December 1999

Highlights

International Oil Markets

Prices. World oil prices for the remainder of 1999 and all of 2000 are expected to remain above \$20 per barrel. EIA believes that prices will rise from average November levels (an estimated \$23.50 per barrel for the price paid by U.S. refiners for imported crude) by about \$1 per barrel by December, due to increased demand in the winter and Y2K precautionary building of end-user inventories (see a brief discussion on Y2K impacts below). The world oil price is then expected to dip slightly to an average of \$24.00 per barrel in January 2000 as the peak of the winter stock build passes before gradually declining to \$20.50 per barrel by December 2000. This forecast assumes that OPEC compliance remains relatively strong through the winter, but that OPEC production increases after March 2000, either by an increase in quotas or a decrease in compliance to current quotas. Even with increased oil supplies from OPEC and non-OPEC countries this production profile should draw down world oil stocks to well below normal levels by the end of the winter period. Since world oil demand exceeded world oil supply by over 1 million barrels per day, even a large increase in supply may not be enough to have world oil supply greater than world oil demand in 2000. However, increases in OPEC crude oil production after March 2000 are not expected to be large enough to allow the world oil price to slip below \$20 per barrel (equivalent to a West Texas Intermediate crude oil price of about \$22 per barrel). This analysis of OPEC production and global oil inventories is a major reason why EIA is forecasting increasing oil prices for the remainder of 1999 and relatively high levels throughout 2000. Of course, if OPEC production in 2000 exceeds this forecast, lower prices would be expected and vice versa. Our normal uncertainty range for crude oil prices suggest that expected end-2000 prices would be within about \$3-\$3.50 of the \$20.00 per barrel level with a high degree of probability (Figure 1).

OPEC Production. EIA is currently forecasting OPEC compliance with agreed upon production cuts beginning this April to remain relatively strong through the end of the current agreement, which expires at the end of March 2000. Although OPEC compliance is expected to decline during the winter period, overall OPEC compliance is expected to remain relatively strong compared to previous agreements (Figure 2). OPEC has tentatively scheduled another ministerial meeting for March 27, 2000, but it is unclear what OPEC will decide to do in relation to their quotas at that meeting. Given our world demand and non-OPEC production forecasts, EIA is assuming that OPEC production will continue to increase in 2000, whether from an increased quota or a decrease in compliance.

Figure 1. U.S. Monthly Crude Oil Prices

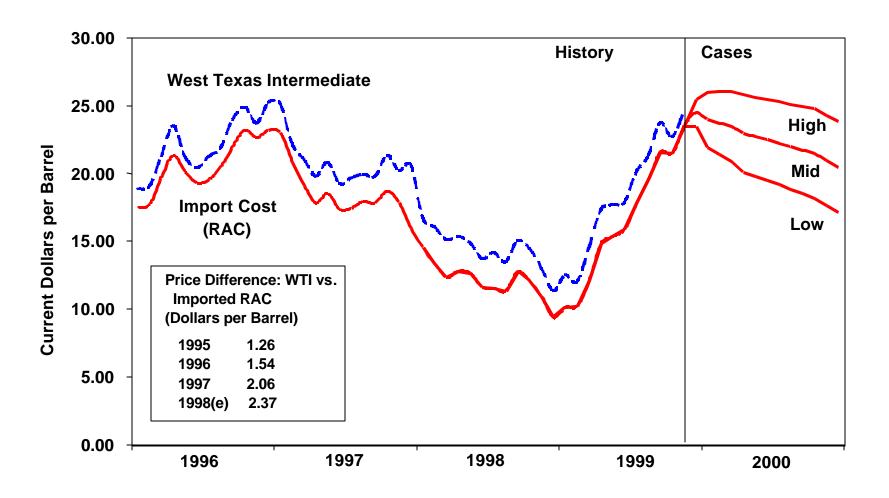
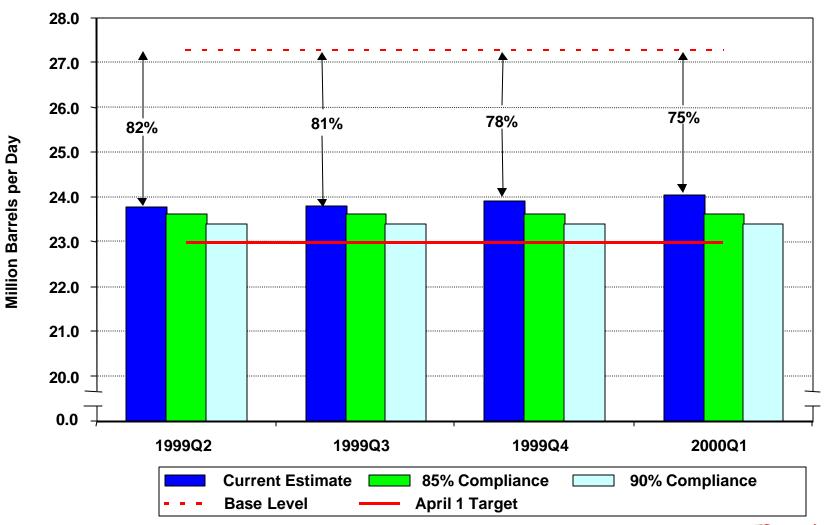




Figure 2. OPEC Compliance to Agreed Upon Cuts in Production





Our forecast assumes that OPEC production in 2000 will average about 1.3 million barrels per day higher than average 1999 OPEC oil production levels.

Non-OPEC Production. Non-OPEC oil production is expected to be about 200,000 barrels per day less in 1999 than it was in 1998, mainly as a result of reduced development expenditures engendered by very low oil prices in 1998 and early 1999. However, EIA is expecting non-OPEC production to increase by about 800,000 barrels per day in 2000 as higher oil prices counteract some of the same forces that caused non-OPEC oil production to decline in 1999 (Figure 3). A significant amount of the increase in non-OPEC production is expected to come from the North Sea. After remaining relatively flat between 1996 and 1999, North Sea oil production is expected to increase by about 400,000 barrels per day in 2000, with the increase split evenly between Norway and the United Kingdom. Another major increase is expected to come from Australia. Australia is expected to increase by about 100,000 barrels per day in 2000, as production continues to increase from low levels at the end of 1998, which were caused by an accident in the Gippsland Basin.

Demand. EIA estimates that world oil demand will grow by about 1.0 million barrels per day in 1999, and by an additional 1.4 million barrels per day (1.8 percent growth) in 2000 (Figure 4 and Table 3). The 2000 world oil demand estimate is unchanged from last month's forecast, and assumes that overall Asian demand continues the slow but steady recovery into next year. After growing by about 900,000 barrels per day each year between 1991 and 1996, oil demand in Asia (Japan, China, and other non-OECD Asia) grew by less than half of that in 1997 and actually declined by over 200,000 barrels per day in 1998. However, in 1999, oil demand in this region is once again expected to grow (bynearly 400,000 barrels per day). By 2000, Asian oil demand growth is expected to grow by over 600,000 barrels per day, or nearly 70% of the 1991-1996 average annual growth.

Inventories. Crude oil prices are influenced by fundamental supply/demand balances in the world petroleum market. Inventories are a measure of the shift in balance between petroleum production and demand and the pressures on crude oil price. For example, when stocks are rising, production is in excess of demand, and one expects downward price pressure. This is what occurred in 1997 and 1998. The increase in oil inventories was due to several factors acting in the same direction to create an excess amount of oil on the world oil market:

- The return of Iraq to the crude markets, without OPEC pulling back production to make room (Iraq went from less than 0.6 MMB/D in 1996 to over 2 MMB/D in 1998.);
- Growth in non-OPEC supplies;
- The economic collapse and reduction in demand from Asia (Asia was the largest growing region of petroleum consumption);
- Two warm winters in a row.

The excess supply pulled prices down, but the excess is eroding with OPEC's cutbacks.

Figure 3. World Oil Supply (Changes from Previous Year)

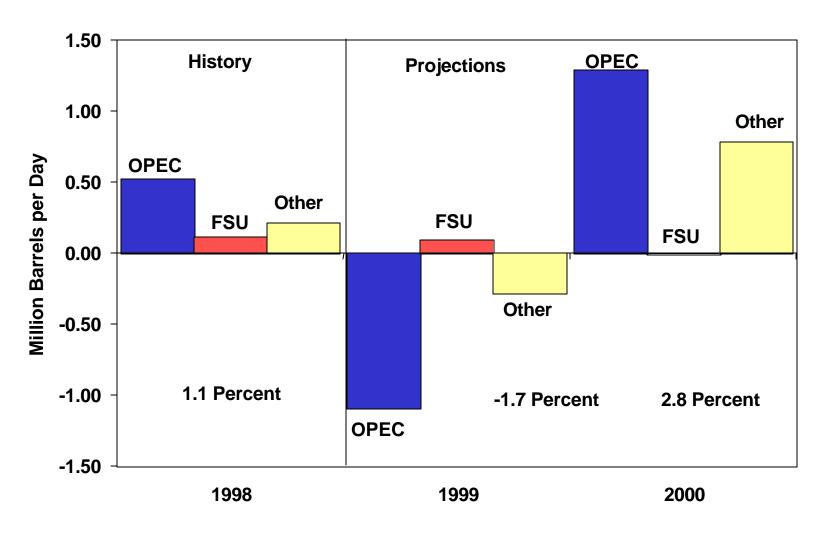
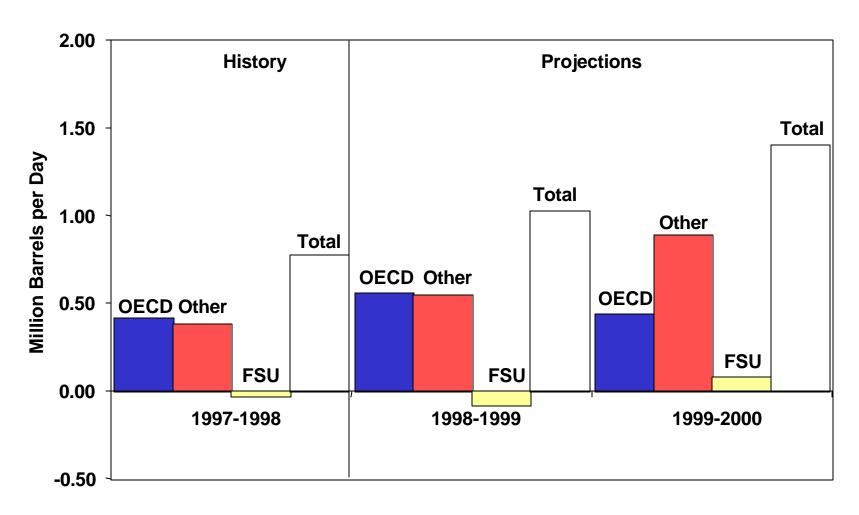




Figure 4. World Oil Demand (Changes from Previous Year)







The opposite effect is expected to occur in late 1999 and 2000, as demand is expected to outstrip supply. Projections for the world high-demand winter season indicate inventories

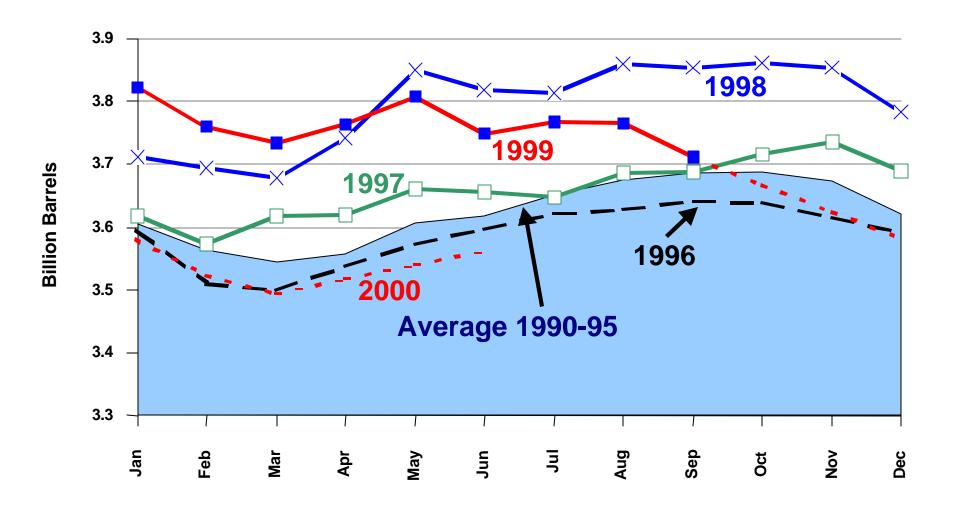
may well be below normal levels -- stocks appear to already be approaching the low levels of 1996, even with some very warm November weather -- all of which is putting upward price pressure on crude oil (Figure 5).

