September 1998

Highlights

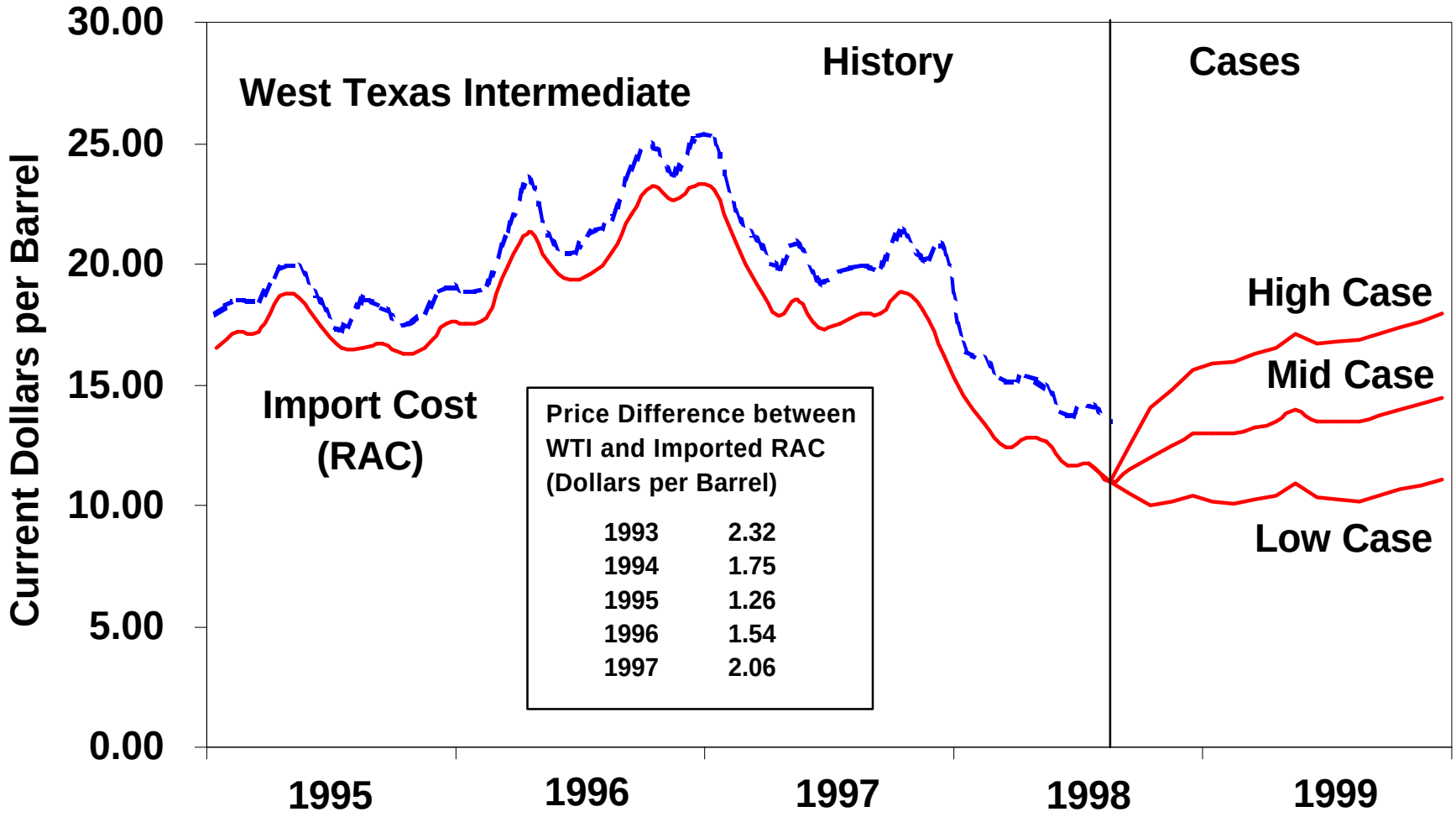
World Oil Markets

Oil prices continue to remain at historically low levels (when taking into account inflation) and our current forecast does not foresee a large increase anytime over the next several months (Figure 1). The imported refiners acquisition cost (EIA's proxy for a "world oil price") is expected to average $11.42 per barrel in the third quarter of 1998 (July - September), before increasing slightly to $12.49 per barrel for the fourth quarter of 1998 (October - December). Our forecast then estimates a slight rise in prices in 1999, but the 1999 average price of $13.65 per barrel is still nearly $5 per barrel less than in 1997 and nearly $7 per barrel less than in 1996. The main reasons for the expected continuation in relatively low oil prices stem from both supply and demand factors.

On the supply side, even with an assumed 85% compliance rate in the OPEC cuts announced at the end of June for the 3rd quarter of 1998 (72% in the fourth quarter of 1998 and even lower in subsequent quarters), EIA is still forecasting world oil supply to exceed world oil demand by nearly 600 thousand barrels per day (over 200 million barrels) in 1998. And this follows 1997, a year in which EIA estimates world oil supply exceeded world oil demand by over 800 thousand barrels per day (300 million barrels over the course of the year)! This has returned inventories to historically high levels and has helped keep prices from rising substantially following the latest announced cuts in production by OPEC and some non-OPEC producers (see http://www.eia.doe.gov/emeu/security/agreemnt.html).

On the demand side, EIA is still forecasting a drop in Asian oil demand (including China and Japan), even though this region averaged growth in oil demand of over 850,000 barrels per day between 1992-1996 (see http://www.eia.doe.gov/emeu/cabs/eastasia.html for an analysis on the energy implications of the Asian economic crisis). The outlook would even be gloomier if not for China. Our forecast still calls for a 6-7% growth rate in Chinese oil demand in 1998 and 1999, an increase of over 500 thousand barrels per day between 1997-1999. While we do expect some recovery in the rest of Asia in 1999, the region is still expected to consume oil at an average rate nearly 1 million barrels per day less in 1999 than we projected as recently as April. Currently, EIA projects that 1998 world oil demand (excluding the Former Soviet Union and Eastern Europe) will grow by less than 1 million barrels per day from 1997, the lowest such increase since 1990 (when the price shock of Iraq's invasion of Kuwait caused oil demand to stagnate).

Figure 1. U.S. Refiner Cost of Imported Oil



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

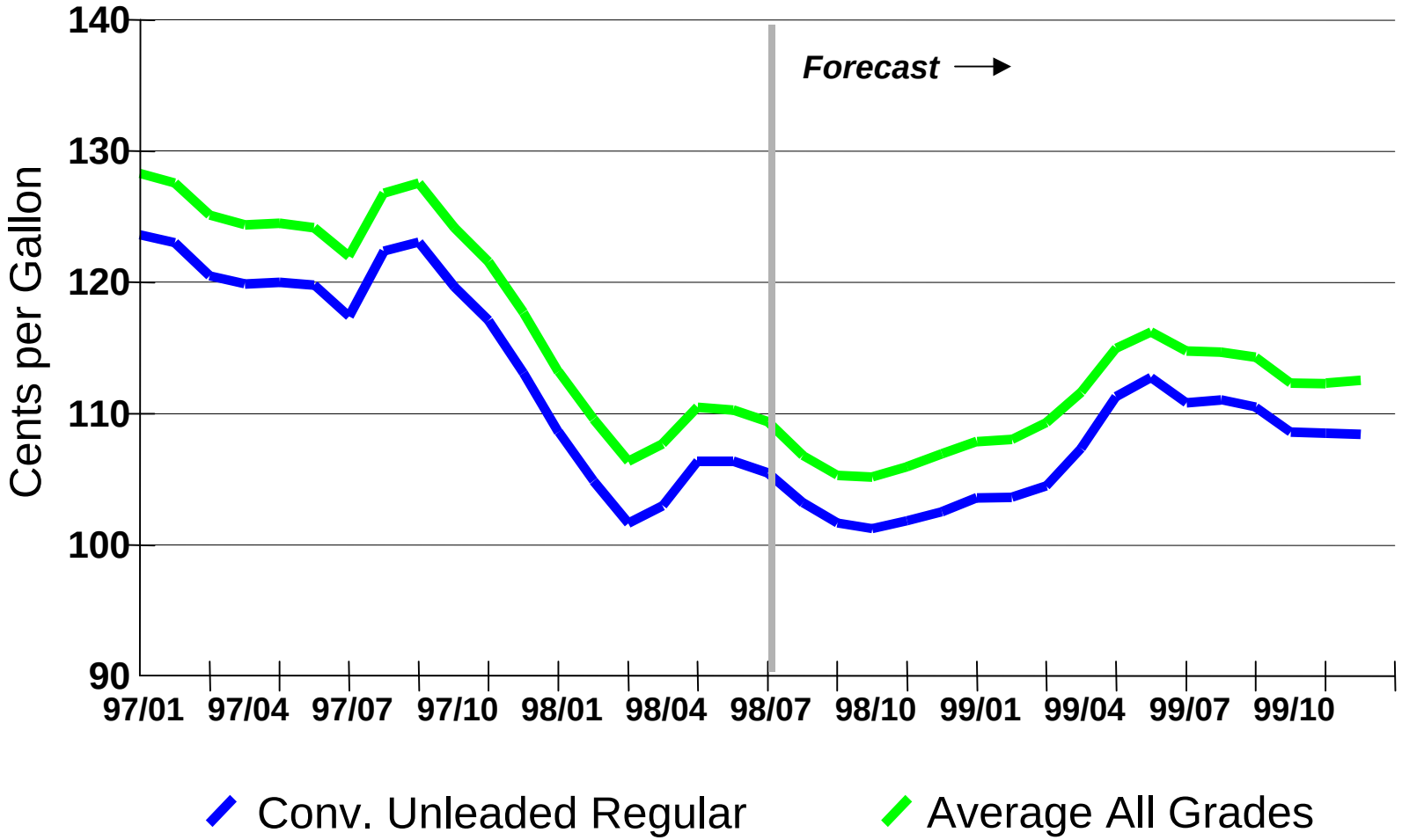
U.S. Energy Prices

September prices for motor gasoline are projected to match the March lows for this year (Figure 2). In March of this year retail motor gasoline prices hit $1.02 and $1.06 per gallon for self-service regular and all grades, respectively-- their lowest inflation-adjusted price ever. Spot prices for motor gasoline have been generally heading downward since peaking in late April, although there were small upward movements in the middle of the summer due to regional refinery problems (early August on the West Coast and middle August on the East Coast - see Figure 3). These problems were very short-lived and have since been resolved. As a result, the spot prices have been abating. With the driving season nearly over, and with low crude oil prices, motor gasoline prices should be heading downward. The average annual price for 1998 is projected to be the lowest inflation-adjusted annual price on record (see "Gasoline Price Analysis Sheet"). With plentiful gasoline stocks and assuming a continuation of the relatively weak crude oil price situation, we now expect average retail gasoline prices to be about 17 cents per gallon lower for the third quarter of this year than for the same period in 1997. Next year, pump prices should rise about 4-5 cents per gallon, following the projected crude oil price increase of about $1.20 per barrel.

Our current view about how this year's average annual natural gas wellhead price will look is that we'll see about a 13 percent decline from 1997 levels (Figure 4). A large portion of this expected average decline stems from the nearly 30-percent year-over-year price decrease that occurred in the unseasonably warm first quarter of this year. This compares to our 9 percent projected decline in the previous Outlook and to a 6 percent decline in the July 1998 Outlook. Our price projection revisions are confined mostly to 1998, with current and very-near term prices exhibiting greater-than-expected weakness. In addition, we are including downward revisions in the wellhead price estimates for the first quarter of the year.

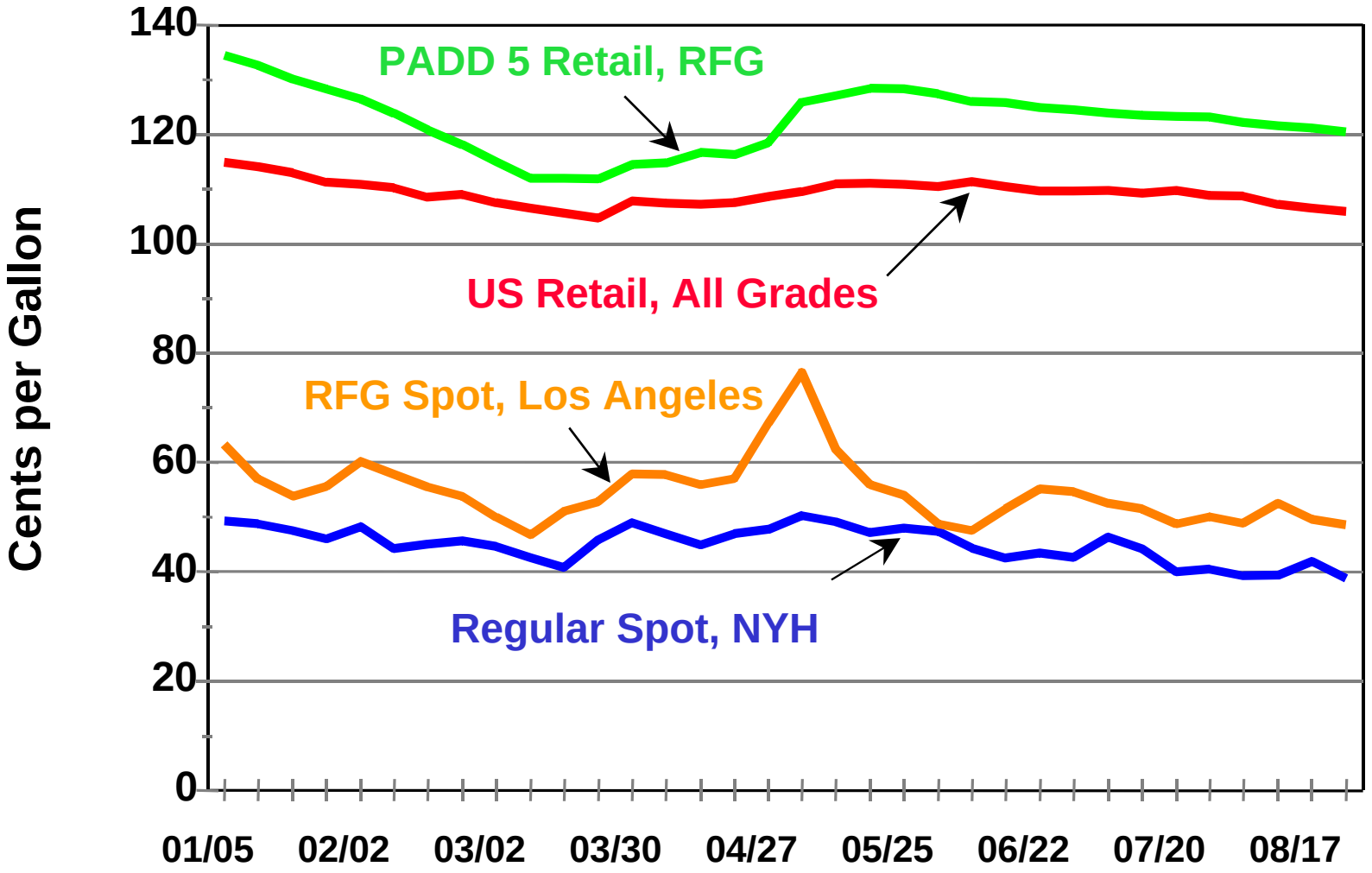
With underground storage at the end of August estimated to have been about 6 percent higher than year-earlier levels (Figure 5), there has been considerable downward price pressure. In addition, industrial demand for gas has not shown any consistent growth so far this year. With relatively high inventories, wellhead prices might have been under greater downward pressure this summer had it not been for prolonged period of extremely hot weather in much of the country from June through August. (Electric utility use of natural gas was nearly 20 percent higher than last year in the second quarter, and the third quarter figures will probably exceed the high levels of Q3 1997 - Figure 6.) On balance, we expect wellhead prices for the third quarter to average about $1.94 per thousand cubic feet or 8 cents less than one year ago. For the remainder of 1998 and for all of 1999, a normal seasonal price pattern is projected: prices are expected to rise in the winter quarters. However, given recent tendencies in the spot market, we have changed our fourth quarter projection for wellhead prices to be about 10 cents per thousand cubic feet lower than our previous forecast (Figure 7). As we mentioned in the previous Outlook, if the

Figure 2. Monthly Retail Gasoline Prices



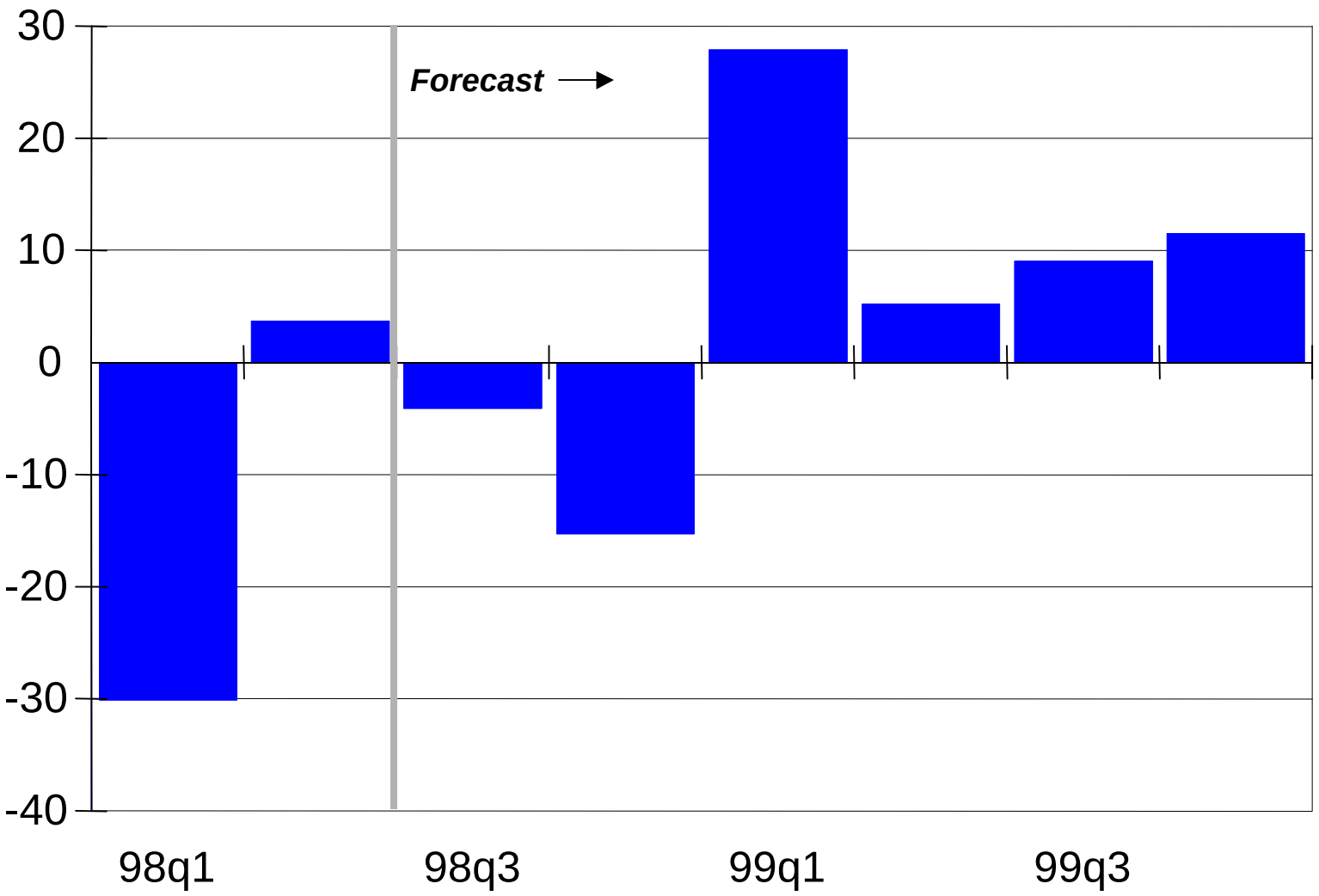
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 3. Weekly Gasoline Prices



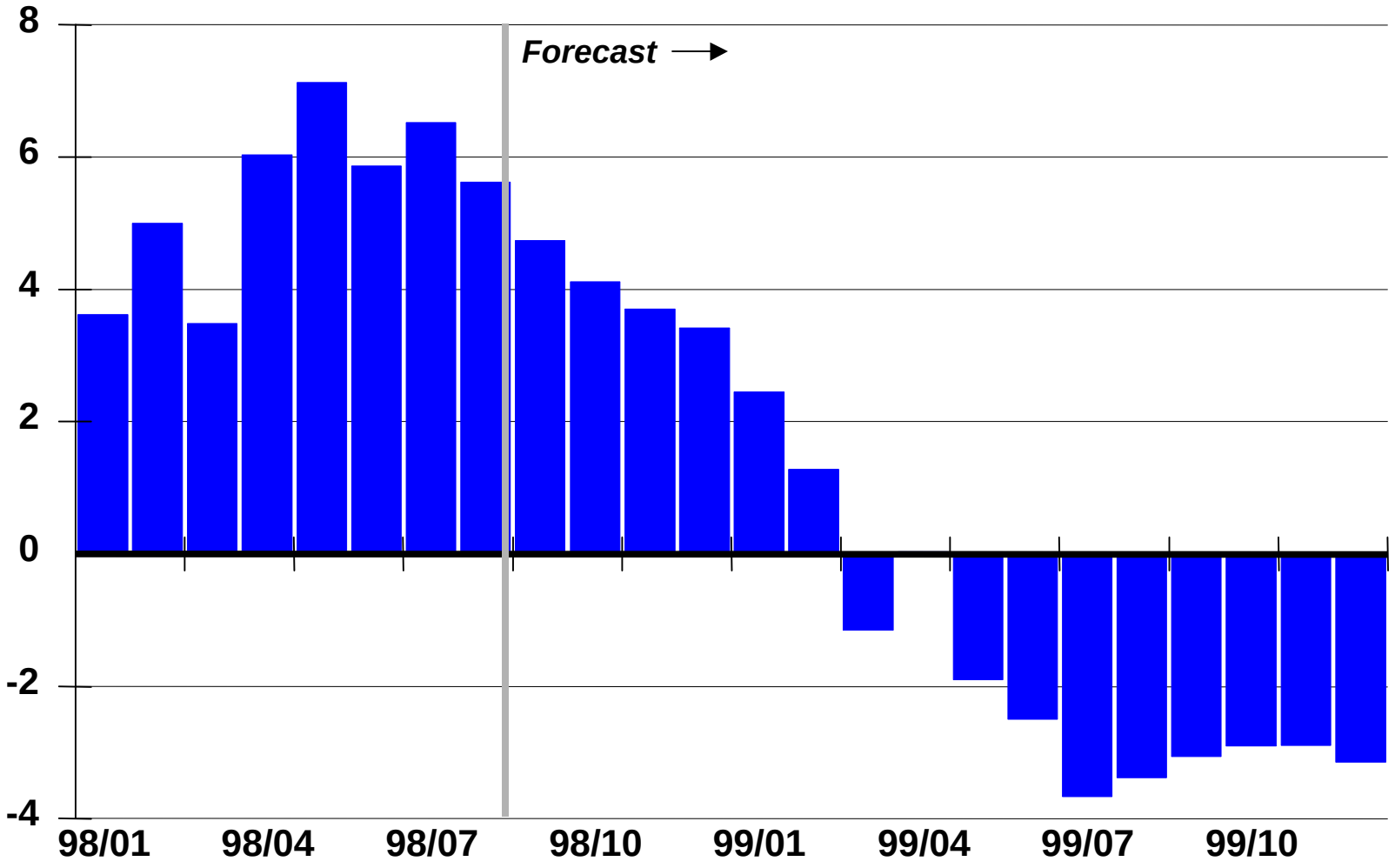
Source : Energy Information Administration: *Weekly Petroleum Status Report*

Figure 4. U.S. Average Wellhead Gas Prices
(Quarterly Percentage Change from Year Ago)



