



EIA Energy Information Administration

Short-Term Energy Outlook

Short-Term Energy Outlook

December 1997 (Released December 8, 1997)

Energy Information Administration

Overview

Prices

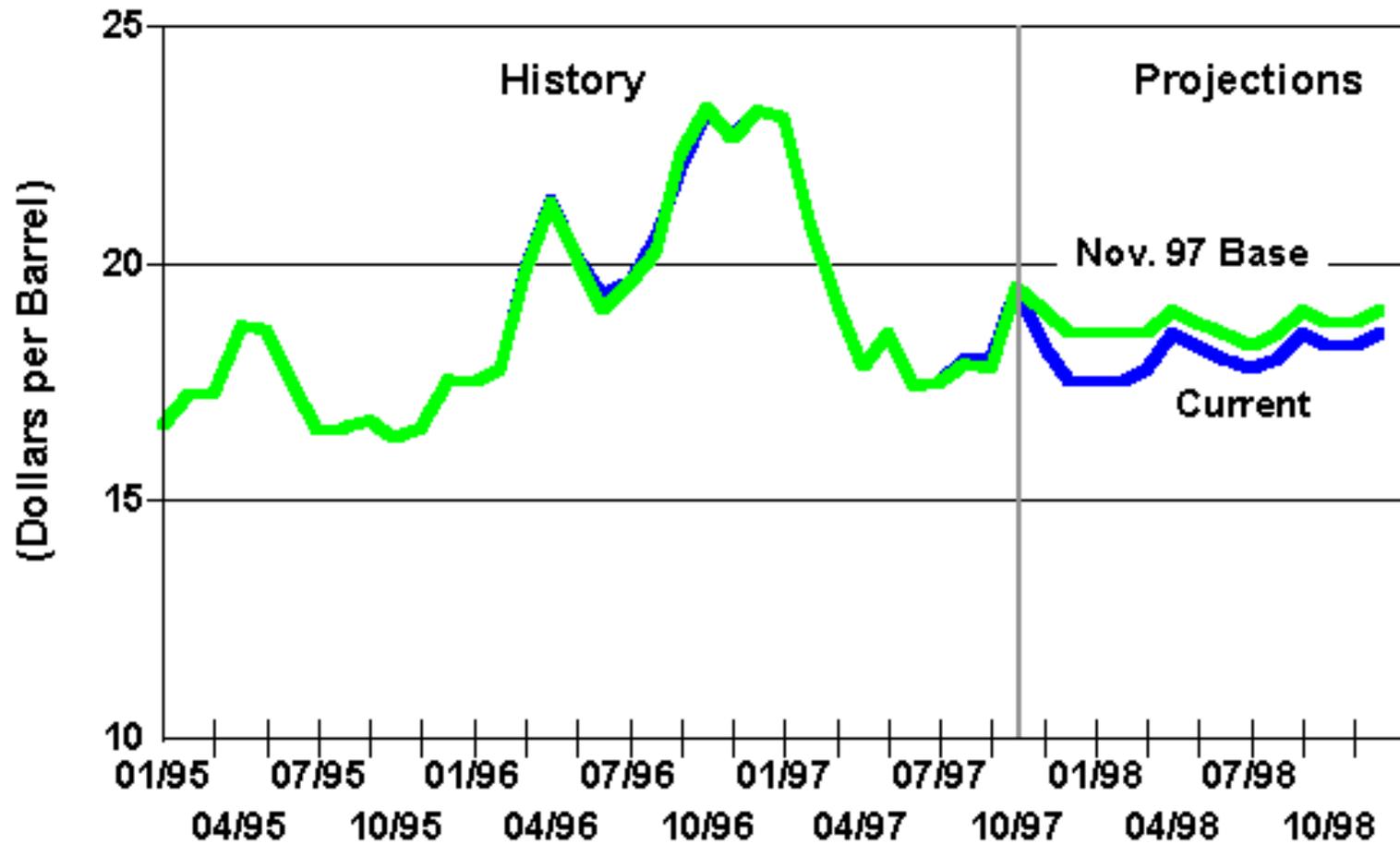
Crude Oil. Higher OPEC oil production quotas, agreed to over the Thanksgiving weekend, along with the lessened uncertainty that Iraq's oil-for-food deal with the United Nations will be significantly interrupted have resulted in expected crude oil prices somewhat lower than those projected last month. OPEC agreed to raise their crude oil production ceiling from 25.033 million barrels per day to 27.500 million barrels per day, an increase of just under 10 percent. However, OPEC crude oil production is not expected to increase by 10 percent since many countries are already producing at maximum capacity. Bottom line: Even if Iraqi crude oil production remains constant, we expect an increase in total OPEC crude oil production of about 0.6 million barrels per day. Under the current situation, it appears that Iraq may stop exporting oil for much of December, but will probably be able to make any such reduction up in January. The net effect of this expected increase in OPEC supply is reflected in a somewhat lower crude oil price path through 1998 (Figure U1). See "[Higher OPEC Production Could Push Oil Prices Lower](#)" for details.

Natural Gas. Although there are plenty of bullish factors that can be cited when assessing the current natural gas price outlook, sharply lower prices than were in evidence a month ago are now holding sway. Gas prices tumbled sharply since mid November and so the market has evidently burst an excessive upward surge in prices just as winter prepares to begin in earnest. Our current outlook calls for significantly lower average spot prices this winter than we would have expected even last month. We have revised our projections for average wellhead prices for the heating season (October to March) to average about 20 cents per thousand cubic feet below last month's projections. On the other hand, these price projections are quite similar to our October 8 report of two months ago (Figure U2).

Natural gas spot wellhead and near futures prices exhibited high degrees of volatility during the period leading up to mid fall, and the last few weeks have brought a continuation of the ride (see EIA's "[Natural Gas Weekly Market Update](#)"). Prices rocketed up in September and generally stayed high through the first half of November, although some pretty wild swings were seen within this period.

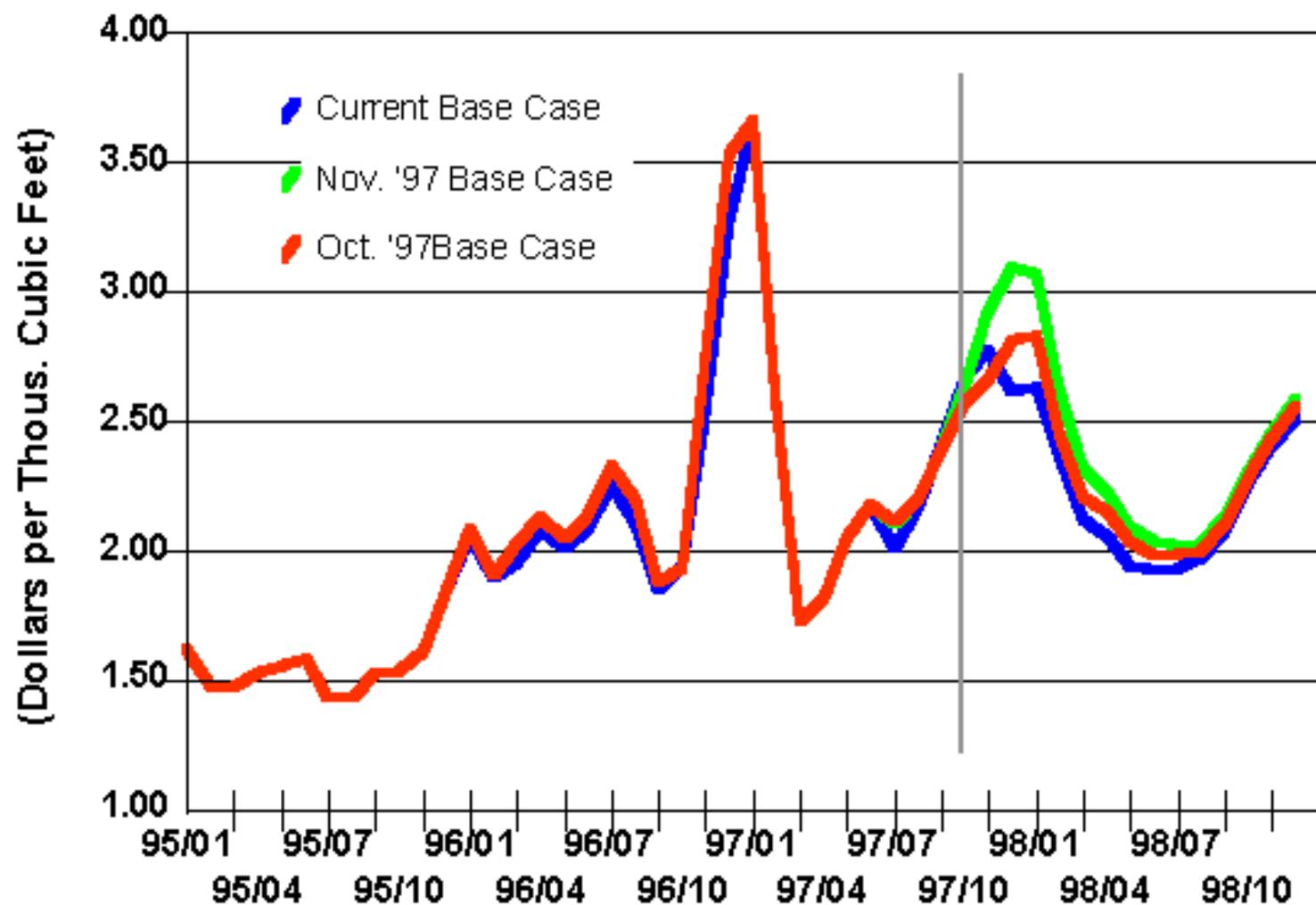
Uncertainties contributing to short-term volatility included: 1) questions about the adequacy of natural gas inventories for heating demand this winter; 2) potential current and expected winter gas demand pressures arising from coal supply difficulties for customers served by the Union Pacific Railroad; 3) availability of marginal domestic production this winter given the relatively weak production performance seen so far this year; 4) doubts about the ability of the Canadian supply system to add significantly to winter supplies this year. There is little or no direct information at hand now that entirely clears up any of these issues. Indirectly, we have seen evidence that, despite relatively high electricity demand in September and early October, and above-normal

Figure U1. Crude Oil Prices



Source: Energy Information Administration, Short-Term Energy Model, December 1997

Figure U2. Natural Gas Wellhead Prices



Source: Energy Information Administration, Short-Term Energy Model, December 1997

heating demand in October and November, winter supplies of gas have not been diminished below what we would otherwise have expected. In fact, nationally the gas market witnessed net injections into storage in early November, which is normally beyond the end of the injection season. Inventories remain above year ago levels, perhaps by an enhanced margin in November ([Figure U3](#)). However, it is still true that, by historical standards, the amount of gas in storage now compared to expected demand is not particularly plentiful. ([Figure U4](#)).

With regard to the coal transportation issue, the slowdown in coal deliveries to some electric utilities, especially in Texas and other South Central States was exacerbated by high electricity demand there in September, leading to significant reductions in coal stocks ([Figure 5](#)). This tendency probably continued into October, since strong electricity demand in the region again contributed to solid U.S. electricity demand in that month (see [Edison Electric Institute](#) weekly data on electricity output by region). November apparently brought a slowdown in electricity demand growth compared to previous months, and this may have granted some reduction in the urgency of the coal distribution problem..

Petroleum Products. Our forecasts for petroleum product prices are generally a little lower than those from last month, as we have revised our crude oil projections down by about \$0.50 per barrel while our demand projections remain about the same and inventories remain in good shape. These lower crude oil prices are expected to be passed on through the end-use prices. Mid-winter heating oil prices are now expected to average between 12 and 13 cents per gallon below those seen last year, while pump prices for gasoline should be about 7 to 9 cents per gallon below last winter's levels ([Figure U6](#)).

