August 1998

Highlights

Oil Prices/Supply

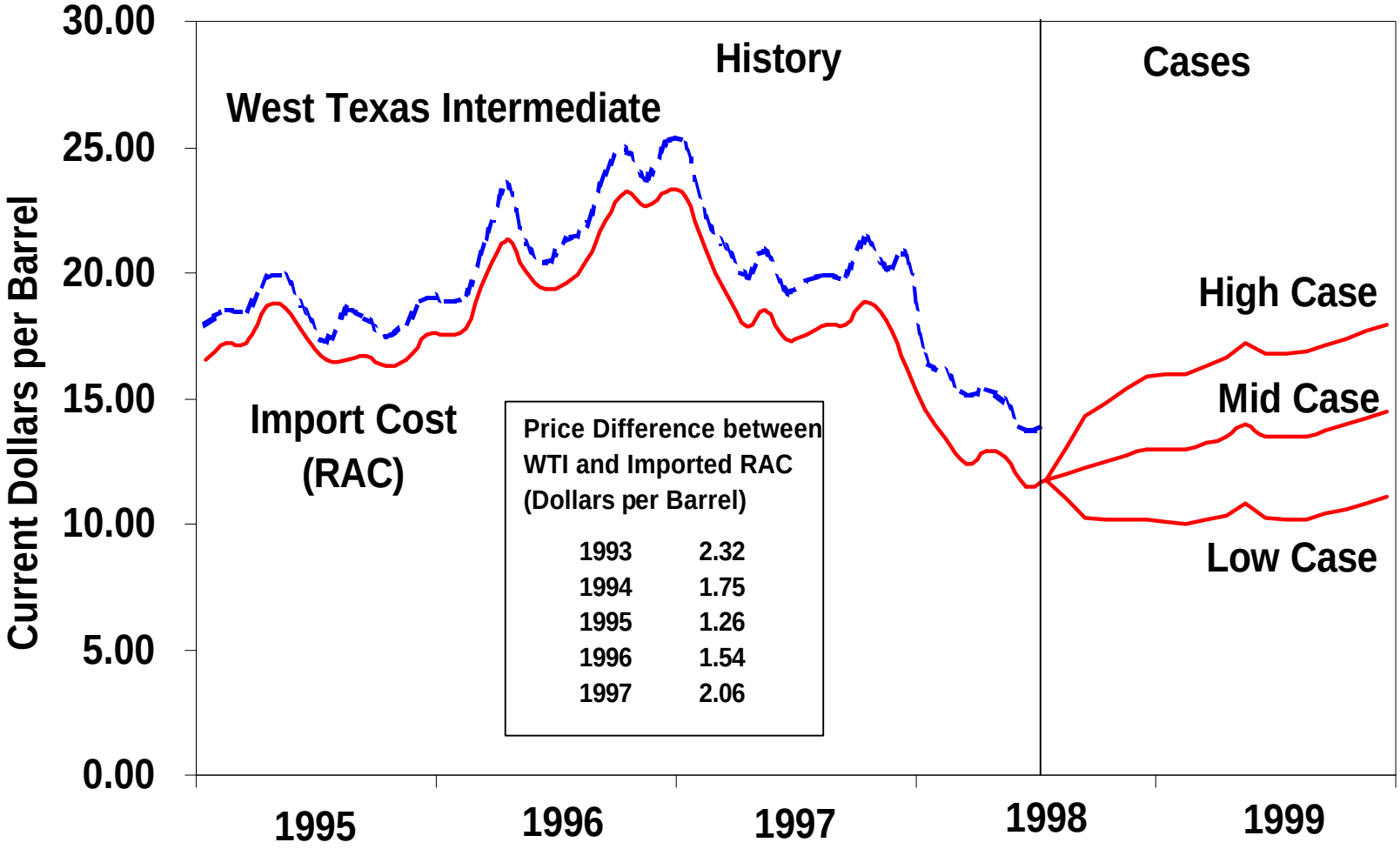
The recent production cuts announced by OPEC and other producers have stabilized prices in the $12 to $13 per barrel range, but the market is a long way from achieving the $17 "target price" being talked about in OPEC circles. Prior to the recent cuts, oil prices had been near $11.50 to $ 12 per barrel. Unless prices rebound by October, the upcoming winter heating season may not be sufficient to increase prices given the current stock overhang. Our current view is that prices will remain low with a gradual increase throughout the next year where we see the oil market finally coming into balance. Even though world oil demand is forecast to recover significantly in 1999, only a "moderate" price recovery is forecast because of the inventory overhang still remaining. Even if weather is normal next winter heating season, the overhang is only slightly shaved.

The dramatic fall in Asian oil demand (see EIA's analysis brief on the energy situation in East Asia {East Asia}) has lowered world oil demand growth to only 1.2 million barrels per day this year; however, oil demand growth is expected to recover to almost 2 million barrels per day in 1999. With the announced production cuts still in effect until July 1999 (and with modest "cheating"), stocks are forecast to be drawn by only 100 thousand barrels per day in 1999. The upshot is that world oil prices (defined as the U.S. imported refiner acquisition cost) are not expected to reach $14 per barrel until the fourth quarter of 1999. Our take on the overall uncertainty of the expected price path is provided in Figure 1.

The major uncertainties that could give an upward boost to oil prices are colder-than-normal winter weather, a faster recovery in Asian oil demand growth, and further production cuts. Any one of these could increase prices by about $2 per barrel, but probably not by as much as the $5 per barrel that would allow OPEC to reach its "target price." The primary downward side uncertainty is a relapse in production restraint shown recently by several major producers. Whether or not something approaching normal weather in the major industrialized countries occurs this winter, following two consecutive mild heating seasons, constitutes another major uncertainty.

The story is not yet complete on the amount of production restraint that has actually occurred since data are not complete. As of June, 1998, there has been a net world oil production decrease from May, 1998 of between 180 thousand barrels per day (as reported by the International Energy Agency, July 9, 1998) and 550 thousand barrels per day (as reported by the Petroleum Intelligence Weekly, July 13, 1998). Additional cuts were to be made beginning this July. For

Figure 1. Crude Oil Prices



Source: Energy Information Administration, Short-Term Energy Model, August 1998

additional details, see EIA's summary of the Oil Supply Cutback Agreements in 1998.

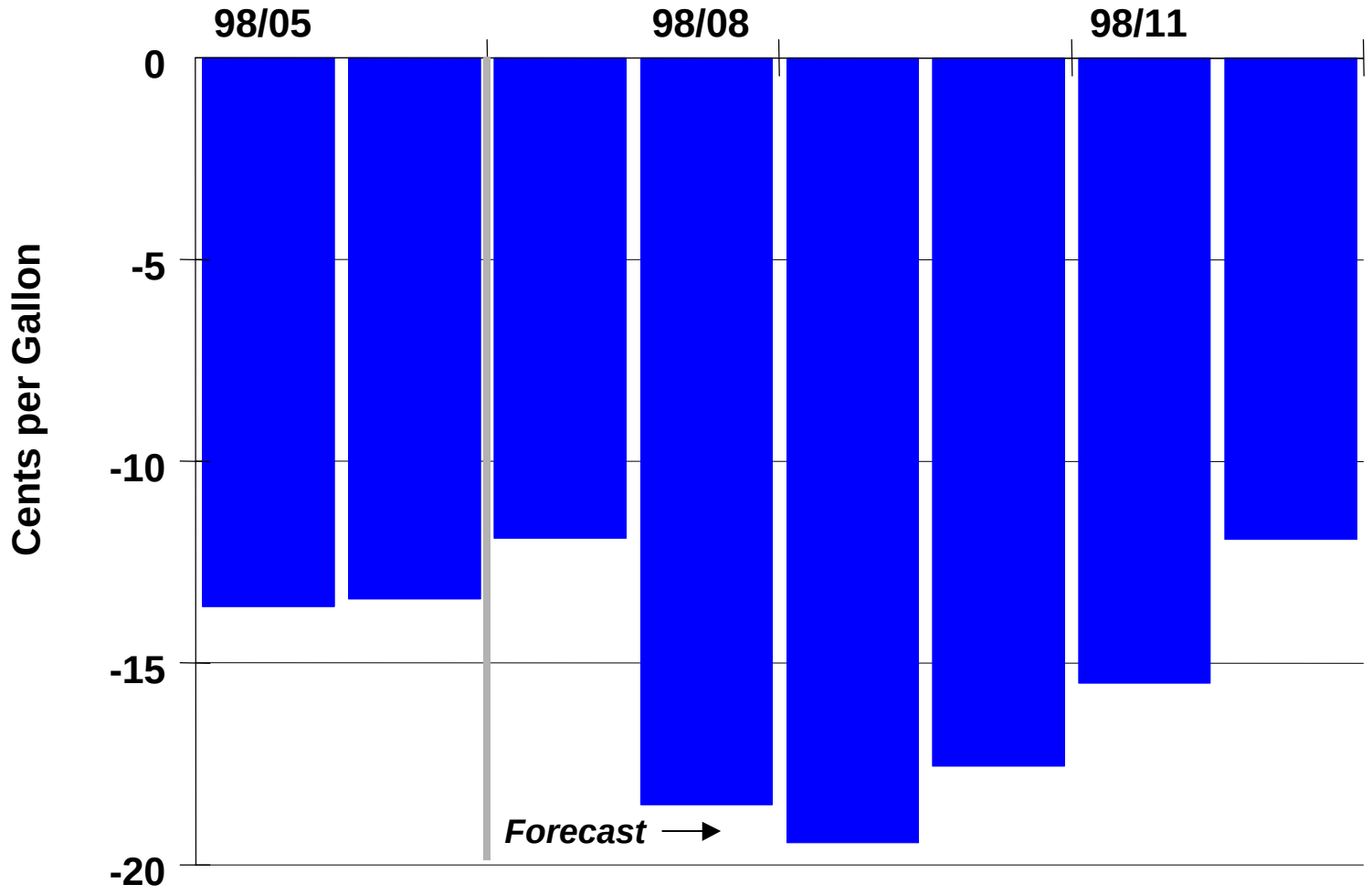
U.S. Energy Prices

Our motor gasoline price forecasts have not changed materially since the previous Outlook. U.S. gasoline prices still are considerably less than year-ago levels, although the extent of the differential apparently diminished somewhat in July (Figure 2). These weak prices are reflective of the continuing depressed crude oil markets and the accompanying bulging crude oil stocks. The stock overhang is evidenced in the United States by the fact that, at the end of July, crude oil inventories (excluding Strategic Petroleum Reserve stocks) were over 30 million barrels higher that last July (Figure 3). In addition, EIA's most recent U.S. gasoline consumption data suggests more tempered growth this year than previously anticipated (see petroleum demand discussion below). Furthermore, gasoline stocks at the end of July were 25 million barrels (13 percent) higher than year-earlier levels (Figure 4). Aside from crude oil, price movements, the relatively high gasoline stocks would only tend to exacerbate weak gasoline prices (Figure 5).

Retail motor gasoline prices bottomed out in March at $1.02 and $1.06 per gallon for self-service regular and all grades, respectively-- their lowest inflation-adjusted price ever. For most of the United States, spot prices for motor gasoline peaked at the end of April, resulting in moderate pump price increases in May leading to seasonal peaks in June as the driving season began in earnest (Figure 6). The retail price for June may prove to be the highest price for the remainder of the year. With the driving season more than half over now, and with low crude oil prices, motor gasoline prices should be heading downward, albeit at a moderate pace, for the rest of the year. The average annual price for 1998 is projected to be the lowest inflation-adjusted annual price on record (see "Gasoline Price Analysis Sheet."). With plentiful gasoline stocks and assuming a continuation of the relatively weak crude oil price situation, we now expect average retail gasoline prices to be about 16 cents per gallon lower for the third quarter of this year than for the same period in 1997. Next year, pump prices should rise about 2-4 cents per gallon, following the projected crude oil price increase of about $1.00 per barrel

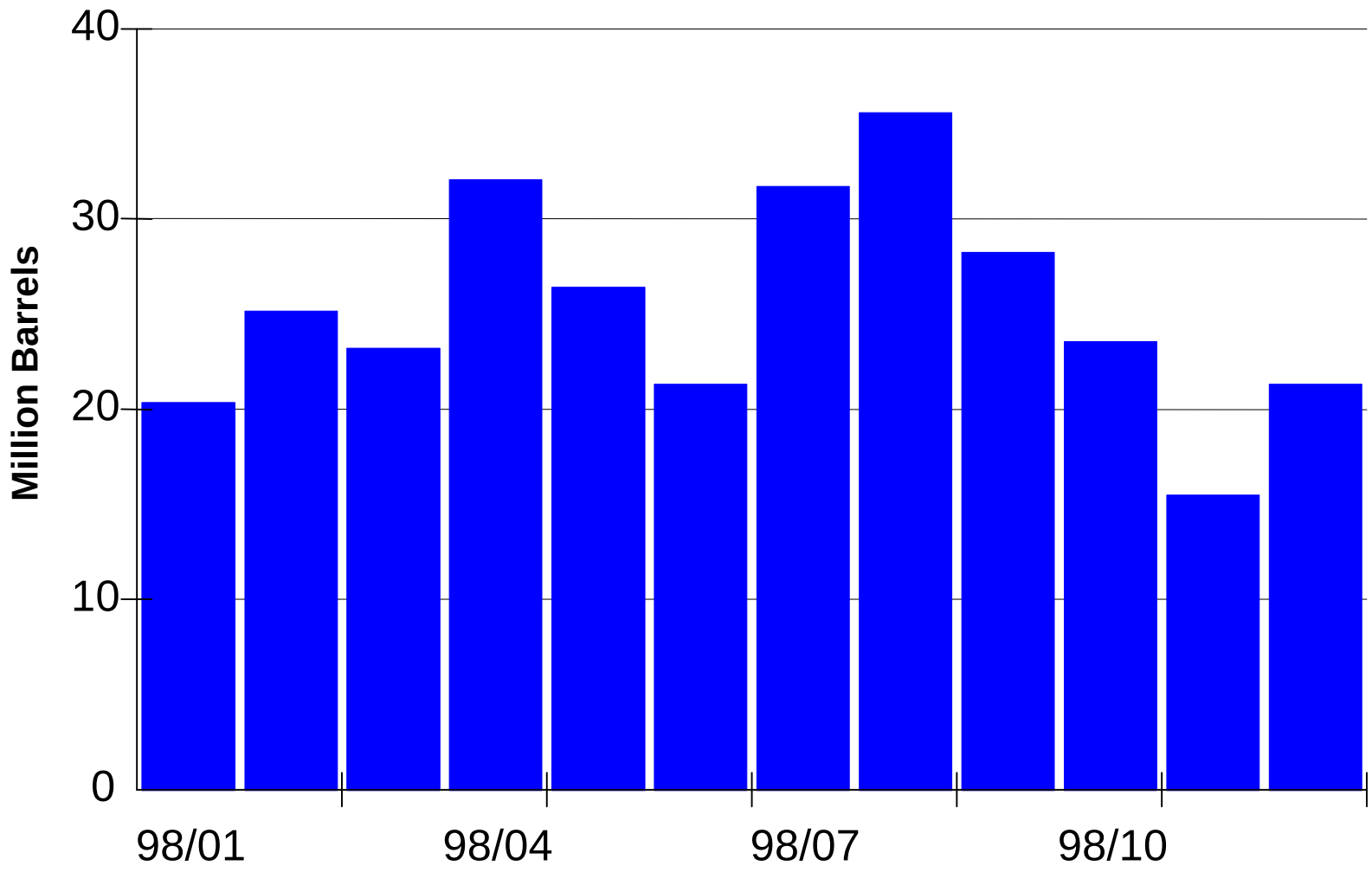
Natural gas prices at the wellhead are projected to decline by 9 percent in 1998 (Figure 7) with a large portion of the fall resulting from the nearly 30 percent year-over-year price decrease that occurred in the unseasonably warm first quarter of this year. This compares to our 6 percent projected decline in the previous Outlook. Our price projection revisions occur mainly for the summer and fall prices. With underground storage at the end of July estimated to have been about 8 percent higher than year-earlier levels, there has been downward price pressure. In addition, industrial demand for gas has continued to show less than robust growth so far this year. With these relatively high inventories, wellhead prices might have been under greater pressure this summer had it not been for prolonged period of extremely hot weather in much of the country during June and July. Prices for the third quarter will average $2.00 per thousand cubic feet or about 2 cents less than one year ago. The hot dry spell has been particularly severe in Texas where unusually large volumes of gas have been burned at electric utilities trying to

Figure 2. Retail Motor Gasoline Price Changes (Change from Year Ago)



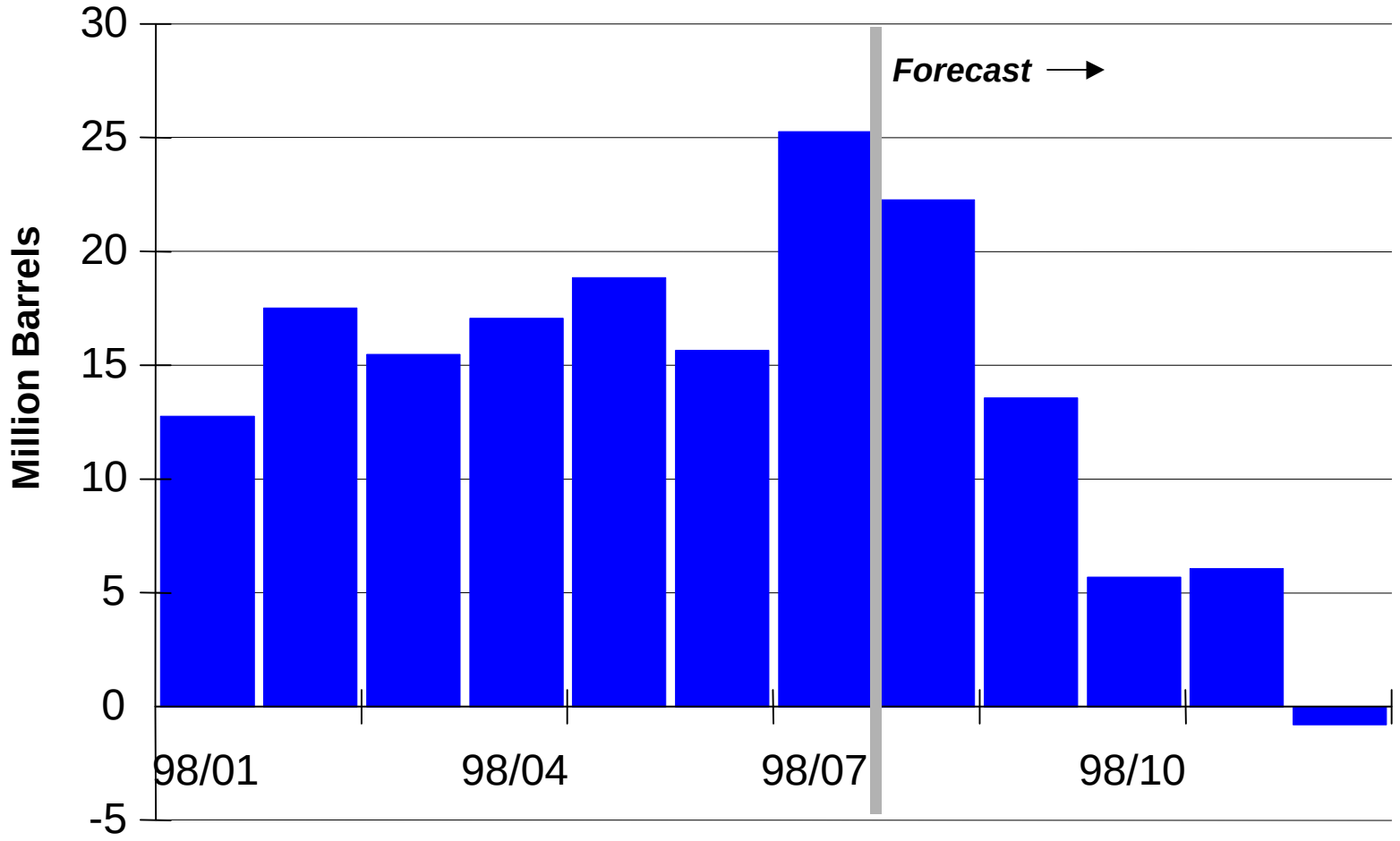
Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 3. U.S. Crude Oil Inventories (End Month) (Change from Year Ago)



