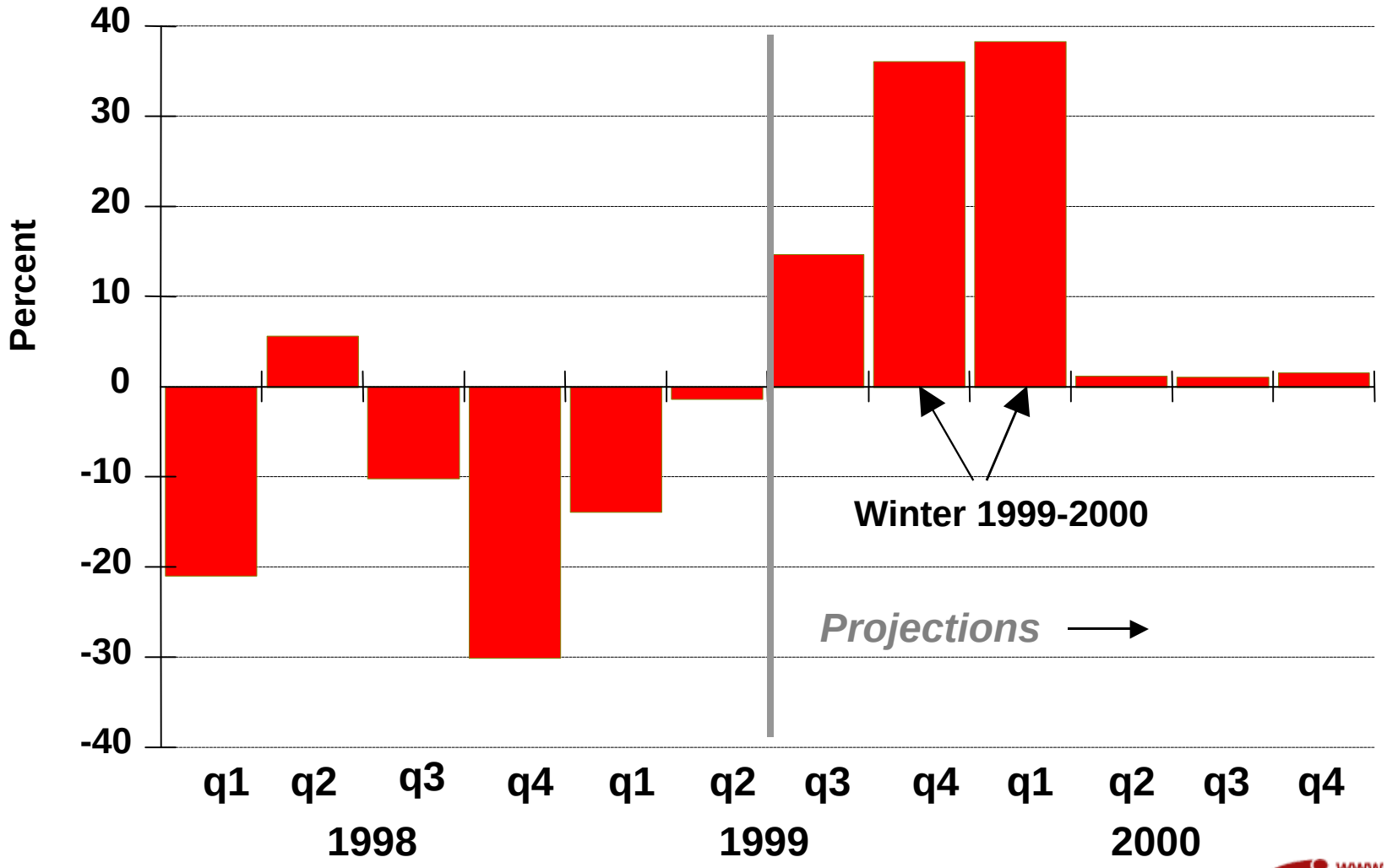


www.eia.doe.gov

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

Figure 13. Quarterly Natural Gas Wellhead Prices

(Percent Change from Year Ago)



www.eia.doe.gov

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

of the two fuels, as it has been historically (Figure 8). Falling world oil prices in 1998 gave the advantage to oil, but much of that advantage will vanish with the assumption of rising world oil prices. Coal is by far the cheapest of the fossil fuels. The price of coal keeps declining as mining productivity keeps increasing.

Natural Gas Demand and Supply

Demand. Third quarter 1999 demand for natural gas by electric utilities is projected to be 3.0 percent above last month's projections due to the heat wave which has prevailed across most of the nation since July 4 (Figure 14). Electricity sector demand for natural gas has been revised upwards for the remainder of the forecast period (Figure 15). In 2000, our new outlook shows electric utility demand at 3.2 percent above last month's projections (Table 8). This is almost entirely due to the increase in expected petroleum prices (relative to natural gas prices) for this forecast.

Supply. Dry gas production is expected to remain at our previously projected levels through the forecast period. On the other hand, gas net imports have been rising based on estimated second quarter data. Overall net imports are estimated at 84 billion cubic feet, or 1.2 percent, above 1998 levels in the second quarter of this year. We have increased our expectations for net imports in 1999 to 3.35 trillion cubic feet, with expected growth in 2000 resulting in a push to about 3.42 trillion cubic feet.

Gas storage levels, which have generally been above year-earlier levels for most of 1999, may fall below comparable 1998 levels some time in August, particularly if high cooling demand continues. Storage is certainly expected to be lower than the abnormally high year-ago levels by the fourth quarter of this year if normal heating demand develops.

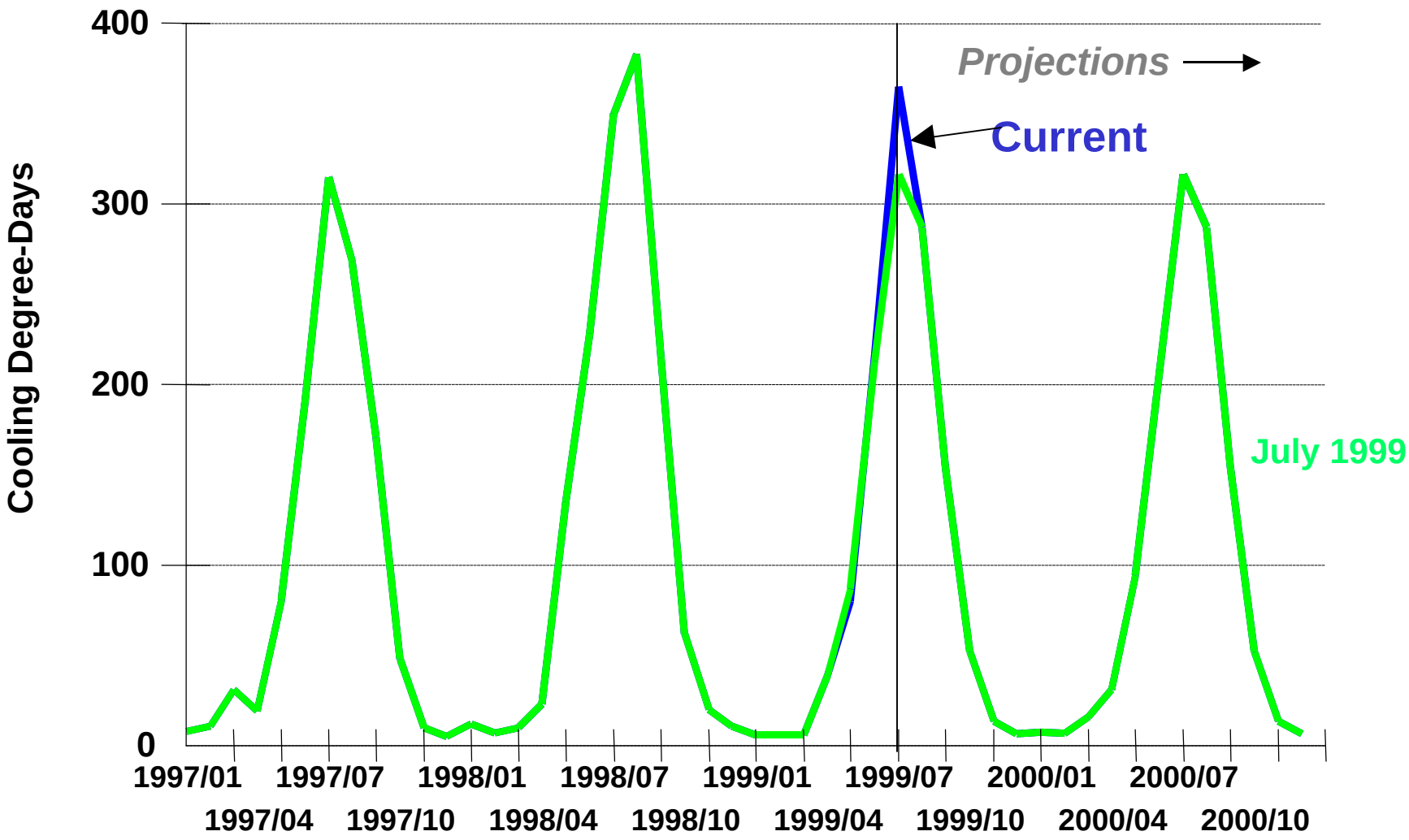
Electricity Demand and Supply

Demand. Electricity demand is projected to be up by about 1.2 percent in the third quarter of 1999 from what it was in last month's outlook, due mainly to higher cooling demand, although it will not reach the level of the third quarter of 1998's demand. Electricity growth for all of 1999 is now expected to be 1.1 percent, to be followed by an expected 2.3 growth rate in 2000 (Figure 16 and Table 10).