Y2K. EIA is forecasting a rise in world oil prices in November and especially December mainly because of fundamental crude oil market developments (e.g. above-normal world oil inventory drawdowns) but also to some small extent because of market concerns about possible Y2K-related disruptions to oil supplies. EIA is estimating that about 17 million barrels (or slightly less than 200,000 barrels per day) of oil products that would normally be supplied in the first quarter of 2000 will be (or has already been) made available in the form of higher precautionary end-user inventories during the fourth quarter in order to prepare for Y2K. In addition, we are now assuming that some small disruptions in global oil supplies related to Y2K may occur, but that in total, EIA expects disruptions in global oil supplies to be minimal. In addition, EIA is also assuming that over the course of the month of January, fixes are either made or workarounds completed such that the average price for crude oil in January 2000 averages close to those in December 1999. This could result from a small price increase in early January 2000 that then declines even below the December 1999 average price as the global oil supply situation eases, either through remediation, stock drawdowns, or other measures, such as production increases from countries with spare production capacity. The oil ministers from Saudi Arabia, Venezuela, and Mexico have already stated their intention to make up for any lost oil supplies resulting from Y2K-related problems.

U.S. Energy Prices

The prices for both petroleum and natural gas have moved considerably but in opposite directions through the month of November. The price of crude oil has increased about \$5 per barrel (or about 12 cents per gallon) from the end of October to the end of November. On the other hand, the wellhead spot price for natural gas at the Henry Hub has dropped by nearly \$1.00 per thousand cubic feet (or by about one third) during the same time period. There are external, but entirely separate reasons for these divergent price paths: Petroleum prices have climbed due to crude oil production cutbacks by oil exporting nations (see discussion in the previous section). Natural gas prices have plunged due to the extraordinarily warm November weather, which greatly reduced demand for heating and left gas in storage at high levels. The weather in November was almost 30 percent warmer than normal. No November in the U.S. since 1931 has been even close to being this warm. Of course, the bulk of the winter still lies ahead and this is why gas price expectations remain relatively strong in the near future (the January NYMEX gas contract

Figure 5. OECD Oil Stocks





has been trading above \$2.30 per million Btu while the December close was \$2.12).

Heating Oil. Assuming that the remainder of the winter (December through March) has "normal" weather in addition to the substantially higher crude oil costs (about \$12.50 per barrel higher than last winter) residential heating oil customers can expect to pay an average of about 28 cents per gallon more this season compared to last winter. (Figure 6) These projections have been adjusted upward from the previous month as our current crude oil price projections have been also been revised upward (Figure 7). It should be noted that last winter, the weather was much warmer than normal and the prices responded accordingly. This winter, residential consumers can expect to pay about \$1.08 per gallon compared to an average of \$0.80 last winter (Table 4). As we have mentioned previously, our projections assume a "normal winter". However, if the winter turns out to be another warm one, then distillate stocks would swell and heating oil prices would not rise as much as projected for the base case.

Motor Gasoline. With increasing crude oil prices, the retail price of motor gasoline is expected to hit the year's peak in December at \$1.29 per gallon <u>Figure 8</u>. Prices this winter will be considerably above last year's near record low (in inflation-adjusted terms) average. Next spring, when the driving season begins, prices are projected to climb to about \$1.34 per gallon, assuming crude prices still remain high (<u>Figure 9</u> and <u>Table 4</u>). Also because of the crude price increases, diesel fuel prices should follow motor gasoline prices closely (<u>Figure 8</u>).

Natural Gas. Both the spot and futures prices for natural gas at the wellhead soared from mid-August of this year through the beginning of September. A hot summer required heavy gas burning at electric utilities for air conditioning, which meant less injections into storage. As a result, anxiety increased in the gas market about whether storage of gas would be enough to meet the needs of the heating season. During the month of October, the wellhead price oscillated sharply as the storage uncertainty continued. However, in November, the gas price plummeted with the unseasonably mild weather. Normally heavy gas-heating cities such as Chicago and Minneapolis experienced record warm spells with temperatures in the 70's. There were net injections to underground storage in some weeks and the price at the wellhead collapsed to under \$2.00 per thousand cubic feet (see EIA's Natural Gas Weekly report and Figure 10).

Last winter was, on the whole, a very warm one and prices responded accordingly. So far this winter has not been particularly cold either, especially during the very warm November period. However, in the base case we assume normal weather for the rest of the winter and underground storage levels are still projected to fall below last year's levels. As a result, we project winter wellhead prices that are about 30 percent above those from last year (Figure 11). This is still a significant downward revision from our previous outlook (Figure 12). It is quite conceivable that there could be a repeat of last year's price plunge, especially if the weather in the gas consuming regions of the country during the month of December also turns out to be warm.

Figure 6. Quarterly Retail Heating Oil Prices

(Change from Year Ago)

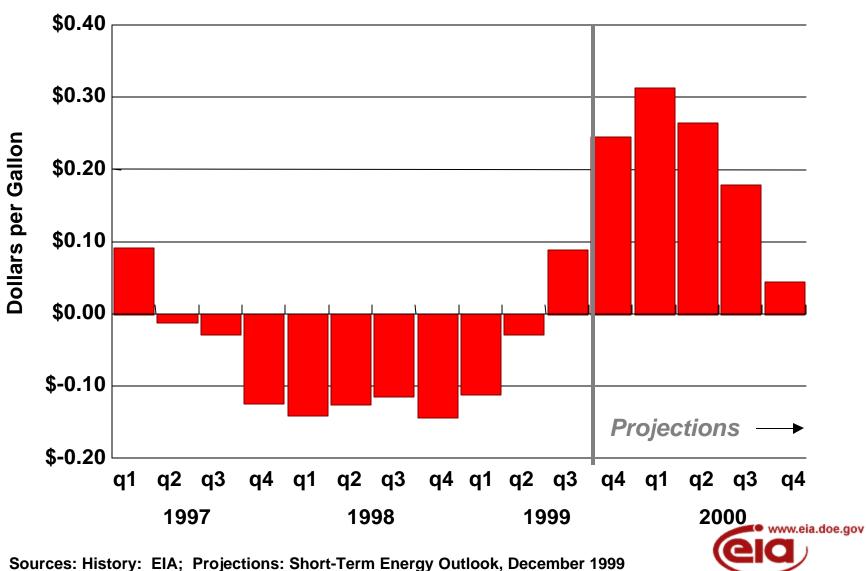


Figure 7. Retail Heating Oil Prices

(Current vs Previous Outlook)

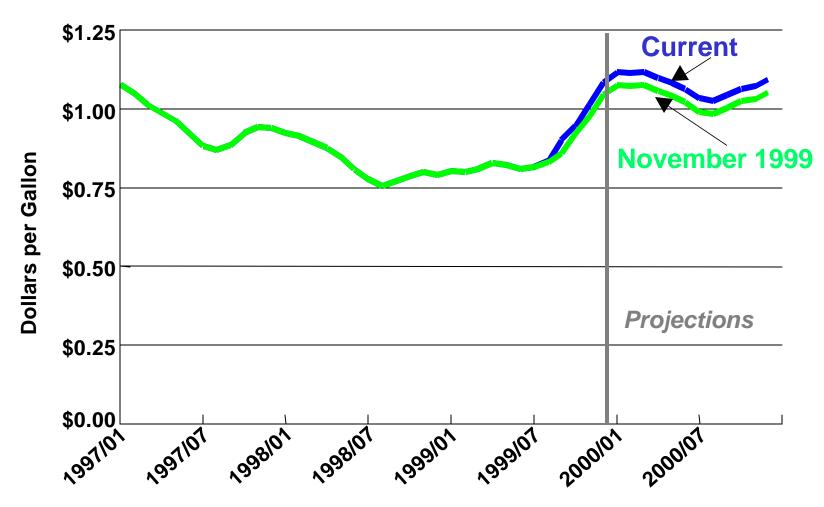




Figure 8. Retail Gasoline and Diesel Prices*

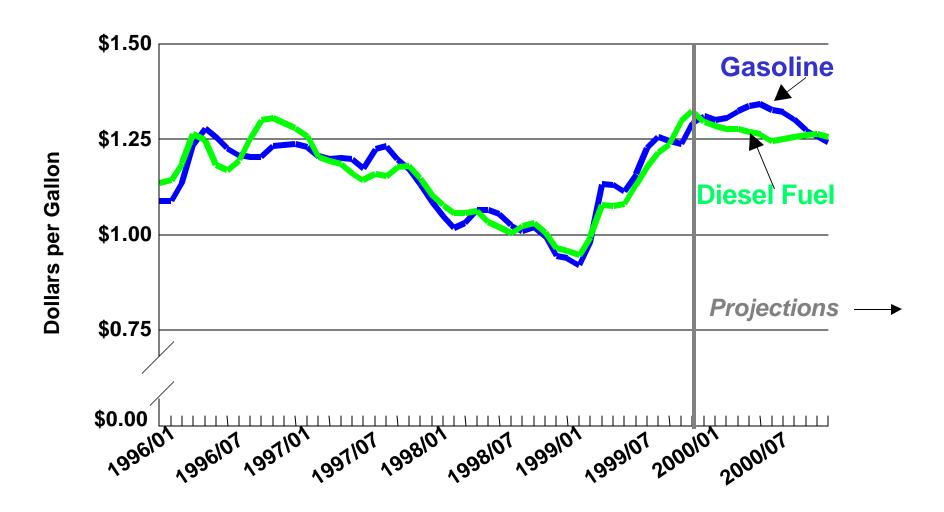
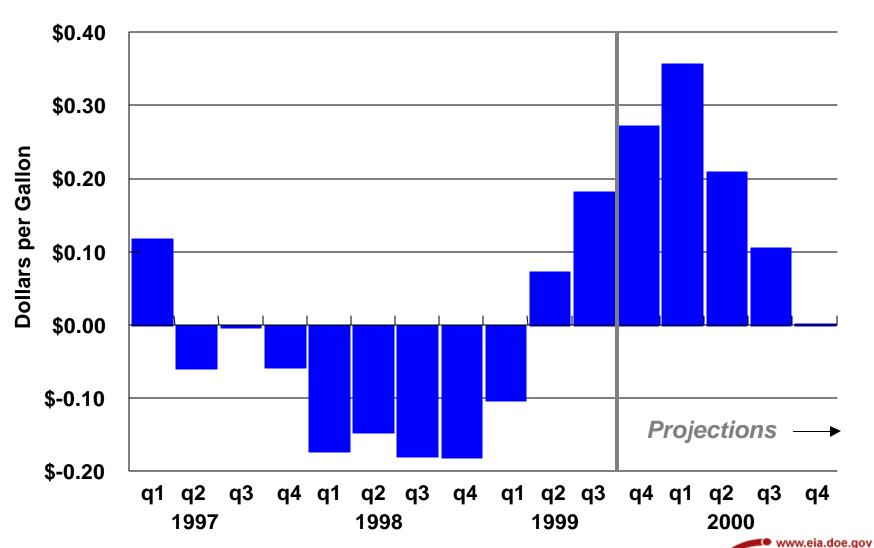






Figure 9. Quarterly Retail Motor Gasoline Prices*

(Percent Change from Year Ago)



*Regular Unleaded, Self-Service Cash Sources: History: EIA; Projections: Short-Term Energy Outlook, December 1999

Figure 10. Quarterly Natural Gas Wellhead Prices

(Percent Change from Year Ago)

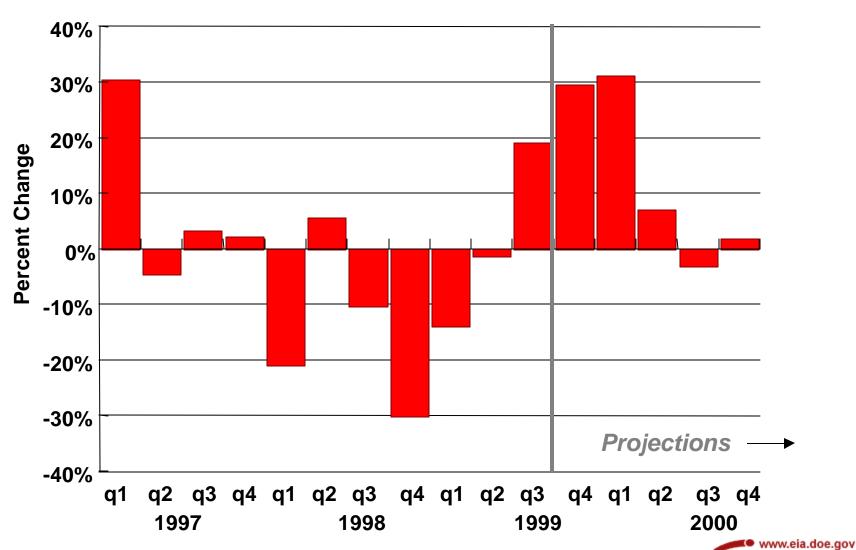


Figure 11. Natural Gas Wellhead Prices

(Monthly: Current vs Previous Outlook)