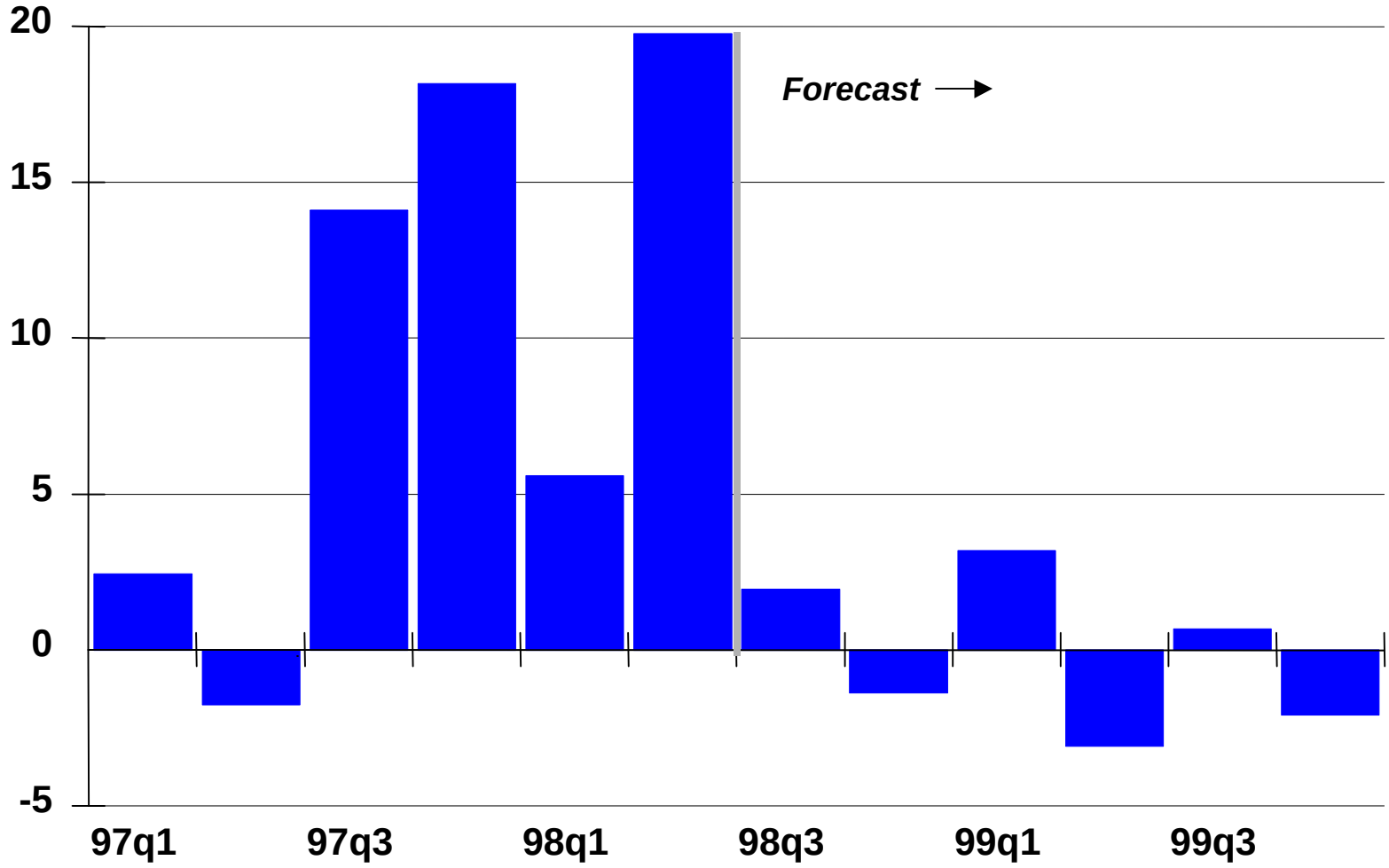
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 5. Total Gas in Underground Storage
(Monthly Percentage Change from Year Ago)



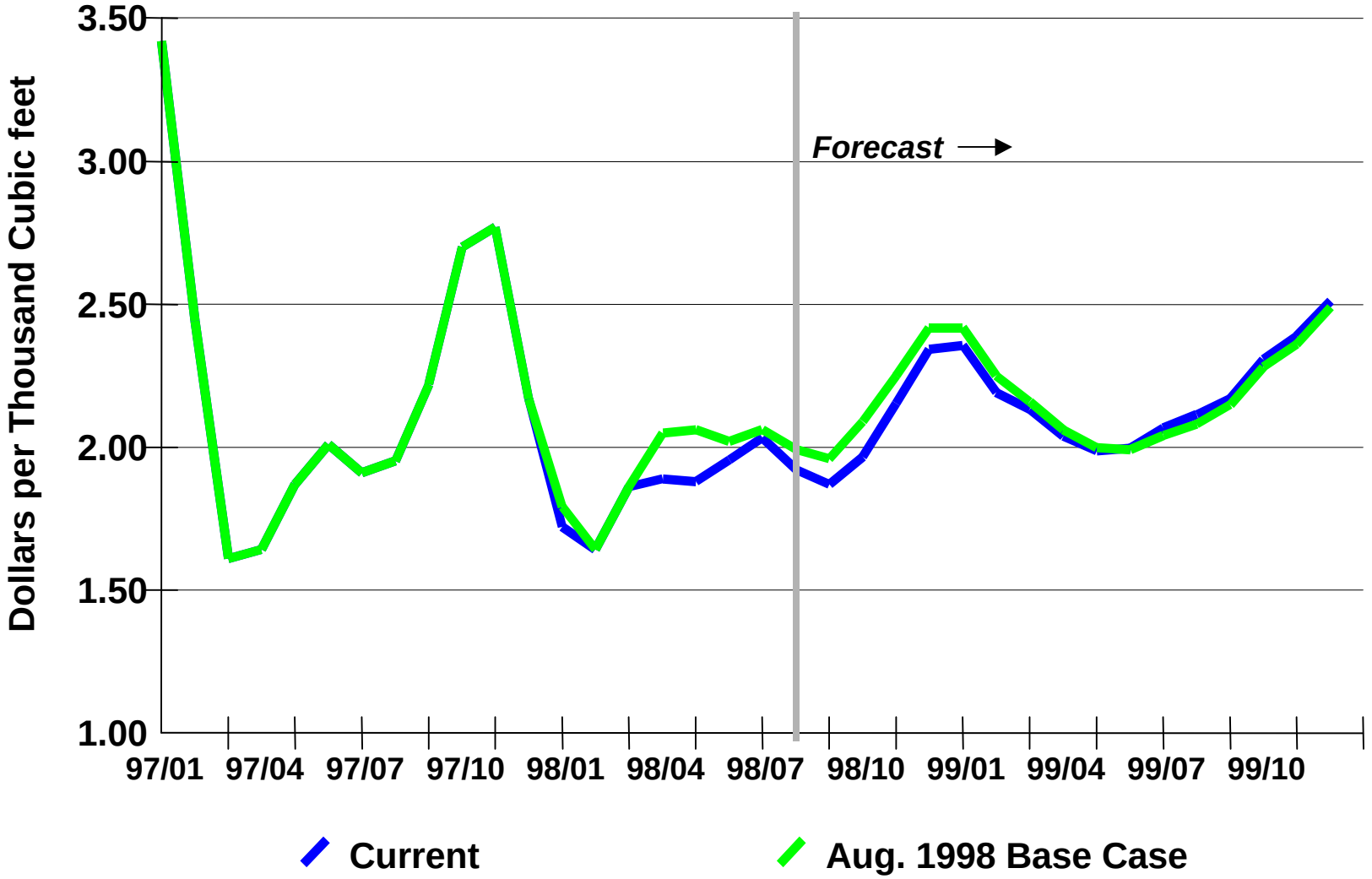
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 6. Gas Use at Electric Utilities
(Quarterly Percentage Change from Year Ago)



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

Figure 7. Average Wellhead Gas Prices
(Current Forecast vs August 1998 Base Case)



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

hot weather in the Southwest continues through September, as it did last year, some upward pressure on prices could reemerge in the near term. Otherwise, demand is not likely to be sufficient to arrest the current slide in spot prices until the heating season kicks in.

For 1999, we expect about a 13 percent rise in natural gas wellhead prices. The bulk of this increase will be coming in the first quarter (28 percent higher), as the winter weather is assumed to be normal. Considerable increases in gas to meet heating demand are expected if the winter is a cold one.

Retail heating oil prices are projected to average 86 cents per gallon for the upcoming heating season (October through March) in our base case outlook. This is 6 cents per gallon less than the previous winter even though the weather is assumed to be to be much colder than last winter (Figure 8). This is because crude oil prices in the fourth quarter of this year are anticipated to be more than $5.00 per barrel less than one-year ago-earlier prices and distillate stocks are projected to be more than 8 percent above 1997 levels for the end of September (Figure 9).

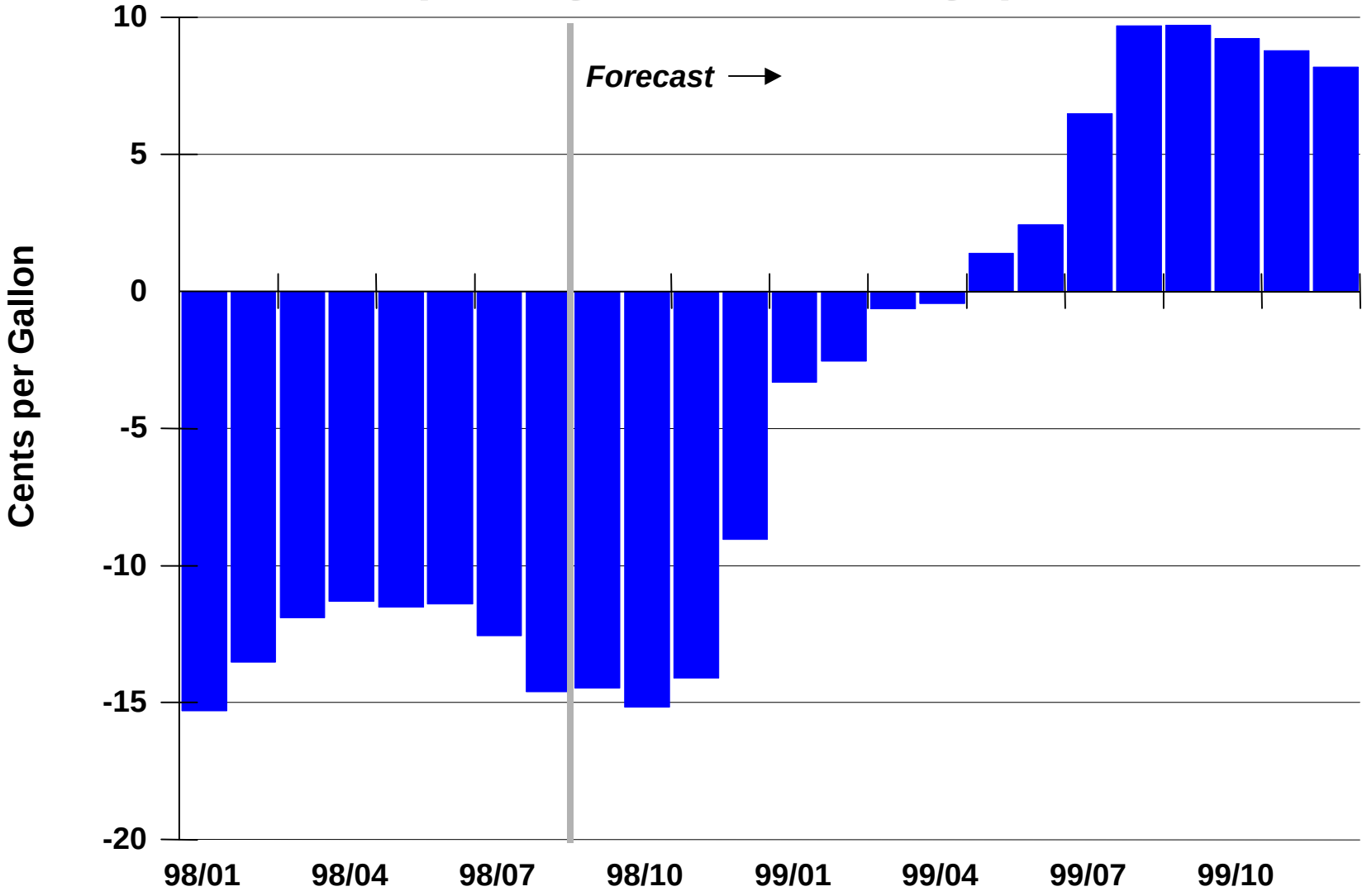
U.S. Petroleum Demand and Supply

Estimated year-to-date growth in petroleum demand through August is placed at 0.5 percent, compared to 1997 levels. Interestingly, one of the most active sectors of growth, in relative terms at least, has been residual fuel oil.

	U.S. Petroleum Demand (Million barrels per Day)								
	Jan.	**Feb.**	**Mar.**	**Apr.**	**May**	**Jun.**	**Jul***	**Aug***	**Year-to-Date**
1997	18.55	18.40	17.86	18.56	18.29	18.62	19.11	18.57	18.49
1998	18.26	18.32	18.39	18.62	17.88	18.82	19.14	19.31	18.60
% Chg.	-1.6%	-0.4%	3.0%	0.4%	-2.3%	1.1%	0.2%	4.0%	0.5%
* Based on Weekly data.									

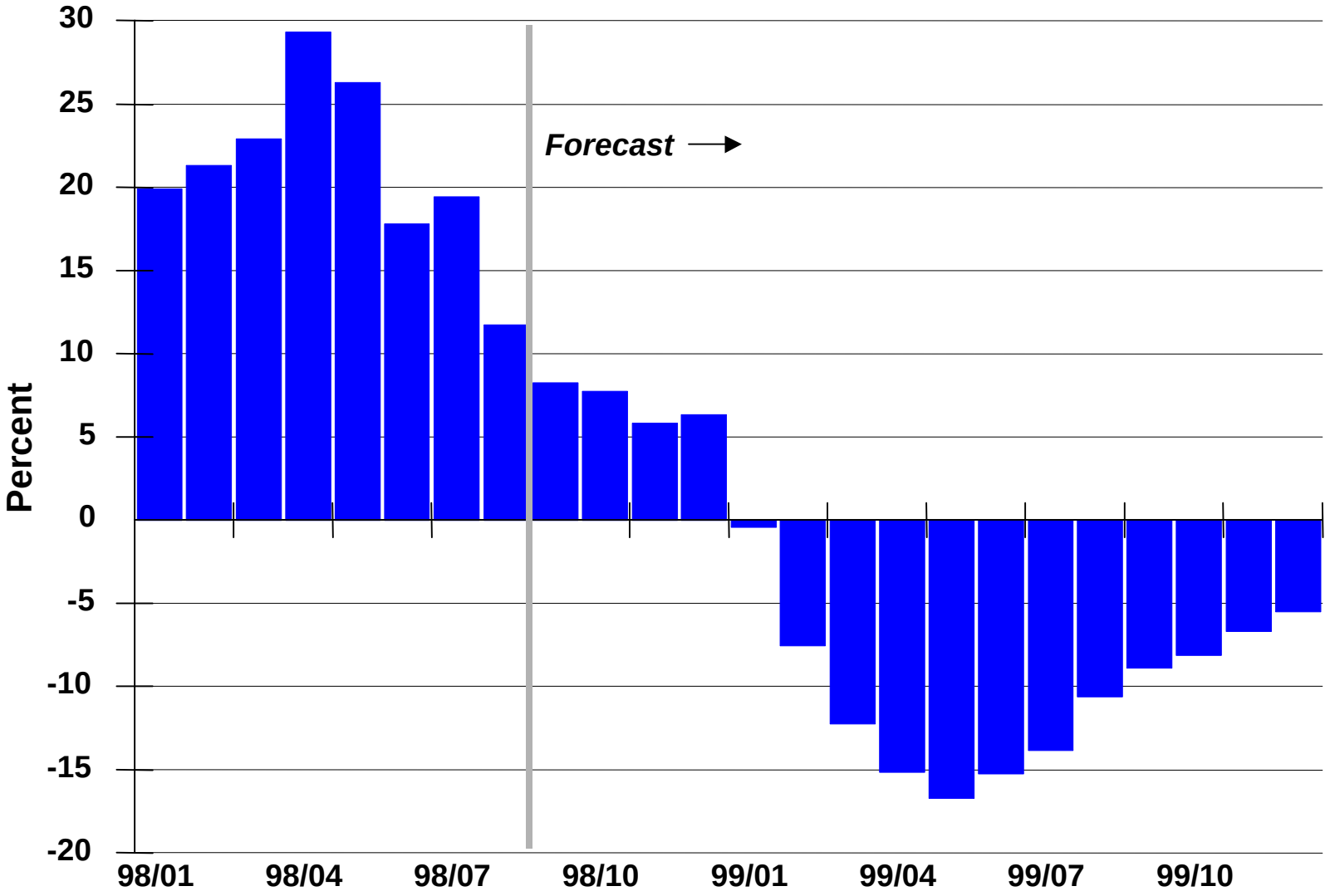
All the action for heavy fuel oil, however, has been at electric utilities, which could burn as much as 80 thousand barrels per day more in 1998 than 1997, when all is said and done (Figure 10). Some additional weather-related growth could emerge in early 1999, but beyond that we expect residual fuel to resume its overall decline after this year. Total petroleum demand is expected to post growth of about 0.8 percent this year and 1.6 percent in 1999. A major reason for the accelerated growth in 1999 (despite a slowing economy) is the prospect for sharply higher

Figure 8. Retail Heating Oil Prices
(Change from Year Ago)



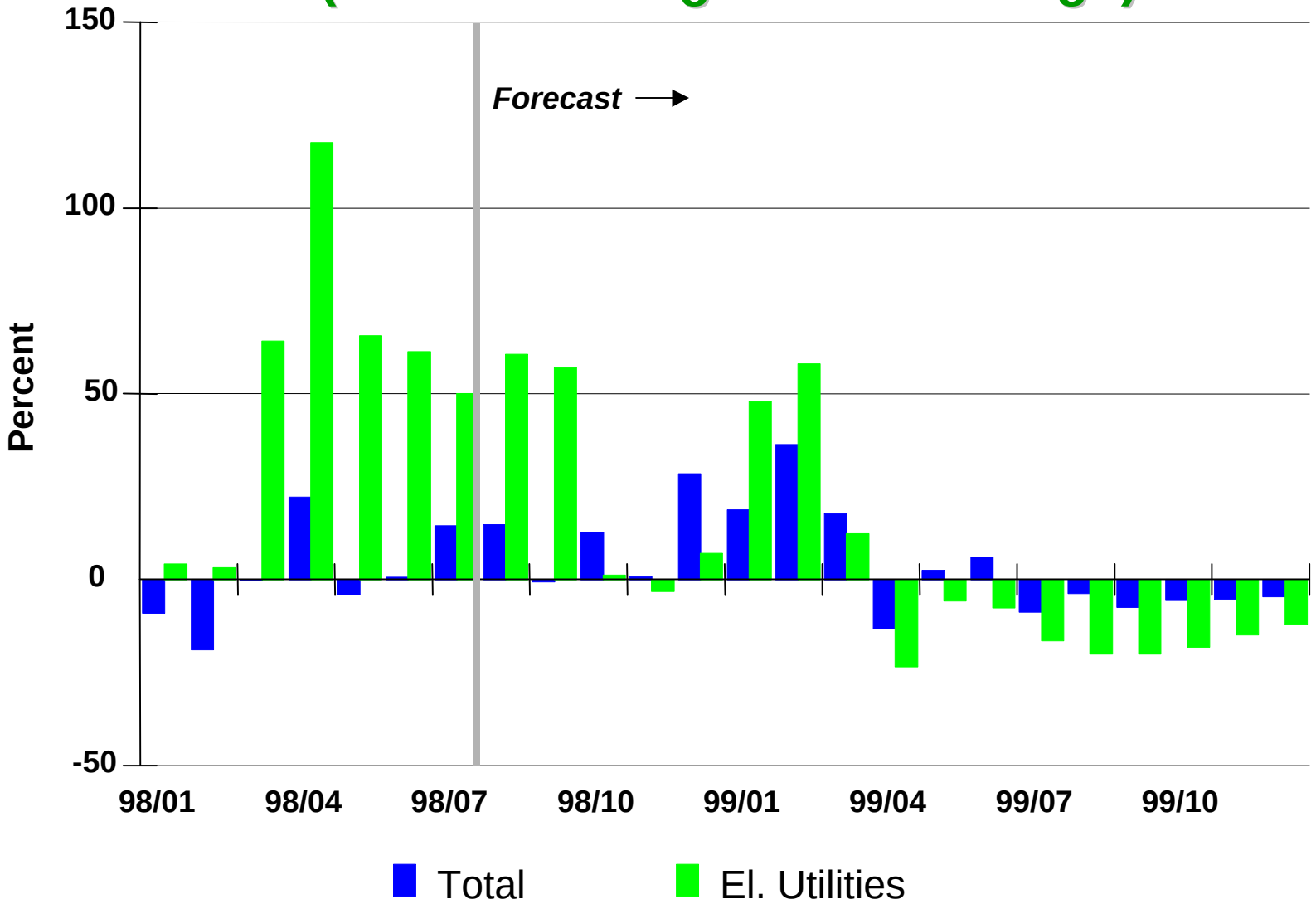
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 9. End-Month Distillate Fuel Stocks
(Percent Change from Year Ago)



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

Figure 10. Residual Fuel Demand
(Percent Change from Year Ago)



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

heating fuel demand in the upcoming first quarter, assuming normal weather. In the base case we assume that heating degree-days in Q1 1999 will be about 18 percent above the Q1 1998 level (Figure 11).

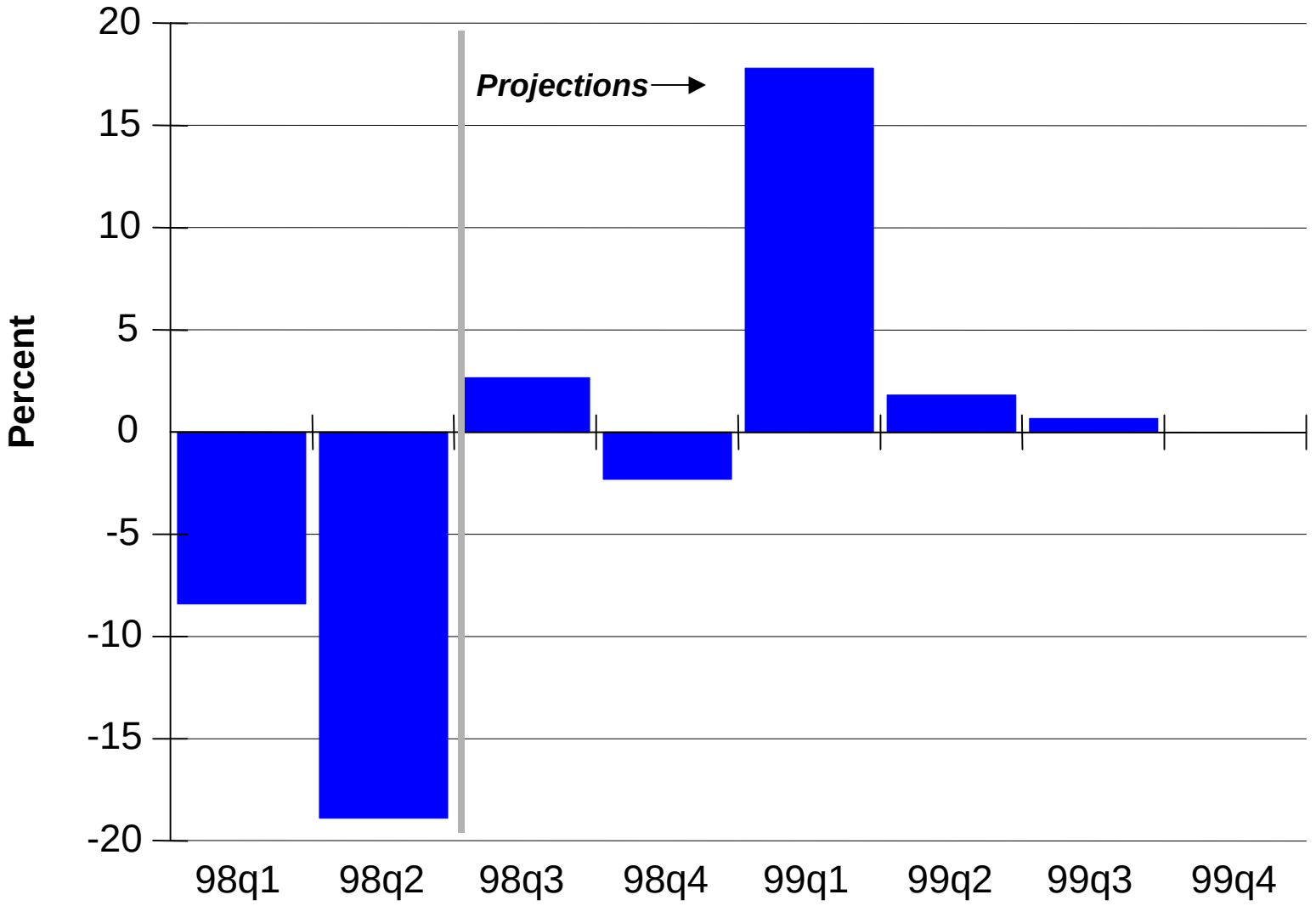
U.S. crude oil production, which almost remained flat in 1997, is expected to show somewhat faster declines for the rest of this year and into 1999 as net positive impacts from previously completed Offshore Gulf projects are overshadowed by the impacts of lower prices on marginal production (Figure 12). However, beyond this summer we do not anticipate that this will induce an acceleration of net crude oil imports. One reason is that we expect the rate of crude oil inputs to distillation units to level off near the high rates seen over the last year and a half (Figure 13). Also, high crude oil stock levels will be a net source of incremental supply of crude oil to refiners in 1999 as inventories are drawn down some from current high levels (Figure 14). Incremental crude oil distillation requirements will be minimized if product stocks are also drawn down, as we expect to happen (Figure 15). Motor gasoline and distillate fuel stocks in particular should be shaved toward more normal levels in 1999 (Figures 16 and 9). However, with demand growth expected to be higher in 1999 we do expect to see petroleum products net imports increase next year. This will contrast with the net decline in product imports likely for 1998 (Figure 17).

Natural Gas Demand and Supply

Parties interested in seeing signs of real life in the natural gas market are probably pinning hopes on a strong winter more than ever now. While we do not know yet what the actual consumption rate for the entire summer was, we expect that, for the electric power sector at least, it was up significantly from last year, given the substantial increase in cooling demand this year. Still, gas storage remains high compared to recent history (Figure 5), meaning that U.S. gas supply has had little or no trouble staying up with or exceeding demand growth.