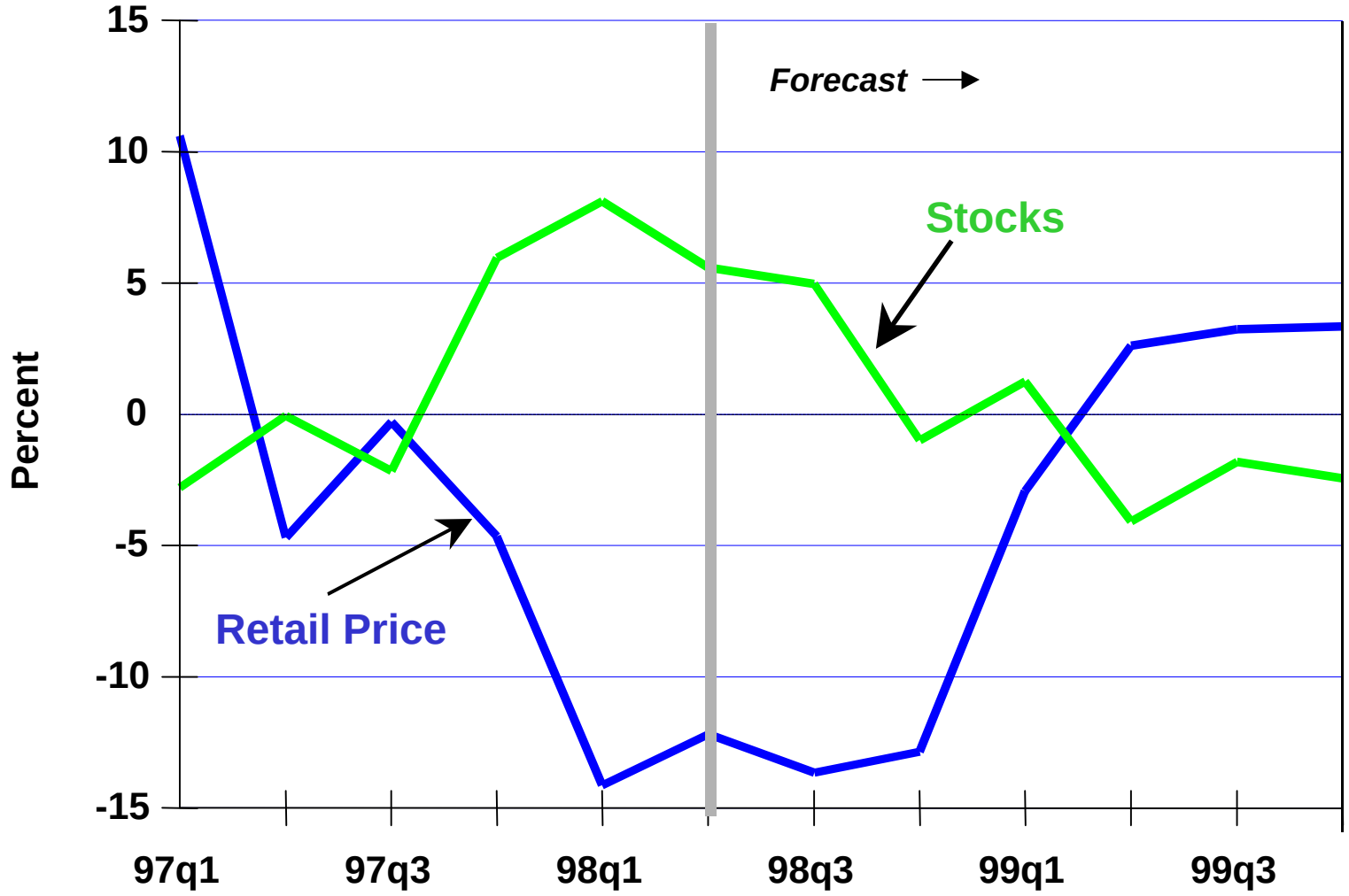
Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 4. U.S. Motor Gasoline Inventories (End Month) (Change from Year Ago)



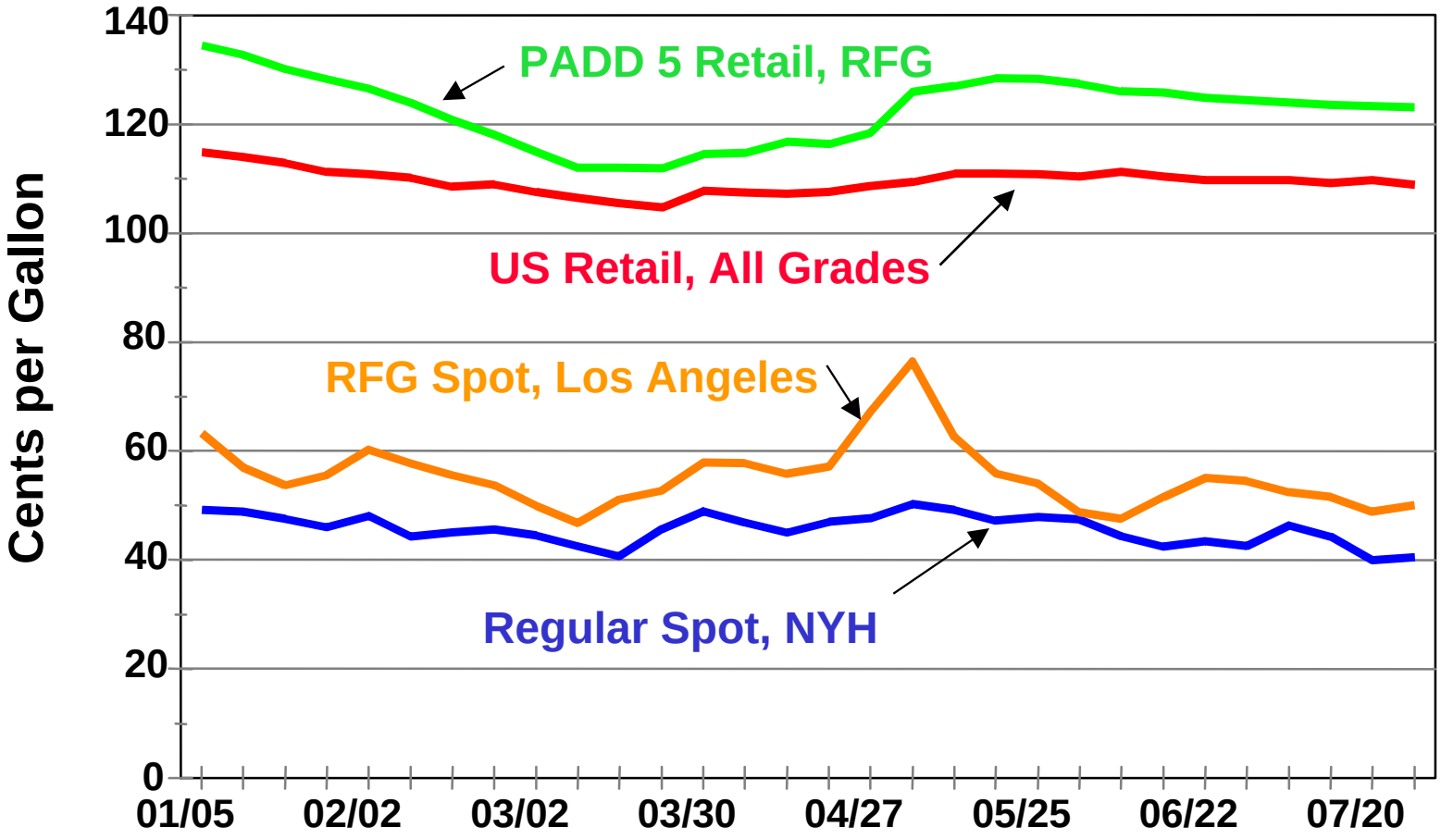
Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 5. Gasoline Stocks and Retail prices (Percent Change from Year Ago)



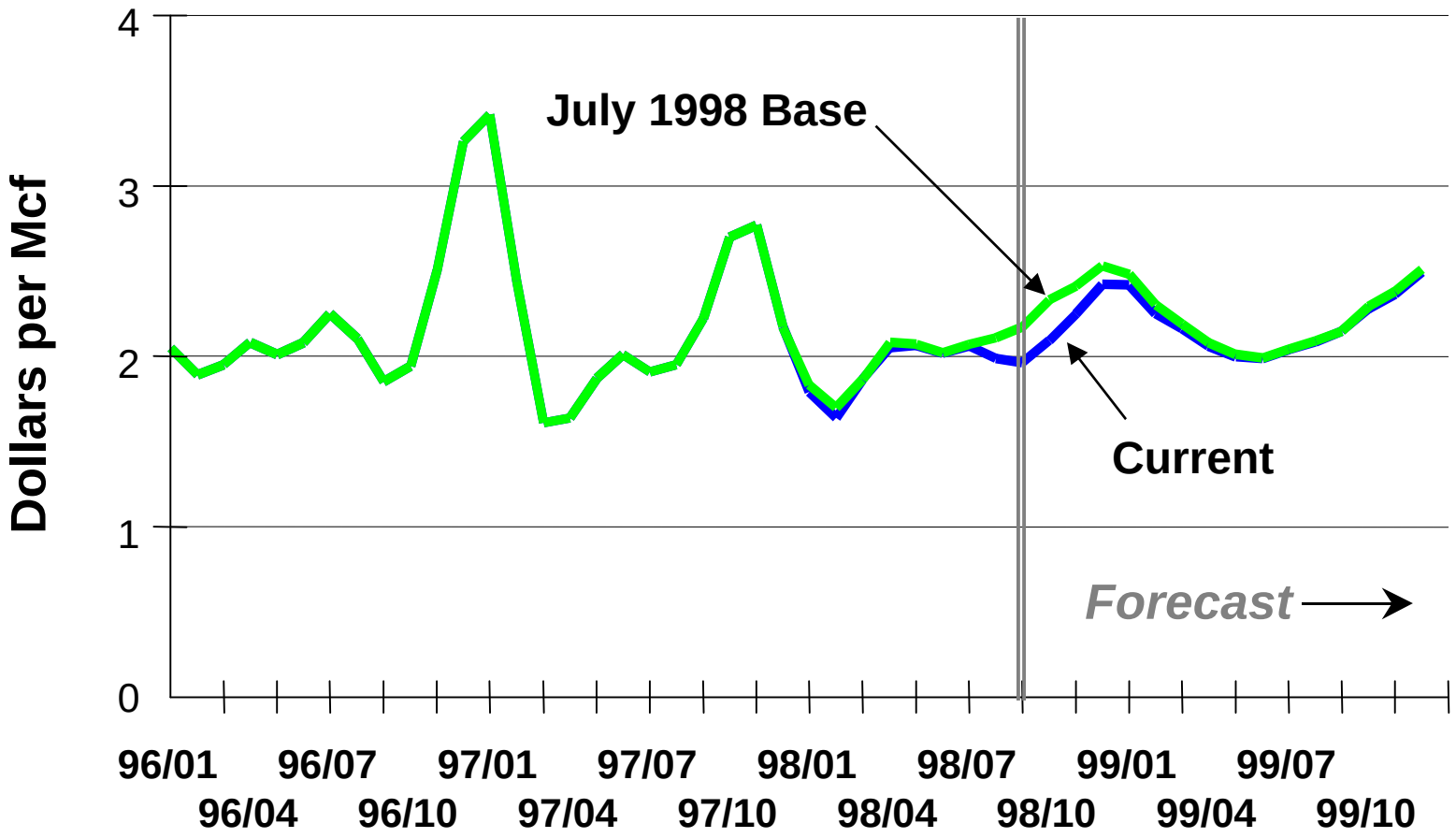
Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 6. Weekly Gasoline Prices



Source: Energy Information Administration: *Weekly Petroleum Status Report*

Figure 7. Natural Gas Wellhead Prices



Sources: History: EIA ; *Projections*: Short-Term Energy Outlook, August 1998

generate sufficient electricity to meet extraordinary demands for air conditioning. For the remainder of 1998 and for all of 1999, a normal seasonal price pattern is projected: prices peak in the winter quarters. Underground storage levels are notably above those from one year ago, and are projected to remain high going into the heating season, thus not much upward price movement is anticipated over the next few months (Figure 8). However, if the hot weather in the Southwest continues through September, as it did last year, less gas than planned would be available for injection. The result would be some upward pressure on prices in the latter part of the year. In addition, there is still concern over the possible effects on gas demand at electric utilities since coal delivery problems for Southwest electric utilities continue.

For 1999, we expect about an 8.5 percent rise in natural gas wellhead prices. The bulk of this increase will be coming in the first quarter (29 percent higher), as the winter weather is assumed to be normal. Very large increases in gas to meet heating demand are expected if that assumption holds.

Retail heating oil prices are projected to average 87 cents per gallon for the upcoming winter, 5 cents per gallon less than the previous winter even though the weather is assumed to be to be much colder than last winter. This is because crude oil prices in the fourth quarter of this year are anticipated to be $5.00 per barrel less than one-year ago-earlier prices.

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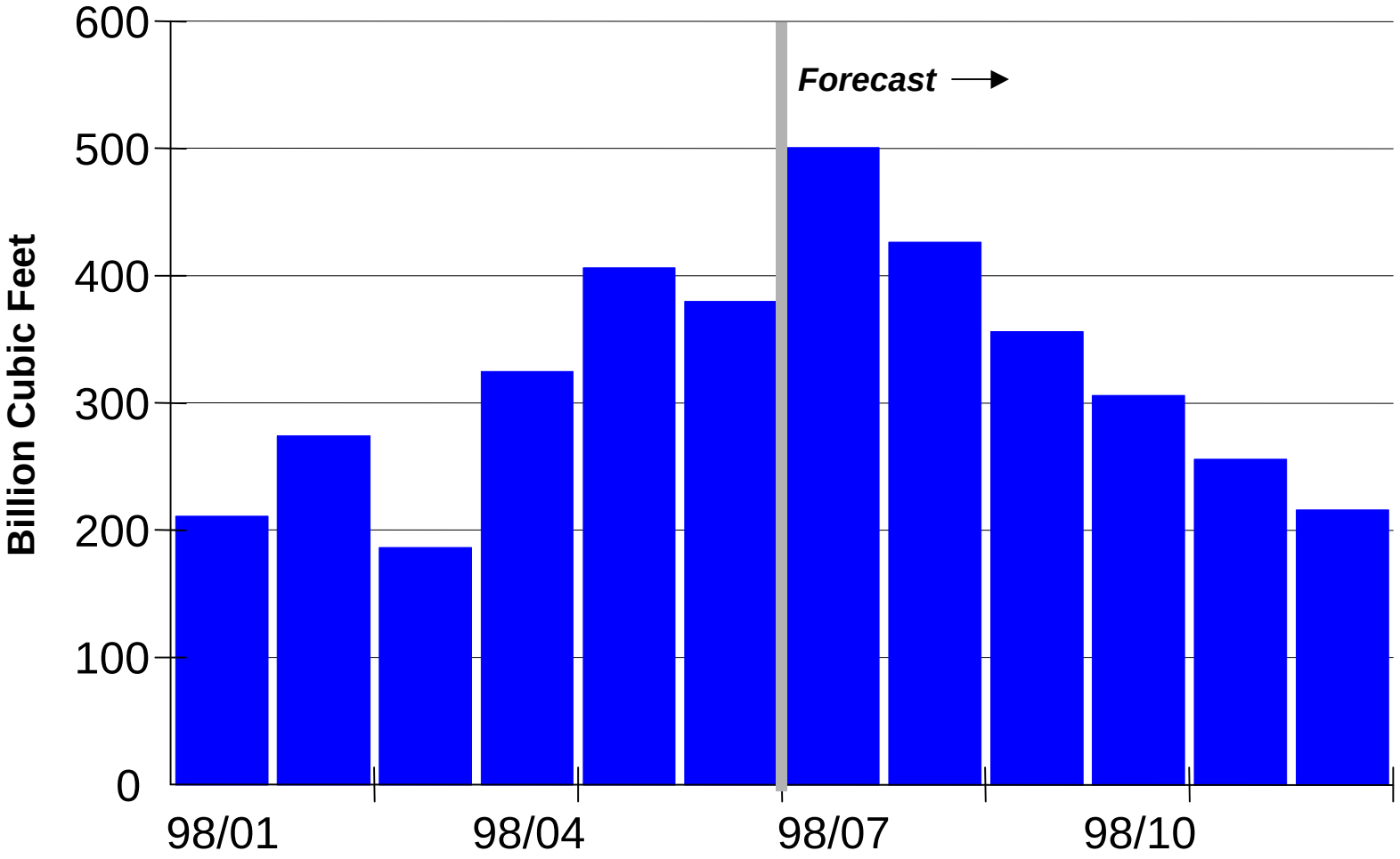
U.S. Petroleum Demand and Supply

Demand

U.S. petroleum demand is on a pace to increase at a 1.1-percent rate in 1998, based on our current base case projections. This is a slight reduction in the rate we projected last month, partly due to a downward revision in the total petroleum demand figure for May (Figure 9). A healthier rate of net additions to inventories occurred in May than was previously estimated, the flip side of a lower demand estimate. Overall, demand estimates have not been changed drastically for the forecast, although gasoline demand has been adjusted downward again slightly because of continuing bearish developments in the major gasoline market indicators (see below). While the high levels of inventories for petroleum products and crude oil haven't materially changed our demand outlook, they do contribute to a more protracted period during which crude and product prices will be under downward pressure from the supply side, counteracting somewhat producer attempts to raise prices through targeted cutbacks in output. A demand growth recovery in 1999 (to about 1.7 percent) is still expected in 1999, mainly because of the assumption of normal weather and higher heating demand in the first quarter than has been evident in the past two years (Figure 10). At normal levels, heating degree-days in the first three months of 1999 would be about 18 percent higher than Q1 1998. Mostly as a result, petroleum demand would be expected to be 3.5 percent (630,000 barrels per day) higher in Q1 1999 compared to year-earlier levels (Figure 11).

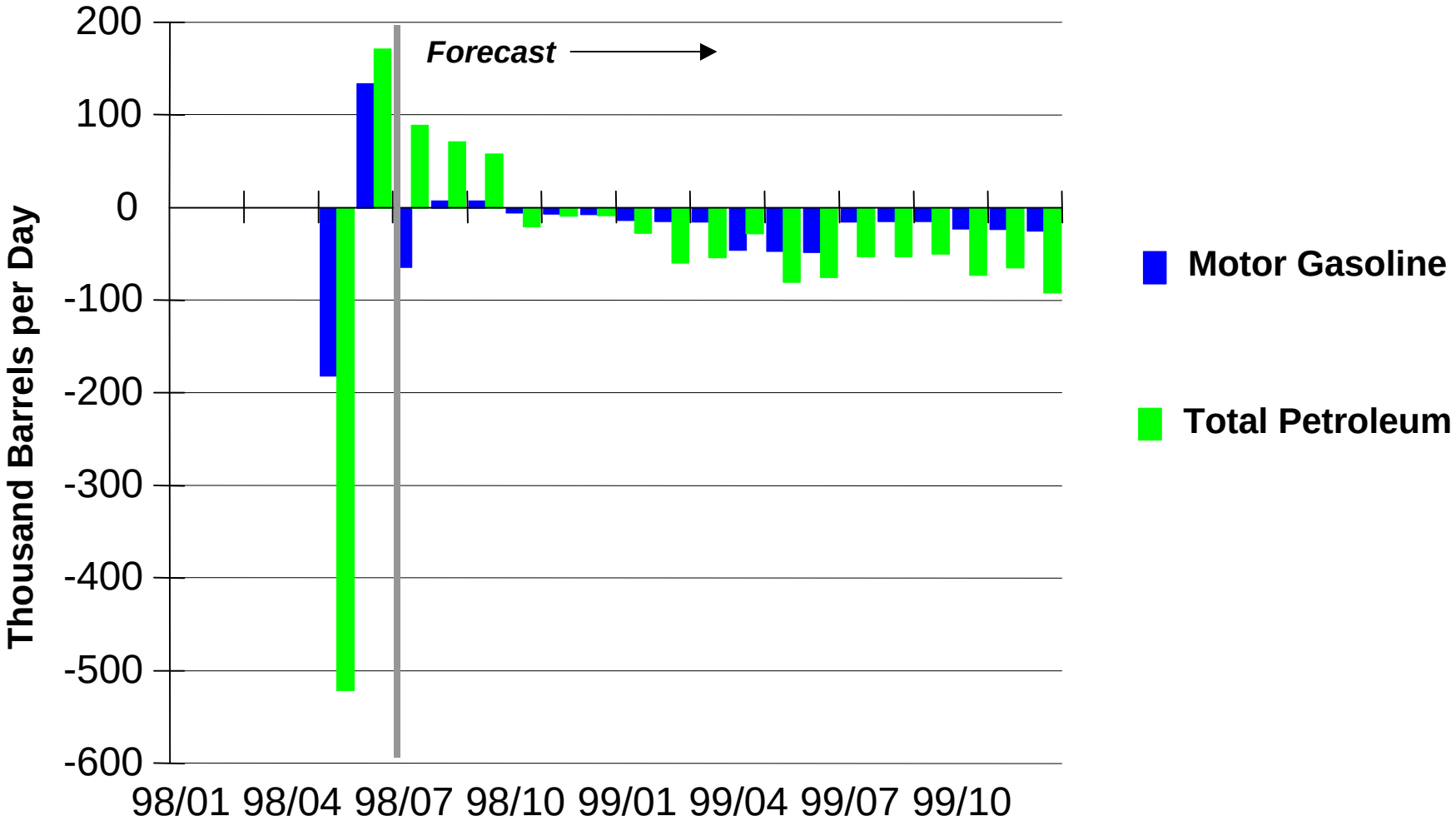
Our estimate for gasoline demand for the second quarter of 1998 has been reduced again this month, this time largely due to the downward revision for May, based on substituting the new

Figure 8. Total Natural Gas In Underground Storage (Change from Year Ago)