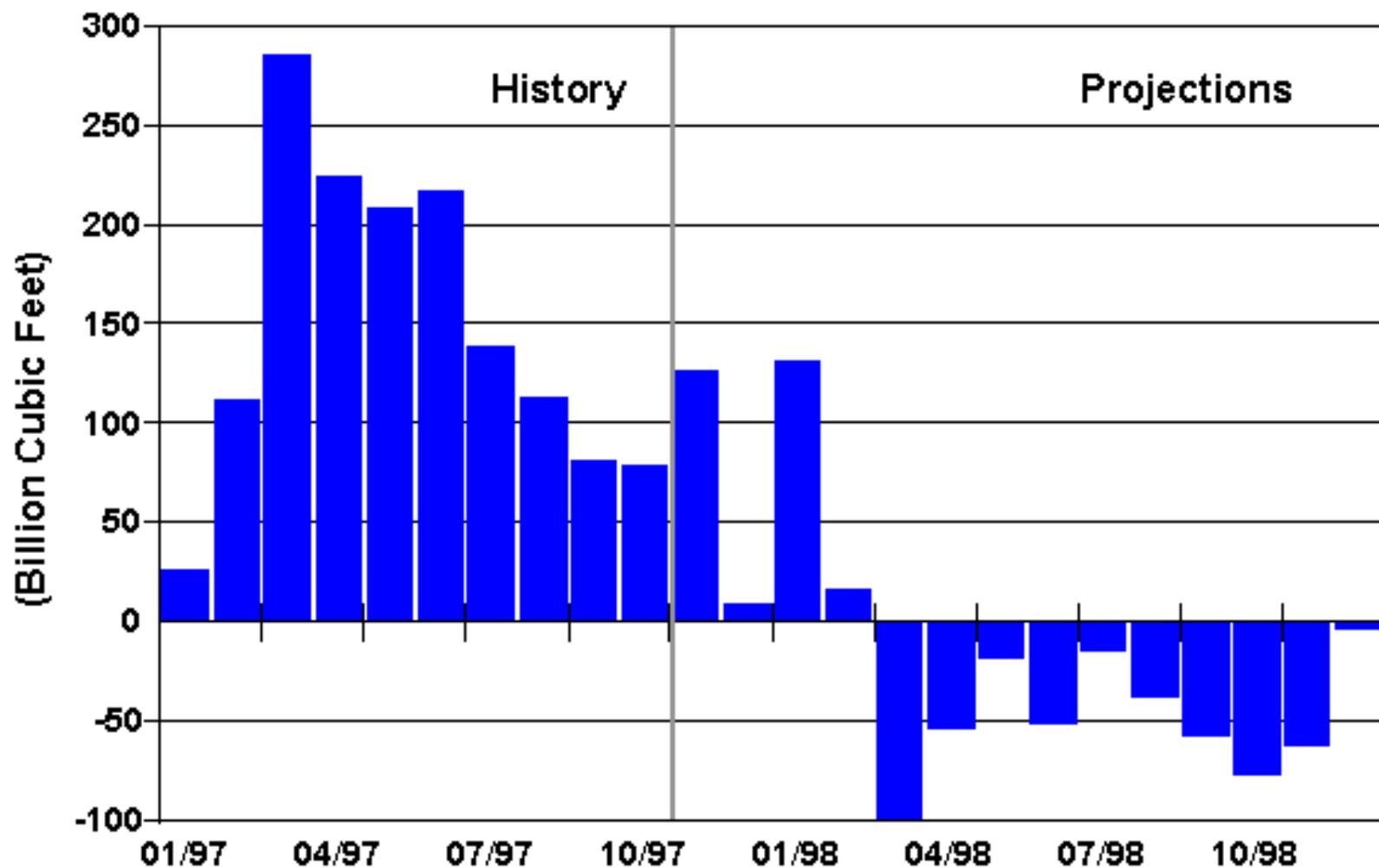
Energy Demand and Supply

Petroleum. Petroleum demand for all of 1997 now looks likely to end up 1.6 percent above 1996 levels, about half of the rate seen in 1996, but still reasonably strong given the low levels of demand for heating fuels this year ([Figure U7](#)). Transportation demand remains the mainstay of growth in the United States, but this year petrochemical feedstocks demand joined the growth leaders. A growth rate similar to this year seems likely in 1998, even if impetus from the chemicals industry wanes ([Figure U8](#)). Demand this winter still promises to be strong, with year-to-year growth rates around 4 percent over the next few months, excluding January, assuming normal weather ([Figure U9](#)).

Petroleum stocks remain in comparatively good shape, although we have reduced our winter trajectory for distillate fuel oil stocks slightly based on late November weekly data ([Figure U10](#)). Still, total petroleum stocks are currently between 60 and 70 million barrels (about 4 percent) above last year at this time (see EIA's [Weekly Petroleum Status Report](#)).

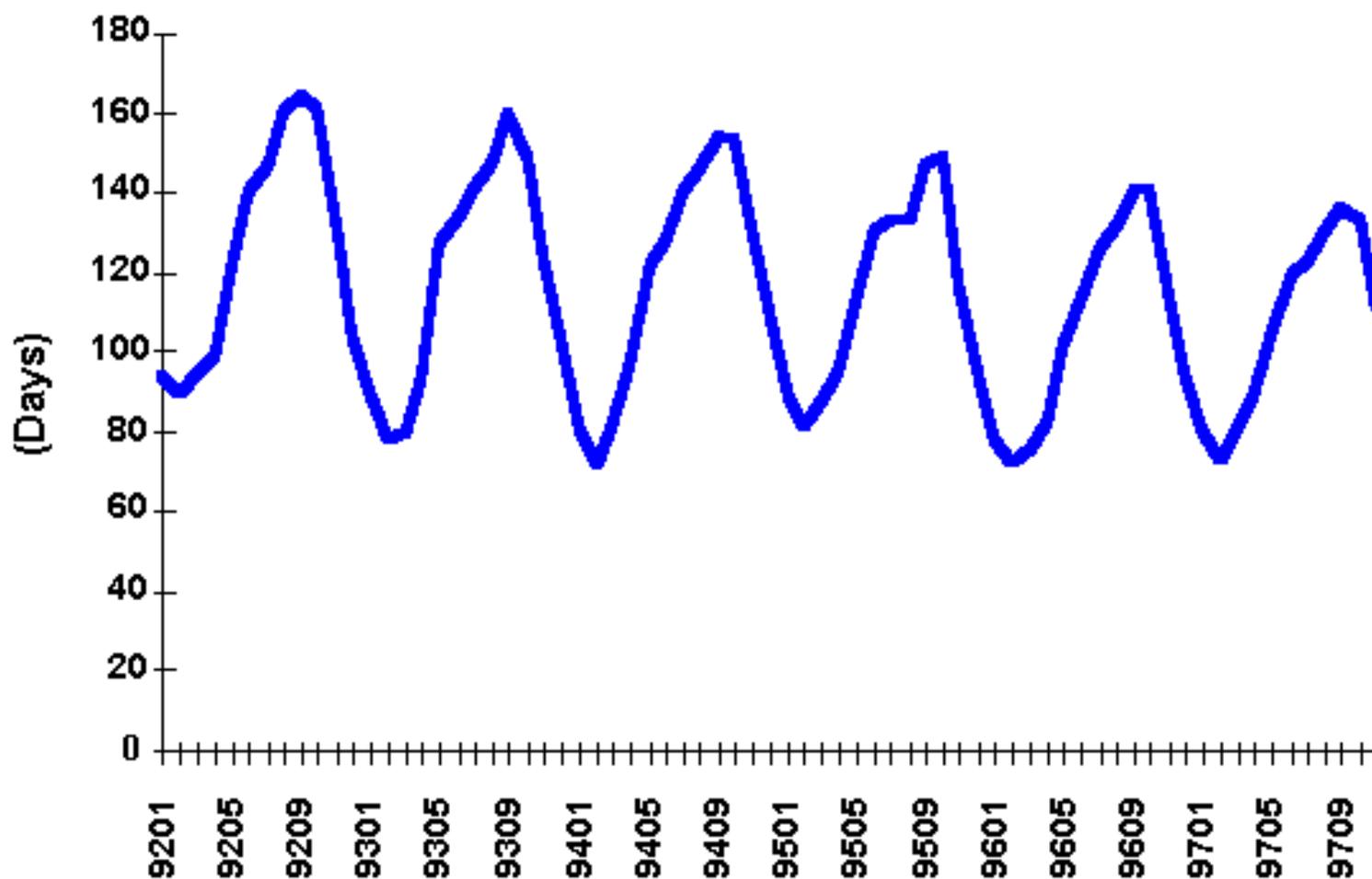
Natural Gas. Strong natural gas demand growth (on a year-over-year basis) is still in prospect for this winter, as long as one continues to assume normal weather patterns.

Figure U3. Natural Gas in Storage (Change from Year Ago)



Source: Energy Information Administration, Short-Term Energy Model, December 1997

Figure U4. Days Supply of Gas in Storage*

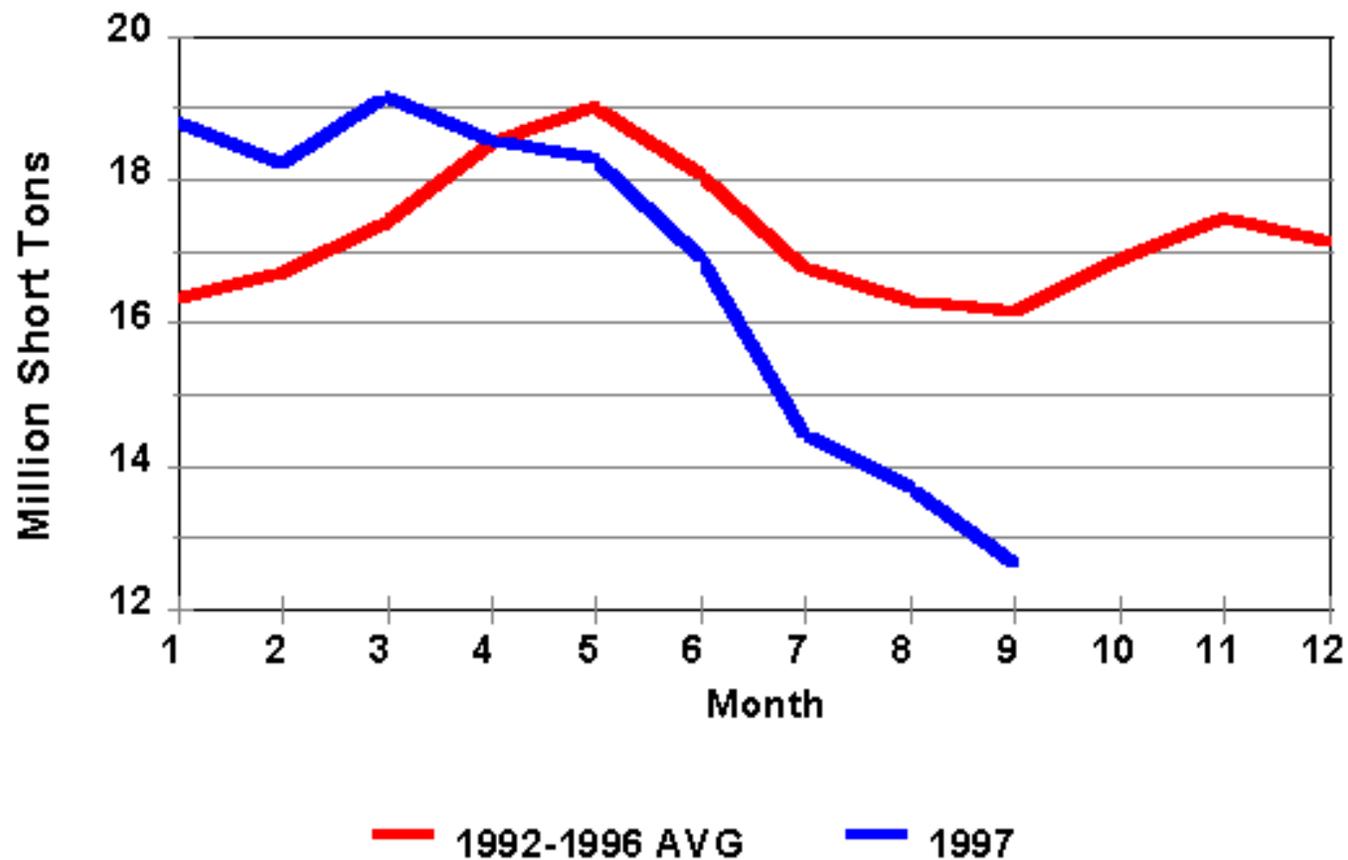


* Total gas in storage divided by 1-month forward demand. Demand Projections used 9709-9711.

Source: Energy Information Administration, Short-Term Energy Model, December 1997