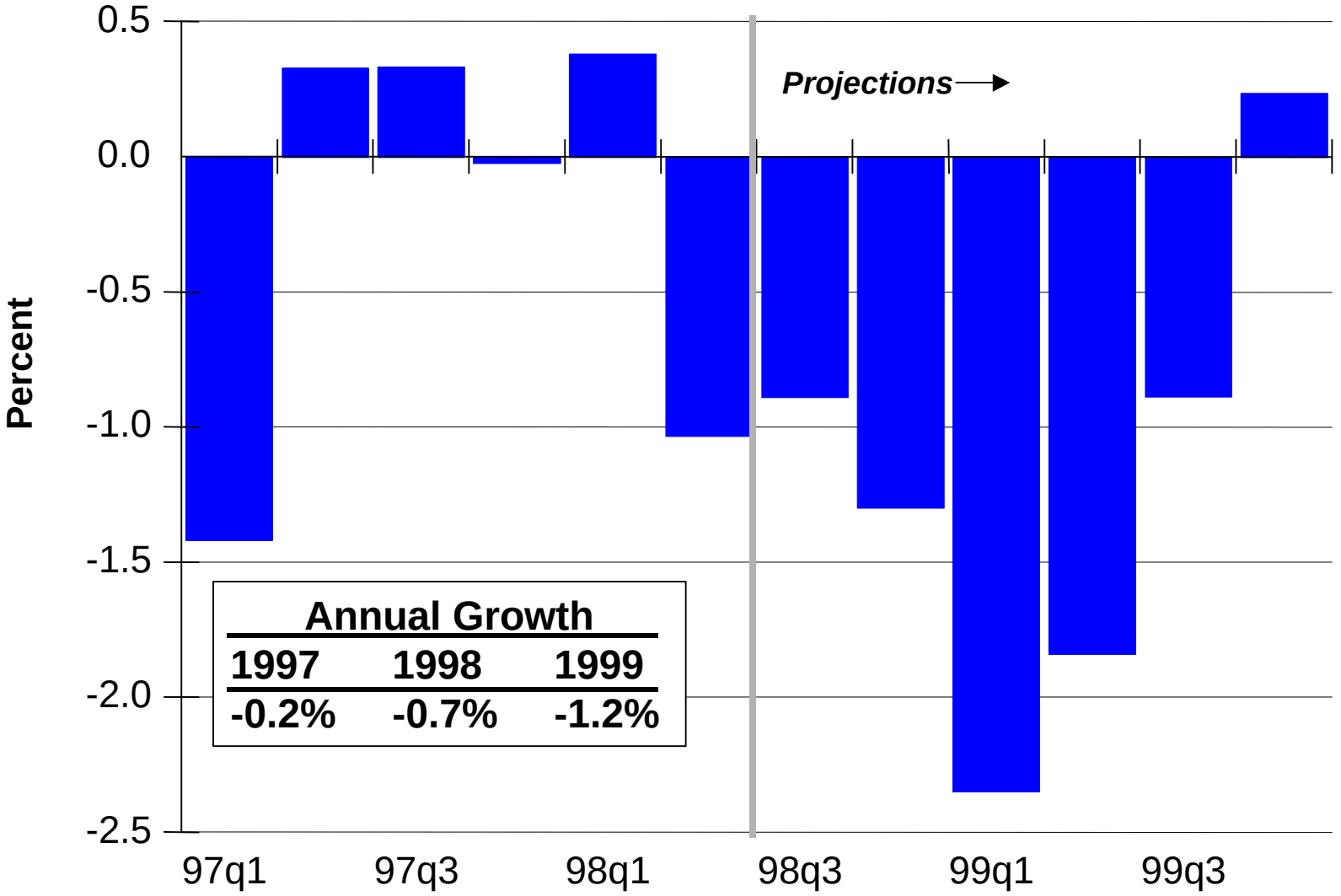
Outside of the electric power sector, demand growth has been dismal this year, largely because of the conspicuous absence of any heating demand from January through May. March was an exception and it was the only month all year to show positive demand growth over 1997 levels until high electric utility gas demand appeared this summer (Figure 18). The industrial sector has not generally provided any strength to the market so far this year, although industrial demand finally showed a positive year-to-year change in May (Figure 19). Even assuming that industrial gas remains on a positive growth track, we don't expect total gas demand to be sufficient to reduce excess supplies until the heating season is well under way (Figure 20). A normal winter would go a long way toward firming up gas wellhead prices, which have generally been declining on a year-over-year basis since early 1997 (Figure 21). We don't expect to see much movement on the positive side until Q1 1999. This is because, assuming normal weather, we expect Q4 1998 heating demand to be slightly below the Q4 1997 level.

Figure 11. U.S. Heating Degree-Days
(Percent Change from Year Ago)



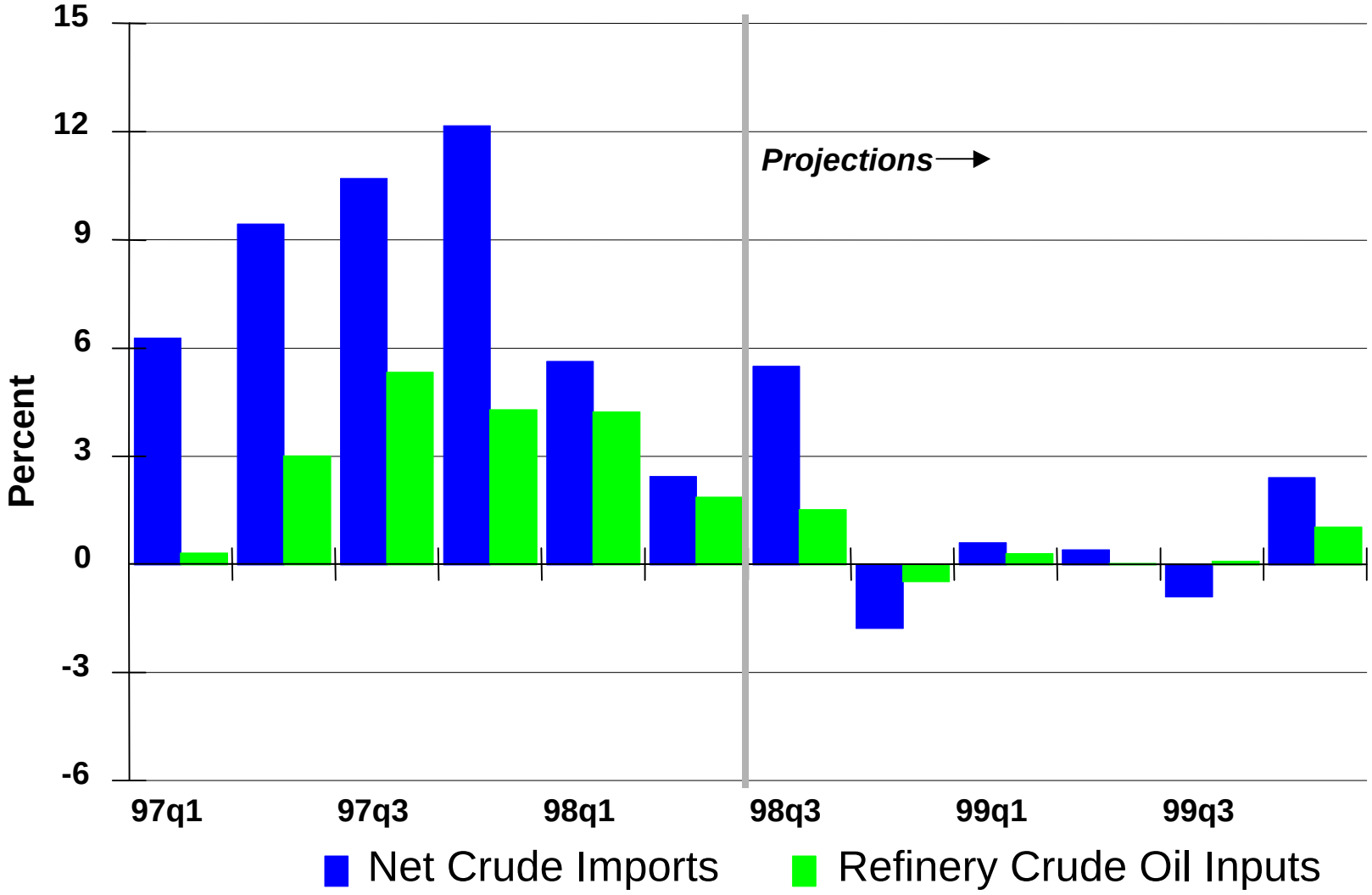
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 12. U.S. Crude Oil Production
(Percent Change from Year Ago)



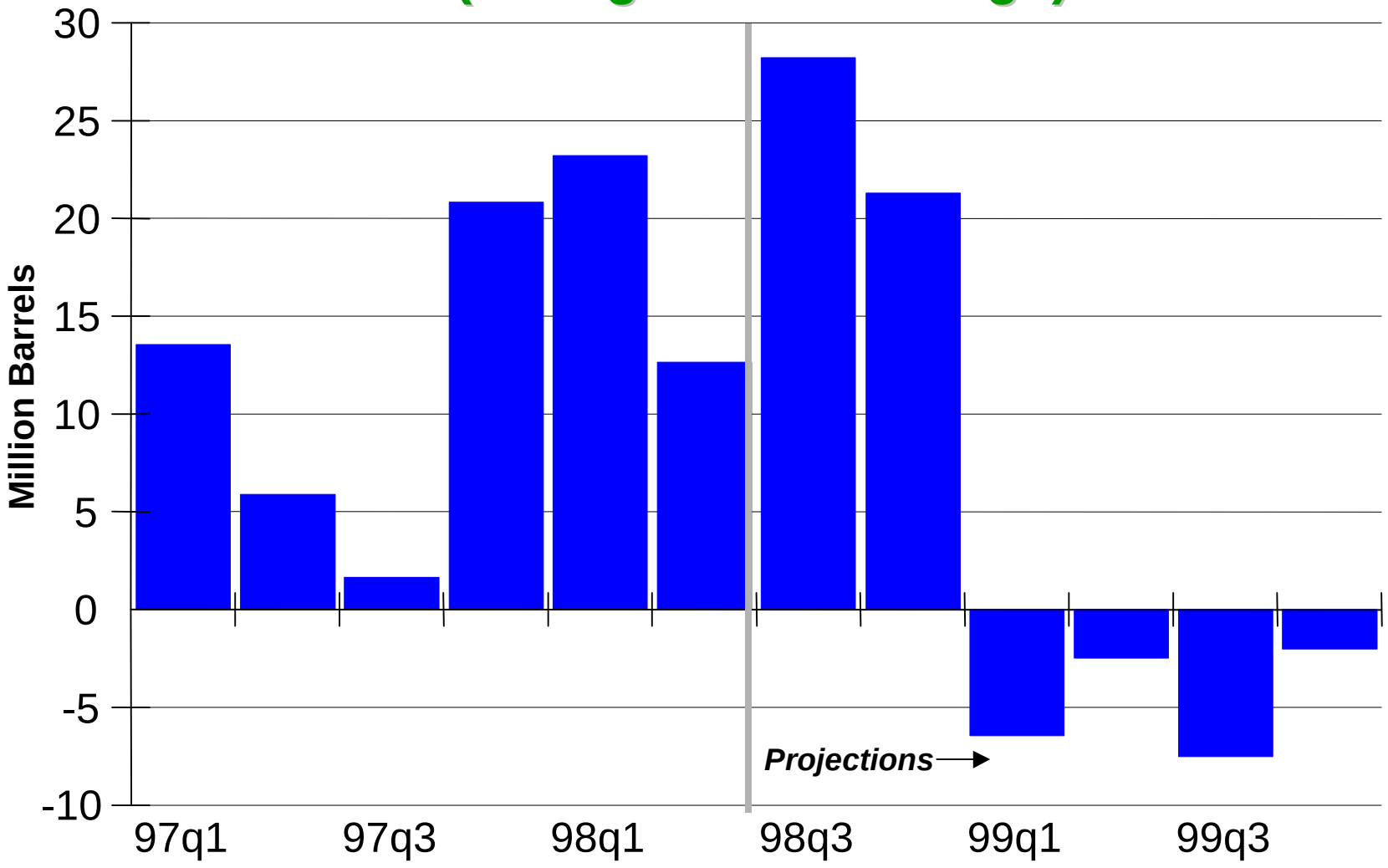
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 13. Crude Oil Imports and Refinery Runs
(Percent Change from Year Ago)



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

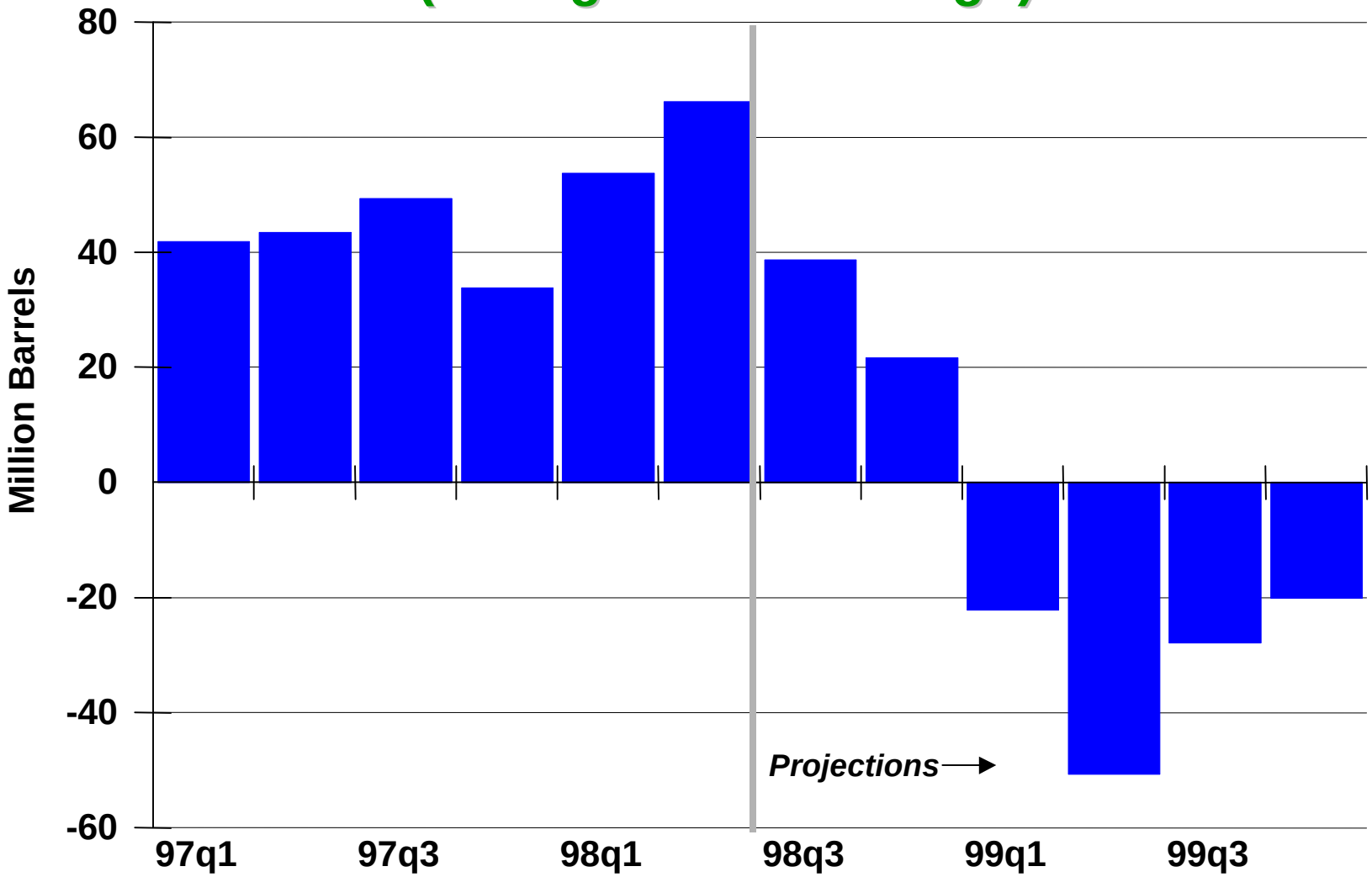
Figure 14. Crude Oil Stocks (Excl. SPR*)
(Change from Year Ago)



*Strategic Petroleum Reserve

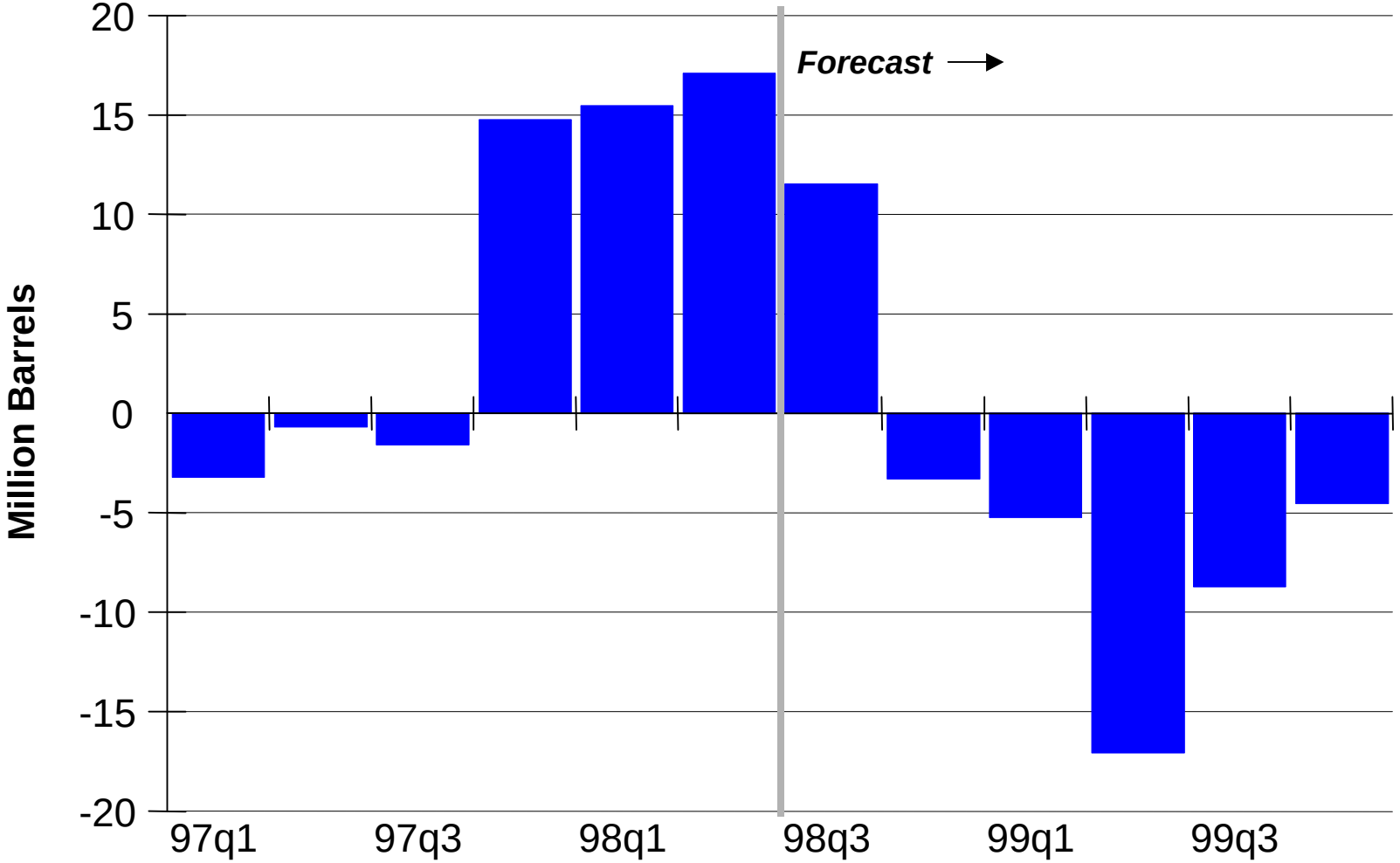
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 15. Petroleum Product Stocks
(Change from Year Ago)



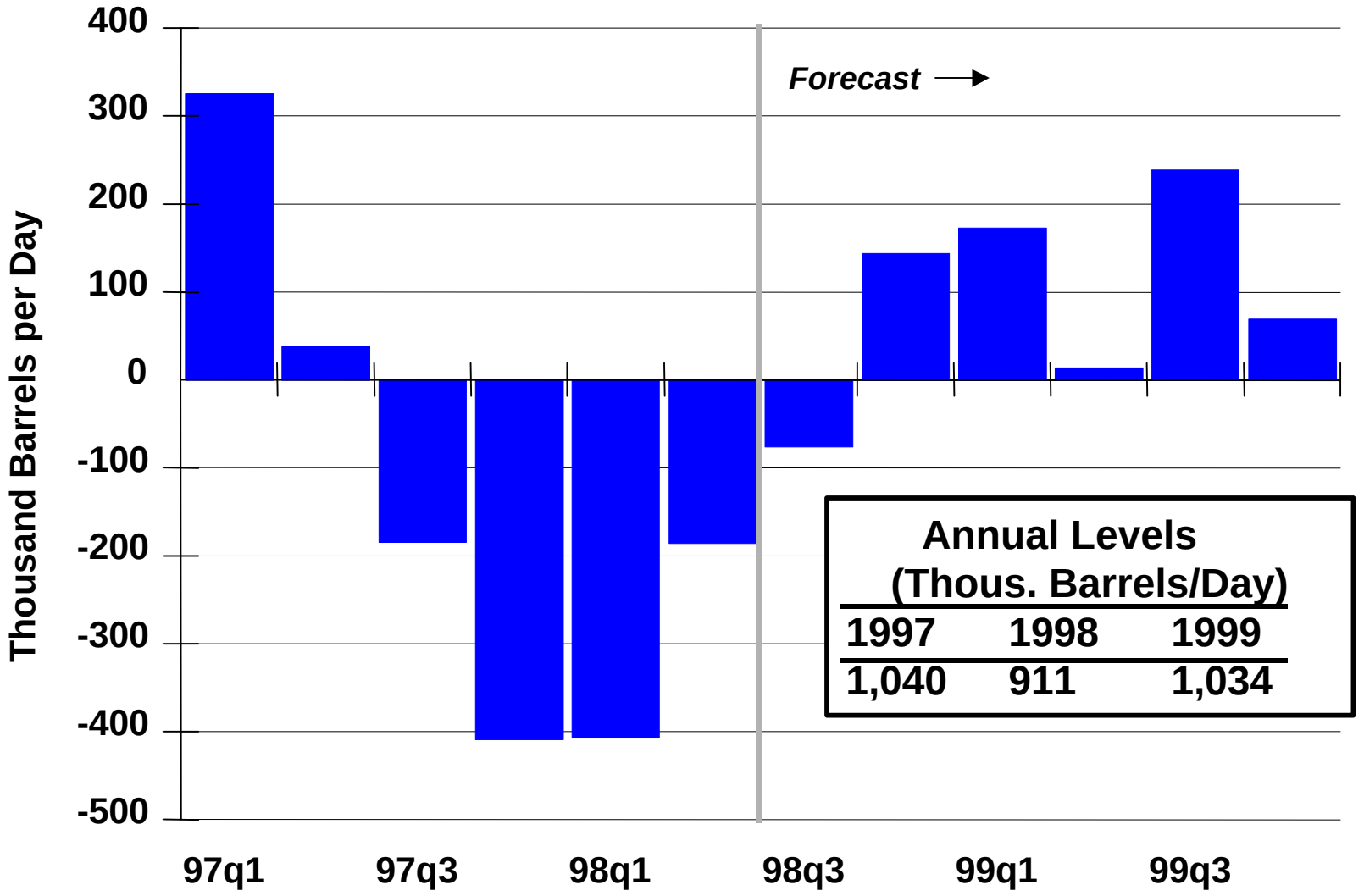
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 16. End-Month Motor Gasoline Stocks



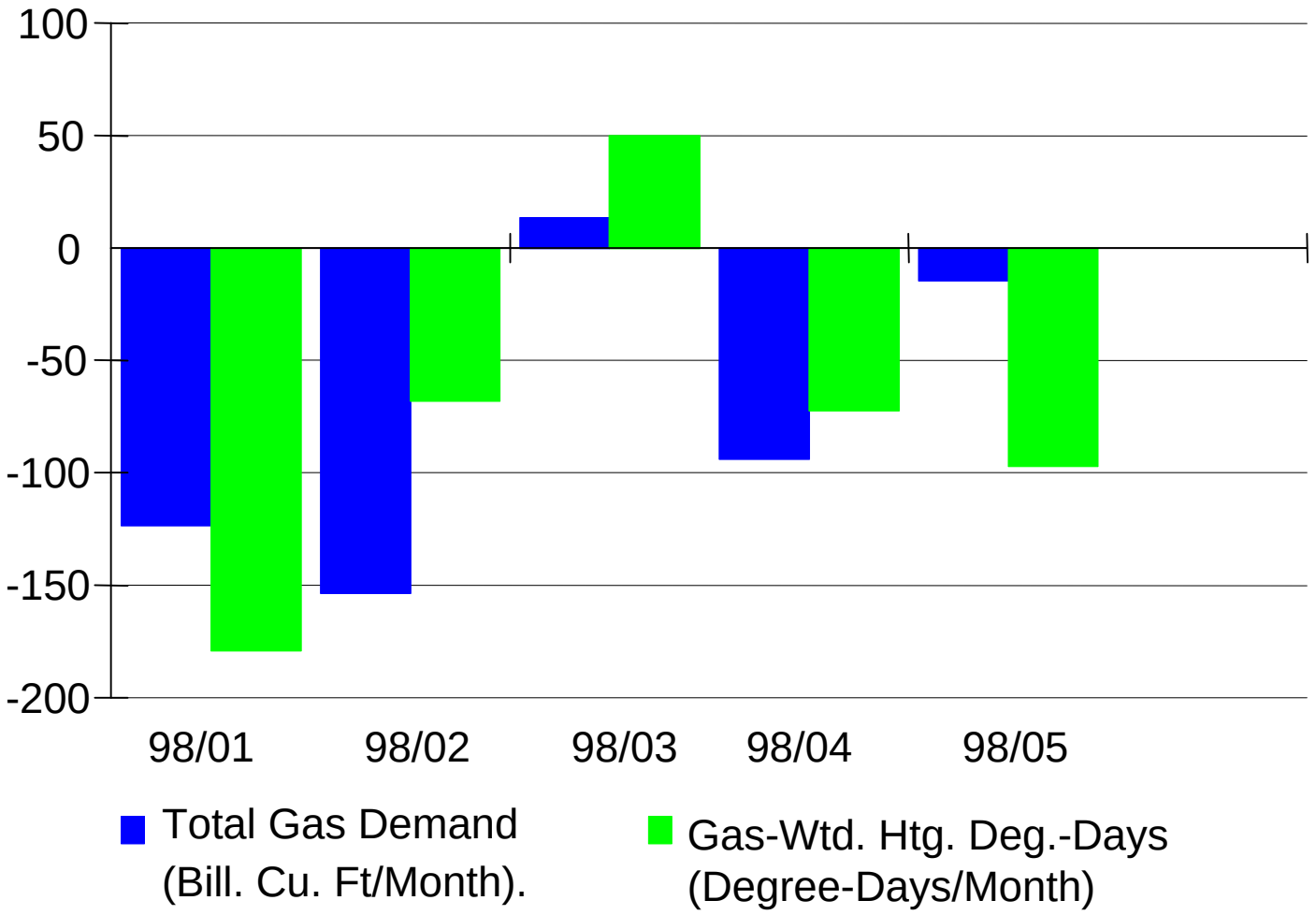
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 17. Net Petroleum Products Imports