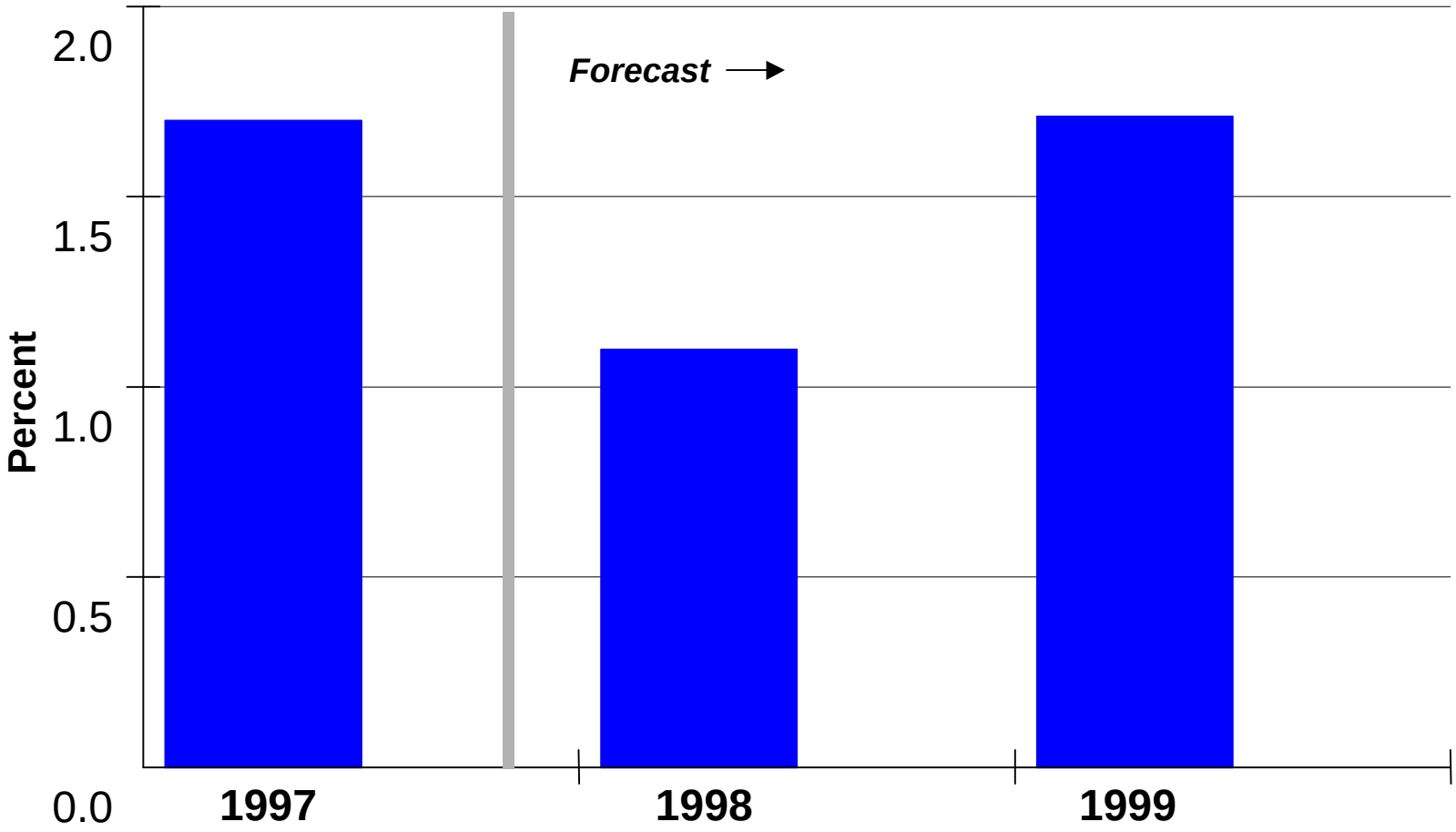
Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 9. Petroleum Demand Changes (Change from Previous Forecast)



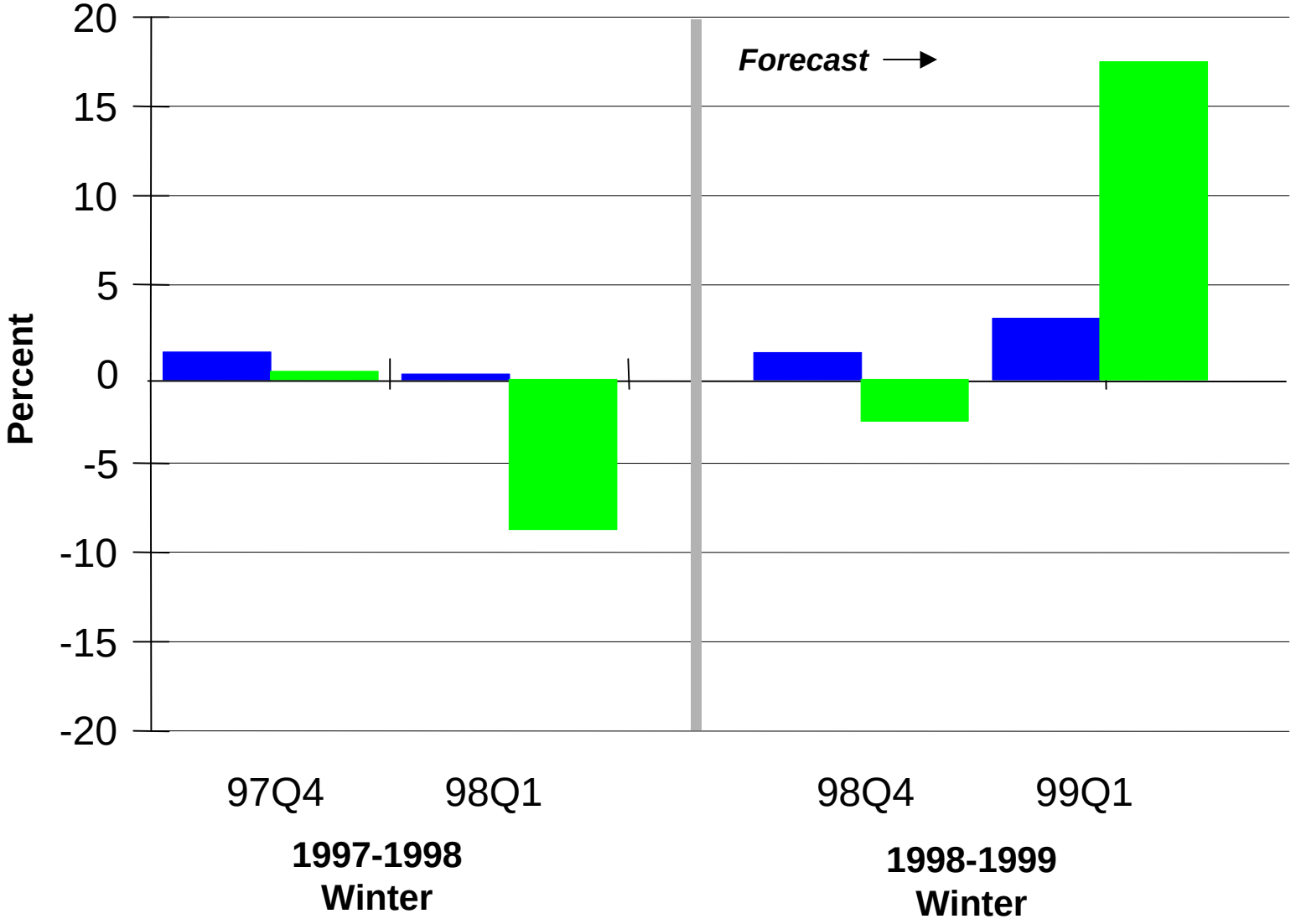
Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 10. Total U.S. Petroleum Demand (Percent Change from Year Ago)



Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 11. Winter Petroleum Demand and Weather (Percent Change from Year Ago)



Source: Energy Information Administration, Short-Term Energy Model, August 1998

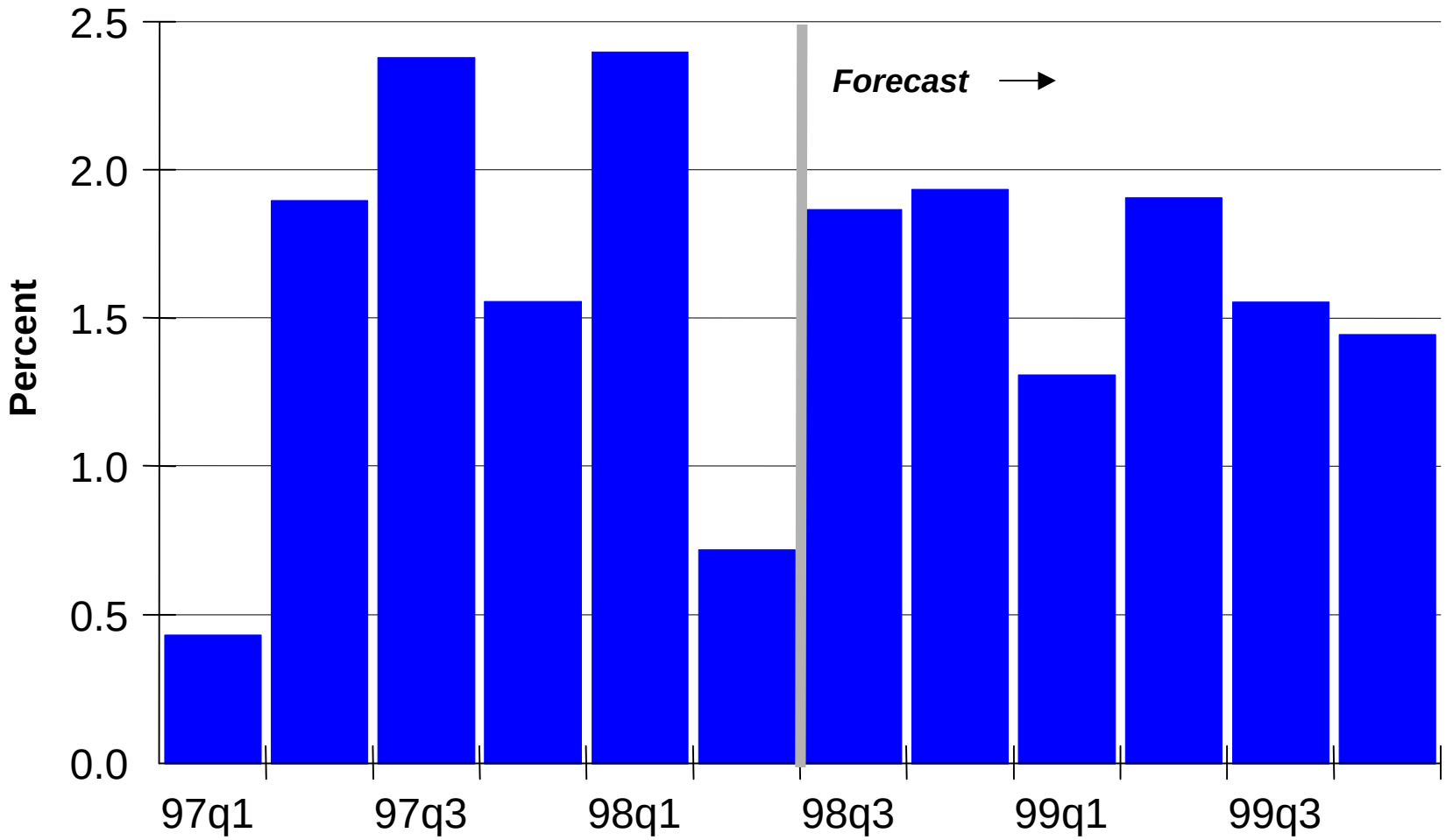
information from EIA's latest Petroleum Supply Monthly for the previous estimate based on EIA's weekly petroleum data (see Figure 9). Much of the downward impetus from this update was countered by an upward revision for June, based on more complete preliminary data and the implications of a slower apparent stock build in June, based on the new stock estimates for May. Nevertheless, it is clear that the second quarter demand level was only 0.7 percent higher than the Q2 1997 level, compared to a 2.4 percent growth rate in Q1 1998 and 1.6 percent for all of 1997 (Figure 12). Some new data from the Transportation Department suggest that highway travel is not currently accelerating at rates previously expected. Year-to-date growth through May 1998 apparently averaged 2.0 percent compared to the same period last year. A weak monthly value for May, along with revisions to previous monthly values in 1998 has lead us to conclude that a somewhat less robust increase in travel demand this summer is evolving, compared to what was previously projected (Figure 13). As recently as last month we had expected to see the 5-month average growth for travel to be about 2.4 percent and to see a monthly value for May at least 1 percent higher than the current actual (albeit preliminary) estimate.

Despite the net reduction in the gasoline demand forecast, we now project third quarter 1998 gasoline demand to be 1.9 percent ahead of the 1997 Q3 figure. This is a lower rate for the mid-summer period than we had previously projected, but still indicative of steady gasoline demand growth. The available weekly estimates through July indicate only very modest (0.3-percent) growth from the same month in 1997, but last July was a banner month for gasoline demand in the United States. Most of the year-over-year growth for Q3 is expected to appear in August and September.

Natural Gas

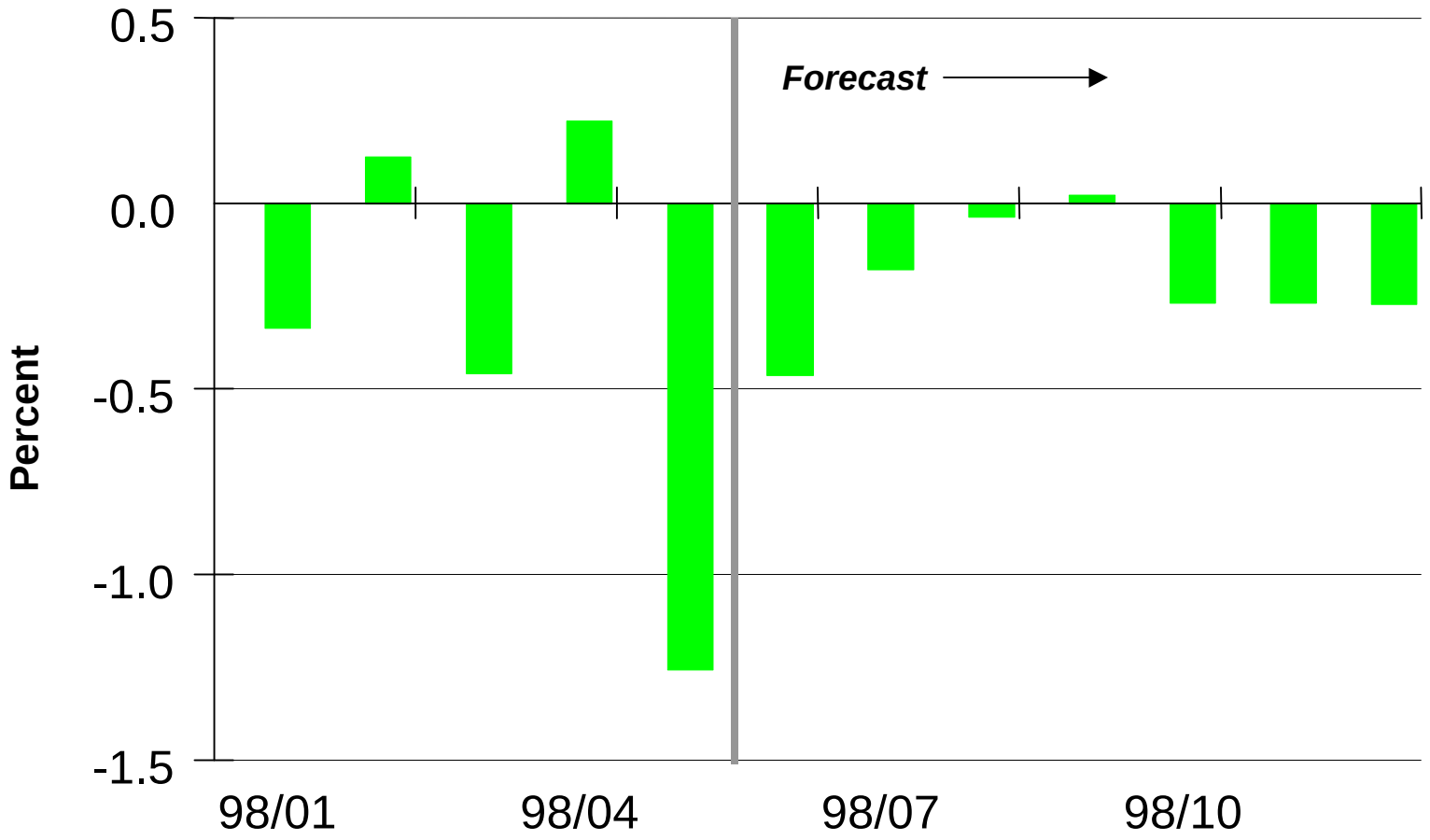
Corrections to previous industrial natural gas demand figures (for January through March 1998) changed the reported rate of decline in industrial gas use during Q1 1998 but did not manage to generate an adjustment to the qualitative outcome (Figure 14). Still, the revisions, as well as somewhat lower gas prices for the rest of this year, result in a slight upward adjustment in the industrial gas demand forecast this month (Figure 15). We now see total natural gas demand declining in 1998 by about 260 billion cubic feet (1.2 percent), thanks mostly to the (revised) 4-percent decline in the first quarter. The decline in demand will be worse if anticipated improvements in industrial demand do not materialize. An expected annual increase in natural gas demand in 1999 springs principally from an expected increase in residential and commercial heating demand. The probability that weather will be much more severe in Q1 1999 than it was in Q1 1998 is high, we think, and a return to normal heating degree-days could push year-over-year growth rates for that period to 17 and 19 percent for residential and commercial demand, respectively (Figure 16). The weather factor is crucial, since a repeat of the 1997-1998 winter this year would generate substantially lower growth in the residential and commercial sectors in the key first quarter of 1999 (Figure 17). Under those conditions a sharp drop in gas prices from the base case would be expected.

Figure 12. Motor Gasoline Demand Growth (Percent Change from Year Ago)



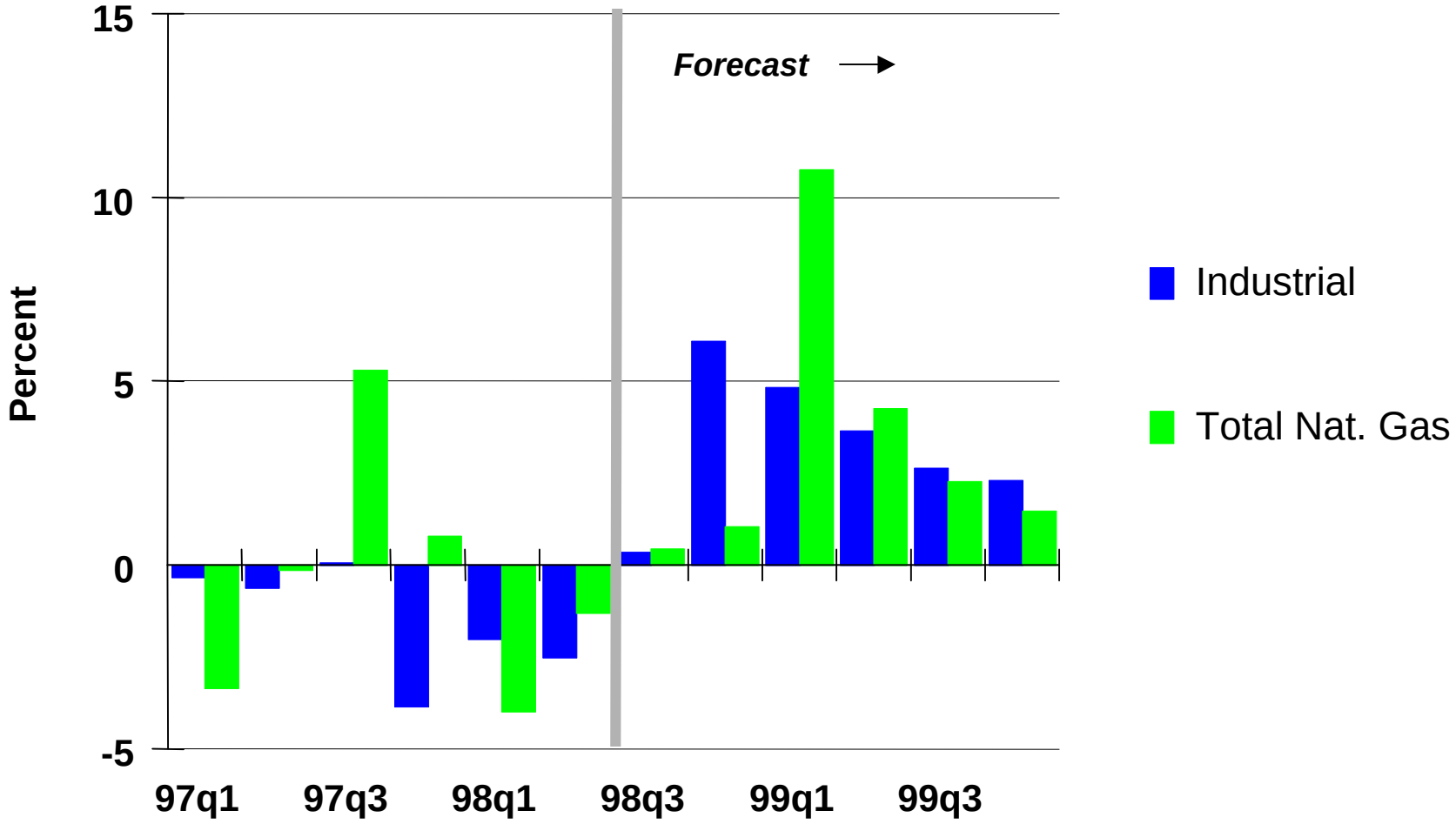
Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 13. Total Vehicle Miles Traveled (Change from Previous Forecast)