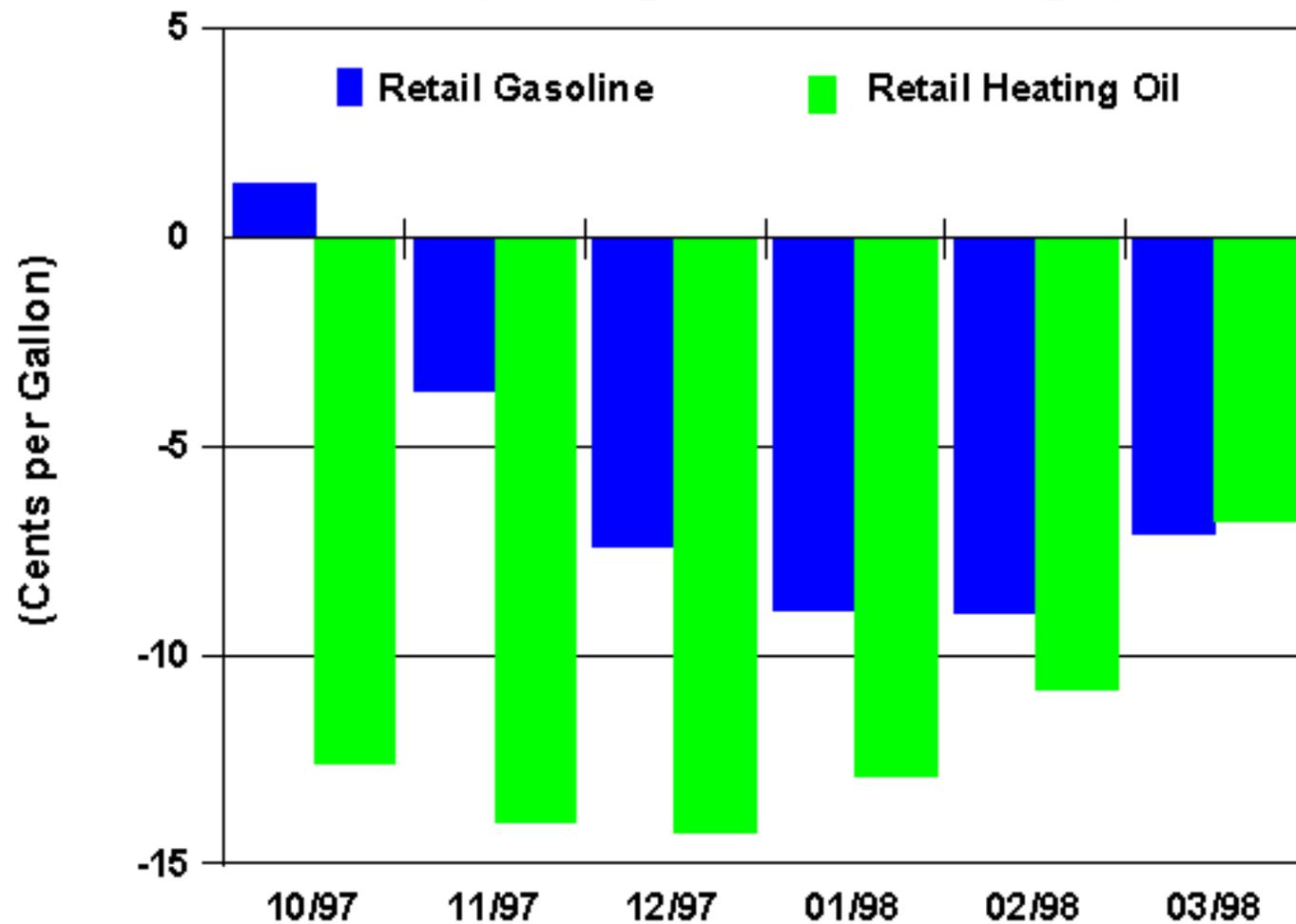
Figure U5. Electric Utility Coal Stocks

West South Central Region



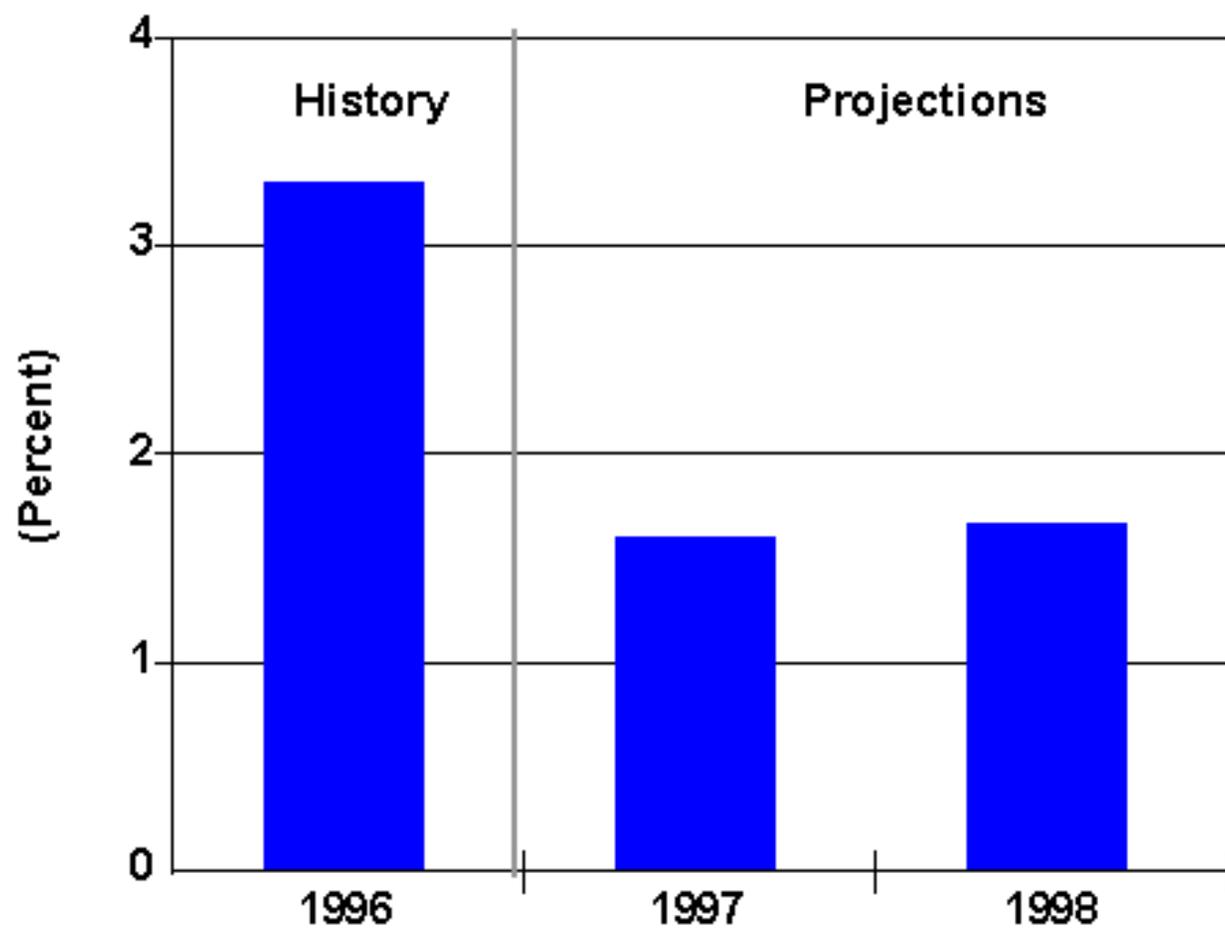
Source: Energy Information Administration, Form EIA-759

**Figure U6. Petroleum Product Price Projections
(Change from Year Ago)**



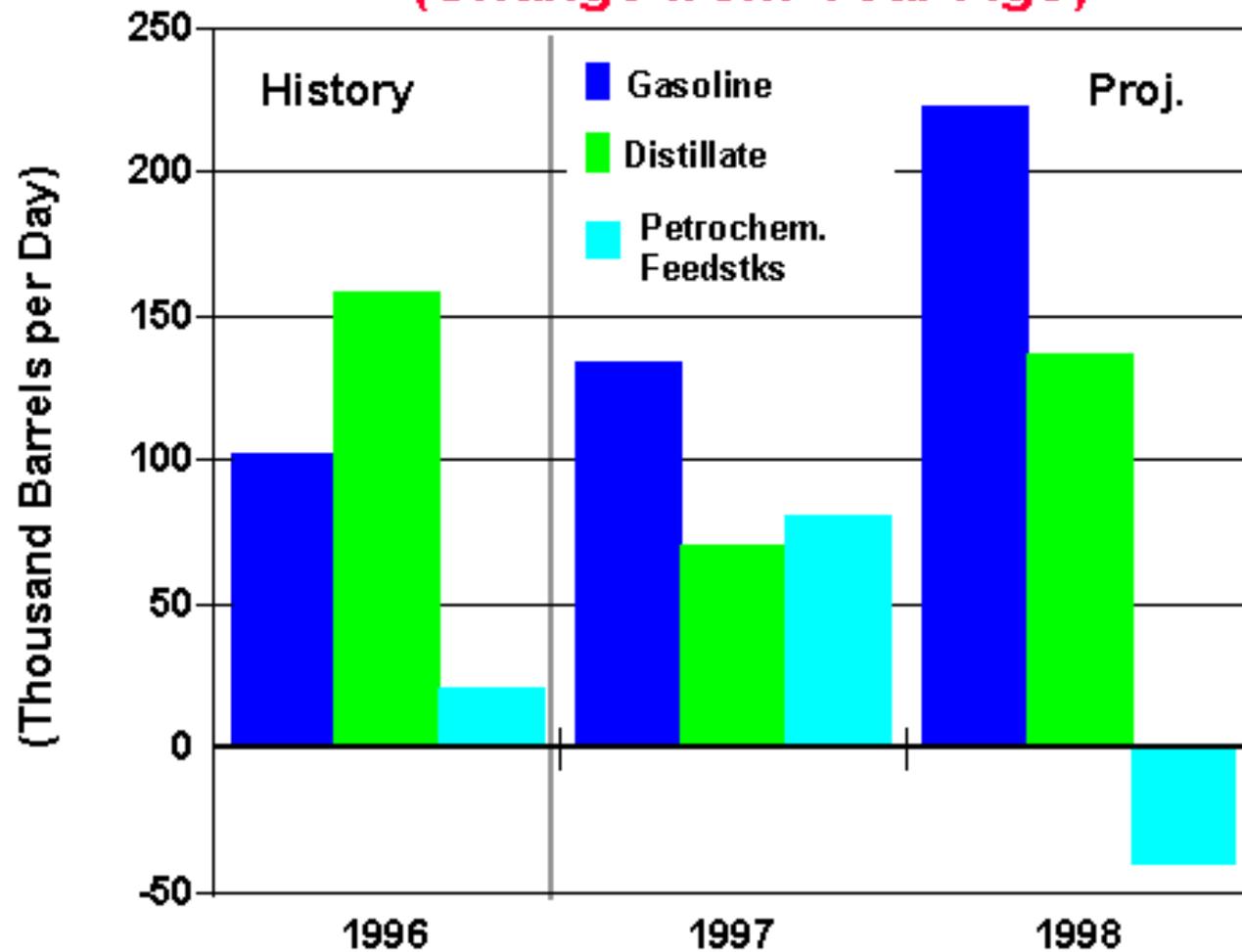
Source: Energy Information Administration, Short-Term Energy Model, December 1997

**Figure U7. Total Petroleum Product Demand Growth
(Percent Change from Year Ago)**



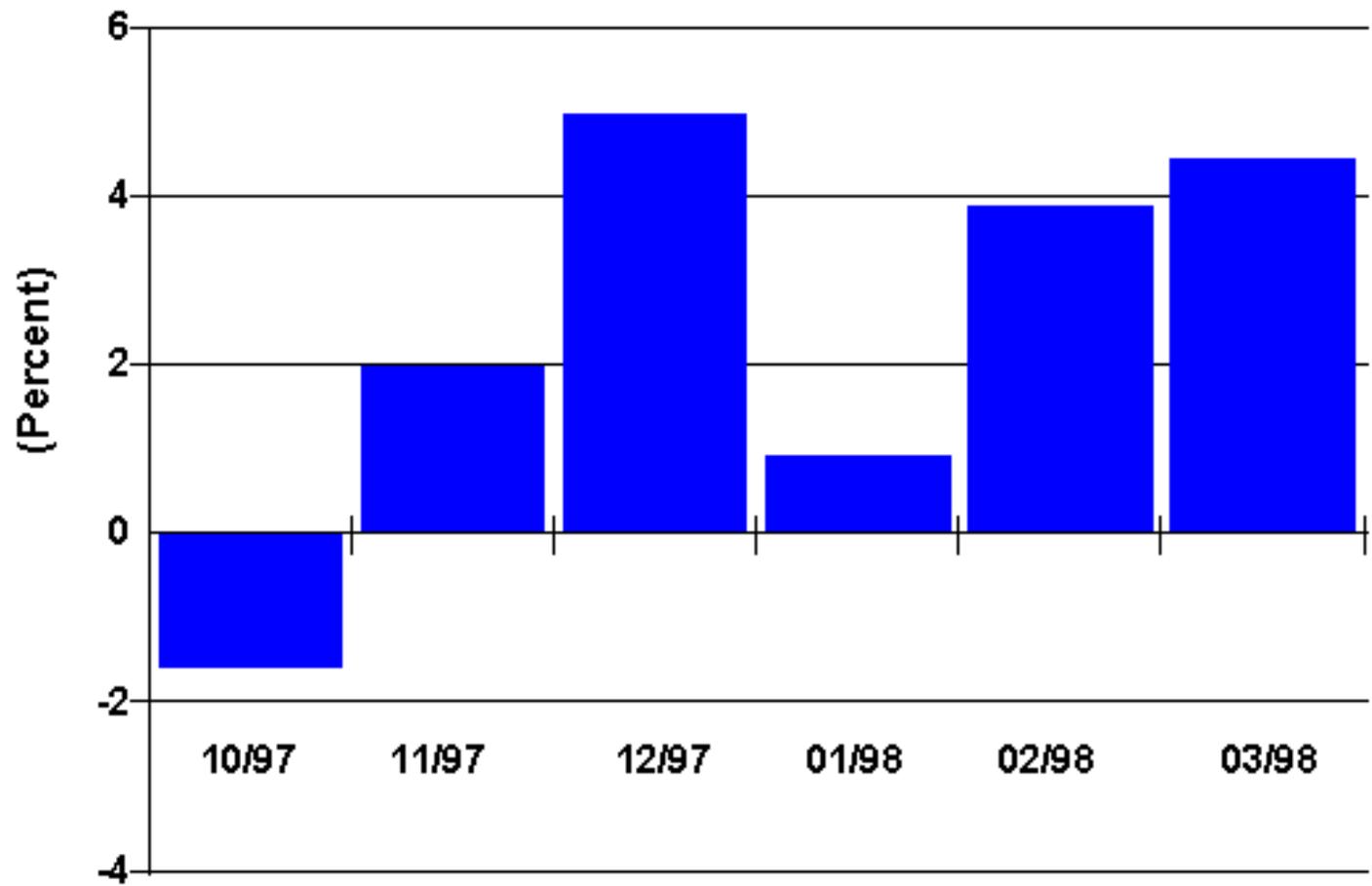
Source: Energy Information Administration, Short-Term Energy Model, December 1997

