EIA Energy Information Administration
Short-Term Energy Outlook

December, 1998 *(Released December 7, 1998)*

Highlights

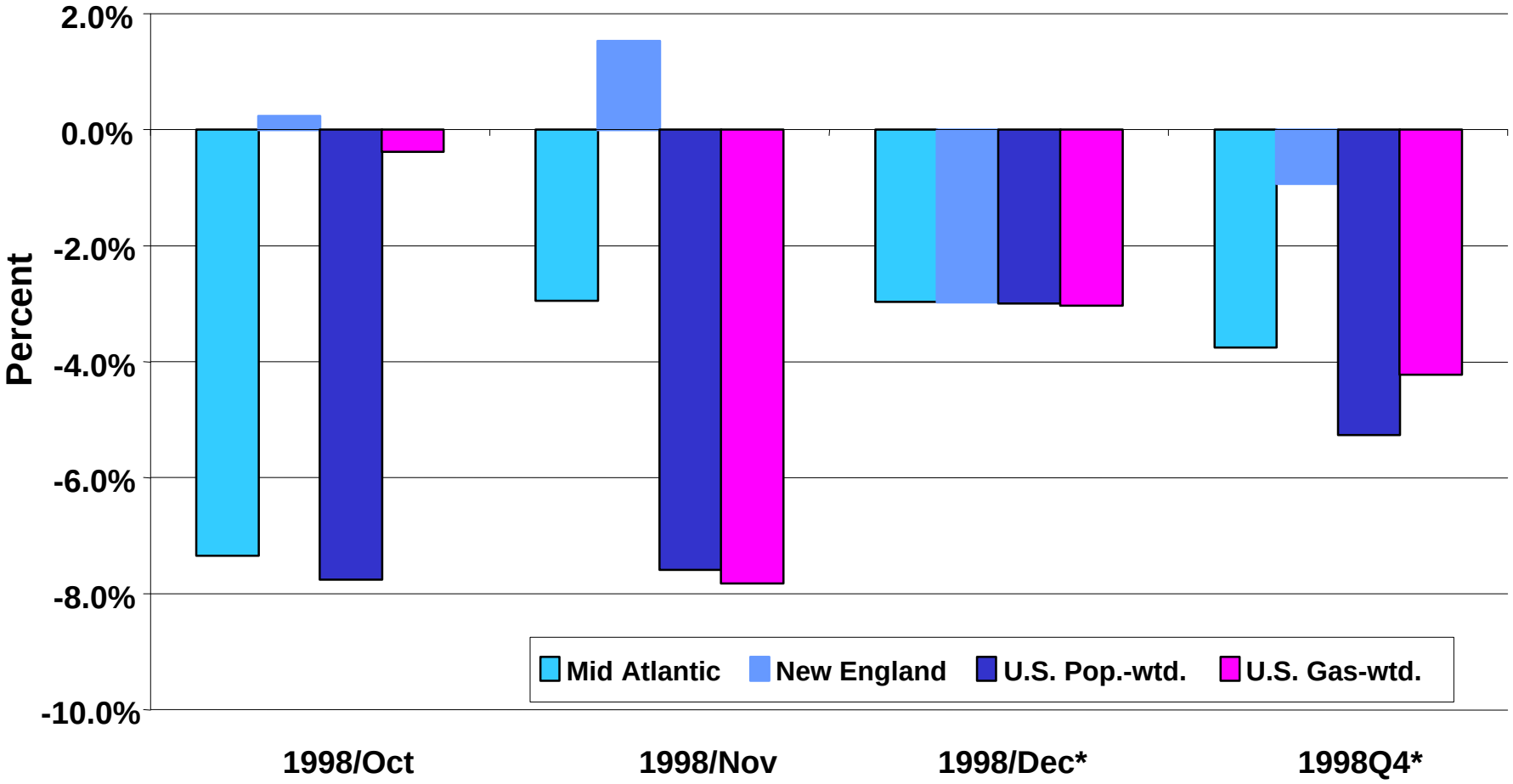
Overview

Several developments in recent weeks have combined to weaken energy demand and prices in the United States. The first two months of what we normally call the "heating season" have been short on one key component - heating demand. Generally speaking, heating degree-days fell below normal across the United States in October and November. Based on early observations and the recent short-range forecast, we expect that below-normal heating demand is likely for December as well (Figure 1). With demand sputtering, heating fuel stocks remain high and prices remain low. This is particularly evident with respect to the U.S. natural gas market. Expectations for wellhead gas prices consistently above $2.00 per thousand cubic feet may have been all but completely erased for the remainder of the heating season (Figure 2). An early-December crash in spot gas prices highlights the crisis in domestic gas markets today (Figure 3). For crude oil prices, prospects for recovery to levels even remotely approaching the averages seen in the 1995-1997 period have dimmed. In addition to a lack of heating fuel demand, lowered expectations of continued strong commitment to production cutbacks by OPEC producers following the latest OPEC Ministerial meeting have prompted us to lower the crude oil price trajectory once again (Figure 4). Relatively little change in the demand and production fundamentals for 1999 has been incorporated in this month's forecast. However, we now estimate that the world-wide rate of oil inventory accumulation will average about 1 million barrels per day in 1998, completing a 3-year run of storage builds totaling about 730 million barrels or well over 9 days of supply based on expected 1999 world consumption rates. This increase in stock levels is expected to be a major force in keeping oil prices from increasing significantly in 1999 (Figure 5) Two months ago we characterized the coming winter as likely to be one in which many consumers saw lower heating bills. Particularly for those consumers using heating oil and propane to heat their homes, the likely windfall has grown significantly since those earlier estimates were made.

World Oil Markets

Prices. The world oil price (defined as the average price U.S. refiners pay for imported crude oil) used in this forecast has been revised downward by between $1.00 - $1.75 per barrel from last month's (November 1998) forecast. This is in large part due to the lack of any production-related agreement at the last OPEC ministerial meeting that was held on November 25-26, 1998. At this meeting, OPEC failed to either extend the current production targets through the end of 1999 (a proposal from Saudi Arabia) or cut production even further (a proposal made by a few countries with Algeria and Kuwait among them). Other than agreeing to a new OPEC President, the only other item OPEC

Figure 1. Heating Degree-Days in Late 1998
(Percent Difference from Normal)



** Assume 3% below-normal HDDs in December*

Sources: History: National Oceanographic and Atmospheric Administration

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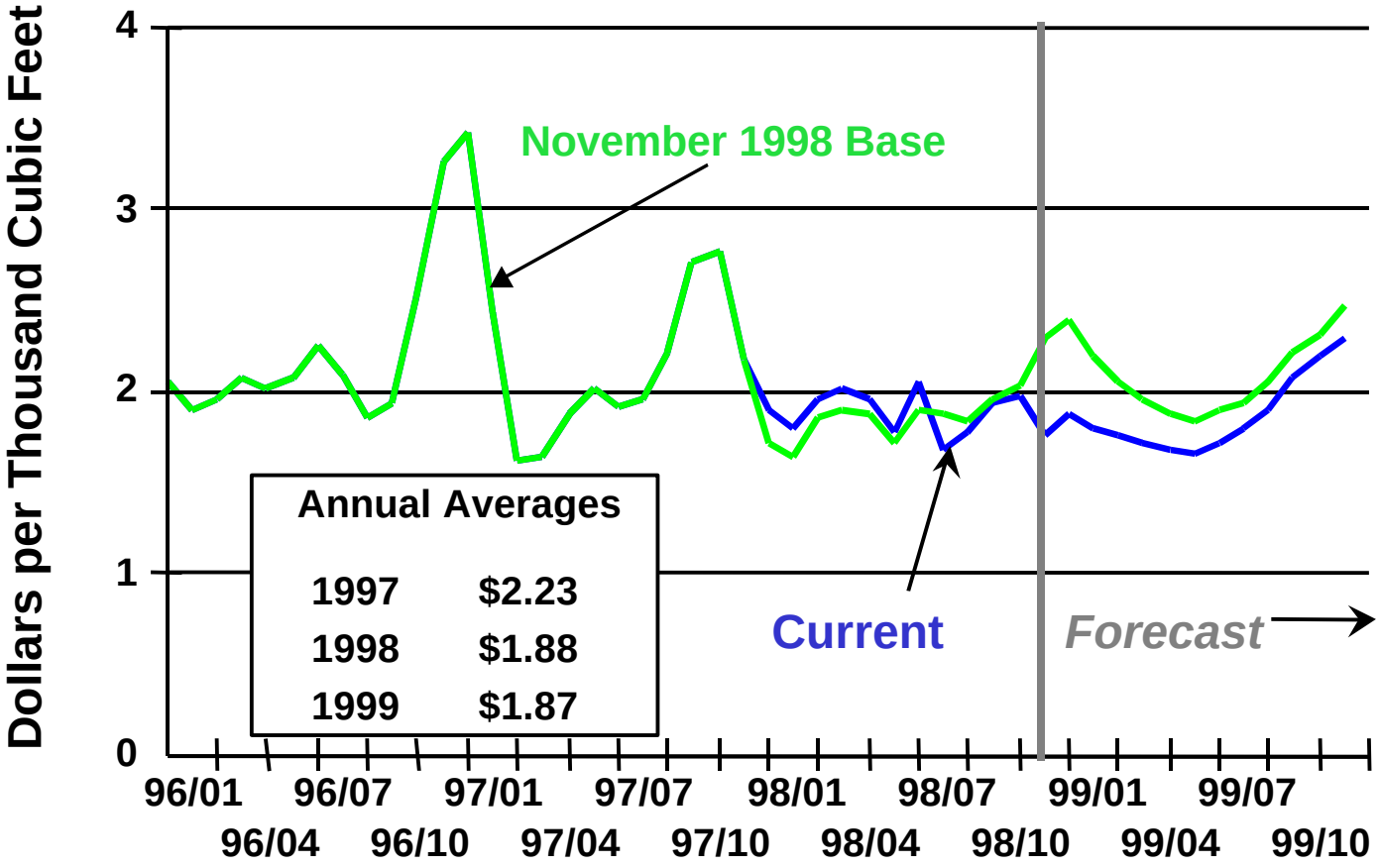
Figure 2. Natural Gas Wellhead Prices

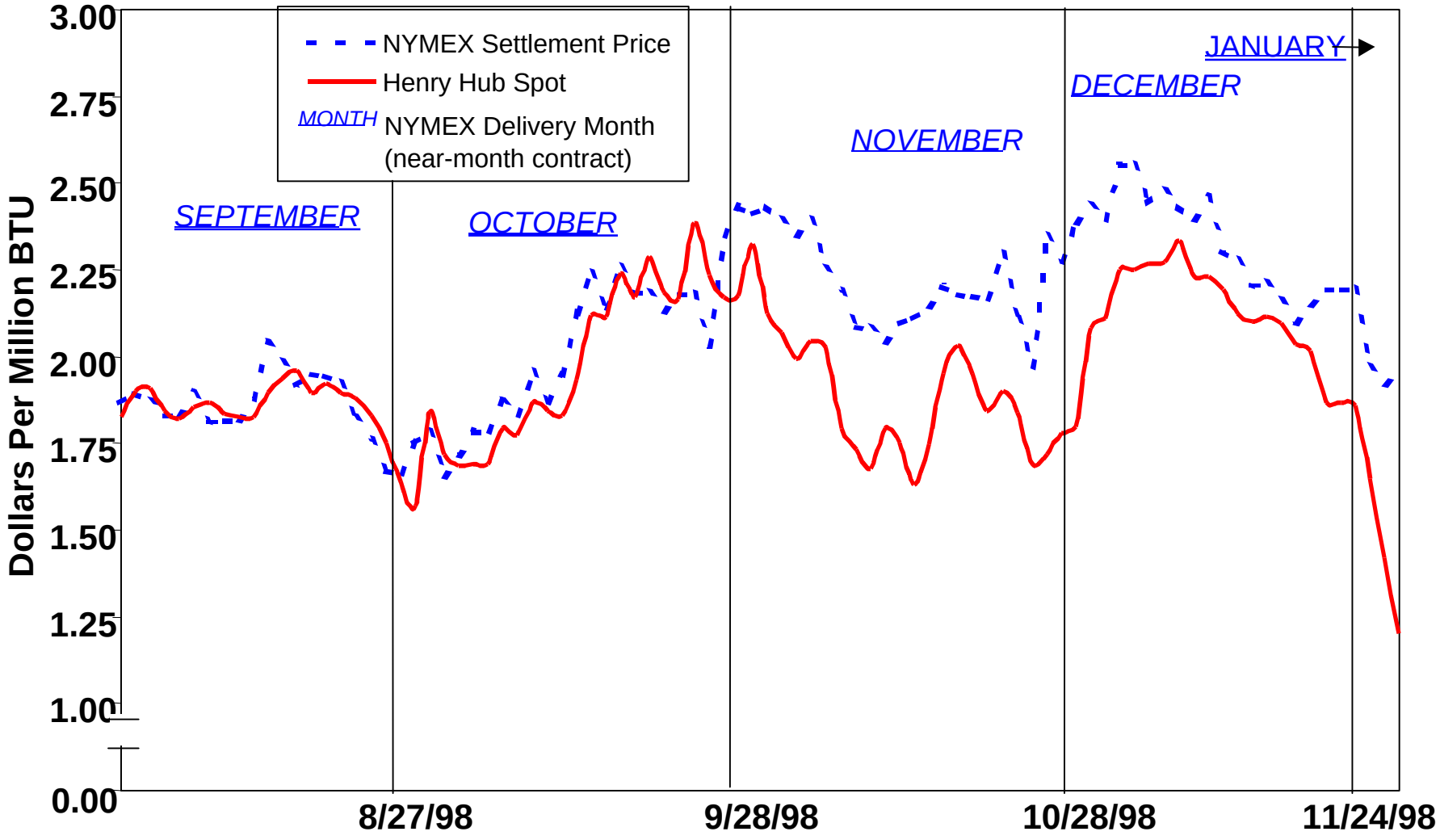
(Current vs Previous Forecast)



Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

Figure 3. Natural Gas Prices:

NYMEX Futures vs Henry Hub Spot

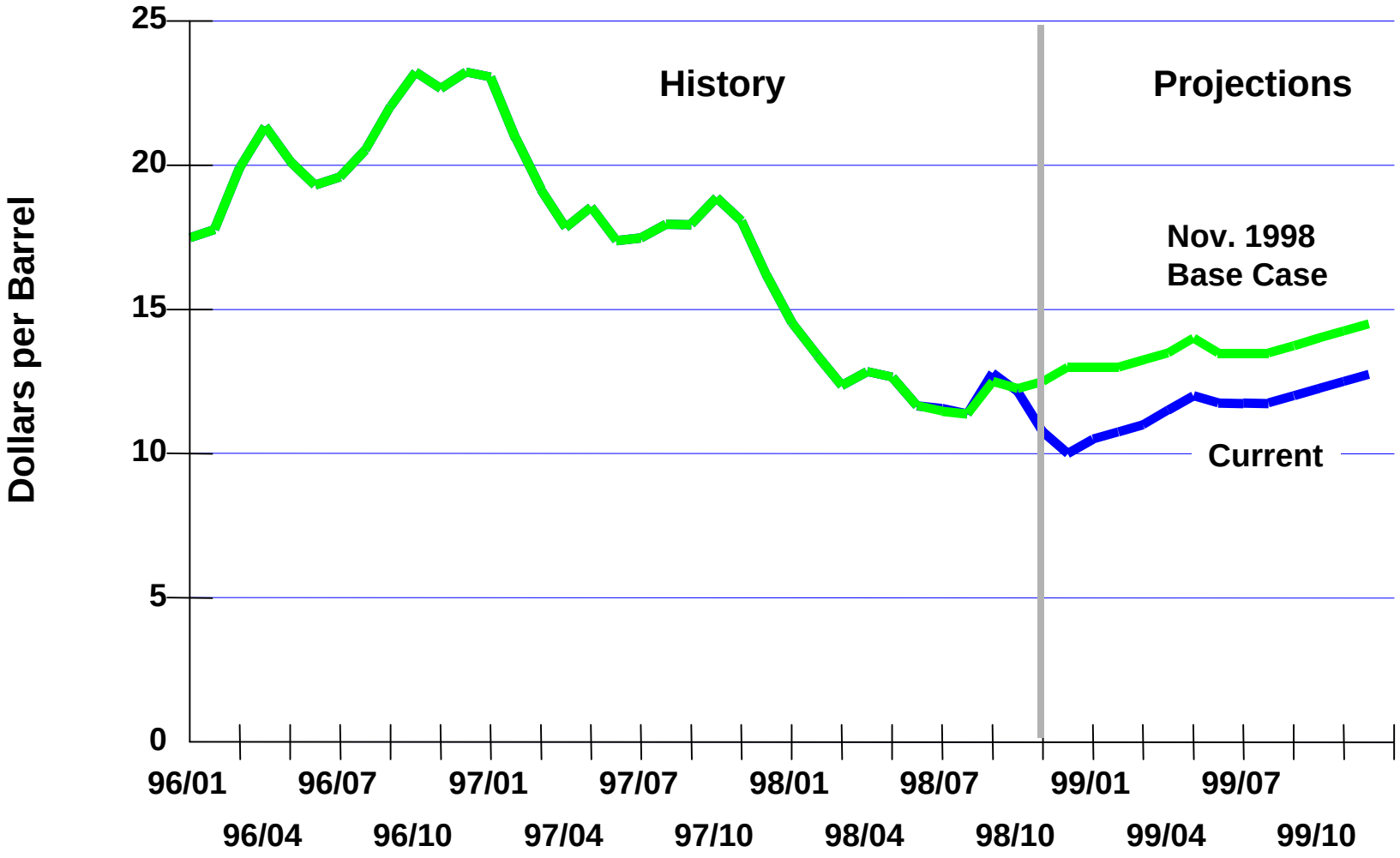


Note: The Henry Hub spot price from the *GAS DAILY* is the midpoint of their high and low price for a day.