Supply. Total electric utility generation for the third quarter is expected to be slightly higher than it was during last year's third quarter, but net electricity imports are expected to be lower. On the other hand, the fuel mix at electric utilities has been noticeably changed this month. In particular, expected oil-fired output has been revised downward in both 1999 and 2000 mainly due to the increases in world petroleum prices. Likewise, the coal and natural gas power forecasts have been raised from last month's projections (Figure 17**).**

Figure 14. Cooling Degree-Days

(Current vs Previous Outlook)

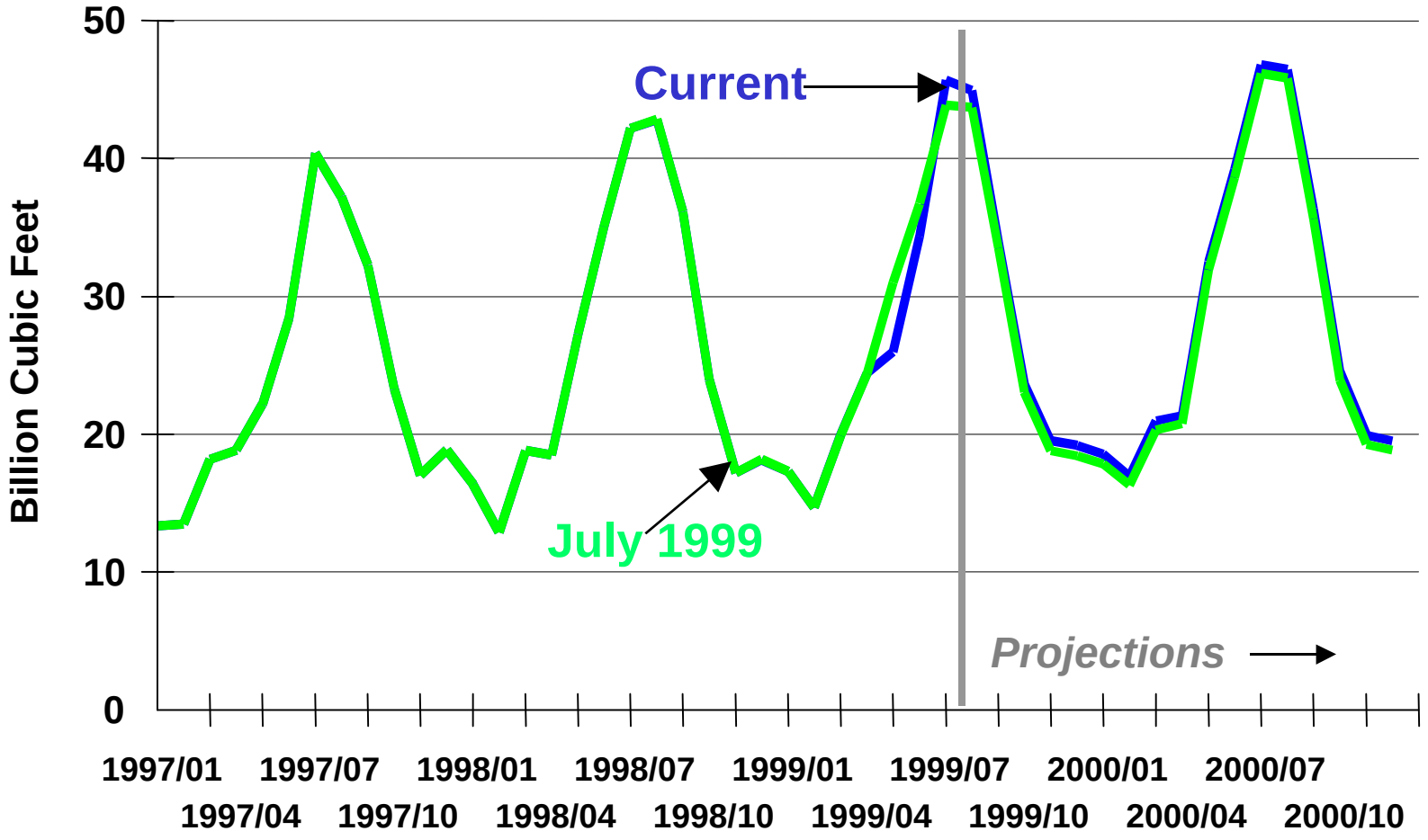


Sources: History: EIA; Projections: Short-Term Energy Outlook, August 1999

www.eia.doe.gov

Figure 15. Electric Utility Demand for Natural Gas

(Current vs Previous Outlook)

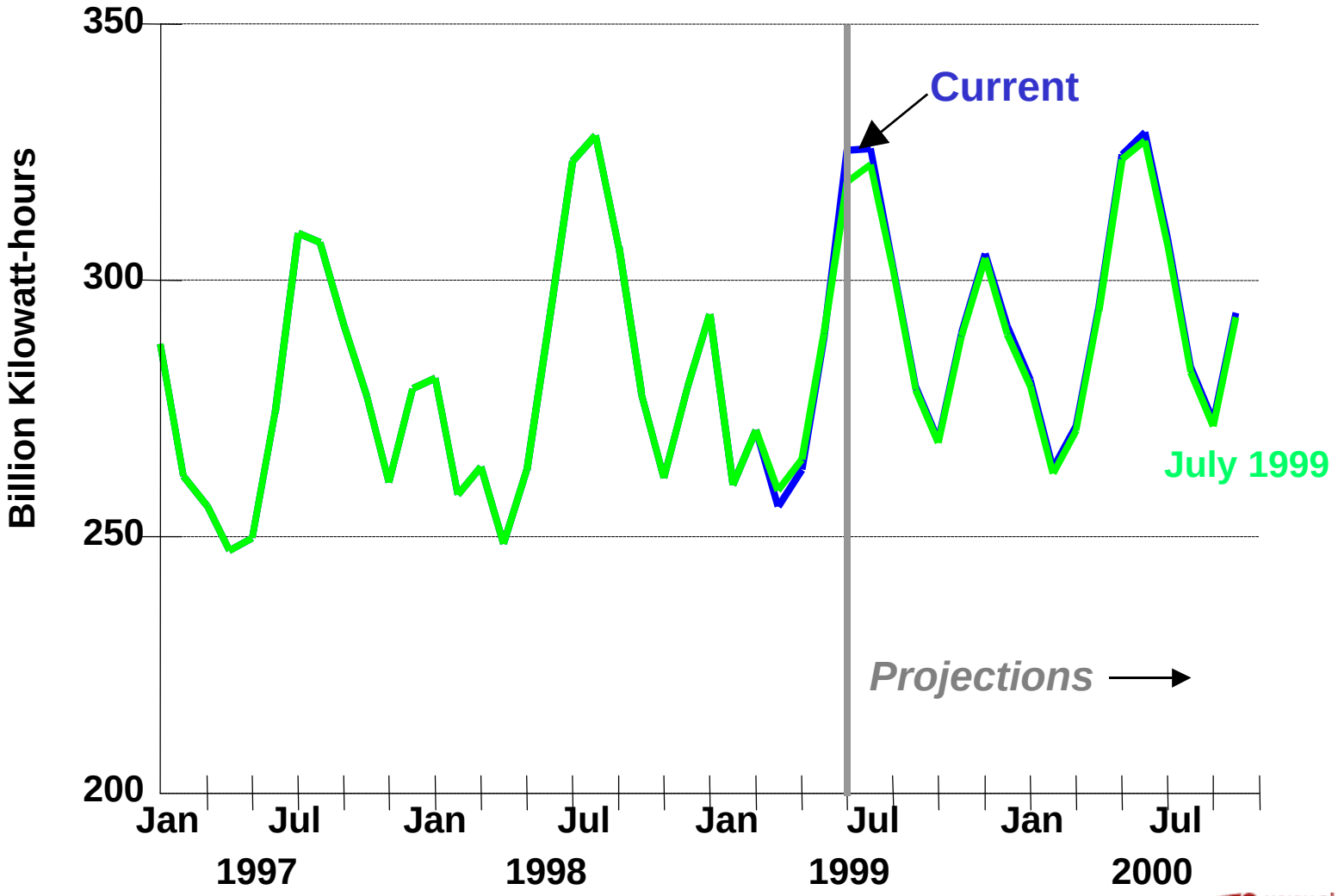


Sources: History: EIA; Projections: Short-Term Energy Outlook, August 1999

www.eia.doe.gov

Figure 16. Total Electricity Demand

(Current vs Previous Outlook)