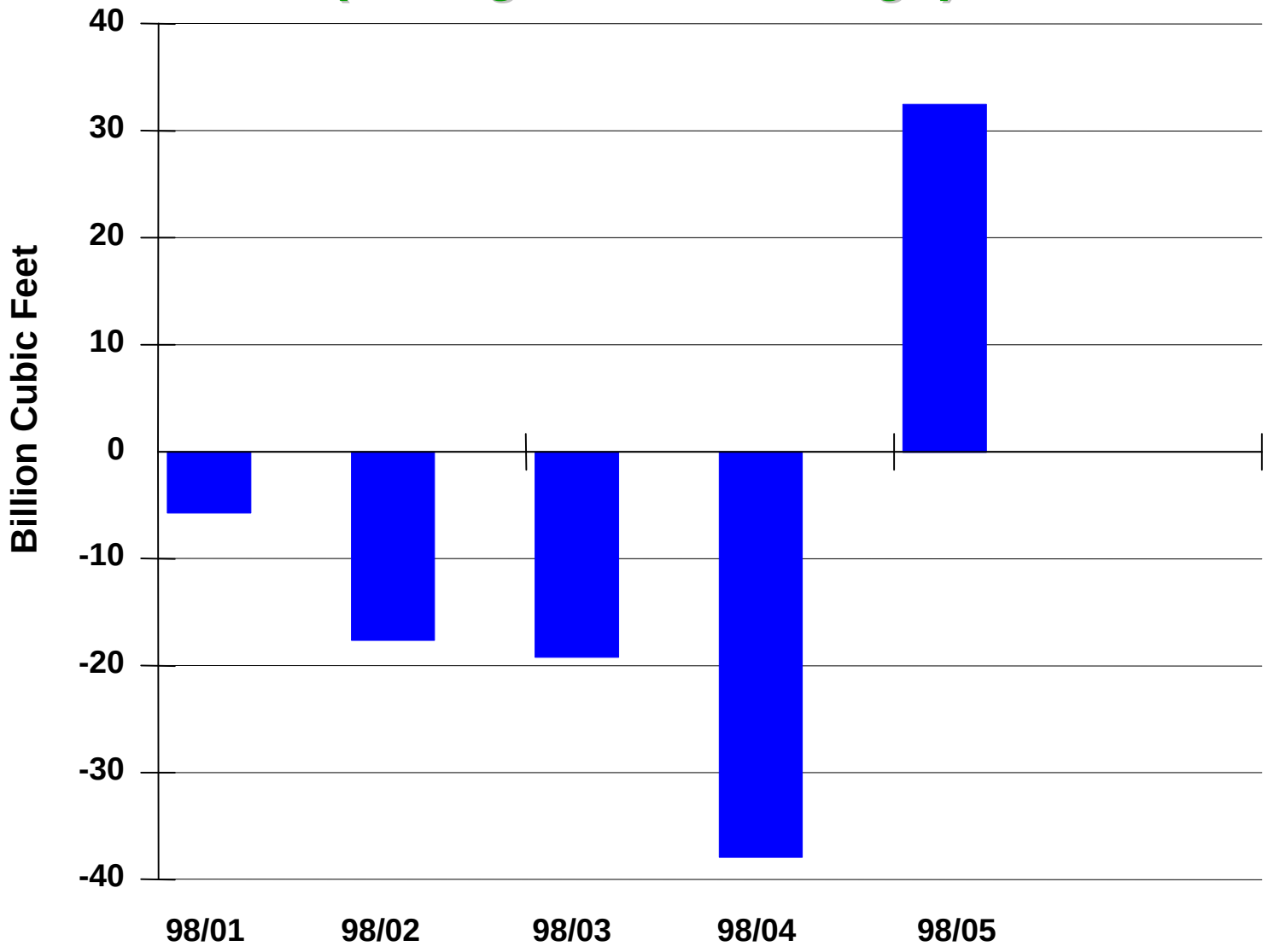
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 18. Gas Use and Heating Demand Indicators
(Change from Year Ago)



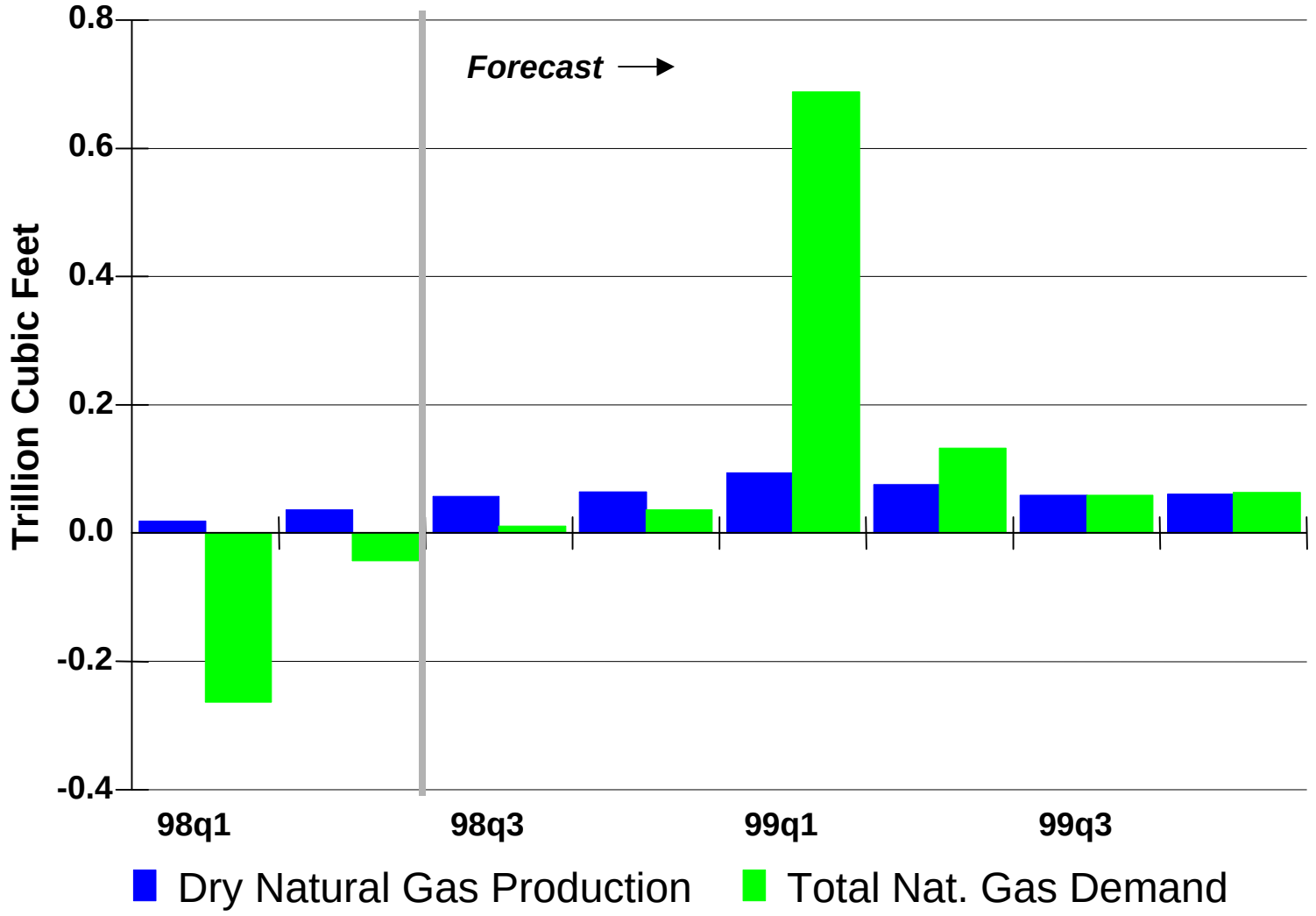
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 19. Industrial Sector Gas Demand
(Change from Year Ago)



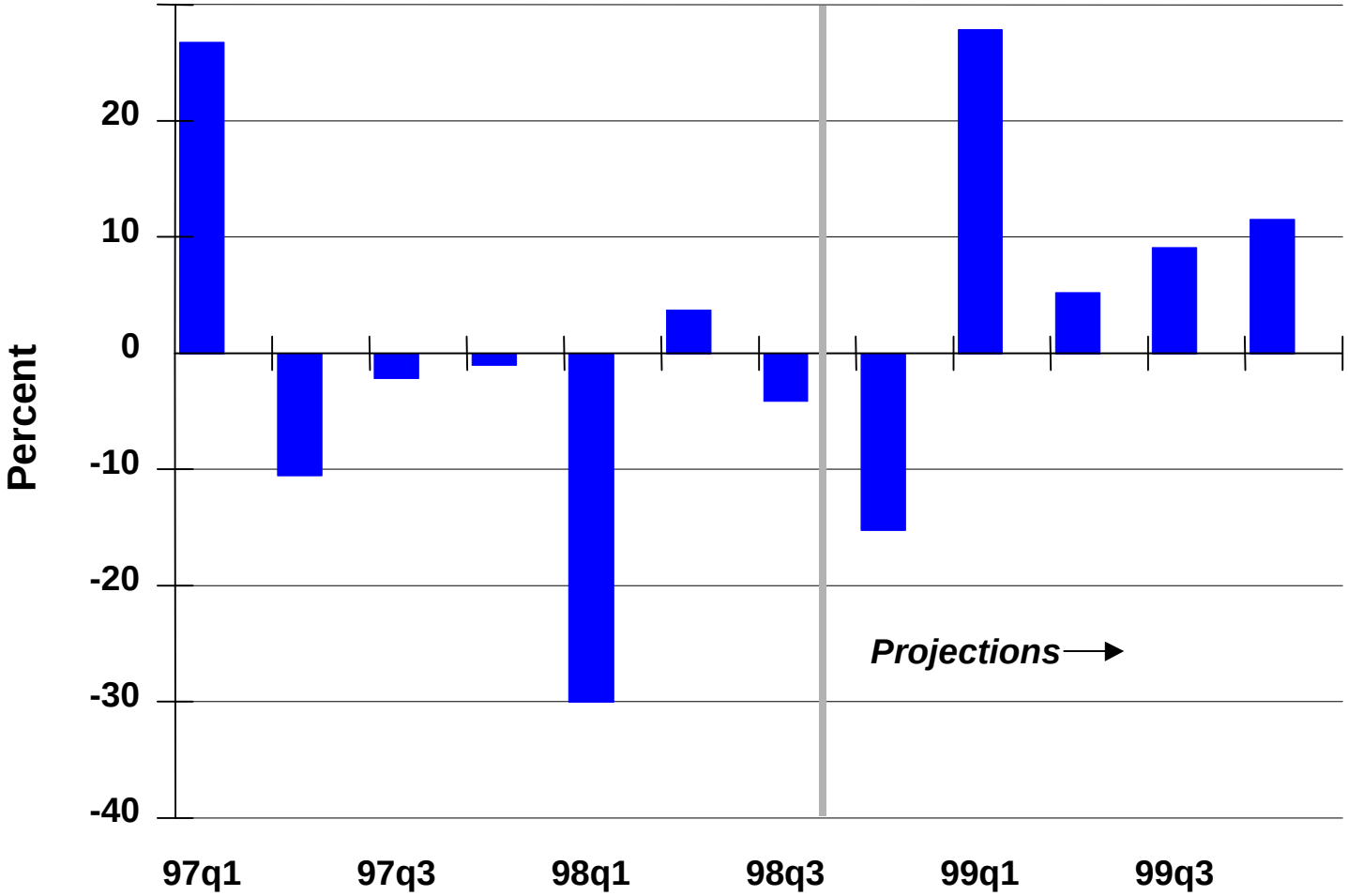
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 20. Quarterly Gas Production and Demand
(Change from Year Ago)



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

Figure 21. Natural Gas Wellhead Prices
(Percent Change from Year Ago)



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

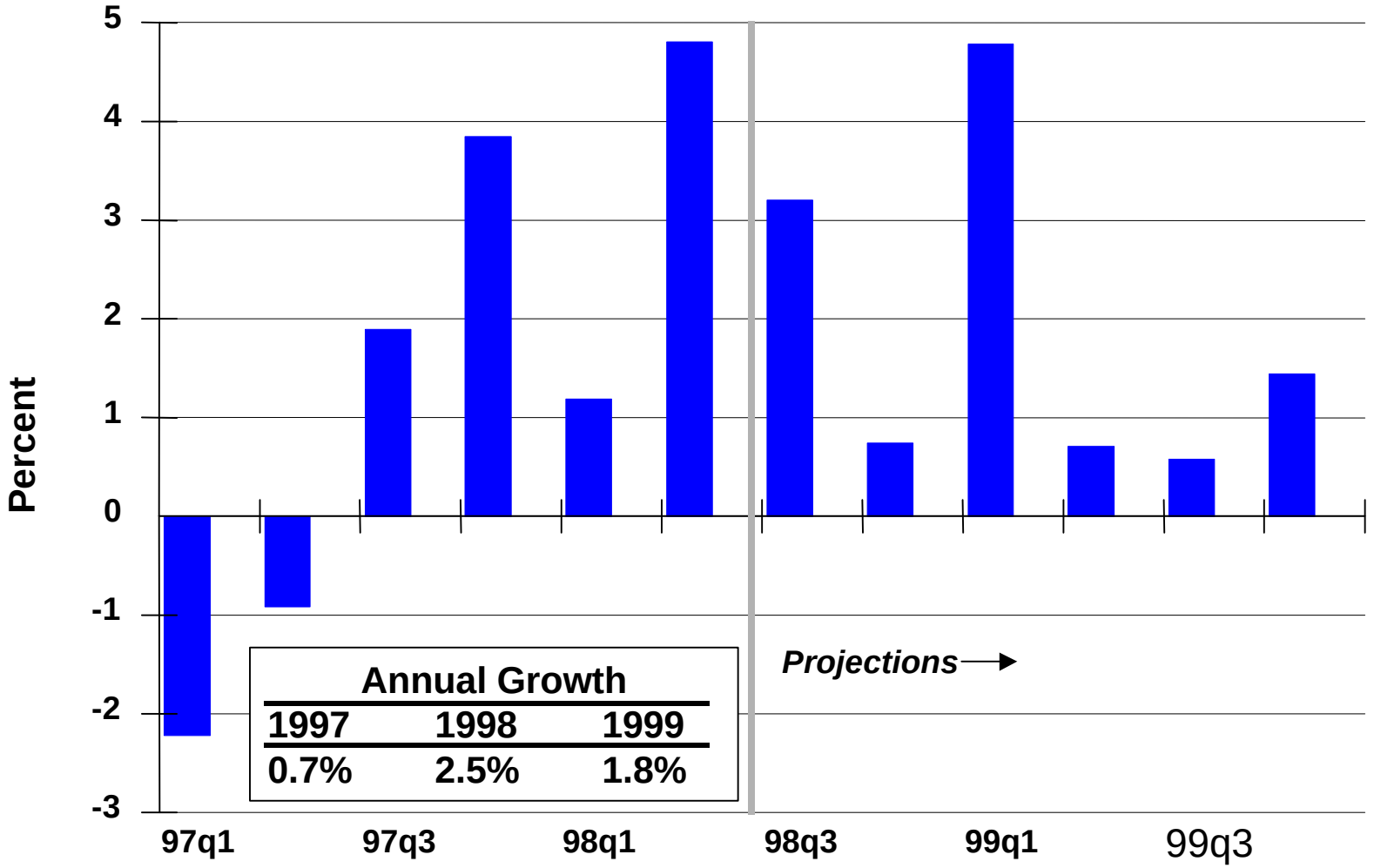
Electricity

Electricity demand for 1998 is expected to be about 2.5 percent above the 1997 level with the bulk of the gain concentrated in the summer period (Figure 22). Demand growth should slow down to below 2 percent in 1999 since cooling demand would not be expected to rise from the high 1998 levels and since the economy is assumed to grow at a slower pace next year. As in the case of natural gas and heating oil, a boost to demand in Q1 1999 is expected to arise from higher heating demand, especially in the residential sector. However, industrial and commercial sales growth rates are likely to tail off through the next year and a half (Figure 23).

In addition to expecting significantly lower electricity demand growth next year, we also expect to see some significant differences in the electricity supply profiles. Because much of the electricity growth this year has been occurring during the spring and summer months, and because most of the decline in hydroelectric power that has been occurring this year stems from reductions in the Pacific region, natural gas has played a relatively large role in meeting incremental demand in 1998 (Figure 24). Next year, with most of the growth expected to take place in the winter, we expect to see a much smaller role (if any) for natural gas and a much larger incremental role for coal. It seems unlikely that oil will continue to gain share as a fuel source in electric power generation beyond the gains made in 1998. While hydroelectric power is expected to continue to decline as a fuel source in 1999, much more of next year's reductions are likely to be outside the Pacific region (Figure 25), which generally implies a smaller impact on natural gas.

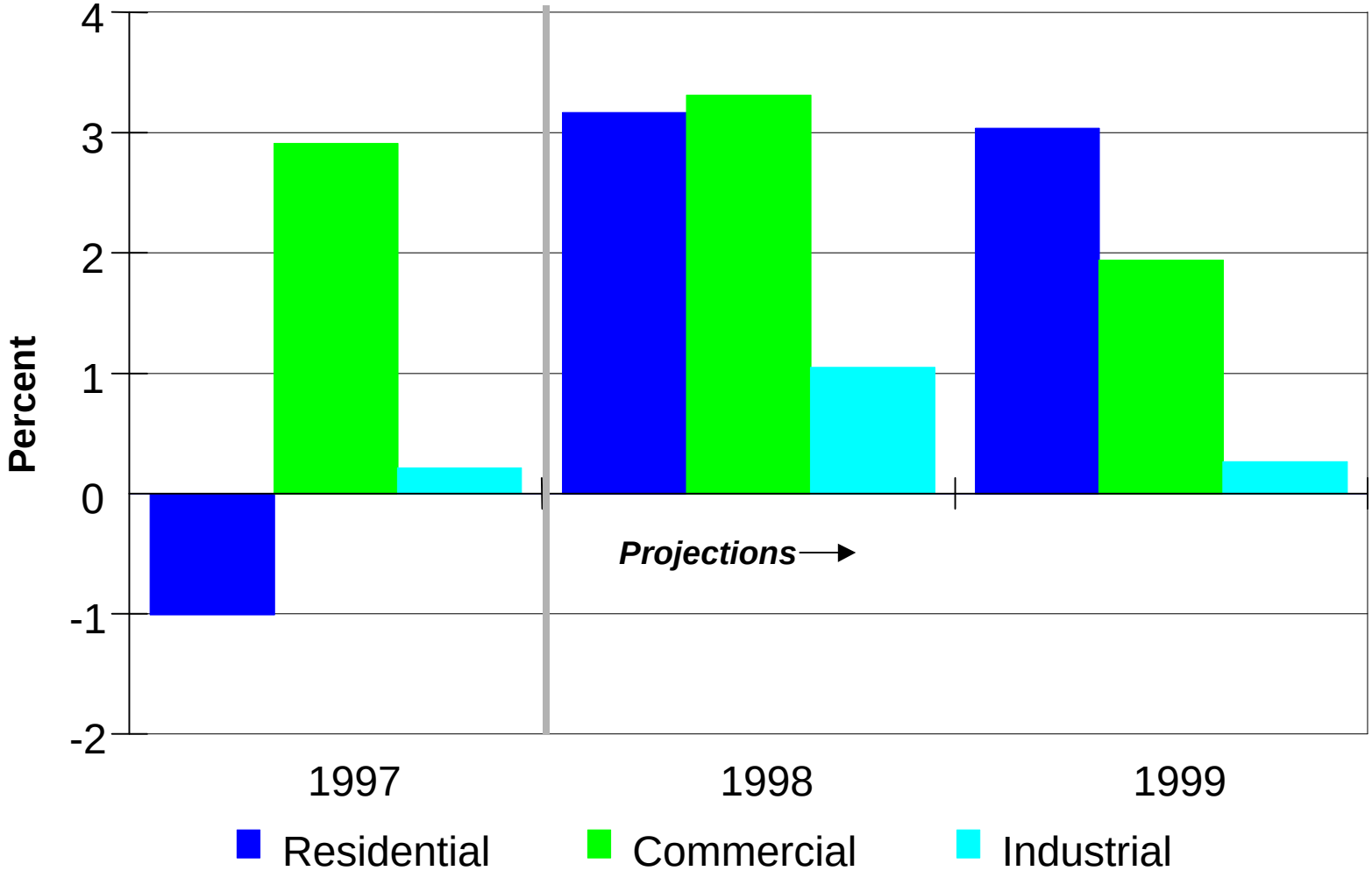
Much of what has been happening with regard to cooling demand this year and most of the consequent impacts on natural gas demand have been concentrated in the West South Central (WSC) region (Texas, Louisiana Oklahoma and Arkansas). That it has been sweltering in the South is evident by the huge increases in heating degree-days relative to 1997 and to normal (Figures 26 and 27). In the months of May and June, the WSC region cumulated a 14 billion kilowatt-hour increase in electricity output over the same period in 1997 (Figure 28). That was nearly 40 percent of the increase for the entire United States. Over the same period, the WSC region reported a 12-billion kilowatt-hour increase in generation from natural gas (Figure 29) which actually equals the total increase for the United States. The WSC region accounts for a very large portion of the total U.S. consumption of natural gas for power generation (50.1 percent in 1997). Since last year, the region's incremental reliance on gas has been strengthened somewhat because of ongoing coal transportation problems in the region. We noticed that so far this year coal has played little or no role in meeting incremental demand there (Figure 30) and coal stocks at electric utilities remain low in the region (Figure 31). We assume that any remaining problems with regard to coal transportation are essentially cleared up by next summer. Under these circumstances, a normal summer for 1999 would be a considerably negative factor for electric utility gas consumption next year.