The dates marked by vertical lines are the NYMEX near-month contract settlement dates.

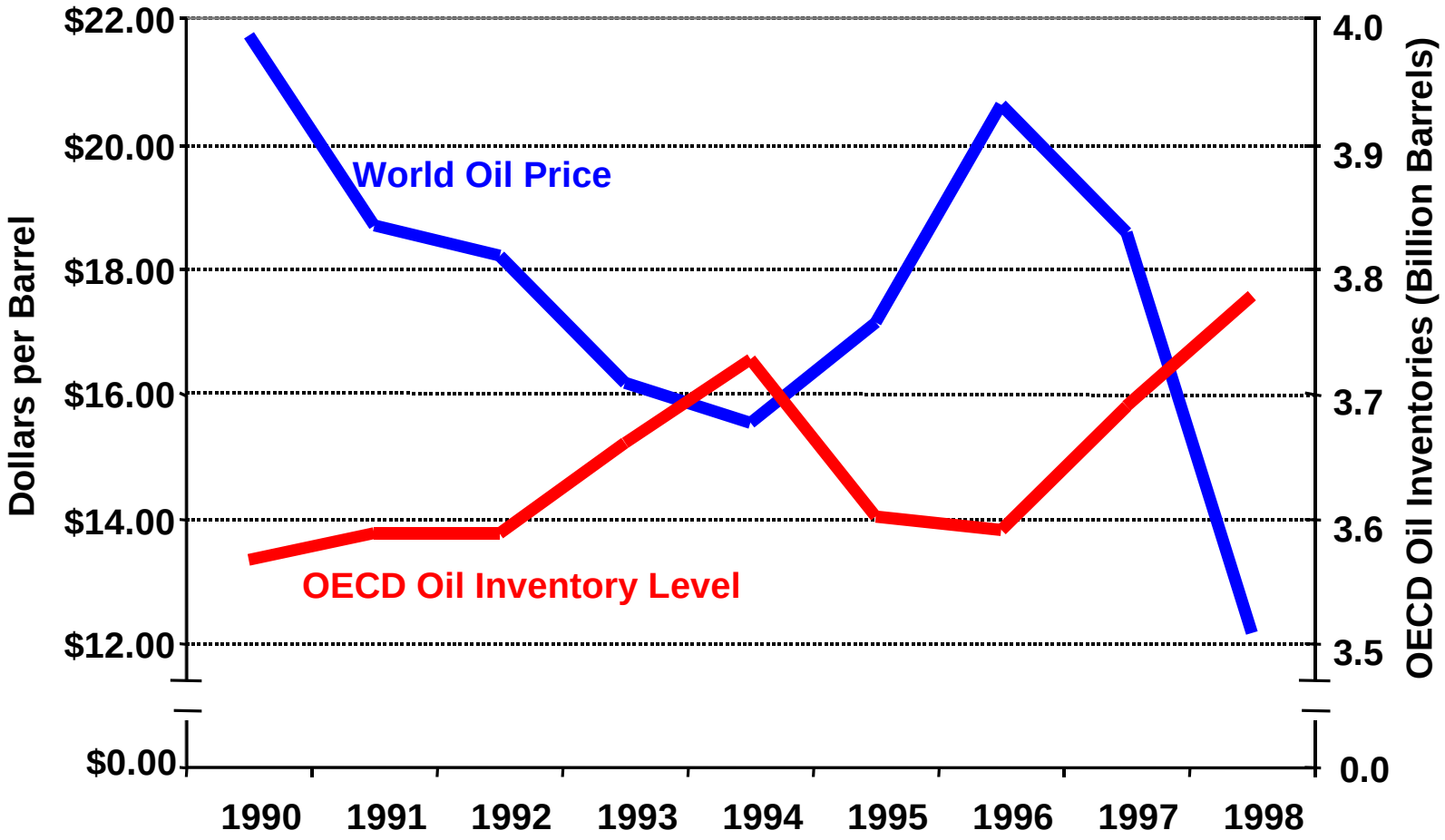
Figure 4 U.S. Refiner Cost of Imported Oil

(Current vs Previous Forecast)



Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

Figure 5. OECD Oil Stocks vs World Oil Price, 1990-1998



Between 1990-1994, stocks increased prices decreased. Then, between 1994-1996, there was a decrease In stocks and an increase in price. Since 1996, there has been an increase in stocks and a decrease in price.

Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

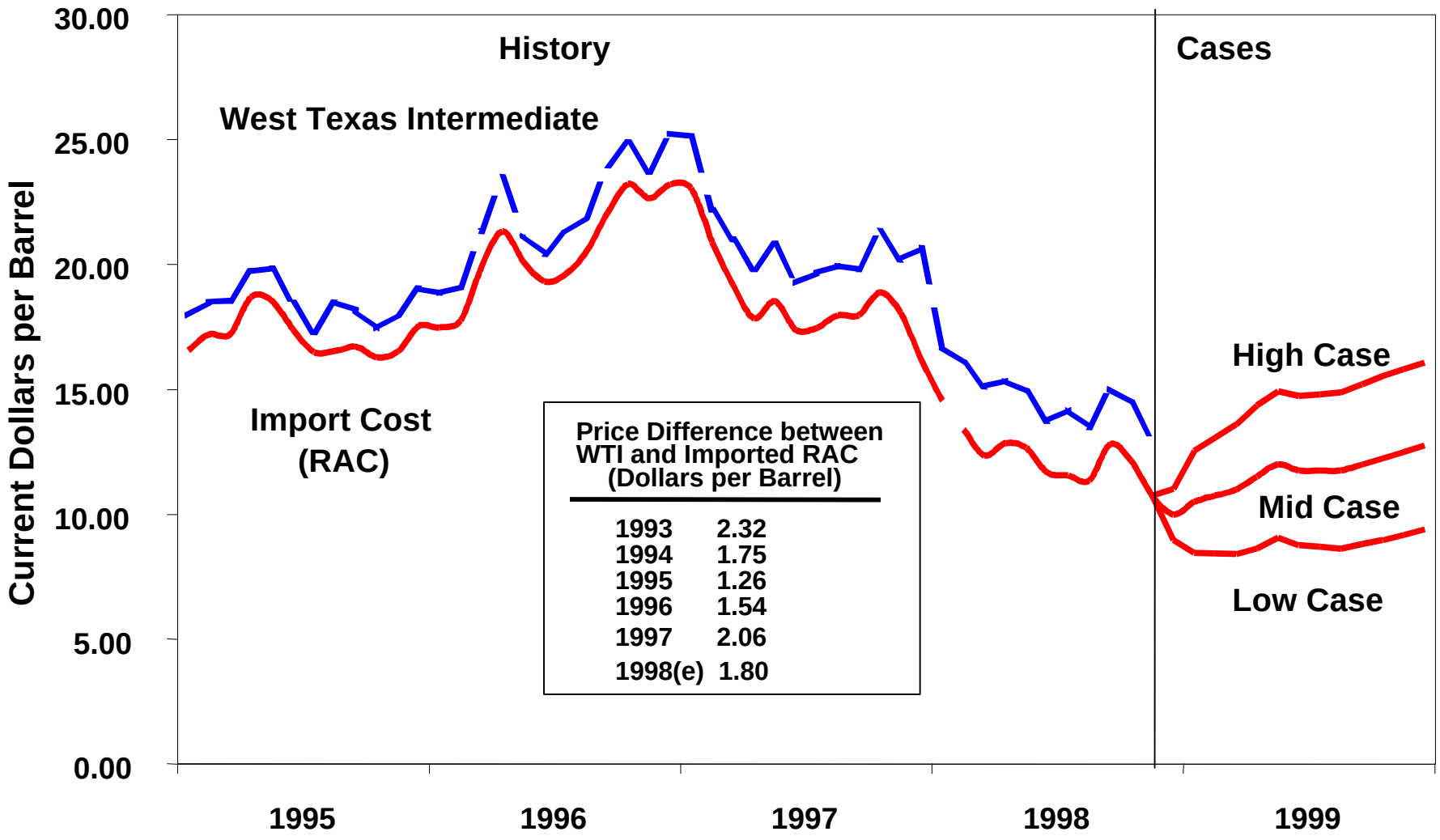
agreed to was switching their ministerial meetings from June/November to March/September. This means OPEC will next meet at the end of the winter season (March 23, 1999). While OPEC did not agree to further cuts, there is also little reason to expect OPEC production to increase significantly between now and March. Thus, our view of the world oil supply and demand numbers are not that different than what we were forecasting last month, especially for the first quarter of 1999. However, based on the most recent data, as well as our assessment of how the market will react to the latest OPEC ministerial meeting, EIA is now forecasting a first quarter 1999 world oil price of under $11 per barrel. The average 1998 world oil price is now $12.16 per barrel, the lowest average annual price since 1973. The world oil price for 1999 is expected to be even lower, as EIA is estimating a relatively slow and moderate recovery in prices from current levels. Our current forecast for 1999 has an average world oil price of $11.73 per barrel, although it rises to $12.50 per barrel by the fourth quarter, as we expect a balanced supply and demand situation in 1999. Figure 6 illustrates the base case oil price outlook and the associated uncertainly range (approximately plus or minus one standard forecast error). *Note: To convert our world oil price forecast to the price of West Texas Intermediate crude oil, add a little more than $2 per barrel; to convert to the price of Brent crude oil, add about $0.50 to our world oil price forecast.*

Supply and Demand. As stated above, the big news of our world oil supply and demand forecast for 1999 is a balanced market. While 1997 saw an implied stock build (world supply - world demand) of over 300 million barrels (more than 0.8 million barrels per day) and estimates for 1998 indicate an implied stock build of 350 million barrels (nearly 1.0 million barrels per day), EIA is estimating that stocks in 1999 will be relatively flat. This is similar to what we were estimating in last month's forecast. The largest difference between this month's forecast and last month's is that we are now estimating OPEC production will increase a little in 1999 as opposed to last month's forecast, which showed a slight decrease in OPEC production. We have increased our estimate of OPEC oil production by nearly 0.4 million barrels per day in 1999 from last month's forecast, while decreasing non-OPEC oil production by a similar amount. This reflects our belief that 2 years of historically low oil prices (1998 and 1999) will limit the growth of non-OPEC oil production. That being said however, EIA still estimates that non-OPEC oil production will continue to increase in 1998 and 1999, thus setting record production levels each year, even with the lowest oil prices in the last 25 years.

U.S. Petroleum Prices, Demand and Supply

Prices. The collapse of world crude oil prices, as well as the recent warm weather in much of the U.S. has lowered domestic petroleum product prices considerably. Retail heating oil prices are projected to average 82 cents per gallon for the winter of 1998-1999, or 10 cents per gallon less than the previous winter, even though the weather for January and February 1999 is assumed to be colder than last winter (Figure 7). Crude oil prices in the fourth quarter of this year are projected to be about $6.75 per barrel less than one year ago while distillate stocks remain above previous-year levels (Figure 8).

Figure 6. U.S. Monthly Crude Oil Prices



Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

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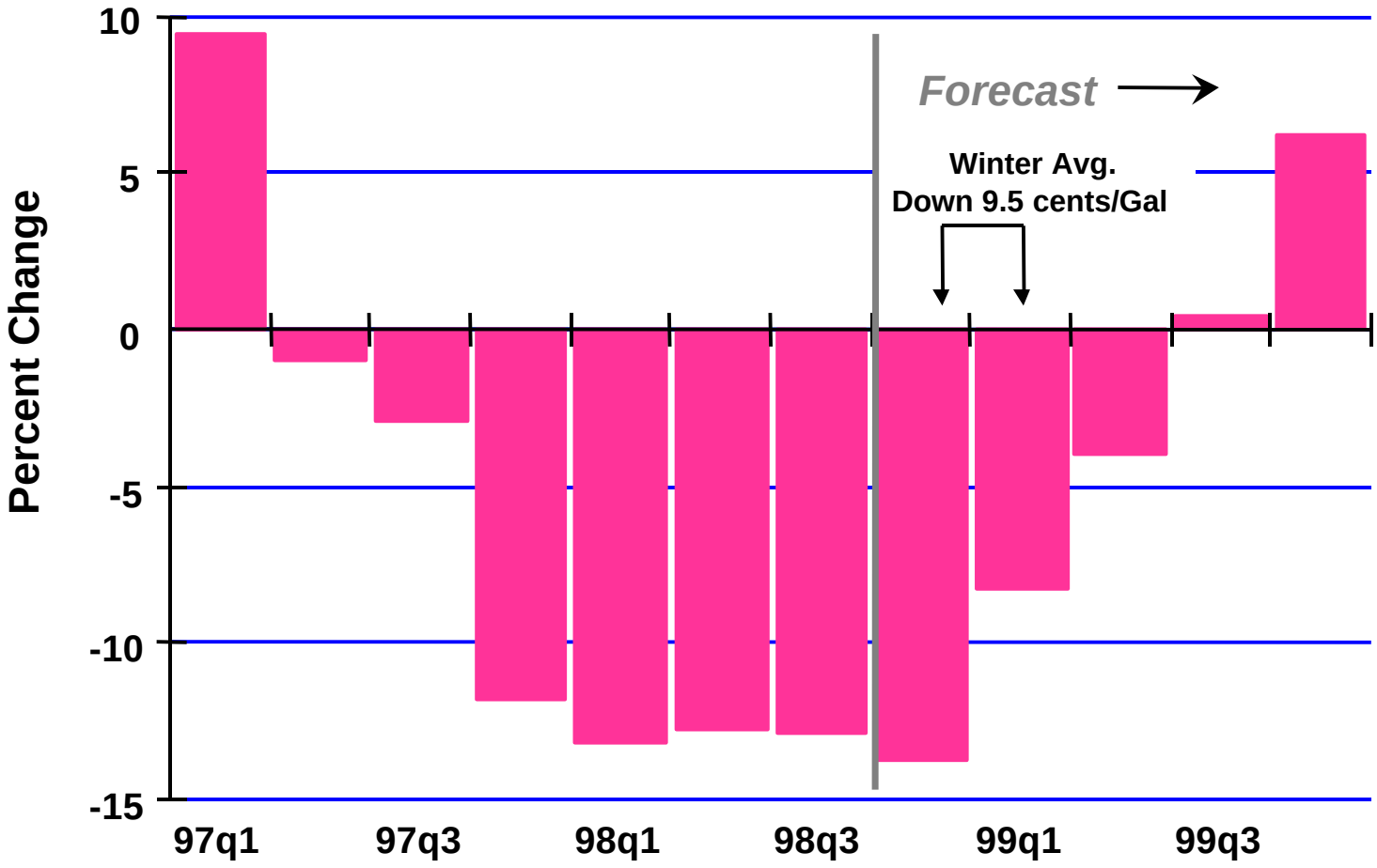
Figure 7. Quarterly Retail Heating Oil Prices

(Percent Change from Year Ago)



Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

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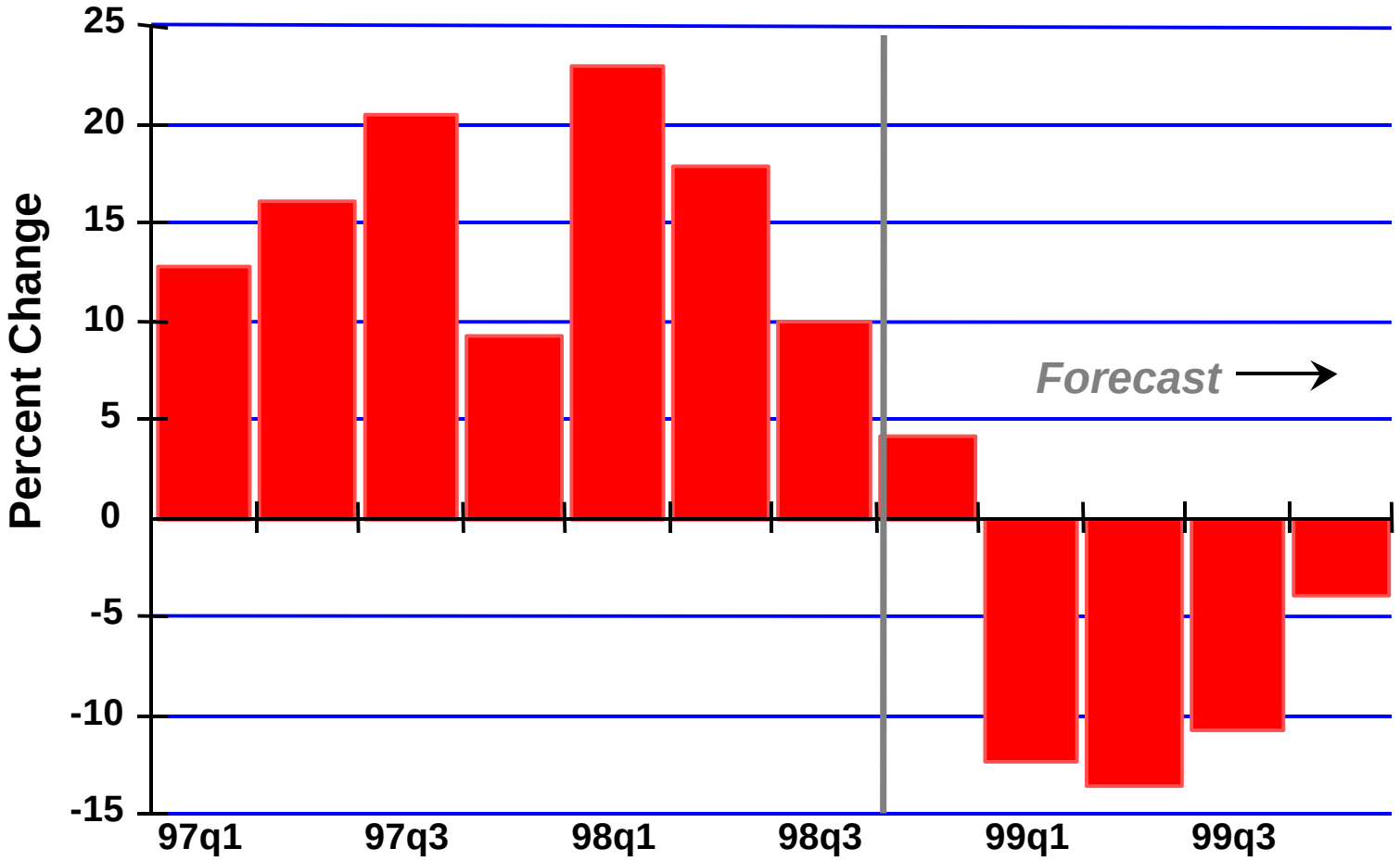
Figure 8. Quarterly Ending Distillate Stocks

(Percent Change from year Ago)



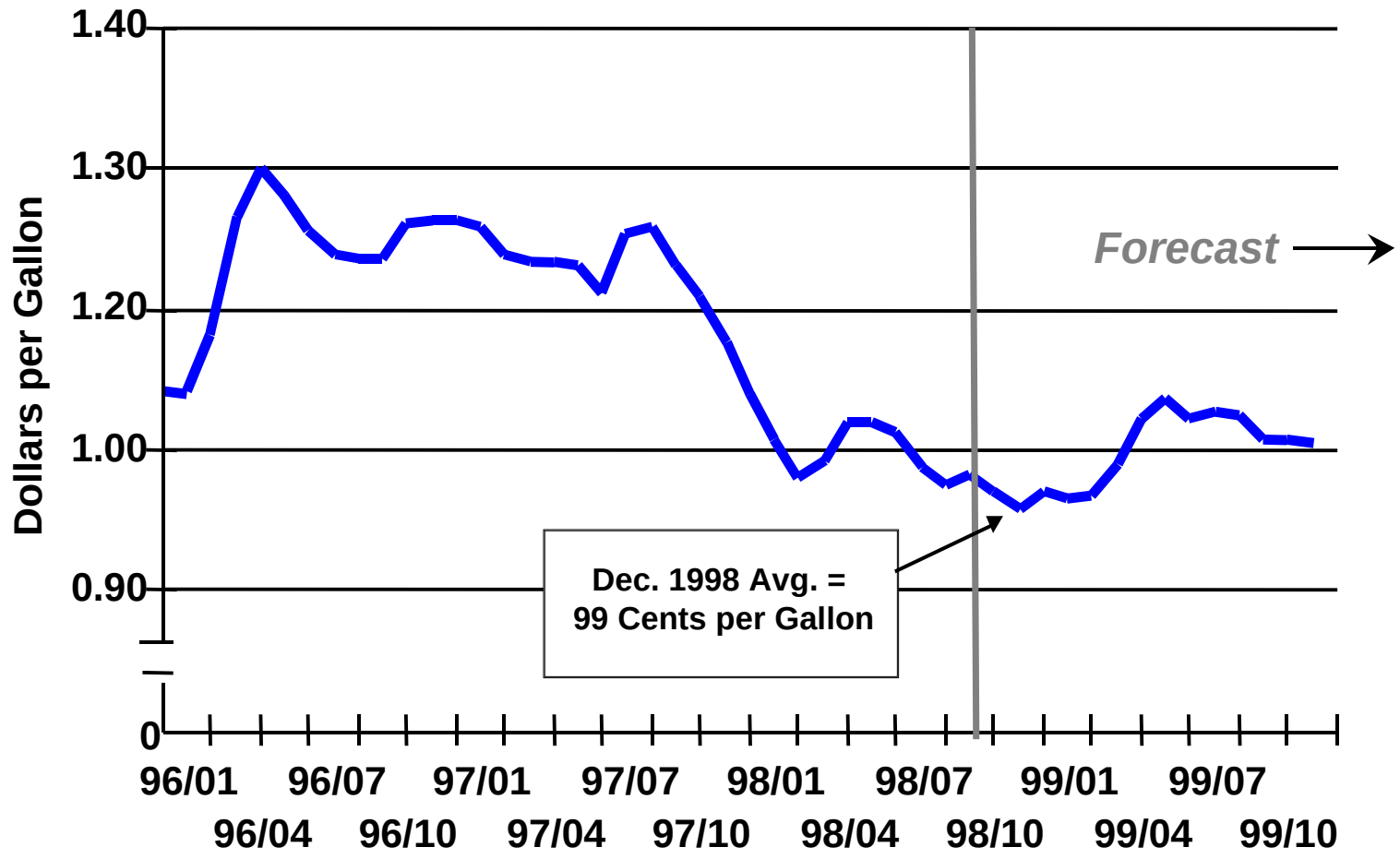
Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

Prices for motor gasoline continue to fall to record low (inflation-adjusted) levels. The current quarter is now expected to exhibit the lowest quarterly average gasoline prices of the year. Self-service unleaded regular and the average of all grades will be averaging $1.00 and $1.04 per gallon, respectively. The lowest monthly prices for the year should appear in December, averaging just below one dollar per gallon (Figure 9). The average annual price for 1998 will also be the lowest annual inflation-adjusted annual price on record. Furthermore, the price will be 17 cents lower than the average price for last year. In 1999, retail prices should remain more or less flat, given the projected crude oil price decrease of about $0.40 per barrel.

Demand. The warm weather pattern that has emerged in the final quarter of 1998 has tended to reinforce the generally low growth pattern for U.S. petroleum demand this year. A somewhat weaker pattern than previously expected for heating oil and propane demand is now evident. On the other hand, residual fuel oil demand, particularly at electric utilities, remains strong and is a source of counterbalancing strength in overall oil demand at the end of the year. Through 11 months of this year (including estimates based on weekly data for October and November) total residual fuel oil increased by 5.3 percent over comparable 1997 levels. We estimate that during the same period residual fuel used at electric utilities rose by 84 percent (based on 9 months of actual data and 2 months of model estimates). Based on the most recent data and because of the lower track for oil prices, we have increased our outlook for residual fuel use at electric utilities through the end of 1999 (Figure 10). On balance we have not materially changed our estimate for fourth quarter demand, but note the apparent rise in power generation use of heavy oil offsetting weaker numbers from the heating fuels. Our current estimate for total petroleum demand growth in 1998 is 0.5 percent (Figure 11). For 1999, a growth rate of 2.2 percent is expected, mainly because of anticipated increases in heating demand and increased residual fuel oil growth.

Supply. Our projected estimate for 1998 U.S. crude oil production has been lowered for two reasons. First, hurricane activity in the Gulf of Mexico during September prompted the precautionary shutdown of production from offshore wells. September 1998 domestic crude oil production is now estimated to be about 6.07 million barrels per day, about 270,000 barrels per day below what was expected for the month (Figure 12). This dip in production lowers the projected 1998 average domestic crude oil production to 6.38 million barrels per day, a decline of 1.2 percent from the 1997 average. Second, the further weakening of crude oil prices also means a lower crude oil production forecast. Looking ahead to next year, with projected average 1999 crude oil prices reduced by almost $2 per barrel from our last month's Outlook, average 1999 crude oil production has been lowered from 6.37 to 6.29 million barrels per day. Since the overall U.S. petroleum demand level for 1998 and 1999 remains about the same as in our previous forecast, our reduced figures for domestic oil production imply higher crude oil imports (Figure 13). For 1998 we now see net crude imports averaging about 8.35 million barrels per day, up about 50,000 barrels per day from last month's projected estimate. For 1999, net crude imports are expected to average 8.48 million barrels per day, about 90,000

Figure 9. Monthly Retail Gasoline Price*



*Regular conventional gasoline, self-serve cash pump price

Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

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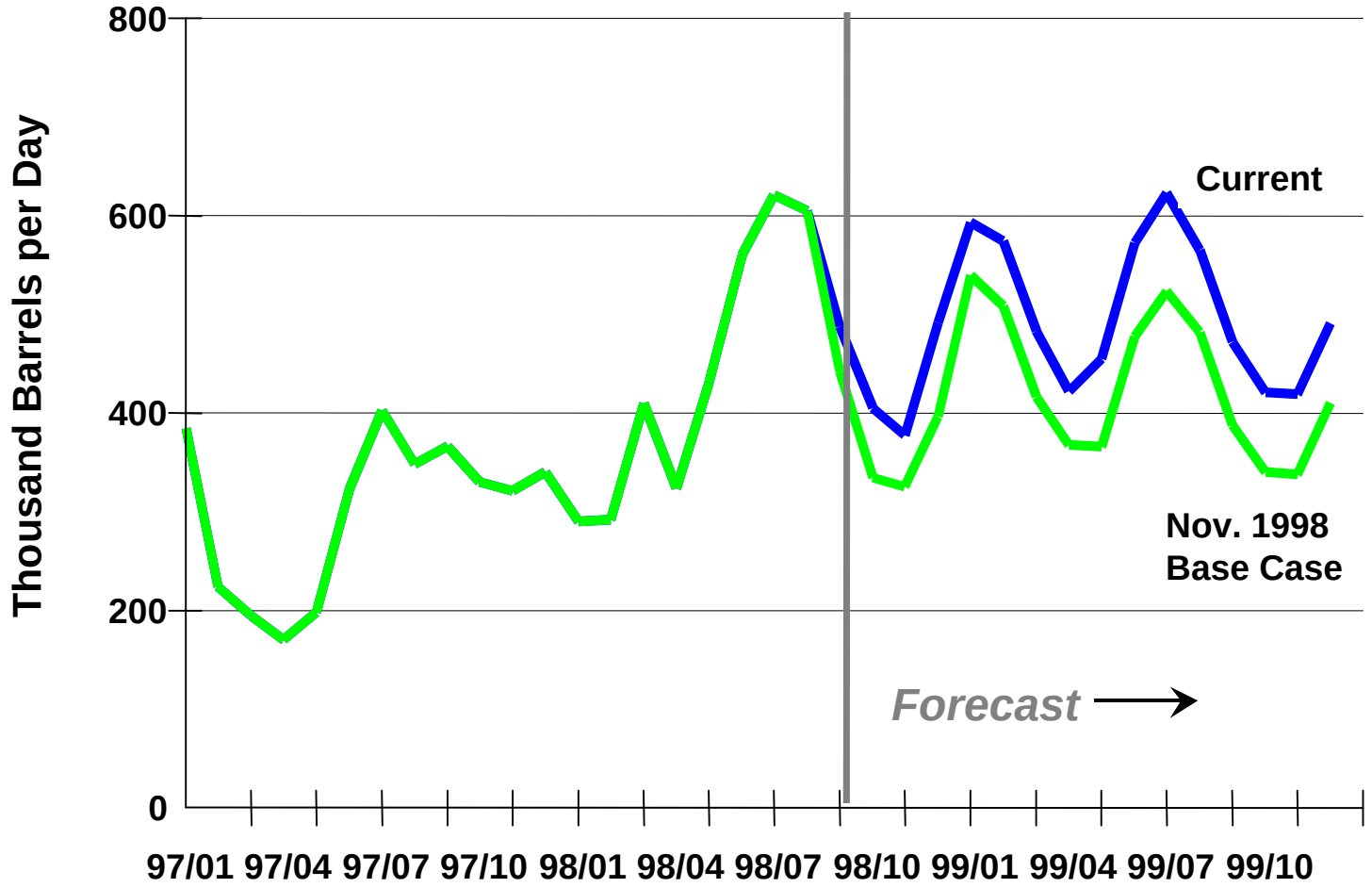
Figure 10. Electric Utility Residual Fuel Use

(Current vs Previous Forecast)



Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

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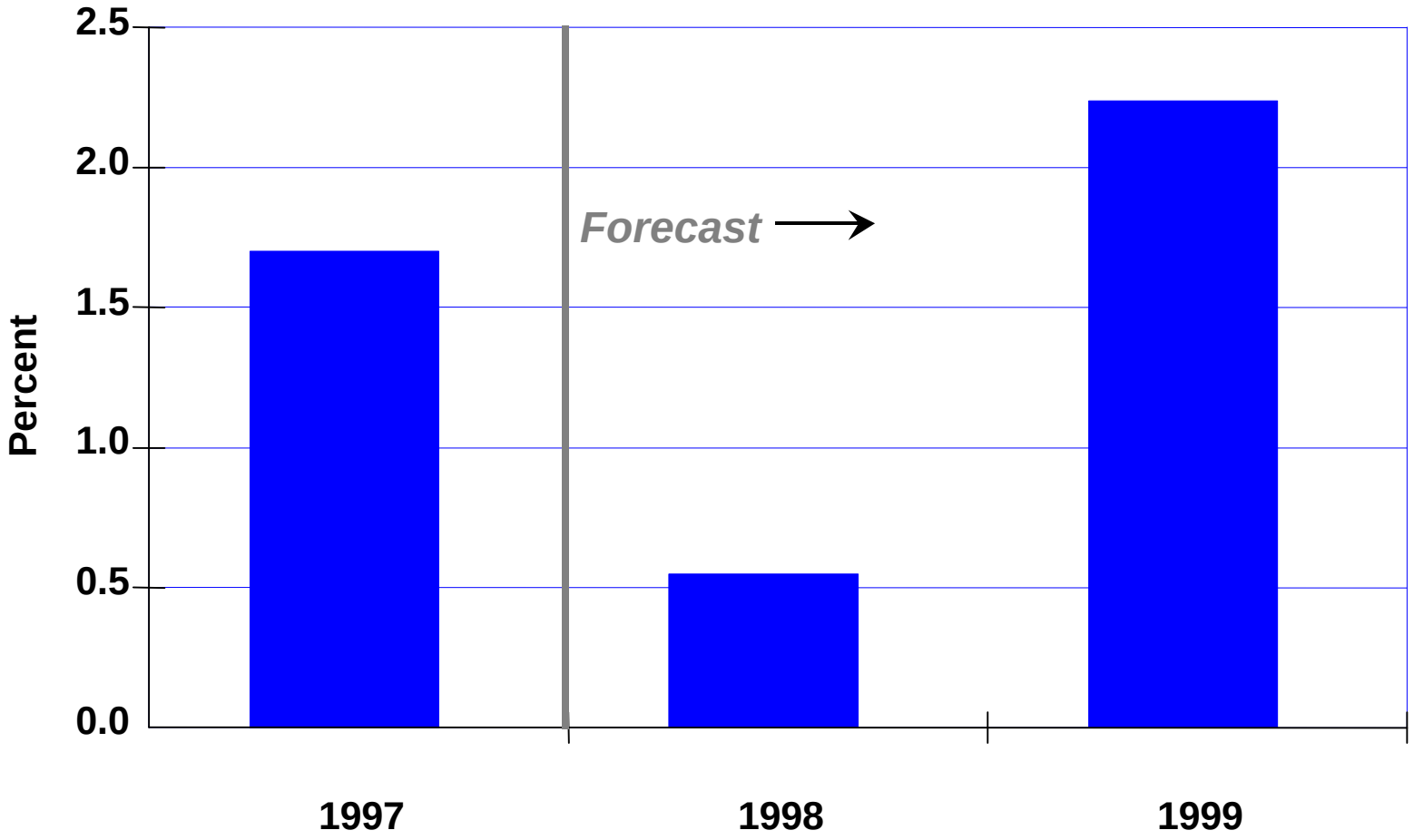
Figure 11. Annual U.S. Petroleum Demand Growth

(Percent Change from Year Ago)



Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

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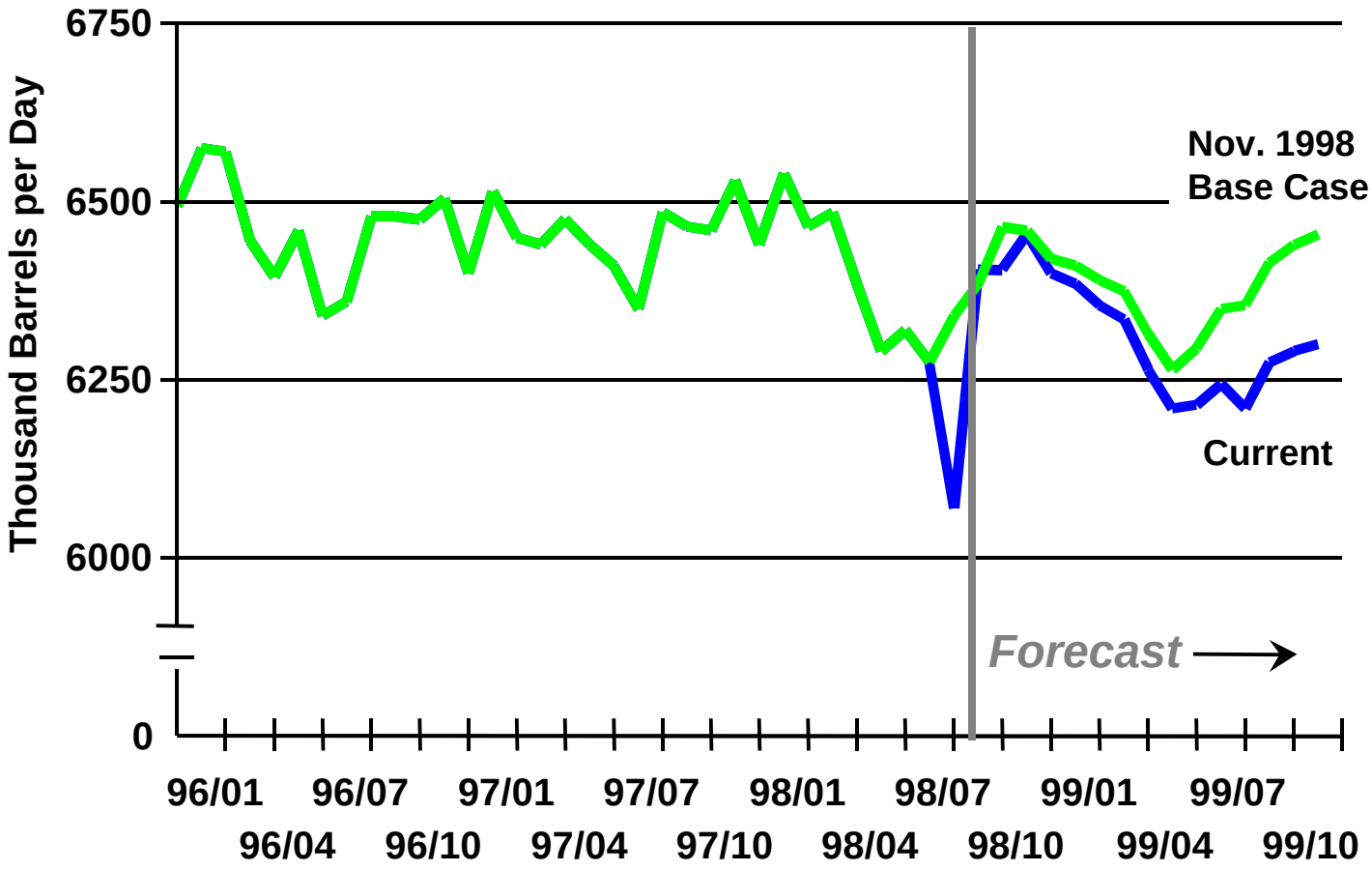
Figure 12. U.S. Crude Oil Production

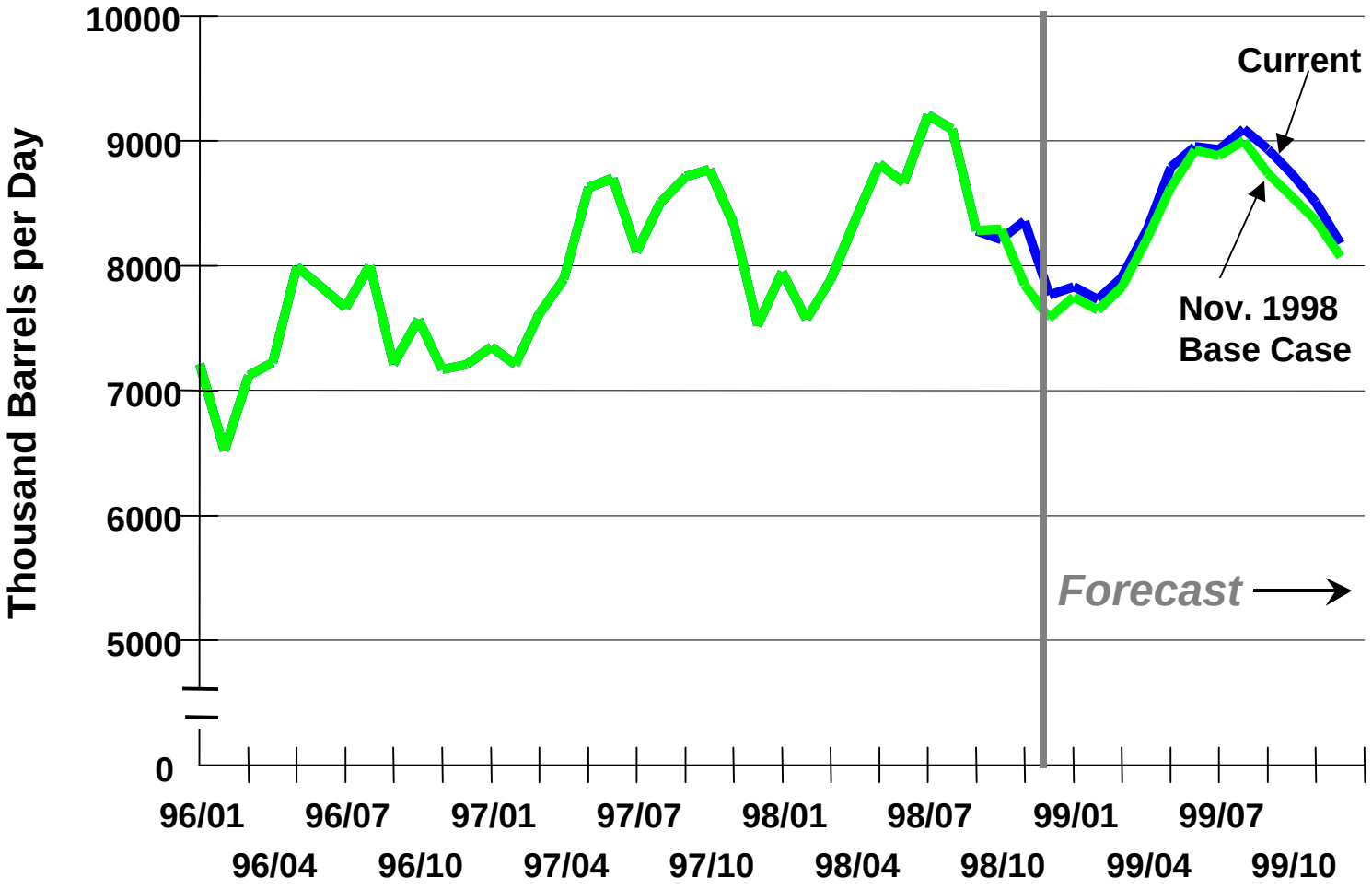
(Current vs Previous Forecast)



Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

Figure 13. U.S. Net Crude Oil Imports

(Current vs Previous Forecast)



Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

barrels per day above our last base case forecast. This development marginally increases our expected net dependence on imported oil (net imports of crude and product relative to total domestic demand) to 50 percent in 1999.

Natural Gas Prices, Demand and Supply

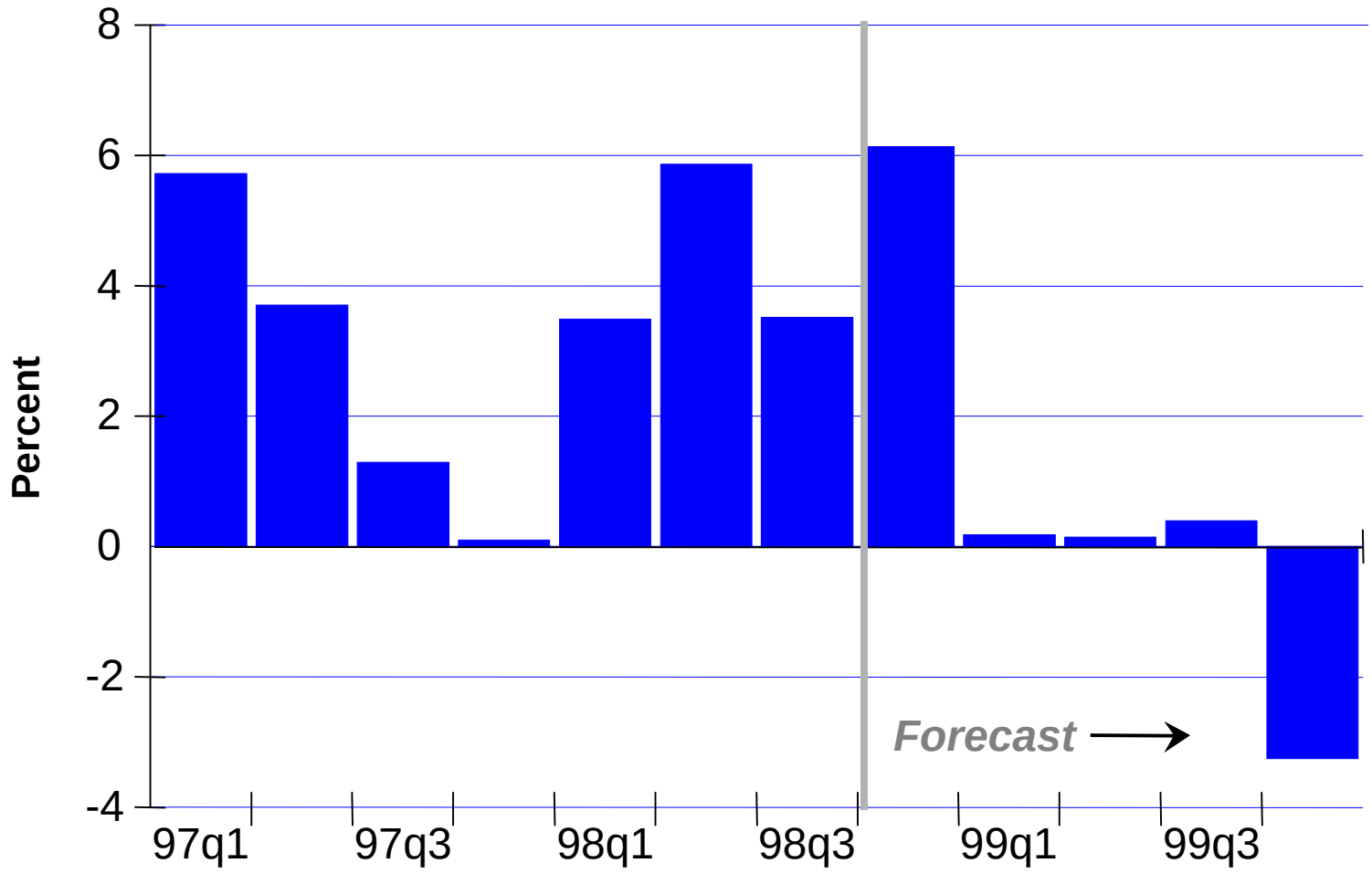
Prices. We are currently projecting that this year's average annual natural as wellhead price will decline 15 percent from the 1997 annual average Some of the expected average decline stems from the nearly 24-percent year-over-year price decrease that occurred in the unseasonably warm first quarter of this year. In addition, prices for the fourth quarter of this year are projected to be about 26 percent lower than the fourth quarter of 1997 since the weather has been much milder and underground storage remains high (Figure 14). In the previous Outlook we had also projected a 15 percent annual average decline. The big differences for 1998, this time, include upward historical price revisions for the first quarter of 1998 and lower price forecasts for the 4th quarter (Figure 2). The very warm weather in the critical months of November and December of this year is expected to have consequences throughout 1999, with considerably larger inventories for the first half of the year. Given this inventory overhang, we are lowering our price projections from an annual average wellhead price of $2.10 per thousand cubic feet in the previous Outlook, to about $1.90 per thousand cubic feet. Prices above $2.00 per thousand cubic feet are not expected to appear until the fourth quarter of next year. Note that price differential between the Henry Hub spot price and the near-month futures contract (NYMEX) reached over 50 cents in early December, reflecting the breadth of the spot surplus, compared to the higher price expectations for the upcoming winter (Figure 3). (For the most current graph on the price differential, see EIA's "Natural Gas Weekly Market Update" and click on the most current date).

Demand. Natural gas demand in fourth quarter 1998 is expected to be 5 to 6 percent lower than it was year-ago (Figure 15). This is because of the relatively mild weather experienced this quarter, amounting to 8.9 percent lower heating degree-days than during the fourth quarter of last year. All sectors are showing lower gas demand in this quarter, except for electric utility gas demand, which may just about hold its own in comparison to Q4 19917. Overall natural gas demand growth this year is now projected to be 2.9 percent below the 1997 level, a downward revision from last month's forecast (Figure 16). On the assumption that weather conditions will be normal during the remainder of the heating season and through 1999, we are still projecting broad growth in gas demand next year. An expected growth rate for total gas demand of 4.1 percent now characterizes our base case outlook for 1999. Because most of this growth is predicated on normal levels of heating demand over the next 3 to 4 months, a continuation of above-normal temperatures in key heating regions of the United States could drastically reduce or eliminate the kind of significant recovery in gas demand shown in the base case for 1999.

Electricity

Figure 14. Natural Gas Storage (End of Quarter)

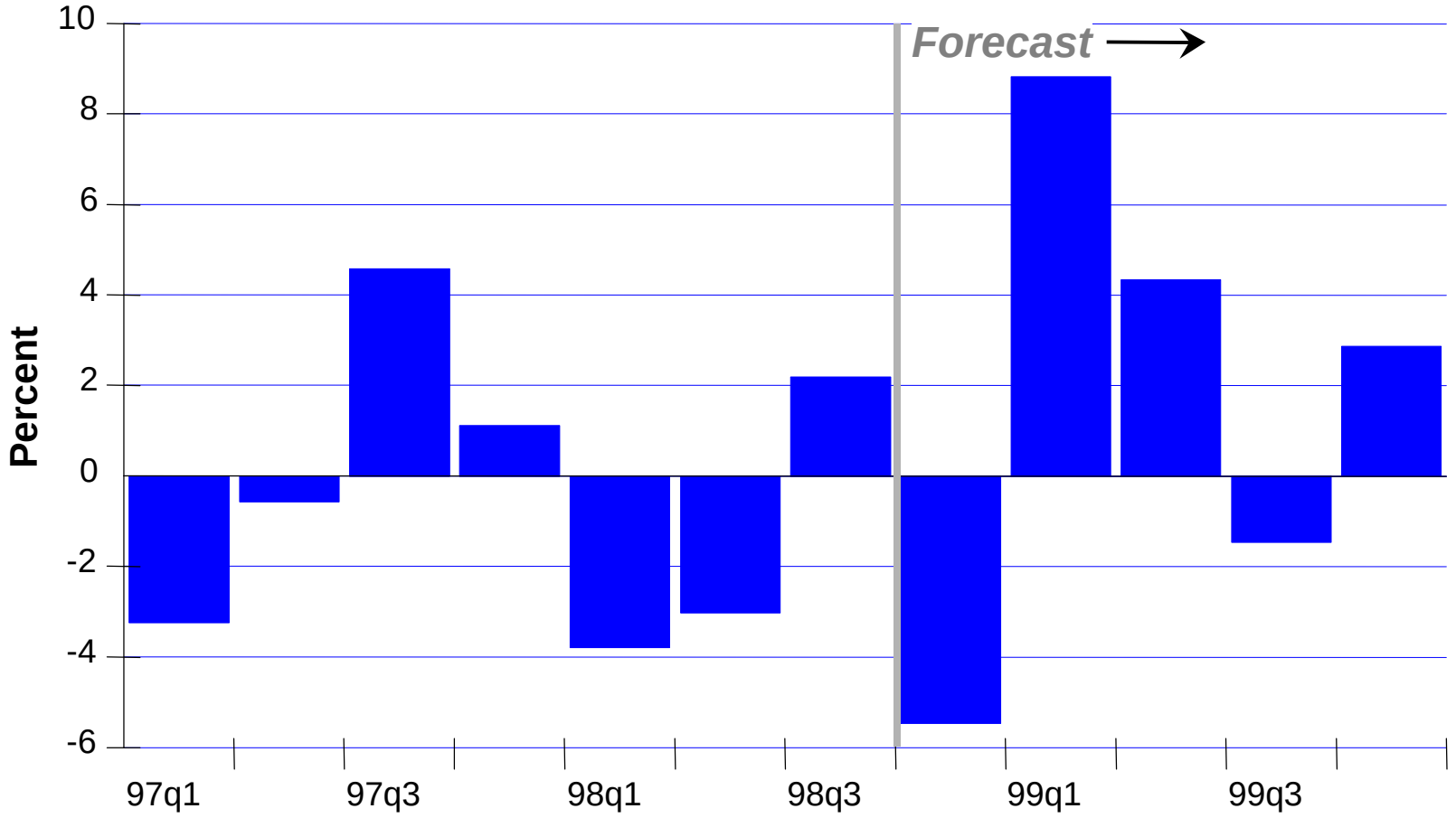
(percent change from previous year)



Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

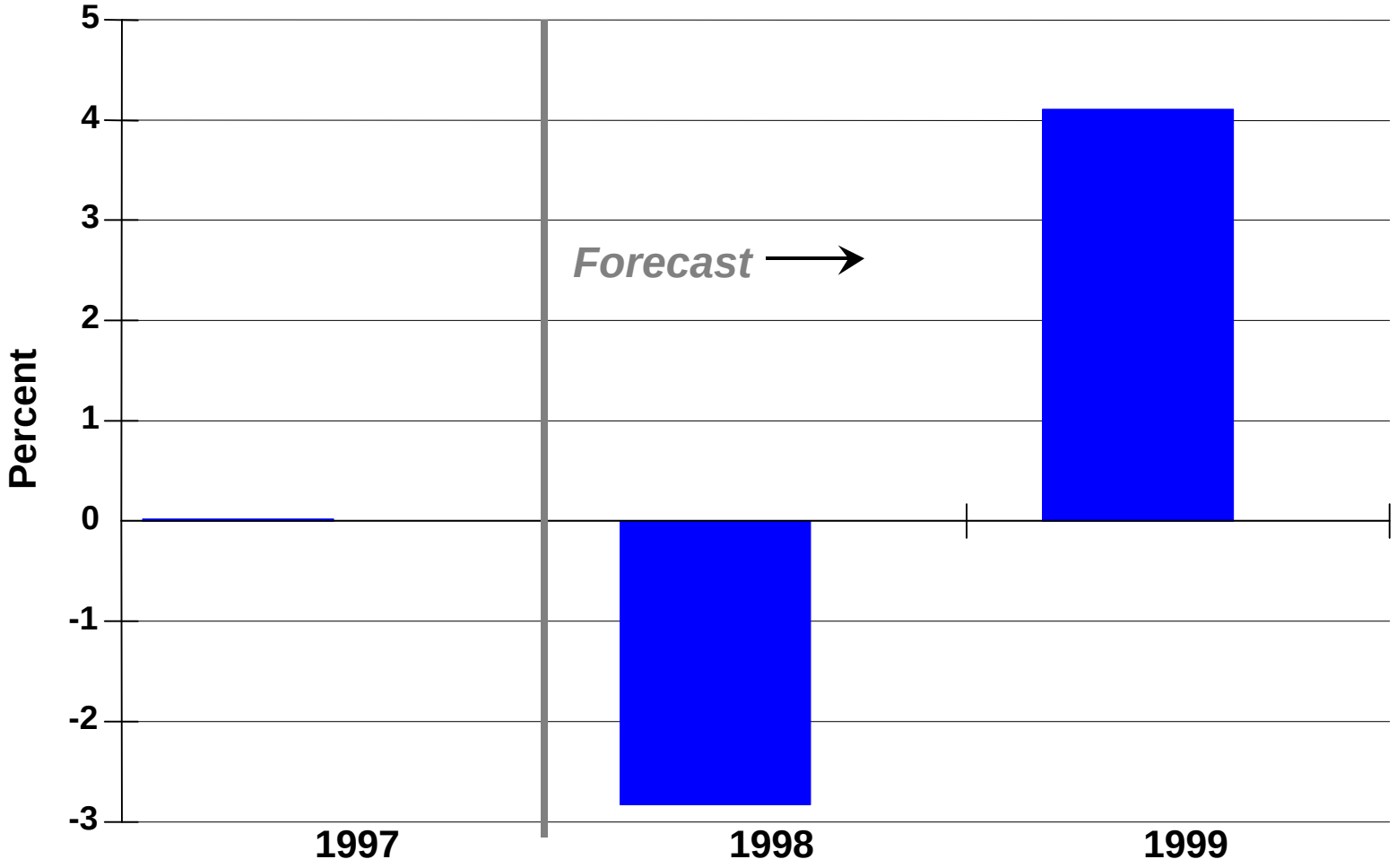
Figure 15. Natural Gas Demand

(percent change from previous year)



Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

Figure 16. Annual U.S. Gas Demand Growth



Sources: History: EIA estimates; Projections: Short-Term Energy Outlook, December 1998

Despite a slight downward revision to estimated fourth quarter electricity demand as a result of heating demand being lower than normal, estimated U.S. electricity demand for 1998 as a whole has been revised slightly upward due to an upward revision in estimated third quarter demand. More complete data for the quarter now shows summer demand to have been higher than previously estimated (Figure 17). Because of revisions to 1997 electricity demand based on EIA's 1997 *Electric Power Annual*, we now show somewhat slower estimated growth for 1998 than we did last month. This result is to some extent an artifact of the revision process and does not necessarily imply an actual downgrading of the strength in 1998 electricity demand. The preliminary (monthly) data for 1998 may ultimately be revised upwards. For 1999, expected growth in demand remains at 1.1 percent over 1998 levels, reflecting expected comparative weakness in summer cooling demand and a general slowing in the economy.

Figure 17. Monthly Electricity Demand

(Current vs Previous Forecast)

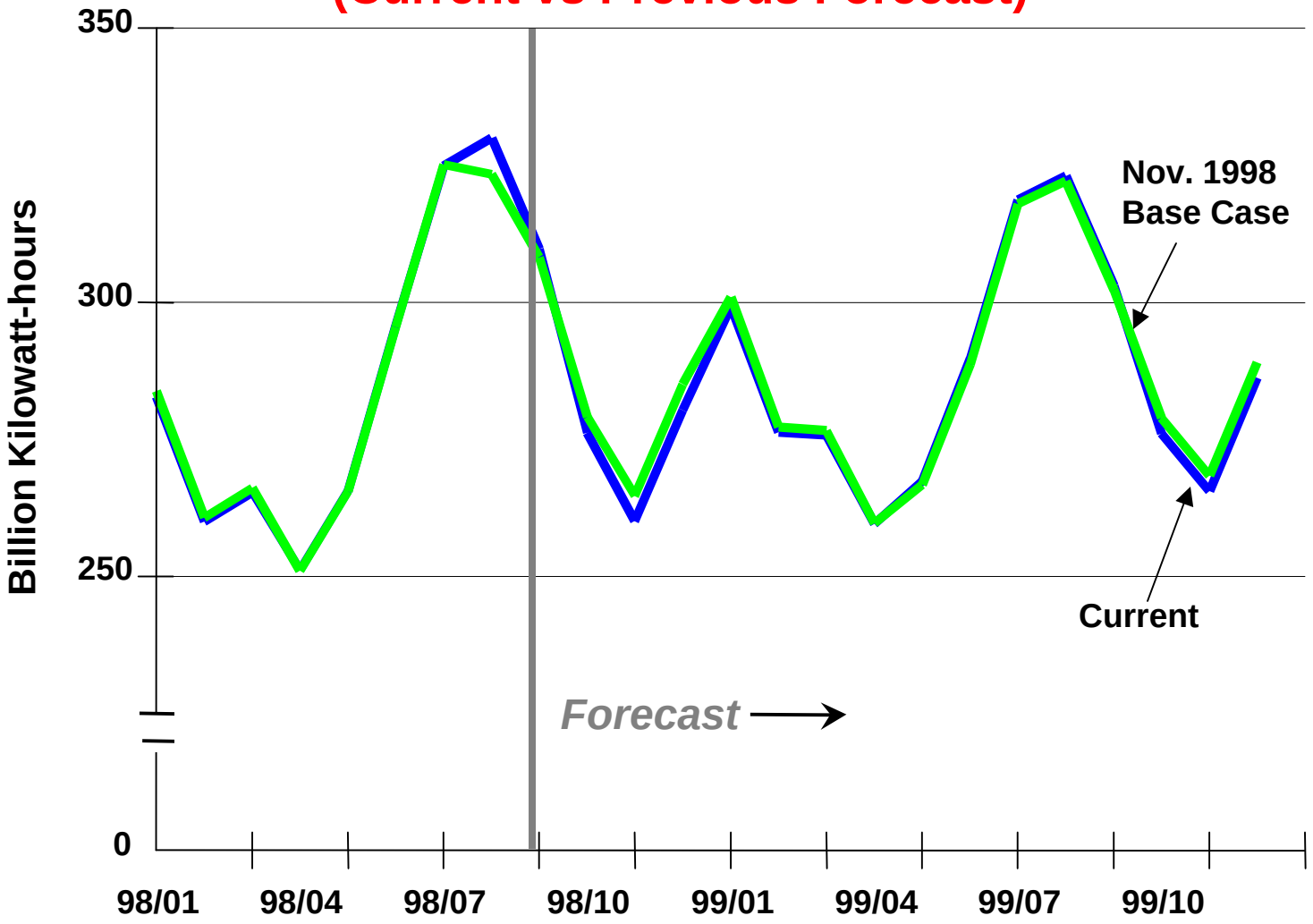


Table HL1. U. S. Energy Supply and Demand

	Year				Annual Percentage Change		
	1996	1997	1998	1999	1996-1997	1997-1998	1998-1999
Real Gross Domestic Product (GDP) (billion chained 1992 dollars)	**6995**	**7270**	*7531*	*7648*	**3.9**	*3.6*	*1.6*
Imported Crude Oil Price [a] (nominal dollars per barrel)	**20.61**	**18.57**	*12.16*	*11.73*	**-9.9**	*-34.5*	*-3.5*
Petroleum Supply (million barrels per day)							
Crude Oil Production [b]	**6.46**	**6.45**	*6.38*	*6.29*	**-0.2**	*-1.1*	*-1.4*
Total Petroleum Net Imports (including SPR)	**8.50**	**9.16**	*9.31*	*9.55*	**7.8**	*1.6*	*2.6*
Energy Demand							
World Petroleum (million barrels per day)	**71.5**	**73.2**	*74.0*	*75.5*	**2.4**	*1.1*	*2.0*
Petroleum (million barrels per day)	**18.31**	**18.62**	*18.72*	*19.14*	**1.7**	*0.5*	*2.2*
Natural Gas (trillion cubic feet)	**21.96**	**21.97**	*21.35*	*22.22*	**0.0**	*-2.8*	*4.1*
Coal (million short tons)	**1006**	**1030**	*1048*	*1068*	**2.4**	*1.7*	*1.9*
Electricity (billion kilowatthours)							
Utility Sales [c]	**3098**	**3140**	*3239*	*3276*	**1.4**	*3.2*	*1.1*
Nonutility Own Use [d]	**158**	**161**	*162*	*165*	**1.9**	*0.6*	*1.9*
Total	**3256**	**3301**	*3402*	*3440*	**1.4**	*3.1*	*1.1*
Total Energy Demand [e] (quadrillion Btu)	**93.9**	**94.3**	*94.4*	*96.2*	**0.4**	*0.0*	*2.0*
Total Energy Demand per Dollar of GDP (thousand Btu per 1992 Dollar)	**13.43**	**12.98**	*12.53*	*12.58*	**-3.4**	*-3.5*	*0.4*
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 CONTROL1198.

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)	**7167**	**7237**	**7311**	**7365**	**7465**	**7499**	*7559*	*7602*	*7615*	*7628*	*7663*	*7685*	**7270**	*7531*	*7648*
Percentage Change from Prior Year	**4.1**	**3.6**	**4.1**	**3.8**	**4.2**	**3.6**	*3.4*	*3.2*	*2.0*	*1.7*	*1.4*	*1.1*	**3.9**	*3.6*	*1.5*
Annualized Percent Change from Prior Quarter	**4.1**	**3.9**	**4.1**	**2.9**	**5.4**	**1.8**	*3.2*	*2.3*	*0.7*	*0.6*	*1.8*	*1.1*			
GDP Implicit Price Deflator (Index, 1992=1.000)	**1.110**	**1.115**	**1.118**	**1.121**	**1.123**	**1.126**	*1.128*	*1.132*	*1.138*	*1.143*	*1.149*	*1.154*	**1.116**	*1.127*	*1.146*
Percentage Change from Prior Year	**1.9**	**2.0**	**1.9**	**1.7**	**1.2**	**1.0**	*0.9*	*1.0*	*1.3*	*1.5*	*1.9*	*1.9*	**1.9**	*1.0*	*1.7*
Real Disposable Personal Income (billion chained 1992 Dollars - SAAR)	**5131**	**5168**	**5198**	**5236**	**5287**	**5322**	*5356*	*5385*	*5420*	*5450*	*5481*	*5489*	**5183**	*5337*	*5460*
Percentage Change from Prior Year	**2.8**	**3.0**	**2.5**	**2.9**	**3.0**	**3.0**	*3.0*	*2.8*	*2.5*	*2.4*	*2.3*	*1.9*	**2.8**	*3.0*	*2.3*
Manufacturing Production (Index, 1992=1.000)	**1.243**	**1.257**	**1.276**	**1.301**	**1.309**	**1.311**	*1.309*	*1.317*	*1.320*	*1.322*	*1.328*	*1.332*	**1.269**	*1.312*	*1.325*
Percentage Change from Prior Year	**5.8**	**5.0**	**5.3**	**6.3**	**5.3**	**4.3**	*2.6*	*1.2*	*0.9*	*0.8*	*1.4*	*1.1*	**5.6**	*3.3*	*1.0*
OECD Economic Growth (percent) [b]													**3.1**	*2.7*	*2.4*
Weather [c]															
Heating Degree-Days															
U.S.	**2156**	**635**	**86**	**1665**	**1972**	**480**	*68*	*1549*	*2327*	*524*	*89*	*1636*	**4542**	*4069*	*4576*
New England	**3108**	**1047**	**172**	**2335**	**2766**	**769**	*203*	*2248*	*3267*	*915*	*171*	*2269*	**6662**	*5986*	*6621*
Middle Atlantic	**2777**	**866**	**121**	**2045**	**2461**	**570**	*106*	*1951*	*2993*	*716*	*105*	*2026*	**5809**	*5088*	*5839*
U.S. Gas-Weighted	**2275**	**711**	**127**	**1773**	**2078**	**548**	*66*	*1615*	*2426*	*539*	*81*	*1686*	**4886**	*4307*	*4732*
Cooling Degree-Days (U.S.)	**50**	**289**	**754**	**63**	**25**	**399**	*865*	*65*	*30*	*334*	*758*	*72*	**1156**	*1354*	*1193*

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

[b] OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

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

SAAR: Seasonally-adjusted annualized rate.

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

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, *Statistical Release G.17(419)*. Projections of OECD growth are based on WEFA Group, "World Economic Outlook," Volume 1. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL1198.