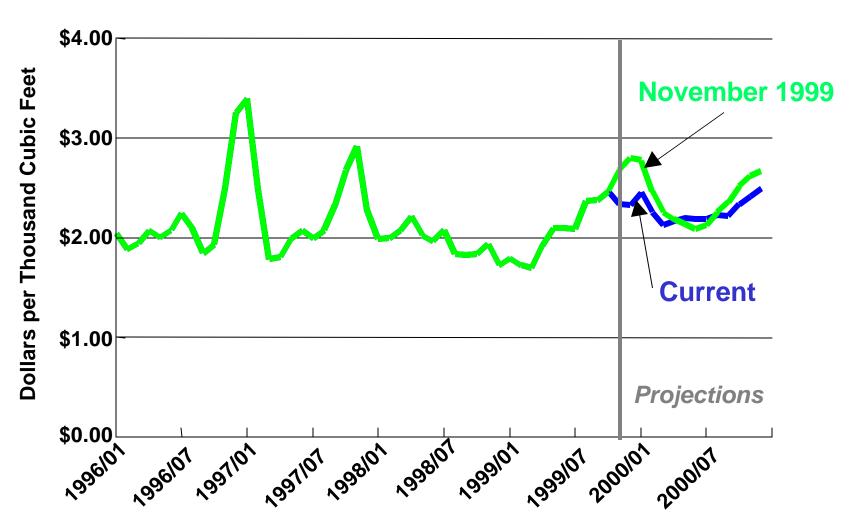
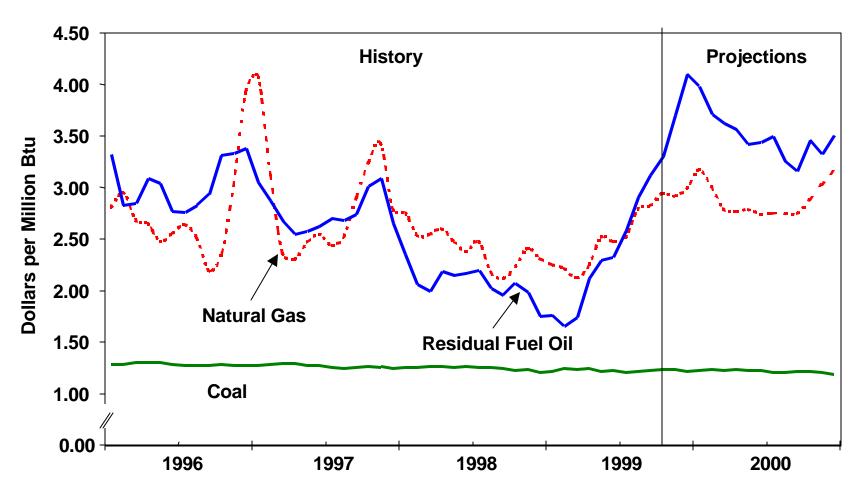




Figure 12. Fossil Fuel Prices to Electric Utilities

(Monthly: 1996-2000)





Electric Utility Fuels. Last August, the average price of residual fuel oil to electric utilities exceed the natural gas price for the first time in two years returning a historical price advantage that gas had generally held. The prices of both these fuels are projected to increase in the year 2000, with the heavy oil price increasing much faster, assuming our base crude oil price path holds. Coal remains by far the least expensive fossil fuel for electric utilities (Figure 13) and (Table 4). Coal prices are expected to decline through 2000 even after costs associated with compliance with the Clean Air Act Amendments of 1990 are included. Continued increases in mining productivity, including longwall mining, as well as the closing of costly marginal mines, particularly those East of the Mississippi, have kept coal supply costs on a gradually declining trend for many years.

U.S. Petroleum Demand

Total petroleum demand in 1999 is projected to grow 500,000 barrels per day, or 2.7 percent, from that of the previous year and increase only slightly by 30,000 barrels per day, or 0.2 percent in 2000. (Table 5). In the current quarter, petroleum demand growth appears to be unusually strong. Two factors appear to contribute to that strong demand. The first is the anticipation of a "normal" winter weather for December, which would be much colder than the same time last winter; and the second would be additional refinery shipments of products, due to Y2K concerns, that would otherwise occur in the first quarter of 2000. The second factor contributes to the robust growth in 1999 but moderate growth in 2000 for petroleum products as a whole. Figure 14 summarizes the year-to-year changes for the major petroleum product categories.

Despite concerns about Y2K, motor gasoline demand is projected to increase steadily at a 2-percent rate throughout the forecast interval. Reflecting moderation in economic growth and increases in motor fuel prices, highway travel activity is projected to slow from 2.6 percent to 2.0 percent. The virtual absence of efficiency growth is expected to ensure continued motor gasoline demand growth.

Despite recent hikes in average ticket prices brought about by substantial increases in jet fuel costs, jet fuel demand is projected to increase almost 2 percent during the forecast interval. That increase is buoyed by a 4-percent increase in available capacity and air traffic volume.

Total distillate demand growth is expected to slow sharply from 3.8 percent in 1999 to 0.1 percent in 2000. Part of that slowdown reflects increased refiner shipments in response to a possible end-of-year buying surge brought about by supply concerns.

Due to recent hikes in product prices, residual fuel oil demand is projected to decline more than 3 percent in 1999, followed by a further 13-percent decline in 2000. Electric utility requirements dominate the negative consumption trend. Purchases by that sector are projected to decline more than 12 percent in 1999 and an additional 20 percent in 2000 as

Figure 13. Year-to-Year Changes in Petroleum Demand

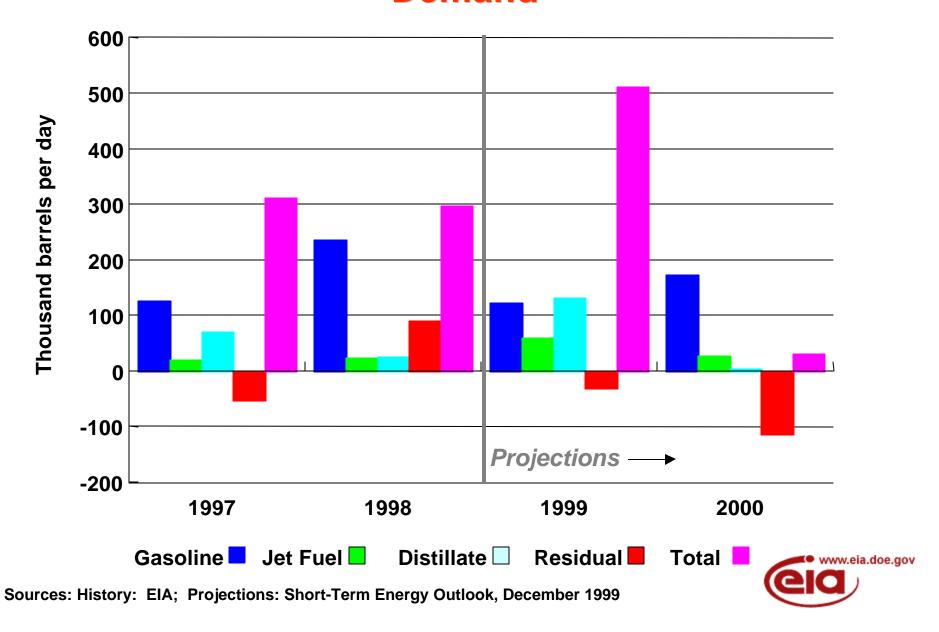
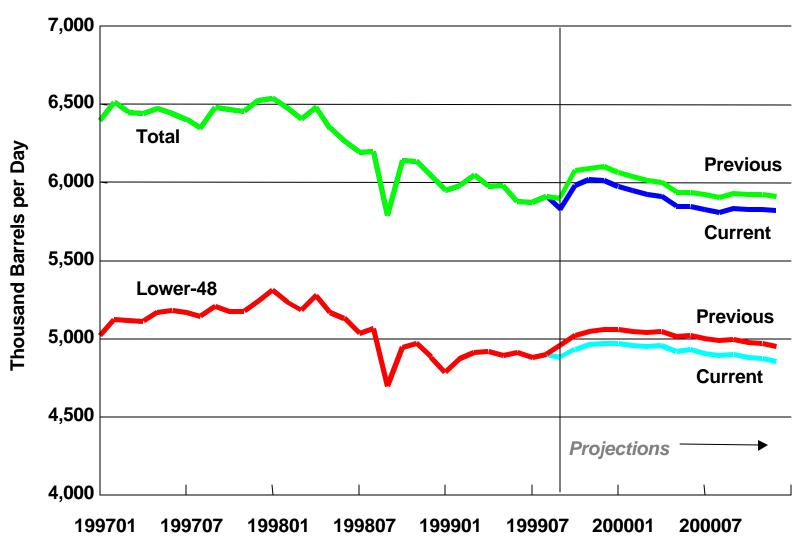


Figure 14. U.S. Monthly Crude Oil Production





more competitively-priced natural gas continues to displace residual fuel oil in that market.

U.S. Petroleum Supply

Despite raising slightly our projections for oil prices for this Outlook, the forecast for U.S. oil production has been revised downward. The new estimates for September are lower by about 75,000 barrels per day for the Lower-48 States than was projected last month and indicates, in our view, that the trajectory for domestic oil production through 2000 will be marginally lower in each month (Figure 15). The reason for the expected persistence of the lower estimates is due to lower-than-expected production performance in Texas, California and Louisiana and a lower revised September production rate. As a result of the revisions, average total domestic oil production is now expected to exhibit a decline of 298,000 barrels per day (4.76 percent) for all of 1999. This yields an average level of 5.95 million barrels per day for 1999 U.S. production compared to 5.98 million projected last month. Production in 1998 was 6.25 million barrels per day. For 2000, a 1.4-percent decline is expected and results in a production rate of 5.87 million barrels of oil per day average for the year compared to 5.96 million projected last month.

Alaska is expected to account for 15.9 percent of the total U.S. oil production in 2000. However, Alaskan oil production is expected to decrease by 10.7 percent in 1999 and again by 9.50 percent in 2000. A substantial portion of the oil production from Alaska comes from the giant Prudhoe Bay Field. Other then the routine maintenance, no major investments are planned for this field during the forecast period. Therefore, the field is expected to follow a steeper decline during this period. Oil production from recent discoveries such as Sambuca and Midnight Sun partially offset the decline in oil production from the Prudhoe Bay and other fields in the North Slope in 1999. Production from the Kuparuk River field plus like production from "West Sak, Tabasco and Tarn fields is expected to stay at an average of 250,000 barrels per day in 1999-2000 forecast period. The Alpine field is expected to come on in mid 2000 at an initial rate of 40,000 barrels per day peaking at 80,000 barrels per day in early 2001. North Slope production is periodically curtailed due to production restraints imposed by TAPPS due to storage, shipment at Valdez, and refining problems on the West Coast.

U.S petroleum stocks (crude oil, unfinished products and finished products) have fallen rapidly in recent months and are now skirting the lower end of the normal range (Figure 16). Some of the decline in recent weeks may be due to Y2K-related shipments to final distributors and consumers, although we have not until now anticipated very significant movements of this type prior to December. Some rebound in stocks toward the middle of the normal range is expected after the end of the year as the reverse of the Y2K stockpiling effect has an impact. Nevertheless, we now see petroleum stocks as likely to range lower than was previously expected and this creates some additional sensitivity of prices in domestic markets to disruptions, cold snaps or other shocks. We now estimate that

Figure 15. U.S. Petroleum Stocks (Excl. SPR)

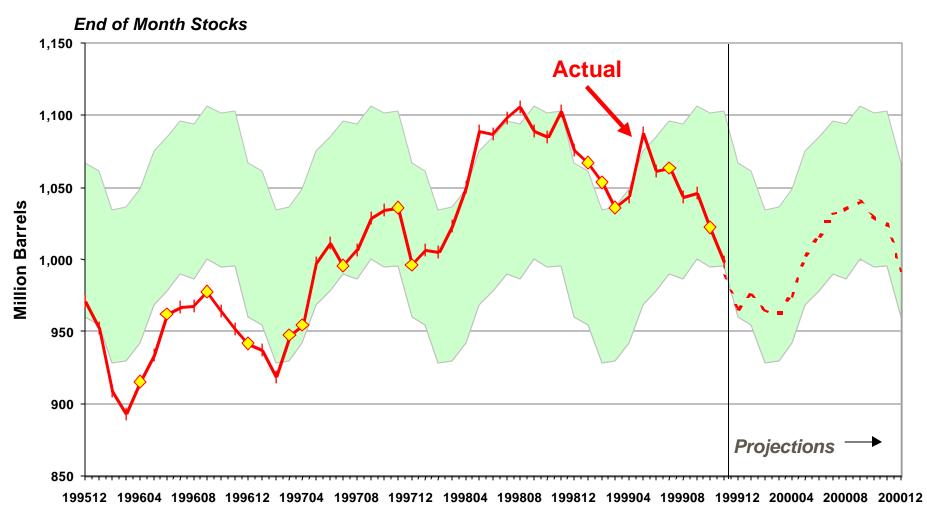
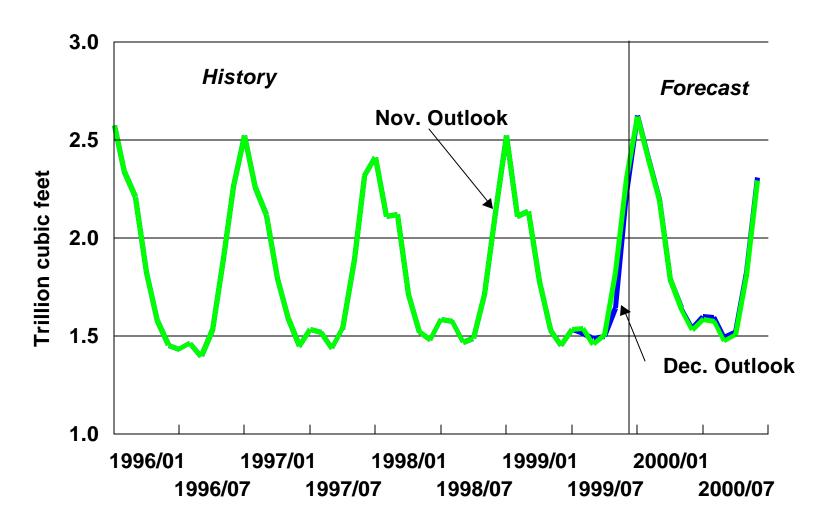




Figure 16. Total Natural Gas Demand





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gasoline and distillate fuel stocks at the end of November were *each* 12-13 million barrels lower than projected in last month's Outlook. In the case of distillate fuel, most of the stock decline was reflected in higher-than expected demand, which occurred despite the appearance of one of the warmest Novembers in the United States in many decades.