Figure 22. Quarterly Electricity Demand Growth
(Percent Change from Year Ago)



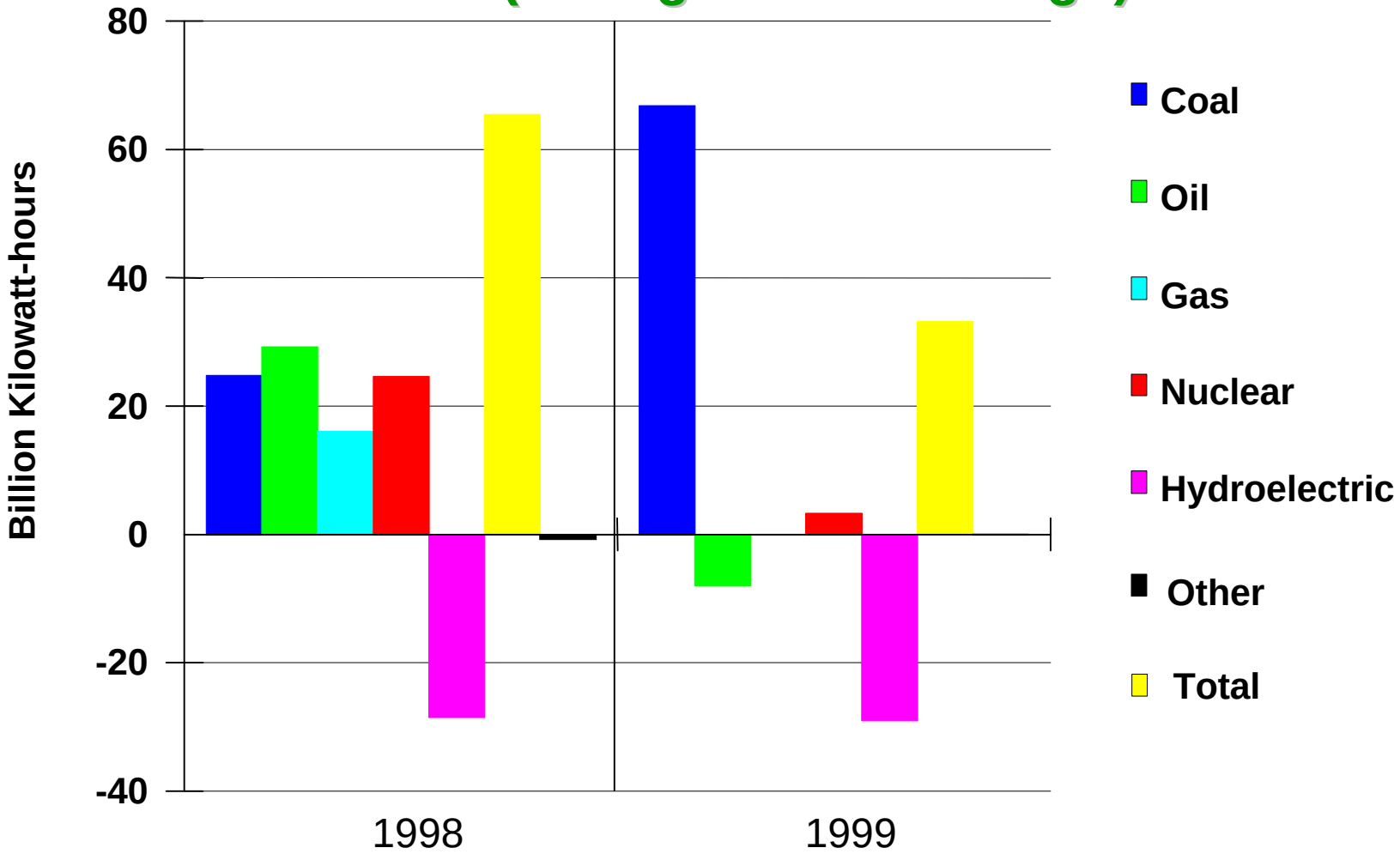
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 23. Electricity Sales by Sector
(Percent Change from Year Ago)



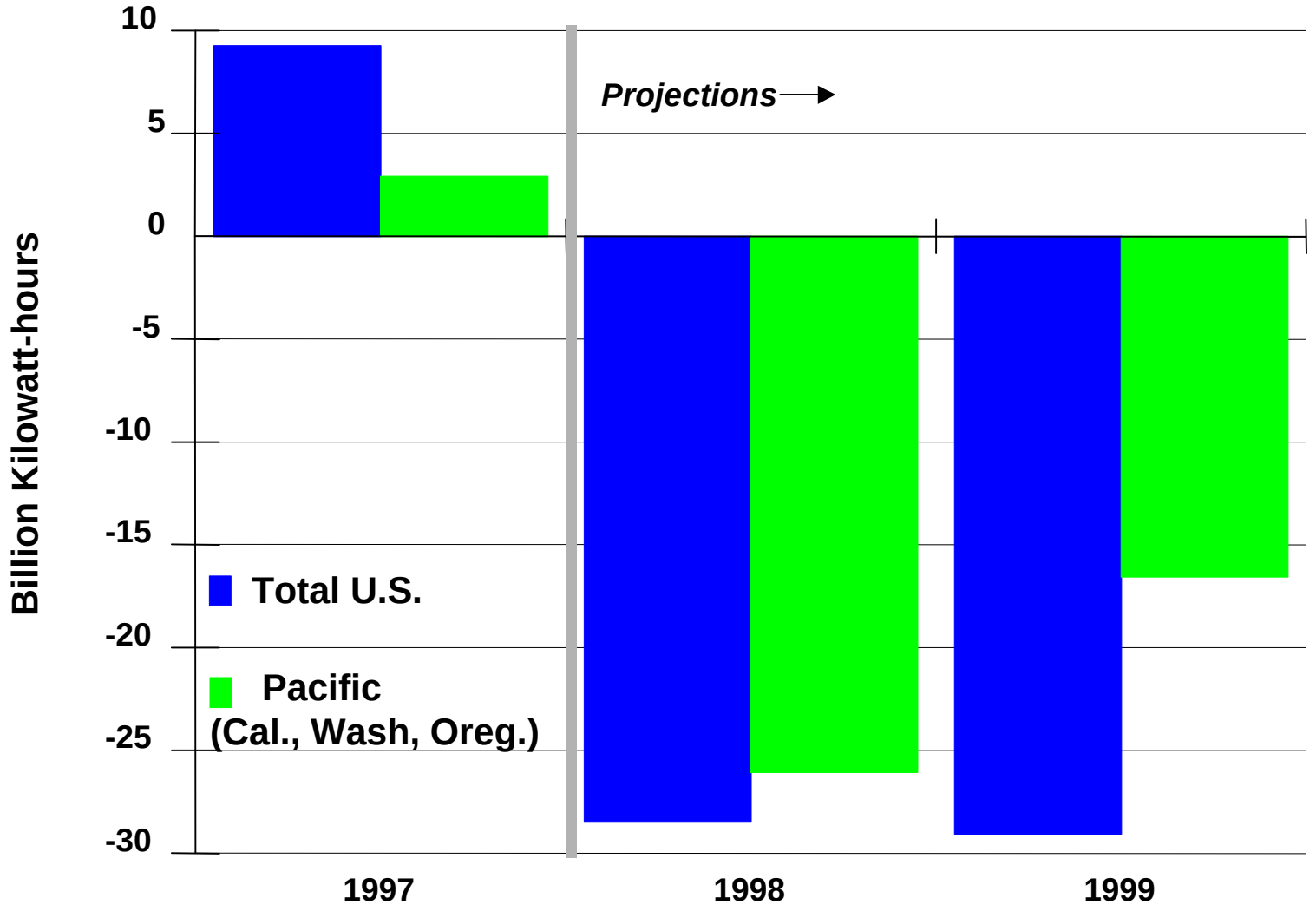
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 24. Electricity Net Generation by Source
(Change from Year Ago)



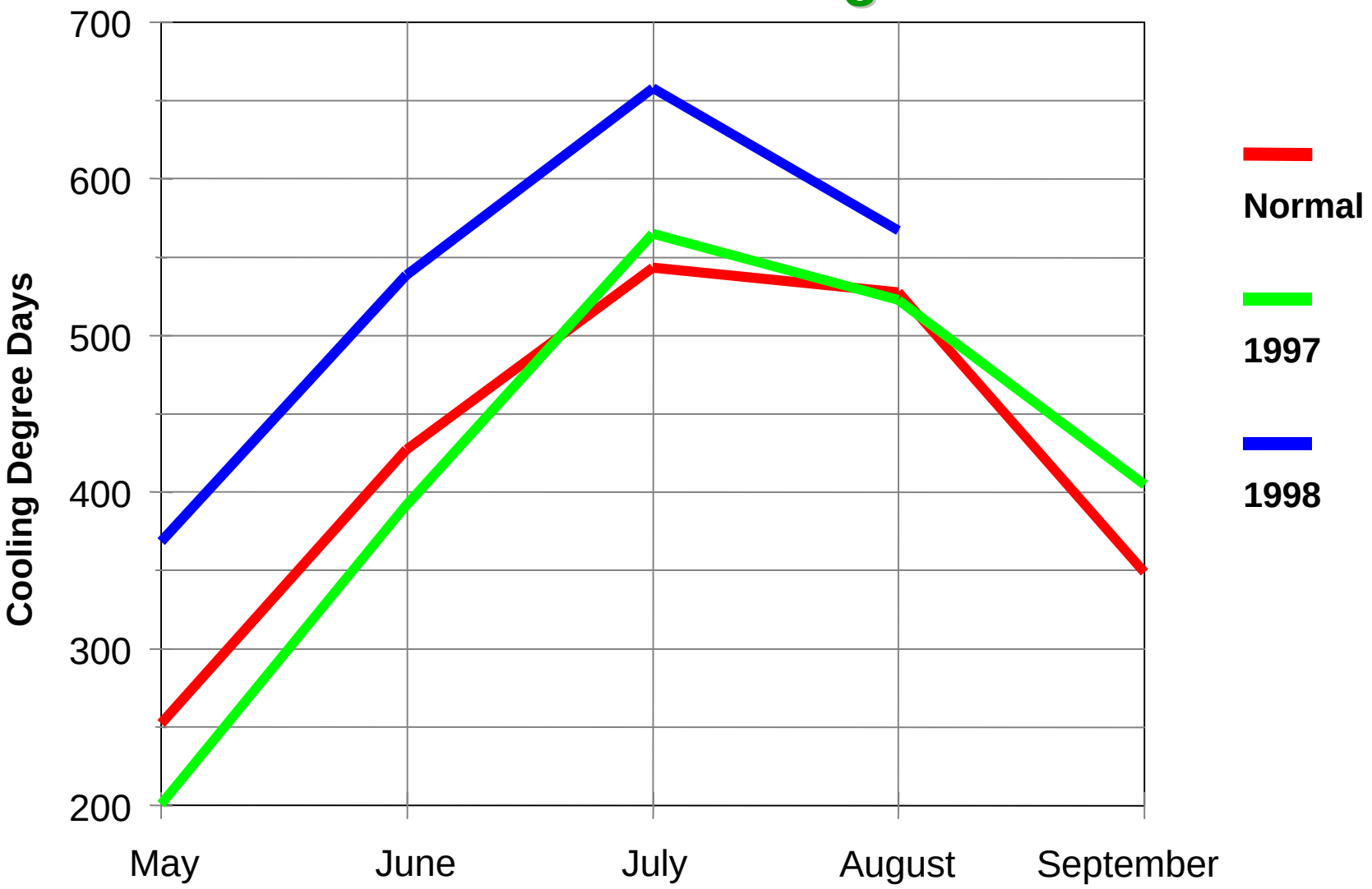
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 25. Shifts in Hydroelectric Power
(Change from Year Ago)



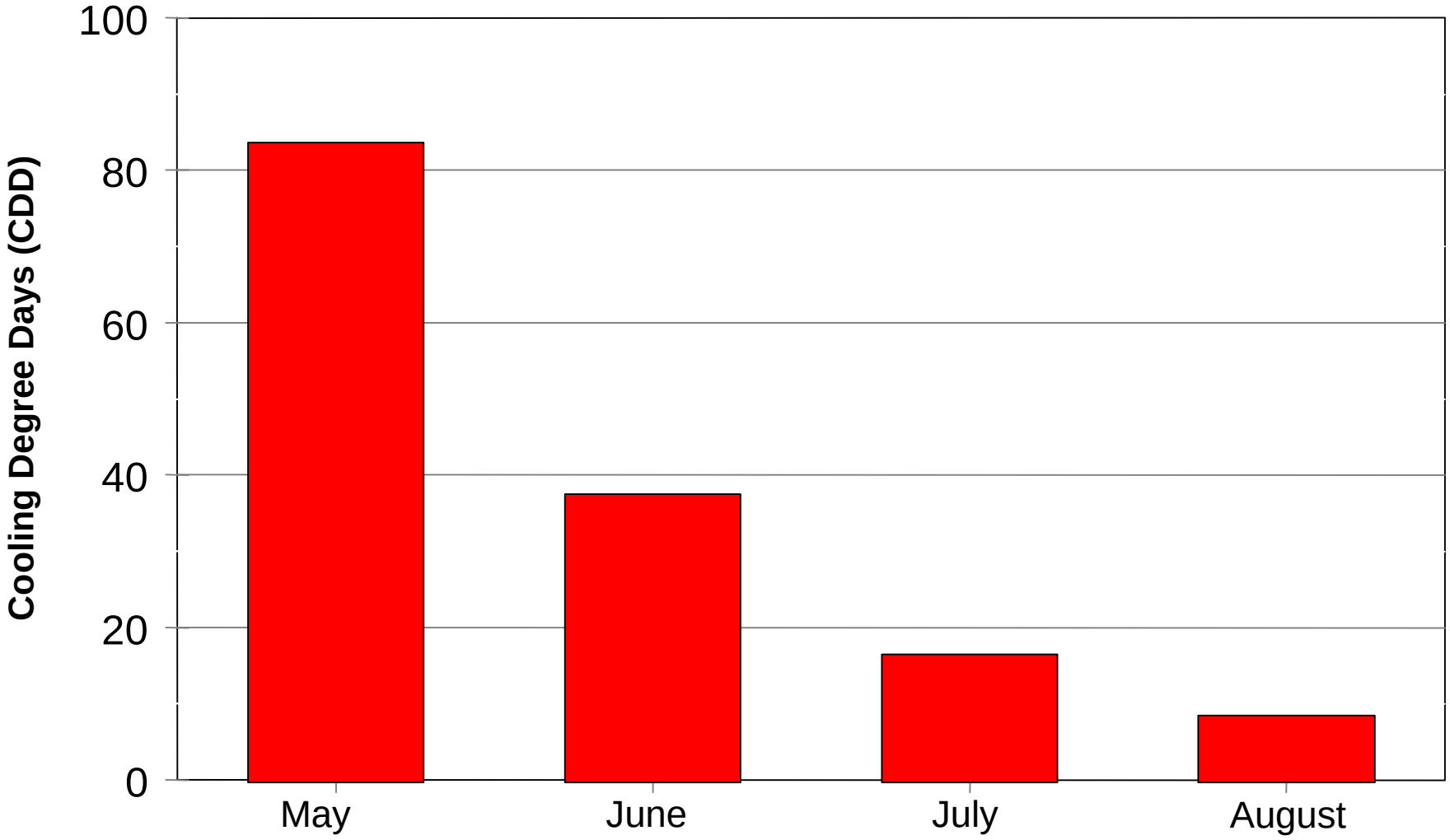
Source: Energy Information Administration, Short-Term Energy Model, September 1998

Figure 26. Cooling Degree-Days in the WSC* Region



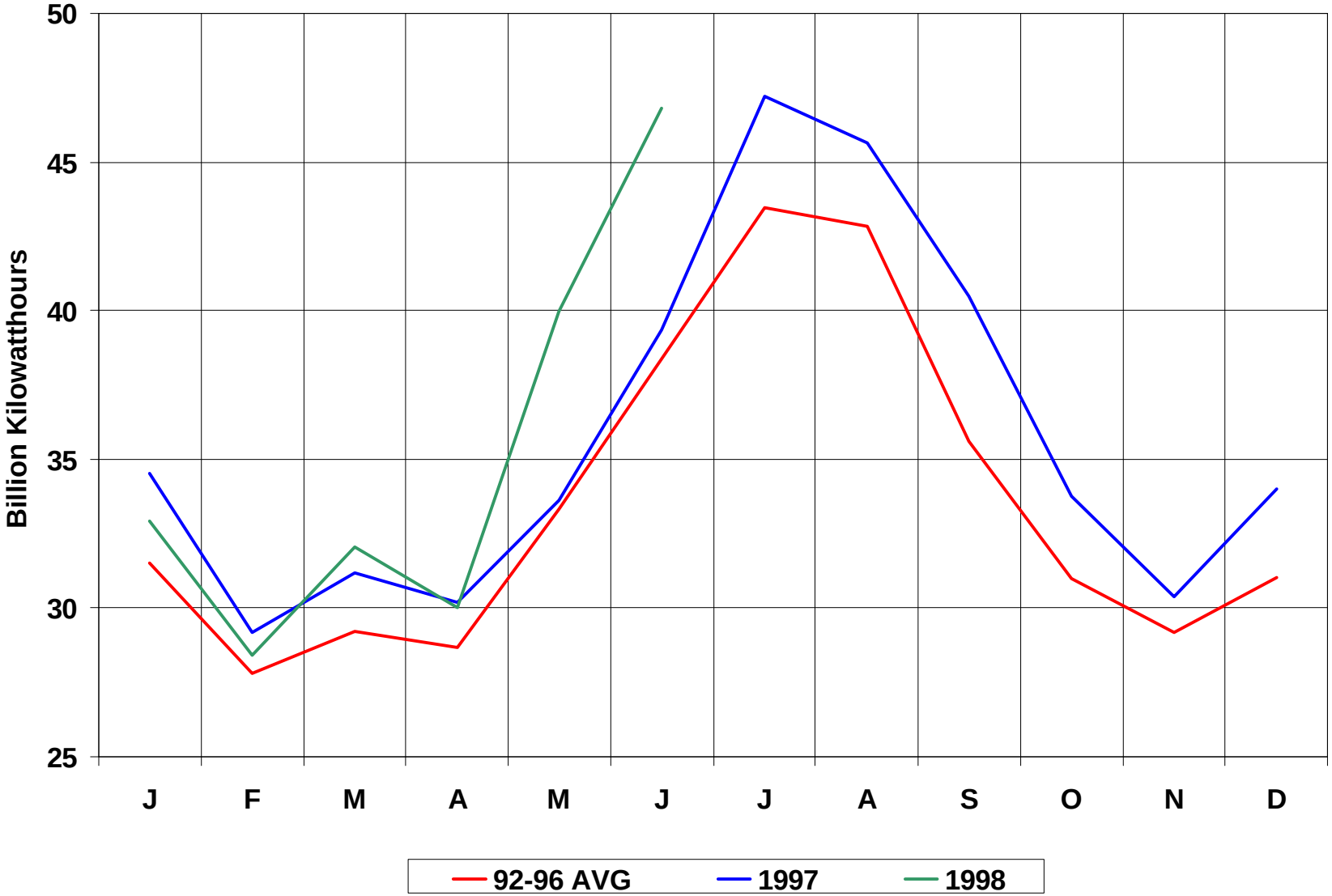
*Texas, Louisiana, Arkansas and Oklahoma

Figure 27. WSC* Region Cooling Degree-Day Growth in 1998



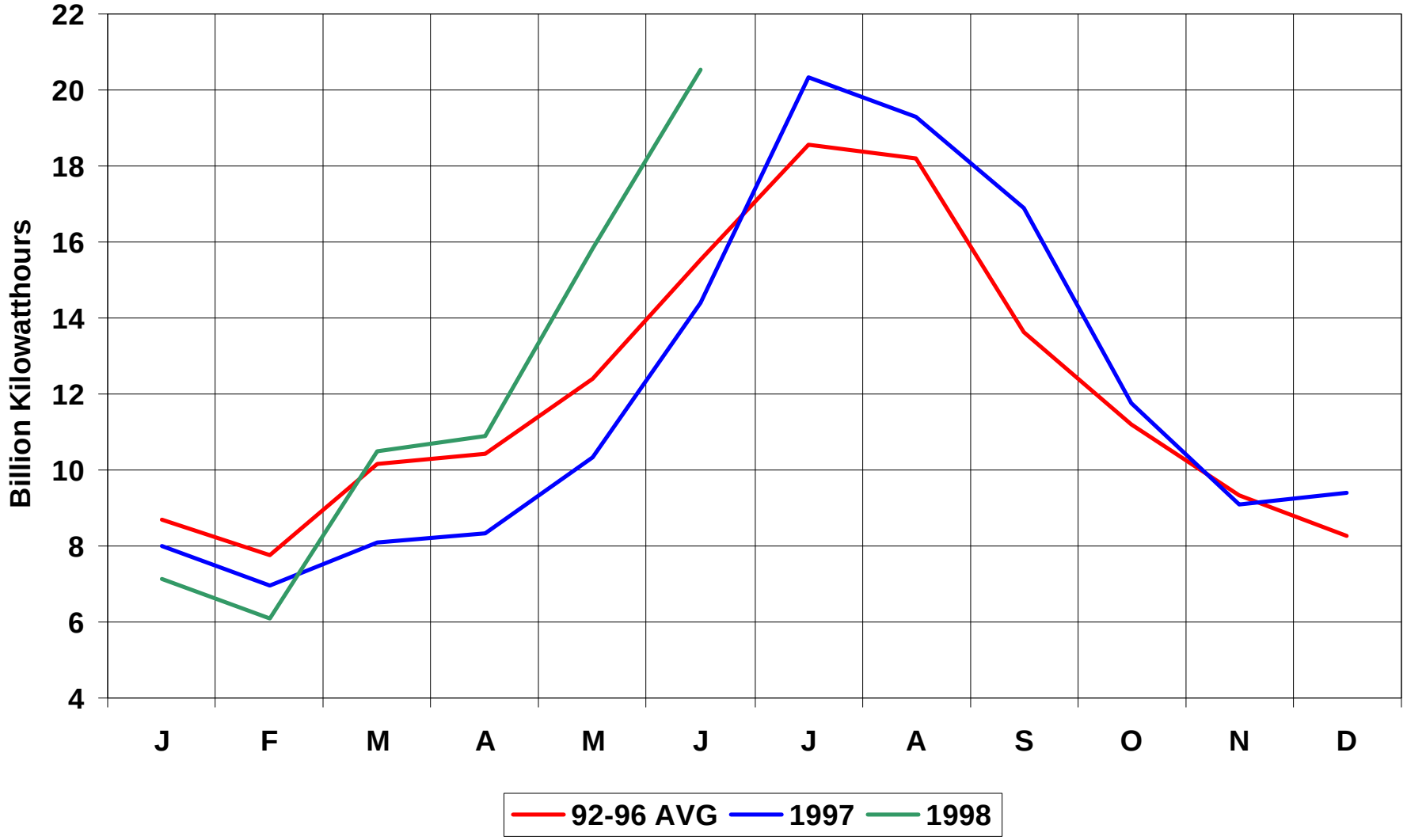
*Texas, Louisiana, Arkansas and Oklahoma

Figure 28. WSC* Region Total Electricity Generation at Electric Utilities



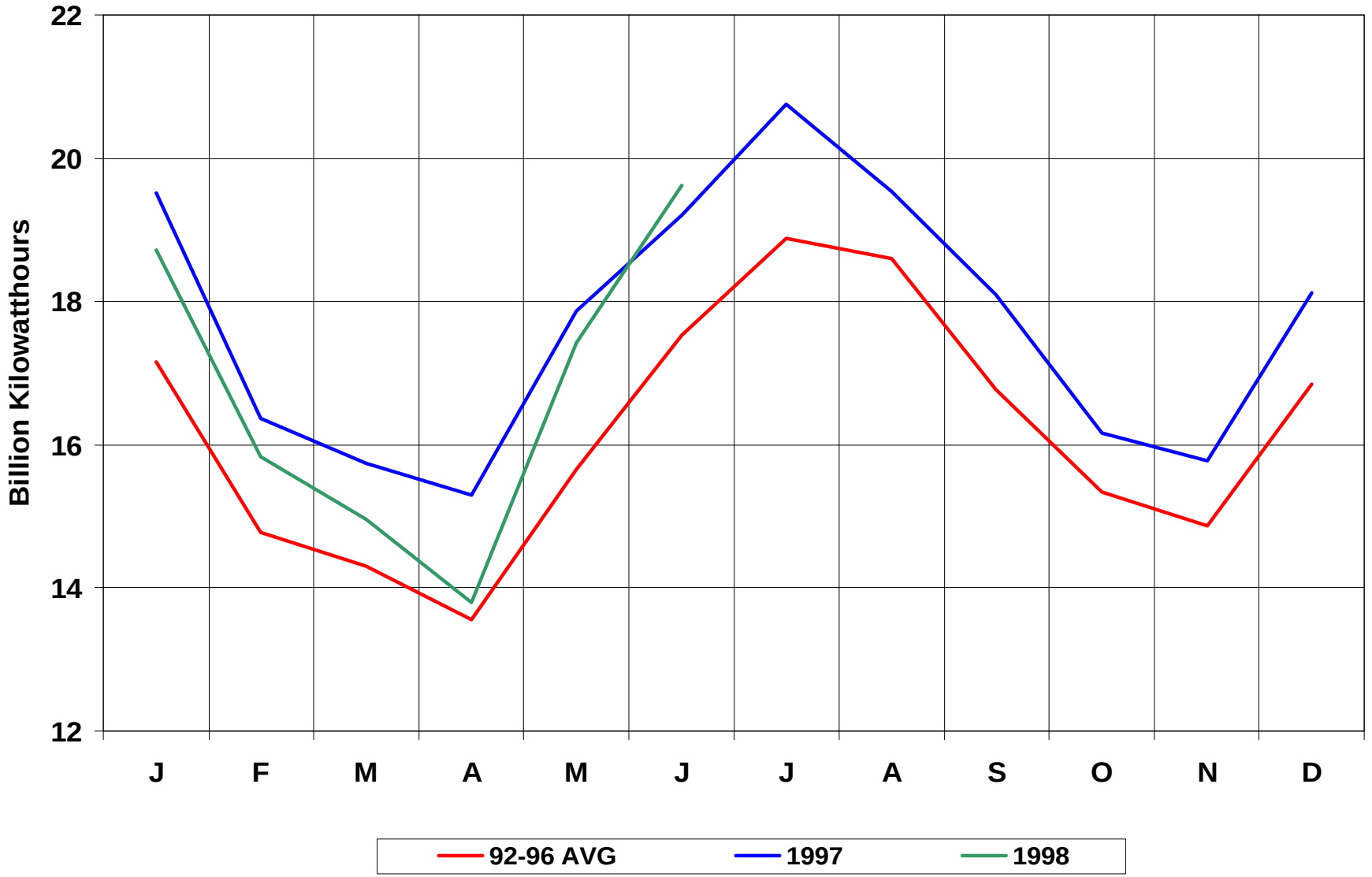
*Texas, Louisiana, Arkansas and Oklahoma