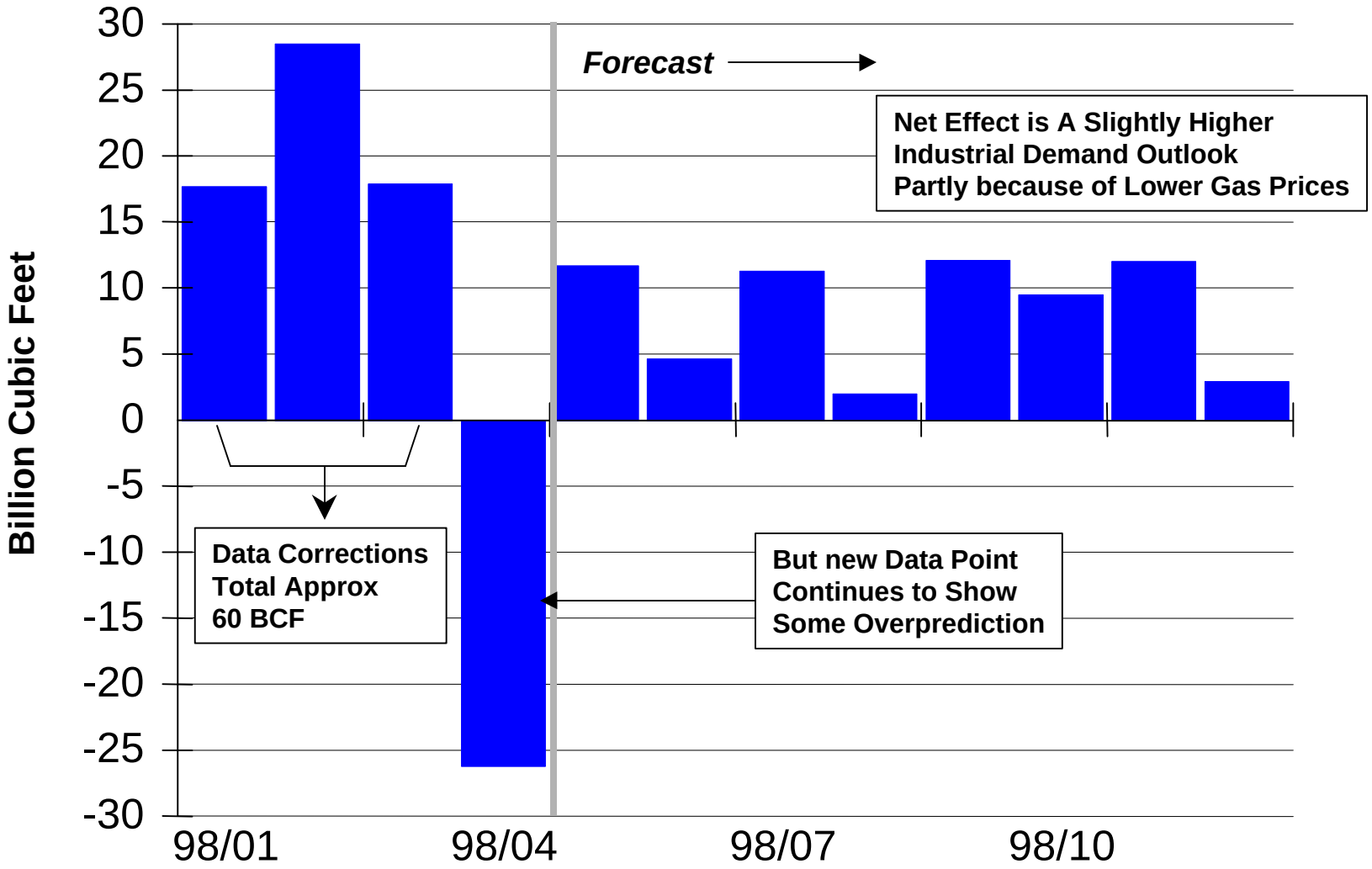
Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 14. Quarterly Natural Gas Demand Growth (Percent Change from Year Ago)



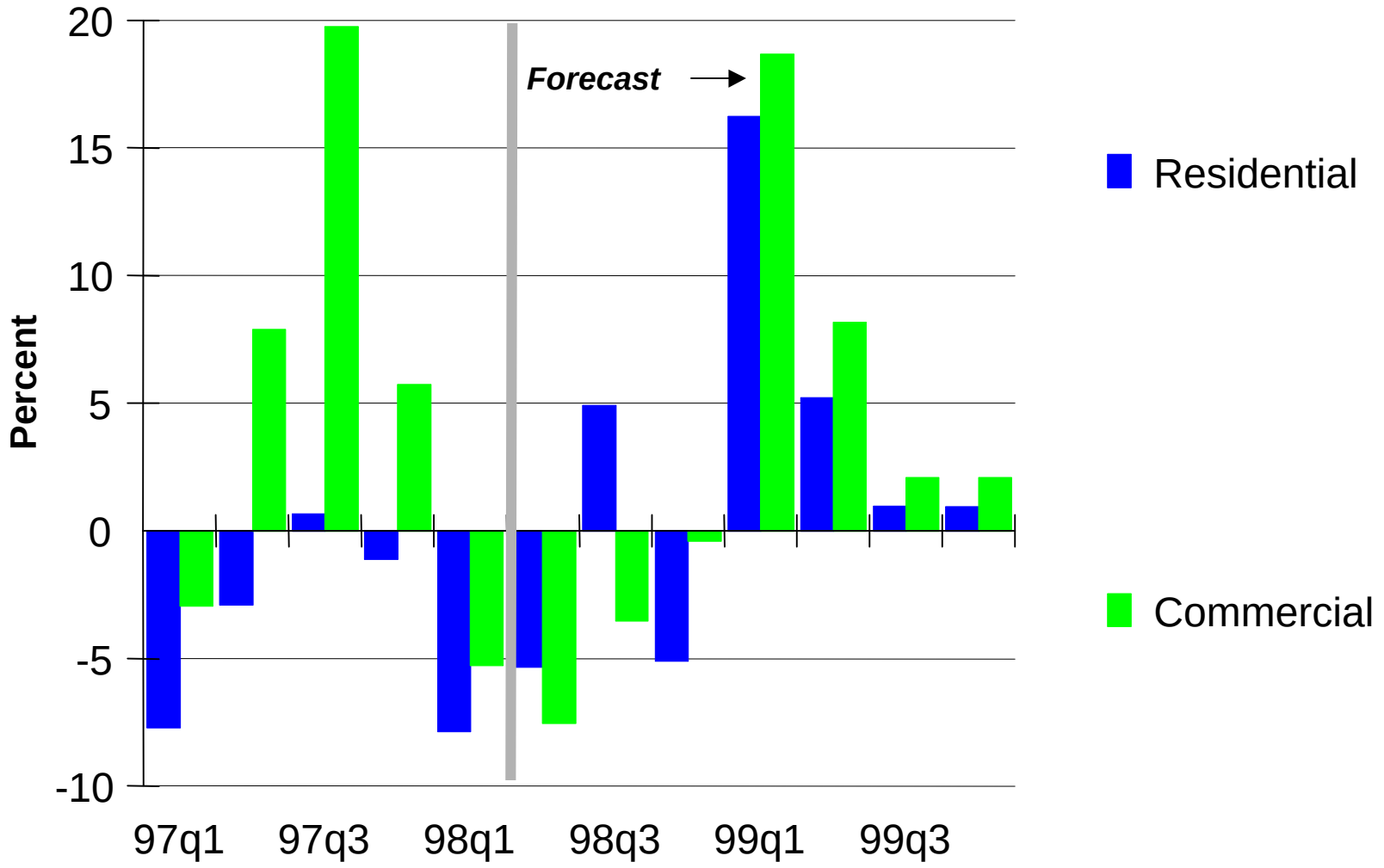
Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 15. Industrial Natural Gas Demand (Change from Previous Forecast)



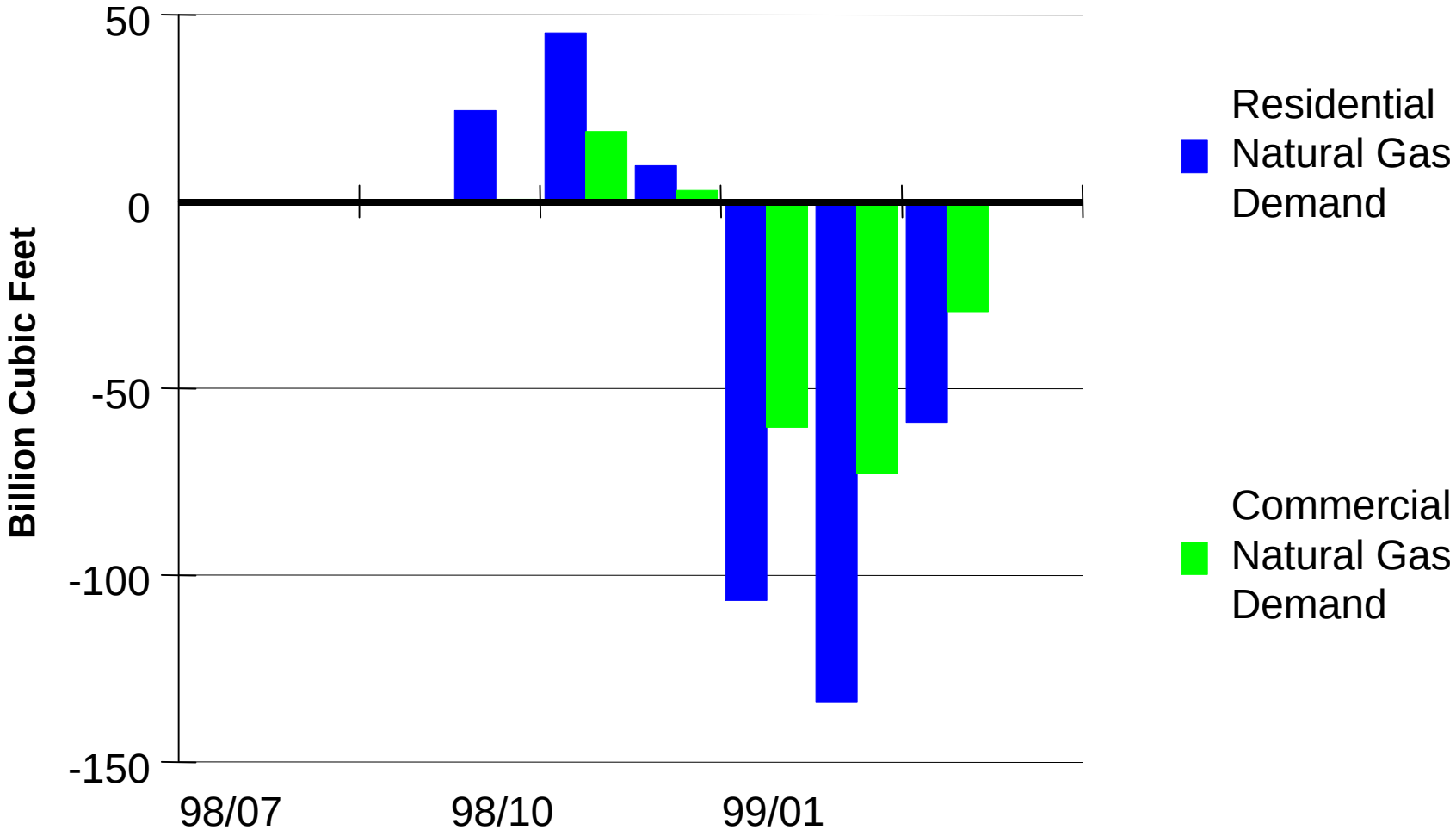
Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 16. Residential/Commercial Natural Gas Demand (Percent Change from Year Ago)



Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 17. Impact of Unchanged Winter Weather (Difference from Base Case)



Source: Energy Information Administration, Short-Term Energy Model, August 1998

Electricity

So far it has been a much hotter summer than last year, and estimates of electricity demand growth reflect the associated increases in cooling demand. For Q2 1998, U.S. population-weighted cooling degree-days was about 30 percent ahead of the Q2 1997 level, mostly because of the unusually warm May (Figure 18). We estimate that electricity demand was up about 5 percent over that period. We anticipate growth on the order of 3 percent for the third quarter, even taking account of a likely falloff in September from the high cooling demand conditions of September 1997 (Figure 19). We note that cooling degree-days in July were nearly 7 percent ahead of last July, an increase that would be repeated in August if normal temperatures hold. On balance we see the anticipated recovery from the relatively weak electricity demand growth rate seen in 1997 materializing, with a 2.3-percent growth rate in 1998 and somewhat slower advance in 1999, the latter due to normal weather and slower overall economic growth (see Figure 20).

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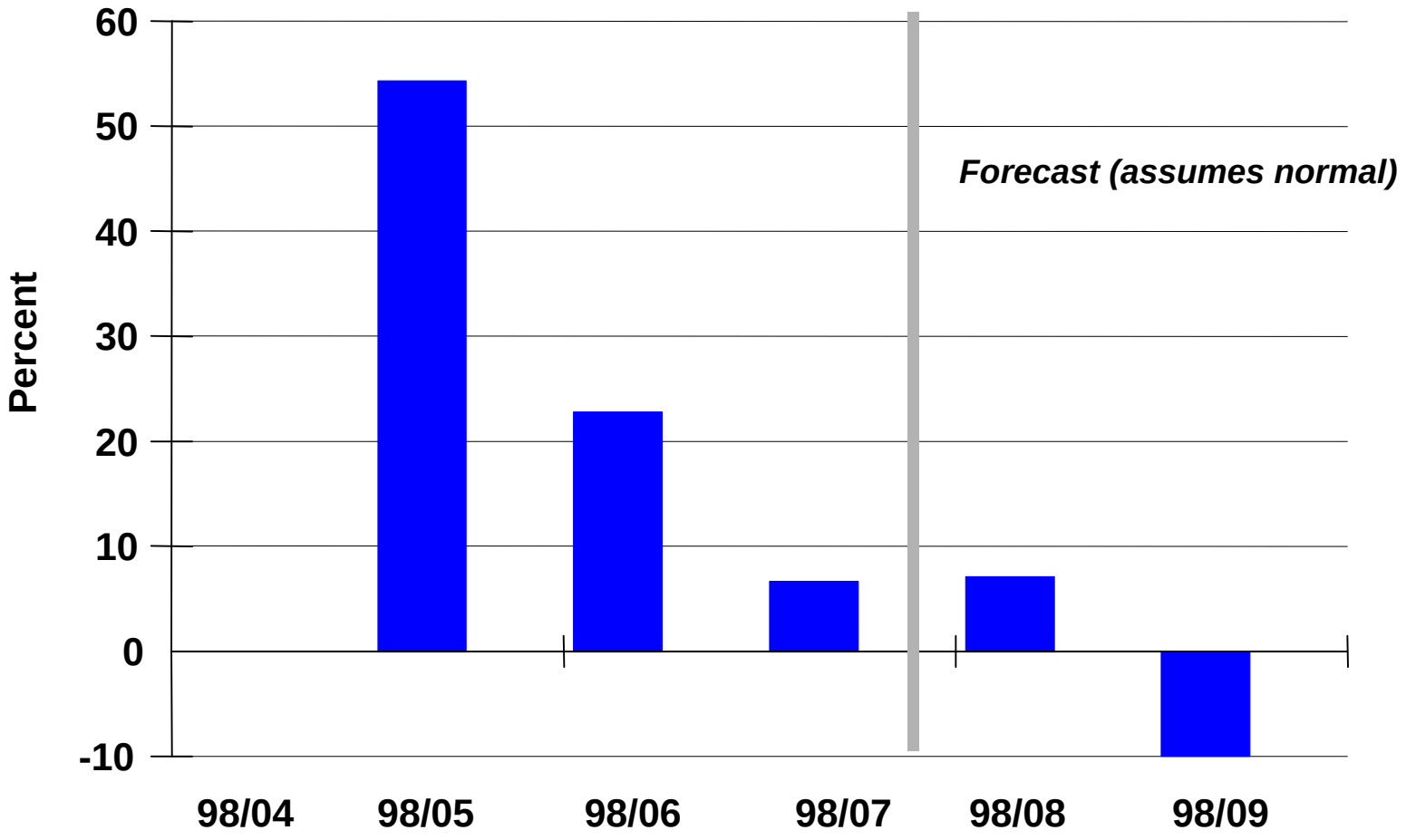
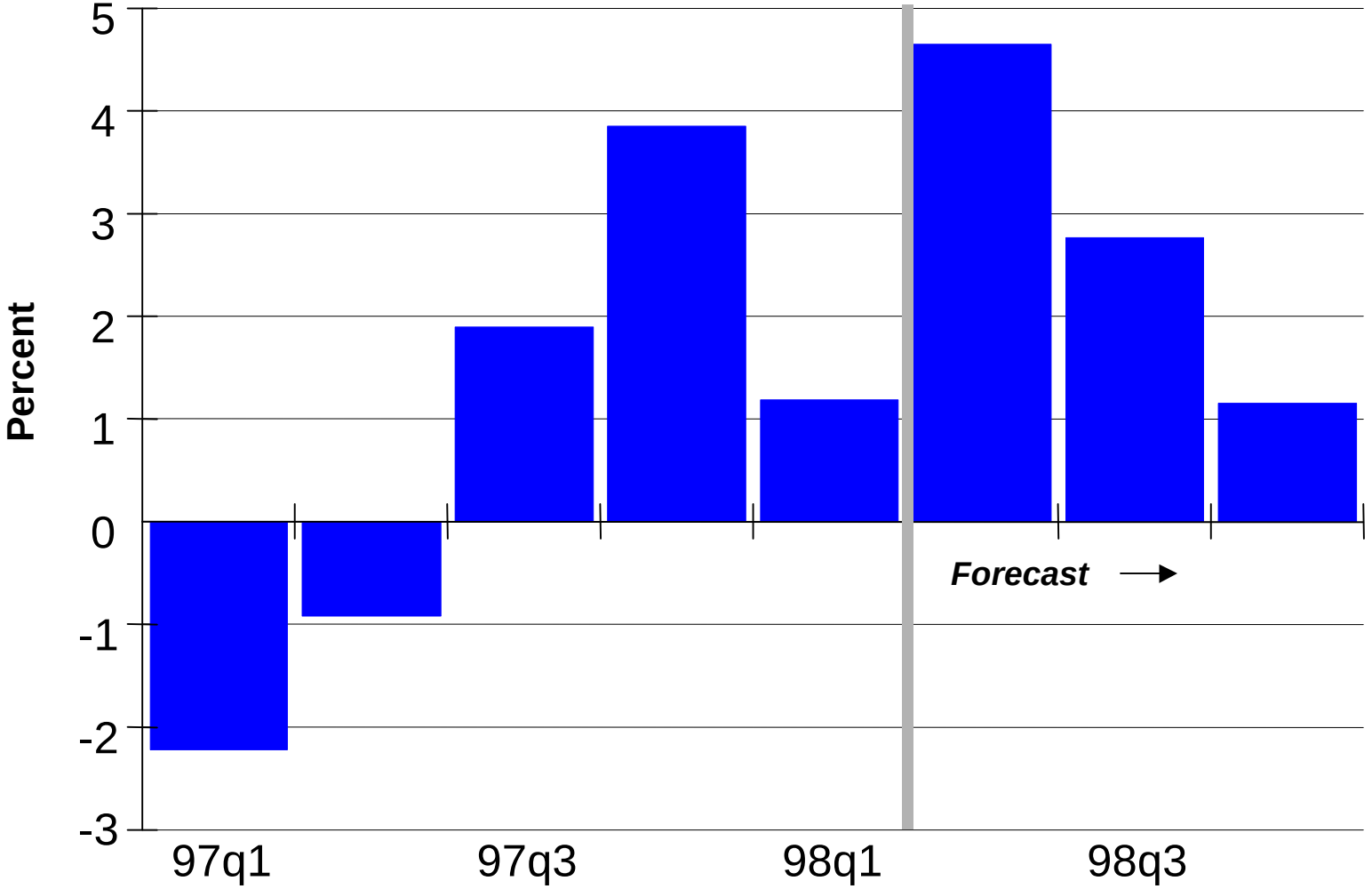
Figure 18. U.S. Cooling Degree-Days (Percent Change From Year Ago)



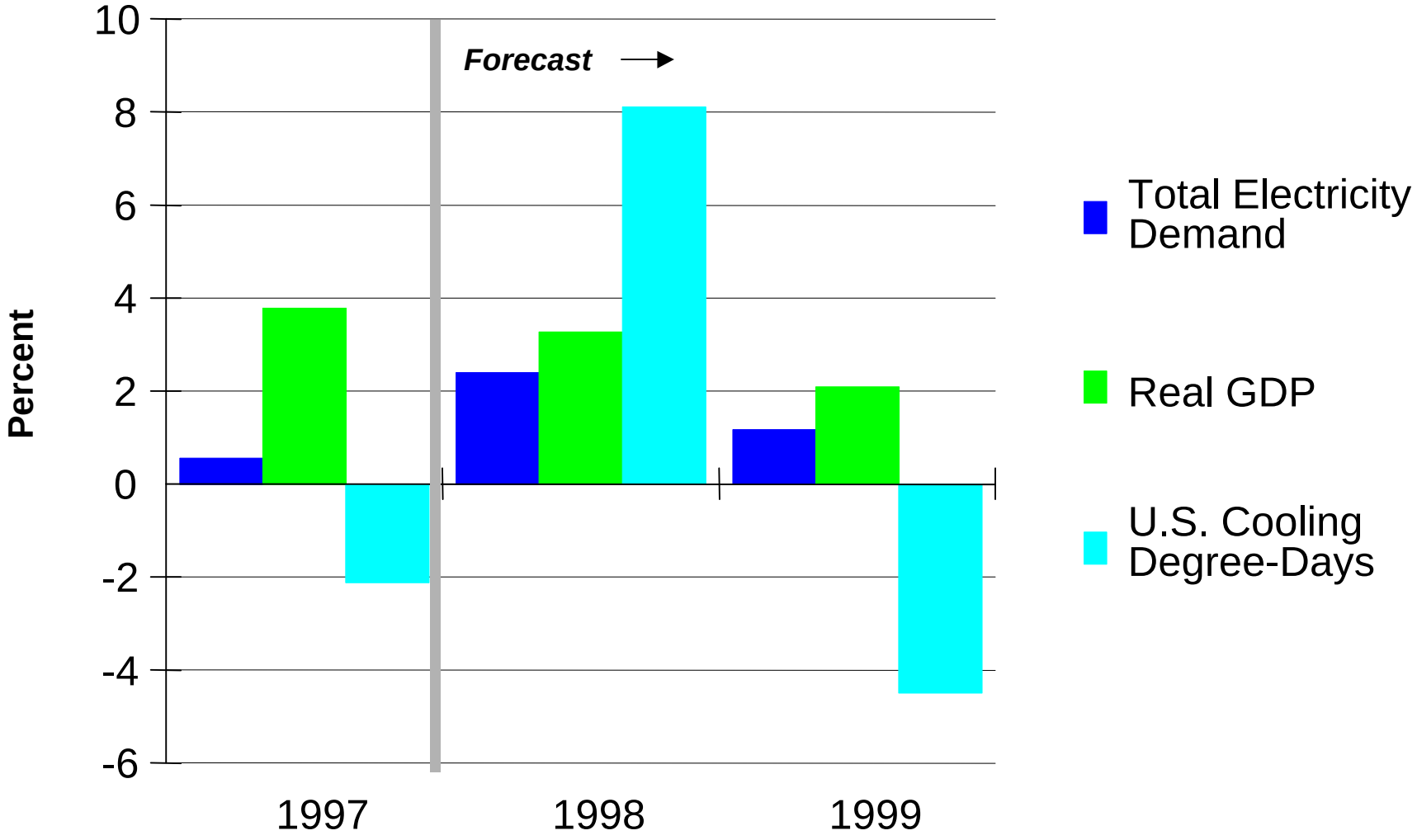
Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 19. Quarterly U.S. Electricity Demand (Percent Change From Year Ago)