**Figure U8. Selected Petroleum Products Demand
(Change from Year Ago)**



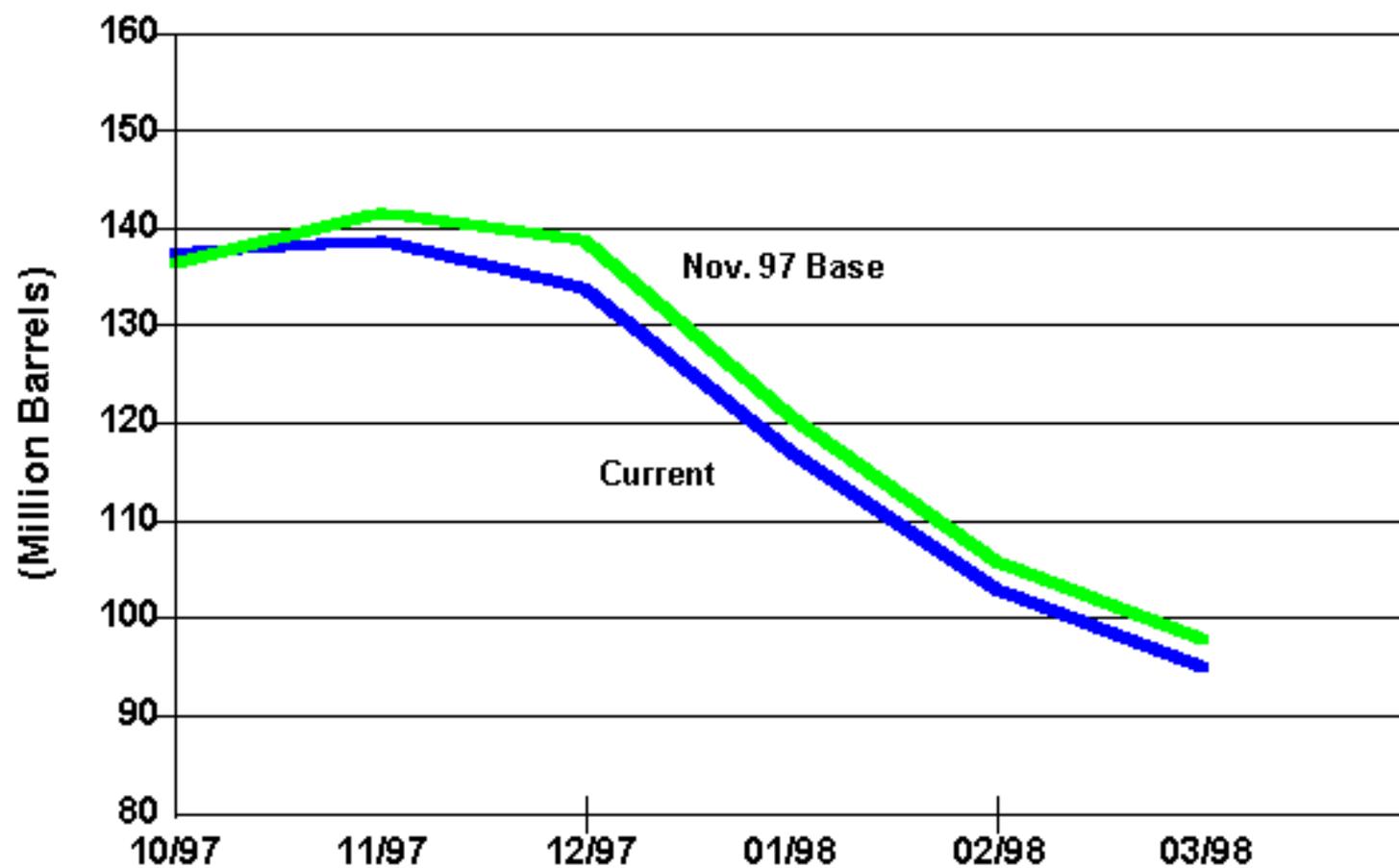
Source: Energy Information Administration, Short-Term Energy Model, December 1997

Figure U9. Winter Petroleum Demand Projections
(Percent Growth from Year Ago)



Source: Energy Information Administration, Short-Term Energy Model, December 1997

Figure U10. Distillate Fuel Stock Projections

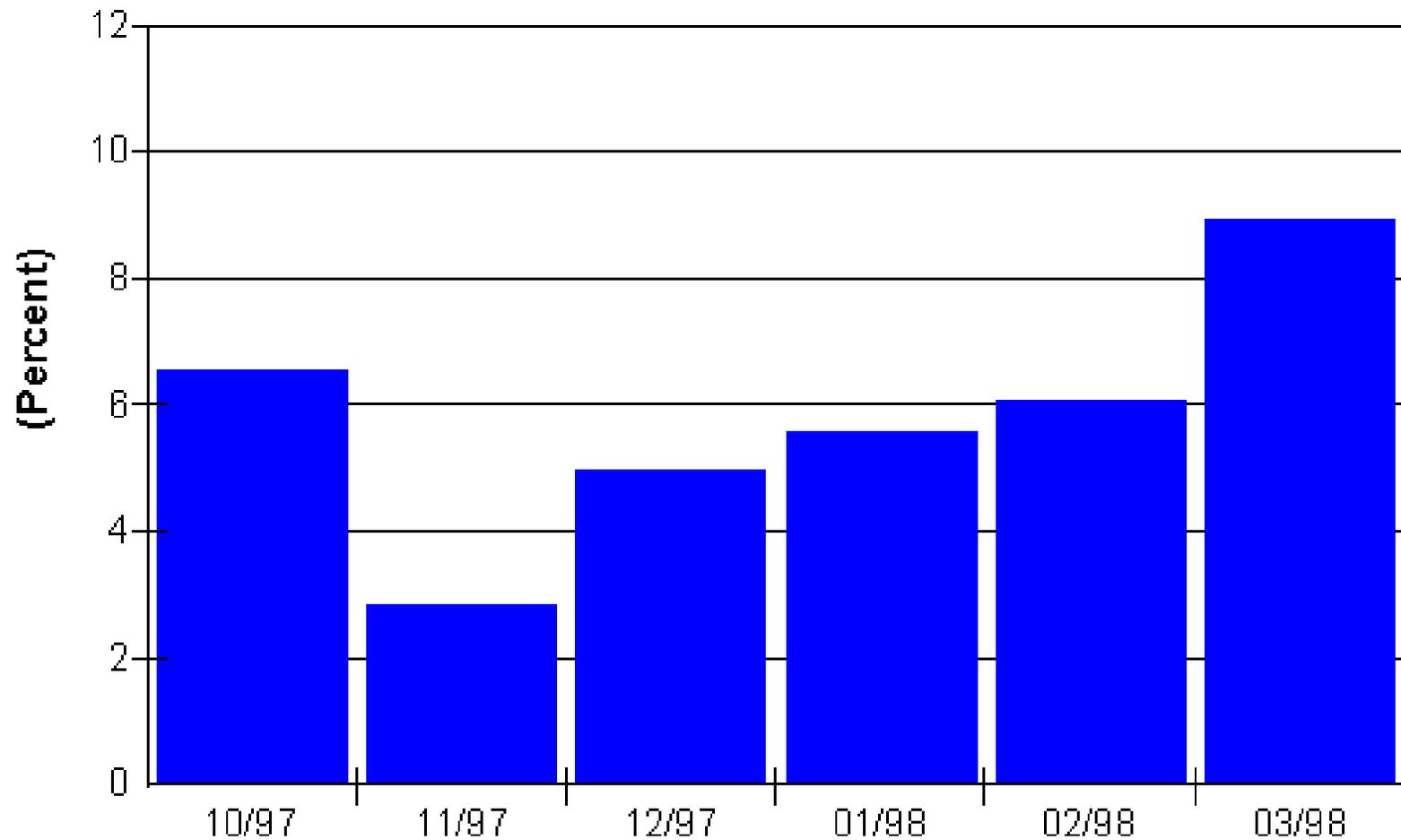


Source: Energy Information Administration, Short-Term Energy Model, December 1997

With this assumption, the growth rate for total gas demand ranges from 5 to 8 percent above year-ago levels for the rest of the winter ([Figure U11](#)). On the other hand, weather patterns equivalent to those observed last winter would very significantly reduce demand pressure on natural gas markets, as illustrated by the scenario depicted in [Figure U12](#). The National Oceanographic and Atmospheric Administration (NOAA) has indicated that an above-average chance of abnormally high temperatures occurring in much of the Midwest (especially the upper plains states) exists for the January-March 1998 period. (See the extensive weather impact analysis from NOAA in "[El Nino impacts on the United States and North America](#)" on NOAA's world wide web site). Undoubtedly, an attenuation of the perceived risk of a severe (or even a normal) winter this year is contributing to the current downward tendency in gas prices.

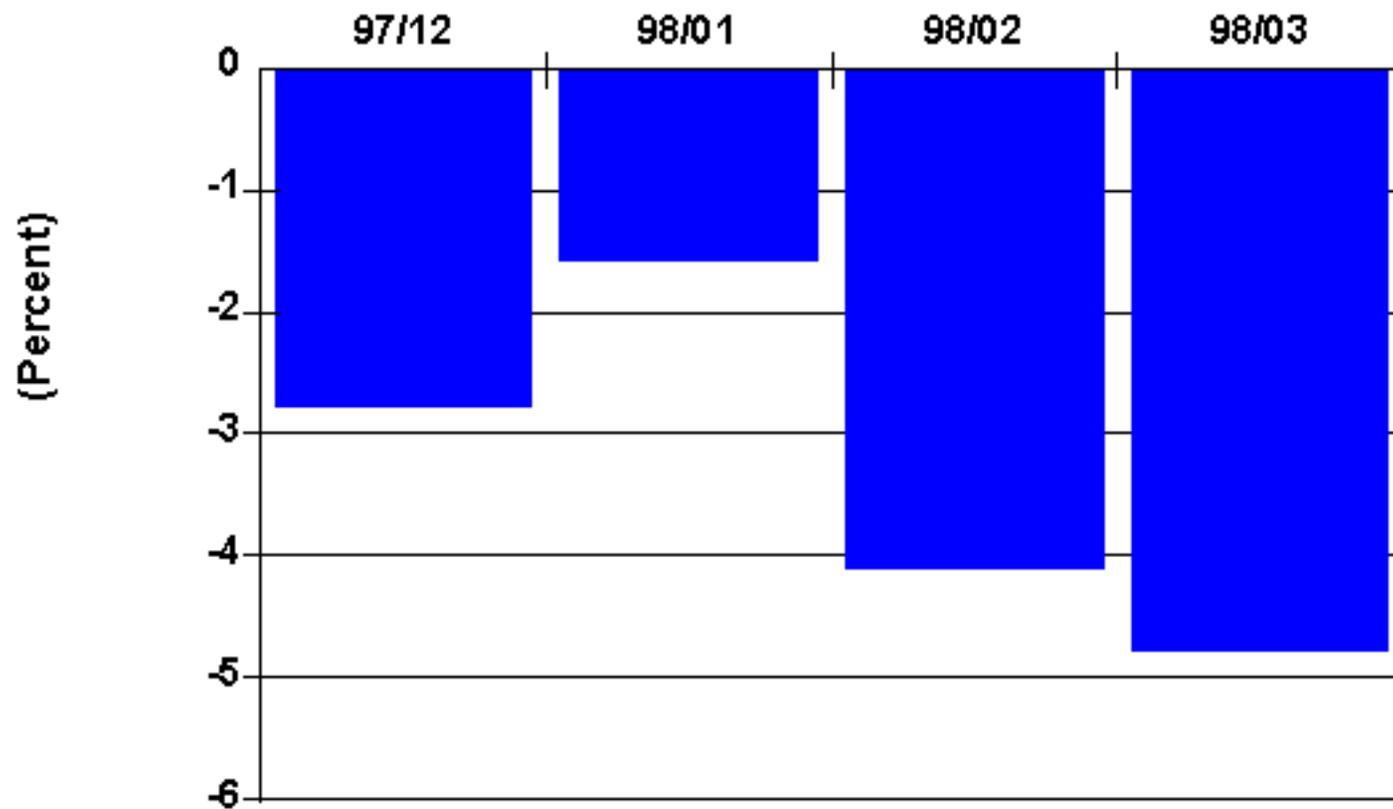
Electricity. The outlook for higher electricity demand this winter stems of course from the assumption of normal weather patterns. In the base case, overall demand is up between 3 and 6 percent over the next four months compared to the same periods last year ([Figure U13](#)). Using the unchanged weather scenario discussed above, the demand growth range would be reduced significantly, as illustrated by the demand path comparison shown in [Figure U14](#). One of the important supply considerations this winter, which has obvious implications for natural gas demand, is the prospective availability of hydroelectric power. Our base case includes a significant reduction in hydroelectric output from last year's levels beginning this month, as the relatively high output of last winter gives way to more normal levels now. However, current statistics from NOAA indicate continued wet conditions in the West and Pacific Northwest, suggesting a continuation of high levels of hydroelectric power availability this winter. (See "[CPC - Climate Operations Branch/Selected Historical/Precipitation/Temperature Tables](#)" on NOAA's world wide web site). A scenario in which hydroelectric output levels are assumed to be equivalent to those seen last winter would imply noticeably lower coal and gas use for power generation, in the aggregate ([Figure U15](#)). In the case of natural gas, we estimate that natural gas demand for power generation by electric utilities would be approximately 5 to 10 percent lower than the base case for the rest of the winter in the high hydroelectric case.