Natural Gas Supply and Demand

Our estimates of natural gas demand starting in August 1999 through November 1999 have been revised slightly downward (Figure 17), mainly due to higher than expected gas prices during that period, which resulted in lower demand in the price-sensitive industrial and utility sectors. Also, in November, heating degree-days were 26% below normal, causing a significant drop in natural gas prices. In the second half of 2000, gas demand is expected to be slightly higher than was projected last month, as gas prices are expected to continue to be below previous expectations.

Consequently, our expectations of natural gas prices and demand this winter (October to March) have been revised downward. Average winter natural gas prices in the high gas consuming area of the Midwest have been lowered from \$6.93 to \$6.75 per thousand cubic feet for the winter season, a difference of 2.6 percent. Midwest winter gas demand is now expected to total 87.5 thousand cubic feet for the winter rather than 90.2 thousand cubic feet, a drop of 3.0 percent.

Electricity Demand and Supply

Projections for of electricity demand in the second half of 1999 and in 2000 have been revised slightly upward. Our revised assumptions for higher macroeconomic growth are the main reason.

Natural gas-fired electricity generation by utilities has been projected to be higher than our last month's projection, due to the fall in natural gas prices. Oil-fired electricity generation by utilities has been projected to be lower than our last month's projection, due to the rise in oil prices (Figure 18).

Figure 17. Oil- and Natural Gas-Fired Electricity Generation

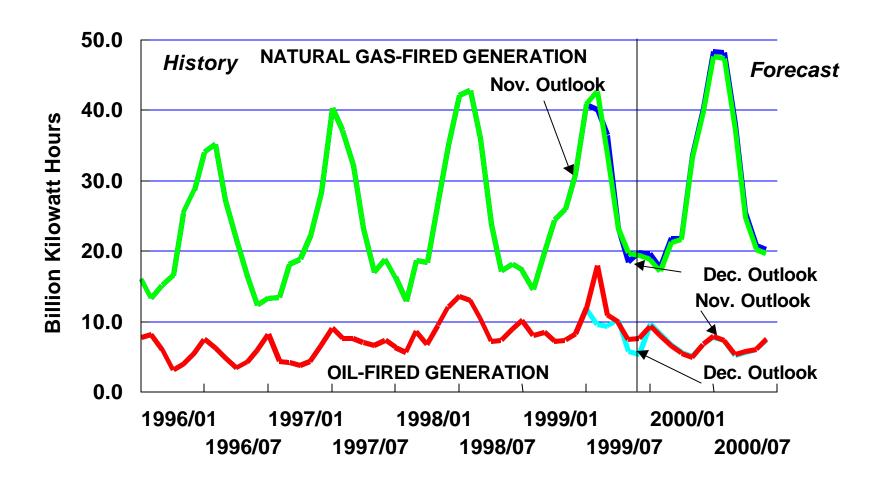




Figure 18. Oil- and Natural Gas-Fired Electricity Generation

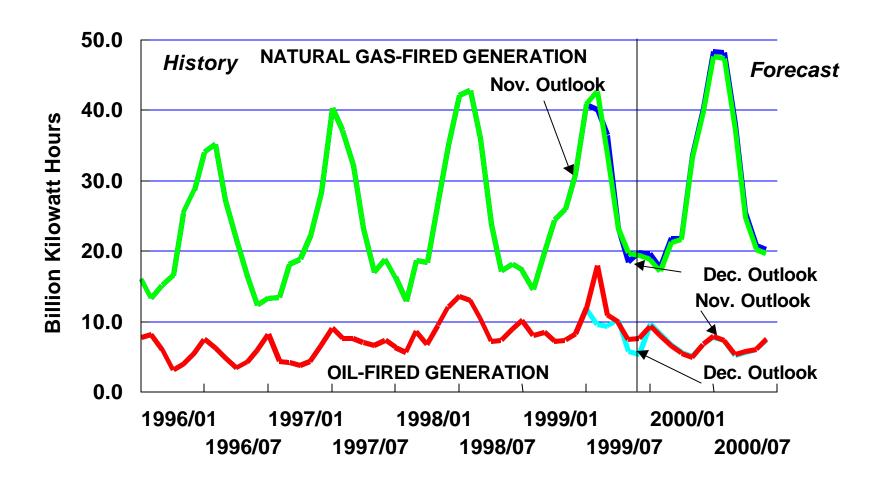




Table HL1. U.S. Energy Supply and Demand

		Year		Annua	Percentage	e Change	
	1997	1998	1999	2000	1997-1998	1998-1999	1999-2000
Real Gross Domestic Product (GDP)							
(billion chained 1992 dollars)	7488	7810	8112	8375	4.3	3.9	3.2
Imported Crude Oil Price ^a							
(nominal dollars per barrel)	18.50	12.12	17.32	22.36	-34.5	42.9	29.1
Petroleum Supply (million barrels per day)							
Crude Oil Production ^b	6.45	6.25	5.96	5.87	-3.1	-4.6	-1.5
Total Petroleum Net Imports							
(including SPR)	9.16	9.76	9.83	10.41	6.6	0.7	5.9
Energy Demand							
World Petroleum							
(million barrels per day)	73.0	73.8	74.8	76.2	1.1	1.4	1.9
Petroleum							
(million barrels per day)	18.62	18.92	19.43	19.46	1.6	2.7	0.2
Natural Gas							
(trillion cubic feet)	21.97	21.33	21.45	22.56	-2.9	0.6	5.2
Coal							
(million short tons)	1029	1044	1046	1090	1.5	0.2	4.2
Electricity (billion kilowatthours)				00.40			
Utility Sales ^c Nonutility Own Use ^d	3140	3240	3269	3343	3.2	0.9	2.3
	161 3301	164	166 2425	168 2512	1.9	1.2	1.2
Total	3301	3403	3435	3512	3.1	0.9	2.2
Total Energy Demand ^e	04.0	04.7	00.4	00.4	0.5	4.5	0.0
(quadrillion Btu)	94.2	94.7	96.1	98.1	0.5	1.5	2.0
Total Energy Demand per Dollar of GDP	40.50	40.40	44.05	44.74		0.0	4.0
(thousand Btu per 1992 Dollar)	12.59	12.13	11.85	11.71	-3.7	-2.3	-1.2
Renewable Energy as Percent of Total ^f	7.5	7.1	7.0	6.8			

 $^{^{\}rm a}{\rm Refers}$ to the refiner acquisition cost (RAC) of imported crude oil.

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 CONTROL1199.

bIncludes lease condensate.

^CTotal Demand includes estimated Independent Power Producer (IPP) coal consumption.

^dTotal 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.

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

^fThe 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)*.

⁹Renewable energy includes minor components of non-marketed renewable energy, which is renewable energy that is neither bought nor sold, either directly or indirectly, as inputs to marketed energy. The Energy Information Administration does not estimate or project total consumption of non-marketed renewable energy. SPR: Strategic Petroleum Reserve.

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

Table 1. U.S. Macroeconomic and Weather Assumptions

		1998				1999				2000				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Macroeconomic ^a															
Real Gross Domestic Product															
(billion chained 1992 dollars - SAAR)	7715	7756	7828	7941	8013	8050	8146	8241	8273	8338	8410	8481	7810	8112	8375
Percentage Change from Prior Year	4.7	4.0	3.9	4.6	3.9	3.8	4.1	3.8	3.2	3.6	3.2	2.9	4.3	3.9	3.2
Annualized Percent Change															
from Prior Quarter	6.5	2.1	3.7	5.8	3.6	1.9	4.7	4.7	1.5	3.2	3.4	3.4			
GDP Implicit Price Deflator															
(Index, 1992=1.000)	1.117	1.120	1.124	1.126	1.132	1.136	1.138	1.141	1.146	1.150	1.155	1.160	1.122	1.137	1.153
Percentage Change from Prior Year	1.3	1.1	1.2	1.1	1.3	1.4	1.2	1.3	1.3	1.3	1.5	1.6	1.2	1.3	1.4
Real Disposable Personal Income															
(billion chained 1992 Dollars - SAAR)	5515	5566	5627	5693	5751	5796	5833	5889	5953	6007	6054	6094	5600	5817	6027
Percentage Change from Prior Year	4.0	3.9	4.1	4.2	4.3	4.1	3.6	3.4	3.5	3.6	3.8	3.5	4.1	3.9	3.6
Manufacturing Production															
(Index, 1992=1.000)	1.338	1.347	1.348	1.364	1.369	1.383	1.394	1.414	1.412	1.419	1.430	1.443	1.349	1.390	1.426
Percentage Change from Prior Year	6.0	5.0	3.1	2.5	2.3	2.7	3.4	3.7	3.1	2.7	2.6	2.1	4.1	3.0	2.6
OECD Economic Growth (percent) b													2.3	2.6	2.7
Weather ^c															
Heating Degree-Days															
U.S	1984	481	42	1444	2154	490	82	1460	2264	522	85	1622	3951	4186	4494
New England	2768	770	104	2038	3039	786	106	2134		894	167	2240	5680	6065	6520
Middle Atlantic	2406	570	57	1779	2819	629	63	1864	2934	709	104	2004	4812	5375	5751
U.S. Gas-Weighted	2087	521	44	1533	2275	517	84	1553	2378	546	95	1714	4185	4429	4734
Cooling Degree-Days (U.S.)	29	386	903	93	35	354	847	84	31	344	783	74	1411	1320	1233

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

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 CONTROL1199.

^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. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

^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.

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

		1998				1999				2000				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Macroeconomic ^a															
Real Fixed Investment															
(billion chained 1992 dollars-SAAR)	1368	1409	1416	1463	1495	1519	1552	1582	1600	1608	1620	1639	1414	1537	1616
Real Exchange Rate															
(index)	1.143	1.162	1.183	1.120	1.134	1.170	1.165	1.140	1.131	1.125	1.140	1.162	1.152	1.152	1.139
Business Inventory Change															
(billion chained 1992 dollars-SAAR)	38.1	27.9	22.2	12.0	0.0	-8.3	0.9	-1.4	-6.3	-5.6	0.5	4.5	25.1	-2.2	-1.7
Producer Price Index															
(index, 1982=1.000)	1.252	1.249	1.243	1.232	1.228	1.245	1.267	1.286	1.296	1.297	1.297	1.296	1.244	1.257	1.297
Consumer Price Index															
(index, 1982-1984=1.000)	1.621	1.628	1.635	1.642	1.648	1.662	1.673	1.683	1.694	1.702	1.712	1.720	1.631	1.667	1.707
Petroleum Product Price Index															
(index, 1982=1.000)	0.541	0.536	0.503	0.473	0.446	0.591	0.684	0.737	0.806	0.774	0.739	0.709	0.513	0.614	0.757
Non-Farm Employment															
(millions)	124.8	125.5	126.1	126.9	127.7	128.2	128.9	129.5	129.9	130.4	130.8	131.3	125.8	128.6	130.6
Commercial Employment															
(millions)	85.6	86.3	87.0	87.7	88.5	89.2	89.8	90.4	90.8	91.1	91.6	92.2	86.6	89.5	91.4
Total Industrial Production							4 0 = 0		4.070	4 070	4 000	4 000			
(index, 1992=1.000)	1.304	1.313	1.316	1.323	1.327	1.340	1.352	1.3/1	1.370	1.378	1.388	1.399	1.314	1.347	1.384
Housing Stock (millions)	440.7	4440	4444	445.0	445.5	445.0	4400	440.7	447.0	447.0	4477	440.0	4440	440.4	447.5
(millions)	113.7	114.0	114.4	115.0	115.5	115.8	116.3	110.7	117.0	117.3	117.7	118.0	114.3	116.1	117.5
Miscellaneous															
Gas Weighted Industrial Production															
(index, 1992=1.000)	1.175	1.171	1.158	1.156	1.169	1.168	1.180	1.189	1.181	1.187	1.195	1.203	1.165	1.176	1.192
Vehicle Miles Traveled b															
(million miles/day)	6629	7424	7602	7032	6712	7569	7841	7309	6974	7725	7902	7427	7174	7361	7508
Vehicle Fuel Efficiency															
(index, 1997=1.0)	0.993	0.999	0.991	0.991	0.984	1.007	1.015	1.010	1.014	1.013	0.992	0.998	0.994	1.004	1.004
Real Vehicle Fuel Cost															
(cents per mile)	3.34	3.18	3.08	3.11	2.98	3.29	3.44	3.78	3.85	3.76	3.72	3.73	3.18	3.37	3.76
Air Travel Capacity															
(mill. available ton-miles/day)	423.5	439.1	443.0	439.5	430.8	452.2	466.0	468.4	464.6	465.1	482.2	471.6	436.3	454.5	470.9
Aircraft Utilization															
(mill. revenue ton-miles/day)	237.7	259.0	260.5	247.1	242.1	263.3	276.1	262.8	256.5	273.9	288.7	273.2	251.1	261.2	273.1
Airline Ticket Price Index															
(index, 1982-1984=1.000)	2.058	2.053	2.070	2.029	2.130	2.186	2.180	2.254	2.289	2.298	2.302	2.321	2.053	2.188	2.302
Raw Steel Production															
(millions tons)	28.75	27.87	26.57	24.40	25.11	26.27	26.26	26.68	26.46	26.33	26.11	26.64	107.28	104.32	105.54

^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.