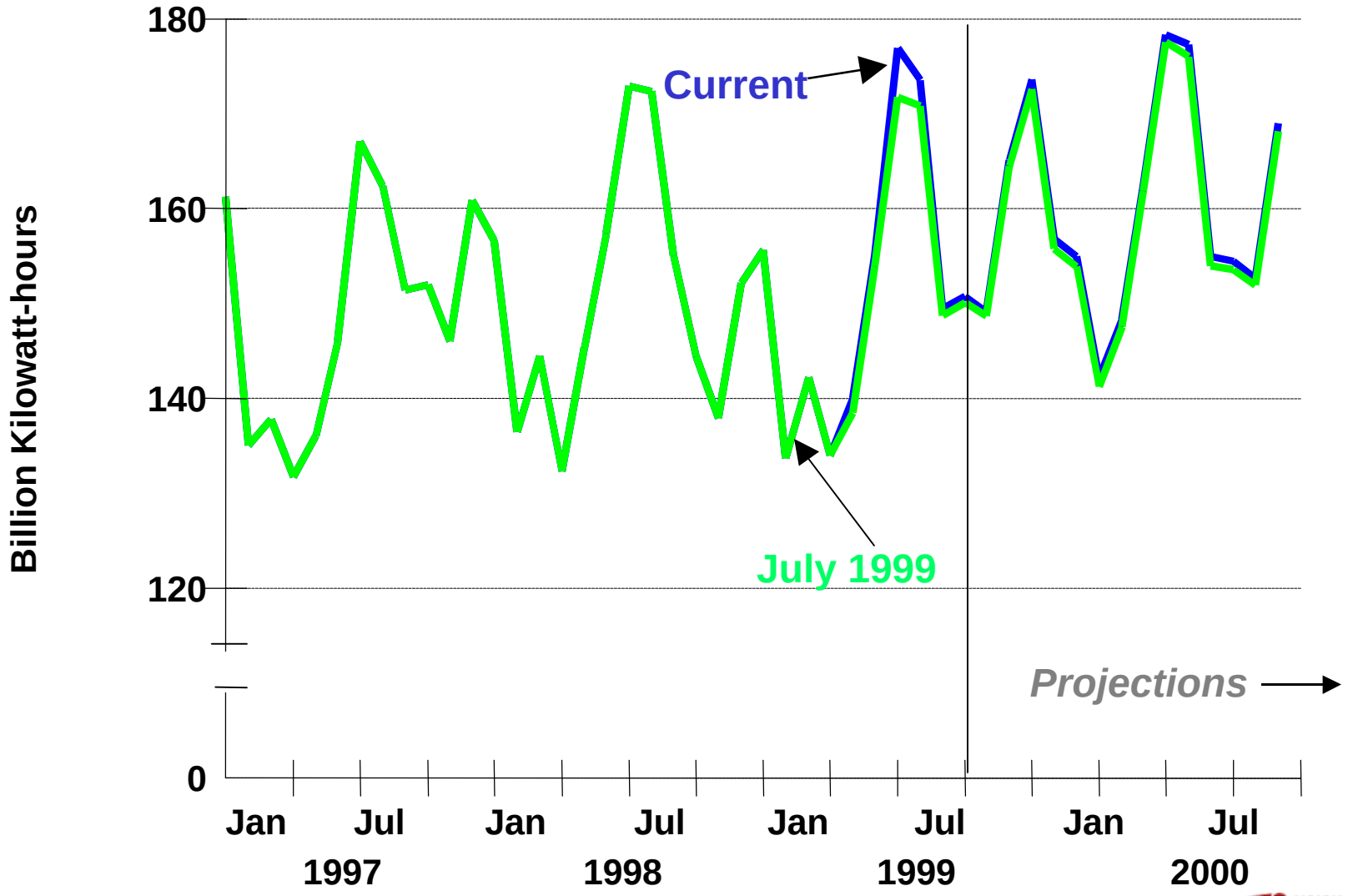


Sources: History: EIA; Projections: Short-Term Energy Outlook, August 1999

www.eia.doe.gov

Figure 17. Electric Utility Demand for Coal

(Current vs Previous Outlook)



Sources: History: EIA; Projections: Short-Term Energy Outlook, August 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**	*7849*	*8004*	**3.9**	*3.9*	*2.0*
Imported Crude Oil Price [a] (nominal dollars per barrel)	**18.50**	**12.12**	*15.86*	*18.74*	**-34.5**	*30.9*	*18.2*
Petroleum Supply (million barrels per day)							
Crude Oil Production [b]	**6.45**	**6.25**	*6.02*	*5.95*	**-3.1**	*-3.7*	*-1.2*
Total Petroleum Net Imports (including SPR)	**9.16**	**9.76**	*9.90*	*10.30*	**6.6**	*1.4*	*4.0*
Energy Demand							
World Petroleum (million barrels per day)	**73.0**	**73.8**	*74.9*	*76.6*	**1.1**	*1.5*	*2.3*
Petroleum (million barrels per day)	**18.62**	**18.92**	*19.23*	*19.55*	**1.6**	*1.6*	*1.7*
Natural Gas (trillion cubic feet)	**21.97**	**21.35**	*21.75*	*22.61*	**-2.8**	*1.9*	*4.0*
Coal (million short tons)	**1029**	**1044**	*1068*	*1116*	**1.5**	*2.3*	*4.5*
Electricity (billion kilowatthours)							
Utility Sales [c]	**3140**	**3220**	*3253*	*3328*	**2.5**	*1.0*	*2.3*
Nonutility Own Use [d]	**161**	**164**	*166*	*168*	**1.9**	*1.2*	*1.2*
Total	**3301**	**3384**	*3419*	*3497*	**2.5**	*1.0*	*2.3*
Total Energy Demand [e] (quadrillion Btu)	**94.3**	**94.7**	*96.4*	*98.8*	**0.5**	*1.8*	*2.5*
Total Energy Demand per Dollar of GDP (thousand Btu per 1992 Dollar)	**12.97**	**12.54**	*12.28*	*12.35*	**-3.3**	*-2.1*	*0.6*
Renewable Energy as Percent of Total f	**7.5**	**7.1**	*6.9*	*6.7*			

[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**	**7755**	*7820*	*7890*	*7932*	*7952*	*7990*	*8020*	*8054*	**7552**	*7849*	*8004*
Percentage Change from Prior Year	**4.2**	**3.6**	**3.5**	**4.3**	**3.9**	*4.3*	*4.3*	*3.3*	*2.5*	*2.2*	*1.6*	*1.5*	**3.9**	*3.9*	*2.0*
Annualized Percent Change from Prior Quarter	**5.4**	**1.8**	**3.6**	**5.9**	**4.0**	*3.4*	*3.6*	*2.1*	*1.0*	*1.9*	*1.5*	*1.7*			
GDP Implicit Price Deflator (Index, 1992=1.000)	**1.123**	**1.126**	**1.129**	**1.131**	**1.135**	*1.138*	*1.141*	*1.145*	*1.151*	*1.154*	*1.158*	*1.162*	**1.127**	*1.140*	*1.156*
Percentage Change from Prior Year	**1.2**	**1.0**	**1.0**	**0.9**	**1.0**	*1.1*	*1.1*	*1.3*	*1.4*	*1.4*	*1.4*	*1.5*	**1.0**	*1.1*	*1.4*
Real Disposable Personal Income (billion chained 1992 Dollars - SAAR)	**5287**	**5322**	**5364**	**5421**	**5479**	*5515*	*5558*	*5608*	*5666*	*5705*	*5729*	*5746*	**5348**	*5540*	*5712*
Percentage Change from Prior Year	**3.0**	**3.0**	**3.2**	**3.5**	**3.6**	*3.6*	*3.6*	*3.4*	*3.4*	*3.4*	*3.1*	*2.5*	**3.2**	*3.6*	*3.1*
Manufacturing Production (Index, 1992=1.000)	**1.338**	**1.347**	**1.348**	**1.364**	**1.370**	*1.390*	*1.401*	*1.407*	*1.407*	*1.418*	*1.430*	*1.443*	**1.349**	*1.392*	*1.425*
Percentage Change from Prior Year	**6.0**	**5.0**	**3.1**	**2.5**	**2.3**	*3.2*	*4.0*	*3.2*	*2.8*	*2.0*	*2.0*	*2.5*	**4.1**	*3.2*	*2.3*
OECD Economic Growth (percent) [b]													**3.0**	*2.6*	*2.4*
Weather [c]															
Heating Degree-Days															
U.S.	**1984**	**481**	**42**	**1444**	**2144**	*541*	*90*	*1636*	*2354*	*524*	*89*	*1636*	**3951**	*4411*	*4603*
New England	**2768**	**770**	**104**	**2038**	**3064**	*882*	*176*	*2269*	*3306*	*915*	*171*	*2269*	**5680**	*6391*	*6660*
Middle Atlantic	**2406**	**570**	**57**	**1779**	**2823**	*703*	*105*	*2026*	*3028*	*716*	*105*	*2026*	**4812**	*5657*	*5875*
U.S. Gas-Weighted	**2078**	**548**	**66**	**1555**	**2267**	*554*	*82*	*1686*	*2454*	*539*	*81*	*1686*	**4247**	*4589*	*4760*
Cooling Degree-Days (U.S.)	**29**	**386**	**948**	**93**	**18**	*336*	*806*	*72*	*30*	*334*	*758*	*72*	**1456**	*1232*	*1193*