Figure U11. Winter Natural Gas Demand Projections
(Percent Growth from Year Ago)



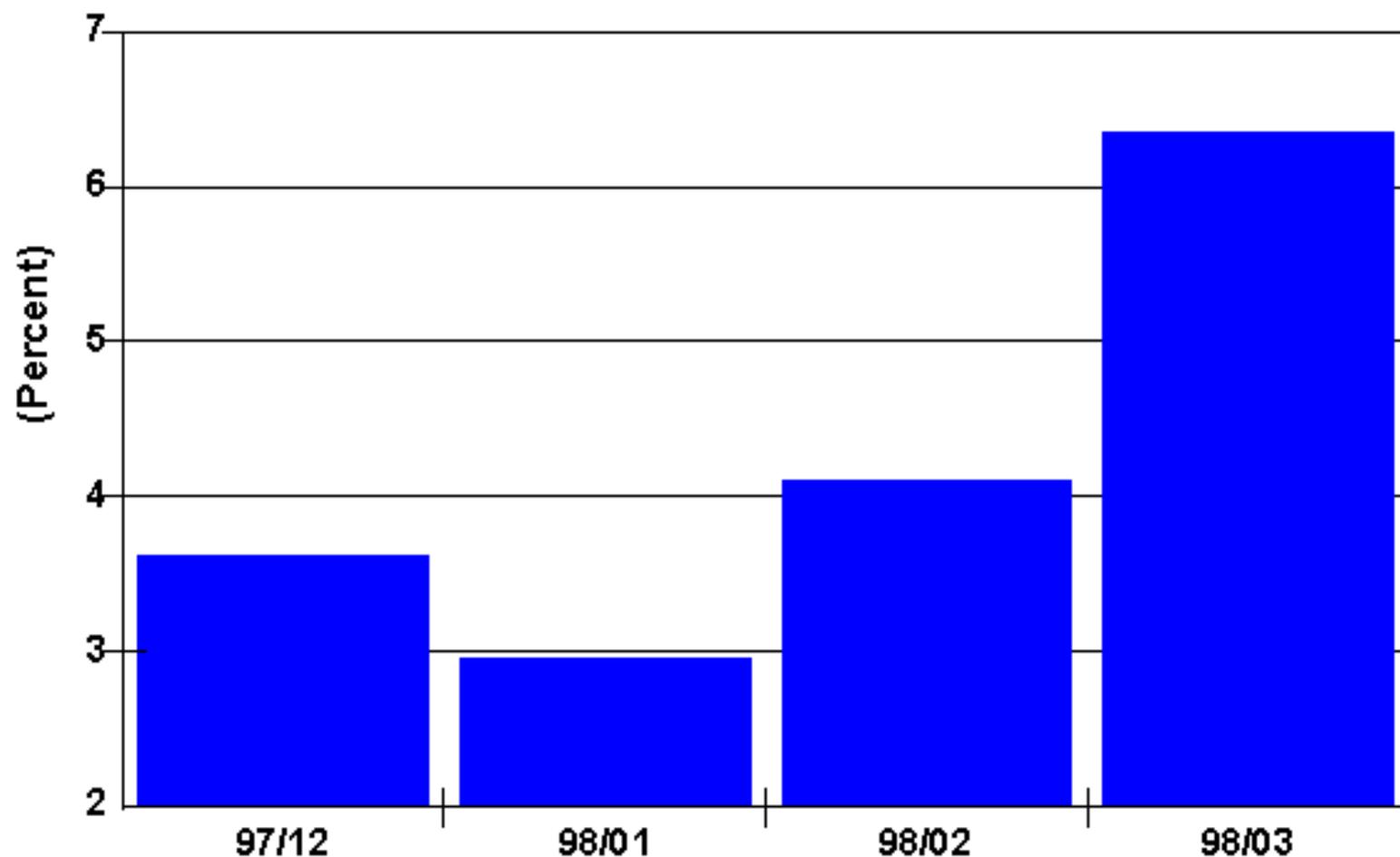
Source: Energy Information Administration, Short-Term Energy Model, December 1997

Figure U12. Natural Gas Demand: Warm Winter Case
(Percent Difference from Base Case)



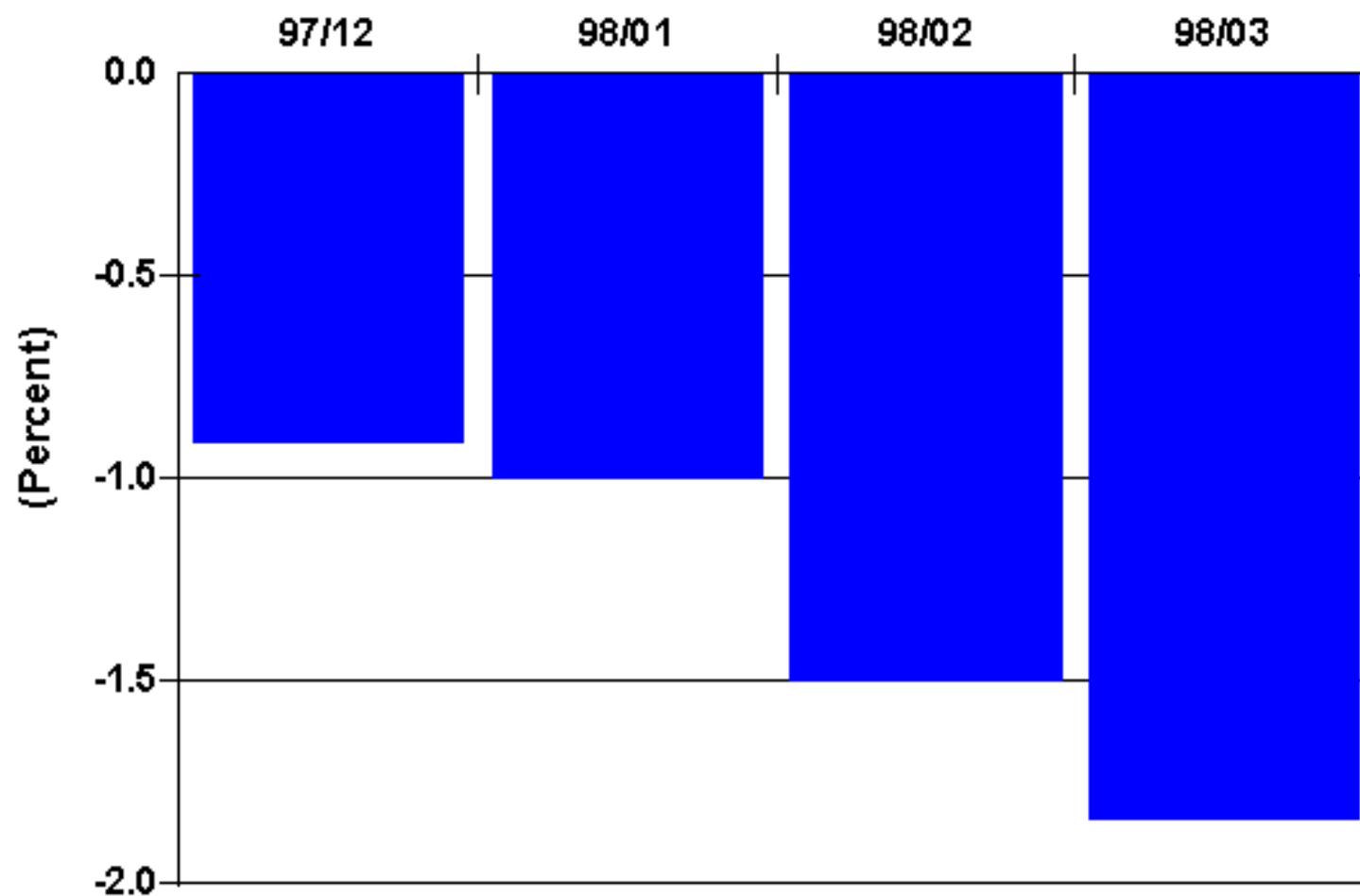
Source: Energy Information Administration, Short-Term Energy Model, December 1997

Figure U13. Winter Electricity Demand Projections
(Percent Growth from Year Ago)



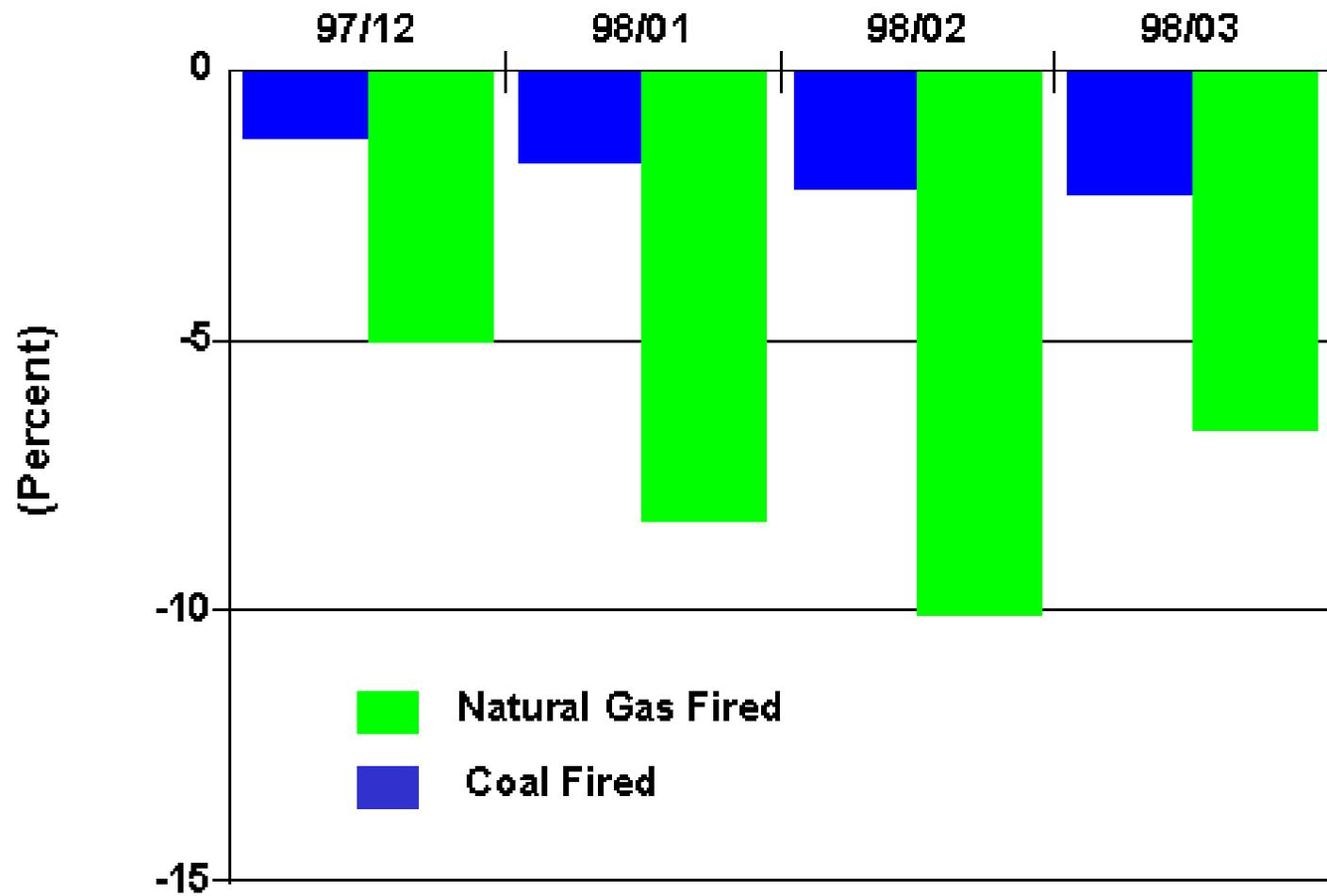
Source: Energy Information Administration, Short-Term Energy Model, December 1997

Figure U14. Electricity Demand: Warm Winter Case
(Percent Difference from Base Case)



Source: Energy Information Administration, Short-Term Energy Model, December 1997

**Figure U15. Electric Generation: High Hydro Case
(Percent Difference from Base Case)**



Source: Energy Information Administration, Short-Term Energy Model, December 1997