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 CONTROL1199.

bIncludes all highway travel.

SAAR: Seasonally-adjusted annualized rate.

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

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

(Million Barrels per Day, Except OECD Commercial Stocks)

(Willion Barrelo per Ba	1998		liciola	1999	(0)			2000				Year			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Demand ^a				1											
OECD															
U.S. (50 States)	18 5	18.9	19.2	19.1	19.2	19.0	19.6	19.8	19.2	19.1	19.6	20.0	18.9	19.4	19.5
U.S. Territories		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Canada		1.8	1.9	1.9	1.9	1.8	2.0	2.0	1.9	1.9	2.0	2.0	1.9	1.9	1.9
Europe		14.2	14.6	15.2	15.2	13.8	14.4	15.4	15.2	14.2	14.8	15.5	14.7	14.7	14.9
Japan		5.0	5.2	5.7	6.2	5.0	5.2	5.7	6.2	5.1	5.3	5.8	5.5	5.5	5.6
Australia and New Zealand		1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total OECD		41.0	42.2	43.2	43.7	40.9	42.5	44.3	43.8	41.6	43.0	44.6	42.3	42.8	43.3
Non-OECD	72.0	41.0	72.2	-10.2	40.7	40.0	12.0	77.0	70.0	77.0	10.0	7 7.0	72.0	12.0	10.0
Former Soviet Union	4.5	4.2	4.2	4.2	4.3	4.0	4.1	4.2	4.4	4.2	4.2	4.2	4.2	4.2	4.2
Europe		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.5	1.5	1.6
China		3.9	3.9	3.9	4.1	4.1	4.1	4.1	4.3	4.3	4.3	4.3	3.9	4.1	4.3
Other Asia		8.6	8.6	8.8	8.8	8.8	8.7	9.0	9.2	9.2	8.9	9.3	8.7	8.8	9.1
Other Non-OECD		13.3	13.4	13.2	13.2	13.4	13.4	13.5	13.5	13.7	13.8	13.7	13.2	13.4	13.7
Total Non-OECD		31.5	31.4	31.5	32.0	31.9	31.8	32.3	33.0	33.0	32.7	33.1	31.5	32.0	32.9
Total World Demand		72.5	73.6	74.7	75.7	72.7	74.2	76.6	76.8	74.6	75.8	77.7	73.8	74.8	76.2
Supply ^b								. 0.0	. 0.0		. 0.0				. 0.2
OECD															
U.S. (50 States)	9.5	9.4	9.0	9.1	8.9	9.0	9.0	9.1	9.0	8.9	8.9	8.9	9.3	9.0	8.9
Canada		2.6	2.8	2.7	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.6	2.7
North Sea ^c		6.2	5.9	6.3	6.3	6.0	6.2	6.4	6.6	6.4	6.6	6.8	6.2	6.2	6.6
Other OECD		1.6	1.6	1.4	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.5	1.6
Total OECD		19.9	19.2	19.6	19.3	19.1	19.4	19.7	19.8	19.6	19.8	20.0	19.7	19.4	19.8
Non-OECD	20.2	13.3	13.2	13.0	13.3	13.1	15.4	10.1	13.0	13.0	13.0	20.0	13.7	13.4	13.0
OPEC	30.9	30.8	30.1	30.0	30.3	28.9	29.2	29.0	29.5	30.7	31.1	31.2	30.4	29.3	30.6
Former Soviet Union		7.2	7.2	7.3	7.2	7.3	7.4	7.4	7.4	7.3	7.3	7.4	7.2	7.3	7.3
China	-	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.2	3.2	3.2
Mexico		3.6	3.5	3.5	3.6	3.4	3.3	3.4	3.4	3.5	3.6	3.6	3.5	3.4	3.5
Other Non-OECD		10.8	10.8	11.0	11.1	10.9	11.0	11.1	11.1	11.2	11.2	11.4	10.8	11.0	11.2
Total Non-OECD		55.5	54.7	54.9	55.4	53.7	54.1	54.0	54.6	55.8	56.5	56.8	55.2	54.3	55.9
Total World Supply		75.3	74.0	74.5	74.7	72.7	73.5	73.7	74.4	75.4	76.3	76.8	74.9	73.6	75.7
Stock Changes							. 0.0				. 0.0	. 0.0		. 0.0	
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR)	-0.3	-0.7	0.0	0.1	0.3	-0.3	0.3	0.8	0.0	-0.6	-0.3	0.5	-0.2	0.3	-0.1
Other		-2.1	-0.4	0.1	0.6	0.3	0.4	2.1	2.4	-0.3	-0.2	0.4	-0.9	0.9	0.6
Total Stock Withdrawals		-2.8	-0.4	0.2	1.0	0.0	0.7	2.9	2.4	-0.8	-0.5	0.9	-1.1	1.2	0.5
OECD Comm. Stocks, End (bill. bbls.)		2.9	2.9	2.8	2.8	2.8	2.8	2.6	2.5	2.6	2.6	2.6	2.8	2.6	2.6
Non-OPEC Supply		44.6	43.9	44.5	44.4	43.8	44.3	44.7	44.8	44.7	45.2	45.6	44.5	44.3	45.1
Net Exports from Former Soviet Union		3.0	3.1	3.1	2.9	3.3	3.4	3.1	3.0	3.1	3.1	3.2	3.0	3.2	3.1
po.too omior cortot critori		7.10	- 11	- 111		5.0	J. 1	<i>U. 1</i>	5.0	<u> </u>	<i>U.</i> 1	~. <u>~</u>		~. <u>-</u>	<u> </u>

^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. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

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

SPR: Strategic Petroleum Reserve

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

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

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

Table 4. U. S. Energy Prices

(Nominal Dollars)

(Norminal Dollars)	1998				1999				2000				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
							•	•		•		•			
Imported Crude Oil a															
(dollars per barrel)	13.44	12.40	11.87	10.86	10.92	15.44	19.64	23.19	23.75	22.75	22.00	21.00	12.12	17.32	22.36
Natural Gas Wellhead															
(dollars per thousand cubic feet)	2.02	2.07	1.92	1.84	1.74	2.04	2.28	2.38	2.28	2.19	2.21	2.42	1.96	2.11	2.28
Petroleum Products															
Gasoline Retail ^b (dollars per gallon)															
All Grades	1.10	1.10	1.07	1.03	0.99	1.17	1.25	1.30	1.35	1.37	1.35	1.30	1.07	1.18	1.34
Regular Unleaded			1.03	0.99	0.95	1.13	1.21	1.26	1.30	1.33	1.32	1.26	1.03	1.14	1.30
No. 2 Diesel Oil, Retail (dollars per gallon)	1 00	1.05	1.02	1.00	0.97	1.08	1.18	1.28	1.29	1.27	1.25	1.26	1.04	1.13	1.27
(dollars per gallori)	1.00	1.03	1.02	1.00	0.51	1.00	1.10	1.20	1.29	1.27	1.20	1.20	1.04	1.13	1.27
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	0.47	0.43	0.39	0.38	0.36	0.44	0.56	0.68	0.71	0.69	0.67	0.68	0.42	0.52	0.69
No. 2 Heating Oil Potail															
No. 2 Heating Oil, Retail (dollars per gallon)	0.91	0.85	0.77	0.79	0.80	0.82	0.86	1.04	1.12	1.09	1.04	1.08	0.85	0.88	1.09
(11 11 11 11 11 11 11 11 11 11 11 11 11															
No. 6 Residual Fuel Oil, Retail ^c															
(dollars per barrel)	13.58	13.27	12.32	11.77	11.28	14.06	17.73	22.83	24.09	21.45	20.35	21.02	12.73	16.31	21.83
Electric Utility Fuels															
Coal															
(dollars per million Btu)	1.26	1.26	1.25	1.23	1.24	1.23	1.22	1.23	1.23	1.23	1.21	1.21	1.25	1.23	1.22
d															
Heavy Fuel Oil ^d (dollars per million Btu)	2 12	2 17	2.07	1.93	1 72	2.26	2.86	3.61	3.80	3.48	3.32	2 12	2.07	2.57	3.53
(dollars per million blu)	2.12	2.17	2.07	1.33	1.72	2.20	2.00	3.01	3.00	3.40	3.32	3.43	2.07	2.57	3.00
Natural Gas															
(dollars per million Btu)	2.61	2.46	2.26	2.31	2.19	2.42	2.70	2.95	2.98	2.76	2.75	3.02	2.38	2.59	2.84
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	6.38	7.33	8.84	6.64	6.09	6.84	8.66	7.11	6.57	7.04	8.87	7.21	6.82	6.70	7.00
Electricity	7.05	0.40	0.50	0.07	7 70	0.00	0.40	7.00	7.50	0.00	0.00	7.00	0.00	0.44	7.00
(cents per kilowatthour)	7.95	8.43	8.53	8.07	7.79	8.28	8.40	7.90	7.58	8.00	8.28	7.82	8.26	8.11	7.93

aRefiner acquisition cost (RAC) of imported crude oil.

^bAverage self-service cash prices.

^cAverage for all sulfur contents.

 $^{^{\}rm d}$ Includes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Data are estimated for the third quarter of 1999. Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: Petroleum Marketing

Monthly, DOE/EIA-0380; Natural Gas Monthly, DOE/EIA-0130; Monthly Energy Review, DOE/EIA-0035; Electric Power Monthly, DOE/EIA-0226.

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

(Million Barrels per Day, Except Closing Stocks)

(ivillier: Barrele per l	1998 1999					2000				Year					
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Supply	1									ı					
Crude Oil Supply															
Domestic Production a	6.47	6.37	6.07	6.11	6.00	5.95	5.87	6.01	5.95	5.87	5.83	5.83	6.25	5.96	5.87
Alaska	1.23	1.17	1.13	1.17	1.13	1.04	0.98	1.05	0.99	0.93	0.93	0.96	1.17	1.05	0.95
Lower 48	5.25	5.20	4.94	4.93	4.86	4.91	4.89	4.96	4.96	4.94	4.90	4.87	5.08	4.91	4.92
Net Imports (including SPR) b	8.00	8.80	9.00	8.57	8.40	8.69	8.69	8.48	8.56	9.17	9.42	8.97	8.60	8.57	9.03
rtot importo (motdanig or rt)										•					
Other SPR Supply	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.05	0.00
SPR Stock Withdrawn or Added (-)	0.00	0.00	0.00	-0.09	-0.01	-0.03	-0.01	0.06	0.00	0.00	0.00	0.00	-0.02	0.00	0.00
Other Stock Withdrawn or Added (-)	-0.33	0.02	0.24	-0.15	-0.24	0.15	0.31	0.02	-0.20	-0.06	0.08	0.05	-0.05	0.06	-0.03
Product Supplied and Losses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaccounted-for Crude Oil	0.20	0.11	0.07	0.09	0.26	0.00	0.37	0.32	0.20	0.21	0.22	0.21	0.11	0.24	0.21
	0.20	0	0.07	0.00	0.20	0.00	0.07	0.02	0.20	0.2 /	0.22	0.2 /	0	0.2 1	0.2 1
Total Crude Oil Supply	14.34	15.30	15.38	14.53	14.41	14.99	15.21	14.88	14.51	15.20	15.54	15.06	14.89	14.87	15.08
Other Supply															
NGL Production	1.84	1.82	1.67	1.71	1.72	1.79	1.88	1.79	1.78	1.78	1.77	1.77	1.76	1.80	1.77
Other Hydrocarbon and Alcohol Inputs	0.39	0.37	0.37	0.39	0.37	0.37	0.38	0.38	0.37	0.35	0.36	0.38	0.38	0.37	0.37
Crude Oil Product Supplied	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Processing Gain	0.84	0.88	0.89	0.00	0.85	0.87	0.00	0.00	0.86	0.00	0.00	0.89	0.89	0.89	0.89
Net Product Imports ^C	1.03	1.22	1.18	1.24	1.29	1.33	1.25	1.19	1.40	1.37	1.36	1.42	1.17	1.26	1.38
					_		_	_		_				_	
Product Stock Withdrawn or Added (-) d.	0.03	-0.72	-0.26	0.30	0.59	-0.37	0.03	0.71	0.24		-0.34		-0.17		-0.04
Total Supply	18.46	18.86	19.24	19.10	19.23	18.98	19.66	19.85	19.17	19.07	19.61	19.98	18.92	19.43	19.46
Demand Mater Consilies							o ==	0 = 4							
Motor Gasoline	7.78	8.37	8.52	8.33	7.95	8.47	8.57	8.51	8.01	8.59	8.85	8.74	8.25	8.38	8.55
Jet Fuel	1.58	1.61	1.61	1.68	1.70	1.63	1.66	1.74	1.72	1.65	1.71	1.74	1.62	1.68	1.71
Distillate Fuel Oil	3.59	3.43	3.37	3.45	3.71	3.35	3.40	3.92	3.82	3.48	3.43	3.67	3.46	3.59	3.60
Residual Fuel Oil	0.85	0.88	0.99	0.83	0.97	0.78	0.86	0.81	0.84	0.68	0.67	0.79	0.89	0.86	0.74
Other Oils ^e	4.65	4.57	4.75	4.80	4.90	4.76	5.15	4.88	4.76	4.67	4.96	5.04	4.69	4.92	4.86
Total Demand	18.46	18.86	19.24	19.10	19.23	18.99	19.64	19.85	19.17	19.07	19.61	19.98	18.92	19.43	19. 4 6
Total Petroleum Net Imports	9.02	10.02	10.19	9.82	9.70	10.02	9.94	9.67	9.95	10.54	10.77	10.39	9.76	9.83	10.41
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	334	332	310	324	345	331	303	301	319	325	317	312	324	301	312
Total Motor Gasoline	216	222	207	216	215	216	204	194	208	208	203	203	216	194	203
Finished Motor Gasoline	167	177	164	172	167	173	159	154	163	167	162	161	172	154	161
Blending Components	49	45	43	44	48	44	45	40	45	41	41	41	44	40	41
Jet Fuel	43	44	46	45	41	44	48	41	39	40	43	43	45	41	43
Distillate Fuel Oil	125	136	153	156	125	133	145	129	98	104	120	125	156	129	125
Residual Fuel Oil	41	40	40	45	40	42	39	39	37	40	41	44	45	39	44
Other Oils ^e	265	313	334	291	278	297	294	262	263	300	315	266	291	262	266
Total Stocks (excluding SPR)	1024	1087	1089	1076	1044	1064	1033	966	962	1016		992	1076	966	992
Crude Oil in SPR	563	563	563	571	572	575	575	570	570	570	570	570	571	570	570
Total Stocks (including SPR)	1587	1651	1653	1647	1616	1639	1608	1537	1533	1586		1562	1647		1562
	.507		. 555			. 555	,000	,007	, 555	,000	1010	1002		,007	1002