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)	**1096**	**1127**	**1159**	**1170**	**1225**	**1264**	*1268*	*1284*	*1286*	*1283*	*1282*	*1285*	**1138**	*1260*	*1284*
Real Exchange Rate (index)	**1.087**	**1.098**	**1.109**	**1.118**	**1.140**	**1.159**	*1.179*	*1.132*	*1.124*	*1.109*	*1.096*	*1.086*	**1.103**	*1.153*	*1.104*
Business Inventory Change (billion chained 1992 dollars-SAAR)	**20.0**	**26.7**	**15.8**	**17.7**	**30.1**	**23.9**	*21.9*	*2.3*	*-0.1*	*-6.4*	*-7.4*	*-8.8*	**20.1**	*19.6*	*-5.7*
Producer Price Index (index, 1982=1.000)	**1.286**	**1.271**	**1.272**	**1.275**	**1.251**	**1.249**	*1.243*	*1.243*	*1.253*	*1.261*	*1.265*	*1.271*	**1.276**	*1.247*	*1.263*
Consumer Price Index (index, 1982-1984=1.000)	**1.596**	**1.602**	**1.609**	**1.618**	**1.620**	**1.628**	*1.635*	*1.645*	*1.658*	*1.669*	*1.679*	*1.691*	**1.606**	*1.632*	*1.674*
Petroleum Product Price Index (index, 1982=1.000)	**0.722**	**0.675**	**0.669**	**0.654**	**0.541**	**0.536**	*0.502*	*0.497*	*0.488*	*0.501*	*0.512*	*0.511*	**0.680**	*0.519*	*0.503*
Non-Farm Employment (millions)	**121.5**	**122.3**	**123.0**	**123.9**	**124.8**	**125.5**	*126.1*	*126.6*	*126.9*	*127.2*	*127.4*	*127.6*	**122.7**	*125.8*	*127.3*
Commercial Employment (millions)	**82.8**	**83.6**	**84.1**	**84.9**	**85.7**	**86.3**	*87.0*	*87.5*	*88.0*	*88.4*	*88.7*	*88.9*	**83.9**	*86.6*	*88.5*
Total Industrial Production (index, 1992=1.000)	**1.219**	**1.233**	**1.251**	**1.273**	**1.277**	**1.282**	*1.283*	*1.288*	*1.289*	*1.291*	*1.296*	*1.300*	**1.244**	*1.283*	*1.294*
Housing Stock (millions)	**112.0**	**112.3**	**112.5**	**113.1**	**113.7**	**113.9**	*114.1*	*114.4*	*114.7*	*115.1*	*115.4*	*115.7*	**112.5**	*114.0*	*115.2*
Miscellaneous															
Gas Weighted Industrial Production (index, 1992=1.000)	**1.140**	**1.152**	**1.155**	**1.170**	**1.180**	**1.175**	*1.167*	*1.162*	*1.160*	*1.158*	*1.163*	*1.166*	**1.154**	*1.171*	*1.162*
Vehicle Miles Traveled [b] (million miles/day)	**6463**	**7138**	**7310**	**6824**	**6580**	**7316**	*7533*	*7010*	*6754*	*7450*	*7706*	*7154*	**6936**	*7112*	*7268*
Vehicle Fuel Efficiency (index, 1996=1.000)	**1.038**	**0.997**	**0.993**	**1.002**	**1.032**	**1.016**	*0.994*	*1.006*	*1.039*	*1.017*	*1.002*	*1.011*	**1.007**	*1.011*	*1.017*
Real Vehicle Fuel Cost (cents per mile)	**3.94**	**3.73**	**3.70**	**3.72**	**3.36**	**3.17**	*3.10*	*3.13*	*3.10*	*3.10*	*3.10*	*3.16*	**3.77**	*3.19*	*3.11*
Air Travel Capacity (mill. available ton-miles/day)	**402.1**	**417.2**	**434.3**	**427.7**	**422.3**	**438.1**	*456.0*	*445.9*	*435.7*	*449.6*	*467.1*	*453.3*	**420.4**	*440.7*	*451.5*
Aircraft Utilization (mill. revenue ton-miles/day)	**230.5**	**248.0**	**260.8**	**247.2**	**237.1**	**258.5**	*272.4*	*254.4*	*240.9*	*263.6*	*277.6*	*261.0*	**246.7**	*255.7*	*260.9*
Airline Ticket Price Index (index, 1982-1984=1.000)	**1.975**	**2.016**	**1.985**	**1.993**	**2.058**	**2.053**	*2.069*	*2.100*	*2.134*	*2.142*	*2.151*	*2.184*	**1.992**	*2.070*	*2.153*
Raw Steel Production (millions tons)	**26.47**	**26.59**	**26.52**	**27.31**	**28.44**	**27.87**	*26.48*	*27.07*	*28.24*	*27.92*	*27.46*	*27.99*	**106.60**	*109.86*	*111.61*

[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 CONTROL1198.

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**	**18.4**	*19.0*	*19.1*	*19.0*	*18.8*	*19.3*	*19.4*	**18.6**	*18.7*	*19.1*
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**	**1.8**	*2.0*	*2.0*	*1.9*	*1.9*	*2.1*	*2.0*	**1.9**	*1.9*	*2.0*
Europe	**14.3**	**14.2**	**14.4**	**14.8**	**14.9**	**14.1**	*14.6*	*14.9*	*15.1*	*14.4*	*14.8*	*15.2*	**14.4**	*14.6*	*14.9*
Japan	**6.4**	**5.2**	**5.4**	**5.9**	**6.2**	**5.0**	*5.3*	*5.8*	*6.2*	*5.0*	*5.3*	*5.9*	**5.7**	*5.6*	*5.6*
Australia and New Zealand	**0.9**	**0.9**	**1.0**	**0.9**	**0.9**	**0.9**	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	**0.9**	*1.0*	*1.0*
Total OECD	**41.9**	**40.8**	**41.7**	**42.7**	**42.3**	**40.5**	*42.1*	*43.0*	*43.4*	*41.2*	*42.8*	*43.7*	**41.8**	*42.0*	*42.8*
Non-OECD															
Former Soviet Union	**4.7**	**4.2**	**4.2**	**4.6**	**4.7**	**4.3**	*4.1*	*4.5*	*4.6*	*4.2*	*4.0*	*4.5*	**4.4**	*4.4*	*4.3*
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*	*4.2*	*4.3*	*4.3*	*4.4*	**3.9**	*4.1*	*4.3*
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*	*13.6*	*13.9*	**13.0**	*13.4*	*13.8*
Total Non-OECD	**31.6**	**31.1**	**30.6**	**32.6**	**32.1**	**31.7**	*31.1*	*33.2*	*32.7*	*32.5*	*31.9*	*34.1*	**31.4**	*32.0*	*32.8*
Total World Demand	**73.5**	**71.8**	**72.2**	**75.3**	**74.4**	**72.2**	*73.2*	*76.2*	*76.1*	*73.6*	*74.7*	*77.8*	**73.2**	*74.0*	*75.5*
Supply [b]															
OECD															
U.S. (50 States)	**9.4**	**9.5**	**9.5**	**9.5**	**9.5**	**9.4**	*9.2*	*9.4*	*9.3*	*9.2*	*9.2*	*9.3*	**9.5**	*9.4*	*9.3*
Canada	**2.6**	**2.5**	**2.6**	**2.7**	**2.7**	**2.6**	*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**	*5.9*	*6.3*	*6.4*	*6.2*	*6.4*	*6.8*	**6.2**	*6.2*	*6.4*
Other OECD	**1.6**	**1.6**	**1.6**	**1.6**	**1.6**	**1.6**	*1.6*	*1.6*	*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**	**19.8**	*19.4*	*20.1*	*20.2*	*19.8*	*20.0*	*20.6*	**19.9**	*19.9*	*20.1*
Non-OECD															
OPEC	**29.5**	**29.7**	**30.1**	**30.3**	**30.9**	**30.7**	*30.0*	*30.4*	*30.4*	*30.5*	*30.7*	*30.8*	**29.9**	*30.5*	*30.6*
Former Soviet Union	**7.0**	**7.1**	**7.2**	**7.2**	**7.3**	**7.2**	*7.2*	*7.2*	*7.2*	*7.2*	*7.2*	*7.3*	**7.1**	*7.2*	*7.2*
China	**3.2**	**3.2**	**3.2**	**3.1**	**3.2**	**3.2**	*3.2*	*3.2*	*3.2*	*3.2*	*3.2*	*3.2*	**3.2**	*3.2*	*3.2*
Mexico	**3.4**	**3.4**	**3.5**	**3.5**	**3.6**	**3.6**	*3.5*	*3.5*	*3.5*	*3.5*	*3.5*	*3.6*	**3.4**	*3.5*	*3.5*
Other Non-OECD	**10.4**	**10.5**	**10.4**	**10.5**	**10.7**	**10.7**	*10.7*	*10.7*	*10.8*	*10.8*	*10.9*	*11.0*	**10.4**	*10.7*	*10.9*
Total Non-OECD	**53.5**	**53.9**	**54.3**	**54.7**	**55.6**	**55.3**	*54.5*	*55.0*	*55.0*	*55.2*	*55.5*	*55.8*	**54.1**	*55.1*	*55.4*
Total World Supply	**73.6**	**73.5**	**74.0**	**75.0**	**75.8**	**75.1**	*73.9*	*75.1*	*75.2*	*75.0*	*75.5*	*76.3*	**74.0**	*75.0*	*75.5*
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*	*0.5*	*0.5*	*-0.5*	*-0.2*	*0.4*	**-0.1**	*-0.1*	*0.1*
Other	**-0.1**	**-1.0**	**-1.6**	**-0.1**	**-1.0**	**-2.2**	*-0.7*	*0.5*	*0.4*	*-0.9*	*-0.7*	*1.1*	**-0.7**	*-0.8*	*0.0*
Total Stock Withdrawals	**-0.1**	**-1.7**	**-1.8**	**0.2**	**-1.4**	**-2.9**	*-0.7*	*1.1*	*0.9*	*-1.4*	*-0.9*	*1.5*	**-0.8**	*-1.0*	*0.0*
OECD Comm. Stocks, End (bill. bbls.)	**2.7**	**2.7**	**2.7**	**2.7**	**2.7**	**2.9**	*2.9*	*2.8*	*2.8*	*2.9*	*2.9*	*2.8*	**2.7**	*2.8*	*2.8*
Non-OPEC Supply	**44.1**	**43.9**	**43.9**	**44.7**	**44.9**	**44.4**	*43.9*	*44.7*	*44.8*	*44.5*	*44.9*	*45.6*	**44.1**	*44.5*	*44.9*
Net Exports from Former Soviet Union	**2.3**	**2.9**	**3.0**	**2.6**	**2.6**	**2.9**	*3.1*	*2.8*	*2.6*	*3.0*	*3.2*	*2.8*	**2.7**	*2.8*	*2.9*

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

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

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

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

OPEC: Organization of Petroleum Exporting Countries: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

SPR: Strategic Petroleum Reserve

Former Soviet Union: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

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

Sources: Energy Information Administration: latest data available from EIA databases supporting the following reports: *International Petroleum Statistics Report*, DOE/EIA-0520; Organization for Economic Cooperation and Development, Annual and Monthly Oil Statistics Database.

Table 4. U. S. Energy Prices

(Nominal Dollars)

	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**	**12.39**	*11.89*	*10.98*	*10.75*	*11.75*	*11.83*	*12.49*	**18.57**	*12.16*	*11.73*
Natural Gas Wellhead															
(dollars per thousand cubic feet)	**2.49**	**1.84**	**2.03**	**2.55**	**1.88**	**1.92**	*1.84*	*1.89*	*1.81*	*1.69*	*1.80*	*2.18*	**2.23**	*1.88*	*1.87*
Petroleum Products															
Gasoline Retail [b] (dollars per gallon)															
All Grades	**1.27**	**1.24**	**1.25**	**1.21**	**1.10**	**1.10**	*1.07*	*1.04*	*1.04*	*1.10*	*1.11*	*1.09*	**1.24**	*1.08*	*1.08*
Regular Unleaded	**1.22**	**1.20**	**1.21**	**1.17**	**1.05**	**1.05**	*1.03*	*1.00*	*1.00*	*1.06*	*1.07*	*1.05*	**1.20**	*1.03*	*1.05*
No. 2 Diesel Oil, Retail															
(dollars per gallon)	**1.25**	**1.18**	**1.15**	**1.17**	**1.08**	**1.05**	*1.02*	*1.03*	*1.02*	*1.03*	*1.03*	*1.08*	**1.19**	*1.04*	*1.04*
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	**0.65**	**0.57**	**0.54**	**0.57**	**0.47**	**0.43**	*0.40*	*0.40*	*0.41*	*0.41*	*0.41*	*0.47*	**0.59**	*0.42*	*0.43*
No. 2 Heating Oil, Retail															
(dollars per gallon)	**1.05**	**0.98**	**0.88**	**0.93**	**0.92**	**0.85**	*0.77*	*0.81*	*0.84*	*0.82*	*0.77*	*0.86*	**0.99**	*0.85*	*0.84*
No. 6 Residual Fuel Oil, Retail [c]															
(dollars per barrel)	**19.00**	**16.84**	**17.04**	**18.16**	**13.56**	**13.22**	*12.31*	*11.20*	*12.25*	*11.72*	*11.50*	*13.12*	**17.80**	*12.52*	*12.16*
Electric Utility Fuels															
Coal															
(dollars per million Btu)	**1.29**	**1.28**	**1.26**	**1.26**	**1.26**	**1.26**	*1.25*	*1.24*	*1.24*	*1.26*	*1.23*	*1.22*	**1.27**	*1.25*	*1.24*
Heavy Fuel Oil [d]															
(dollars per million Btu)	**2.91**	**2.59**	**2.71**	**2.92**	**2.12**	**2.17**	*2.05*	*1.86*	*1.95*	*1.91*	*1.90*	*2.17*	**2.79**	*2.05*	*1.97*
Natural Gas															
(dollars per million Btu)	**3.10**	**2.46**	**2.60**	**3.15**	**2.61**	**2.46**	*2.28*	*2.36*	*2.60*	*2.32*	*2.38*	*2.81*	**2.76**	*2.39*	*2.49*
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	**6.69**	**6.97**	**8.80**	**6.82**	**6.39**	**7.32**	*8.75*	*6.62*	*6.62*	*7.24*	*8.51*	*6.84*	**6.94**	*6.80*	*6.91*
Electricity															
(cents per kilowatthour)	**8.04**	**8.69**	**8.79**	**8.31**	**7.93**	**8.42**	*8.56*	*7.97*	*7.65*	*8.32*	*8.58*	*8.12*	**8.46**	*8.24*	*8.17*

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

[b] Average self-service cash prices.

[c] Average for all sulfur contents.

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

Notes: Data are estimated for the third quarter of 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**	**6.39**	*6.22*	*6.42*	*6.38*	*6.27*	*6.22*	*6.29*	**6.45**	*6.38*	*6.29*
Alaska	**1.36**	**1.30**	**1.24**	**1.28**	**1.23**	**1.17**	*1.13*	*1.21*	*1.16*	*1.08*	*1.06*	*1.10*	**1.30**	*1.18*	*1.10*
Lower 48	**5.09**	**5.15**	**5.18**	**5.20**	**5.25**	**5.22**	*5.10*	*5.22*	*5.22*	*5.18*	*5.16*	*5.19*	**5.16**	*5.19*	*5.19*
Net Imports (including SPR) [b]	**7.40**	**8.41**	**8.44**	**8.21**	**7.81**	**8.61**	*8.87*	*8.11*	*7.83*	*8.67*	*8.99*	*8.47*	**8.12**	*8.35*	*8.49*
Other SPR Supply	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.00**	*0.00*	*0.00*
SPR Stock Withdrawn or Added (-)	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*-0.01*	*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**	**0.04**	*0.25*	*-0.18*	*-0.04*	*-0.03*	*0.09*	*0.01*	**-0.06**	*-0.06*	*0.01*
Product Supplied and Losses	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*-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**	**0.11**	*0.00*	*0.17*	*0.23*	*0.24*	*0.25*	*0.24*	**0.14**	*0.16*	*0.24*
Total Crude Oil Supply	**13.74**	**14.87**	**15.19**	**14.83**	**14.32**	**15.14**	*15.34*	*14.51*	*14.38*	*15.15*	*15.54*	*15.00*	**14.66**	*14.83*	*15.02*
Other Supply															
NGL Production	**1.84**	**1.82**	**1.83**	**1.77**	**1.85**	**1.80**	*1.67*	*1.77*	*1.78*	*1.78*	*1.80*	*1.80*	**1.82**	*1.77*	*1.79*
Other Hydrocarbon and Alcohol Inputs	**0.31**	**0.34**	**0.36**	**0.36**	**0.34**	**0.36**	*0.38*	*0.36*	*0.37*	*0.34*	*0.34*	*0.37*	**0.34**	*0.36*	*0.35*
Crude Oil Product Supplied	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*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**	*0.89*	*0.87*	*0.81*	*0.85*	*0.88*	*0.86*	**0.85**	*0.86*	*0.85*
Net Product Imports [c]	**1.33**	**1.23**	**0.86**	**0.75**	**0.93**	**1.04**	*0.99*	*0.88*	*1.15*	*1.11*	*0.99*	*0.98*	**1.04**	*0.96*	*1.06*
Product Stock Withdrawn or Added (-) [d]	**0.25**	**-0.62**	**-0.37**	**0.36**	**0.03**	**-0.75**	*-0.24*	*0.70*	*0.53*	*-0.45*	*-0.26*	*0.42*	**-0.09**	*-0.06*	*0.06*
Total Supply	**18.27**	**18.49**	**18.75**	**18.97**	**18.30**	**18.43**	*19.03*	*19.09*	*19.04*	*18.79*	*19.30*	*19.43*	**18.62**	*18.72*	*19.14*
Demand															
Motor Gasoline	**7.59**	**8.16**	**8.25**	**8.06**	**7.77**	**8.21**	*8.49*	*8.25*	*7.92*	*8.35*	*8.62*	*8.37*	**8.02**	*8.18*	*8.32*
Jet Fuel	**1.57**	**1.56**	**1.64**	**1.62**	**1.55**	**1.55**	*1.54*	*1.58*	*1.55*	*1.59*	*1.66*	*1.64*	**1.60**	*1.55*	*1.61*
Distillate Fuel Oil	**3.58**	**3.33**	**3.24**	**3.60**	**3.58**	**3.37**	*3.39*	*3.53*	*3.82*	*3.39*	*3.31*	*3.57*	**3.44**	*3.47*	*3.52*
Residual Fuel Oil	**0.89**	**0.76**	**0.77**	**0.77**	**0.81**	**0.81**	*0.89*	*0.91*	*1.06*	*0.88*	*0.88*	*0.92*	**0.80**	*0.86*	*0.93*
Other Oils [e]	**4.64**	**4.67**	**4.85**	**4.93**	**4.62**	**4.49**	*4.71*	*4.82*	*4.69*	*4.59*	*4.83*	*4.92*	**4.77**	*4.66*	*4.76*
Total Demand	**18.27**	**18.49**	**18.75**	**18.97**	**18.32**	**18.43**	*19.03*	*19.09*	*19.04*	*18.79*	*19.30*	*19.43*	**18.62**	*18.72*	*19.14*
Total Petroleum Net Imports	**8.73**	**9.64**	**9.31**	**8.96**	**8.74**	**9.66**	*9.86*	*8.98*	*8.97*	*9.78*	*9.98*	*9.46*	**9.16**	*9.31*	*9.55*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**313**	**320**	**304**	**305**	**336**	**333**	*310*	*326*	*330*	*333*	*325*	*324*	**305**	*326*	*324*
Total Motor Gasoline	**200**	**204**	**198**	**210**	**215**	**221**	*207*	*207*	*211*	*205*	*197*	*204*	**210**	*207*	*204*
Finished Motor Gasoline	**154**	**164**	**158**	**166**	**166**	**178**	*165*	*164*	*166*	*164*	*155*	*162*	**166**	*164*	*162*
Blending Components	**46**	**41**	**41**	**43**	**49**	**44**	*43*	*43*	*45*	*41*	*42*	*41*	**43**	*43*	*41*
Jet Fuel	**39**	**43**	**46**	**44**	**43**	**44**	*46*	*42*	*43*	*42*	*43*	*45*	**44**	*42*	*45*
Distillate Fuel Oil	**101**	**118**	**139**	**138**	**124**	**139**	*153*	*144*	*109*	*120*	*136*	*139*	**138**	*144*	*139*
Residual Fuel Oil	**41**	**39**	**35**	**40**	**41**	**40**	*40*	*38*	*32*	*38*	*39*	*42*	**40**	*38*	*42*
Other Oils [e]	**253**	**286**	**308**	**259**	**265**	**313**	*334*	*283*	*272*	*302*	*316*	*263*	**259**	*283*	*263*
Total Stocks (excluding SPR)	**948**	**1011**	**1029**	**996**	**1025**	**1090**	*1089*	*1041*	*997*	*1040*	*1055*	*1017*	**996**	*1041*	*1017*
Crude Oil in SPR	**563**	**563**	**563**	**563**	**563**	**563**	*563*	*564*	*564*	*564*	*564*	*564*	**563**	*564*	*564*
Total Stocks (including SPR)	**1512**	**1575**	**1592**	**1560**	**1588**	**1654**	*1652*	*1605*	*1561*	*1604*	*1619*	*1581*	**1560**	*1605*	*1581*