[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**	**1343**	*1365*	*1384*	*1400*	*1412*	*1414*	*1411*	*1413*	**1268**	*1373*	*1412*
Real Exchange Rate (index)	**1.142**	**1.161**	**1.182**	**1.120**	**1.134**	*1.164*	*1.179*	*1.182*	*1.164*	*1.151*	*1.139*	*1.129*	**1.151**	*1.165*	*1.146*
Business Inventory Change (billion chained 1992 dollars-SAAR)	**30.1**	**23.9**	**19.2**	**6.2**	**-4.9**	*2.5*	*15.3*	*19.4*	*4.0*	*-0.6*	*-3.0*	*-3.2*	**19.9**	*8.1*	*-0.7*
Producer Price Index (index, 1982=1.000)	**1.252**	**1.250**	**1.243**	**1.233**	**1.230**	*1.243*	*1.251*	*1.257*	*1.264*	*1.266*	*1.269*	*1.276*	**1.244**	*1.245*	*1.269*
Consumer Price Index (index, 1982-1984=1.000)	**1.621**	**1.628**	**1.635**	**1.642**	**1.648**	*1.663*	*1.669*	*1.678*	*1.689*	*1.698*	*1.707*	*1.719*	**1.631**	*1.664*	*1.703*
Petroleum Product Price Index (index, 1982=1.000)	**0.541**	**0.536**	**0.503**	**0.473**	**0.444**	*0.601*	*0.667*	*0.648*	*0.662*	*0.674*	*0.666*	*0.650*	**0.513**	*0.590*	*0.663*
Non-Farm Employment (millions)	**124.8**	**125.5**	**126.1**	**126.8**	**127.6**	*128.2*	*128.8*	*129.6*	*130.1*	*130.4*	*130.7*	*131.1*	**125.8**	*128.6*	*130.6*
Commercial Employment (millions)	**85.7**	**86.3**	**87.0**	**87.7**	**88.5**	*89.2*	*89.7*	*90.4*	*90.7*	*91.0*	*91.3*	*91.8*	**86.7**	*89.4*	*91.2*
Total Industrial Production (index, 1992=1.000)	**1.303**	**1.312**	**1.316**	**1.323**	**1.327**	*1.345*	*1.357*	*1.363*	*1.365*	*1.375*	*1.386*	*1.397*	**1.314**	*1.348*	*1.381*
Housing Stock (millions)	**113.7**	**114.0**	**114.4**	**115.0**	**115.5**	*115.9*	*116.2*	*116.6*	*116.9*	*117.2*	*117.5*	*117.8*	**114.3**	*116.0*	*117.4*
Miscellaneous															
Gas Weighted Industrial Production (index, 1992=1.000)	**1.175**	**1.171**	**1.158**	**1.156**	**1.170**	*1.178*	*1.185*	*1.184*	*1.180*	*1.187*	*1.194*	*1.202*	**1.165**	*1.179*	*1.191*
Vehicle Miles Traveled [b] (million miles/day)	**6629**	**7424**	**7602**	**7032**	**6707**	*7597*	*7761*	*7253*	*7049*	*7743*	*7911*	*7425*	**7174**	*7332*	*7533*
Vehicle Fuel Efficiency (index, 1997=1.0)	**0.993**	**0.999**	**0.991**	**0.991**	**0.985**	*1.011*	*0.990*	*0.998*	*1.006*	*1.013*	*0.992*	*0.998*	**0.994**	*0.996*	*1.002*
Real Vehicle Fuel Cost (cents per mile)	**3.34**	**3.18**	**3.08**	**3.11**	**2.98**	*3.28*	*3.48*	*3.59*	*3.50*	*3.49*	*3.49*	*3.56*	**3.18**	*3.33*	*3.51*
Air Travel Capacity (mill. available ton-miles/day)	**423.5**	**439.1**	**443.0**	**439.5**	**428.8**	*448.7*	*467.6*	*468.8*	*464.8*	*468.0*	*483.5*	*472.1*	**436.3**	*453.6*	*472.1*
Aircraft Utilization (mill. revenue ton-miles/day)	**237.7**	**259.0**	**260.5**	**247.1**	**240.8**	*269.1*	*278.5*	*262.0*	*256.1*	*274.4*	*289.4*	*274.1*	**251.1**	*262.7*	*273.5*
Airline Ticket Price Index (index, 1982-1984=1.000)	**2.058**	**2.053**	**2.070**	**2.029**	**2.130**	*2.186*	*2.132*	*2.184*	*2.241*	*2.265*	*2.278*	*2.308*	**2.053**	*2.158*	*2.273*
Raw Steel Production (millions tons)	**28.75**	**27.87**	**26.57**	**24.40**	**25.11**	*26.30*	*26.32*	*26.84*	*26.64*	*26.47*	*26.19*	*26.69*	**107.28**	*104.56*	*105.99*