Table U1. U.S. Macroeconomic and Weather Assumptions- December 1997

	1996				1997				1998				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1996	1997	1998
Macroeconomic ^a															
Real Gross Domestic Product (billion chained 1992 dollars - SAAR).....	6826	6926	6944	7017	7102	7165	<i>7213</i>	<i>7262</i>	<i>7309</i>	<i>7342</i>	<i>7371</i>	<i>7409</i>	6928	<i>7185</i>	<i>7358</i>
Percentage Change from Prior Year.....	1.8	3.2	2.7	3.3	4.0	3.5	<i>3.9</i>	<i>3.5</i>	<i>2.9</i>	<i>2.5</i>	<i>2.2</i>	<i>2.0</i>	2.8	<i>3.7</i>	<i>2.4</i>
Annualized Percent Change from Prior Quarter	1.8	5.8	1.0	4.2	4.8	3.6	<i>2.7</i>	<i>2.7</i>	<i>2.6</i>	<i>1.8</i>	<i>1.6</i>	<i>2.0</i>			
GDP Implicit Price Deflator (Index, 1992=1.000).....	1.093	1.099	1.106	1.111	1.118	1.122	<i>1.128</i>	<i>1.134</i>	<i>1.139</i>	<i>1.144</i>	<i>1.150</i>	<i>1.156</i>	1.102	<i>1.125</i>	<i>1.147</i>
Percentage Change from Prior Year.....	2.2	2.2	2.4	2.3	2.2	2.1	<i>2.0</i>	<i>2.0</i>	<i>1.9</i>	<i>2.0</i>	<i>2.0</i>	<i>1.9</i>	2.3	<i>2.1</i>	<i>1.9</i>
Real Disposable Personal Income (billion chained 1992 Dollars - SAAR).....	5048	5061	5095	5104	5161	5198	<i>5225</i>	<i>5271</i>	<i>5352</i>	<i>5393</i>	<i>5424</i>	<i>5444</i>	5077	<i>5214</i>	<i>5403</i>
Percentage Change from Prior Year.....	2.2	2.4	2.4	2.0	2.2	2.7	<i>2.5</i>	<i>3.3</i>	<i>3.7</i>	<i>3.7</i>	<i>3.8</i>	<i>3.3</i>	2.3	<i>2.7</i>	<i>3.6</i>
Manufacturing Production (Index, 1992=1.000).....	1.141	1.158	1.172	1.184	1.200	1.211	<i>1.219</i>	<i>1.228</i>	<i>1.240</i>	<i>1.251</i>	<i>1.259</i>	<i>1.264</i>	1.164	<i>1.215</i>	<i>1.253</i>
Percentage Change from Prior Year.....	0.9	2.7	3.3	4.2	5.2	4.6	<i>4.0</i>	<i>3.7</i>	<i>3.3</i>	<i>3.3</i>	<i>3.3</i>	<i>2.9</i>	2.8	<i>4.4</i>	<i>3.2</i>
OECD Economic Growth (percent) ^b													2.5	<i>2.7</i>	<i>2.5</i>
Weather ^c															
Heating Degree-Days															
U.S.....	2406	552	89	1666	2143	669	<i>122</i>	<i>1741</i>	<i>2327</i>	<i>524</i>	<i>89</i>	<i>1636</i>	4713	<i>4675</i>	<i>4576</i>
New England.....	3361	933	151	2234	3119	1078	<i>281</i>	<i>2416</i>	<i>3267</i>	<i>915</i>	<i>171</i>	<i>2269</i>	6679	<i>6894</i>	<i>6621</i>
Middle Atlantic.....	3120	750	87	2029	2814	887	<i>187</i>	<i>2152</i>	<i>2993</i>	<i>716</i>	<i>105</i>	<i>2026</i>	5986	<i>6040</i>	<i>5839</i>
U.S. Gas-Weighted.....	2501	636	135	1768	2275	711	<i>127</i>	<i>1799</i>	<i>2426</i>	<i>539</i>	<i>81</i>	<i>1686</i>	5040	<i>4912</i>	<i>4732</i>
Cooling Degree-Days (U.S.).....	21	368	725	66	29	275	<i>716</i>	<i>71</i>	<i>30</i>	<i>334</i>	<i>758</i>	<i>72</i>	1180	<i>1091</i>	<i>1193</i>

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

^bOECD: 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.

^cPopulation-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 CONTROL0997.

Table U2. U.S. Energy Indicators: Mid World Oil Price Case- December 1997

	1996				1997				1998				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1996	1997	1998
Macroeconomic ^a															
Real Fixed Investment (billion chained 1992 dollars-SAAR).....	1002	1036	1061	1069	1079	1113	<i>1130</i>	<i>1149</i>	<i>1171</i>	<i>1189</i>	<i>1198</i>	<i>1205</i>	1042	<i>1118</i>	<i>1191</i>
Real Exchange Rate (index)	0.998	1.013	1.017	1.030	1.085	1.096	<i>1.107</i>	<i>1.110</i>	<i>1.108</i>	<i>1.104</i>	<i>1.102</i>	<i>1.097</i>	1.015	<i>1.100</i>	<i>1.103</i>
Business Inventory Change (billion chained 1992 dollars-SAAR).....	12.5	0.6	14.3	12.3	20.9	29.9	<i>24.9</i>	<i>15.8</i>	<i>9.0</i>	<i>2.8</i>	<i>0.4</i>	<i>-1.3</i>	9.9	<i>22.9</i>	<i>2.7</i>
Producer Price Index (index, 1980-1984=1.000)	1.263	1.275	1.282	1.288	1.285	1.269	<i>1.272</i>	<i>1.278</i>	<i>1.280</i>	<i>1.281</i>	<i>1.284</i>	<i>1.288</i>	1.277	<i>1.276</i>	<i>1.283</i>
Consumer Price Index (index, 1980-1984=1.000)	1.551	1.564	1.575	1.588	1.597	1.601	<i>1.611</i>	<i>1.619</i>	<i>1.627</i>	<i>1.636</i>	<i>1.645</i>	<i>1.655</i>	1.570	<i>1.607</i>	<i>1.641</i>
Petroleum Product Price Index (index, 1980-1984=1.000)	0.632	0.727	0.702	0.744	0.722	0.675	<i>0.659</i>	<i>0.653</i>	<i>0.640</i>	<i>0.633</i>	<i>0.636</i>	<i>0.640</i>	0.701	<i>0.677</i>	<i>0.637</i>
Non-Farm Employment (millions)	118.5	119.3	119.9	120.5	121.1	121.9	<i>122.5</i>	<i>123.2</i>	<i>123.9</i>	<i>124.5</i>	<i>124.9</i>	<i>125.4</i>	119.5	<i>122.2</i>	<i>124.7</i>
Commercial Employment (millions)	80.1	80.8	81.4	81.9	82.6	83.2	<i>83.8</i>	<i>84.4</i>	<i>85.0</i>	<i>85.5</i>	<i>85.9</i>	<i>86.3</i>	81.0	<i>83.5</i>	<i>85.7</i>
Total Industrial Production (index, 1992=1.000)	1.131	1.148	1.157	1.170	1.183	1.194	<i>1.201</i>	<i>1.210</i>	<i>1.221</i>	<i>1.230</i>	<i>1.239</i>	<i>1.244</i>	1.152	<i>1.197</i>	<i>1.233</i>
Housing Stock (millions)	110.6	111.0	111.4	111.8	112.1	112.5	<i>112.9</i>	<i>113.3</i>	<i>113.6</i>	<i>114.0</i>	<i>114.4</i>	<i>114.7</i>	111.2	<i>112.7</i>	<i>114.2</i>
Miscellaneous															
Gas Weighted Industrial Production (index, 1992=1.000)	1.077	1.087	1.102	1.119	1.125	1.135	<i>1.132</i>	<i>1.133</i>	<i>1.135</i>	<i>1.138</i>	<i>1.142</i>	<i>1.146</i>	1.096	<i>1.131</i>	<i>1.140</i>
Vehicle Miles Traveled ^b (million miles/day)	6200	7027	7193	6704	6463	7139	<i>7295</i>	<i>6848</i>	<i>6675</i>	<i>7412</i>	<i>7582</i>	<i>7090</i>	6782	<i>6938</i>	<i>7192</i>
Vehicle Fuel Efficiency (index, 1995=1.000)	0.964	1.030	1.048	0.992	1.000	1.028	<i>1.041</i>	<i>0.990</i>	<i>1.005</i>	<i>1.040</i>	<i>1.052</i>	<i>0.997</i>	1.009	<i>1.015</i>	<i>1.024</i>
Real Vehicle Fuel Cost (cents per mile).....	3.96	4.13	3.94	4.13	4.06	3.85	<i>3.83</i>	<i>3.91</i>	<i>3.69</i>	<i>3.68</i>	<i>3.59</i>	<i>3.70</i>	4.04	<i>3.91</i>	<i>3.66</i>
Air Travel Capacity (mill. available ton-miles/day)	382.0	400.1	413.9	402.6	401.7	411.1	<i>432.4</i>	<i>428.9</i>	<i>422.8</i>	<i>434.2</i>	<i>452.8</i>	<i>447.0</i>	399.7	<i>418.6</i>	<i>439.3</i>
Aircraft Utilization (mill. revenue ton-miles/day)	213.0	233.4	244.8	232.0	230.4	243.9	<i>260.2</i>	<i>244.8</i>	<i>239.9</i>	<i>256.2</i>	<i>271.6</i>	<i>256.3</i>	230.8	<i>244.9</i>	<i>256.1</i>
Aircraft Yield (cents per ton-mile)	14.10	13.98	13.19	13.36	14.16	13.61	<i>12.96</i>	<i>13.79</i>	<i>14.69</i>	<i>14.29</i>	<i>13.48</i>	<i>14.14</i>	13.66	<i>13.63</i>	<i>14.15</i>
Raw Steel Production (millions tons)	26.55	26.05	25.62	25.67	26.18	26.70	<i>26.54</i>	<i>27.72</i>	<i>28.77</i>	<i>29.00</i>	<i>28.58</i>	<i>29.40</i>	103.89	<i>107.14</i>	<i>115.75</i>

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

^bIncludes 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 CONTROL0997.

Table U3. International Petroleum Supply and Demand: Mid World Oil Price Case- December 1997
(Million Barrels per Day, Except Closing Stocks)

	1996				1997				1998				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1996	1997	1998
Demand^a															
OECD															
U.S. (50 States)&	18.4	18.0	18.2	18.7	18.2	18.5	18.7	19.0	18.8	18.6	18.9	19.3	18.3	18.6	18.9
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	1.7	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9
Europe&	14.5	13.7	14.3	14.6	14.3	14.1	14.5	14.9	14.5	14.3	14.7	15.1	14.3	14.5	14.7
Japan&	6.5	5.3	5.5	6.1	6.4	5.2	5.6	6.2	6.5	5.3	5.7	6.3	5.9	5.8	6.0
Australia and New Zealand&	1.0	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	0.9	0.9	1.0	0.9	0.9	1.0
Total OECD&	42.4	39.9	40.8	42.4	41.9	40.7	41.7	43.1	42.8	41.2	42.3	43.7	41.4	41.8	42.5
Non-OECD															
Former Soviet Union&	4.8	4.3	4.3	4.7	4.8	4.3	4.3	4.7	4.8	4.4	4.4	4.8	4.5	4.5	4.6
Europe&	1.4	1.3	1.3	1.4	1.5	1.3	1.3	1.4	1.5	1.3	1.3	1.4	1.3	1.4	1.4
China&	3.5	3.6	3.6	3.7	3.8	3.8	3.8	3.9	4.0	4.1	4.1	4.1	3.6	3.8	4.1
Other Asia&	8.6	8.3	7.9	9.1	9.2	8.9	8.5	9.7	9.8	9.5	9.1	10.4	8.5	9.1	9.7
Other Non-OECD&	12.5	12.8	12.5	12.8	12.9	13.3	13.0	13.3	13.4	13.7	13.4	13.7	12.7	13.1	13.6
Total Non-OECD&	30.7	30.3	29.6	31.5	32.1	31.7	31.0	33.0	33.5	33.0	32.3	34.4	30.5	31.9	33.3
Total World Demand&	73.1	70.1	70.4	73.9	74.0	72.4	72.7	76.1	76.3	74.3	74.6	78.2	71.9	73.8	75.8
Supply^b															
OECD															
U.S. (50 States)&	9.4	9.4	9.4	9.6	9.4	9.4	9.4	9.5	9.4	9.5	9.4	9.4	9.4	9.4	9.4
Canada&	2.4	2.4	2.5	2.6	2.6	2.5	2.6	2.6	2.6	2.7	2.7	2.7	2.5	2.6	2.7
North Sea c &	6.2	6.1	6.1	6.5	6.5	6.1	6.0	6.5	6.6	6.4	6.6	6.9	6.2	6.3	6.6
Other OECD&	1.5	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&	19.6	19.5	19.6	20.2	20.1	19.6	19.6	20.2	20.3	20.2	20.3	20.7	19.7	19.9	20.4
Non-OECD															
OPEC&	28.1	28.1	28.3	28.7	29.5	29.6	30.1	30.2	30.5	30.7	30.8	30.9	28.3	29.9	30.7
Former Soviet Union&	7.1	7.1	7.1	7.1	7.1	7.2	7.3	7.3	7.3	7.3	7.3	7.4	7.1	7.2	7.3
China&	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.1	3.2	3.3
Mexico&	3.3	3.4	3.3	3.3	3.4	3.4	3.5	3.5	3.5	3.5	3.5	3.5	3.3	3.4	3.5
Other Non-OECD&	10.1	10.2	10.2	10.4	10.4	10.5	10.4	10.6	10.8	11.0	11.1	11.2	10.2	10.5	11.0
Total Non-OECD&	51.7	51.8	52.0	52.6	53.6	54.0	54.4	54.7	55.4	55.7	55.9	56.2	52.0	54.2	55.8
Total World Supply&	71.3	71.3	71.6	72.8	73.7	73.5	74.1	75.0	75.7	75.9	76.3	76.9	71.7	74.1	76.2
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR)&	0.9	-0.7	-0.1	0.5	-0.1	-0.7	-0.2	0.5	0.4	-0.6	-0.3	0.5	0.2	-0.1	0.0
Other&	1.0	-0.5	-1.1	0.7	0.4	-0.5	-1.2	0.6	0.2	-1.0	-1.4	0.8	0.0	-0.2	-0.3
Total Stock Withdrawals&	1.9	-1.2	-1.1	1.1	0.3	-1.2	-1.4	1.1	0.7	-1.6	-1.6	1.3	0.2	-0.3	-0.3
Closing Stocks, OECD only (billion barrels)&	2.5	2.6	2.7	2.7	2.7	2.7	2.8	2.7	2.7	2.7	2.8	2.7	2.7	2.7	2.7
Non-OPEC Supply&	43.2	43.3	43.3	44.1	44.2	43.9	43.9	44.8	45.1	45.2	45.4	46.0	43.5	44.2	45.4
Net Exports from Former Soviet Union&	2.4	2.8	2.8	2.4	2.3	2.9	3.0	2.5	2.4	2.9	2.9	2.6	2.6	2.7	2.7

^aDemand 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.