Source: Energy Information Administration, Short-Term Energy Model, August 1998

Figure 20. Electricity Market Indicators (Percent Change From Year Ago)



Source: Energy Information Administration, Short-Term Energy Model, August 1998

Table HL1. U. S. Energy Supply and Demand

	Year				Annual Percentage Change		
	1996	1997	1998	1999	1996-1997	1997-1998	1998-1999
Real Gross Domestic Product (GDP)							
(billion chained 1992 dollars)	**6928**	**7191**	*7426*	*7581*	**3.8**	*3.3*	*2.1*
Imported Crude Oil Price [a]							
(nominal dollars per barrel)	**20.61**	**18.57**	*12.61*	*13.65*	**-9.9**	*-32.1*	*8.2*
Petroleum Supply (million barrels per day)							
Crude Oil Production [b]	**6.46**	**6.45**	*6.42*	*6.37*	**-0.2**	*-0.5*	*-0.8*
Total Petroleum Net Imports							
(including SPR)	**8.50**	**9.16**	*9.20*	*9.37*	**7.8**	*0.4*	*1.8*
Energy Demand							
World Petroleum							
(million barrels per day)	**71.5**	**73.2**	*74.4*	*76.3*	**2.4**	*1.6*	*2.6*
Petroleum							
(million barrels per day)	**18.31**	**18.62**	*18.82*	*19.15*	**1.7**	*1.1*	*1.8*
Natural Gas							
(trillion cubic feet)	**21.96**	**21.99**	*21.73*	*22.84*	**0.1**	*-1.2*	*5.1*
Coal							
(million short tons)	**1006**	**1030**	*1048*	*1083*	**2.4**	*1.7*	*3.3*
Electricity (billion kilowatthours)							
Utility Sales [c]	**3098**	**3115**	*3187*	*3250*	**0.5**	*2.3*	*2.0*
Nonutility Own Use [d]	**164**	**169**	*173*	*178*	**3.0**	*2.4*	*2.9*
Total	**3262**	**3283**	*3360*	*3428*	**0.6**	*2.3*	*2.0*
Total Energy Demand [e]							
(quadrillion Btu)	**93.9**	**94.4**	**94.7**	**97.3**	**0.6**	*0.3*	*2.7*
Total Energy Demand per Dollar of GDP							
(thousand Btu per 1992 Dollar)	**13.55**	**13.13**	*12.75*	*12.83*	**-3.1**	*-2.9*	*0.6*
Renewable Energy as Percent of Total	**7.8**	**7.6**	*7.3*	*6.9*			

[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 1997 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)*.

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 CONTROL0698.

Table 1. U.S. Macroeconomic and Weather Assumptions

	1997				1998				1999				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1997	1998	1999
Macroeconomic [a]															
Real Gross Domestic Product (billion chained 1992 dollars - SAAR)	**7102**	**7160**	**7218**	**7283**	**7366**	*7407*	*7445*	*7486*	*7513*	*7546*	*7597*	*7668*	**7191**	*7426*	*7581*
Percentage Change from Prior Year	**4.0**	**3.4**	**3.9**	**3.8**	**3.7**	*3.5*	*3.1*	*2.8*	*2.0*	*1.9*	*2.0*	*2.4*	**3.8**	*3.3*	*2.1*
Annualized Percent Change from Prior Quarter	**4.8**	**3.3**	**3.2**	**3.6**	**4.5**	*2.2*	*2.1*	*2.2*	*1.5*	*1.8*	*2.7*	*3.7*			
GDP Implicit Price Deflator (Index, 1992=1.000)	**1.118**	**1.123**	**1.127**	**1.131**	**1.133**	*1.138*	*1.144*	*1.149*	*1.155*	*1.160*	*1.165*	*1.170*	**1.125**	*1.141*	*1.162*
Percentage Change from Prior Year	**2.3**	**2.2**	**1.9**	**1.8**	**1.4**	*1.4*	*1.5*	*1.6*	*1.9*	*1.9*	*1.9*	*1.9*	**2.0**	*1.5*	*1.9*
Real Disposable Personal Income (billion chained 1992 Dollars - SAAR)	**5161**	**5201**	**5235**	**5292**	**5352**	*5383*	*5417*	*5453*	*5492*	*5529*	*5558*	*5594*	**5222**	*5401*	*5543*
Percentage Change from Prior Year	**2.2**	**2.8**	**2.8**	**3.7**	**3.7**	*3.5*	*3.5*	*3.0*	*2.6*	*2.7*	*2.6*	*2.6*	**2.9**	*3.4*	*2.6*
Manufacturing Production (Index, 1992=1.000)	**1.243**	**1.257**	**1.276**	**1.301**	**1.308**	*1.310*	*1.328*	*1.339*	*1.342*	*1.350*	*1.361*	*1.377*	**1.269**	*1.321*	*1.357*
Percentage Change from Prior Year	**5.8**	**5.0**	**5.3**	**6.3**	**5.2**	*4.2*	*4.1*	*2.9*	*2.6*	*3.1*	*2.5*	*2.8*	**5.6**	*4.1*	*2.8*
OECD Economic Growth (percent) [b]													**3.1**	*2.7*	*2.4*
Weather [c]															
Heating Degree-Days															
U.S.	**2156**	**635**	**86**	**1674**	**1975**	*515*	*91*	*1636*	*2327*	*524*	*89*	*1636*	**4551**	*4217*	*4576*
New England	**3108**	**1047**	**172**	**2318**	**2779**	*870*	*195*	*2269*	*3267*	*915*	*171*	*2269*	**6645**	*6113*	*6621*
Middle Atlantic	**2777**	**866**	**121**	**2052**	**2428**	*656*	*114*	*2026*	*2993*	*716*	*105*	*2026*	**5816**	*5224*	*5839*
U.S. Gas-Weighted	**2275**	**711**	**127**	**1773**	**2078**	*548*	*86*	*1686*	*2426*	*539*	*81*	*1686*	**4886**	*4398*	*4732*
Cooling Degree-Days (U.S.)	**50**	**289**	**754**	**62**	**24**	*376*	*777*	*72*	*30*	*334*	*758*	*72*	**1155**	*1249*	*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. Mexico is also a member but is not yet included in OECD data.

[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 CONTROL0698.

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

	1997				1998				1999				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1997	1998	1999
Macroeconomic [a]															
Real Fixed Investment (billion chained 1992 dollars-SAAR)	**1079**	**1111**	**1148**	**1149**	**1200**	*1224*	*1239*	*1253*	*1265*	*1277*	*1288*	*1305*	**1122**	*1229*	*1284*
Real Exchange Rate (index)	**1.085**	**1.096**	**1.106**	**1.117**	**1.138**	*1.141*	*1.136*	*1.129*	*1.115*	*1.089*	*1.071*	*1.065*	**1.101**	*1.136*	*1.085*
Business Inventory Change (billion chained 1992 dollars-SAAR)	**20.9**	**29.0**	**16.9**	**22.3**	**38.3**	*19.3*	*8.6*	*5.9*	*1.8*	*-2.5*	*-1.0*	*4.3*	**22.2**	*18.0*	*0.7*
Producer Price Index (index, 1982=1.000)	**1.285**	**1.268**	**1.272**	**1.274**	**1.252**	*1.250*	*1.255*	*1.261*	*1.265*	*1.268*	*1.270*	*1.274*	**1.275**	*1.255*	*1.269*
Consumer Price Index (index, 1982-1984=1.000)	**1.597**	**1.601**	**1.609**	**1.618**	**1.619**	*1.626*	*1.636*	*1.646*	*1.657*	*1.667*	*1.677*	*1.689*	**1.606**	*1.632*	*1.673*
Petroleum Product Price Index (index, 1982=1.000)	**0.722**	**0.675**	**0.669**	**0.654**	**0.542**	*0.520*	*0.504*	*0.515*	*0.533*	*0.542*	*0.546*	*0.551*	**0.680**	*0.520*	*0.543*
Non-Farm Employment (millions)	**121.1**	**121.9**	**122.6**	**123.5**	**124.4**	*125.0*	*125.7*	*126.3*	*126.7*	*127.1*	*127.5*	*128.2*	**122.3**	*125.3*	*127.4*
Commercial Employment (millions)	**82.5**	**83.2**	**83.7**	**84.5**	**85.3**	*85.9*	*86.6*	*87.2*	*87.6*	*88.0*	*88.4*	*89.0*	**83.5**	*86.3*	*88.3*
Total Industrial Production (index, 1992=1.000)	**1.220**	**1.233**	**1.251**	**1.273**	**1.276**	*1.279*	*1.295*	*1.305*	*1.308*	*1.316*	*1.326*	*1.341*	**1.244**	*1.289*	*1.323*
Housing Stock (millions)	**112.1**	**112.5**	**112.9**	**113.3**	**113.0**	*113.3*	*113.6*	*113.8*	*114.1*	*114.4*	*114.7*	*114.9*	**112.7**	*113.4*	*114.5*
Miscellaneous															
Gas Weighted Industrial Production (index, 1992=1.000)	**1.140**	**1.152**	**1.155**	**1.169**	**1.179**	*1.171*	*1.178*	*1.189*	*1.194*	*1.199*	*1.208*	*1.219*	**1.154**	*1.179*	*1.205*
Vehicle Miles Traveled [b] (million miles/day)	**6463**	**7138**	**7310**	**6824**	**6579**	*7278*	*7511*	*6994*	*6726*	*7435*	*7674*	*7145*	**6936**	*7093*	*7247*
Vehicle Fuel Efficiency (index, 1996=1.000)	**1.038**	**0.997**	**0.993**	**1.002**	**1.032**	*1.009*	*1.001*	*1.008*	*1.041*	*1.012*	*1.007*	*1.015*	**1.007**	*1.012*	*1.018*
Real Vehicle Fuel Cost (cents per mile)	**3.94**	**3.73**	**3.70**	**3.72**	**3.36**	*3.19*	*3.12*	*3.22*	*3.23*	*3.26*	*3.20*	*3.27*	**3.77**	*3.22*	*3.24*
Air Travel Capacity (mill. available ton-miles/day)	**402.1**	**417.2**	**434.1**	**427.7**	**420.2**	*437.3*	*458.9*	*449.7*	*439.0*	*454.7*	*474.6*	*462.7*	**420.4**	*441.6*	*457.9*
Aircraft Utilization (mill. revenue ton-miles/day)	**230.5**	**248.0**	**260.7**	**247.2**	**235.6**	*257.3*	*274.3*	*257.8*	*244.0*	*267.9*	*282.9*	*268.2*	**246.7**	*256.4*	*265.9*
Airline Ticket Price Index (index, 1982-1984=1.000)	**1.975**	**2.016**	**1.985**	**1.993**	**2.058**	*2.094*	*2.095*	*2.122*	*2.156*	*2.167*	*2.174*	*2.205*	**1.992**	*2.092*	*2.175*
Raw Steel Production (millions tons)	**26.47**	**26.59**	**26.52**	**27.31**	**28.44**	*27.18*	*26.35*	*26.99*	*28.36*	*28.25*	*27.98*	*28.74*	**106.60**	*108.96*	*113.32*

[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 CONTROL0698.

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

(Million Barrels per Day, Except OECD Commercial Stocks)

	1997				1998				1999				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1997	1998	1999
Demand [a]															
OECD															
U.S. (50 States)	**18.3**	**18.5**	**18.7**	**19.0**	**18.3**	*18.5*	*19.2*	*19.3*	*19.0*	*18.9*	*19.3*	*19.5*	**18.6**	*18.8*	*19.2*
U.S. Territories	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	**0.2**	*0.2*	*0.2*
Canada	**1.8**	**1.8**	**1.9**	**1.9**	**1.9**	*1.9*	*2.0*	*2.0*	*1.9*	*2.0*	*2.1*	*2.0*	**1.9**	*1.9*	*2.0*
Europe	**14.3**	**14.2**	**14.4**	**14.8**	**14.9**	*14.4*	*14.6*	*14.9*	*15.1*	*14.6*	*14.8*	*15.2*	**14.4**	*14.7*	*14.9*
Japan	**6.4**	**5.2**	**5.4**	**5.9**	**6.2**	*5.1*	*5.3*	*5.8*	*6.2*	*5.1*	*5.3*	*5.9*	**5.7**	*5.6*	*5.6*
Australia and New Zealand	**0.9**	**0.9**	**1.0**	**0.9**	**0.9**	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	**0.9**	*1.0*	*1.0*
Total OECD	**41.9**	**40.8**	**41.6**	**42.7**	**42.3**	*41.0*	*42.2*	*43.1*	*43.3*	*41.7*	*42.8*	*43.8*	**41.8**	*42.2*	*42.9*
Non-OECD															
Former Soviet Union	**4.7**	**4.2**	**4.2**	**4.6**	**4.9**	*4.4*	*4.4*	*4.8*	*5.1*	*4.6*	*4.6*	*5.0*	**4.4**	*4.6*	*4.8*
Europe	**1.5**	**1.3**	**1.3**	**1.4**	**1.6**	*1.4*	*1.4*	*1.5*	*1.7*	*1.4*	*1.4*	*1.6*	**1.4**	*1.5*	*1.5*
China	**3.8**	**3.9**	**3.9**	**4.0**	**4.0**	*4.1*	*4.1*	*4.2*	*4.3*	*4.4*	*4.4*	*4.5*	**3.9**	*4.1*	*4.4*
Other Asia	**8.8**	**8.6**	**8.3**	**9.5**	**8.5**	*8.4*	*8.3*	*9.5*	*8.6*	*8.6*	*8.4*	*9.8*	**8.8**	*8.7*	*8.8*
Other Non-OECD	**12.8**	**13.1**	**12.8**	**13.1**	**13.2**	*13.6*	*13.2*	*13.5*	*13.6*	*14.0*	*13.7*	*13.9*	**13.0**	*13.4*	*13.8*
Total Non-OECD	**31.6**	**31.1**	**30.6**	**32.6**	**32.2**	*31.8*	*31.4*	*33.5*	*33.2*	*32.9*	*32.5*	*34.7*	**31.4**	*32.2*	*33.4*
Total World Demand	**73.5**	**71.9**	**72.2**	**75.2**	**74.5**	*72.8*	*73.7*	*76.7*	*76.6*	*74.7*	*75.3*	*78.6*	**73.2**	*74.4*	*76.3*
Supply [b]															
OECD															
U.S. (50 States)	**9.4**	**9.5**	**9.5**	**9.5**	**9.5**	*9.4*	*9.4*	*9.4*	*9.4*	*9.4*	*9.4*	*9.5*	**9.5**	*9.4*	*9.4*
Canada	**2.6**	**2.5**	**2.6**	**2.7**	**2.7**	*2.7*	*2.7*	*2.7*	*2.7*	*2.7*	*2.8*	*2.8*	**2.6**	*2.7*	*2.8*
North Sea [c]	**6.5**	**6.1**	**6.0**	**6.5**	**6.4**	*6.2*	*6.3*	*6.6*	*6.8*	*6.6*	*6.9*	*7.2*	**6.2**	*6.4*	*6.9*
Other OECD	**1.6**	**1.6**	**1.6**	**1.6**	**1.6**	*1.6*	*1.6*	*1.7*	*1.7*	*1.7*	*1.7*	*1.7*	**1.6**	*1.6*	*1.7*
Total OECD	**20.1**	**19.6**	**19.7**	**20.3**	**20.2**	*19.9*	*20.1*	*20.4*	*20.6*	*20.4*	*20.8*	*21.1*	**19.9**	*20.1*	*20.7*
Non-OECD															
OPEC	**29.5**	**29.7**	**30.1**	**30.3**	**30.8**	*30.7*	*29.4*	*29.8*	*29.9*	*29.9*	*30.2*	*30.5*	**29.9**	*30.2*	*30.1*
Former Soviet Union	**7.0**	**7.1**	**7.2**	**7.2**	**7.3**	*7.1*	*7.2*	*7.3*	*7.3*	*7.3*	*7.3*	*7.4*	**7.1**	*7.2*	*7.3*
China	**3.2**	**3.2**	**3.2**	**3.1**	**3.2**	*3.2*	*3.2*	*3.2*	*3.3*	*3.3*	*3.3*	*3.3*	**3.2**	*3.2*	*3.3*
Mexico	**3.4**	**3.4**	**3.5**	**3.5**	**3.6**	*3.6*	*3.4*	*3.4*	*3.5*	*3.5*	*3.6*	*3.6*	**3.4**	*3.5*	*3.5*
Other Non-OECD	**10.4**	**10.5**	**10.4**	**10.5**	**10.6**	*10.5*	*10.8*	*10.9*	*11.0*	*11.2*	*11.3*	*11.6*	**10.4**	*10.7*	*11.3*
Total Non-OECD	**53.5**	**53.9**	**54.3**	**54.7**	**55.4**	*55.0*	*53.9*	*54.6*	*54.8*	*55.2*	*55.6*	*56.2*	**54.1**	*54.7*	*55.5*
Total World Supply	**73.6**	**73.5**	**74.0**	**75.0**	**75.6**	*74.9*	*74.0*	*75.0*	*75.5*	*75.6*	*76.4*	*77.3*	**74.0**	*74.9*	*76.2*
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR)	**0.0**	**-0.7**	**-0.2**	**0.4**	**-0.3**	*-0.7*	*0.0*	*0.7*	*0.5*	*-0.5*	*-0.2*	*0.5*	**-0.1**	*-0.1*	*0.1*
Other	**-0.1**	**-1.0**	**-1.6**	**-0.1**	**-0.8**	*-1.4*	*-0.3*	*1.0*	*0.6*	*-0.4*	*-0.8*	*0.7*	**-0.7**	*-0.4*	*0.0*
Total Stock Withdrawals	**-0.1**	**-1.7**	**-1.8**	**0.2**	**-1.1**	*-2.1*	*-0.3*	*1.7*	*1.1*	*-0.9*	*-1.1*	*1.2*	**-0.8**	*-0.4*	*0.1*
OECD Comm. Stocks, End (bill. bbls.)	**2.7**	**2.7**	**2.7**	**2.7**	**2.7**	*2.9*	*2.9*	*2.8*	*2.7*	*2.8*	*2.8*	*2.7*	**2.7**	*2.8*	*2.7*
Non-OPEC Supply	**44.1**	**43.9**	**43.9**	**44.7**	**44.8**	*44.2*	*44.6*	*45.2*	*45.6*	*45.7*	*46.2*	*46.8*	**44.1**	*44.7*	*46.1*
Net Exports from Former Soviet Union	**2.3**	**2.9**	**3.0**	**2.6**	**2.4**	*2.7*	*2.8*	*2.5*	*2.2*	*2.7*	*2.7*	*2.4*	**2.7**	*2.6*	*2.5*

[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. Mexico is also a member, but is not yet included in OECD data.