Figure 29. WSC* Region Electricity Generation from Gas at Electric Utilities



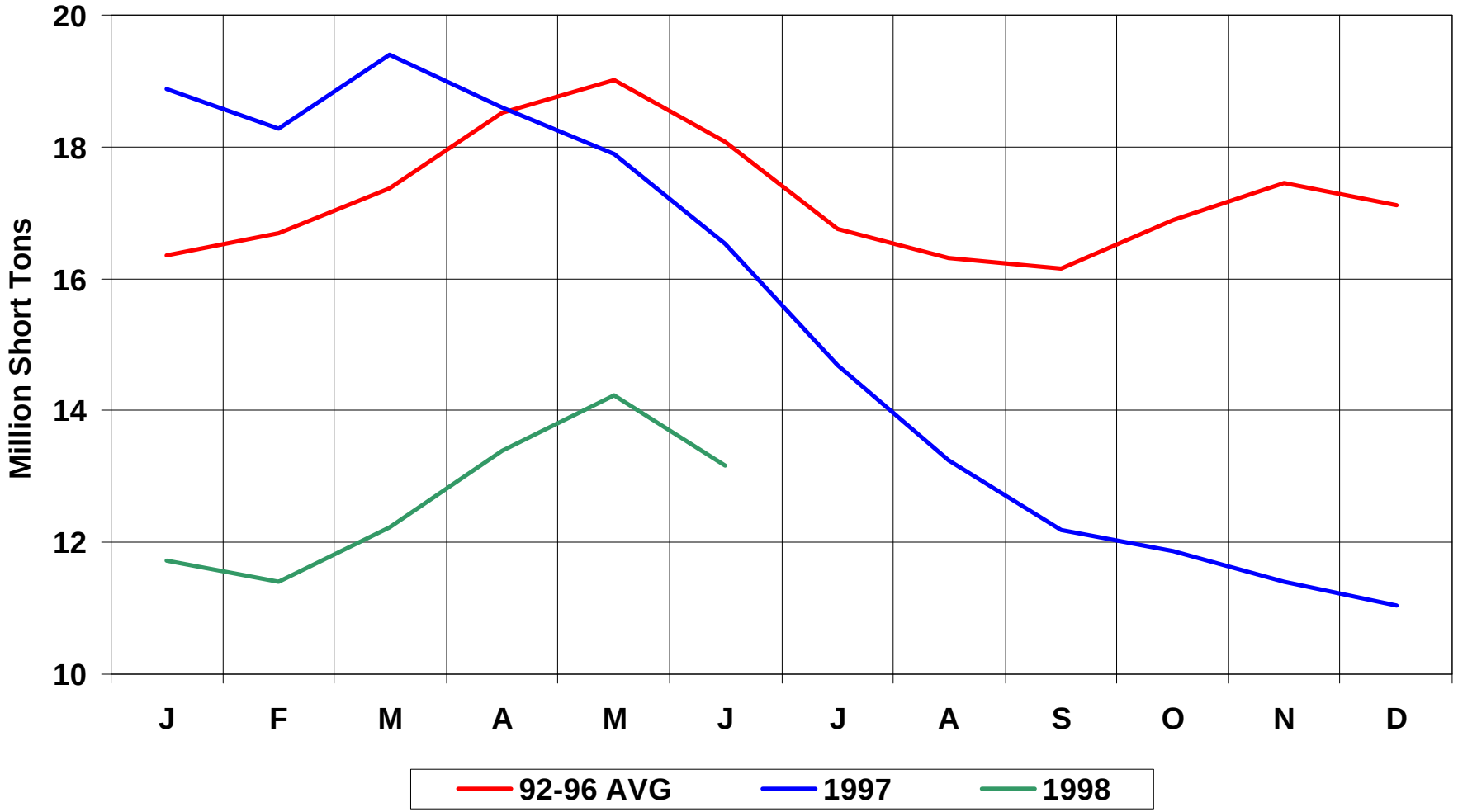
*Texas, Louisiana, Arkansas and Oklahoma

Figure 30. WSC* Region Electricity Generation from Coal at Electric Utilities



*Texas, Louisiana, Arkansas and Oklahoma

Figure 31. WSC* Region Coal Stocks at Electric Utilities



*Texas, Louisiana, Arkansas and Oklahoma

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**	*7517*	*7639*	**3.9**	*3.4*	*1.6*
Imported Crude Oil Price [a]							
(nominal dollars per barrel)	**20.61**	**18.57**	*12.40*	*13.65*	**-9.9**	*-33.2*	*10.1*
Petroleum Supply (million barrels per day)							
Crude Oil Production [b]	**6.46**	**6.45**	*6.41*	*6.33*	**-0.2**	*-0.6*	*-1.2*
Total Petroleum Net Imports							
(including SPR)	**8.50**	**9.16**	*9.26*	*9.43*	**7.8**	*1.1*	*1.8*
Energy Demand							
World Petroleum							
(million barrels per day)	**71.5**	**73.2**	*74.3*	*76.2*	**2.4**	*1.5*	*2.6*
Petroleum							
(million barrels per day)	**18.31**	**18.62**	*18.77*	*19.08*	**1.7**	*0.8*	*1.7*
Natural Gas							
(trillion cubic feet)	**21.96**	**21.98**	*21.72*	*22.66*	**0.1**	*-1.2*	*4.3*
Coal							
(million short tons)	**1006**	**1030**	*1045*	*1081*	**2.4**	*1.5*	*3.4*
Electricity (billion kilowatthours)							
Utility Sales [c]	**3098**	**3115**	*3192*	*3249*	**0.5**	*2.5*	*1.8*
Nonutility Own Use [d]	**164**	**169**	*173*	*178*	**3.0**	*2.4*	*2.9*
Total	**3262**	**3283**	*3365*	*3427*	**0.6**	*2.5*	*1.8*
Total Energy Demand [e]							
(quadrillion Btu)	**93.9**	**94.4**	**94.7**	**97.3**	**0.6**	*0.3*	*2.7*
Total Energy Demand per Dollar of GDP							
(thousand Btu per 1992 Dollar)	**13.42**	**12.99**	*12.60*	*12.73*	**-3.2**	*-3.0*	*1.0*
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 CONTROL0898.

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**	*7491*	*7529*	*7585*	*7598*	*7617*	*7645*	*7696*	**7270**	*7517*	*7639*
Percentage Change from Prior Year	**4.1**	**3.6**	**4.1**	**3.8**	**4.2**	*3.5*	*3.0*	*3.0*	*1.8*	*1.7*	*1.5*	*1.5*	**3.9**	*3.4*	*1.6*
Annualized Percent Change from Prior Quarter	**4.1**	**3.9**	**4.1**	**2.9**	**5.4**	*1.4*	*2.0*	*3.0*	*0.7*	*1.0*	*1.5*	*2.6*			
GDP Implicit Price Deflator (Index, 1992=1.000)	**1.110**	**1.115**	**1.118**	**1.121**	**1.123**	*1.126*	*1.130*	*1.134*	*1.140*	*1.146*	*1.151*	*1.157*	**1.116**	*1.128*	*1.148*
Percentage Change from Prior Year	**1.9**	**2.0**	**1.9**	**1.7**	**1.2**	*1.0*	*1.0*	*1.2*	*1.5*	*1.8*	*1.9*	*2.0*	**1.9**	*1.1*	*1.8*
Real Disposable Personal Income (billion chained 1992 Dollars - SAAR)	**5131**	**5168**	**5198**	**5236**	**5287**	*5325*	*5370*	*5404*	*5438*	*5465*	*5493*	*5529*	**5183**	*5346*	*5481*
Percentage Change from Prior Year	**2.8**	**3.0**	**2.5**	**2.9**	**3.0**	*3.0*	*3.3*	*3.2*	*2.8*	*2.6*	*2.3*	*2.3*	**2.8**	*3.1*	*2.5*
Manufacturing Production (Index, 1992=1.000)	**1.243**	**1.257**	**1.276**	**1.301**	**1.309**	*1.314*	*1.309*	*1.332*	*1.342*	*1.350*	*1.352*	*1.360*	**1.269**	*1.316*	*1.351*
Percentage Change from Prior Year	**5.8**	**5.0**	**5.3**	**6.3**	**5.3**	*4.5*	*2.6*	*2.4*	*2.6*	*2.7*	*3.3*	*2.1*	**5.6**	*3.7*	*2.7*
OECD Economic Growth (percent) [b]													**3.1**	*2.7*	*2.4*
Weather [c]															
Heating Degree-Days															
U.S.	**2156**	**635**	**86**	**1674**	**1975**	*515*	*88*	*1636*	*2327*	*524*	*89*	*1636*	**4551**	*4214*	*4576*
New England	**3108**	**1047**	**172**	**2318**	**2779**	*870*	*206*	*2269*	*3267*	*915*	*171*	*2269*	**6645**	*6124*	*6621*
Middle Atlantic	**2777**	**866**	**121**	**2052**	**2428**	*656*	*115*	*2026*	*2993*	*716*	*105*	*2026*	**5816**	*5225*	*5839*
U.S. Gas-Weighted	**2275**	**711**	**127**	**1773**	**2078**	*548*	*85*	*1686*	*2426*	*539*	*81*	*1686*	**4886**	*4397*	*4732*
Cooling Degree-Days (U.S.)	**50**	**289**	**754**	**62**	**24**	*376*	*797*	*72*	*30*	*334*	*758*	*72*	**1155**	*1269*	*1193*

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

[b] OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Mexico is also a member but is not yet included in OECD data.

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

SAAR: Seasonally-adjusted annualized rate.

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

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, *Statistical Release G.17(419)*. Projections of OECD growth are based on WEFA Group, "World Economic Outlook," Volume 1. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0898.

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**	*1260*	*1270*	*1284*	*1294*	*1297*	*1302*	*1310*	**1138**	*1260*	*1301*
Real Exchange Rate (index)	**1.086**	**1.098**	**1.108**	**1.117**	**1.140**	*1.158*	*1.172*	*1.164*	*1.148*	*1.128*	*1.113*	*1.108*	**1.102**	*1.159*	*1.124*
Business Inventory Change (billion chained 1992 dollars-SAAR)	**20.0**	**26.7**	**15.8**	**17.7**	**30.2**	*26.2*	*14.3*	*3.2*	*-1.2*	*-7.1*	*-6.8*	*-6.9*	**20.1**	*18.5*	*-5.5*
Producer Price Index (index, 1982=1.000)	**1.286**	**1.271**	**1.272**	**1.275**	**1.251**	*1.247*	*1.244*	*1.247*	*1.256*	*1.262*	*1.266*	*1.269*	**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*	*1.633*	*1.643*	*1.656*	*1.666*	*1.676*	*1.688*	**1.606**	*1.631*	*1.671*
Petroleum Product Price Index (index, 1982=1.000)	**0.722**	**0.675**	**0.669**	**0.654**	**0.542**	*0.523*	*0.507*	*0.511*	*0.531*	*0.546*	*0.547*	*0.551*	**0.680**	*0.521*	*0.544*
Non-Farm Employment (millions)	**121.5**	**122.3**	**123.0**	**123.9**	**124.8**	*125.5*	*126.3*	*126.8*	*127.3*	*127.6*	*127.9*	*128.2*	**122.7**	*125.9*	*127.8*
Commercial Employment (millions)	**82.8**	**83.6**	**84.1**	**84.9**	**85.7**	*86.3*	*87.2*	*87.9*	*88.4*	*88.7*	*88.9*	*89.3*	**83.9**	*86.8*	*88.8*
Total Industrial Production (index, 1992=1.000)	**1.219**	**1.233**	**1.251**	**1.273**	**1.277**	*1.285*	*1.280*	*1.299*	*1.308*	*1.315*	*1.317*	*1.325*	**1.244**	*1.285*	*1.316*
Housing Stock (millions)	**112.0**	**112.3**	**112.5**	**113.1**	**113.8**	*114.2*	*114.5*	*114.8*	*115.1*	*115.5*	*115.8*	*116.1*	**112.5**	*114.3*	*115.6*
Miscellaneous															
Gas Weighted Industrial Production (index, 1992=1.000)	**1.140**	**1.152**	**1.155**	**1.170**	**1.180**	*1.176*	*1.168*	*1.178*	*1.181*	*1.186*	*1.194*	*1.203*	**1.154**	*1.175*	*1.191*
Vehicle Miles Traveled [b] (million miles/day)	**6463**	**7138**	**7310**	**6824**	**6579**	*7278*	*7504*	*6985*	*6714*	*7411*	*7659*	*7127*	**6936**	*7089*	*7230*
Vehicle Fuel Efficiency (index, 1996=1.000)	**1.038**	**0.997**	**0.993**	**1.002**	**1.032**	*1.010*	*0.998*	*1.007*	*1.040*	*1.010*	*1.006*	*1.013*	**1.007**	*1.011*	*1.017*
Real Vehicle Fuel Cost (cents per mile)	**3.94**	**3.73**	**3.70**	**3.72**	**3.36**	*3.19*	*3.10*	*3.19*	*3.22*	*3.25*	*3.20*	*3.27*	**3.77**	*3.21*	*3.24*
Air Travel Capacity (mill. available ton-miles/day)	**402.1**	**417.2**	**434.1**	**427.7**	**420.2**	*438.1*	*458.2*	*448.2*	*438.4*	*454.5*	*472.7*	*459.9*	**420.4**	*441.3*	*456.5*
Aircraft Utilization (mill. revenue ton-miles/day)	**230.5**	**248.0**	**260.7**	**247.2**	**235.6**	*258.7*	*272.1*	*256.5*	*243.9*	*267.8*	*281.4*	*265.2*	**246.7**	*255.8*	*264.7*
Airline Ticket Price Index (index, 1982-1984=1.000)	**1.975**	**2.016**	**1.985**	**1.993**	**2.058**	*2.053*	*2.030*	*2.073*	*2.118*	*2.134*	*2.145*	*2.181*	**1.992**	*2.053*	*2.145*
Raw Steel Production (millions tons)	**26.47**	**26.59**	**26.52**	**27.31**	**28.44**	*27.21*	*26.29*	*26.88*	*28.21*	*27.98*	*27.61*	*28.23*	**106.60**	*108.81*	*112.03*

[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 CONTROL0898.

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*	*19.2*	*19.3*	*19.1*	*18.9*	*19.3*	*19.4*	**18.6**	*18.8*	*19.2*
U.S. Territories	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	**0.2**	*0.2*	*0.2*
Canada	**1.8**	**1.8**	**1.9**	**1.9**	**1.9**	*1.9*	*2.0*	*2.0*	*1.9*	*2.0*	*2.1*	*2.0*	**1.9**	*1.9*	*2.0*
Europe	**14.3**	**14.2**	**14.4**	**14.8**	**14.9**	*14.4*	*14.6*	*15.0*	*15.1*	*14.6*	*14.8*	*15.2*	**14.4**	*14.7*	*14.9*
Japan	**6.4**	**5.2**	**5.4**	**5.9**	**6.2**	*5.1*	*5.3*	*5.8*	*6.2*	*5.1*	*5.3*	*5.9*	**5.7**	*5.6*	*5.6*
Australia and New Zealand	**0.9**	**0.9**	**1.0**	**0.9**	**0.9**	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	**0.9**	*1.0*	*1.0*
Total OECD	**41.9**	**40.8**	**41.7**	**42.7**	**42.3**	*40.9*	*42.2*	*43.2*	*43.4*	*41.7*	*42.7*	*43.7*	**41.8**	*42.2*	*42.9*
Non-OECD															
Former Soviet Union	**4.7**	**4.2**	**4.2**	**4.6**	**4.8**	*4.3*	*4.3*	*4.7*	*5.0*	*4.5*	*4.4*	*4.9*	**4.4**	*4.5*	*4.7*
Europe	**1.5**	**1.3**	**1.3**	**1.4**	**1.6**	*1.4*	*1.4*	*1.5*	*1.7*	*1.4*	*1.4*	*1.6*	**1.4**	*1.5*	*1.5*
China	**3.8**	**3.9**	**3.9**	**4.0**	**4.0**	*4.1*	*4.1*	*4.2*	*4.3*	*4.4*	*4.4*	*4.5*	**3.9**	*4.1*	*4.4*
Other Asia	**8.8**	**8.6**	**8.3**	**9.5**	**8.5**	*8.4*	*8.3*	*9.5*	*8.6*	*8.6*	*8.4*	*9.8*	**8.8**	*8.7*	*8.8*
Other Non-OECD	**12.8**	**13.1**	**12.8**	**13.1**	**13.2**	*13.6*	*13.2*	*13.5*	*13.6*	*14.0*	*13.7*	*13.9*	**13.0**	*13.4*	*13.8*
Total Non-OECD	**31.6**	**31.1**	**30.6**	**32.6**	**32.2**	*31.8*	*31.3*	*33.4*	*33.1*	*32.8*	*32.4*	*34.7*	**31.4**	*32.2*	*33.3*
Total World Demand	**73.5**	**71.9**	**72.2**	**75.3**	**74.5**	*72.7*	*73.5*	*76.6*	*76.6*	*74.5*	*75.1*	*78.4*	**73.2**	*74.3*	*76.2*
Supply [b]															
OECD															
U.S. (50 States)	**9.4**	**9.5**	**9.5**	**9.5**	**9.5**	*9.4*	*9.3*	*9.4*	*9.3*	*9.3*	*9.3*	*9.4*	**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*	*6.3*	*6.6*	*6.8*	*6.6*	*6.9*	*7.2*	**6.2**	*6.4*	*6.9*
Other OECD	**1.6**	**1.6**	**1.6**	**1.6**	**1.6**	*1.6*	*1.6*	*1.7*	*1.7*	*1.7*	*1.7*	*1.7*	**1.6**	*1.6*	*1.7*
Total OECD	**20.1**	**19.6**	**19.7**	**20.3**	**20.2**	*19.8*	*20.0*	*20.4*	*20.5*	*20.3*	*20.7*	*21.1*	**19.9**	*20.1*	*20.7*
Non-OECD															
OPEC	**29.5**	**29.7**	**30.1**	**30.3**	**30.8**	*30.6*	*29.4*	*29.8*	*29.9*	*29.9*	*30.2*	*30.5*	**29.9**	*30.1*	*30.1*
Former Soviet Union	**7.0**	**7.1**	**7.2**	**7.2**	**7.3**	*7.2*	*7.2*	*7.3*	*7.3*	*7.3*	*7.3*	*7.4*	**7.1**	*7.2*	*7.3*
China	**3.2**	**3.2**	**3.2**	**3.1**	**3.2**	*3.2*	*3.2*	*3.2*	*3.3*	*3.3*	*3.3*	*3.3*	**3.2**	*3.2*	*3.3*
Mexico	**3.4**	**3.4**	**3.5**	**3.5**	**3.6**	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	**3.4**	*3.6*	*3.6*
Other Non-OECD	**10.4**	**10.5**	**10.4**	**10.5**	**10.6**	*10.6*	*10.7*	*10.8*	*10.9*	*11.1*	*11.2*	*11.4*	**10.4**	*10.7*	*11.2*
Total Non-OECD	**53.5**	**53.9**	**54.3**	**54.7**	**55.4**	*55.1*	*54.0*	*54.7*	*54.9*	*55.2*	*55.6*	*56.1*	**54.1**	*54.8*	*55.4*
Total World Supply	**73.6**	**73.5**	**74.0**	**75.0**	**75.6**	*75.0*	*74.0*	*75.1*	*75.4*	*75.5*	*76.2*	*77.2*	**74.0**	*74.9*	*76.1*
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*	*-0.1*	*0.6*	*0.5*	*-0.4*	*-0.3*	*0.5*	**-0.1**	*-0.1*	*0.1*
Other	**-0.1**	**-1.0**	**-1.6**	**-0.1**	**-0.8**	*-1.6*	*-0.4*	*0.9*	*0.7*	*-0.5*	*-0.9*	*0.7*	**-0.7**	*-0.5*	*0.0*
Total Stock Withdrawals	**-0.1**	**-1.7**	**-1.8**	**0.3**	**-1.1**	*-2.3*	*-0.5*	*1.5*	*1.1*	*-1.0*	*-1.1*	*1.2*	**-0.8**	*-0.6*	*0.1*
OECD Comm. Stocks, End (bill. bbls.)	**2.7**	**2.7**	**2.7**	**2.7**	**2.7**	*2.9*	*2.9*	*2.8*	*2.7*	*2.8*	*2.8*	*2.8*	**2.7**	*2.8*	*2.8*
Non-OPEC Supply	**44.1**	**43.9**	**43.9**	**44.7**	**44.8**	*44.3*	*44.6*	*45.3*	*45.6*	*45.6*	*46.1*	*46.7*	**44.1**	*44.8*	*46.0*
Net Exports from Former Soviet Union	**2.3**	**2.9**	**3.0**	**2.6**	**2.5**	*2.9*	*2.9*	*2.6*	*2.3*	*2.8*	*2.9*	*2.5*	**2.7**	*2.7*	*2.6*

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

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

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

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Mexico is also a member, but is not yet included in OECD data.

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

SPR: Strategic Petroleum Reserve

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

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

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

Table 4. U. S. Energy Prices

(Nominal Dollars)

	1997				1998				1999				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1997	1998	1999
Imported Crude Oil [a]															
(dollars per barrel)	**21.04**	**17.93**	**17.81**	**17.78**	**13.44**	*12.39*	*11.42*	*12.49*	*13.08*	*13.67*	*13.58*	*14.25*	**18.57**	*12.40*	*13.65*
Natural Gas Wellhead															
(dollars per thousand cubic feet)	**2.49**	**1.84**	**2.02**	**2.54**	**1.74**	*1.91*	*1.94*	*2.16*	*2.23*	*2.01*	*2.12*	*2.40*	**2.23**	*1.94*	*2.19*
Petroleum Products															
Gasoline Retail [b] (dollars per gallon)															
All Grades	**1.27**	**1.24**	**1.25**	**1.21**	**1.10**	*1.10*	*1.07*	*1.06*	*1.08*	*1.14*	*1.15*	*1.12*	**1.24**	*1.08*	*1.13*
Regular Unleaded	**1.22**	**1.20**	**1.21**	**1.17**	**1.05**	*1.05*	*1.04*	*1.02*	*1.04*	*1.11*	*1.11*	*1.09*	**1.20**	*1.04*	*1.09*
No. 2 Diesel Oil, Retail															
(dollars per gallon)	**1.25**	**1.18**	**1.15**	**1.17**	**1.08**	*1.05*	*1.01*	*1.05*	*1.05*	*1.06*	*1.06*	*1.11*	**1.19**	*1.05*	*1.07*
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	**0.65**	**0.57**	**0.54**	**0.57**	**0.47**	*0.43*	*0.40*	*0.46*	*0.47*	*0.45*	*0.47*	*0.51*	**0.59**	*0.44*	*0.48*
No. 2 Heating Oil, Retail															
(dollars per gallon)	**1.05**	**0.98**	**0.88**	**0.93**	**0.92**	*0.85*	*0.74*	*0.82*	*0.89*	*0.86*	*0.83*	*0.90*	**0.99**	*0.85*	*0.89*
No. 6 Residual Fuel Oil, Retail [c]															
(dollars per barrel)	**19.00**	**16.84**	**17.04**	**18.16**	**13.56**	*13.22*	*12.01*	*12.85*	*14.20*	*13.25*	*12.84*	*14.39*	**17.80**	*12.90*	*13.71*
Electric Utility Fuels															
Coal															
(dollars per million Btu)	**1.29**	**1.28**	**1.26**	**1.26**	**1.26**	*1.26*	*1.24*	*1.24*	*1.24*	*1.26*	*1.23*	*1.23*	**1.27**	*1.25*	*1.24*
Heavy Fuel Oil [d]															
(dollars per million Btu)	**2.91**	**2.59**	**2.71**	**2.92**	**2.12**	*2.19*	*1.98*	*2.11*	*2.24*	*2.18*	*2.11*	*2.36*	**2.79**	*2.09*	*2.22*
Natural Gas															
(dollars per million Btu)	**3.10**	**2.46**	**2.60**	**3.15**	**2.61**	*2.51*	*2.43*	*2.60*	*2.94*	*2.59*	*2.65*	*2.99*	**2.76**	*2.51*	*2.75*
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	**6.70**	**6.96**	**8.67**	**6.82**	**6.38**	*7.29*	*8.40*	*6.52*	*6.76*	*7.51*	*8.55*	*6.84*	**6.93**	*6.73*	*7.03*
Electricity															
(cents per kilowatthour)	**8.04**	**8.69**	**8.79**	**8.31**	**7.93**	*8.46*	*8.64*	*8.15*	*7.81*	*8.44*	*8.70*	*8.20*	**8.46**	*8.31*	*8.29*

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

[b] Average self-service cash prices.

[c] Average for all sulfur contents.