^aIncludes lease condensate.

Notes: Minor discrepancies with other EIA published historical data are due to rounding, with the following exception: recent petroleum demand and supply data displayed here reflect the incorporation of resubmissions of the data as reported in EIA's *Petroleum Supply Monthly*, TableC1. 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.

^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

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

		+ 10)% Prices	+ 109	% Weather ^e
Demand Sector	+1% GDP	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%

^aPercent change in demand quantity resulting from specified percent changes in model inputs.

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

(Million Barrels per Day)

		Difference Total Uncertainty Price Imp				
High Price Case	Low Price Case	Total	Uncertainty	Price Impact		
6.25	5.61	0.64	0.09	0.56		
5.29	4.67	0.62	0.07	0.54		
0.97	0.94	0.03	0.01	0.01		
	6.25 5.29	Price Case Price Case 6.25 5.61 5.29 4.67	Price Case Price Case Total 6.25 5.61 0.64 5.29 4.67 0.62	Price Case Price Case Total Uncertainty 6.25 5.61 0.64 0.09 5.29 4.67 0.62 0.07		

Note: Components provided are for the fourth quarter 2000. Totals may not add to sum of components due to independent rounding. Source: Energy Information Administration, Office of Oil and Gas, Reserves and Natural Gas Division.

^bShort-Term Integrated Forecasting System.

^cRefiner acquisitions cost of imported crude oil.

^dAverage unit value of marketed natural gas production reported by States.

eRefers to percent changes in degree-days.

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

(Trillion Cubic Feet)

(Thillon Cubic Feet)															
		1998				1999				2000				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Supply															
Total Dry Gas Production	. 4.72	4.71	4.72	4.71	4.61	4.63	4.71	4.71	4.77	4.72	4.74	4.74	18.86	18.67	18.97
Net Imports	. 0.75	0.71	0.77	0.76	0.83	0.80	0.84	0.85	0.89	0.86	0.92	0.92	2.99	3.32	3.58
Supplemental Gaseous Fuels	. 0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.12	0.12	0.13
Total New Supply	. 5.50	5.45	5.52	5.50	5.48	5.46	5.58	5.59	5.69	5.61	5.69	5.69	21.97	22.11	22.68
Total Underground Storage															
Opening	. 6.52	5.53	6.45	7.29	7.04	5.79	6.50	7.29	6.86	5.35	6.18	7.10	6.52	7.04	6.86
Closing	. 5.53	6.45	7.29	7.04	5.79	6.50	7.29	6.86	5.35	6.18	7.10	6.68	7.04	6.86	6.68
Net Withdrawals	. 0.99	-0.92	-0.84	0.25	1.25	-0.71	-0.79	0.43	1.51	-0.83	-0.92	0.42	-0.52	0.18	0.18
Total Supply	. 6.50	4.53	4.68	5.75	6.73	4.75	4.79	6.02	7.20	4.77	4.77	6.11	21.45	22.29	22.86
Balancing Item ^a	. 0.15	0.19	-0.04	-0.42	0.04	0.03	-0.25	-0.66	0.03	0.20	-0.08	-0.45	-0.12	-0.84	-0.31
Total Primary Supply	. 6.65	4.71	4.64	5.33	6.77	4.77	4.54	5.37	7.23	4.97	4.69	5.66	21.33	21.45	22.56
Demand															
Lease and Plant Fuel	. 0.31	0.31	0.31	0.31	0.30	0.30	0.31	0.31	0.31	0.31	0.31	0.31	1.24	1.23	1.24
Pipeline Use		0.16	0.16	0.18	0.23	0.16	0.16	0.19	0.23	0.17	0.16	0.19	0.73	0.74	0.75
Residential	. 2.13	0.78	0.37	1.20	2.24	0.81	0.37	1.22	2.40	0.83	0.37	1.38	4.48	4.64	4.99
Commercial		0.57	0.44	0.80	1.25	0.60	0.43	0.80	1.38	0.63	0.45	0.90	3.02	3.08	3.36
Industrial (Incl. Cogenerators)	. 2.23	1.99	2.03	2.17	2.16	2.00	1.99	2.15	2.24	1.99	1.94	2.13	8.42	8.31	8.30
Cogenerators	. 0.51	0.49	0.54	0.60	0.53	0.50	0.55	0.61	0.54	0.51	0.56	0.63	2.14	2.19	2.23
Electricity Production															
Electric Utilities		0.86	1.29	0.61	0.54	0.85	1.24	0.65	0.62	1.00	1.41	0.70	3.26	3.27	3.74
Nonutilities (Excl. Cogen.) b	. 0.04	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.05	0.04	0.05	0.05	0.18	0.18	0.19
Total Demand	. 6.65	4.71	4.64	5.33	6.77	4.77	4.54	5.37	7.23	4.97	4.69	5.66	21.33	21.45	22.56

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

(Million Short Tons)

		1998	•	•		1999	•	•		2000	•			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1998	1999	2000
Supply		•			•	•	•	•		•					
Production	281.6	275.4	278.6	282.6	282.3	263.3	272.4	286.0	287.3	279.9	275.9	291.0	1118.1	1104.1	1134.0
Appalachia	119.5	114.0	113.2	113.6	113.9	102.7	108.5	117.9	118.5	116.9	107.6	118.0	460.4	443.0	461.0
Interior	43.1	42.4	41.5	41.4	40.1	40.8	38.8	41.4	40.5	37.3	37.5	40.2	168.4	161.2	155.5
Western	119.0	119.0	123.8	127.6	128.2	119.8	125.1	126.8	128.3	125.7	130.8	132.7	489.4	499.9	517.5
Primary Stock Levels ^a															
Opening	34.0	41.0	38.3	34.2	36.1	42.4	41.5	35.1	34.4	41.3	41.9	35.5	34.0	36.1	34.4
Closing	41.0	38.3	34.2	36.1	42.4	41.5	35.1	34.4	41.3	41.9	35.5	34.6	36.1	34.4	34.6
Net Withdrawals	-7.0	2.7	4.2	-2.0	-6.2	8.0	6.5	0.7	-6.9	-0.6	6.4	0.9	-2.2	1.8	-0.3
Imports	1.8	2.2	2.1	2.5	2.2	2.1	2.4	2.3	2.5	2.5	2.5	2.6	8.7	9.0	10.2
Exports		20.7	19.9	18.8	13.0	14.4	16.1	17.8	15.4	15.6	15.9	15.8	78.0	61.2	62.7
Total Net Domestic Supply	257.8	259.5	265.0	264.4	265.4	251.8	265.2	271.3	267.5	266.2	268.9	278.6	1046.6	1053.7	1081.3
Secondary Stock Levels b															
Opening	106.4	114.5	124.3	111.8	129.5	144.2	152.9	137.7	151.0	150.7	162.9	146.0	106.4	129.5	151.0
Closing								151.0		162.9	146.0		129.5	151.0	155.3
Net Withdrawals		-9.8	12.5	-17.6		-8.7	15.2	-13.3	0.3	-12.2	16.8	-9.3	-23.1	-21.6	-4.3
Waste Coal Supplied to IPPs c		2.4	2.4	2.3	2.3	2.4	2.7	2.9	3.2	3.2	3.2	3.2	9.5	10.3	12.7
Total Supply	252.0	252.2	279.8	249.0	252.9	245.5	283.1	260.9	271.1	257.2	288.9	272.5	1033.0	1042.4	1089.7
Demand															
Coke Plants	6.7	7.2	7.3	7.0	6.8	7.1	6.8	7.1	7.1	6.9	6.8	7.0	28.2	27.8	27.8
Electricity Production															
		218.4								219.6		-	910.9	897.1	932.1
Nonutilities (Excl. Cogen.) d	6.4	6.5	7.8	8.4	8.8	10.7	12.7	12.9	13.1	12.8	13.5	13.5	29.1	45.1	52.9
Retail and General Industry ^e		18.3	17.8	19.5	19.4	17.7	18.0	20.6	20.5	17.9	17.9	20.6	75.7	75.7	77.0
Total Demand	253.6	250.4	285.2	254.7	252.2	250.2	282.3	260.9	271.1	257.2	288.9	272.5	1043.9	1045.6	1089.7
Discrepancy f	-1.6	1.7	-5.3	-5.7	0.7	-4.7	0.7	0.0	0.0	0.0	0.0	0.0	-10.9	-3.2	0.0

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

^bSecondary stocks are held by users. It includes an estimate of stocks held at utility plants sold to nonutility generators.

^CEstimated independent power producers (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes, 1.2 million tons in 1999 and 3.1 million tons in 2000.

^dEstimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA). Quarterly coal consumption estimates for 1998 and projections for 1999 and 2000 are based on (1) estimated consumption by utility power plants sold to nonutility generators during 1998 and 1999, and (2) annual coal-fired generation at nonutilities from Form EIA-867 (Annual Nonutility Power Producer Report).

eSynfuels plant demand in 1993 was 1.7 million tons per quarter and is assumed to remain at that level.

^fTotal Demand includes estimated IPP consumption.

⁹The discrepancy reflects an unaccounted-for shipper and receiver reporting difference, assumed to be zero in the forecast period.