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)

	1997				1998				1999				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1997	1998	1999
Imported Crude Oil [a]															
(dollars per barrel)	**21.04**	**17.93**	**17.81**	**17.78**	13.44	*12.33*	*12.00*	*12.74*	*13.08*	*13.67*	*13.58*	*14.25*	**18.57**	*12.61*	*13.65*
Natural Gas Wellhead															
(dollars per thousand cubic feet)	**2.49**	**1.84**	**2.02**	**2.54**	1.77	*2.04*	*2.00*	*2.26*	*2.28*	*2.02*	*2.09*	*2.38*	**2.23**	*2.02*	*2.19*
Petroleum Products															
Gasoline Retail [b] (dollars per gallon)															
All Grades	**1.27**	**1.24**	**1.25**	**1.21**	1.10	*1.10*	*1.09*	*1.07*	*1.09*	*1.15*	*1.15*	*1.13*	**1.24**	*1.09*	*1.13*
Regular Unleaded	**1.22**	**1.20**	**1.21**	**1.17**	1.05	*1.05*	*1.04*	*1.02*	*1.02*	*1.08*	*1.08*	*1.05*	**1.20**	*1.04*	*1.06*
No. 2 Diesel Oil, Retail															
(dollars per gallon)	**1.25**	**1.18**	**1.15**	**1.17**	1.08	*1.05*	*1.03*	*1.07*	*1.06*	*1.07*	*1.06*	*1.11*	**1.19**	*1.06*	*1.08*
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	**0.65**	**0.57**	**0.54**	**0.57**	0.47	*0.43*	*0.44*	*0.48*	*0.50*	*0.48*	*0.49*	*0.53*	**0.59**	*0.46*	*0.50*
No. 2 Heating Oil, Retail															
(dollars per gallon)	**1.05**	**0.98**	**0.88**	**0.93**	0.92	*0.84*	*0.77*	*0.85*	*0.90*	*0.87*	*0.83*	*0.90*	**0.99**	*0.86*	*0.89*
No. 6 Residual Fuel Oil, Retail [c]															
(dollars per barrel)	**19.00**	**16.84**	**17.04**	**18.16**	13.56	*13.03*	*12.23*	*13.50*	*13.90*	*13.28*	*13.03*	*14.50*	**17.80**	*13.07*	*13.69*
Electric Utility Fuels															
Coal															
(dollars per million Btu)	**1.29**	**1.28**	**1.26**	**1.26**	1.26	*1.27*	*1.25*	*1.24*	*1.25*	*1.26*	*1.24*	*1.23*	**1.27**	*1.26*	*1.24*
Heavy Fuel Oil [d]															
(dollars per million Btu)	**2.91**	**2.59**	**2.71**	**2.92**	2.12	*2.13*	*2.01*	*2.21*	*2.23*	*2.17*	*2.14*	*2.37*	**2.79**	*2.11*	*2.22*
Natural Gas															
(dollars per million Btu)	**3.10**	**2.46**	**2.60**	**3.15**	2.61	*2.52*	*2.45*	*2.69*	*2.87*	*2.57*	*2.59*	*2.91*	**2.76**	*2.54*	*2.69*
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	**6.70**	**6.95**	**8.67**	**6.82**	6.36	*6.75*	*8.08*	*6.46*	*6.54*	*7.19*	*8.34*	*6.74*	**6.93**	*6.60*	*6.85*
Electricity															
(cents per kilowatthour)	**8.04**	**8.69**	**8.79**	**8.31**	7.93	*8.50*	*8.71*	*8.22*	*7.86*	*8.47*	*8.74*	*8.24*	**8.46**	*8.35*	*8.33*

[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 1998. 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)

	1997				1998				1999				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1997	1998	1999
Supply															
Crude Oil Supply															
Domestic Production [a]	**6.45**	**6.45**	**6.41**	**6.49**	**6.48**	*6.40*	*6.37*	*6.42*	*6.38*	*6.34*	*6.34*	*6.43*	**6.45**	*6.42*	*6.37*
Alaska	**1.36**	**1.30**	**1.24**	**1.28**	**1.23**	*1.17*	*1.15*	*1.23*	*1.23*	*1.19*	*1.16*	*1.19*	**1.30**	*1.19*	*1.19*
Lower 48	**5.09**	**5.15**	**5.18**	**5.20**	**5.25**	*5.23*	*5.22*	*5.19*	*5.15*	*5.15*	*5.18*	*5.24*	**5.16**	*5.22*	*5.18*
Net Imports (including SPR) [b]	**7.40**	**8.41**	**8.44**	**8.21**	**7.81**	*8.69*	*8.60*	*7.98*	*7.67*	*8.42*	*8.66*	*8.20*	**8.12**	*8.27*	*8.24*
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**	*0.00*	*0.00*
SPR Stock Withdrawn or Added (-)	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.01**	*0.00*	*0.00*
Other Stock Withdrawn or Added (-)	**-0.33**	**-0.08**	**0.18**	**-0.01**	**-0.35**	*-0.06*	*0.10*	*0.07*	*-0.03*	*0.01*	*0.08*	*0.02*	**-0.06**	*-0.06*	*0.02*
Product Supplied and Losses	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	**0.00**	*0.00*	*-0.01*
Unaccounted-for Crude Oil	**0.19**	**0.09**	**0.15**	**0.15**	**0.38**	*0.12*	*0.33*	*0.28*	*0.27*	*0.29*	*0.29*	*0.28*	**0.14**	*0.28*	*0.28*
Total Crude Oil Supply	**13.74**	**14.87**	**15.19**	**14.83**	**14.32**	*15.15*	*15.39*	*14.75*	*14.29*	*15.05*	*15.37*	*14.93*	**14.66**	*14.91*	*14.91*
Other Supply															
NGL Production	**1.84**	**1.82**	**1.83**	**1.77**	**1.85**	*1.84*	*1.84*	*1.82*	*1.86*	*1.84*	*1.83*	*1.83*	**1.82**	*1.84*	*1.84*
Other Hydrocarbon and Alcohol Inputs	**0.31**	**0.34**	**0.36**	**0.36**	**0.34**	*0.32*	*0.34*	*0.35*	*0.36*	*0.34*	*0.35*	*0.36*	**0.34**	*0.34*	*0.35*
Crude Oil Product Supplied	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	**0.00**	*0.00*	*0.01*
Processing Gain	**0.79**	**0.84**	**0.87**	**0.90**	**0.83**	*0.84*	*0.86*	*0.83*	*0.80*	*0.85*	*0.88*	*0.85*	**0.85**	*0.84*	*0.84*
Net Product Imports [c]	**1.33**	**1.23**	**0.86**	**0.75**	**0.93**	*0.99*	*0.91*	*0.89*	*1.14*	*1.24*	*1.17*	*0.97*	**1.04**	*0.93*	*1.13*
Product Stock Withdrawn or Added (-) [d]	**0.25**	**-0.62**	**-0.37**	**0.36**	**0.03**	*-0.64*	*-0.15*	*0.61*	*0.51*	*-0.47*	*-0.31*	*0.52*	**-0.09**	*-0.04*	*0.06*
Total Supply	**18.27**	**18.49**	**18.75**	**18.97**	**18.30**	*18.50*	*19.20*	*19.26*	*18.96*	*18.86*	*19.30*	*19.46*	**18.62**	*18.82*	*19.15*
Demand															
Motor Gasoline	**7.59**	**8.16**	**8.25**	**8.06**	**7.77**	*8.22*	*8.41*	*8.21*	*7.87*	*8.38*	*8.54*	*8.33*	**8.02**	*8.15*	*8.28*
Jet Fuel	**1.57**	**1.56**	**1.64**	**1.62**	**1.55**	*1.58*	*1.67*	*1.65*	*1.58*	*1.61*	*1.69*	*1.66*	**1.60**	*1.61*	*1.63*
Distillate Fuel Oil	**3.58**	**3.33**	**3.24**	**3.60**	**3.58**	*3.37*	*3.43*	*3.61*	*3.86*	*3.46*	*3.41*	*3.67*	**3.44**	*3.50*	*3.60*
Residual Fuel Oil	**0.89**	**0.76**	**0.77**	**0.77**	**0.81**	*0.81*	*0.87*	*0.89*	*0.95*	*0.83*	*0.82*	*0.86*	**0.80**	*0.84*	*0.86*
Other Oils [e]	**4.64**	**4.67**	**4.85**	**4.93**	**4.62**	*4.52*	*4.83*	*4.90*	*4.70*	*4.59*	*4.85*	*4.94*	**4.77**	*4.72*	*4.77*
Total Demand	**18.27**	**18.49**	**18.75**	**18.97**	**18.32**	*18.50*	*19.20*	*19.26*	*18.96*	*18.86*	*19.30*	*19.46*	**18.62**	*18.82*	*19.15*
Total Petroleum Net Imports	**8.73**	**9.64**	**9.31**	**8.96**	**8.74**	*9.67*	*9.50*	*8.88*	*8.81*	*9.66*	*9.83*	*9.17*	**9.16**	*9.20*	*9.37*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**313**	**320**	**304**	**305**	**336**	*342*	*332*	*326*	*329*	*328*	*320*	*318*	**305**	*326*	*318*
Total Motor Gasoline	**200**	**204**	**198**	**210**	**215**	*220*	*212*	*209*	*214*	*207*	*204*	*202*	**210**	*209*	*202*
Finished Motor Gasoline	**154**	**164**	**158**	**166**	**166**	*173*	*166*	*165*	*169*	*166*	*163*	*161*	**166**	*165*	*161*
Blending Components	**46**	**41**	**41**	**43**	**49**	*47*	*46*	*44*	*45*	*42*	*42*	*41*	**43**	*44*	*41*
Jet Fuel	**39**	**43**	**46**	**44**	**43**	*42*	*42*	*41*	*44*	*44*	*46*	*45*	**44**	*41*	*45*
Distillate Fuel Oil	**101**	**118**	**139**	**138**	**124**	*138*	*146*	*140*	*101*	*112*	*129*	*132*	**138**	*140*	*132*
Residual Fuel Oil	**41**	**39**	**35**	**40**	**41**	*40*	*38*	*42*	*36*	*39*	*39*	*42*	**40**	*42*	*42*
Other Oils [e]	**253**	**286**	**308**	**259**	**265**	*307*	*322*	*272*	*265*	*299*	*312*	*262*	**259**	*272*	*262*
Total Stocks (excluding SPR)	**948**	**1011**	**1029**	**996**	**1025**	*1088*	*1092*	*1031*	*988*	*1029*	*1050*	*1001*	**996**	*1031*	*1001*
Crude Oil in SPR	**563**	**563**	**563**	**563**	**563**	*563*	*563*	*563*	*563*	*563*	*563*	*563*	**563**	*563*	*563*
Total Stocks (including SPR)	**1512**	**1575**	**1592**	**1560**	**1588**	*1652*	*1656*	*1594*	*1551*	*1593*	*1614*	*1564*	**1560**	*1594*	*1564*

[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

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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	*6.71*	*5.87*	*0.85*	*0.11*	*0.74*
Lower 48 States	*5.49*	*4.71*	*0.79*	*0.08*	*0.71*
Alaska	*1.22*	*1.16*	*0.06*	*0.03*	*0.03*

Note: Components provided are for the fourth quarter 1999. 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)

	1997				1998				1999				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1997	1998	1999
Supply															
Total Dry Gas Production	**4.73**	**4.70**	**4.72**	**4.79**	**4.78**	*4.75*	*4.78*	*4.85*	*4.84*	*4.81*	*4.84*	*4.91*	**18.93**	*19.16*	*19.39*
Net Imports	**0.74**	**0.68**	**0.68**	**0.73**	**0.75**	*0.71*	*0.71*	*0.78*	*0.79*	*0.76*	*0.77*	*0.83*	**2.83**	*2.94*	*3.14*
Supplemental Gaseous Fuels	**0.03**	**0.03**	**0.02**	**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**	**5.40**	**5.43**	**5.55**	**5.56**	*5.48*	*5.52*	*5.66*	*5.66*	*5.60*	*5.63*	*5.77*	**21.88**	*22.23*	*22.66*
Underground Working Gas Storage															
Opening	**6.51**	**5.34**	**6.09**	**7.03**	**6.52**	*5.52*	*6.47*	*7.39*	*6.74*	*5.45*	*6.27*	*7.13*	**6.51**	*6.52*	*6.74*
Closing	**5.34**	**6.09**	**7.03**	**6.52**	**5.52**	*6.47*	*7.39*	*6.74*	*5.45*	*6.27*	*7.13*	*6.52*	**6.52**	*6.74*	*6.52*
Net Withdrawals	**1.18**	**-0.75**	**-0.95**	**0.51**	**1.00**	*-0.94*	*-0.92*	*0.65*	*1.28*	*-0.82*	*-0.86*	*0.61*	**-0.01**	*-0.22*	*0.22*
Total Supply	**6.68**	**4.65**	**4.49**	**6.07**	**6.56**	*4.54*	*4.60*	*6.31*	*6.95*	*4.78*	*4.78*	*6.38*	**21.88**	*22.01*	*22.88*
Balancing Item [a]	**0.20**	**0.20**	**0.04**	**-0.33**	**0.04**	*0.25*	*-0.05*	*-0.51*	*0.37*	*0.21*	*-0.13*	*-0.50*	**0.11**	*-0.28*	*-0.05*
Total Primary Supply	**6.88**	**4.85**	**4.53**	**5.74**	**6.60**	*4.79*	*4.55*	*5.80*	*7.31*	*4.99*	*4.65*	*5.88*	**21.99**	*21.73*	*22.84*
Demand															
Lease and Plant Fuel	**0.31**	**0.31**	**0.31**	**0.31**	**0.31**	*0.31*	*0.31*	*0.32*	*0.32*	*0.31*	*0.31*	*0.32*	**1.25**	*1.26*	*1.27*
Pipeline Use	**0.22**	**0.16**	**0.15**	**0.19**	**0.21**	*0.16*	*0.15*	*0.19*	*0.22*	*0.16*	*0.15*	*0.19*	**0.71**	*0.71*	*0.72*
Residential	**2.28**	**0.88**	**0.38**	**1.47**	**2.10**	*0.83*	*0.40*	*1.39*	*2.44*	*0.88*	*0.41*	*1.41*	**5.01**	*4.73*	*5.13*
Commercial	**1.27**	**0.65**	**0.45**	**0.93**	**1.20**	*0.60*	*0.43*	*0.92*	*1.43*	*0.65*	*0.44*	*0.94*	**3.29**	*3.16*	*3.46*
Industrial (Incl. Cogenerators)	**2.28**	**2.09**	**2.04**	**2.17**	**2.23**	*2.04*	*2.05*	*2.30*	*2.34*	*2.11*	*2.10*	*2.35*	**8.58**	*8.61*	*8.90*
Cogenerators	**0.53**	**0.57**	**0.57**	**0.64**	**0.58**	*0.55*	*0.60*	*0.68*	*0.60*	*0.57*	*0.62*	*0.70*	**2.31**	*2.41*	*2.49*
Electricity Production															
Electric Utilities	***0.47***	***0.72***	***1.15***	**0.62**	**0.50**	*0.80*	*1.15*	*0.62*	*0.52*	*0.84*	*1.19*	*0.62*	**2.97**	*3.07*	*3.16*
Nonutilities (Excl. Cogen.)	**0.04**	**0.04**	**0.05**	**0.05**	**0.05**	*0.04*	*0.05*	*0.05*	*0.05*	*0.05*	*0.05*	*0.06*	**0.18**	*0.19*	*0.20*
Total Demand	**6.88**	**4.85**	**4.53**	**5.74**	**6.60**	*4.79*	*4.55*	*5.80*	*7.31*	*4.99*	*4.65*	*5.88*	**21.99**	*21.73*	*22.84*

[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)

	1997				1998				1999				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1997	1998	1999
Supply															
Production	**273.9**	**269.7**	**271.3**	**273.7**	**279.2**	*270.5*	*282.1*	*281.1*	*294.4*	*277.8*	*282.1*	*290.1*	**1088.6**	*1112.9*	*1144.4*
Appalachia	**119.0**	**117.8**	**112.0**	**115.9**	**119.1**	*114.2*	*114.0*	*117.2*	*123.7*	*115.3*	*111.7*	*119.0*	**464.7**	*464.5*	*469.7*
Interior	**42.9**	**41.4**	**44.4**	**43.6**	**41.0**	*39.8*	*44.3*	*42.9*	*42.9*	*39.1*	*42.5*	*42.4*	**172.3**	*168.1*	*166.9*
Western	**112.0**	**110.5**	**114.9**	**114.2**	**119.1**	*116.5*	*123.8*	*120.9*	*127.8*	*123.4*	*127.9*	*128.7*	**451.6**	*480.3*	*507.8*
Primary Stock Levels [a]															
Opening	**28.6**	**37.5**	**42.5**	**39.1**	**32.9**	*37.5*	*37.2*	*34.2*	*32.9*	*39.9*	*40.3*	*34.1*	**28.6**	*32.9*	*32.9*
Closing	**37.5**	**42.5**	**39.1**	**32.9**	**37.5**	*37.2*	*34.2*	*32.9*	*39.9*	*40.3*	*34.1*	*33.0*	**32.9**	*32.9*	*33.0*
Net Withdrawals	**-8.9**	**-5.0**	**3.4**	**6.2**	**-4.7**	*0.3*	*3.0*	*1.2*	*-6.9*	*-0.4*	*6.2*	*1.1*	**-4.2**	*-0.1*	*(S)*
Imports	**1.3**	**1.7**	**2.2**	**2.2**	**1.8**	*1.9*	*1.8*	*1.8*	*1.8*	*1.8*	*1.8*	*1.8*	**7.5**	*7.3*	*7.3*
Exports	**20.0**	**20.6**	**22.4**	**20.6**	**18.3**	*20.9*	*21.6*	*21.5*	*20.1*	*20.7*	*21.0*	*20.9*	**83.5**	*82.2*	*82.8*
Total Net Domestic Supply	**246.4**	**245.8**	**254.6**	**261.6**	**258.1**	*251.8*	*265.4*	*262.6*	*269.2*	*258.5*	*269.1*	*272.1*	**1008.3**	*1037.9*	*1068.9*
Secondary Stock Levels [b]															
Opening	**123.0**	**120.7**	**127.6**	**109.8**	**106.8**	*114.1*	*118.2*	*105.4*	*106.9*	*107.1*	*113.0*	*99.4*	**123.0**	*106.8*	*106.9*
Closing	**120.7**	**127.6**	**109.8**	**106.8**	**114.1**	*118.2*	*105.4*	*106.9*	*107.1*	*113.0*	*99.4*	*103.6*	**106.8**	*106.9*	*103.6*
Net Withdrawals	**2.3**	**-6.9**	**17.8**	**3.0**	**-7.3**	*-4.1*	*12.7*	*-1.5*	*-0.2*	*-5.9*	*13.6*	*-4.2*	**16.1**	*-0.1*	*3.3*
Waste Coal Supplied to IPPs [c]	**2.3**	**2.4**	**2.4**	**2.4**	**2.5**	*2.5*	*2.5*	*2.5*	*2.6*	*2.6*	*2.6*	*2.6*	**9.4**	*10.0*	*10.6*
Total Supply	**251.0**	**241.3**	**274.7**	**266.9**	**253.3**	*250.3*	*280.6*	*263.6*	*271.6*	*255.2*	*285.4*	*270.6*	**1033.9**	*1047.8*	*1082.9*
Demand															
Coke Plants	**7.6**	**7.4**	**7.9**	**6.6**	**6.9**	*6.9*	*7.2*	*7.7*	*7.6*	*7.4*	*7.3*	*7.6*	**29.4**	*28.6*	*29.9*
Electricity Production															
Electric Utilities	**218.8**	**207.7**	**243.7**	**230.3**	**220.5**	*219.2*	*249.3*	*229.3*	*236.8*	*223.2*	*253.4*	*235.5*	**900.4**	*918.4*	*948.9*
Nonutilities (Excl. Cogen.) [d]	**5.9**	**5.9**	**5.9**	**5.9**	**6.3**	*6.2*	*6.3*	*6.3*	*6.6*	*6.6*	*6.6*	*6.6*	**23.5**	*25.0*	*26.5*
Retail and General Industry [e]	**20.0**	**18.2**	**17.9**	**20.2**	**19.9**	*18.0*	*17.8*	*20.4*	*20.6*	*18.1*	*18.1*	*20.8*	**76.4**	*76.1*	*77.6*
Total Demand	**252.3**	**239.1**	**275.4**	**262.9**	**253.6**	*250.3*	*280.6*	*263.6*	*271.6*	*255.2*	*285.4*	*270.6*	**1029.7**	*1048.1*	*1082.8*
Discrepancy [f]	**-1.3**	**2.1**	**-0.7**	**4.0**	**-0.3**	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	***4.2***	*-0.3*	*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 8.9 million tons in 1996.

[d] Consumption of coal by IPPs. In 1995, IPP consumption was estimated to be 5.290 million tons per quarter. Quarterly estimates and projections for coal consumption by nonutility generators are based on estimates for annual coal-fired generation at nonutilities, 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). Data for first quarter 1998 are estimates.