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

Notes: Data are estimated for the first quarter of 1998. Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

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

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

(Million Barrels per Day, Except Closing Stocks)

	1997				1998				1999				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1997	1998	1999
Supply															
Crude Oil Supply															
Domestic Production [a]	**6.45**	**6.45**	**6.41**	**6.49**	**6.48**	*6.39*	*6.36*	*6.40*	*6.33*	*6.27*	*6.30*	*6.42*	**6.45**	*6.41*	*6.33*
Alaska	**1.36**	**1.30**	**1.24**	**1.28**	**1.23**	*1.17*	*1.14*	*1.23*	*1.23*	*1.19*	*1.16*	*1.19*	**1.30**	*1.19*	*1.19*
Lower 48	**5.09**	**5.15**	**5.18**	**5.20**	**5.25**	*5.22*	*5.21*	*5.17*	*5.10*	*5.08*	*5.14*	*5.23*	**5.16**	*5.21*	*5.14*
Net Imports (including SPR) [b]	**7.40**	**8.41**	**8.44**	**8.21**	**7.81**	*8.61*	*8.91*	*8.06*	*7.86*	*8.65*	*8.83*	*8.26*	**8.12**	*8.35*	*8.40*
Other SPR Supply	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.00**	*0.00*	*0.00*
SPR Stock Withdrawn or Added (-)	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.01**	*0.00*	*0.00*
Other Stock Withdrawn or Added (-)	**-0.33**	**-0.08**	**0.18**	**-0.01**	**-0.35**	*0.04*	*0.01*	*0.07*	*-0.04*	*-0.01*	*0.07*	*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*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	**0.00**	*0.00*	*-0.01*
Unaccounted-for Crude Oil	**0.19**	**0.09**	**0.15**	**0.15**	**0.38**	*0.11*	*0.15*	*0.24*	*0.23*	*0.24*	*0.25*	*0.24*	**0.14**	*0.22*	*0.24*
Total Crude Oil Supply	**13.74**	**14.87**	**15.19**	**14.83**	**14.32**	*15.14*	*15.42*	*14.76*	*14.36*	*15.15*	*15.43*	*14.91*	**14.66**	*14.91*	*14.97*
Other Supply															
NGL Production	**1.84**	**1.82**	**1.83**	**1.77**	**1.85**	*1.80*	*1.78*	*1.79*	*1.83*	*1.82*	*1.81*	*1.81*	**1.82**	*1.80*	*1.82*
Other Hydrocarbon and Alcohol Inputs	**0.31**	**0.34**	**0.36**	**0.36**	**0.34**	*0.36*	*0.34*	*0.35*	*0.36*	*0.34*	*0.35*	*0.36*	**0.34**	*0.35*	*0.35*
Crude Oil Product Supplied	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	**0.00**	*0.00*	*0.01*
Processing Gain	**0.79**	**0.84**	**0.87**	**0.90**	**0.83**	*0.84*	*0.86*	*0.84*	*0.80*	*0.86*	*0.88*	*0.85*	**0.85**	*0.84*	*0.85*
Net Product Imports [c]	**1.33**	**1.23**	**0.86**	**0.75**	**0.93**	*1.04*	*0.79*	*0.89*	*1.10*	*1.05*	*1.03*	*0.96*	**1.04**	*0.91*	*1.03*
Product Stock Withdrawn or Added (-) [d]	**0.25**	**-0.62**	**-0.37**	**0.36**	**0.03**	*-0.75*	*-0.07*	*0.55*	*0.52*	*-0.44*	*-0.32*	*0.46*	**-0.09**	*-0.06*	*0.05*
Total Supply	**18.27**	**18.49**	**18.75**	**18.97**	**18.30**	*18.43*	*19.13*	*19.19*	*18.98*	*18.78*	*19.19*	*19.36*	**18.62**	*18.77*	*19.08*
Demand															
Motor Gasoline	**7.59**	**8.16**	**8.25**	**8.06**	**7.77**	*8.21*	*8.43*	*8.21*	*7.86*	*8.36*	*8.53*	*8.32*	**8.02**	*8.16*	*8.27*
Jet Fuel	**1.57**	**1.56**	**1.64**	**1.62**	**1.55**	*1.55*	*1.61*	*1.63*	*1.57*	*1.60*	*1.68*	*1.66*	**1.60**	*1.58*	*1.63*
Distillate Fuel Oil	**3.58**	**3.33**	**3.24**	**3.60**	**3.58**	*3.37*	*3.43*	*3.59*	*3.85*	*3.43*	*3.35*	*3.62*	**3.44**	*3.49*	*3.56*
Residual Fuel Oil	**0.89**	**0.76**	**0.77**	**0.77**	**0.81**	*0.81*	*0.84*	*0.87*	*1.00*	*0.79*	*0.78*	*0.83*	**0.80**	*0.83*	*0.85*
Other Oils [e]	**4.64**	**4.67**	**4.85**	**4.93**	**4.62**	*4.49*	*4.81*	*4.89*	*4.69*	*4.59*	*4.84*	*4.93*	**4.77**	*4.70*	*4.77*
Total Demand	**18.27**	**18.49**	**18.75**	**18.97**	**18.32**	*18.43*	*19.13*	*19.19*	*18.98*	*18.78*	*19.19*	*19.36*	**18.62**	*18.77*	*19.08*
Total Petroleum Net Imports	**8.73**	**9.64**	**9.31**	**8.96**	**8.74**	*9.66*	*9.69*	*8.95*	*8.96*	*9.70*	*9.85*	*9.22*	**9.16**	*9.26*	*9.43*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**313**	**320**	**304**	**305**	**336**	*333*	*332*	*326*	*330*	*331*	*325*	*324*	**305**	*326*	*324*
Total Motor Gasoline	**200**	**204**	**198**	**210**	**215**	*221*	*210*	*207*	*210*	*204*	*201*	*202*	**210**	*207*	*202*
Finished Motor Gasoline	**154**	**164**	**158**	**166**	**166**	*178*	*165*	*163*	*166*	*164*	*160*	*161*	**166**	*163*	*161*
Blending Components	**46**	**41**	**41**	**43**	**49**	*44*	*45*	*43*	*44*	*41*	*42*	*41*	**43**	*43*	*41*
Jet Fuel	**39**	**43**	**46**	**44**	**43**	*44*	*42*	*42*	*44*	*44*	*44*	*45*	**44**	*42*	*45*
Distillate Fuel Oil	**101**	**118**	**139**	**138**	**124**	*139*	*150*	*147*	*109*	*118*	*137*	*139*	**138**	*147*	*139*
Residual Fuel Oil	**41**	**39**	**35**	**40**	**41**	*40*	*39*	*43*	*36*	*39*	*39*	*42*	**40**	*43*	*42*
Other Oils [e]	**253**	**286**	**308**	**259**	**265**	*313*	*322*	*275*	*267*	*301*	*315*	*265*	**259**	*275*	*265*
Total Stocks (excluding SPR)	**948**	**1011**	**1029**	**996**	**1025**	*1090*	*1096*	*1039*	*996*	*1037*	*1060*	*1017*	**996**	*1039*	*1017*
Crude Oil in SPR	**563**	**563**	**563**	**563**	**563**	*563*	*563*	*563*	*563*	*563*	*563*	*563*	**563**	*563*	*563*
Total Stocks (including SPR)	**1512**	**1575**	**1592**	**1560**	**1588**	*1654*	*1659*	*1603*	*1560*	*1601*	*1624*	*1581*	**1560**	*1603*	*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

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Table 6. Approximate Energy Demand Sensitivities[a] for the STIFS[b] Model
(Percent Deviation Base Case)

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

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

Table 7. Forecast Components for U.S. Crude Oil Production
(Million Barrels per Day)

	High Price Case	Low Price Case	Difference		
			Total	Uncertainty	Price Impact
United States	*6.84*	*6.00*	*0.84*	*0.11*	*0.73*
Lower 48 States	*5.62*	*4.84*	*0.78*	*0.08*	*0.70*
Alaska	*1.22*	*1.16*	*0.06*	*0.03*	*0.03*

Note: Components provided are for the fourth quarter 1999. Totals may not add to sum of components due to independent rounding.
Source: Energy Information Administration, Office of Oil and Gas, Reserves and Natural Gas Division.

Table 8. U.S. Natural Gas Supply and Demand: Mid world Oil Price Case

(Trillion cubic Feet)

	1997				1998				1999				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1997	1998	1999
Supply															
Total Dry Gas Production	**4.73**	**4.70**	**4.72**	**4.78**	**4.74**	*4.74*	*4.78*	*4.85*	*4.84*	*4.81*	*4.84*	*4.91*	**18.93**	*19.11*	*19.39*
Net Imports	**0.74**	**0.68**	**0.68**	**0.73**	**0.75**	*0.70*	*0.71*	*0.77*	*0.78*	*0.75*	*0.76*	*0.83*	**2.83**	*2.93*	*3.13*
Supplemental Gaseous Fuels	**0.03**	**0.03**	**0.02**	**0.03**	**0.03**	*0.03*	*0.03*	*0.03*	*0.04*	*0.03*	*0.03*	*0.03*	**0.12**	*0.12*	*0.13*
Total New Supply	**5.50**	**5.40**	**5.43**	**5.55**	**5.52**	*5.46*	*5.52*	*5.66*	*5.66*	*5.59*	*5.63*	*5.77*	**21.88**	*22.16*	*22.65*
Underground Working Gas Storage															
Opening	**6.51**	**5.34**	**6.09**	**7.03**	**6.52**	*5.52*	*6.44*	*7.37*	*6.74*	*5.46*	*6.28*	*7.14*	**6.51**	*6.52*	*6.74*
Closing	**5.34**	**6.09**	**7.03**	**6.52**	**5.52**	*6.44*	*7.37*	*6.74*	*5.46*	*6.28*	*7.14*	*6.53*	**6.52**	*6.74*	*6.53*
Net Withdrawals	**1.18**	**-0.75**	**-0.95**	**0.51**	**1.00**	*-0.92*	*-0.92*	*0.62*	*1.28*	*-0.82*	*-0.86*	*0.61*	**-0.01**	*-0.22*	*0.21*
Total Supply	**6.68**	**4.65**	**4.49**	**6.06**	**6.52**	*4.54*	*4.59*	*6.28*	*6.94*	*4.77*	*4.77*	*6.38*	**21.87**	*21.94*	*22.86*
Balancing Item [a]	**0.21**	**0.20**	**0.03**	**-0.33**	**0.10**	*0.27*	*-0.07*	*-0.51*	*0.36*	*0.17*	*-0.19*	*-0.55*	**0.11**	*-0.21*	*-0.20*
Total Primary Supply	**6.88**	**4.85**	**4.51**	**5.73**	**6.62**	*4.81*	*4.52*	*5.77*	*7.31*	*4.94*	*4.58*	*5.83*	**21.98**	*21.72*	*22.66*
Demand															
Lease and Plant Fuel	**0.31**	**0.31**	**0.31**	**0.31**	**0.31**	*0.31*	*0.31*	*0.32*	*0.31*	*0.31*	*0.31*	*0.32*	**1.25**	*1.24*	*1.26*
Pipeline Use	**0.22**	**0.16**	**0.15**	**0.19**	**0.21**	*0.15*	*0.15*	*0.19*	*0.22*	*0.16*	*0.15*	*0.19*	**0.71**	*0.71*	*0.71*
Residential	**2.28**	**0.89**	**0.38**	**1.47**	**2.11**	*0.77*	*0.35*	*1.39*	*2.45*	*0.83*	*0.35*	*1.41*	**5.01**	*4.63*	*5.05*
Commercial	**1.27**	**0.65**	**0.44**	**0.93**	**1.20**	*0.58*	*0.45*	*0.91*	*1.42*	*0.65*	*0.46*	*0.92*	**3.29**	*3.14*	*3.44*
Industrial (Incl. Cogenerators)	**2.28**	**2.09**	**2.04**	**2.17**	**2.23**	*2.09*	*2.05*	*2.29*	*2.33*	*2.11*	*2.09*	*2.34*	**8.57**	*8.66*	*8.87*
Cogenerators	**0.53**	**0.57**	**0.57**	**0.64**	**0.58**	*0.55*	*0.60*	*0.68*	*0.60*	*0.57*	*0.62*	*0.70*	**2.31**	*2.41*	*2.49*
Electricity Production															
Electric Utilities	***0.47***	***0.72***	***1.15***	**0.62**	**0.50**	*0.86*	*1.17*	*0.62*	*0.51*	*0.84*	*1.18*	*0.60*	**2.97**	*3.15*	*3.14*
Nonutilities (Excl. Cogen.)	**0.04**	**0.04**	**0.05**	**0.05**	**0.05**	*0.04*	*0.05*	*0.05*	*0.05*	*0.05*	*0.05*	*0.06*	**0.18**	*0.19*	*0.20*
Total Demand	**6.88**	**4.85**	**4.51**	**5.73**	**6.62**	*4.81*	*4.52*	*5.77*	*7.31*	*4.94*	*4.58*	*5.83*	**21.98**	*21.72*	*22.66*

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

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

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

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

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

(Million Short Tons)

	1997				1998				1999				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1997	1998	1999
Supply															
Production	**273.9**	**269.7**	**271.3**	**273.7**	**279.2**	*276.9*	*280.1*	*279.7*	*294.7*	*276.9*	*281.6*	*289.2*	**1088.6**	*1115.9*	*1142.4*
Appalachia	**119.0**	**117.8**	**112.0**	**115.9**	**119.1**	*116.9*	*113.2*	*116.6*	*123.8*	*115.0*	*111.5*	*118.6*	**464.7**	*465.9*	*469.0*
Interior	**42.9**	**41.4**	**44.4**	**43.6**	**41.0**	*40.8*	*44.0*	*42.7*	*42.9*	*39.0*	*42.4*	*42.3*	**172.3**	*168.5*	*166.6*
Western	**112.0**	**110.5**	**114.9**	**114.2**	**119.1**	*119.2*	*122.9*	*120.4*	*128.0*	*122.9*	*127.7*	*128.3*	**451.6**	*481.5*	*506.8*
Primary Stock Levels [a]															
Opening	**28.6**	**37.5**	**42.5**	**39.1**	**32.9**	*37.5*	*37.2*	*34.2*	*32.9*	*39.9*	*40.3*	*34.1*	**28.6**	*32.9*	*32.9*
Closing	**37.5**	**42.5**	**39.1**	**32.9**	**37.5**	*37.2*	*34.2*	*32.9*	*39.9*	*40.3*	*34.1*	*33.0*	**32.9**	*32.9*	*33.0*
Net Withdrawals	**-8.9**	**-5.0**	**3.4**	**6.2**	**-4.7**	*0.3*	*3.0*	*1.2*	*-6.9*	*-0.4*	*6.2*	*1.1*	**-4.2**	*-0.1*	*(S)*
Imports	**1.3**	**1.7**	**2.2**	**2.2**	**1.8**	*1.9*	*1.8*	*1.8*	*1.8*	*1.8*	*1.8*	*1.8*	**7.5**	*7.3*	*7.3*
Exports	**20.0**	**20.6**	**22.4**	**20.6**	**18.3**	*20.9*	*21.6*	*21.5*	*20.1*	*20.7*	*21.0*	*20.9*	**83.5**	*82.2*	*82.8*
Total Net Domestic Supply	**246.4**	**245.8**	**254.6**	**261.6**	**258.1**	*258.2*	*263.3*	*261.2*	*269.5*	*257.6*	*268.7*	*271.2*	**1008.3**	*1040.9*	*1067.0*
Secondary Stock Levels [b]															
Opening	**123.0**	**120.7**	**127.6**	**109.8**	**106.8**	*114.1*	*125.0*	*112.1*	*113.3*	*114.1*	*119.6*	*105.8*	**123.0**	*106.8*	*113.3*
Closing	**120.7**	**127.6**	**109.8**	**106.8**	**114.1**	*125.0*	*112.1*	*113.3*	*114.1*	*119.6*	*105.8*	*110.2*	**106.8**	*113.3*	*110.2*
Net Withdrawals	**2.3**	**-6.9**	**17.8**	**3.0**	**-7.3**	*-10.9*	*13.0*	*-1.3*	*-0.8*	*-5.5*	*13.8*	*-4.4*	**16.1**	*-6.5*	*3.1*
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	**251.0**	**241.3**	**274.7**	**266.9**	**253.3**	*249.8*	*278.8*	*262.5*	*271.3*	*254.7*	*285.1*	*269.5*	**1033.9**	*1044.4*	*1080.7*
Demand															
Coke Plants	**7.6**	**7.4**	**7.9**	**6.6**	**6.9**	*6.9*	*7.1*	*7.6*	*7.6*	*7.3*	*7.2*	*7.5*	**29.4**	*28.6*	*29.5*
Electricity Production															
Electric Utilities	**218.8**	**207.7**	**243.7**	**230.3**	**220.5**	*218.7*	*247.7*	*228.2*	*236.6*	*222.8*	*253.3*	*234.6*	**900.4**	*915.1*	*947.2*
Nonutilities (Excl. Cogen.) [d]	**5.9**	**5.9**	**5.9**	**5.9**	**6.3**	*6.2*	*6.3*	*6.3*	*6.6*	*6.6*	*6.6*	*6.6*	**23.5**	*25.0*	*26.5*
Retail and General Industry [e]	**20.0**	**18.2**	**17.9**	**20.2**	**19.9**	*18.0*	*17.8*	*20.4*	*20.6*	*18.1*	*18.1*	*20.8*	**76.4**	*76.0*	*77.5*
Total Demand	**252.3**	**239.1**	**275.4**	**262.9**	**253.6**	*249.8*	*278.8*	*262.5*	*271.3*	*254.7*	*285.1*	*269.5*	**1029.7**	*1044.7*	*1080.7*
Discrepancy [f]	**-1.3**	**2.1**	**-0.7**	**4.0**	**-0.3**	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	***4.2***	*-0.3*	*0.0*

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

[b] Secondary stocks are held by users.

[c] Estimated independent power producers (IPPs) consumption of waste coal for 1994 is 7.9 million tons, 8.5 million tons in 1995, and 8.9 million tons in 1996.

[d] Consumption of coal by IPPs. In 1995, IPP consumption was estimated to be 5.290 million tons per quarter. Quarterly estimates and projections for coal consumption by nonutility generators are based on estimates for annual coal-fired generation at nonutilities, supplied by the Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration (EIA), based on annual data reported to EIA on Form EIA-867 (Annual Nonutility Power Producer Report). Data for first quarter 1998 are estimates.

[e] Synfuels plant demand in 1993 was 1.7 million tons per quarter and is assumed to remain at that level in 1994, 1995, 1996, 1997 and 1998.

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

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

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

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

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

(Billion Kilowatthours)

	1997				1998				1999				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1997	1998	1999
Supply															
Net Utility Generation															
Coal	**434.1**	**413.9**	**480.9**	**458.9**	**437.0**	*434.9*	*489.2*	*451.5*	*470.8*	*442.8*	*501.4*	*464.5*	**1787.8**	*1812.7*	*1879.5*
Petroleum	**17.0**	**15.1**	**24.5**	**21.1**	**20.9**	*28.5*	*33.2*	*24.3*	*27.8*	*22.9*	*27.4*	*20.9*	**77.8**	*106.9*	*99.0*
Natural Gas	**45.0**	**69.5**	**109.9**	**59.2**	**47.9**	*80.7*	*112.2*	*58.9*	*49.2*	*79.9*	*112.9*	*57.7*	**283.6**	*299.7*	*299.6*
Nuclear	**160.0**	**144.0**	**171.0**	**153.6**	**162.6**	*154.7*	*176.7*	*159.2*	*166.9*	*151.5*	*177.8*	*160.3*	**628.6**	*653.2*	*656.5*
Hydroelectric	**94.2**	**95.9**	**77.5**	**69.6**	**86.7**	*88.6*	*69.5*	*64.0*	*73.9*	*77.3*	*64.3*	*64.1*	**337.2**	*308.8*	*279.7*
Geothermal and Other [a]	**1.6**	**1.8**	**2.0**	**2.0**	**1.9**	*1.4*	*1.7*	*1.7*	*1.7*	*1.6*	*1.7*	*1.7*	**7.5**	*6.7*	*6.7*
Subtotal	**752.0**	**740.2**	**865.8**	**764.5**	**757.0**	*789.0*	*882.5*	*759.6*	*790.3*	*776.0*	*885.6*	*769.2*	**3122.5**	*3188.0*	*3221.1*
Nonutility Generation [b]															
Coal	**15.3**	**16.3**	**16.4**	**18.4**	**16.6**	*15.9*	*17.3*	*19.3*	*17.0*	*16.3*	*17.7*	*19.8*	**66.4**	*69.1*	*70.8*
Petroleum	**4.0**	**4.2**	**4.2**	**4.7**	**4.4**	*4.2*	*4.6*	*5.1*	*4.7*	*4.5*	*4.9*	*5.5*	**17.1**	*18.4*	*19.6*
Natural Gas	**49.2**	**52.5**	**52.8**	**59.1**	**53.7**	*51.4*	*55.9*	*62.6*	*55.2*	*52.9*	*57.6*	*64.5*	**213.7**	*223.7*	*230.2*
Other Gaseous Fuels [c]	**2.9**	**3.1**	**3.1**	**3.5**	**3.0**	*2.9*	*3.1*	*3.5*	*3.0*	*2.9*	*3.1*	*3.5*	**12.5**	*12.5*	*12.6*
Hydroelectric	**3.9**	**4.2**	**4.2**	**4.7**	**4.4**	*4.2*	*4.5*	*5.1*	*4.6*	*4.4*	*4.7*	*5.3*	**17.1**	*18.2*	*19.0*
Geothermal and Other [d]	**19.0**	**20.3**	**20.4**	**22.9**	**20.3**	*19.4*	*21.2*	*23.7*	*20.5*	*19.6*	*21.3*	*23.9*	**82.6**	*84.6*	*85.3*
Subtotal	**94.3**	**100.6**	**101.2**	**113.3**	**102.3**	*98.0*	*106.7*	*119.4*	*104.9*	*100.5*	*109.4*	*122.5*	**409.4**	*426.4*	*437.4*
Total Generation	**846.3**	**840.8**	**967.0**	**877.7**	**859.3**	*887.0*	*989.1*	*879.0*	*895.2*	*876.6*	*995.0*	*891.7*	**3531.9**	*3614.3*	*3658.5*
Net Imports [e]	**7.5**	**8.9**	**11.8**	**8.3**	**5.8**	*9.3*	*12.2*	*8.0*	*7.2*	*9.2*	*11.7*	*7.9*	**36.6**	*35.3*	*36.0*
Total Supply	**853.8**	**849.8**	**978.8**	**886.1**	**865.1**	*896.3*	*1001.3*	*887.0*	*902.4*	*885.7*	*1006.7*	*899.6*	**3568.5**	*3649.6*	*3694.5*
Losses and Unaccounted for [f]	**52.8**	**82.7**	**76.3**	**73.3**	**54.5**	*92.3*	*69.8*	*68.2*	*53.0*	*76.1*	*69.9*	*69.0*	**285.0**	*284.8*	*268.0*
Demand															
Electric Utility Sales															
Residential	**276.7**	**226.2**	**309.9**	**258.8**	**275.8**	*245.8*	*326.2*	*257.7*	*299.7*	*250.6*	*325.6*	*263.2*	**1071.6**	*1105.5*	*1139.1*
Commercial	**214.5**	**217.6**	**256.0**	**225.3**	**217.4**	*229.9*	*266.8*	*229.4*	*230.6*	*232.0*	*268.0*	*231.4*	**913.3**	*943.5*	*961.9*
Industrial	**247.6**	**258.7**	**268.9**	**257.4**	**252.2**	*264.2*	*268.6*	*258.4*	*251.5*	*261.7*	*271.8*	*261.1*	**1032.5**	*1043.4*	*1046.1*
Other	**23.5**	**23.2**	**26.2**	**24.6**	**23.7**	*24.2*	*26.6*	*24.8*	*25.1*	*24.5*	*27.0*	*25.2*	**97.5**	*99.3*	*101.8*
Subtotal	**762.2**	**725.7**	**860.9**	**766.1**	**769.1**	*764.2*	*888.2*	*770.3*	*806.8*	*768.8*	*892.4*	*780.9*	**3114.9**	*3191.7*	*3248.8*
Nonutility Gener. for Own Use [b]	**38.8**	**41.4**	**41.7**	**46.6**	**41.5**	*39.8*	*43.3*	*48.5*	*42.6*	*40.9*	*44.5*	*49.8*	**168.6**	*173.1*	*177.7*
Total Demand	**801.0**	**767.1**	**902.6**	**812.7**	**810.6**	*804.0*	*931.5*	*818.8*	*849.4*	*809.6*	*936.9*	*830.6*	**3283.5**	*3364.9*	*3426.6*
Memo:															
Nonutility Sales to Electric Utilities [b]	**55.5**	**59.2**	**59.5**	**66.6**	**60.7**	*58.2*	*63.3*	*70.9*	*62.3*	*59.7*	*65.0*	*72.7*	**240.8**	253.2	259.7

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

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

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

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

[e] Data for 1997 are estimates.

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

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

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

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

(Quadrillion Btu)

	Year				Annual Percentage Change		
	1996	1997	1998	1999	1996-1997	1997-1998	1998-1999
Electric Utilities							
Hydroelectric Power [a]	**3.433**	**3.530**	*3.232*	*2.928*	**2.8**	*-8.4*	*-9.4*
Geothermal, Solar and Wind Energy [b]	**0.110**	**0.115**	*0.099*	*0.099*	**4.5**	*-13.9*	*0.0*
Biofuels [c]	**0.020**	**0.021**	*0.020*	*0.020*	**5.0**	*-4.8*	*0.0*
Total	**3.563**	**3.665**	*3.352*	*3.048*	**2.9**	*-8.5*	*-9.1*
Nonutility Power Generators							
Hydroelectric Power [a]	**0.171**	**0.177**	*0.188*	*0.196*	**3.5**	*6.2*	*4.3*
Geothermal, Solar and Wind Energy [b]	**0.258**	**0.280**	*0.289*	*0.294*	**8.5**	*3.2*	*1.7*
Biofuels [c]	**0.601**	**0.638**	*0.651*	*0.655*	**6.2**	*2.0*	*0.6*
Total	**1.030**	**1.095**	*1.128*	*1.145*	**6.3**	*3.0*	*1.5*
Total Power Generation	**4.593**	**4.760**	*4.480*	*4.193*	**3.6**	*-5.9*	*-6.4*
Other Sectors							
Residential and Commercial [d]	**0.722**	**0.553**	*0.568*	*0.574*	**-23.4**	*2.7*	*1.1*
Industrial [e]	**1.603**	**1.498**	*1.515*	*1.542*	**-6.6**	*1.1*	*1.8*
Transportation [f]	**0.074**	**0.097**	*0.094*	*0.095*	**31.1**	*-3.1*	*1.1*
Total	**2.399**	**2.148**	*2.177*	*2.211*	**-10.5**	*1.4*	*1.6*
Net Imported Electricity [g]	**0.305**	**0.297**	*0.287*	*0.293*	**-2.6**	*-3.4*	*2.1*
Total Renewable Energy Demand	**7.297**	**7.205**	*6.944*	*6.696*	**-1.3**	*-3.6*	*-3.6*

[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**	*7517*	*7639*
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**	*12.40*	*13.65*
Petroleum Supply															
Crude Oil Production [b]															
(million barrels per day)	**8.97**	**8.68**	**8.35**	**8.14**	**7.61**	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	**6.56**	**6.46**	**6.45**	*6.41*	*6.33*
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**	*9.26*	*9.43*
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**	*74.3*	*76.2*
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**	*18.77*	*19.08*
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**	**21.98**	*21.72*	*22.66*
Coal															
(million short tons)	**810**	**797**	**830**	**877**	**891**	**897**	**898**	**907**	**944**	**951**	**962**	**1006**	**1030**	*1045*	*1081*
Electricity (billion kilowatthours)															
Utility Sales [c]	**2324**	**2369**	**2457**	**2578**	**2647**	**2713**	**2762**	**2763**	**2861**	**2935**	**3013**	**3098**	**3115**	*3192*	*3249*
Nonutility Own Use [d]	**NA**	**NA**	**NA**	**NA**	**108**	**113**	**122**	**132**	**138**	**150**	**158**	**164**	**169**	*173*	*178*
Total	**2324**	**2369**	**2457**	**2578**	**2755**	**2826**	**2884**	**2895**	**3000**	**3085**	**3171**	**3262**	**3283**	*3365*	*3427*
Total Energy Demand [e]															
(quadrillion Btu)	**NA**	**NA**	**NA**	**NA**	**NA**	**84.1**	**84.0**	**85.6**	**87.4**	**89.3**	**90.9**	**93.9**	**94.4**	*94.7*	*97.3*
Total Energy Demand per Dollar of GDP															
(thousand Btu per 1992 Dollar)	**NA**	**NA**	**NA**	**NA**	**NA**	**13.71**	**13.82**	**13.70**	**13.67**	**13.50**	**13.44**	**13.42**	**12.99**	*12.60*	*12.73*

[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 CONTROL0898.