[a] Includes lease condensate.

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

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

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

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

SPR: Strategic Petroleum Reserve

NGL: Natural Gas Liquids

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

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

Table 6. Approximate Energy Demand Sensitivities[a] for the STIFS[b] Model

(Percent Deviation Base Case)

Demand Sector	+1% GDP	+ 10% Prices		+ 10% Weather [e]	
		Crude Oil [c]	N.Gas Wellhead [d]	Fall/Winter [f]	Spring/Summer [f]
Petroleum					
Total	0.6%	-0.3%	0.1%	1.1%	0.1%
Motor Gasoline	0.1%	-0.3%	0.0%	0.0%	0.0%
Distillate Fuel	0.8%	-0.2%	0.0%	2.7%	0.1%
Residual Fuel	1.6%	-3.4%	2.6%	2.0%	2.7%
Natural Gas					
Total	1.1%	0.3%	-0.4%	4.4%	1.0%
Residential	0.1%	0.0%	0.0%	8.2%	0.0%
Commercial	0.9%	0.0%	0.0%	7.3%	0.0%
Industrial	1.7%	0.2%	-0.5%	1.3%	0.0%
Electric Utility	1.8%	1.6%	-1.5%	1.0%	4.0%
Coal					
Total	0.7%	0.0%	0.0%	1.7%	1.7%
Electric Utility	0.6%	0.0%	0.0%	1.9%	1.9%
Electricity					
Total	0.6%	0.0%	0.0%	1.5%	1.7%
Residential	0.1%	0.0%	0.0%	3.2%	3.6%
Commercial	0.9%	0.0%	0.0%	1.0%	1.4%
Industrial	0.8%	0.0%	0.0%	0.3%	0.2%

[a]Percent change in demand quantity resulting from specified percent changes in model inputs.
[b]Short-Term Integrated Forecasting System.
[c]Refiner acquisitions cost of imported crude oil.
[d]Average unit value of marketed natural gas production reported by States.
[e]Refers to percent changes in degree-days.
[f]Response during fall/winter period(first and fourth calendar quarters) refers to change in heating degree-days. Response during the spring/summer period refers to change in cooling degree-days.

Table 7. Forecast Components for U.S. Crude Oil Production

(Million Barrels per Day)

	High Price Case	Low Price Case	Difference		
			Total	Uncertainty	Price Impact
United States	*6.58*	*5.83*	*0.75*	*0.11*	*0.64*
Lower 48 States	*5.44*	*4.75*	*0.69*	*0.08*	*0.61*
Alaska	*1.13*	*1.08*	*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	**4.74**	**4.71**	**4.74**	**4.72**	**4.75**	**4.70**	*4.77*	*4.78*	*4.77*	*4.75*	*4.83*	*4.84*	**18.90**	*19.00*	*19.19*
Net Imports	**0.74**	**0.68**	**0.68**	**0.74**	**0.75**	**0.70**	*0.72*	*0.78*	*0.78*	*0.75*	*0.76*	*0.83*	**2.84**	*2.95*	*3.13*
Supplemental Gaseous Fuels	**0.03**	**0.02**	**0.02**	**0.03**	**0.03**	**0.02**	*0.03*	*0.03*	*0.04*	*0.03*	*0.03*	*0.03*	**0.10**	*0.12*	*0.13*
Total New Supply	**5.50**	**5.41**	**5.44**	**5.49**	**5.53**	**5.43**	*5.52*	*5.59*	*5.59*	*5.54*	*5.62*	*5.70*	**21.84**	*22.07*	*22.44*
Underground Working Gas Storage															
Opening	**6.51**	**5.34**	**6.09**	**7.03**	**6.52**	**5.52**	*6.44*	*7.28*	*6.92*	*5.53*	*6.45*	*7.31*	**6.51**	*6.52*	*6.92*
Closing	**5.34**	**6.09**	**7.03**	**6.52**	**5.52**	**6.44**	*7.28*	*6.92*	*5.53*	*6.45*	*7.31*	*6.70*	**6.52**	*6.92*	*6.70*
Net Withdrawals	**1.18**	**-0.75**	**-0.95**	**0.51**	**1.00**	**-0.92**	*-0.84*	*0.36*	*1.39*	*-0.92*	*-0.85*	*0.61*	**-0.01**	*-0.40*	*0.22*
Total Supply	**6.68**	**4.66**	**4.49**	**6.00**	**6.52**	**4.51**	*4.69*	*5.95*	*6.97*	*4.62*	*4.77*	*6.31*	**21.84**	*21.67*	*22.67*
Balancing Item [a]	**0.21**	**0.17**	**0.01**	**-0.25**	**0.10**	**0.18**	*-0.10*	*-0.51*	*0.24*	*0.27*	*-0.24*	*-0.71*	**0.13**	*-0.32*	*-0.45*
Total Primary Supply	**6.89**	**4.83**	**4.50**	**5.76**	**6.63**	**4.68**	*4.59*	*5.44*	*7.21*	*4.89*	*4.53*	*5.60*	**21.97**	*21.35*	*22.22*
Demand															
Lease and Plant Fuel	**0.30**	**0.30**	**0.30**	**0.30**	**0.31**	**0.31**	*0.31*	*0.32*	*0.31*	*0.31*	*0.31*	*0.32*	**1.20**	*1.25*	*1.26*
Pipeline Use	**0.24**	**0.16**	**0.15**	**0.20**	**0.23**	**0.16**	*0.16*	*0.19*	*0.23*	*0.16*	*0.15*	*0.18*	**0.75**	*0.73*	*0.71*
Residential	**2.27**	**0.88**	**0.38**	**1.46**	**2.11**	**0.78**	*0.36*	*1.33*	*2.43*	*0.83*	*0.34*	*1.40*	**4.98**	*4.57*	*5.00*
Commercial	**1.26**	**0.63**	**0.43**	**0.91**	**1.20**	**0.57**	*0.45*	*0.85*	*1.40*	*0.64*	*0.45*	*0.90*	**3.22**	*3.08*	*3.39*
Industrial (Incl. Cogenerators)	**2.32**	**2.10**	**2.05**	**2.23**	**2.24**	**1.97**	*2.00*	*2.10*	*2.27*	*2.04*	*2.01*	*2.11*	**8.70**	*8.31*	*8.43*
Cogenerators	**0.53**	**0.51**	**0.55**	**0.51**	**0.54**	**0.52**	*0.56*	*0.51*	*0.54*	*0.52*	*0.56*	*0.52*	**2.11**	*2.12*	*2.15*
Electricity Production															
Electric Utilities	***0.47***	***0.72***	***1.15***	**0.62**	**0.50**	**0.86**	*1.28*	*0.62*	*0.54*	*0.88*	*1.23*	*0.65*	**2.97**	*3.27*	*3.29*
Nonutilities (Excl. Cogen.)	**0.04**	**0.03**	**0.04**	**0.03**	**0.04**	**0.03**	*0.04*	*0.03*	*0.04*	*0.04*	*0.04*	*0.04*	**0.14**	*0.14*	*0.15*
Total Demand	**6.89**	**4.83**	**4.50**	**5.76**	**6.63**	**4.68**	*4.59*	*5.44*	*7.21*	*4.89*	*4.53*	*5.60*	**21.97**	*21.35*	*22.22*

[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	**274.1**	**270.1**	**271.6**	**274.1**	**279.2**	**271.6**	*282.8*	*277.2*	*290.9*	*271.9*	*276.0*	*287.5*	**1089.9**	*1110.8*	*1126.3*
Appalachia	**119.7**	**118.7**	**112.7**	**116.7**	**119.1**	**111.6**	*114.9*	*116.2*	*122.4*	*113.3*	*109.9*	*118.6*	**467.8**	*461.9*	*464.2*
Interior	**42.5**	**41.1**	**44.1**	**43.3**	**41.0**	**41.5**	*44.0*	*41.9*	*40.9*	*38.0*	*41.2*	*41.6*	**170.9**	*168.4*	*161.7*
Western	**111.9**	**110.4**	**114.8**	**114.1**	**119.1**	**118.5**	*123.9*	*119.0*	*127.6*	*120.6*	*124.9*	*127.3*	**451.3**	*480.5*	*500.4*
Primary Stock Levels [a]															
Opening	**28.6**	**37.5**	**42.5**	**39.1**	**34.0**	**37.5**	*37.2*	*34.2*	*32.9*	*39.9*	*40.3*	*34.1*	**28.6**	*34.0*	*32.9*
Closing	**37.5**	**42.5**	**39.1**	**34.0**	**37.5**	**37.2**	*34.2*	*32.9*	*39.9*	*40.3*	*34.1*	*33.0*	**34.0**	*32.9*	*33.0*
Net Withdrawals	**-8.9**	**-5.0**	**3.4**	**5.1**	**-3.6**	**0.3**	*3.0*	*1.2*	*-6.9*	*-0.4*	*6.2*	*1.1*	**-5.3**	*1.0*	*(S)*
Imports	**1.3**	**1.7**	**2.2**	**2.2**	**1.8**	**2.2**	*2.2*	*1.7*	*2.1*	*2.2*	*2.2*	*2.2*	**7.5**	*7.8*	*8.6*
Exports	**20.0**	**20.6**	**22.4**	**20.6**	**18.3**	**20.5**	*19.7*	*20.3*	*19.3*	*19.9*	*20.1*	*20.0*	**83.5**	*78.8*	*79.3*
Total Net Domestic Supply	**246.5**	**246.3**	**254.9**	**260.9**	**259.2**	**253.6**	*268.3*	*259.8*	*266.9*	*253.8*	*264.3*	*270.7*	**1008.5**	*1040.9*	*1054.9*
Secondary Stock Levels [b]															
Opening	**123.0**	**120.7**	**127.6**	**109.8**	**106.8**	**114.1**	*124.7*	*111.3*	*113.2*	*116.0*	*121.7*	*108.1*	**123.0**	*106.8*	*113.2*
Closing	**120.7**	**127.6**	**109.8**	**106.8**	**114.1**	**124.7**	*111.3*	*113.2*	*116.0*	*121.7*	*108.1*	*111.6*	**106.8**	*113.2*	*111.6*
Net Withdrawals	**2.3**	**-6.9**	**17.8**	**3.0**	**-7.3**	**-10.6**	*13.4*	*-1.9*	*-2.6*	*-5.5*	*13.8*	*-3.3*	**16.1**	*-6.3*	*2.4*
Waste Coal Supplied to IPPsc	**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	**251.2**	**241.7**	**275.0**	**266.2**	**254.4**	**245.5**	*284.2*	*260.4*	*266.7*	*250.7*	*280.5*	*269.8*	**1034.1**	*1044.6*	*1067.8*
Demand															
Coke Plants	**7.6**	**7.4**	**7.9**	**6.6**	**6.9**	**6.8**	*7.2*	*7.4*	*7.5*	*7.2*	*7.1*	*7.4*	**29.4**	*28.3*	*29.3*
Electricity Production															
Electric Utilities	**218.8**	**207.7**	**243.7**	**230.3**	**220.5**	**218.7**	*252.8*	*226.5*	*232.1*	*218.9*	*248.9*	*235.2*	**900.4**	*918.5*	*935.2*
Nonutilities (Excl. Cogen.) [d]	**5.7**	**5.7**	**5.7**	**5.7**	**6.3**	**6.2**	*6.3*	*6.3*	*6.6*	*6.6*	*6.6*	*6.6*	**22.8**	*25.0*	*26.5*
Retail and General Industry [e]	**20.0**	**18.2**	**17.9**	**20.2**	**20.0**	**18.3**	*18.0*	*20.3*	*20.5*	*17.9*	*17.9*	*20.6*	**76.4**	*76.6*	*76.8*
Total Demand	**252.1**	**238.9**	**275.2**	**262.7**	**253.7**	**250.1**	*284.2*	*260.4*	*266.7*	*250.7*	*280.5*	*269.8*	**1029.0**	*1048.4*	*1067.8*
Discrepancy [f]	**-0.9**	**2.8**	**-0.2**	**3.5**	**0.7**	**-4.5**	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	***5.1***	*-3.8*	*0.0*

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

[b] Secondary stocks are held by users.