^bIncludes 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.

^cIncludes 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, Gabon, 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, Kazakstan, 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 U4. U. S. Energy Prices- December 1997
(Nominal Dollars)

	1996				1997				1998				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1996	1997	1998
Imported Crude Oil ^a															
(dollars per barrel)	18.40	20.23	20.69	23.04	21.03	17.93	17.80	18.44	17.59	18.25	18.08	18.33	20.61	18.75	18.07
Natural Gas Wellhead															
(dollars per thousand cubic feet)	1.96	2.06	2.07	2.57	2.66	2.01	2.20	2.69	2.37	1.97	1.99	2.39	2.16	2.39	2.18
Petroleum Products															
Gasoline Retail ^b															
(dollars per gallon)	1.20	1.35	1.31	1.30	1.31	1.29	1.30	1.27	1.22	1.27	1.26	1.24	1.29	1.29	1.25
No. 2 Diesel Oil, Retail															
(dollars per gallon)	1.16	1.23	1.21	1.30	1.25	1.18	1.15	1.17	1.14	1.14	1.14	1.19	1.23	1.19	1.15
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	0.59	0.61	0.63	0.72	0.65	0.57	0.54	0.56	0.55	0.55	0.55	0.59	0.64	0.58	0.56
No. 2 Heating Oil, Retail															
(dollars per gallon)	0.96	0.98	0.91	1.06	1.05	0.97	0.88	0.92	0.95	0.93	0.89	0.96	0.99	0.98	0.94
No. 6 Residual Fuel Oil, Retail ^c															
(dollars per barrel)	19.29	18.12	17.64	20.72	19.00	16.84	17.05	18.84	17.65	16.98	16.51	17.74	18.97	18.00	17.26
Electric Utility Fuels															
Coal															
(dollars per million Btu)	1.30	1.30	1.28	1.28	1.29	1.29	1.26	1.25	1.25	1.26	1.24	1.23	1.29	1.27	1.24
Heavy Fuel Oil ^d															
(dollars per million Btu)	3.01	2.93	2.83	3.35	2.91	2.59	2.81	3.09	2.79	2.73	2.74	2.91	3.01	2.85	2.79
Natural Gas															
(dollars per million Btu)	2.81	2.55	2.46	2.96	3.11	2.45	2.58	3.13	2.80	2.33	2.33	2.76	2.64	2.75	2.49
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	5.78	6.72	8.43	6.53	6.67	6.89	8.49	6.79	6.56	6.97	8.10	6.37	6.35	6.88	6.69
Electricity															
(cents per kilowatthour)	7.90	8.52	8.83	8.31	8.04	8.69	8.78	8.35	7.98	8.56	8.73	8.32	8.39	8.47	8.40

^aRefiner acquisition cost (RAC) of imported crude oil.

^bAverage for all grades and services.

^cAverage for all sulfur contents.

^dIncludes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Data are estimated for the third quarter of 1997. 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 U5. U.S. Petroleum Supply and Demand: Mid World Oil Price Case- December 1997
(Million Barrels per Day, Except Closing Stocks)

	1996				1997				1998				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1996	1997	1998
Supply															
Crude Oil Supply															
Domestic Production ^a	6.55	6.43	6.39	6.49	6.45	6.41	6.33	6.41	6.42	6.44	6.40	6.41	6.46	6.40	6.42
Alaska.....	1.46	1.38	1.35	1.39	1.36	1.30	1.24	1.28	1.26	1.20	1.18	1.20	1.39	1.29	1.21
Lower 48.....	5.09	5.06	5.04	5.10	5.09	5.11	5.09	5.13	5.16	5.23	5.22	5.21	5.07	5.11	5.21
Net Imports (including SPR) ^b	6.96	7.68	7.63	7.32	7.32	8.11	8.17	7.72	7.27	8.11	8.23	7.84	7.40	7.83	7.86
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	0.05	0.12	0.09	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01	0.00
Other Stock Withdrawn or Added (-).....	0.04	-0.16	0.13	0.20	-0.34	-0.08	0.20	-0.06	-0.02	-0.02	0.06	0.02	0.05	-0.07	0.01
Product Supplied and Losses.....	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	-0.01
Unaccounted-for Crude Oil	0.13	0.44	0.16	0.14	0.24	0.41	0.46	0.48	0.26	0.28	0.28	0.28	0.22	0.40	0.28
Total Crude Oil Supply	13.70	14.43	14.42	14.22	13.71	14.84	15.16	14.54	13.93	14.80	14.96	14.54	14.19	14.57	14.56
Other Supply															
NGL Production.....	1.74	1.83	1.85	1.90	1.87	1.84	1.86	1.91	1.89	1.89	1.87	1.89	1.83	1.87	1.88
Other Hydrocarbon and Alcohol Inputs	0.33	0.29	0.30	0.33	0.31	0.34	0.36	0.30	0.32	0.31	0.32	0.32	0.31	0.33	0.32
Crude Oil Product Supplied.....	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
Processing Gain.....	0.79	0.84	0.85	0.87	0.78	0.84	0.87	0.82	0.78	0.84	0.85	0.82	0.84	0.83	0.82
Net Product Imports ^c	1.01	1.19	1.05	1.16	1.30	1.22	0.82	0.87	1.41	1.39	1.27	1.19	1.10	1.05	1.31
Product Stock Withdrawn or Added (-) ^d	0.82	-0.60	-0.31	0.20	0.26	-0.62	-0.38	0.55	0.45	-0.59	-0.33	0.50	0.03	-0.05	0.01
Total Supply.....	18.39	17.98	18.18	18.68	18.23	18.46	18.69	19.01	18.79	18.65	18.94	19.26	18.31	18.60	18.91
Demand															
Motor Gasoline.....	7.55	8.01	8.06	7.93	7.59	8.15	8.23	8.12	7.80	8.37	8.46	8.35	7.89	8.02	8.25
Jet Fuel.....	1.61	1.52	1.59	1.60	1.57	1.56	1.65	1.63	1.60	1.57	1.64	1.68	1.58	1.60	1.62
Distillate Fuel Oil.....	3.63	3.23	3.12	3.48	3.58	3.33	3.23	3.60	3.84	3.43	3.37	3.65	3.37	3.44	3.57
Residual Fuel Oil.....	0.98	0.77	0.83	0.82	0.90	0.77	0.77	0.86	0.97	0.80	0.77	0.87	0.85	0.82	0.85
Other Oils ^e	4.62	4.45	4.58	4.85	4.61	4.65	4.81	4.79	4.58	4.48	4.69	4.71	4.63	4.72	4.62
Total Demand.....	18.39	17.98	18.18	18.68	18.24	18.46	18.69	19.01	18.79	18.65	18.94	19.26	18.31	18.60	18.91
Total Petroleum Net Imports	7.97	8.87	8.67	8.47	8.62	9.32	8.99	8.59	8.68	9.50	9.49	9.03	8.50	8.88	9.18
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	300	314	302	284	314	322	303	309	311	313	307	305	284	309	305
Total Motor Gasoline.....	203	205	200	195	200	205	199	199	212	212	207	200	195	199	200
Finished Motor Gasoline	158	164	161	157	154	164	158	158	171	172	166	159	157	158	159
Blending Components	44	41	39	38	46	41	41	40	42	40	41	41	38	40	41
Jet Fuel.....	34	39	43	40	39	43	45	44	42	43	45	44	40	44	44
Distillate Fuel Oil.....	90	102	115	127	102	118	139	134	95	108	126	130	127	134	130
Residual Fuel Oil.....	32	35	38	46	41	39	35	37	33	38	39	42	46	37	42
Other Oils ^e	235	267	280	250	253	286	309	263	254	288	303	257	250	263	257
Total Stocks (excluding SPR)	893	962	978	942	949	1013	1030	986	946	1001	1027	979	942	986	979
Crude Oil in SPR	589	584	574	566	563	563	563	563	563	563	563	563	566	563	563
Total Stocks (including SPR).....	1482	1547	1551	1507	1512	1577	1594	1549	1510	1565	1590	1542	1507	1549	1542

^aIncludes lease condensate.

^bNet imports equals gross imports plus SPR imports minus exports.

^cIncludes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

^dIncludes 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.

^eIncludes 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 U6. U.S. Natural Gas Supply and Demand: Mid world Oil Price Case- December 1997
(Trillion cubic Feet)

	1996				1997				1998				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1996	1997	1998
Supply															
Total Dry Gas Production.....	4.69	4.72	4.71	4.67	4.72	4.70	<i>4.72</i>	<i>4.80</i>	<i>4.77</i>	<i>4.75</i>	<i>4.81</i>	<i>4.88</i>	18.79	<i>18.94</i>	<i>19.21</i>
Net Imports.....	0.70	0.68	0.67	0.73	0.74	0.68	<i>0.68</i>	<i>0.76</i>	<i>0.78</i>	<i>0.75</i>	<i>0.76</i>	<i>0.83</i>	2.78	<i>2.86</i>	<i>3.11</i>
Supplemental Gaseous Fuels.....	0.03	0.02	0.02	0.03	0.03	0.03	<i>0.03</i>	<i>0.03</i>	<i>0.04</i>	<i>0.03</i>	<i>0.03</i>	<i>0.03</i>	0.11	<i>0.12</i>	<i>0.13</i>
Total New Supply.....	5.42	5.43	5.41	5.43	5.49	5.40	<i>5.42</i>	<i>5.60</i>	<i>5.58</i>	<i>5.53</i>	<i>5.59</i>	<i>5.74</i>	21.69	<i>21.91</i>	<i>22.45</i>
Underground Working Gas Storage															
Opening.....	6.50	5.05	5.87	6.94	6.51	5.33	<i>6.09</i>	<i>7.02</i>	<i>6.52</i>	<i>5.23</i>	<i>6.03</i>	<i>6.96</i>	6.50	<i>6.51</i>	<i>6.52</i>
Closing.....	5.05	5.87	6.94	6.51	5.33	6.09	<i>7.02</i>	<i>6.52</i>	<i>5.23</i>	<i>6.03</i>	<i>6.96</i>	<i>6.52</i>	6.51	<i>6.52</i>	<i>6.52</i>
Net Withdrawals.....	1.45	-0.82	-1.07	0.43	1.18	-0.75	<i>-0.94</i>	<i>0.50</i>	<i>1.29</i>	<i>-0.80</i>	<i>-0.93</i>	<i>0.45</i>	-0.01	<i>-0.01</i>	<i>0.01</i>
Total Supply.....	6.87	4.61	4.33	5.86	6.67	4.65	<i>4.49</i>	<i>6.10</i>	<i>6.87</i>	<i>4.73</i>	<i>4.66</i>	<i>6.19</i>	21.68	<i>21.91</i>	<i>22.45</i>
Balancing Item ^a	0.24	0.25	-0.03	-0.17	0.19	0.16	<i>0.03</i>	<i>-0.14</i>	<i>0.45</i>	<i>0.24</i>	<i>-0.05</i>	<i>-0.29</i>	0.29	<i>0.24</i>	<i>0.35</i>
Total Primary Supply.....	7.12	4.86	4.30	5.69	6.86	4.81	<i>4.52</i>	<i>5.96</i>	<i>7.32</i>	<i>4.98</i>	<i>4.61</i>	<i>5.90</i>	21.96	<i>22.14</i>	<i>22.80</i>
Demand															
Lease and Plant Fuel.....	0.31	0.31	0.31	0.31	0.31	0.31	<i>0.31</i>	<i>0.33</i>	<i>0.33</i>	<i>0.32</i>	<i>0.32</i>	<i>0.33</i>	1.25	<i>1.26</i>	<i>1.29</i>
Pipeline Use.....	0.23	0.16	0.14	0.18	0.22	0.16	<i>0.15</i>	<i>0.21</i>	<i>0.23</i>	<i>0.17</i>	<i>0.16</i>	<i>0.20</i>	0.71	<i>0.73</i>	<i>0.76</i>
Residential.....	2.47	0.91	0.38	1.48	2.28	0.88	<i>0.38</i>	<i>1.50</i>	<i>2.45</i>	<i>0.86</i>	<i>0.38</i>	<i>1.42</i>	5.24	<i>5.04</i>	<i>5.11</i>
Commercial.....	1.31	0.60	0.37	0.87	1.26	0.62	<i>0.40</i>	<i>0.93</i>	<i>1.38</i>	<i>0.62</i>	<i>0.41</i>	<i>0.91</i>	3.16	<i>3.22</i>	<i>3.32</i>
Industrial (Incl. Cogenerators).....	2.28	2.10	2.04	2.26	2.27	2.08	<i>2.07</i>	<i>2.32</i>	<i>2.35</i>	<i>2.14</i>	<i>2.10</i>	<i>2.35</i>	8.68	<i>8.74</i>	<i>8.95</i>
Cogenerators ^b	0.56	0.51	0.52	0.60	0.56	0.54	<i>0.57</i>	<i>0.65</i>	<i>0.58</i>	<i>0.56</i>	<i>0.59</i>	<i>0.68</i>	2.20	<i>2.32</i>	<i>2.41</i>
Electricity Production															
Electric Utilities.....	0.46	0.73	1.01	0.53	0.47	0.72	<i>1.15</i>	<i>0.61</i>	<i>0.52</i>	<i>0.82</i>	<i>1.19</i>	<i>0.63</i>	2.73	<i>2.95</i>	<i>3.17</i>
Nonutilities (Excl. Cogen.).....	0.05	0.04	0.05	0.05	0.05	0.05	<i>0.05</i>	<i>0.06</i>	<i>0.05</i>	<i>0.05</i>	<i>0.05</i>	<i>0.06</i>	0.19	<i>0.20</i>	<i>0.21</i>
Total Demand.....	7.12	4.86	4.30	5.69	6.86	4.81	<i>4.52</i>	<i>5.96</i>	<i>7.32</i>	<i>4.98</i>	<i>4.61</i>	<i>5.90</i>	21.96	<i>22.14</i>	<i>22.80</i>