[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 Kilowatthours)

	1997				1998				1999				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1997	1998	1999
Supply															
Net Utility Generation															
Coal	**434.1**	**413.9**	**480.9**	**458.9**	**437.0**	*437.2*	*494.6*	*454.6*	*471.8*	*444.3*	*502.2*	*467.0*	**1787.8**	*1823.4*	*1885.3*
Petroleum	**17.0**	**15.1**	**24.5**	**21.1**	**20.9**	*24.4*	*26.7*	*20.9*	*25.2*	*21.0*	*25.5*	*19.0*	**77.8**	*92.9*	*90.7*
Natural Gas	**45.0**	**69.5**	**109.9**	**59.2**	**47.9**	*77.1*	*110.3*	*59.0*	*49.5*	*80.1*	*113.9*	*58.9*	**283.6**	*294.2*	*302.4*
Nuclear	**160.0**	**144.0**	**171.0**	**153.6**	**162.6**	*153.3*	*176.7*	*159.2*	*166.9*	*151.5*	*177.8*	*160.3*	**628.6**	*651.8*	*656.5*
Hydroelectric	**94.2**	**95.9**	**77.5**	**69.6**	**86.7**	*87.3*	*67.8*	*64.0*	*73.9*	*77.3*	*64.3*	*64.1*	**337.2**	*305.7*	*279.7*
Geothermal and Other [a]	**1.6**	**1.8**	**2.0**	**2.0**	**1.9**	*1.6*	*1.9*	*1.8*	*1.7*	*1.7*	*1.7*	*1.7*	**7.5**	*7.1*	*6.8*
Subtotal	**752.0**	**740.2**	**865.8**	**764.5**	**757.0**	*780.8*	*877.9*	*759.5*	*789.0*	*775.8*	*885.5*	*771.1*	**3122.5**	*3175.2*	*3221.4*
Nonutility Generation [b]															
Coal	**15.3**	**16.3**	**16.4**	**18.4**	**16.6**	*15.9*	*17.3*	*19.3*	*17.0*	*16.3*	*17.7*	*19.8*	**66.4**	*69.1*	*70.8*
Petroleum	**4.0**	**4.2**	**4.2**	**4.7**	**4.4**	*4.2*	*4.6*	*5.1*	*4.7*	*4.5*	*4.9*	*5.5*	**17.1**	*18.4*	*19.6*
Natural Gas	**49.2**	**52.5**	**52.8**	**59.1**	**53.7**	*51.4*	*55.9*	*62.6*	*55.2*	*52.9*	*57.6*	*64.5*	**213.7**	*223.7*	*230.2*
Other Gaseous Fuels [c]	**2.9**	**3.1**	**3.1**	**3.5**	**3.0**	*2.9*	*3.1*	*3.5*	*3.0*	*2.9*	*3.1*	*3.5*	**12.5**	*12.5*	*12.6*
Hydroelectric	**3.9**	**4.2**	**4.2**	**4.7**	**4.4**	*4.2*	*4.5*	*5.1*	*4.6*	*4.4*	*4.7*	*5.3*	**17.1**	*18.2*	*19.0*
Geothermal and Other [d]	**19.0**	**20.3**	**20.4**	**22.9**	**20.3**	*19.4*	*21.2*	*23.7*	*20.5*	*19.6*	*21.3*	*23.9*	**82.6**	*84.6*	*85.3*
Subtotal	**94.3**	**100.6**	**101.2**	**113.3**	**102.3**	*98.0*	*106.7*	*119.4*	*104.9*	*100.5*	*109.4*	*122.5*	**409.4**	*426.4*	*437.4*
Total Generation	**846.3**	**840.8**	**967.0**	**877.7**	**859.3**	*878.8*	*984.5*	*879.0*	*894.0*	*876.4*	*994.9*	*893.6*	**3531.9**	*3601.6*	*3658.9*
Net Imports [e]	**7.5**	**8.9**	**11.8**	**8.3**	**5.8**	*9.3*	*12.2*	*8.0*	*7.2*	*9.2*	*11.7*	*7.9*	**36.6**	*35.3*	*36.0*
Total Supply	**853.8**	**849.8**	**978.8**	**886.1**	**865.1**	*888.1*	*996.7*	*886.9*	*901.1*	*885.5*	*1006.6*	*901.5*	**3568.5**	*3636.9*	*3694.8*
Losses and Unaccounted for [f]	**52.8**	**82.7**	**76.3**	**73.3**	**54.6**	*85.3*	*69.2*	*68.1*	*52.5*	*75.6*	*69.6*	*69.1*	**285.0**	*277.2*	*266.9*
Demand															
Electric Utility Sales															
Residential	**276.7**	**226.2**	**309.9**	**258.8**	**275.8**	*247.3*	*320.1*	*255.0*	*296.6*	*248.7*	*322.3*	*260.1*	**1071.6**	*1098.1*	*1127.7*
Commercial	**214.5**	**217.6**	**256.0**	**225.3**	**217.4**	*228.8*	*264.4*	*228.2*	*229.3*	*230.9*	*267.2*	*231.5*	**913.3**	*938.8*	*958.9*
Industrial	**247.6**	**258.7**	**268.9**	**257.4**	**252.1**	*262.8*	*273.2*	*262.4*	*255.0*	*265.0*	*275.9*	*265.7*	**1032.5**	*1050.5*	*1061.5*
Other	**23.5**	**23.2**	**26.2**	**24.6**	**23.7**	*24.1*	*26.6*	*24.8*	*25.0*	*24.5*	*27.1*	*25.4*	**97.5**	*99.1*	*102.1*
Subtotal	**762.2**	**725.7**	**860.9**	**766.1**	**769.0**	*763.0*	*884.2*	*770.4*	*806.0*	*769.0*	*892.5*	*782.7*	**3114.9**	*3186.5*	*3250.2*
Nonutility Gener. for Own Use [b]	**38.8**	**41.4**	**41.7**	**46.6**	**41.5**	*39.8*	*43.3*	*48.5*	*42.6*	*40.9*	*44.5*	*49.8*	**168.6**	*173.1*	*177.7*
Total Demand	**801.0**	**767.1**	**902.6**	**812.7**	**810.5**	*802.8*	*927.5*	*818.9*	*848.6*	*809.9*	*937.0*	*832.5*	**3283.5**	*3359.6*	*3428.0*
Memo:															
Nonutility Sales to Electric Utilities [b]	**55.5**	**59.2**	**59.5**	**66.6**	**60.7**	*58.2*	*63.3*	*70.9*	*62.3*	*59.7*	*65.0*	*72.7*	**240.8**	253.2	259.7

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

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

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

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

[e] Data for 1997 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		
	1996	1997	1998	1999	1996-1997	1997-1998	1998-1999
Electric Utilities							
Hydroelectric Power [a]	**3.433**	**3.530**	*3.200*	*2.928*	**2.8**	*-9.3*	*-8.5*
Geothermal, Solar and Wind Energy [b]	**0.110**	**0.115**	*0.106*	*0.102*	**4.5**	*-7.8*	*-3.8*
Biofuels [c]	**0.020**	**0.021**	*0.021*	*0.021*	**5.0**	*0.0*	*0.0*
Total	**3.563**	**3.665**	*3.328*	*3.050*	**2.9**	*-9.2*	*-8.4*
Nonutility Power Generators							
Hydroelectric Power [a]	**0.171**	**0.177**	*0.188*	*0.196*	**3.5**	*6.2*	*4.3*
Geothermal, Solar and Wind Energy [b]	**0.258**	**0.280**	*0.289*	*0.294*	**8.5**	*3.2*	*1.7*
Biofuels [c]	**0.601**	**0.638**	*0.651*	*0.655*	**6.2**	*2.0*	*0.6*
Total	**1.030**	**1.095**	*1.128*	*1.145*	**6.3**	*3.0*	*1.5*
Total Power Generation	**4.593**	**4.760**	*4.456*	*4.195*	**3.6**	*-6.4*	*-5.9*
Other Sectors							
Residential and Commercial [d]	**0.722**	**0.553**	*0.568*	*0.574*	**-23.4**	*2.7*	*1.1*
Industrial [e]	**1.603**	**1.498**	*1.515*	*1.542*	**-6.6**	*1.1*	*1.8*
Transportation [f]	**0.074**	**0.097**	*0.094*	*0.095*	**31.1**	*-3.1*	*1.1*
Total	**2.399**	**2.148**	*2.177*	*2.211*	**-10.5**	*1.4*	*1.6*
Net Imported Electricity [g]	**0.305**	**0.297**	*0.287*	*0.293*	**-2.6**	*-3.4*	*2.1*
Total Renewable Energy Demand	**7.297**	**7.205**	*6.920*	*6.698*	**-1.3**	*-4.0*	*-3.2*

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

[e] Consists primarily of biofuels for use other than in electricity cogeneration.

[f] Ethanol blended into gasoline.

[g] 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														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Real Gross Domestic Product (GDP)															
(billion chained 1992 dollars)	**5324**	**5488**	**5649**	**5865**	**6062**	**6136**	**6079**	**6244**	**6390**	**6611**	**6742**	**6928**	**7191**	*7426*	*7581*
Imported Crude Oil Price [a]															
(nominal dollars per barrel)	**26.99**	**14.00**	**18.13**	**14.57**	**18.08**	**21.75**	**18.70**	**18.20**	**16.14**	**15.52**	**17.14**	**20.61**	**18.57**	*12.61*	*13.65*
Petroleum Supply															
Crude Oil Production [b]															
(million barrels per day)	**8.97**	**8.68**	**8.35**	**8.14**	**7.61**	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	**6.56**	**6.46**	**6.45**	*6.42*	*6.37*
Total Petroleum Net Imports (including SPR)															
(million barrels per day)	**4.29**	**5.44**	**5.91**	**6.59**	**7.20**	**7.16**	**6.63**	**6.94**	**7.62**	**8.05**	**7.89**	**8.50**	**9.16**	*9.20*	*9.37*
Energy Demand															
World Petroleum															
(million barrels per day)	**60.1**	**61.8**	**63.1**	**64.9**	**65.9**	**66.0**	**66.6**	**66.8**	**67.0**	**68.3**	**69.9**	**71.5**	**73.2**	*74.4*	*76.3*
U.S. Petroleum															
(million barrels per day)	**15.78**	**16.33**	**16.72**	**17.34**	**17.37**	**17.04**	**16.77**	**17.10**	**17.24**	**17.72**	**17.72**	**18.31**	**18.62**	*18.82*	*19.15*
Natural Gas															
(trillion cubic feet)	**17.28**	**16.22**	**17.21**	**18.03**	**18.80**	**18.72**	**19.03**	**19.54**	**20.28**	**20.71**	**21.58**	**21.96**	**21.99**	*21.73*	*22.84*
Coal															
(million short tons)	**810**	**797**	**830**	**877**	**891**	**897**	**898**	**907**	**944**	**951**	**962**	**1006**	**1030**	*1048*	*1083*
Electricity (billion kilowatthours)															
Utility Sales [c]	**2324**	**2369**	**2457**	**2578**	**2647**	**2713**	**2762**	**2763**	**2861**	**2935**	**3013**	**3098**	**3115**	*3187*	*3250*
Nonutility Own Use [d]	**NA**	**NA**	**NA**	**NA**	**108**	**113**	**122**	**132**	**138**	**150**	**158**	**164**	**169**	*173*	*178*
Total	**2324**	**2369**	**2457**	**2578**	**2755**	**2826**	**2884**	**2895**	**3000**	**3085**	**3171**	**3262**	**3283**	*3360*	*3428*
Total Energy Demand [e]															
(quadrillion Btu)	**NA**	**NA**	**NA**	**NA**	**NA**	**84.1**	**84.0**	**85.6**	**87.4**	**89.3**	**90.9**	**93.9**	**94.4**	*94.7*	*97.3*
Total Energy Demand per Dollar of GDP															
(thousand Btu per 1992 Dollar)	**NA**	**NA**	**NA**	**NA**	**NA**	**13.71**	**13.82**	**13.70**	**13.67**	**13.50**	**13.48**	**13.55**	**13.13**	*12.75*	*12.83*

[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 1997 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 CONTROL0398.

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

	Year														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Macroeconomic															
Real Gross Domestic Product (billion chained 1992 dollars)	**5324**	**5488**	**5649**	**5865**	**6062**	**6136**	**6079**	**6244**	**6390**	**6611**	**6742**	**6928**	**7191**	*7426*	*7581*
GDP Implicit Price Deflator (Index, 1992=1.000)	**0.786**	**0.806**	**0.831**	**0.861**	**0.897**	**0.936**	**0.973**	**1.000**	**1.026**	**1.051**	**1.078**	**1.102**	**1.125**	*1.141*	*1.162*
Real Disposable Personal Income (billion chained 1992 Dollars)	**3972**	**4101**	**4168**	**4332**	**4417**	**4498**	**4500**	**4627**	**4704**	**4805**	**4964**	**5077**	**5222**	*5401*	*5543*
Manufacturing Production (Index, 1987=1.000)	**0.857**	**0.881**	**0.928**	**0.971**	**0.990**	**0.985**	**0.962**	**1.000**	**1.038**	**1.100**	**1.160**	**1.202**	**1.269**	*1.321*	*1.357*
Real Fixed Investment (billion chained 1992 dollars)	**799**	**805**	**799**	**818**	**832**	**806**	**741**	**783**	**843**	**916**	**962**	**1042**	**1122**	*1229*	*1284*
Real Exchange Rate (Index, 1990=1.000)	**NA**	**NA**	**NA**	**NA**	**NA**	**1.000**	**1.006**	**1.012**	**1.056**	**1.033**	**0.960**	**1.015**	**1.101**	*1.136*	*1.085*
Business Inventory Change (billion chained 1992 dollars)	**-4.5**	**-4.2**	**5.1**	**9.5**	**19.2**	**6.6**	**-6.1**	**-9.2**	**6.1**	**11.1**	**7.8**	**9.9**	**22.2**	*18.0*	*0.7*
Producer Price Index (index, 1982=1.000)	**1.032**	**1.002**	**1.028**	**1.069**	**1.122**	**1.163**	**1.165**	**1.172**	**1.189**	**1.205**	**1.248**	**1.277**	**1.275**	*1.255*	*1.269*
Consumer Price Index (index, 1982-1984=1.000)	**1.076**	**1.097**	**1.137**	**1.184**	**1.240**	**1.308**	**1.363**	**1.404**	**1.446**	**1.483**	**1.525**	**1.570**	**1.606**	*1.632*	*1.673*
Petroleum Product Price Index (index, 1982=1.000)	**0.832**	**0.532**	**0.568**	**0.539**	**0.612**	**0.748**	**0.671**	**0.647**	**0.620**	**0.591**	**0.608**	**0.701**	**0.680**	*0.520*	*0.543*
Non-Farm Employment (millions)	**97.4**	**99.3**	**102.0**	**105.2**	**107.9**	**109.4**	**108.3**	**108.6**	**110.7**	**114.1**	**117.2**	**119.5**	**122.3**	*125.3*	*127.4*
Commercial Employment (millions)	**60.8**	**62.9**	**65.2**	**67.8**	**70.0**	**71.3**	**70.8**	**71.2**	**73.2**	**76.1**	**78.8**	**81.0**	**83.5**	*86.3*	*88.3*
Total Industrial Production (index, 1987=1.000)	**0.880**	**0.890**	**0.931**	**0.973**	**0.990**	**0.989**	**0.969**	**1.000**	**1.035**	**1.092**	**1.145**	**1.185**	**1.244**	*1.289*	*1.323*
Housing Stock (millions)	**96.3**	**98.0**	**99.8**	**101.6**	**102.9**	**103.5**	**104.5**	**105.5**	**106.8**	**108.2**	**109.8**	**111.2**	**112.7**	*113.4*	*114.5*
Weather [a]															
Heating Degree-Days															
U.S.	**4642**	**4295**	**4334**	**4653**	**4726**	**4016**	**4200**	**4441**	**4700**	**4483**	**4531**	**4713**	**4551**	*4217*	*4576*
New England	**6571**	**6517**	**6546**	**6715**	**6887**	**5848**	**5960**	**6844**	**6728**	**6672**	**6559**	**6679**	**6645**	*6113*	*6621*
Middle Atlantic	**5660**	**5665**	**5699**	**6088**	**6134**	**4998**	**5177**	**5964**	**5948**	**5934**	**5831**	**5986**	**5816**	*5224*	*5839*
U.S. Gas-Weighted	**4856**	**4442**	**4391**	**4779**	**4856**	**4139**	**4337**	**4458**	**4754**	**4659**	**4707**	**5040**	**4886**	*4398*	*4732*
Cooling Degree-Days (U.S.)	**1194**	**1249**	**1269**	**1283**	**1156**	**1260**	**1331**	**1040**	**1218**	**1220**	**1293**	**1180**	**1155**	*1249*	*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 CONTROL0698.

Table A3. Annual International Petroleum Supply and Demand Balance

(Millions Barrels per Day, Except OECD Commercial Stocks)

	Year														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Demand [a]															
OECD															
U.S. (50 States)	**15.8**	**16.3**	**16.7**	**17.3**	**17.4**	**17.0**	**16.8**	**17.1**	**17.2**	**17.7**	**17.7**	**18.3**	**18.6**	*18.8*	*19.2*
Europe [b]	**11.7**	**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*
Japan	**4.4**	**4.4**	**4.5**	**4.8**	**5.0**	**5.1**	**5.3**	**5.4**	**5.4**	**5.7**	**5.7**	**5.9**	**5.7**	*5.6*	*5.6*
Other OECD	**2.5**	**2.5**	**2.5**	**2.6**	**2.7**	**2.7**	**2.7**	**2.7**	**2.8**	**2.9**	**3.0**	**3.0**	**3.0**	*3.1*	*3.2*
Total OECD	**34.3**	**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*
Non-OECD															
Former Soviet Union	**9.0**	**9.0**	**9.0**	**8.9**	**8.7**	**8.4**	**8.3**	**6.8**	**5.6**	**4.8**	**4.6**	**4.4**	**4.4**	*4.6*	*4.8*
Europe	**2.2**	**2.2**	**2.2**	**2.2**	**2.1**	**1.9**	**1.4**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	**1.4**	*1.5*	*1.5*
China	**1.9**	**2.0**	**2.1**	**2.3**	**2.4**	**2.3**	**2.5**	**2.7**	**3.0**	**3.1**	**3.3**	**3.5**	**3.9**	*4.1*	*4.4*
Other Asia	**3.6**	**3.8**	**4.1**	**4.4**	**4.9**	**5.3**	**5.7**	**6.2**	**6.8**	**7.3**	**7.9**	**8.3**	**8.8**	*8.7*	*8.8*
Other Non-OECD	**9.1**	**9.5**	**9.7**	**10.0**	**10.3**	**10.5**	**10.6**	**11.0**	**11.4**	**11.8**	**12.2**	**12.5**	**13.0**	*13.4*	*13.8*
Total Non-OECD	**25.8**	**26.5**	**27.1**	**27.7**	**28.3**	**28.5**	**28.5**	**28.0**	**28.1**	**28.4**	**29.4**	**30.1**	**31.4**	*32.2*	*33.4*
Total World Demand	**60.1**	**61.8**	**63.1**	**64.9**	**66.0**	**66.0**	**66.6**	**66.8**	**67.0**	**68.3**	**69.9**	**71.5**	**73.2**	*74.4*	*76.3*
Supply [c]															
OECD															
U.S. (50 States)	**11.2**	**11.0**	**10.7**	**10.5**	**9.9**	**9.7**	**9.9**	**9.8**	**9.6**	**9.4**	**9.4**	**9.4**	**9.5**	*9.4*	*9.4*
Canada	**1.8**	**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*	*2.8*
North Sea [d]	**3.6**	**3.8**	**3.8**	**3.8**	**3.7**	**3.9**	**4.1**	**4.5**	**4.8**	**5.5**	**5.9**	**6.3**	**6.2**	*6.4*	*6.9*
Other OECD	**1.4**	**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*	*1.7*
Total OECD	**18.1**	**17.9**	**17.9**	**17.8**	**17.1**	**17.1**	**17.5**	**17.9**	**18.0**	**18.7**	**19.2**	**19.7**	**19.9**	*20.1*	*20.7*
Non-OECD															
OPEC	**17.2**	**19.3**	**19.6**	**21.5**	**23.3**	**24.5**	**24.6**	**25.8**	**26.6**	**27.0**	**27.6**	**28.3**	**29.9**	*30.2*	*30.1*
Former Soviet Union	**11.9**	**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*
China	**2.5**	**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*	*3.3*
Mexico	**3.0**	**2.8**	**2.9**	**2.9**	**2.9**	**3.0**	**3.2**	**3.2**	**3.2**	**3.2**	**3.1**	**3.3**	**3.4**	*3.5*	*3.5*
Other Non-OECD	**6.6**	**11.0**	**6.9**	**7.3**	**7.7**	**8.0**	**8.1**	**8.4**	**8.7**	**9.2**	**9.9**	**10.2**	**10.4**	*10.7*	*11.3*
Total Non-OECD	**41.2**	**43.9**	**44.6**	**47.0**	**48.9**	**49.7**	**49.1**	**49.1**	**49.4**	**49.6**	**50.7**	**52.0**	**54.1**	*54.7*	*55.5*
Total World Supply	**59.3**	**61.8**	**62.5**	**64.8**	**65.9**	**66.8**	**66.7**	**67.0**	**67.4**	**68.3**	**69.9**	**71.8**	**74.0**	*74.9*	*76.2*
Total Stock Withdrawals	**0.8**	**0.0**	**0.6**	**0.1**	**0.0**	**-0.8**	**-0.1**	**-0.2**	**-0.3**	**0.1**	**0.1**	**-0.2**	**-0.8**	*-0.4*	*0.1*
OECD Comm. Stocks, End (bill. bbls.)	**2.6**	**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*
Net Exports from Former Soviet Union	**3.0**	**3.4**	**3.5**	**3.6**	**3.4**	**3.0**	**2.1**	**2.1**	**2.3**	**2.4**	**2.5**	**2.7**	**2.7**	*2.6*	*2.5*

[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. Mexico is also a member but OECD data do not yet include Mexico.

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														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Imported Crude Oil [a]															
(dollars per barrel)	**26.99**	**14.00**	**18.13**	**14.57**	**18.08**	**21.75**	**18.70**	**18.20**	**16.14**	**15.52**	**17.14**	**20.61**	**18.57**	*12.61*	*13.65*
Natural Gas Wellhead															
(dollars per thousand cubic feet)	**2.51**	**1.94**	**1.66**	**1.69**	**1.69**	**1.71**	**1.64**	**1.74**	**2.04**	**1.85**	**1.55**	**2.16**	**2.23**	*2.02*	*2.19*
Petroleum Products															
Gasoline Retail [b] (dollars per gallon)															
All Grades	**1.15**	**0.88**	**0.91**	**0.92**	**1.02**	**1.17**	**1.15**	**1.14**	**1.13**	**1.13**	**1.16**	**1.25**	**1.24**	*1.09*	*1.13*
Reguler Unleaded	**1.17**	**0.88**	**0.91**	**0.91**	**0.99**	**1.13**	**1.10**	**1.09**	**1.07**	**1.08**	**1.11**	**1.20**	**1.20**	*1.04*	*1.06*
No. 2 Diesel Oil, Retail															
(dollars per gallon)	**1.16**	**0.88**	**0.93**	**0.91**	**0.99**	**1.16**	**1.12**	**1.10**	**1.11**	**1.11**	**1.11**	**1.23**	**1.19**	*1.06*	*1.08*
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	**0.78**	**0.49**	**0.53**	**0.47**	**0.56**	**0.70**	**0.62**	**0.58**	**0.54**	**0.51**	**0.51**	**0.64**	**0.59**	*0.46*	*0.50*
No. 2 Heating Oil, Retail															
(dollars per gallon)	**1.05**	**0.84**	**0.80**	**0.81**	**0.90**	**1.06**	**1.02**	**0.93**	**0.91**	**0.89**	**0.87**	**0.99**	**0.99**	*0.86*	*0.89*
No. 6 Residual Fuel Oil, Retail [c]															
(dollars per barrel)	**25.57**	**14.46**	**17.76**	**14.04**	**16.20**	**18.66**	**14.32**	**14.21**	**14.00**	**14.79**	**16.49**	**18.97**	**17.80**	*13.07*	*13.69*
Electric Utility Fuels															
Coal															
(dollars per million Btu)	**1.65**	**1.58**	**1.51**	**1.47**	**1.44**	**1.45**	**1.45**	**1.41**	**1.38**	**1.36**	**1.32**	**1.29**	**1.27**	*1.26*	*1.24*
Heavy Fuel Oil [d]															
(dollars per million Btu)	**4.26**	**2.40**	**2.98**	**2.41**	**2.85**	**3.22**	**2.49**	**2.46**	**2.36**	**2.40**	**2.60**	**3.01**	**2.79**	*2.11*	*2.22*
Natural Gas															
(dollars per million Btu)	**3.43**	**2.35**	**2.24**	**2.26**	**2.36**	**2.32**	**2.15**	**2.33**	**2.56**	**2.23**	**1.98**	**2.64**	**2.76**	*2.54*	*2.69*
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	**6.12**	**5.83**	**5.55**	**5.47**	**5.64**	**5.80**	**5.82**	**5.89**	**6.17**	**6.41**	**6.06**	**6.35**	**6.93**	*6.60*	*6.85*
Electricity															
(cents per kilowatthour)	**7.8**	**7.4**	**7.4**	**7.5**	**7.6**	**7.8**	**8.1**	**8.2**	**8.3**	**8.4**	**8.4**	**8.4**	**8.5**	*8.4*	*8.3*

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

[b] Average self-service cash prices.