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**	*7517*	*7639*
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**	*1.128*	*1.148*
Real Disposable Personal Income (billion chained 1992 Dollars)	**3960**	**4077**	**4155**	**4325**	**4412**	**4490**	**4484**	**4605**	**4667**	**4773**	**4906**	**5043**	**5183**	*5346*	*5481*
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**	*1.316*	*1.351*
Real Fixed Investment (billion chained 1992 dollars)	**799**	**805**	**799**	**818**	**832**	**806**	**741**	**783**	**843**	**916**	**966**	**1051**	**1138**	*1260*	*1301*
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**	**1.102**	*1.159*	*1.124*
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**	*18.5*	*-5.5*
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**	*1.631*	*1.671*
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**	*0.521*	*0.544*
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**	*125.9*	*127.8*
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**	*86.8*	*88.8*
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**	*1.285*	*1.316*
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**	*114.3*	*115.6*
Weather [a]															
Heating Degree-Days															
U.S.	**4642**	**4295**	**4334**	**4653**	**4726**	**4016**	**4200**	**4441**	**4700**	**4483**	**4531**	**4713**	**4551**	*4214*	*4576*
New England	**6571**	**6517**	**6546**	**6715**	**6887**	**5848**	**5960**	**6844**	**6728**	**6672**	**6559**	**6679**	**6645**	*6124*	*6621*
Middle Atlantic	**5660**	**5665**	**5699**	**6088**	**6134**	**4998**	**5177**	**5964**	**5948**	**5934**	**5831**	**5986**	**5816**	*5225*	*5839*
U.S. Gas-Weighted	**4856**	**4442**	**4391**	**4804**	**4856**	**4139**	**4337**	**4458**	**4754**	**4659**	**4707**	**5040**	**4886**	*4397*	*4732*
Cooling Degree-Days (U.S.)	**1194**	**1249**	**1269**	**1283**	**1156**	**1260**	**1331**	**1040**	**1218**	**1220**	**1293**	**1180**	**1155**	*1269*	*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 CONTROL0898.

Table A3. Annual International Petroleum Supply and Demand Balance

(Millions Barrels per Day, Except OECD Commercial Stocks)

	Year														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Demand [a]															
OECD															
U.S. (50 States)	**15.8**	**16.3**	**16.7**	**17.3**	**17.4**	**17.0**	**16.8**	**17.1**	**17.2**	**17.7**	**17.7**	**18.3**	**18.6**	*18.8*	*19.2*
Europe [b]	**11.7**	**12.1**	**12.3**	**12.4**	**12.5**	**12.6**	**13.4**	**13.6**	**13.5**	**13.6**	**14.1**	**14.3**	**14.4**	*14.7*	*14.9*
Japan	**4.4**	**4.4**	**4.5**	**4.8**	**5.0**	**5.1**	**5.3**	**5.4**	**5.4**	**5.7**	**5.7**	**5.9**	**5.7**	*5.6*	*5.6*
Other OECD	**2.5**	**2.5**	**2.5**	**2.6**	**2.7**	**2.7**	**2.7**	**2.7**	**2.8**	**2.9**	**3.0**	**3.0**	**3.0**	*3.1*	*3.2*
Total OECD	**34.3**	**35.3**	**36.0**	**37.1**	**37.6**	**37.5**	**38.1**	**38.8**	**39.0**	**39.9**	**40.6**	**41.4**	**41.8**	*42.2*	*42.9*
Non-OECD															
Former Soviet Union	**9.0**	**9.0**	**9.0**	**8.9**	**8.7**	**8.4**	**8.3**	**6.8**	**5.6**	**4.8**	**4.6**	**4.4**	**4.4**	*4.5*	*4.7*
Europe	**2.2**	**2.2**	**2.2**	**2.2**	**2.1**	**1.9**	**1.4**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	**1.4**	*1.5*	*1.5*
China	**1.9**	**2.0**	**2.1**	**2.3**	**2.4**	**2.3**	**2.5**	**2.7**	**3.0**	**3.1**	**3.3**	**3.5**	**3.9**	*4.1*	*4.4*
Other Asia	**3.6**	**3.8**	**4.1**	**4.4**	**4.9**	**5.3**	**5.7**	**6.2**	**6.8**	**7.3**	**7.9**	**8.3**	**8.8**	*8.7*	*8.8*
Other Non-OECD	**9.1**	**9.5**	**9.7**	**10.0**	**10.3**	**10.5**	**10.6**	**11.0**	**11.4**	**11.8**	**12.2**	**12.5**	**13.0**	*13.4*	*13.8*
Total Non-OECD	**25.8**	**26.5**	**27.1**	**27.7**	**28.3**	**28.5**	**28.5**	**28.0**	**28.1**	**28.4**	**29.4**	**30.1**	**31.4**	*32.2*	*33.3*
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**	*74.3*	*76.2*
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**	*6.4*	*6.9*
Other OECD	**1.4**	**1.4**	**1.4**	**1.5**	**1.4**	**1.5**	**1.5**	**1.4**	**1.4**	**1.5**	**1.5**	**1.5**	**1.6**	*1.6*	*1.7*
Total OECD	**18.1**	**17.9**	**17.9**	**17.8**	**17.1**	**17.1**	**17.5**	**17.9**	**18.0**	**18.7**	**19.2**	**19.7**	**19.9**	*20.1*	*20.7*
Non-OECD															
OPEC	**17.2**	**19.3**	**19.6**	**21.5**	**23.3**	**24.5**	**24.6**	**25.8**	**26.6**	**27.0**	**27.6**	**28.3**	**29.9**	*30.1*	*30.1*
Former Soviet Union	**11.9**	**12.3**	**12.5**	**12.5**	**12.1**	**11.4**	**10.4**	**8.9**	**8.0**	**7.3**	**7.1**	**7.1**	**7.1**	*7.2*	*7.3*
China	**2.5**	**2.6**	**2.7**	**2.7**	**2.8**	**2.8**	**2.8**	**2.8**	**2.9**	**2.9**	**3.0**	**3.1**	**3.2**	*3.2*	*3.3*
Mexico	**3.0**	**2.8**	**2.9**	**2.9**	**2.9**	**3.0**	**3.2**	**3.2**	**3.2**	**3.2**	**3.1**	**3.3**	**3.4**	*3.6*	*3.6*
Other Non-OECD	**6.6**	**11.0**	**6.9**	**7.3**	**7.7**	**8.0**	**8.1**	**8.4**	**8.7**	**9.2**	**9.9**	**10.2**	**10.4**	*10.7*	*11.2*
Total Non-OECD	**41.2**	**43.9**	**44.6**	**47.0**	**48.9**	**49.7**	**49.1**	**49.1**	**49.4**	**49.6**	**50.7**	**52.0**	**54.1**	*54.8*	*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**	*74.9*	*76.1*
Total Stock Withdrawals	**0.8**	**0.0**	**0.6**	**0.1**	**0.0**	**-0.8**	**-0.1**	**-0.2**	**-0.3**	**0.1**	**0.1**	**-0.2**	**-0.8**	*-0.6*	*0.1*
OECD Comm. Stocks, End (bill. bbls.)	**2.6**	**2.7**	**2.7**	**2.6**	**2.6**	**2.7**	**2.7**	**2.7**	**2.8**	**2.8**	**2.7**	**2.7**	**2.7**	*2.8*	*2.8*
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**	*2.7*	*2.6*

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

[b] OECD Europe includes the former East Germany.

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

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

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Mexico is also a member but OECD data do not yet include Mexico.

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

SPR: Strategic Petroleum Reserve

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

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

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

Table A4. Annual Average U.S. Energy Prices

(Nominal Dollars)

	Year														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Imported Crude Oil [a]															
(dollars per barrel)	**26.99**	**14.00**	**18.13**	**14.57**	**18.08**	**21.75**	**18.70**	**18.20**	**16.14**	**15.52**	**17.14**	**20.61**	**18.57**	*12.40*	*13.65*
Natural Gas Wellhead															
(dollars per thousand cubic feet)	**2.51**	**1.94**	**1.66**	**1.69**	**1.69**	**1.71**	**1.64**	**1.74**	**2.04**	**1.85**	**1.55**	**2.16**	**2.23**	*1.94*	*2.19*
Petroleum Products															
Gasoline Retail [b] (dollars per gallon)															
All Grades	**1.15**	**0.88**	**0.91**	**0.92**	**1.02**	**1.17**	**1.15**	**1.14**	**1.13**	**1.13**	**1.16**	**1.25**	**1.24**	*1.08*	*1.13*
Reguler Unleaded	**1.17**	**0.88**	**0.91**	**0.91**	**0.99**	**1.13**	**1.10**	**1.09**	**1.07**	**1.08**	**1.11**	**1.20**	**1.20**	*1.04*	*1.09*
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**	*1.05*	*1.07*
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**	*0.44*	*0.48*
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*	*0.89*
No. 6 Residual Fuel Oil, Retail [c]															
(dollars per barrel)	**25.57**	**14.46**	**17.76**	**14.04**	**16.20**	**18.66**	**14.32**	**14.21**	**14.00**	**14.79**	**16.49**	**18.97**	**17.80**	*12.90*	*13.71*
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**	*2.09*	*2.22*
Natural Gas															
(dollars per million Btu)	**3.43**	**2.35**	**2.24**	**2.26**	**2.36**	**2.32**	**2.15**	**2.33**	**2.56**	**2.23**	**1.98**	**2.64**	**2.76**	*2.51*	*2.75*
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	**6.12**	**5.83**	**5.55**	**5.47**	**5.64**	**5.80**	**5.82**	**5.89**	**6.17**	**6.41**	**6.06**	**6.35**	**6.93**	*6.73*	*7.03*
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**	*8.3*	*8.3*

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

[b] Average self-service cash prices.

[c] Average for all sulfur contents.

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

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

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

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

(Million Barrels per Day, Except Closing Stocks)

	Year														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Supply															
Crude Oil Supply															
Domestic Production [a]	**8.97**	**8.68**	**8.35**	**8.14**	**7.61**	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	**6.56**	**6.46**	**6.45**	*6.41*	*6.33*
Alaska	**1.83**	**1.87**	**1.96**	**2.02**	**1.87**	**1.77**	**1.80**	**1.71**	**1.58**	**1.56**	**1.48**	**1.39**	**1.30**	*1.19*	*1.19*
Lower 48	**7.15**	**6.81**	**6.39**	**6.12**	**5.74**	**5.58**	**5.62**	**5.46**	**5.26**	**5.10**	**5.08**	**5.07**	**5.16**	*5.21*	*5.14*
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*	*8.40*
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**	*0.22*	*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**	*14.91*	*14.97*
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**	*1.80*	*1.82*
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**	*0.35*	*0.35*
Crude Oil Product Supplied	**0.06**	**0.05**	**0.03**	**0.04**	**0.03**	**0.02**	**0.02**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.00**	*0.00*	*0.01*
Processing Gain	**0.56**	**0.62**	**0.64**	**0.66**	**0.66**	**0.70**	**0.71**	**0.77**	**0.76**	**0.77**	**0.77**	**0.84**	**0.85**	*0.84*	*0.85*
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**	*0.91*	*1.03*
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*	*0.05*
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**	*18.77*	*19.08*
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**	*8.16*	*8.27*
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**	*1.58*	*1.63*
Distillate Fuel Oil	**2.87**	**2.91**	**2.98**	**3.12**	**3.16**	**3.02**	**2.92**	**2.98**	**3.04**	**3.16**	**3.21**	**3.37**	**3.44**	*3.49*	*3.56*
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**	*0.83*	*0.85*
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**	*4.70*	*4.77*
Total Demand	**15.78**	**16.33**	**16.72**	**17.34**	**17.37**	**17.04**	**16.77**	**17.10**	**17.24**	**17.72**	**17.72**	**18.31**	**18.62**	*18.77*	*19.08*
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**	*9.26*	*9.43*
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*	*202*
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**	*147*	*139*
Residual Fuel Oil	**50**	**47**	**47**	**45**	**44**	**49**	**50**	**43**	**44**	**42**	**37**	**46**	**40**	*43*	*42*
Other Oils [f]	**247**	**265**	**260**	**267**	**257**	**261**	**267**	**263**	**273**	**275**	**258**	**250**	**259**	*275*	*265*

[a] Includes lease condensate.
[b] Net imports equals gross imports plus SPR imports minus exports.
[c] Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.
[d] For years prior to 1993, motor gasoline includes an estimate of fuel ethanol blended into gasoline and certain product reclassifications, not reported elsewhere in EIA. See Appendix B in Energy Information Administration, *Short-Term Energy Outlook*, EIA/DOE-0202(93/3Q), for details on this adjustment.
[e] Includes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.
[f] Includes stocks of all other oils, such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

SPR: Strategic Petroleum Reserve. NGL: Natural Gas Liquids

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

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

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

(Trillion Cubic Feet)

	Year														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Supply															
Total Dry Gas Production	**16.45**	**16.06**	**16.62**	**17.10**	**17.31**	**17.81**	**17.70**	**17.84**	**18.10**	**18.82**	**18.60**	**18.79**	**18.93**	*19.11*	*19.39*
Net Imports	**0.89**	**0.69**	**0.94**	**1.22**	**1.27**	**1.45**	**1.64**	**1.92**	**2.21**	**2.46**	**2.69**	**2.78**	**2.83**	*2.93*	*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**	**0.12**	*0.12*	*0.13*
Total New Supply	**17.47**	**16.86**	**17.66**	**18.42**	**18.69**	**19.38**	**19.45**	**19.88**	**20.42**	**21.39**	**21.40**	**21.69**	**21.88**	*22.16*	*22.65*
Total Underground Storage															
Opening	**6.71**	**6.45**	**6.57**	**6.55**	**6.65**	**6.33**	**6.94**	**6.78**	**6.64**	**6.65**	**6.97**	**6.50**	**6.51**	*6.52*	*6.74*
Closing	**6.45**	**6.57**	**6.55**	**6.65**	**6.33**	**6.94**	**6.78**	**6.64**	**6.65**	**6.97**	**6.50**	**6.51**	**6.52**	*6.74*	*6.53*
Net Withdrawals	**0.26**	**-0.12**	**0.02**	**-0.10**	**0.33**	**-0.61**	**0.16**	**0.14**	**-0.01**	**-0.32**	**0.46**	**-0.01**	**-0.01**	*-0.22*	*0.21*
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**	**21.87**	*21.94*	*22.86*
Balancing Item [a]	**-0.45**	**-0.52**	**-0.47**	**-0.29**	**-0.22**	**-0.05**	**-0.58**	**-0.47**	**-0.14**	**-0.37**	**-0.28**	**0.29**	**0.11**	*-0.21*	*-0.20*
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**	**21.98**	*21.72*	*22.66*
Demand															
Lease and Plant Fuel	**0.97**	**0.92**	**1.15**	**1.10**	**1.07**	**1.24**	**1.13**	**1.17**	**1.17**	**1.12**	**1.22**	**1.25**	**1.25**	*1.24*	*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**	**0.71**	*0.71*	*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**	**5.01**	*4.63*	*5.05*
Commercial	**2.43**	**2.32**	**2.43**	**2.67**	**2.72**	**2.62**	**2.73**	**2.80**	**2.86**	**2.90**	**3.03**	**3.16**	**3.29**	*3.14*	*3.44*
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**	**8.75**	*8.85*	*9.06*
Cogenerators [b]	**NA**	**NA**	**NA**	**NA**	**1.12**	**1.30**	**1.41**	**1.67**	**1.80**	**1.98**	**2.18**	**2.27**	**2.31**	*2.41*	*2.49*
Other Nonutil. Gen. [b]	**NA**	**NA**	**NA**	**NA**	**0.06**	**0.09**	**0.16**	**0.18**	**0.22**	**0.17**	**0.17**	**0.16**	**0.18**	*0.19*	*0.20*
Electric Utilities	**3.04**	**2.60**	**2.84**	**2.64**	**2.79**	**2.79**	**2.79**	**2.77**	**2.68**	**2.99**	**3.20**	**2.73**	**2.97**	*3.15*	*3.14*
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**	**21.98**	*21.72*	*22.66*

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

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

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

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

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

(Million Short Tons)

	Year														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Supply															
Production	**883.6**	**890.3**	**918.8**	**950.3**	**980.7**	**1029.1**	**996.0**	**997.5**	**945.4**	**1033.5**	**1033.0**	**1063.9**	**1088.6**	*1115.9*	*1142.4*
Appalachia	**NA**	**NA**	**NA**	**NA**	**464.8**	**489.0**	**457.8**	**456.6**	**409.7**	**445.4**	**434.9**	**451.9**	**464.7**	*465.9*	*469.0*
Interior	**NA**	**NA**	**NA**	**NA**	**198.1**	**205.8**	**195.4**	**195.7**	**167.2**	**179.9**	**168.5**	**172.8**	**172.3**	*168.5*	*166.6*
Western	**NA**	**NA**	**NA**	**NA**	**317.9**	**334.3**	**342.8**	**345.3**	**368.5**	**408.3**	**429.6**	**439.1**	**451.6**	*481.5*	*506.8*
Primary Stock Levels [a]															
Opening	**34.1**	**33.1**	**32.1**	**28.3**	**30.4**	**29.0**	**33.4**	**33.0**	**34.0**	**25.3**	**33.2**	**34.4**	**28.6**	*32.9*	*32.9*
Closing	**33.1**	**32.1**	**28.3**	**30.4**	**29.0**	**33.4**	**33.0**	**34.0**	**25.3**	**33.2**	**34.4**	**28.6**	**32.9**	*32.9*	*33.0*
Net Withdrawals	**1.0**	**1.0**	**3.8**	**-2.1**	**1.4**	**-4.4**	**0.4**	**-1.0**	**8.7**	**-7.9**	**-1.2**	**5.8**	**-4.2**	*-0.1*	*S*
Imports	**2.0**	**2.2**	**1.7**	**2.1**	**2.9**	**2.7**	**3.4**	**3.8**	**7.3**	**7.6**	**7.2**	**7.1**	**7.5**	*7.3*	*7.3*
Exports	**92.7**	**85.5**	**79.6**	**95.0**	**100.8**	**105.8**	**109.0**	**102.5**	**74.5**	**71.4**	**88.5**	**90.5**	**83.5**	*82.2*	*82.8*
Total Net Domestic Supply	**793.9**	**808.0**	**844.7**	**855.3**	**884.2**	**921.6**	**890.9**	**897.8**	**886.9**	**961.8**	**950.4**	**986.3**	**1008.3**	*1040.9*	*1067.0*
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*	*113.3*
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**	*113.3*	*110.2*
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**	*-6.5*	*3.1*
Waste Coal Supplied to IPPsc	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**7.9**	**8.5**	**8.9**	**9.4**	*10.0*	*10.6*
Total Supply	**820.8**	**803.1**	**834.4**	**882.3**	**896.5**	**899.4**	**891.4**	**901.8**	**930.2**	**954.0**	**960.4**	**1006.9**	**1033.9**	*1044.4*	*1080.7*
Demand															
Coke Plants	**41.1**	**35.9**	**37.0**	**41.9**	**40.5**	**38.9**	**33.9**	**32.4**	**31.3**	**31.7**	**33.0**	**31.7**	**29.4**	*28.6*	*29.5*
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**	*915.1*	*947.2*
Nonutilities (Excl. Cogen.) [d]	**NA**	**NA**	**NA**	**NA**	**0.9**	**1.6**	**10.2**	**14.8**	**17.8**	**20.9**	**21.2**	**22.2**	**23.5**	*25.0*	*26.5*
Retail and General Industry [e]	**75.4**	**75.6**	**75.2**	**76.3**	**82.3**	**83.1**	**81.5**	**80.2**	**81.1**	**81.2**	**78.9**	**76.9**	**76.4**	*76.0*	*77.5*
Total Demand	**810.3**	**796.6**	**830.0**	**876.5**	**890.6**	**897.1**	**897.8**	**907.3**	**943.7**	**951.1**	**962.0**	**1005.6**	**1029.7**	*1044.7*	*1080.7*
Discrepancy [f]	**10.6**	**6.5**	**4.4**	**5.8**	**5.9**	**2.4**	**-6.4**	**-5.4**	**-13.5**	**2.9**	**-1.6**	**1.3**	**4.2**	*-0.3*	*0.0*

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

[b] Secondary stocks are held by users.

[c] Estimated independent power producers (IPPs) consumption of waste coal for 1994 is 7.9 million tons, 8.5 million tons in 1995, and 8.9 million tons in 1996.

[d] Consumption of coal by IPPs. In 1995, IPP consumption was estimated to be 5.290 million tons per quarter. Quarterly estimates and projections for coal consumption by nonutility generators are based on estimates for annual coal-fired generation at nonutilities, supplied by the Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration (EIA), based on annual data reported to EIA on Form EIA-867 (Annual Nonutility Power Producer Report). Data for first quarter 1998 are estimates.

[e] Synfuels plant demand in 1993 was 1.7 million tons per quarter and is assumed to remain at that level in 1994, 1995, 1996, 1997 and 1998.

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

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

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

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

Table A8. Annual U.S. Electricity Supply and Demand

(Billion Kilowatthours)

	Year														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Supply															
Net Utility Generation															
Coal	**1402.1**	**1385.8**	**1463.8**	**1540.7**	**1553.7**	**1559.6**	**1551.2**	**1575.9**	**1639.2**	**1635.5**	**1652.9**	**1737.5**	**1787.8**	*1812.7*	*1879.5*
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**	*106.9*	*99.0*
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**	*299.7*	*299.6*
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**	*653.2*	*656.5*
Hydroelectric	**281.1**	**290.8**	**249.7**	**222.9**	**265.1**	**279.9**	**275.5**	**239.6**	**265.1**	**243.7**	**293.7**	**328.0**	**337.2**	*308.8*	*279.7*
Geothermal and Other [a]	**10.7**	**11.5**	**12.3**	**12.0**	**11.3**	**10.7**	**10.1**	**10.2**	**9.6**	**8.9**	**6.4**	**7.2**	**7.5**	*6.7*	*6.7*
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**	*3188.0*	*3221.1*
Nonutility Generation [b]	**NA**	**NA**	**NA**	**NA**	**191.3**	**221.8**	**253.7**	**296.0**	**325.5**	**354.9**	**374.4**	**382.5**	**409.4**	*426.4*	*437.4*
Total Generation	**NA**	**NA**	**NA**	**NA**	**2975.6**	**3030.0**	**3078.7**	**3093.2**	**3208.1**	**3265.6**	**3369.0**	**3460.0**	**3531.9**	*3614.3*	*3658.5*
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**	*35.3*	*36.0*
Total Supply	**NA**	**NA**	**NA**	**NA**	**2986.6**	**3032.0**	**3101.0**	**3121.6**	**3236.5**	**3310.3**	**3406.6**	**3498.0**	**3568.5**	*3649.6*	*3694.5*
Losses and Unaccounted for [c]	**NA**	**NA**	**NA**	**NA**	**231.4**	**206.1**	**217.1**	**226.6**	**236.9**	**225.5**	**235.4**	**236.2**	**285.0**	*284.8*	*268.0*
Demand															
Electric Utility Sales															
Residential	**793.9**	**819.1**	**850.4**	**892.9**	**905.5**	**924.0**	**955.4**	**935.9**	**994.8**	**1008.5**	**1042.5**	**1082.5**	**1071.6**	*1105.5*	*1139.1*
Commercial	**606.0**	**630.5**	**660.4**	**699.1**	**725.9**	**751.0**	**765.7**	**761.3**	**794.6**	**820.3**	**862.7**	**887.4**	**913.3**	*943.5*	*961.9*
Industrial	**836.8**	**830.5**	**858.2**	**896.5**	**925.7**	**945.5**	**946.6**	**972.7**	**977.2**	**1008.0**	**1012.7**	**1030.4**	**1032.5**	*1043.4*	*1046.1*
Other	**87.3**	**88.6**	**88.2**	**89.6**	**89.8**	**92.0**	**94.3**	**93.4**	**94.9**	**97.8**	**95.4**	**97.5**	**97.5**	*99.3*	*101.8*
Subtotal	**2324.0**	**2368.8**	**2457.3**	**2578.1**	**2646.8**	**2712.6**	**2762.0**	**2763.4**	**2861.5**	**2934.6**	**3013.3**	**3097.8**	**3114.9**	*3191.7*	*3248.8*
Nonutility Own Use [b]	**NA**	**NA**	**NA**	**NA**	**108.4**	**113.4**	**121.9**	**131.6**	**138.1**	**150.2**	**157.9**	**164.0**	**168.6**	*173.1*	*177.7*
Total Demand	**NA**	**NA**	**NA**	**NA**	**2755.2**	**2825.9**	**2883.9**	**2895.0**	**2999.6**	**3084.8**	**3171.2**	**3261.8**	**3283.5**	*3364.9*	*3426.6*
Memo:															
Nonutility Sales															
to Electric Utilities [d]	**26.0**	**39.9**	**50.0**	**68.0**	**83.0**	**108.5**	**131.9**	**164.4**	**187.4**	**204.7**	**216.5**	**218.5**	**240.8**	*253.2*	*259.7*

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

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

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

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

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

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

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