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

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

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

(Billion Kilowatt-hours)

5 431.7 7 26.9 3 52.0 3 181.2 2 83.4 0 1.6 0 776.8 1 21.3 6 4.0 1 50.9	23.0 81.3 166.1 79.8 1.0	481.9 31.0 117.5 195.0 71.0 0.5 896.9	432.6 21.5 61.7 172.9 63.8 0.6 753.2	458.3 24.6 59.4 177.1 79.4 0.5 799.5	17.7 96.0 160.8 79.9 0.5	495.7 20.5 134.7 188.8 66.0 0.6	457.8 19.2 66.9 170.1 64.1	1998 1807.5 110.2 309.2 673.7 304.4	102.4 312.5 715.3	1849.0 82.0 357.1 696.8
7 26.9 3 52.0 3 181.2 2 83.4 0 1.6 0 776.8 1 21.3 6 4.0 1 50.9	23.0 81.3 166.1 79.8 1.0 777.7	31.0 117.5 195.0 71.0 0.5 896.9	21.5 61.7 172.9 63.8 0.6	24.6 59.4 177.1 79.4 0.5	17.7 96.0 160.8 79.9 0.5	20.5 134.7 188.8 66.0	19.2 66.9 170.1 64.1	110.2 309.2 673.7	102.4 312.5 715.3	82.0 357.1
7 26.9 3 52.0 3 181.2 2 83.4 0 1.6 0 776.8 1 21.3 6 4.0 1 50.9	23.0 81.3 166.1 79.8 1.0 777.7	31.0 117.5 195.0 71.0 0.5 896.9	21.5 61.7 172.9 63.8 0.6	24.6 59.4 177.1 79.4 0.5	17.7 96.0 160.8 79.9 0.5	20.5 134.7 188.8 66.0	19.2 66.9 170.1 64.1	110.2 309.2 673.7	102.4 312.5 715.3	82.0 357.1
7 26.9 3 52.0 3 181.2 2 83.4 0 1.6 0 776.8 1 21.3 6 4.0 1 50.9	23.0 81.3 166.1 79.8 1.0 777.7	31.0 117.5 195.0 71.0 0.5 896.9	21.5 61.7 172.9 63.8 0.6	24.6 59.4 177.1 79.4 0.5	17.7 96.0 160.8 79.9 0.5	20.5 134.7 188.8 66.0	19.2 66.9 170.1 64.1	110.2 309.2 673.7	102.4 312.5 715.3	82.0 357.1
3 52.0 3 181.2 2 83.4 1.6 0 776.8 1 21.3 6 4.0 1 50.9	81.3 166.1 79.8 1.0 777.7	117.5 195.0 71.0 0.5 896.9	61.7 172.9 63.8 0.6	59.4 177.1 79.4 0.5	96.0 160.8 79.9 0.5	134.7 188.8 66.0	66.9 170.1 64.1	309.2 673.7	312.5 715.3	357.1
.3 181.2 2 83.4 0 1.6 .0 776.8 1 21.3 6 4.0 1 50.9	166.1 79.8 1.0 777.7 24.8	195.0 71.0 0.5 896.9	172.9 63.8 0.6	177.1 79.4 0.5	160.8 79.9 0.5	188.8 66.0	170.1 64.1	673.7	715.3	
2 83.4 1.6 .0 776.8 1 21.3 5 4.0 1 50.9	79.8 1.0 777.7 24.8	71.0 0.5 896.9	63.8 0.6	79.4 0.5	79.9 0.5	66.0	64.1			696.8
1.6 .0 776.8 1 21.3 3 4.0 1 50.9	1.0 777.7 24.8	0.5 896.9	0.6	0.5	0.5			304.4		
.0 776.8 1 21.3 6 4.0 1 50.9	24.8	896.9				0.6	0.7		298.0	289.5
1 21.3 5 4.0 1 50.9	24.8		753.2	799.5	792.0		0.7	7.2	3.7	2.3
4.0 1 50.9		20.6				906.3	778.8	3212.2	3204.6	3276.6
4.0 1 50.9		20.6								
1 50.9	3.9	23.0	31.0	29.7	28.8	31.0	32.1	73.9	106.7	121.6
		4.2	4.7	4.1	4.0	4.3	4.8	16.4	16.8	17.2
2.0	48.7	53.0	59.4	51.9	49.8	54.1	60.6	207.6	212.0	216.5
2.9	2.8	3.1	3.4	2.9	2.7	3.0	3.3	12.5	12.2	11.9
4.3	4.1	4.5	5.0	4.5	4.3	4.7	5.2	17.4	18.0	18.7
17.8	17.0	18.6	21.7	18.6	17.8	19.7	22.0	50.7	75.1	78.1
5 101.3	101.4	113.0	125.2	111.7	107.3	116.8	128.1	378.6	440.8	464.0
5 878.0	879.1	1010.0	878.4	911.2	899.3	1023.1	906.9	3590.7	3645.4	3740.5
2.0	7.6	9.8	7.6	6.0	6.1	8.9	6.4	28.8	27.0	27.4
6 880.0	886.7	1019.7	886.0	917.2	905.5	1031.9	913.3	3619.5	3672.4	3767.9
3 55.7	73.9	46.9	60.5	49.0	76.6	66.0	64.6	216.1	237.1	256.2
9 286 (249.2	350.5	255 4	305.3	2596	341 1	269.0	1127.7	1141 0	11749
	-	278.5				-		968.5		1000.8
6 248.5								1040.0		
1 23.9	24.4	27.6	25.9	26.4	25.7	28.6	26.6	103.5	101.8	107.4
.6 784.4		931.3	779.0	-	-	923.9				
-	-			_						168.5
	63.2	71.5	78.7	71.3	68.6	74.7	80.9	215.0	274.9	295.5
		3.4 824.3 812.7	3.4 824.3 812.7 972.8	3.4 824.3 812.7 972.8 825.4	3.4 824.3 812.7 972.8 825.4 868.2	3.4 824.3 812.7 972.8 825.4 868.2 828.9	3.4 824.3 812.7 972.8 825.4 868.2 828.9 966.0	3.4 824.3 812.7 972.8 825.4 868.2 828.9 966.0 848.7	3.4 824.3 812.7 972.8 825.4 868.2 828.9 966.0 848.7 3403.4	3.4 824.3 812.7 972.8 825.4 868.2 828.9 966.0 848.7 3403.4 3435.2

 $^{^{\}rm a}\mbox{"Other"}$ 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 1998 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 report: *Electric Power Monthly*, DOE/EIA-0226. Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels.

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

		Year			Annual	Percentage	Change
	1997	1998	1999	2000	1997-1998	1998-1999	1999-2000
Electric Utilities		•		•	•	•	
Hydroelectric Power ^a	3.521	3.178	3.162	3.022	-9.7	-0.5	-4.4
Geothermal, Solar and Wind Energy b	0.115	0.109	0.036	0.006	-5.2	-67.0	-83.3
Biofuels ^c	0.020	0.021	0.021	0.021	5.0	0.0	0.0
Total	3.656	3.307	3.218	3.049	-9.5	-2.7	-5.3
Nonutility Power Generators							
Hydroelectric Power a	0.185	0.179	0.186	0.192	-3.2	3.9	3.2
Geothermal, Solar and Wind Energy b	0.235	0.253	0.274	0.343	7.7	8.3	25.2
Biofuels ^c	0.576	0.584	0.580	0.578	1.4	-0.7	-0.3
Total	0.996	1.016	1.040	1.113	2.0	2.4	7.0
Total Power Generation	4.652	4.323	4.259	4.162	-7.1	-1.5	-2.3
Other Sectors d							
Residential and Commercial e	0.553	0.568	0.574	0.583	2.7	1.1	1.6
Industrial ^f	1.498	1.515	1.542	1.569	1.1	1.8	1.8
Transportation ^g	0.087	0.095	0.094	0.095	9.2	-1.1	1.1
Total	2.138	2.178	2.210	2.247	1.9	1.5	1.7
Net Imported Electricity h	0.259	0.233	0.219	0.222	-10.0	-6.0	1.4
Total Renewable Energy Demand	7.048	6.734	6.688	6.631	-4.5	-0.7	-0.9

^aConventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.

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.

^bAlso includes photovoltaic and solar thermal energy.

^CBiofuels are fuelwood, wood byproducts, waste wood, municipal solid waste, manufacturing process waste, and alcohol fuels.

^dRenewable energy includes minor components of non-marketed renewable energy, which is renewable energy that is neither bought nor sold, either directly or indirectly as inputs to marketed energy. The Energy Information Administration does not estimate or project total consumption of non-marketed renewable energy.

encludes biofuels and solar energy consumed in the residential and commercial sectors.

fonsists primarily of biofuels for use other than in electricity cogeneration.

^gEthanol blended into gasoline.

^hRepresents 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).

Table A1. Annual U.S. Energy Supply and Demand

								Year							
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Real Gross Domestic Product (GDP)															
(billion chained 1992 dollars)	5488	5649	5822	6024	6129	6116	6319	6469	6729	6912	7165	7488	7810	8112	8375
Imported Crude Oil Price ^a															
(nominal dollars per barrel)	14.00	18.13	14.57	18.08	21.75	18.70	18.20	16.14	15.52	17.14	20.61	18.50	12.12	17.32	22.36
(nominal dollars per barrer)	14.00	10.13	14.37	10.00	21.73	10.70	10.20	10.14	13.32	17.14	20.01	10.50	12.12	17.32	22.30
Petroleum Supply															
Crude Oil Production ^b															
(million barrels per day)	8.68	8.35	8.14	7.61	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.96	5.87
Total Petroleum Net Imports (including SPR)															
(million barrels per day)	5.44	5.91	6.59	7.20	7.16	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.83	10.41
Energy Demand															
World Petroleum															
(million barrels per day)	61.8	63.1	64.9	65.9	66.0	66.6	66.8	67.0	68.3	69.9	71.3	73.0	73.8	74.9	76.2
U.S. Petroleum															
(million barrels per day)	16.33	16.72	17.34	17.37	17.04	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.43	19.46
Natural Gas															
(trillion cubic feet)	16.22	17.21	18.03	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.97	21.33	21.45	22.56
Coal															
(million short tons)	797	830	877	891	897	898	907	943	950	962	1006	1029	1044	1046	1090
Electricity (billion kilowatthours)															
Utility Sales ^c	2369	2457	2578	2647	2713	2762	2763	2861	2935	3013	3098	3140	3240	3269	3343
Nonutility Own Use ^d	NA	NA	NA	97	113	122	137	138	150	158	158	161	164	166	168
Total	2369	2457	2578	2744	2826	2884	2901	2999	3085	3171	3256	3301	3403	3435	3512
Total Energy Demand ^e															
(quadrillion Btu)	NA	NA	NA	NA	84.2	84.3	85.6	87.4	89.3	91.0	94.0	94.2	94.7	96.1	98.1
Total Energy Demand per Dollar of GDP															
(thousand Btu per 1992 Dollar)	NA	NA	NA	NA	13.73	13.78	13.55	13.51	13.27	13.16	13.11	12.59	12.13	11.85	11.71
a															

^aRefers to the imported cost of crude oil to U.S. refiners.

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.

Dincludes lease condensate

^cTotal 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.

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

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

Sources: Historical data: Latest data available from Bureau of Economic Analysis; Energy Information Administration; latest data available from EIA databases supporting the follow DOE/EIA-0109; Petroleum Supply Annual, DOE/EIA-0340/2; Natural Gas Monthly, DOE/EIA-0130; Electric Power Monthly, DOE/EIA-0226; Quarterly Coal Report, DOE/EIA-0121; Intended DOE/EIA-520, and Weekly Petroleum Status Report DOE/EIA-0208. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL1199.	ing reports: Petroleum Supply Monthly, national Petroleum Statistics Report

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

								Year							
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Macroeconomic															
Real Gross Domestic Product															
(billion chained 1992 dollars)	5488	5649	5822	6024	6129	6116	6319	6469	6729	6912	7165	7488	7810	8112	8375
GDP Implicit Price Deflator	3400	3043	3022	0024	0123	0110	0313	0403	0123	0312	7 103	7-100	7010	0112	0373
(Index, 1992=1.000)	0.806	0.831	0.878	0.911	0.947	0.979	1.000	1.027	1.048	1.071	1.091	1.109	1.122	1.137	1.153
Real Disposable Personal Income	0.000	0.051	0.070	0.311	0.341	0.373	1.000	1.021	1.040	1.07 1	1.031	1.103	1.122	1.137	1.100
(billion chained 1992 Dollars)	4077	4155	4358	4466	4564	4596	4754	4804	4927	5059	5191	5381	5600	5817	6027
Manufacturing Production	4011	4133	4000	4400	4304	4030	7/ 57	4004	4321	3033	3131	JJ0 I	3000	3017	0027
(Index, 1987=1.000)	0.881	0.928	0.971	0.990	0.985	0.962	1.000	1.037	1.099	1.159	1.214	1.296	1.349	1.390	1. 4 26
Real Fixed Investment	0.001	0.320	0.37 1	0.550	0.303	0.902	1.000	1.037	1.033	1.133	1.214	1.290	1.343	1.390	1.420
(billion chained 1992 dollars)	805	799	852	875	859	800	852	921	1005	1066	1165	1264	1414	1537	1616
Real Exchange Rate	003	199	032	0/3	033	000	032	321	1003	1000	1103	1204	1414	1007	1010
(Index, 1990=1.000)	NA	NA	NA	NA	0.999	1.007	1.013	1.057	1.034	0.961	1.017	1.105	1.152	1.152	1.139
Business Inventory Change	11/1	11/1	11/1	IVA	0.333	1.007	1.013	1.037	1.054	0.301	1.017	1.105	1.132	1.102	1.133
(billion chained 1992 dollars)	-4.2	5.1	17.0	14.2	8.9	-6.8	-4.7	3.7	12.1	14.1	10.1	22.2	25.1	-2.2	-1.7
Producer Price Index	-4.2	J. 1	17.0	17.2	0.5	-0.0	-4.1	3.7	12.1	14.1	10.1	22.2	23.1	-2.2	-1.7
(index, 1982=1.000)	1.002	1.028	1.069	1.122	1.163	1.165	1.172	1.189	1.205	1.248	1.277	1.276	1.244	1.257	1.297
Consumer Price Index	1.002	1.020	1.005	1.122	1.103	1.103	1.172	1.103	1.203	1.240	1.277	1.270	1.277	1.201	1.201
(index, 1982-1984=1.000)	1.097	1.137	1.184	1.240	1.308	1.363	1.404	1.446	1.483	1.525	1.570	1.606	1.631	1.667	1.707
Petroleum Product Price Index	1.007	1.107	11104	1.2-10	1.000	1.000	11.70	1.440	1100	1.020	1.070	1.000	1.001	1.001	1.707
(index, 1982=1.000)	0.532	0.568	0.539	0.612	0.748	0.671	0.647	0.620	0.591	0.608	0.701	0.680	0.513	0.614	0.757
Non-Farm Employment	0.002	0.000	0.000	0.0.2	0 10	0.01	0.0	0.020	0.00	0.000	001	0.000	0.0.0	0.077	0.707
(millions)	99.3	102.0	105.2	107.9	109.4	108.3	108.6	110.7	114.1	117.2	119.6	122.7	125.8	128.6	130.6
Commercial Employment														0.0	
(millions)	62.9	65.2	67.8	70.0	71.3	70.8	71.2	73.2	76.1	78.8	81.1	83.9	86.6	89.5	91.4
Total Industrial Production	02.0										•	00.0		00.0	•
(index, 1987=1.000)	0.890	0.932	0.974	0.991	0.989	0.970	1.000	1.035	1.091	1.144	1.196	1.267	1.314	1.347	1.384
Housing Stock		****		-											
(millions)	98.0	99.8	101.6	102.9	103.5	104.5	105.5	106.8	108.2	109.6	111.0	112.5	114.3	116.1	117.5
Weather a															
Heating Degree-Days	4005	400 (4050	4700	1016	4000	4444	4700	4.406	4504	4746	45.46	0054	4400	440.4
U.S	4295	4334	4653	4726	4016	4200	4441	4700	4483	4531	4713	4542	3951	4186	4494
New England	6517	6546	6715	6887	5848	5960	6844	6728	6672	6559	6679	6662	5680	6065	6520
Middle Atlantic	5665	5699	6088	6134	4998	5177	5964	5948	5934	5831	5986	5809	4812	5375	5751
U.S. Gas-Weighted	4442	4391	4804	4856	4139	4337	4458	4754	4659	4707	4980	4802	4185	4429	4734
Cooling Degree-Days (U.S.)	1249	1269	1283	1156	1260	1331	1040	1218	1220	1293	1180	1156	1411	1320	1233