^aThe balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

^bQuarterly 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 U7. U.S. Coal Supply and Demand: Mid World Oil Price Case- December 1997
(Million Short Tons)

	1996				1997				1998				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1996	1997	1998
Supply															
Production	259.8	263.4	272.1	268.6	273.9	269.7	<i>265.2</i>	<i>282.4</i>	<i>283.8</i>	<i>273.4</i>	<i>279.6</i>	<i>282.3</i>	1063.9	<i>1091.2</i>	<i>1119.1</i>
Appalachia.....	111.5	113.9	111.3	115.1	119.0	117.8	<i>106.0</i>	<i>118.7</i>	<i>121.3</i>	<i>113.7</i>	<i>109.2</i>	<i>116.5</i>	451.9	<i>461.6</i>	<i>460.7</i>
Interior	44.0	42.7	43.9	42.2	42.9	41.4	<i>40.8</i>	<i>42.3</i>	<i>42.9</i>	<i>41.0</i>	<i>41.0</i>	<i>40.2</i>	172.8	<i>167.4</i>	<i>165.1</i>
Western.....	104.3	106.7	116.9	111.3	112.0	110.5	<i>118.3</i>	<i>121.4</i>	<i>119.6</i>	<i>118.7</i>	<i>129.4</i>	<i>125.6</i>	439.1	<i>462.1</i>	<i>493.3</i>
Primary Stock Levels ^a															
Opening.....	34.4	36.9	37.3	33.8	31.1	37.5	<i>42.5</i>	<i>33.0</i>	<i>31.0</i>	<i>34.0</i>	<i>34.0</i>	<i>32.0</i>	34.4	<i>31.1</i>	<i>31.0</i>
Closing	36.9	37.3	33.8	31.1	37.5	42.5	<i>33.0</i>	<i>31.0</i>	<i>34.0</i>	<i>34.0</i>	<i>32.0</i>	<i>30.0</i>	31.1	<i>31.0</i>	<i>30.0</i>
Net Withdrawals	-2.4	-0.5	3.6	2.7	-6.5	-5.0	<i>9.5</i>	<i>2.0</i>	<i>-3.0</i>	<i>(S)</i>	<i>2.0</i>	<i>2.0</i>	3.4	<i>0.1</i>	<i>1.0</i>
Imports	1.7	1.6	2.1	1.8	1.3	1.7	<i>2.0</i>	<i>1.9</i>	<i>1.8</i>	<i>1.8</i>	<i>1.8</i>	<i>1.8</i>	7.1	<i>7.0</i>	<i>7.3</i>
Exports	20.5	23.0	23.5	23.4	20.0	20.6	<i>22.2</i>	<i>23.2</i>	<i>22.0</i>	<i>22.6</i>	<i>22.8</i>	<i>22.7</i>	90.5	<i>86.1</i>	<i>90.1</i>
Total Net Domestic Supply.....	238.5	241.4	254.2	249.7	248.8	245.8	<i>254.5</i>	<i>263.1</i>	<i>260.7</i>	<i>252.6</i>	<i>260.6</i>	<i>263.4</i>	983.9	<i>1012.1</i>	<i>1037.3</i>
Secondary Stock Levels ^b															
Opening.....	134.6	124.8	134.3	127.6	123.0	119.8	<i>128.1</i>	<i>109.8</i>	<i>112.3</i>	<i>112.6</i>	<i>121.4</i>	<i>107.8</i>	134.6	<i>123.0</i>	<i>112.3</i>
Closing	124.8	134.3	127.6	123.0	119.8	128.1	<i>109.8</i>	<i>112.3</i>	<i>112.6</i>	<i>121.4</i>	<i>107.8</i>	<i>109.3</i>	123.0	<i>112.3</i>	<i>109.3</i>
Net Withdrawals	9.9	-9.5	6.7	4.6	3.2	-8.2	<i>18.3</i>	<i>-2.4</i>	<i>-0.4</i>	<i>-8.8</i>	<i>13.6</i>	<i>-1.5</i>	11.6	<i>10.8</i>	<i>3.0</i>
Total Supply	248.4	231.9	260.9	254.2	251.9	237.6	<i>272.7</i>	<i>260.7</i>	<i>260.3</i>	<i>243.9</i>	<i>274.2</i>	<i>261.9</i>	995.5	<i>1022.9</i>	<i>1040.3</i>
Demand															
Coke Plants.....	8.0	8.0	8.0	7.8	7.6	7.4	<i>7.7</i>	<i>8.1</i>	<i>7.8</i>	<i>7.6</i>	<i>7.8</i>	<i>8.3</i>	31.7	<i>30.8</i>	<i>31.5</i>
Electricity Production															
Electric Utilities	215.0	203.2	233.6	222.9	218.2	207.4	<i>243.1</i>	<i>228.2</i>	<i>228.5</i>	<i>214.4</i>	<i>244.8</i>	<i>229.4</i>	874.7	<i>896.7</i>	<i>917.1</i>
Nonutilities (Excl. Cogen.) ^c	6.0	6.0	6.0	6.0	6.5	6.5	<i>6.5</i>	<i>6.5</i>	<i>7.0</i>	<i>7.0</i>	<i>7.0</i>	<i>7.0</i>	24.0	<i>26.0</i>	<i>28.0</i>
Retail and General Industry ^d	20.3	18.0	17.9	20.3	20.1	18.3	<i>18.1</i>	<i>20.5</i>	<i>19.8</i>	<i>17.7</i>	<i>17.5</i>	<i>20.0</i>	76.4	<i>76.9</i>	<i>75.0</i>
Total Demand.....	249.2	235.1	265.5	256.9	252.3	239.5	<i>275.3</i>	<i>263.3</i>	<i>263.1</i>	<i>246.7</i>	<i>277.0</i>	<i>264.7</i>	1006.8	<i>1030.5</i>	<i>1051.5</i>
Discrepancy ^e	-0.8	-3.2	-4.6	-2.7	-0.4	-2.0	<i>-2.6</i>	<i>-2.6</i>	<i>-2.8</i>	<i>-2.8</i>	<i>-2.8</i>	<i>-2.8</i>	-11.3	<i>-7.5</i>	<i>-11.2</i>

^aPrimary stocks are held at the mines, preparation plants, and distribution points.

^bSecondary stocks are held by users.

^cConsumption of coal by Independent Power Producers (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 second quarter 1997 are estimates.

^dSynfuels 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.

^eHistorical period discrepancy reflects an unaccounted-for shipper and receiver reporting difference. Estimated IPP consumption not included in production (waste coal) has been netted out of the discrepancy. The estimated annual consumption for 1995 is 8.496 million tons, 9.600 million tons in 1996, and the forecast for 1997 is 10.400 million tons, and 11.200 million tons in 1998.

(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 U8. U.S. Electricity Supply and Demand: Mid World Oil Price Case- December 1997
(Billion Kilowatthours)

	1996				1997				1998				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1996	1997	1998
Supply															
Net Utility Generation															
Coal.....	428.3	405.7	462.6	440.8	434.0	414.0	480.5	456.3	458.8	430.3	488.9	459.1	1737.5	1784.8	1837.1
Petroleum.....	22.2	12.8	18.8	13.6	17.6	15.4	24.6	16.9	21.9	16.6	20.1	15.8	67.3	74.5	74.3
Natural Gas.....	44.6	70.8	96.6	50.8	45.6	69.1	109.6	58.7	50.0	79.3	114.1	60.9	262.7	282.9	304.3
Nuclear.....	174.3	163.5	177.0	159.9	160.0	144.4	171.0	158.6	169.9	153.0	178.5	161.2	674.7	634.0	662.6
Hydroelectric.....	90.9	92.3	72.9	71.9	94.3	96.0	77.7	70.0	79.3	80.7	65.7	64.6	328.0	338.0	290.3
Geothermal and Other ^a	1.5	1.5	2.2	2.1	1.6	1.8	2.0	1.8	1.7	1.6	1.7	1.7	7.2	7.3	6.7
Subtotal.....	761.9	746.4	830.1	739.1	753.1	740.8	865.4	762.3	781.6	761.5	869.0	763.3	3077.4	3121.6	3175.4
Nonutility Generation ^b															
Coal.....	16.1	14.7	15.1	17.4	15.9	15.5	16.3	18.7	16.4	16.0	16.8	19.3	63.3	66.4	68.5
Petroleum.....	4.4	4.0	4.1	4.7	4.5	4.4	4.6	5.3	4.9	4.8	5.0	5.7	17.3	18.8	20.4
Natural Gas.....	52.3	47.9	49.1	56.5	52.3	50.8	53.3	61.2	54.2	52.7	55.3	63.6	205.8	217.6	225.9
Other Gaseous Fuels ^c	3.2	2.9	3.0	3.4	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	3.6	3.7	4.2	4.0	3.8	4.0	4.6	4.1	4.0	4.2	4.9	15.3	16.4	17.3
Geothermal and Other ^d	20.5	18.7	19.2	22.1	19.9	19.4	20.3	23.4	20.2	19.7	20.6	23.7	80.5	83.0	84.3
Subtotal.....	100.3	91.8	94.2	108.3	99.6	96.9	101.6	116.7	103.0	100.1	105.0	120.7	394.7	414.7	428.8
Total Generation.....	862.2	838.3	924.3	847.4	852.7	837.7	967.0	879.0	884.6	861.6	974.0	883.9	3472.2	3536.3	3604.1
Net Imports ^e	7.1	9.5	13.0	8.4	7.5	9.5	12.7	7.8	6.7	9.3	12.6	8.1	38.0	37.5	36.7
Total Supply.....	869.3	847.8	937.4	855.7	860.2	847.1	979.7	886.8	891.2	870.9	986.6	892.1	3510.2	3573.8	3640.8
Losses and Unaccounted for ^f	55.0	78.3	59.1	71.4	57.6	81.5	67.5	69.3	53.4	75.2	69.0	69.7	263.7	276.0	267.2
Demand															
Electric Utility Sales															
Residential.....	290.7	239.2	302.1	246.5	276.8	226.2	316.4	262.5	296.4	243.1	314.3	260.6	1078.5	1082.0	1114.5
Commercial.....	212.3	215.8	248.1	215.4	214.5	217.6	260.4	224.2	223.5	225.6	261.4	226.2	891.6	916.7	936.8
Industrial.....	245.6	252.5	262.8	253.4	248.0	259.5	268.4	258.9	251.1	261.6	272.1	261.3	1014.3	1034.8	1046.1
Other.....	24.6	24.3	26.6	24.7	23.4	23.6	26.4	25.2	26.1	25.8	28.3	26.6	100.2	98.7	106.8
Subtotal.....	773.2	731.9	839.6	740.0	762.8	726.9	871.6	770.9	797.2	756.2	876.2	774.6	3084.7	3132.2	3204.1
Nonutility Gener. for Own Use ^b	41.1	37.6	38.6	44.4	39.8	38.7	40.6	46.6	40.7	39.6	41.5	47.7	161.8	165.6	169.5
Total Demand.....	814.3	769.5	878.3	784.4	802.5	765.6	912.2	817.5	837.9	795.7	917.7	822.3	3246.4	3297.8	3373.6
Memo:															
Nonutility Sales to															
Electric Utilities ^b	59.2	54.2	55.6	63.9	59.8	58.2	61.0	70.1	62.3	60.6	63.5	73.0	232.9	249.1	259.3

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

^bElectricity 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."

^cIncludes refinery still gas and other process or waste gases, and liquefied petroleum gases.

^dIncludes geothermal, solar, wind, wood, waste, nuclear, hydrogen, sulfur, batteries, chemicals and spent sulfite liquor.

^eData for 1996 are estimates.

^fBalancing 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.