[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**	*18.8*	*19.3*	*19.6*	*19.5*	*19.1*	*19.6*	*20.0*	**18.9**	*19.2*	*19.6*
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**	*1.9*	*2.0*	*2.0*	*2.0*	*1.9*	*2.0*	*2.0*	**1.9**	*1.9*	*2.0*
Europe	**14.9**	**14.2**	**14.6**	**15.2**	**15.2**	*14.4*	*14.8*	*15.4*	*15.4*	*14.6*	*15.2*	*15.6*	**14.7**	*14.9*	*15.2*
Japan	**6.2**	**5.0**	**5.2**	**5.7**	**6.2**	*5.0*	*5.2*	*5.7*	*6.3*	*5.1*	*5.3*	*5.9*	**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*	*42.5*	*44.0*	*44.5*	*42.0*	*43.3*	*44.7*	**42.2**	*42.9*	*43.6*
Non-OECD															
Former Soviet Union	**4.5**	**4.0**	**4.0**	**4.4**	**4.4**	*4.0*	*4.0*	*4.3*	*4.5*	*4.1*	*4.1*	*4.4*	**4.2**	*4.2*	*4.3*
Europe	**1.6**	**1.4**	**1.4**	**1.5**	**1.7**	*1.5*	*1.5*	*1.6*	*1.8*	*1.5*	*1.5*	*1.7*	**1.5**	*1.6*	*1.6*
China	**3.8**	**3.9**	**3.9**	**4.0**	**4.0**	*4.1*	*4.1*	*4.2*	*4.2*	*4.3*	*4.3*	*4.4*	**3.9**	*4.1*	*4.3*
Other Asia	**8.7**	**8.4**	**8.2**	**9.4**	**8.8**	*8.6*	*8.4*	*9.5*	*9.1*	*8.9*	*8.7*	*9.8*	**8.7**	*8.8*	*9.1*
Other Non-OECD	**13.0**	**13.3**	**13.1**	**13.4**	**13.2**	*13.5*	*13.3*	*13.5*	*13.5*	*13.8*	*13.6*	*13.8*	**13.2**	*13.4*	*13.7*
Total Non-OECD	**31.6**	**31.1**	**30.7**	**32.7**	**32.1**	*31.6*	*31.2*	*33.2*	*33.1*	*32.6*	*32.2*	*34.1*	**31.5**	*32.0*	*33.0*
Total World Demand	**74.2**	**72.1**	**72.9**	**75.9**	**75.8**	*72.9*	*73.7*	*77.2*	*77.6*	*74.6*	*75.5*	*78.8*	**73.8**	*74.9*	*76.6*
Supply [b]															
OECD															
U.S. (50 States)	**9.5**	**9.4**	**9.0**	**9.1**	**9.0**	*9.0*	*9.0*	*9.1*	*9.0*	*9.0*	*8.9*	*8.9*	**9.3**	*9.0*	*9.0*
Canada	**2.7**	**2.6**	**2.8**	**2.7**	**2.6**	*2.6*	*2.6*	*2.6*	*2.7*	*2.7*	*2.7*	*2.7*	**2.7**	*2.6*	*2.7*
North Sea [c]	**6.4**	**6.2**	**5.9**	**6.3**	**6.3**	*6.1*	*6.1*	*6.6*	*6.8*	*6.5*	*6.7*	*7.0*	**6.2**	*6.3*	*6.7*
Other OECD	**1.6**	**1.6**	**1.6**	**1.4**	**1.5**	*1.5*	*1.6*	*1.6*	*1.6*	*1.6*	*1.7*	*1.7*	**1.6**	*1.5*	*1.6*
Total OECD	**20.2**	**19.9**	**19.2**	**19.6**	**19.3**	*19.1*	*19.2*	*20.0*	*20.1*	*19.9*	*20.0*	*20.3*	**19.7**	*19.4*	*20.1*
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**	*7.2*	*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**	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	**3.5**	*3.6*	*3.6*
Other Non-OECD	**10.7**	**10.8**	**10.8**	**11.0**	**11.1**	*11.0*	*11.1*	*11.3*	*11.3*	*11.3*	*11.4*	*11.4*	**10.8**	*11.1*	*11.4*
Total Non-OECD	**55.7**	**55.5**	**54.7**	**54.9**	**55.4**	*53.8*	*54.0*	*54.6*	*55.0*	*55.3*	*56.0*	*56.6*	**55.2**	*54.5*	*55.8*
Total World Supply	**75.9**	**75.3**	**74.0**	**74.5**	**74.7**	*73.0*	*73.3*	*74.6*	*75.1*	*75.2*	*76.0*	*77.0*	**74.9**	*73.9*	*75.8*
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR)	**-0.3**	**-0.7**	**0.0**	**0.1**	**0.4**	*-0.4*	*-0.3*	*0.5*	*0.6*	*-0.6*	*-0.3*	*0.5*	**-0.2**	*0.1*	*0.1*
Other	**-1.4**	**-2.5**	**-1.1**	**1.3**	**0.6**	*0.3*	*0.8*	*2.0*	*1.8*	*-0.1*	*-0.2*	*1.4*	**-0.9**	*0.9*	*0.7*
Total Stock Withdrawals	**-1.7**	**-3.2**	**-1.1**	**1.4**	**1.1**	*-0.1*	*0.4*	*2.6*	*2.4*	*-0.6*	*-0.5*	*1.9*	**-1.2**	*1.0*	*0.8*
OECD Comm. Stocks, End (bill. bbls.)	**2.7**	**2.9**	**2.9**	**2.8**	**2.8**	*2.8*	*2.8*	*2.7*	*2.5*	*2.6*	*2.6*	*2.5*	**2.8**	*2.7*	*2.5*
Non-OPEC Supply	**45.0**	**44.6**	**43.9**	**44.5**	**44.4**	*44.1*	*44.3*	*45.4*	*45.6*	*45.3*	*45.5*	*46.1*	**44.5**	*44.6*	*45.6*
Net Exports from Former Soviet Union	**2.8**	**3.1**	**3.2**	**2.9**	**2.8**	*3.2*	*3.3*	*3.0*	*2.8*	*3.2*	*3.2*	*3.0*	**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**	*15.18*	*18.39*	*18.67*	*18.34*	*18.92*	*18.67*	*19.00*	**12.12**	*15.86*	*18.74*
Natural Gas Wellhead															
(dollars per thousand cubic feet)	**2.02**	**2.07**	**1.92**	**1.84**	**1.74**	*2.04*	*2.20*	*2.50*	*2.40*	*2.06*	*2.22*	*2.53*	**1.96**	*2.12*	*2.30*
Petroleum Products															
Gasoline Retail [b] (dollars per gallon)															
All Grades	**1.10**	**1.10**	**1.07**	**1.03**	**0.99**	*1.17*	*1.23*	*1.22*	*1.21*	*1.27*	*1.27*	*1.24*	**1.07**	*1.16*	*1.25*
Regular Unleaded	**1.05**	**1.05**	**1.03**	**0.99**	**0.95**	*1.13*	*1.19*	*1.18*	*1.17*	*1.23*	*1.23*	*1.20*	**1.03**	*1.11*	*1.21*
No. 2 Diesel Oil, Retail															
(dollars per gallon)	**1.08**	**1.05**	**1.02**	**1.00**	**0.97**	*1.08*	*1.14*	*1.18*	*1.17*	*1.18*	*1.17*	*1.21*	**1.04**	*1.09*	*1.18*
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	**0.47**	**0.43**	**0.39**	**0.38**	**0.36**	*0.44*	*0.51*	*0.57*	*0.58*	*0.59*	*0.58*	*0.61*	**0.42**	*0.47*	*0.59*
No. 2 Heating Oil, Retail															
(dollars per gallon)	**0.91**	**0.85**	**0.77**	**0.79**	**0.80**	*0.83*	*0.87*	*0.96*	*1.00*	*0.99*	*0.94*	*1.01*	**0.85**	*0.86*	*1.00*
No. 6 Residual Fuel Oil, Retail [c]															
(dollars per barrel)	**13.58**	**13.27**	**12.32**	**11.77**	**11.28**	*14.54*	*17.47*	*18.62*	*18.85*	*17.84*	*17.14*	*18.70*	**12.73**	*15.30*	*18.20*
Electric Utility Fuels															
Coal															
(dollars per million Btu)	**1.26**	**1.26**	**1.25**	**1.23**	**1.24**	*1.25*	*1.24*	*1.24*	*1.24*	*1.25*	*1.23*	*1.22*	**1.25**	*1.24*	*1.23*
Heavy Fuel Oil [d]															
(dollars per million Btu)	**2.12**	**2.17**	**2.07**	**1.93**	**1.72**	*2.36*	*2.88*	*3.06*	*2.94*	*2.90*	*2.82*	*3.08*	**2.07**	*2.45*	*2.94*
Natural Gas															
(dollars per million Btu)	**2.61**	**2.46**	**2.26**	**2.31**	**2.19**	*2.46*	*2.63*	*3.02*	*3.04*	*2.61*	*2.72*	*3.10*	**2.38**	*2.59*	*2.81*
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	**6.38**	**7.33**	**8.90**	**6.64**	**6.09**	*6.73*	*8.71*	*6.87*	*7.07*	*7.73*	*9.03*	*7.40*	**6.82**	*6.60*	*7.39*
Electricity															
(cents per kilowatthour)	**7.96**	**8.43**	**8.55**	**8.09**	**7.79**	*8.27*	*8.51*	*8.08*	*7.53*	*8.15*	*8.40*	*7.94*	**8.28**	*8.18*	*8.01*