[c] Estimated independent power producers (IPPs) consumption of waste coal for 1994 is 7.9 million tons, 8.5 million tons in 1995, and 8.9 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 third 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**	**434.9**	*501.3*	*450.4*	*464.0*	*437.6*	*495.1*	*469.5*	**1787.8**	*1823.6*	*1866.3*
Petroleum	**17.0**	**15.1**	**24.5**	**21.1**	**20.9**	**28.5**	*37.3*	*27.1*	*33.7*	*30.2*	*34.8*	*28.2*	**77.8**	*113.8*	*126.9*
Natural Gas	**45.0**	**69.5**	**109.9**	**59.2**	**47.9**	**80.7**	*120.8*	*59.6*	*51.5*	*84.0*	*117.2*	*61.8*	**283.6**	*309.0*	*314.5*
Nuclear	**160.0**	**144.0**	**171.0**	**153.6**	**162.6**	**154.7**	*179.1*	*168.4*	*168.5*	*152.9*	*179.5*	*161.8*	**628.6**	*664.8*	*662.8*
Hydroelectric	**94.2**	**95.9**	**77.5**	**69.6**	**86.7**	**88.6**	*69.7*	*69.6*	*77.3*	*78.3*	*66.1*	*63.7*	**337.2**	*314.6*	*285.5*
Geothermal and Other [a]	**1.6**	**1.8**	**2.0**	**2.0**	**1.9**	**1.4**	*1.9*	*1.9*	*1.7*	*1.7*	*1.7*	*1.7*	**7.5**	*7.1*	*6.9*
Subtotal	**752.0**	**740.2**	**865.8**	**764.5**	**757.0**	**789.0**	*910.0*	*776.9*	*796.7*	*784.7*	*894.5*	*786.8*	**3122.5**	*3232.9*	*3262.8*
Nonutility Generation[b]	**94.9**	**94.0**	**100.1**	**95.7**	**93.2**	**95.7**	*102.0*	*96.4*	*94.5*	*97.1*	*103.4*	*97.8*	**384.7**	*387.3*	*392.7*
Total Generation	**846.9**	**834.3**	**965.9**	**860.2**	**850.2**	**884.7**	*1012.0*	*873.3*	*891.2*	*881.8*	*997.9*	*884.6*	**3507.2**	*3620.2*	*3655.5*
Net Imports [e]	**7.5**	**8.9**	**11.8**	**8.3**	**5.8**	**6.9**	*9.2*	*6.5*	*6.8*	*7.9*	*10.4*	*7.6*	**36.6**	*28.5*	*32.7*
Total Supply	**854.3**	**843.2**	**977.7**	**868.5**	**855.9**	**891.6**	*1021.2*	*879.8*	*898.0*	*889.7*	*1008.3*	*892.2*	**3543.8**	*3648.6*	*3688.2*
Losses and Unaccounted for [f]	**46.4**	**72.3**	**67.9**	**56.2**	**47.8**	**79.2**	*56.6*	*63.3*	*46.8*	*73.1*	*63.5*	*64.5*	**242.8**	*247.0*	*247.9*
Demand															
Electric Utility Sales															
Residential	**277.8**	**227.1**	**311.0**	**259.8**	**275.8**	**250.7**	*348.9*	*259.8*	*300.6*	*253.7*	*330.0*	*265.0*	**1075.7**	*1135.2*	*1149.2*
Commercial	**218.0**	**221.2**	**260.3**	**229.0**	**217.4**	**230.9**	*272.1*	*230.3*	*231.7*	*233.7*	*270.2*	*233.6*	**928.5**	*950.7*	*969.2*
Industrial	**247.6**	**258.7**	**268.9**	**257.5**	**252.2**	**266.3**	*274.2*	*260.6*	*253.7*	*263.6*	*273.8*	*262.6*	**1032.7**	*1053.4*	*1053.7*
Other	**24.7**	**24.5**	**27.6**	**26.0**	**23.7**	**24.3**	*26.7*	*25.3*	*25.6*	*25.0*	*27.5*	*25.6*	**102.9**	*100.0*	*103.6*
Subtotal	**768.2**	**731.5**	**867.9**	**772.3**	**769.1**	**772.3**	*921.9*	*776.1*	*811.6*	*776.0*	*901.5*	*786.8*	**3139.8**	*3239.3*	*3275.8*
Nonutility Gener. for Own Use [b]	**39.8**	**39.4**	**41.9**	**40.1**	**39.0**	**40.1**	*42.7*	*40.4*	*39.6*	*40.7*	*43.3*	*41.0*	**161.2**	*162.3*	*164.6*
Total Demand	**807.9**	**770.9**	**909.8**	**812.4**	**808.1**	**812.4**	*964.6*	*816.5*	*851.2*	*816.6*	*944.8*	*827.8*	**3301.0**	*3401.6*	*3440.4*
Memo:															
Nonutility Sales to Electric Utilities [b]	**55.1**	**54.6**	**58.1**	**55.6**	**54.1**	**55.6**	*59.2*	*56.0*	*54.9*	*56.4*	*60.1*	*56.8*	**223.5**	225.0	228.1

[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 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,.

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

(Quadrillion Btu)

	Year						
	1996	1997	1998	1999	1996-1997	1997-1998	1998-1999
Electric Utilities							
Hydroelectric Power [a]	**3.433**	**3.530**	*3.293*	*2.988*	**2.8**	*-6.7*	*-9.3*
Geothermal, Solar and Wind Energy [b]	**0.110**	**0.115**	*0.107*	*0.102*	**4.5**	*-7.0*	*-4.7*
Biofuels [c]	**0.020**	**0.021**	*0.021*	*0.021*	**5.0**	*0.0*	*0.0*
Total	**3.563**	**3.665**	*3.420*	*3.111*	**2.9**	*-6.7*	*-9.0*
Nonutility Power Generators							
Hydroelectric Power [a]	**0.171**	**0.172**	*0.174*	*0.176*	**0.6**	*1.2*	*1.1*
Geothermal, Solar and Wind Energy [b]	**0.258**	**0.260**	*0.262*	*0.266*	**0.8**	*0.8*	*1.5*
Biofuels [c]	**0.599**	**0.603**	*0.609*	*0.617*	**0.7**	*1.0*	*1.3*
Total	**1.028**	**1.036**	*1.045*	*1.060*	**0.8**	*0.9*	*1.4*
Total Power Generation	**4.591**	**4.701**	*4.465*	*4.171*	**2.4**	*-5.0*	*-6.6*
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**	*0.231*	*0.266*	**-2.6**	*-22.2*	*15.2*
Total Renewable Energy Demand	**7.295**	**7.146**	*6.874*	*6.647*	**-2.0**	*-3.8*	*-3.3*

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

[b] Also includes photovoltaic and solar thermal energy.

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

[d] 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**	**6762**	**6995**	**7270**	*7531*	*7648*
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**	*12.16*	*11.73*
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**	*6.38*	*6.29*
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**	*9.31*	*9.55*
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**	*74.0*	*75.5*
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**	*18.72*	*19.14*
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**	**21.97**	*21.35*	*22.22*
Coal															
(million short tons)	**810**	**797**	**830**	**877**	**891**	**897**	**898**	**907**	**944**	**951**	**962**	**1006**	**1030**	*1048*	*1068*
Electricity (billion kilowatthours)															
Utility Sales [c]	**2324**	**2369**	**2457**	**2578**	**2647**	**2713**	**2762**	**2763**	**2861**	**2935**	**3013**	**3098**	**3140**	*3239*	*3276*
Nonutility Own Use [d]	**NA**	**NA**	**NA**	**NA**	**108**	**113**	**122**	**132**	**138**	**150**	**158**	**158**	**161**	*162*	*165*
Total	**2324**	**2369**	**2457**	**2578**	**2755**	**2826**	**2884**	**2895**	**3000**	**3085**	**3171**	**3256**	**3301**	*3402*	*3440*
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**	**94.3**	*94.4*	*96.2*
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**	**13.45**	**13.43**	**12.98**	*12.53*	*12.58*

[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 CONTROL1198.

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**	**6762**	**6995**	**7270**	*7531*	*7648*
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**	**1.075**	**1.095**	**1.116**	*1.127*	*1.146*
Real Disposable Personal Income (billion chained 1992 Dollars)	**3960**	**4077**	**4155**	**4325**	**4412**	**4490**	**4484**	**4605**	**4667**	**4773**	**4906**	**5043**	**5183**	*5337*	*5460*
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**	*1.312*	*1.325*
Real Fixed Investment (billion chained 1992 dollars)	**799**	**805**	**799**	**818**	**832**	**806**	**741**	**783**	**843**	**916**	**966**	**1051**	**1138**	*1260*	*1284*
Real Exchange Rate (Index, 1990=1.000)	**NA**	**NA**	**NA**	**NA**	**NA**	**1.000**	**1.006**	**1.012**	**1.055**	**1.032**	**0.959**	**1.015**	**1.103**	*1.153*	*1.104*
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**	**11.2**	**12.0**	**20.1**	*19.6*	*-5.7*
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**	**1.276**	*1.247*	*1.263*
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*	*1.674*
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**	*0.519*	*0.503*
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**	**119.6**	**122.7**	*125.8*	*127.3*
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**	**81.1**	**83.9**	*86.6*	*88.5*
Total Industrial Production (index, 1987=1.000)	**0.880**	**0.890**	**0.931**	**0.974**	**0.991**	**0.990**	**0.970**	**1.000**	**1.036**	**1.092**	**1.146**	**1.185**	**1.244**	*1.283*	*1.294*
Housing Stock (millions)	**96.3**	**98.0**	**99.8**	**101.6**	**102.9**	**103.5**	**104.5**	**105.5**	**106.8**	**108.2**	**109.6**	**111.0**	**112.5**	*114.0*	*115.2*
Weather [a]															
Heating Degree-Days															
U.S.	**4642**	**4295**	**4334**	**4653**	**4726**	**4016**	**4200**	**4441**	**4700**	**4483**	**4531**	**4713**	**4542**	*4069*	*4576*
New England	**6571**	**6517**	**6546**	**6715**	**6887**	**5848**	**5960**	**6844**	**6728**	**6672**	**6559**	**6679**	**6662**	*5986*	*6621*
Middle Atlantic	**5660**	**5665**	**5699**	**6088**	**6134**	**4998**	**5177**	**5964**	**5948**	**5934**	**5831**	**5986**	**5809**	*5088*	*5839*
U.S. Gas-Weighted	**4856**	**4442**	**4391**	**4804**	**4856**	**4139**	**4337**	**4458**	**4754**	**4659**	**4707**	**5040**	**4886**	*4307*	*4732*
Cooling Degree-Days (U.S.)	**1194**	**1249**	**1269**	**1283**	**1156**	**1260**	**1331**	**1040**	**1218**	**1220**	**1293**	**1180**	**1156**	*1354*	*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 CONTROL1198.

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**	*18.7*	*19.1*
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**	*14.6*	*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**	*42.0*	*42.8*
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**	*4.4*	*4.3*
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*	*4.3*
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**	*32.0*	*32.8*
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**	*74.0*	*75.5*
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*	*9.3*
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**	*6.2*	*6.4*
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**	*19.9*	*20.1*
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**	*30.5*	*30.6*
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*	*7.2*
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*	*3.2*
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*	*10.9*
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**	*55.1*	*55.4*
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**	*75.0*	*75.5*
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**	*-1.0*	*0.0*
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*	*2.8*
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**	*2.8*	*2.9*

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

[b] OECD Europe includes the former East Germany.

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

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

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

OPEC: Organization of Petroleum Exporting Countries: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

SPR: Strategic Petroleum Reserve

Former Soviet Union: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

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

Sources: Energy Information Administration: latest data available from EIA databases supporting the following reports: *International Petroleum Statistics Report*, DOE/EIA-0520, and Organization for Economic Cooperation and Development, Annual and Monthly Oil Statistics Database.

Table A4. Annual Average U. S. Energy Prices

(Nominal Dollars)

	Year														
	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**	*12.16*	*11.73*
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**	*1.88*	*1.87*
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**	*1.08*	*1.08*
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**	*1.03*	*1.05*
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**	*1.04*	*1.04*
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**	*0.42*	*0.43*
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**	*0.85*	*0.84*
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**	*12.52*	*12.16*
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**	*1.25*	*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**	*2.05*	*1.97*
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**	*2.39*	*2.49*
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**	**6.94**	*6.80*	*6.91*
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**	*8.2*	*8.2*

[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**	*6.38*	*6.29*
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**	*1.18*	*1.10*
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**	*5.19*	*5.19*
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**	*8.35*	*8.49*
Other SPR Supply	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*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*	*0.01*
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**	*0.16*	*0.24*
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**	*14.83*	*15.02*
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**	*1.77*	*1.79*
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**	*0.36*	*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**	*0.86*	*0.85*
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**	*0.96*	*1.06*
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**	*-0.06*	*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**	*18.72*	*19.14*
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**	*8.18*	*8.32*
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**	*1.55*	*1.61*
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**	*3.47*	*3.52*
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**	*0.86*	*0.93*
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**	*4.66*	*4.76*
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**	*18.72*	*19.14*
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**	*9.31*	*9.55*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**321**	**331**	**349**	**330**	**341**	**323**	**325**	**318**	**335**	**337**	**303**	**284**	**305**	*326*	*324*
Total Motor Gasoline	**223**	**233**	**226**	**228**	**213**	**220**	**219**	**216**	**226**	**215**	**202**	**195**	**210**	*207*	*204*
Jet Fuel	**40**	**50**	**50**	**44**	**41**	**52**	**49**	**43**	**40**	**47**	**40**	**40**	**44**	*42*	*45*
Distillate Fuel Oil	**144**	**155**	**134**	**124**	**106**	**132**	**144**	**141**	**141**	**145**	**130**	**127**	**138**	*144*	*139*
Residual Fuel Oil	**50**	**47**	**47**	**45**	**44**	**49**	**50**	**43**	**44**	**42**	**37**	**46**	**40**	*38*	*42*
Other Oils [f]	**247**	**265**	**260**	**267**	**257**	**261**	**267**	**263**	**273**	**275**	**258**	**250**	**259**	*283*	*263*

[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**	**18.90**	*19.00*	*19.19*
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**	**2.84**	*2.95*	*3.13*
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**	**0.10**	*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**	**21.84**	*22.07*	*22.44*
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*	*6.92*
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**	*6.92*	*6.70*
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**	*-0.40*	*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**	**21.84**	*21.67*	*22.67*
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**	**0.13**	*-0.32*	*-0.45*
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**	**21.97**	*21.35*	*22.22*
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**	**1.20**	*1.25*	*1.26*
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**	**0.75**	*0.73*	*0.71*
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**	**4.98**	*4.57*	*5.00*
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**	**3.22**	*3.08*	*3.39*
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**	**8.84**	*8.45*	*8.57*
Cogenerators [b]	**NA**	**NA**	**NA**	**NA**	**0.87**	**1.03**	**1.13**	**1.37**	**1.49**	**1.72**	**1.88**	**2.29**	**2.11**	*2.12*	*2.15*
Other Nonutil. Gen. [b]	**NA**	**NA**	**NA**	**NA**	**0.04**	**0.07**	**0.13**	**0.14**	**0.18**	**0.14**	**0.15**	**0.16**	**0.14**	*0.14*	*0.15*
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**	*3.27*	*3.29*
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**	**21.97**	*21.35*	*22.22*

[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**	**1089.9**	*1110.8*	*1126.3*
Appalachia	**NA**	**NA**	**NA**	**NA**	**464.8**	**489.0**	**457.8**	**456.6**	**409.7**	**445.4**	**434.9**	**451.9**	**467.8**	*461.9*	*464.2*
Interior	**NA**	**NA**	**NA**	**NA**	**198.1**	**205.8**	**195.4**	**195.7**	**167.2**	**179.9**	**168.5**	**172.8**	**170.9**	*168.4*	*161.7*
Western	**NA**	**NA**	**NA**	**NA**	**317.9**	**334.3**	**342.8**	**345.3**	**368.5**	**408.3**	**429.6**	**439.1**	**451.3**	*480.5*	*500.4*
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**	*34.0*	*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**	**34.0**	*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**	**-5.3**	*1.0*	*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**	*7.8*	*8.6*
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**	*78.8*	*79.3*
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**	**1008.5**	*1040.9*	*1054.9*
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*	*113.2*
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**	*113.2*	*111.6*
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**	*-6.3*	*2.4*
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**	**8.8**	**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**	**1006.7**	**1034.1**	*1044.6*	*1067.8*
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**	*28.3*	*29.3*
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**	*918.5*	*935.2*
Nonutilities (Excl. Cogen.) [d]	**NA**	**NA**	**NA**	**NA**	**0.9**	**1.6**	**10.2**	**14.8**	**17.8**	**20.9**	**21.2**	**22.2**	**22.8**	*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**	*76.6*	*76.8*
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**	**1029.0**	*1048.4*	*1067.8*
Discrepancy [f]	**10.6**	**6.5**	**4.4**	**5.8**	**5.9**	**2.4**	**-6.4**	**-5.4**	**-13.5**	**2.9**	**-1.6**	**1.2**	**5.1**	*-3.8*	*0.0*

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

[b] Secondary stocks are held by users.

[c] Estimated independent power producers (IPPs) consumption of waste coal for 1994 is 7.9 million tons, 8.5 million tons in 1995, and 8.9 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 third 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**	*1823.6*	*1866.3*
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**	*113.8*	*126.9*
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**	*309.0*	*314.5*
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**	*664.8*	*662.8*
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**	*314.6*	*285.5*
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*	*6.9*
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**	*3232.9*	*3262.8*
Nonutility Generation [b]	**NA**	**NA**	**NA**	**NA**	**191.3**	**221.8**	**253.7**	**296.0**	**325.5**	**354.9**	**374.4**	**382.4**	**384.7**	*387.3*	*392.7*
Total Generation	**NA**	**NA**	**NA**	**NA**	**2975.6**	**3030.0**	**3078.7**	**3093.2**	**3208.1**	**3265.6**	**3369.0**	**3459.9**	**3507.2**	*3620.2*	*3655.5*
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**	*28.5*	*32.7*
Total Supply	**NA**	**NA**	**NA**	**NA**	**2986.6**	**3032.0**	**3101.0**	**3121.6**	**3236.5**	**3310.3**	**3406.6**	**3497.9**	**3543.8**	*3648.6*	*3688.2*
Losses and Unaccounted for [c]	**NA**	**NA**	**NA**	**NA**	**231.4**	**206.1**	**217.1**	**226.6**	**236.9**	**225.5**	**235.4**	**242.3**	**242.8**	*247.0*	*247.9*
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**	**1075.7**	*1135.2*	*1149.2*
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**	**928.5**	*950.7*	*969.2*
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**	**1032.7**	*1053.4*	*1053.7*
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**	**102.9**	*100.0*	*103.6*
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**	**3139.8**	*3239.3*	*3275.8*
Nonutility Own Use [b]	**NA**	**NA**	**NA**	**NA**	**108.4**	**113.4**	**121.9**	**131.6**	**138.1**	**150.2**	**157.9**	**157.8**	**161.2**	*162.3*	*164.6*
Total Demand	**NA**	**NA**	**NA**	**NA**	**2755.2**	**2825.9**	**2883.9**	**2895.0**	**2999.6**	**3084.8**	**3171.2**	**3255.6**	**3301.0**	*3401.6*	*3440.4*
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**	**224.6**	**223.5**	*225.0*	*228.1*

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

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

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

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

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

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