[c] Average for all sulfur contents.

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

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

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

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

(Million Barrels per Day, Except Closing Stocks)

	Year														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Supply															
Crude Oil Supply															
Domestic Production [a]	**8.97**	**8.68**	**8.35**	**8.14**	**7.61**	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	**6.56**	**6.46**	**6.45**	*6.42*	*6.37*
Alaska	**1.83**	**1.87**	**1.96**	**2.02**	**1.87**	**1.77**	**1.80**	**1.71**	**1.58**	**1.56**	**1.48**	**1.39**	**1.30**	*1.19*	*1.19*
Lower 48	**7.15**	**6.81**	**6.39**	**6.12**	**5.74**	**5.58**	**5.62**	**5.46**	**5.26**	**5.10**	**5.08**	**5.07**	**5.16**	*5.22*	*5.18*
Net Imports (including SPR) [b]	**3.00**	**4.02**	**4.52**	**4.95**	**5.70**	**5.79**	**5.67**	**5.99**	**6.69**	**6.96**	**7.14**	**7.40**	**8.12**	*8.27*	*8.24*
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**	*0.00*	*0.00*
Stock Draw (Including SPR)	**-0.05**	**-0.08**	**-0.12**	**0.00**	**-0.09**	**0.02**	**-0.01**	**0.01**	**-0.06**	**-0.02**	**0.09**	**0.05**	**-0.06**	*-0.06*	*0.02*
Product Supplied and Losses	**-0.06**	**-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*	*-0.01*
Unaccounted-for Crude Oil	**0.15**	**0.14**	**0.14**	**0.20**	**0.20**	**0.26**	**0.20**	**0.26**	**0.17**	**0.27**	**0.19**	**0.22**	**0.14**	*0.28*	*0.28*
Total Crude Oil Supply	**12.00**	**12.72**	**12.85**	**13.25**	**13.40**	**13.41**	**13.30**	**13.41**	**13.61**	**13.87**	**13.97**	**14.19**	**14.66**	*14.91*	*14.91*
Other Supply															
NGL Production	**1.61**	**1.55**	**1.59**	**1.62**	**1.55**	**1.56**	**1.66**	**1.70**	**1.74**	**1.73**	**1.76**	**1.83**	**1.82**	*1.84*	*1.84*
Other Hydrocarbon and Alcohol Inputs	**0.11**	**0.11**	**0.12**	**0.11**	**0.11**	**0.13**	**0.15**	**0.20**	**0.25**	**0.26**	**0.30**	**0.31**	**0.34**	*0.34*	*0.35*
Crude Oil Product Supplied	**0.06**	**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*	*0.01*
Processing Gain	**0.56**	**0.62**	**0.64**	**0.66**	**0.66**	**0.70**	**0.71**	**0.77**	**0.76**	**0.77**	**0.77**	**0.84**	**0.85**	*0.84*	*0.84*
Net Product Imports [c]	**1.29**	**1.41**	**1.39**	**1.63**	**1.50**	**1.38**	**0.96**	**0.94**	**0.93**	**1.09**	**0.75**	**1.10**	**1.04**	*0.93*	*1.13*
Product Stock Withdrawn	**0.15**	**-0.12**	**0.09**	**0.03**	**0.13**	**-0.14**	**-0.04**	**0.06**	**-0.05**	**0.00**	**0.15**	**0.03**	**-0.09**	*-0.04*	*0.06*
Total Supply	**15.78**	**16.33**	**16.72**	**17.33**	**17.37**	**17.05**	**16.76**	**17.10**	**17.25**	**17.72**	**17.72**	**18.31**	**18.62**	*18.82*	*19.15*
Demand															
Motor Gasoline [d]	**6.78**	**6.94**	**7.19**	**7.36**	**7.40**	**7.31**	**7.23**	**7.38**	**7.48**	**7.60**	**7.79**	**7.89**	**8.02**	*8.15*	*8.28*
Jet Fuel	**1.22**	**1.31**	**1.38**	**1.45**	**1.49**	**1.52**	**1.47**	**1.45**	**1.47**	**1.53**	**1.51**	**1.58**	**1.60**	*1.61*	*1.63*
Distillate Fuel Oil	**2.87**	**2.91**	**2.98**	**3.12**	**3.16**	**3.02**	**2.92**	**2.98**	**3.04**	**3.16**	**3.21**	**3.37**	**3.44**	*3.50*	*3.60*
Residual Fuel Oil	**1.20**	**1.42**	**1.26**	**1.38**	**1.37**	**1.23**	**1.16**	**1.09**	**1.08**	**1.02**	**0.85**	**0.85**	**0.80**	*0.84*	*0.86*
Other Oils [e]	**3.71**	**3.75**	**3.90**	**4.03**	**3.95**	**3.95**	**3.99**	**4.20**	**4.17**	**4.41**	**4.36**	**4.63**	**4.77**	*4.72*	*4.77*
Total Demand	**15.78**	**16.33**	**16.72**	**17.34**	**17.37**	**17.04**	**16.77**	**17.10**	**17.24**	**17.72**	**17.72**	**18.31**	**18.62**	*18.82*	*19.15*
Total Petroleum Net Imports	**4.29**	**5.44**	**5.91**	**6.59**	**7.20**	**7.16**	**6.63**	**6.94**	**7.62**	**8.05**	**7.89**	**8.50**	**9.16**	*9.20*	*9.37*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**321**	**331**	**349**	**330**	**341**	**323**	**325**	**318**	**335**	**337**	**303**	**284**	**305**	*326*	*318*
Total Motor Gasoline	**223**	**233**	**226**	**228**	**213**	**220**	**219**	**216**	**226**	**215**	**202**	**195**	**210**	*209*	*202*
Jet Fuel	**40**	**50**	**50**	**44**	**41**	**52**	**49**	**43**	**40**	**47**	**40**	**40**	**44**	*41*	*45*
Distillate Fuel Oil	**144**	**155**	**134**	**124**	**106**	**132**	**144**	**141**	**141**	**145**	**130**	**127**	**138**	*140*	*132*
Residual Fuel Oil	**50**	**47**	**47**	**45**	**44**	**49**	**50**	**43**	**44**	**42**	**37**	**46**	**40**	*42*	*42*
Other Oils [f]	**247**	**265**	**260**	**267**	**257**	**261**	**267**	**263**	**273**	**275**	**258**	**250**	**259**	*272*	*262*

[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														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Supply															
Total Dry Gas Production	**16.45**	**16.06**	**16.62**	**17.10**	**17.31**	**17.81**	**17.70**	**17.84**	**18.10**	**18.82**	**18.60**	**18.79**	**18.93**	*19.16*	*19.39*
Net Imports	**0.89**	**0.69**	**0.94**	**1.22**	**1.27**	**1.45**	**1.64**	**1.92**	**2.21**	**2.46**	**2.69**	**2.78**	**2.83**	*2.94*	*3.14*
Supplemental Gaseous Fuels	**0.13**	**0.11**	**0.10**	**0.10**	**0.11**	**0.12**	**0.11**	**0.12**	**0.12**	**0.11**	**0.11**	**0.11**	**0.12**	*0.12*	*0.13*
Total New Supply	**17.47**	**16.86**	**17.66**	**18.42**	**18.69**	**19.38**	**19.45**	**19.88**	**20.42**	**21.39**	**21.40**	**21.69**	**21.88**	*22.23*	*22.66*
Total Underground Storage															
Opening	**6.71**	**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*	*6.74*
Closing	**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**	*6.74*	*6.52*
Net Withdrawals	**0.26**	**-0.12**	**0.02**	**-0.10**	**0.33**	**-0.61**	**0.16**	**0.14**	**-0.01**	**-0.32**	**0.46**	**-0.01**	**-0.01**	*-0.22*	*0.22*
Total Supply	**17.73**	**16.74**	**17.68**	**18.32**	**19.02**	**18.77**	**19.61**	**20.02**	**20.42**	**21.08**	**21.86**	**21.68**	**21.88**	*22.01*	*22.88*
Balancing Item [a]	**-0.45**	**-0.52**	**-0.47**	**-0.29**	**-0.22**	**-0.05**	**-0.58**	**-0.47**	**-0.14**	**-0.37**	**-0.28**	**0.29**	**0.11**	*-0.28*	*-0.05*
Total Primary Supply	**17.28**	**16.22**	**17.21**	**18.03**	**18.80**	**18.72**	**19.03**	**19.54**	**20.28**	**20.71**	**21.58**	**21.96**	**21.99**	*21.73*	*22.84*
Demand															
Lease and Plant Fuel	**0.97**	**0.92**	**1.15**	**1.10**	**1.07**	**1.24**	**1.13**	**1.17**	**1.17**	**1.12**	**1.22**	**1.25**	**1.25**	*1.26*	*1.27*
Pipeline Use	**0.50**	**0.49**	**0.52**	**0.61**	**0.63**	**0.66**	**0.60**	**0.59**	**0.62**	**0.69**	**0.70**	**0.71**	**0.71**	*0.71*	*0.72*
Residential	**4.43**	**4.31**	**4.31**	**4.63**	**4.78**	**4.39**	**4.56**	**4.69**	**4.96**	**4.85**	**4.85**	**5.24**	**5.01**	*4.73*	*5.13*
Commercial	**2.43**	**2.32**	**2.43**	**2.67**	**2.72**	**2.62**	**2.73**	**2.80**	**2.86**	**2.90**	**3.03**	**3.16**	**3.29**	*3.16*	*3.46*
Industrial (Incl. Nonutilities)	**5.90**	**5.58**	**5.95**	**6.38**	**6.82**	**7.02**	**7.23**	**7.53**	**7.98**	**8.17**	**8.58**	**8.87**	**8.76**	*8.80*	*9.10*
Cogenerators [b]	**NA**	**NA**	**NA**	**NA**	**1.12**	**1.30**	**1.41**	**1.67**	**1.80**	**1.98**	**2.18**	**2.27**	**2.31**	*2.41*	*2.49*
Other Nonutil. Gen. [b]	**NA**	**NA**	**NA**	**NA**	**0.06**	**0.09**	**0.16**	**0.18**	**0.22**	**0.17**	**0.17**	**0.16**	**0.18**	*0.19*	*0.20*
Electric Utilities	**3.04**	**2.60**	**2.84**	**2.64**	**2.79**	**2.79**	**2.79**	**2.77**	**2.68**	**2.99**	**3.20**	**2.73**	**2.97**	*3.07*	*3.16*
Total Demand	**17.28**	**16.22**	**17.21**	**18.03**	**18.80**	**18.72**	**19.03**	**19.54**	**20.28**	**20.71**	**21.58**	**21.96**	**21.99**	*21.73*	*22.84*

[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														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Supply															
Production	**883.6**	**890.3**	**918.8**	**950.3**	**980.7**	**1029.1**	**996.0**	**997.5**	**945.4**	**1033.5**	**1033.0**	**1063.9**	**1088.6**	*1112.9*	*1144.4*
Appalachia	**NA**	**NA**	**NA**	**NA**	**464.8**	**489.0**	**457.8**	**456.6**	**409.7**	**445.4**	**434.9**	**451.9**	**464.7**	*464.5*	*469.7*
Interior	**NA**	**NA**	**NA**	**NA**	**198.1**	**205.8**	**195.4**	**195.7**	**167.2**	**179.9**	**168.5**	**172.8**	**172.3**	*168.1*	*166.9*
Western	**NA**	**NA**	**NA**	**NA**	**317.9**	**334.3**	**342.8**	**345.3**	**368.5**	**408.3**	**429.6**	**439.1**	**451.6**	*480.3*	*507.8*
Primary Stock Levels [a]															
Opening	**34.1**	**33.1**	**32.1**	**28.3**	**30.4**	**29.0**	**33.4**	**33.0**	**34.0**	**25.3**	**33.2**	**34.4**	**28.6**	*32.9*	*32.9*
Closing	**33.1**	**32.1**	**28.3**	**30.4**	**29.0**	**33.4**	**33.0**	**34.0**	**25.3**	**33.2**	**34.4**	**28.6**	**32.9**	*32.9*	*33.0*
Net Withdrawals	**1.0**	**1.0**	**3.8**	**-2.1**	**1.4**	**-4.4**	**0.4**	**-1.0**	**8.7**	**-7.9**	**-1.2**	**5.8**	**-4.2**	*-0.1*	*S*
Imports	**2.0**	**2.2**	**1.7**	**2.1**	**2.9**	**2.7**	**3.4**	**3.8**	**7.3**	**7.6**	**7.2**	**7.1**	**7.5**	*7.3*	*7.3*
Exports	**92.7**	**85.5**	**79.6**	**95.0**	**100.8**	**105.8**	**109.0**	**102.5**	**74.5**	**71.4**	**88.5**	**90.5**	**83.5**	*82.2*	*82.8*
Total Net Domestic Supply	**793.9**	**808.0**	**844.7**	**855.3**	**884.2**	**921.6**	**890.9**	**897.8**	**886.9**	**961.8**	**950.4**	**986.3**	**1008.3**	*1037.9*	*1068.9*
Secondary Stock Levels [b]															
Opening	**197.2**	**170.2**	**175.2**	**185.5**	**158.4**	**146.1**	**168.2**	**167.7**	**163.7**	**120.5**	**136.1**	**134.6**	**123.0**	*106.8*	*106.9*
Closing	**170.2**	**175.2**	**185.5**	**158.4**	**146.1**	**168.2**	**167.7**	**163.7**	**120.5**	**136.1**	**134.6**	**123.0**	**106.8**	*106.9*	*103.6*
Net Withdrawals	**27.0**	**-5.0**	**-10.2**	**27.0**	**12.3**	**-22.1**	**0.5**	**4.0**	**43.2**	**-15.7**	**1.5**	**11.7**	**16.1**	*-0.1*	*3.3*
Waste Coal Supplied to IPPsc	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**7.9**	**8.5**	**8.9**	**9.4**	*10.0*	*10.6*
Total Supply	**820.8**	**803.1**	**834.4**	**882.3**	**896.5**	**899.4**	**891.4**	**901.8**	**930.2**	**954.0**	**960.4**	**1006.9**	**1033.9**	*1047.8*	*1082.9*
Demand															
Coke Plants	**41.1**	**35.9**	**37.0**	**41.9**	**40.5**	**38.9**	**33.9**	**32.4**	**31.3**	**31.7**	**33.0**	**31.7**	**29.4**	*28.6*	*29.9*
Electricity Production															
Electric Utilities	**693.8**	**685.1**	**717.9**	**758.4**	**766.9**	**773.5**	**772.3**	**779.9**	**813.5**	**817.3**	**829.0**	**874.7**	**900.4**	*918.4*	*948.9*
Nonutilities (Excl. Cogen.) [d]	**NA**	**NA**	**NA**	**NA**	**0.9**	**1.6**	**10.2**	**14.8**	**17.8**	**20.9**	**21.2**	**22.2**	**23.5**	*25.0*	*26.5*
Retail and General Industry [e]	**75.4**	**75.6**	**75.2**	**76.3**	**82.3**	**83.1**	**81.5**	**80.2**	**81.1**	**81.2**	**78.9**	**76.9**	**76.4**	*76.1*	*77.6*
Total Demand	**810.3**	**796.6**	**830.0**	**876.5**	**890.6**	**897.1**	**897.8**	**907.3**	**943.7**	**951.1**	**962.0**	**1005.6**	**1029.7**	*1048.1*	*1082.8*
Discrepancy [f]	**10.6**	**6.5**	**4.4**	**5.8**	**5.9**	**2.4**	**-6.4**	**-5.4**	**-13.5**	**2.9**	**-1.6**	**1.3**	**4.2**	*-0.3*	*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 8.9 million tons in 1996.

[d] Consumption of coal by IPPs. In 1995, IPP consumption was estimated to be 5.290 million tons per quarter. Quarterly estimates and projections for coal consumption by nonutility generators are based on estimates for annual coal-fired generation at nonutilities, 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). Data for first quarter 1998 are estimates.

[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 Kilowatthours)

	Year														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Supply															
Net Utility Generation															
Coal	**1402.1**	**1385.8**	**1463.8**	**1540.7**	**1553.7**	**1559.6**	**1551.2**	**1575.9**	**1639.2**	**1635.5**	**1652.9**	**1737.5**	**1787.8**	*1823.4*	*1885.3*
Petroleum	**100.2**	**136.6**	**118.5**	**148.9**	**158.3**	**117.0**	**111.5**	**88.9**	**99.5**	**91.0**	**60.8**	**67.3**	**77.8**	*92.9*	*90.7*
Natural Gas	**291.9**	**248.5**	**272.6**	**252.8**	**266.6**	**264.1**	**264.2**	**263.9**	**258.9**	**291.1**	**307.3**	**262.7**	**283.6**	*294.2*	*302.4*
Nuclear	**383.7**	**414.0**	**455.3**	**527.0**	**529.4**	**576.9**	**612.6**	**618.8**	**610.3**	**640.4**	**673.4**	**674.7**	**628.6**	*651.8*	*656.5*
Hydroelectric	**281.1**	**290.8**	**249.7**	**222.9**	**265.1**	**279.9**	**275.5**	**239.6**	**265.1**	**243.7**	**293.7**	**328.0**	**337.2**	*305.7*	*279.7*
Geothermal and Other [a]	**10.7**	**11.5**	**12.3**	**12.0**	**11.3**	**10.7**	**10.1**	**10.2**	**9.6**	**8.9**	**6.4**	**7.2**	**7.5**	*7.1*	*6.8*
Subtotal	**2469.8**	**2487.3**	**2572.1**	**2704.3**	**2784.3**	**2808.2**	**2825.0**	**2797.2**	**2882.5**	**2910.7**	**2994.5**	**3077.4**	**3122.5**	*3175.2*	*3221.4*
Nonutility Generation [b]	**NA**	**NA**	**NA**	**NA**	**191.3**	**221.8**	**253.7**	**296.0**	**325.5**	**354.9**	**374.4**	**382.5**	**409.4**	*426.4*	*437.4*
Total Generation	**NA**	**NA**	**NA**	**NA**	**2975.6**	**3030.0**	**3078.7**	**3093.2**	**3208.1**	**3265.6**	**3369.0**	**3460.0**	**3531.9**	*3601.6*	*3658.9*
Net Imports	**40.9**	**35.9**	**46.3**	**31.8**	**11.0**	**2.0**	**22.3**	**28.3**	**28.4**	**44.6**	**37.6**	**38.0**	**36.6**	*35.3*	*36.0*
Total Supply	**NA**	**NA**	**NA**	**NA**	**2986.6**	**3032.0**	**3101.0**	**3121.6**	**3236.5**	**3310.3**	**3406.6**	**3498.0**	**3568.5**	*3636.9*	*3694.8*
Losses and Unaccounted for [c]	**NA**	**NA**	**NA**	**NA**	**231.4**	**206.1**	**217.1**	**226.6**	**236.9**	**225.5**	**235.4**	**236.2**	**285.0**	*277.2*	*266.9*
Demand															
Electric Utility Sales															
Residential	**793.9**	**819.1**	**850.4**	**892.9**	**905.5**	**924.0**	**955.4**	**935.9**	**994.8**	**1008.5**	**1042.5**	**1082.5**	**1071.6**	*1098.1*	*1127.7*
Commercial	**606.0**	**630.5**	**660.4**	**699.1**	**725.9**	**751.0**	**765.7**	**761.3**	**794.6**	**820.3**	**862.7**	**887.4**	**913.3**	*938.8*	*958.9*
Industrial	**836.8**	**830.5**	**858.2**	**896.5**	**925.7**	**945.5**	**946.6**	**972.7**	**977.2**	**1008.0**	**1012.7**	**1030.4**	**1032.5**	*1050.5*	*1061.5*
Other	**87.3**	**88.6**	**88.2**	**89.6**	**89.8**	**92.0**	**94.3**	**93.4**	**94.9**	**97.8**	**95.4**	**97.5**	**97.5**	*99.1*	*102.1*
Subtotal	**2324.0**	**2368.8**	**2457.3**	**2578.1**	**2646.8**	**2712.6**	**2762.0**	**2763.4**	**2861.5**	**2934.6**	**3013.3**	**3097.8**	**3114.9**	*3186.5*	*3250.2*
Nonutility Own Use [b]	**NA**	**NA**	**NA**	**NA**	**108.4**	**113.4**	**121.9**	**131.6**	**138.1**	**150.2**	**157.9**	**164.0**	**168.6**	*173.1*	*177.7*
Total Demand	**NA**	**NA**	**NA**	**NA**	**2755.2**	**2825.9**	**2883.9**	**2895.0**	**2999.6**	**3084.8**	**3171.2**	**3261.8**	**3283.5**	*3359.6*	*3428.0*
Memo:															
Nonutility Sales															
to Electric Utilities [d]	**26.0**	**39.9**	**50.0**	**68.0**	**83.0**	**108.5**	**131.9**	**164.4**	**187.4**	**204.7**	**216.5**	**218.5**	**240.8**	*253.2*	*259.7*

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

[b] For 1989 to 1991, estimates for nonutility generation are estimates made by the Energy Markets and Contingency Information Division, based on Form EIA-867 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 (Annual Nonutility Power Producer Report).

[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 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.