[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*	*6.01*	*6.10*	*6.05*	*5.99*	*5.90*	*5.88*	**6.25**	*6.02*	*5.95*
Alaska	**1.23**	**1.17**	**1.13**	**1.17**	**1.13**	*1.05*	*1.04*	*1.07*	*1.02*	*0.96*	*0.92*	*0.95*	**1.17**	*1.07*	*0.96*
Lower 48	**5.25**	**5.20**	**4.94**	**4.93**	**4.86**	*4.91*	*4.97*	*5.03*	*5.03*	*5.02*	*4.98*	*4.93*	**5.08**	*4.94*	*4.99*
Net Imports (including SPR) [b]	**8.00**	**8.80**	**9.00**	**8.57**	**8.38**	*8.69*	*9.16*	*8.58*	*8.42*	*9.23*	*9.52*	*8.99*	**8.60**	*8.70*	*9.04*
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**	*-0.02*	*-0.08*	*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**	**-0.14**	*0.06*	*0.06*	*0.01*	*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**	**0.25**	*0.31*	*0.26*	*0.21*	*0.21*	*0.22*	*0.22*	*0.21*	**0.11**	*0.26*	*0.21*
Total Crude Oil Supply	**14.34**	**15.30**	**15.38**	**14.53**	**14.47**	*15.02*	*15.40*	*14.92*	*14.70*	*15.39*	*15.69*	*15.14*	**14.89**	*14.95*	*15.23*
Other Supply															
NGL Production	**1.84**	**1.82**	**1.67**	**1.71**	**1.72**	*1.77*	*1.75*	*1.76*	*1.78*	*1.78*	*1.77*	*1.77*	**1.76**	*1.75*	*1.77*
Other Hydrocarbon and Alcohol Inputs	**0.39**	**0.37**	**0.37**	**0.39**	**0.38**	*0.38*	*0.35*	*0.38*	*0.37*	*0.35*	*0.36*	*0.38*	**0.38**	*0.37*	*0.36*
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**	**0.86**	*0.86*	*0.89*	*0.88*	*0.85*	*0.90*	*0.92*	*0.89*	**0.89**	*0.87*	*0.89*
Net Product Imports [c]	**1.03**	**1.22**	**1.18**	**1.24**	**1.18**	*1.25*	*1.22*	*1.16*	*1.19*	*1.23*	*1.28*	*1.34*	**1.17**	*1.20*	*1.26*
Product Stock Withdrawn or Added (-) [d]	**0.03**	**-0.72**	**-0.26**	**0.30**	**0.58**	*-0.44*	*-0.32*	*0.51*	*0.60*	*-0.52*	*-0.37*	*0.44*	**-0.17**	*0.08*	*0.04*
Total Supply	**18.46**	**18.86**	**19.24**	**19.10**	**19.19**	*18.83*	*19.30*	*19.60*	*19.48*	*19.13*	*19.64*	*19.96*	**18.92**	*19.23*	*19.55*
Demand															
Motor Gasoline	**7.78**	**8.37**	**8.52**	**8.33**	**7.93**	*8.46*	*8.71*	*8.54*	*8.17*	*8.61*	*8.86*	*8.74*	**8.25**	*8.41*	*8.59*
Jet Fuel	**1.58**	**1.61**	**1.61**	**1.68**	**1.70**	*1.62*	*1.64*	*1.71*	*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**	*3.35*	*3.39*	*3.65*	*3.90*	*3.51*	*3.46*	*3.71*	**3.46**	*3.52*	*3.65*
Residual Fuel Oil	**0.85**	**0.88**	**0.99**	**0.83**	**0.92**	*0.81*	*0.72*	*0.80*	*0.88*	*0.67*	*0.67*	*0.76*	**0.89**	*0.81*	*0.74*
Other Oils [e]	**4.65**	**4.57**	**4.75**	**4.80**	**4.95**	*4.58*	*4.82*	*4.90*	*4.81*	*4.68*	*4.94*	*5.01*	**4.69**	*4.81*	*4.86*
Total Demand	**18.46**	**18.86**	**19.24**	**19.10**	**19.19**	*18.82*	*19.29*	*19.60*	*19.48*	*19.13*	*19.64*	*19.96*	**18.92**	*19.23*	*19.55*
Total Petroleum Net Imports	**9.02**	**10.02**	**10.19**	**9.82**	**9.56**	*9.93*	*10.37*	*9.74*	*9.61*	*10.46*	*10.80*	*10.34*	**9.76**	*9.90*	*10.30*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**334**	**332**	**310**	**324**	**336**	*330*	*325*	*324*	*322*	*326*	*321*	*316*	**324**	*324*	*316*
Total Motor Gasoline	**216**	**222**	**207**	**216**	**216**	*216*	*206*	*210*	*210*	*212*	*208*	*209*	**216**	*210*	*209*
Finished Motor Gasoline	**167**	**177**	**164**	**172**	**168**	*171*	*163*	*167*	*167*	*170*	*166*	*168*	**172**	*167*	*168*
Blending Components	**49**	**45**	**43**	**44**	**48**	*45*	*43*	*43*	*44*	*41*	*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**	*131*	*147*	*147*	*110*	*118*	*137*	*142*	**156**	*147*	*142*
Residual Fuel Oil	**41**	**40**	**40**	**45**	**40**	*41*	*45*	*45*	*37*	*41*	*42*	*44*	**45**	*45*	*44*
Other Oils [e]	**265**	**313**	**334**	**291**	**279**	*309*	*326*	*278*	*270*	*303*	*317*	*268*	**291**	*278*	*268*
Total Stocks (excluding SPR)	**1024**	**1087**	**1089**	**1076**	**1036**	*1070*	*1094*	*1046*	*989*	*1041*	*1070*	*1024*	**1076**	*1046*	*1024*
Crude Oil in SPR	**563**	**563**	**563**	**571**	**572**	*574*	*581*	*579*	*579*	*579*	*579*	*579*	**571**	*579*	*579*
Total Stocks (including SPR)	**1587**	**1651**	**1653**	**1647**	**1608**	*1644*	*1675*	*1626*	*1569*	*1620*	*1650*	*1604*	**1647**	*1626*	*1604*

[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*	*0.85*	*0.86*	*0.86*	*0.81*	*0.82*	*0.88*	**2.98**	*3.35*	*3.38*
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**	*0.12*	*0.13*
Total New Supply	**5.50**	**5.45**	**5.51**	**5.52**	**5.49**	*5.52*	*5.59*	*5.60*	*5.67*	*5.56*	*5.59*	*5.66*	**21.98**	*22.21*	*22.48*
Underground Working Gas Storage															
Opening	**6.52**	**5.53**	**6.45**	**7.29**	**7.04**	*5.79*	*6.53*	*7.33*	*6.81*	*5.36*	*6.19*	*7.10*	**6.52**	*7.04*	*6.81*
Closing	**5.53**	**6.45**	**7.29**	**7.04**	**5.79**	*6.53*	*7.33*	*6.81*	*5.36*	*6.19*	*7.10*	*6.68*	**7.04**	*6.81*	*6.68*
Net Withdrawals	**0.99**	**-0.92**	**-0.84**	**0.25**	**1.25**	*-0.74*	*-0.80*	*0.52*	*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**	*4.78*	*4.80*	*6.13*	*7.12*	*4.73*	*4.67*	*6.08*	**21.46**	*22.45*	*22.60*
Balancing Item [a]	**0.16**	**0.19**	**-0.03**	**-0.43**	**0.02**	*-0.04*	*-0.23*	*-0.45*	*0.26*	*0.23*	*-0.07*	*-0.42*	**-0.11**	*-0.70*	*0.01*
Total Primary Supply	**6.66**	**4.72**	**4.64**	**5.34**	**6.77**	*4.74*	*4.57*	*5.67*	*7.38*	*4.96*	*4.61*	*5.66*	**21.35**	*21.75*	*22.61*
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*	*0.19*	*0.24*	*0.16*	*0.15*	*0.19*	**0.73**	*0.75*	*0.75*
Residential	**2.13**	**0.78**	**0.37**	**1.20**	**2.24**	*0.78*	*0.31*	*1.36*	*2.49*	*0.81*	*0.31*	*1.38*	**4.48**	*4.69*	*4.98*
Commercial	**1.21**	**0.57**	**0.45**	**0.81**	**1.25**	*0.62*	*0.45*	*0.89*	*1.43*	*0.64*	*0.46*	*0.91*	**3.04**	*3.22*	*3.45*
Industrial (Incl. Cogenerators)	**2.23**	**1.99**	**2.03**	**2.18**	**2.16**	*1.94*	*1.99*	*2.21*	*2.28*	*2.02*	*1.97*	*2.15*	**8.43**	*8.29*	*8.42*
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**	*0.89*	*1.30*	*0.65*	*0.59*	*0.97*	*1.36*	*0.67*	**3.26**	*3.38*	*3.59*
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*	*4.57*	*5.67*	*7.38*	*4.96*	*4.61*	*5.66*	**21.35**	*21.75*	*22.61*

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

[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**	*269.8*	*281.1*	*286.8*	*286.7*	*280.4*	*280.3*	*289.6*	**1118.1**	*1120.0*	*1137.0*
Appalachia	**119.5**	**114.0**	**113.2**	**113.6**	**118.2**	*114.6*	*111.9*	*118.1*	*118.3*	*117.1*	*109.4*	*117.3*	**460.4**	*462.9*	*462.1*
Interior	**43.1**	**42.4**	**41.5**	**41.4**	**41.5**	*37.6*	*40.1*	*41.5*	*40.4*	*37.4*	*38.0*	*40.0*	**168.4**	*160.7*	*155.9*
Western	**119.0**	**119.0**	**123.8**	**127.6**	**122.5**	*117.5*	*129.1*	*127.2*	*128.0*	*126.0*	*132.9*	*132.2*	**489.4**	*496.4*	*519.1*
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**	*257.8*	*268.0*	*273.8*	*267.5*	*266.7*	*275.0*	*277.1*	**1046.6**	*1064.9*	*1086.4*
Secondary Stock Levels [b]															
Opening	**106.4**	**114.5**	**124.3**	**111.8**	**129.5**	*143.8*	*152.8*	*133.9*	*137.1*	*127.5*	*135.5*	*121.0*	**106.4**	*129.5*	*137.1*
Closing	**114.5**	**124.3**	**111.8**	**129.5**	**143.8**	*152.8*	*133.9*	*137.1*	*127.5*	*135.5*	*121.0*	*123.3*	**129.5**	*137.1*	*123.3*
Net Withdrawals	**-8.1**	**-9.8**	**12.5**	**-17.6**	**-14.4**	*-9.0*	*18.9*	*-3.2*	*9.6*	*-8.1*	*14.6*	*-2.3*	**-23.1**	*-7.6*	*13.8*
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**	**249.0**	**253.2**	*251.4*	*290.0*	*274.2*	*281.1*	*262.6*	*293.6*	*278.7*	**1033.0**	*1068.9*	*1116.0*
Demand															
Coke Plants	**6.7**	**7.2**	**7.3**	**7.0**	**6.8**	*6.8*	*6.9*	*7.1*	*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**	*216.0*	*252.3*	*233.5*	*240.3*	*225.1*	*255.3*	*237.6*	**910.9**	*919.0*	*958.3*
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**	*17.9*	*18.2*	*20.9*	*20.8*	*18.1*	*18.1*	*20.8*	**75.7**	*76.3*	*77.8*
Total Demand	**253.6**	**250.4**	**285.2**	**254.7**	**252.1**	*251.4*	*290.0*	*274.2*	*281.1*	*262.6*	*293.6*	*278.7*	**1043.9**	*1067.7*	*1116.0*
Discrepancy [f]	**-1.6**	**1.7**	**-5.3**	**-5.7**	**1.2**	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	***-10.9***	*1.2*	*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**	*429.1*	*499.3*	*462.2*	*480.9*	*449.8*	*506.7*	*472.0*	**1807.5**	*1822.1*	*1909.4*
Petroleum	**20.8**	**28.5**	**37.2**	**23.7**	**26.9**	*22.8*	*22.5*	*21.0*	*25.8*	*18.2*	*21.9*	*21.7*	**110.2**	*93.1*	*87.5*
Natural Gas	**48.0**	**80.8**	**121.1**	**59.3**	**52.0**	*84.7*	*124.6*	*62.4*	*56.6*	*93.0*	*129.5*	*64.0*	**309.2**	*323.7*	*343.1*
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**	*1.2*	*1.9*	*2.1*	*1.7*	*1.5*	*2.0*	*2.1*	**7.2**	*6.8*	*7.2*
Subtotal	**757.3**	**788.6**	**909.3**	**757.0**	**776.5**	*782.5*	*909.7*	*780.1*	*819.3*	*802.5*	*913.5*	*793.1*	**3212.2**	*3248.7*	*3328.4*
Nonutility Generation [b]															
Coal	**14.9**	**14.3**	**15.5**	**17.4**	**15.1**	*14.4*	*15.7*	*17.6*	*15.3*	*14.6*	*15.9*	*17.8*	**62.0**	*62.8*	*63.7*
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]	**17.9**	**17.1**	**18.6**	**20.8**	**17.8**	*17.0*	*18.5*	*20.8*	*17.7*	*17.0*	*18.5*	*20.7*	**74.4**	*74.1*	*73.9*
Subtotal	**93.6**	**89.7**	**97.6**	**109.3**	**95.0**	*91.0*	*99.1*	*110.9*	*96.4*	*92.4*	*100.5*	*112.6*	**390.3**	*396.0*	*401.9*
Total Generation	**851.0**	**878.3**	**1006.9**	**866.3**	**871.5**	*873.5*	*1008.7*	*891.0*	*915.7*	*894.9*	*1014.0*	*905.7*	**3602.5**	*3644.8*	*3730.3*
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	**856.8**	**885.2**	**1017.8**	**871.5**	**872.7**	*881.0*	*1018.0*	*898.7*	*921.3*	*901.3*	*1022.4*	*911.7*	**3631.3**	*3670.4*	*3756.7*
Losses and Unaccounted for [f]	**54.1**	**80.8**	**59.8**	**52.9**	**48.5**	*73.3*	*65.0*	*64.4*	*49.9*	*76.2*	*66.6*	*67.0*	**247.6**	*251.2*	*259.8*
Demand															
Electric Utility Sales															
Residential	**273.5**	**248.9**	**346.6**	**255.0**	**286.0**	*247.4*	*335.2*	*262.9*	*308.9*	*257.9*	*334.9*	*268.4*	**1124.0**	*1131.4*	*1170.1*
Commercial	**216.5**	**230.2**	**271.9**	**230.2**	**226.0**	*233.5*	*273.6*	*235.1*	*238.2*	*237.3*	*274.5*	*237.2*	**948.9**	*968.1*	*987.1*
Industrial	**249.7**	**263.6**	**271.6**	**262.4**	**248.5**	*264.6*	*275.6*	*264.4*	*257.9*	*266.0*	*276.2*	*265.9*	**1047.3**	*1053.1*	*1066.0*
Other	**23.6**	**24.1**	**27.0**	**25.1**	**23.9**	*24.2*	*27.2*	*25.4*	*25.9*	*25.2*	*28.0*	*26.0*	**99.9**	*100.7*	*105.1*
Subtotal	**763.4**	**766.9**	**917.1**	**772.7**	**784.4**	*769.6*	*911.5*	*787.8*	*830.9*	*786.4*	*913.6*	*797.5*	**3220.1**	*3253.3*	*3328.4*
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**	*807.7*	*953.0*	*834.3*	*871.3*	*825.1*	*955.8*	*844.6*	**3383.7**	*3419.2*	*3496.8*
Memo:															
Nonutility Sales to Electric Utilities [b]	**54.4**	**52.1**	**56.7**	**63.5**	**55.2**	*52.9*	*57.5*	*64.4*	*56.0*	*53.7*	*58.4*	*65.4*	**226.7**	*230.1*	*233.4*

[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]	**3.530**	**3.186**	*3.131*	*2.982*	**-9.7**	*-1.7*	*-4.8*
Geothermal, Solar and Wind Energy [b]	**0.115**	**0.109**	*0.100*	*0.109*	**-5.2**	*-8.3*	*9.0*
Biofuels [c]	**0.021**	**0.021**	*0.021*	*0.021*	**0.0**	*0.0*	*0.0*
Total	**3.665**	**3.316**	*3.251*	*3.112*	**-9.5**	*-2.0*	*-4.3*
Nonutility Power Generators							
Hydroelectric Power [a]	**0.185**	**0.179**	*0.186*	*0.193*	**-3.2**	*3.9*	*3.8*
Geothermal, Solar and Wind Energy [b]	**0.235**	**0.253**	*0.254*	*0.255*	**7.7**	*0.4*	*0.4*
Biofuels [c]	**0.578**	**0.585**	*0.582*	*0.579*	**1.2**	*-0.5*	*-0.5*
Total	**0.998**	**1.018**	*1.022*	*1.027*	**2.0**	*0.4*	*0.5*
Total Power Generation	**4.663**	**4.334**	*4.273*	*4.140*	**-7.1**	*-1.4*	*-3.1*
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**	*0.094*	*0.095*	**9.2**	*-1.1*	*1.1*
Total	**2.138**	**2.178**	*2.211*	*2.247*	**1.9**	*1.5*	*1.6*
Net Imported Electricity [h]	**0.297**	**0.234**	*0.208*	*0.214*	**-21.2**	*-11.1*	*2.9*
Total Renewable Energy Demand	**7.098**	**6.746**	*6.692*	*6.602*	**-5.0**	*-0.8*	*-1.3*

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

[b] Also includes photovoltaic and solar thermal energy.

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

[d] Renewable energy includes minor components of non-marketed renewable energy, which is renewable energy that is neither bought nor sold, either directly or indirectly as inputs to marketed energy. The Energy Information Administration does not estimate or project total consumption of non-marketed renewable energy. 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**	*7849*	*8004*
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**	*15.86*	*18.74*
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**	*6.02*	*5.95*
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**	*9.90*	*10.30*
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*	*76.6*
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*	*19.55*
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**	*21.75*	*22.61*
Coal															
(million short tons)	**797**	**830**	**877**	**891**	**897**	**898**	**907**	**943**	**950**	**962**	**1006**	**1029**	**1044**	*1068*	*1116*
Electricity (billion kilowatthours)															
Utility Sales [c]	**2369**	**2457**	**2578**	**2647**	**2713**	**2762**	**2763**	**2861**	**2935**	**3013**	**3098**	**3140**	**3220**	*3253*	*3328*
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**	*3419*	*3497*
Total Energy Demand [e]															
(quadrillion Btu)	**NA**	**NA**	**NA**	**NA**	**84.2**	**84.3**	**85.6**	**87.4**	**89.2**	**90.9**	**93.9**	**94.3**	**94.7**	*96.4*	*98.8*
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**	**12.97**	**12.54**	*12.28*	*12.35*

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

[b] Includes lease condensate.

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

[d] Defined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA-867, "Annual Nonutility Power Producer Report." Data for 1998 are estimates.

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

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

Sources: Historical data: Latest data available from Bureau of Economic Analysis; Energy Information Administration; latest data available from EIA databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109; *Petroleum Supply Annual*, DOE/EIA-0340/2; *Natural Gas Monthly*, DOE/EIA-0130*; Electric Power Monthly*, DOE/EIA-0226; and *Quarterly Coal Report*, DOE/EIA-0121; *International Petroleum Statistics Report* DOE/EIA-520; Weekly Petroleum *Status Report* DOE/EIA-0208. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0299.

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**	*7849*	*8004*
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**	**1.095**	**1.116**	**1.127**	*1.140*	*1.156*
Real Disposable Personal Income (billion chained 1992 Dollars)	**4077**	**4155**	**4325**	**4412**	**4490**	**4484**	**4605**	**4667**	**4773**	**4906**	**5043**	**5183**	**5348**	*5540*	*5712*
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**	*1.392*	*1.425*
Real Fixed Investment (billion chained 1992 dollars)	**805**	**799**	**818**	**832**	**806**	**741**	**783**	**843**	**916**	**966**	**1051**	**1138**	**1268**	*1373*	*1412*
Real Exchange Rate (Index, 1990=1.000)	**NA**	**NA**	**NA**	**NA**	**0.999**	**1.006**	**1.013**	**1.057**	**1.033**	**0.961**	**1.016**	**1.104**	**1.151**	*1.165*	*1.146*
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**	*8.1*	*-0.7*
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**	*1.245*	*1.269*
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**	*1.664*	*1.703*
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**	*0.590*	*0.663*
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**	*128.6*	*130.6*
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**	**86.7**	*89.4*	*91.2*
Total Industrial Production (index, 1987=1.000)	**0.890**	**0.931**	**0.974**	**0.991**	**0.990**	**0.970**	**1.000**	**1.034**	**1.091**	**1.144**	**1.196**	**1.267**	**1.314**	*1.348*	*1.381*
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**	*116.0*	*117.4*
Weather [a]															
Heating Degree-Days															
U.S.	**4295**	**4334**	**4653**	**4726**	**4016**	**4200**	**4441**	**4700**	**4483**	**4531**	**4713**	**4542**	**3951**	*4411*	*4603*
New England	**6517**	**6546**	**6715**	**6887**	**5848**	**5960**	**6844**	**6728**	**6672**	**6559**	**6679**	**6662**	**5680**	*6391*	*6660*
Middle Atlantic	**5665**	**5699**	**6088**	**6134**	**4998**	**5177**	**5964**	**5948**	**5934**	**5831**	**5986**	**5809**	**4812**	*5657*	*5875*
U.S. Gas-Weighted	**4442**	**4391**	**4804**	**4856**	**4139**	**4337**	**4458**	**4754**	**4659**	**4707**	**5040**	**4886**	**4247**	*4589*	*4760*
Cooling Degree-Days (U.S.)	**1249**	**1269**	**1283**	**1156**	**1260**	**1331**	**1040**	**1218**	**1220**	**1293**	**1180**	**1156**	**1456**	*1232*	*1193*

[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**	*19.3*	*19.6*
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*	*15.1*
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*	*43.6*
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*	*76.6*
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*	*8.9*
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*	*2.7*
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**	*6.3*	*6.7*
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**	*19.4*	*20.0*
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**	*29.6*	*30.6*
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**	*3.6*	*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*	*11.4*
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**	*54.7*	*56.1*
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**	*74.1*	*76.1*
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**	**-1.2**	*0.8*	*0.5*
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**	*2.7*	*2.6*
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**	*15.86*	*18.74*
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**	*2.12*	*2.30*
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**	*1.16*	*1.25*
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**	*1.11*	*1.21*
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**	*1.09*	*1.18*
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**	*0.47*	*0.59*
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**	*0.86*	*1.00*
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**	*15.30*	*18.20*
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*	*1.23*
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**	*2.45*	*2.94*
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**	*2.59*	*2.81*
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**	*6.60*	*7.39*
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**	*6.02*	*5.95*
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**	*1.07*	*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*	*4.99*
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**	*8.70*	*9.04*
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**	*0.26*	*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**	*14.95*	*15.23*
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**	*1.75*	*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*	*0.36*
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**	*0.87*	*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*	*1.26*
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**	*0.08*	*0.04*
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*	*19.55*
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**	*8.41*	*8.59*
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*	*3.65*
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**	*0.81*	*0.74*
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**	*4.81*	*4.86*
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*	*19.55*
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**	*9.90*	*10.30*
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**	*147*	*142*
Residual Fuel Oil	**47**	**47**	**45**	**44**	**49**	**50**	**43**	**44**	**42**	**37**	**46**	**40**	**45**	*45*	*44*
Other Oils [f]	**265**	**260**	**267**	**257**	**261**	**267**	**263**	**273**	**275**	**258**	**250**	**259**	**291**	*278*	*268*

[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**	*3.35*	*3.38*
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**	*0.12*	*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**	*22.21*	*22.48*
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*	*6.81*
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**	*6.81*	*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**	*22.45*	*22.60*
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**	*-0.70*	*0.01*
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**	*21.75*	*22.61*
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**	*4.69*	*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**	*3.22*	*3.45*
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**	*8.47*	*8.60*
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**	*3.38*	*3.59*
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**	*21.75*	*22.61*

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

[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**	*1120.0*	*1137.0*
Appalachia	**NA**	**NA**	**NA**	**464.8**	**489.0**	**457.8**	**456.6**	**409.7**	**445.4**	**434.9**	**451.9**	**467.8**	**460.4**	*462.9*	*462.1*
Interior	**NA**	**NA**	**NA**	**198.1**	**205.8**	**195.4**	**195.7**	**167.2**	**179.9**	**168.5**	**172.8**	**170.9**	**168.4**	*160.7*	*155.9*
Western	**NA**	**NA**	**NA**	**317.9**	**334.3**	**342.8**	**345.3**	**368.5**	**408.3**	**429.6**	**439.1**	**451.3**	**489.4**	*496.4*	*519.1*
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*	*36.6*
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**	*36.6*	*33.6*
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**	*-0.5*	*3.1*
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**	*8.8*	*9.0*
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**	*63.4*	*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**	*1064.9*	*1086.4*
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*	*137.1*
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**	*137.1*	*123.3*
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**	*-7.6*	*13.8*
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**	*1068.9*	*1116.0*
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**	*27.6*	*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**	*919.0*	*958.3*
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**	*76.3*	*77.8*
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**	*1067.7*	*1116.0*
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***	*1.2*	*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**	*1822.1*	*1909.4*
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**	*93.1*	*87.5*
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**	*323.7*	*343.1*
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**	*6.8*	*7.2*
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**	*3248.7*	*3328.4*
Nonutility Generation [b]	**NA**	**NA**	**NA**	**187.0**	**221.5**	**253.3**	**301.8**	**325.2**	**354.9**	**375.9**	**382.4**	**384.7**	**390.3**	*396.0*	*401.9*
Total Generation	**NA**	**NA**	**NA**	**2971.3**	**3029.6**	**3078.3**	**3099.0**	**3207.8**	**3265.6**	**3370.4**	**3459.9**	**3507.2**	**3602.5**	*3644.8*	*3730.3*
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**	**2982.3**	**3031.6**	**3100.6**	**3127.3**	**3236.2**	**3310.3**	**3408.0**	**3497.9**	**3543.8**	**3631.3**	*3670.4*	*3756.7*
Losses and Unaccounted for [c]	**NA**	**NA**	**NA**	**238.3**	**205.8**	**216.9**	**226.6**	**237.0**	**225.5**	**236.8**	**242.3**	**242.8**	**247.6**	*251.2*	*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**	*1131.4*	*1170.1*
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**	*968.1*	*987.1*
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**	*1053.1*	*1066.0*
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**	*100.7*	*105.1*
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**	*3253.3*	*3328.4*
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**	*3419.2*	*3496.8*
Memo:															
Nonutility Sales to Electric Utilities [d]	**39.9**	**50.0**	**68.0**	**89.8**	**108.2**	**131.6**	**164.4**	**187.5**	**204.7**	**217.9**	**224.6**	**223.5**	**226.7**	*230.1*	*233.4*

[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.