^aPopulation-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.

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 CONTROL1199.

Table A3. Annual International Petroleum Supply and Demand Balance

(Millions Barrels per Day, Except OECD Commercial Stocks)

								Year							
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Demand ^a															
OECD															
U.S. (50 States)	16.3	16.7	17.3	17.4	17.0	16.8	17.1	17.2	17.7	17.7	18.3	18.6	18.9	19.4	19.5
Europe ^b	12.1	12.3	12.4	12.5	12.6	13.4	13.6	13.5	13.6	14.1	14.3	14.4	14.7	14.7	14.9
Japan	4.4	4.5	4.8	5.0	5.1	5.3	5.4	5.4	5.7	5.7	5.9	5.7	5.5	5.5	5.6
Other OECD	2.5	2.5	2.6	2.7	2.7	2.7	2.7	2.8	2.9	3.0	3.0	3.1	3.1	3.2	3.3
Total OECD	35.3	36.0	37.1	37.6	37.5	38.1	38.8	39.0	39.9	40.6	41.4	41.8	42.3	42.8	43.3
Non-OECD															
Former Soviet Union	9.0	9.0	8.9	8.7	8.4	8.3	6.8	5.6	4.8	4.6	4.0	4.3	4.2	4.2	4.2
Europe	2.2	2.2	2.2	2.1	1.9	1.4	1.3	1.3	1.3	1.3	1.4	1.4	1.5	1.5	1.6
China	2.0	2.1	2.3	2.4	2.3	2.5	2.7	3.0	3.1	3.3	3.5	3.8	3.9	4.1	4.3
Other Asia	3.8	4.1	4.4	4.9	5.3	5.7	6.2	6.8	7.9	7.9	8.5	8.8	8.7	8.8	9.1
Other Non-OECD	9.5	9.7	10.0	10.3	10.5	10.6	11.0	11.4	11.8	12.1	12.4	12.8	13.2	13.4	13.7
Total Non-OECD	26.5	27.1	27.7	28.3	28.5	28.5	28.0	28.1	29.0	29.3	29.9	31.2	31.5	32.0	32.9
Total World Demand	61.8	63.1	64.9	66.0	66.0	66.6	66.8	67.0	68.9	69.9	71.3	73.0	73.8	74.8	76.2
Supply ^c															
OECD															
U.S. (50 States)	11.0	10.7	10.5	9.9	9.7	9.9	9.8	9.6	9.4	9.4	9.4	9.5	9.3	9.0	8.9
Canada	1.8	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.6	2.7
North Sea d	3.8	3.8	3.8	3.7	3.9	4.1	4.5	4.8	5.5	5.9	6.3	6.2	6.2	6.2	6.6
Other OECD	1.4	1.4	1.5	1.4	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.5	1.6
Total OECD	17.9	17.9	17.8	17.1	17.1	17.5	17.9	18.0	18.7	19.2	19.7	19.9	19.7	19.4	19.8
Non-OECD															
OPEC	19.3	19.6	21.5	23.3	24.5	24.6	25.8	26.6	27.0	27.6	28.3	29.9	30.4	29.3	30.6
Former Soviet Union	12.3	12.5	12.5	12.1	11.4	10.4	8.9	8.0	7.3	7.1	7.1	7.1	7.2	7.3	7.3
China	2.6	2.7	2.7	2.8	2.8	2.8	2.8	2.9	2.9	3.0	3.1	3.2	3.2	3.2	3.2
Mexico	2.8	2.9	2.9	2.9	3.0	3.2	3.2	3.2	3.2	3.1	3.3	3.4	3.5	3.4	3.5
Other Non-OECD	6.8	11.3	7.3	7.7	8.0	8.1	8.4	8.7	9.2	9.9	10.2	10.5	10.8	11.0	11.2
Total Non-OECD	43.9	44.6	47.0	48.9	49.7	49.1	49.1	49.4	49.6	50.7	52.0	54.2	55.2	54.3	55.9
Total World Supply	61.8	62.5	64.8	65.9	66.8	66.7	67.0	67.4	68.3	69.9	71.8	74.1	74.9	73.6	75.7
Total Stock Withdrawals	0.0	0.6	0.1	0.0	-0.8	-0.1	-0.2	-0.3	0.1	0.0	-0.4	-1.1	-1.1	1.2	0.5
DECD Comm. Stocks, End (bill. bbls.)	2.7	2.7	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.7	2.7	2.7	2.8	2.6	2.6
Net Exports from Former Soviet Union	3.4	3.5	3.6	3.4	3.0	2.1	2.1	2.3	2.4	2.5	3.0	2.9	3.0	3.2	3.1

^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.

^bOECD Europe includes the former East Germany.

CIncludes 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.

^dIncludes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

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

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

SPR: Strategic Petroleum Reserve

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

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

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

Table A4. Annual Average U. S. Energy Prices

(Nominal Dollars)

(Normal Behale)								Year							
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Imported Crude Oil ^a															
(dollars per barrel)	14.00	18.13	14.57	18.08	21.75	18.70	18.20	16.14	15.52	17.14	20.61	18.50	12.12	17.32	22.36
Natural Gas Wellhead															
(dollars per thousand cubic feet)	1.94	1.66	1.69	1.69	1.71	1.64	1.74	2.04	1.85	1.55	2.16	2.32	1.96	2.11	2.28
Petroleum Products															
Gasoline Retail ^b (dollars per gallon)															
All Grades	0.88	0.91	0.92	1.02	1.17	1.15	1.14	1.13	1.13	1.16	1.25	1.24	1.07	1.18	1.34
Regular Unleaded	0.88	0.91	0.91	0.99	1.13	1.10	1.09	1.07	1.08	1.11	1.20	1.20	1.03	1.14	1.30
No. 2 Diesel Oil, Retail															
(dollars per gallon)	0.88	0.93	0.91	0.99	1.16	1.12	1.10	1.11	1.11	1.10	1.22	1.19	1.04	1.13	1.27
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	0.49	0.53	0.47	0.56	0.70	0.62	0.58	0.54	0.51	0.51	0.64	0.59	0.42	0.52	0.69
No. 2 Heating Oil, Retail															
(dollars per gallon)	0.84	0.80	0.81	0.90	1.06	1.02	0.93	0.91	0.89	0.87	0.99	0.99	0.85	0.88	1.09
No. 6 Residual Fuel Oil, Retail ^c															
(dollars per barrel)	14.46	17.76	14.04	16.20	18.66	14.32	14.21	14.00	14.79	16.49	19.01	17.82	12.73	16.31	21.83
Electric Utility Fuels															
Coal															
(dollars per million Btu)	1.58	1.51	1.47	1.44	1.45	1.45	1.41	1.38	1.36	1.32	1.29	1.27	1.25	1.23	1.22
Heavy Fuel Oil ^d															
(dollars per million Btu)	2.40	2.98	2.41	2.85	3.22	2.49	2.46	2.36	2.40	2.60	3.01	2.79	2.07	2.57	3.53
Natural Gas															
(dollars per million Btu)	2.35	2.24	2.26	2.36	2.32	2.15	2.33	2.56	2.23	1.98	2.64	2.76	2.38	2.59	2.84
Other Residential															
Natural Gas															
(dollars per thousand cubic feet) Electricity	5.83	5.55	5.47	5.64	5.80	5.82	5.89	6.17	6.41	6.06	6.35	6.95	6.82	6.70	7.00
(cents per kilowatthour)	7.4	7.4	7.5	7.6	7.8	8.1	8.2	8.3	8.4	8.4	8.4	8.4	8.3	8.1	7.9

aRefiner acquisition cost (RAC) of imported crude oil.

Average self-service cash prices.

^cAverage for all sulfur contents.

^dIncludes 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-0335; Electric Power Monthly, DOE/EIA-0226.

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

(Million Barrels per Day, Except Closing Stocks)

								Year							
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Supply	•														<u> </u>
Crude Oil Supply															
Domestic Production a	8.68	8.35	8.14	7.61	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.96	5.87
Alaska	1.87	1.96	2.02	1.87	1.77	1.80	1.71	1.58	1.56	1.48	1.39	1.30	1.17	1.05	0.95
Lower 48	6.81	6.39	6.12	5.74	5.58	5.62	5.46	5.26	5.10	5.08	5.07	5.16	5.08	4.91	4.92
Net Imports (including SPR) b	4.02	4.52	4.95	5.70	5.79	5.67	5.99	6.69	6.96	7.14	7.40	8.12	8.60	8.57	9.03
Other SPR Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
Stock Draw (Including SPR)	-0.08	-0.12	0.00	-0.09	0.02	-0.01	0.01	-0.06	-0.02	0.09	0.05	-0.06	-0.05	0.06	-0.03
Product Supplied and Losses	-0.05	-0.03	-0.04	-0.03	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00
Unaccounted-for Crude Oil	0.14	0.14	0.20	0.20	0.26	0.20	0.26	0.17	0.27	0.19	0.22	0.14	0.11	0.24	0.21
Total Crude Oil Supply	12.72	12.85	13.25	13.40	13.41	13.30	13.41	13.61	13.87	13.97	14.19	14.66	14.89	14.87	15.08
Other Supply															
NGL Production	1.55	1.59	1.62	1.55	1.56	1.66	1.70	1.74	1.73	1.76	1.83	1.82	1.76	1.80	1.77
Other Hydrocarbon and Alcohol Inputs	0.11	0.12	0.11	0.11	0.13	0.15	0.20	0.25	0.26	0.30	0.31	0.34	0.38	0.37	0.37
Crude Oil Product Supplied	0.05	0.03	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Processing Gain	0.62	0.64	0.66	0.66	0.68	0.71	0.77	0.77	0.77	0.77	0.84	0.85	0.89	0.89	0.89
Net Product Imports ^c	1.41	1.39	1.63	1.50	1.38	0.96	0.94	0.93	1.09	0.75	1.10	1.04	1.17	1.26	1.38
Product Stock Withdrawn	-0.12	0.09	0.03	0.13	-0.14	-0.04	0.06	-0.05	0.00	0.15	0.03	-0.09	-0.17	0.24	-0.04
Total Supply	16.33	16.72	17.33	17.37	17.04	16.76	17.10	17.26	17.72	17.72	18.31	18.62	18.92	19.43	19.46
Demand															
Motor Gasoline d	6.94	7.19	7.36	7.40	7.31	7.23	7.38	7.48	7.60	7.79	7.89	8.02	8.25	8.38	8.55
Jet Fuel	1.31	1.38	1.45	1.49	1.52	1.47	1.45	1.47	1.53	1.51	1.58	1.60	1.62	1.68	1.71
Distillate Fuel Oil	2.91	2.98	3.12	3.16	3.02	2.92	2.98	3.04	3.16	3.21	3.37	3.44	3.46	3.59	3.60
Residual Fuel Oil	1.42	1.26	1.38	1.37	1.23	1.16	1.09	1.08	1.02	0.85	0.85	0.80	0.89	0.86	0.74
Other Oils ^e	3.75	3.90	4.03	3.95	3.95	3.99	4.20	4.17	4.41	4.36	4.63	4.77	4.69	4.92	4.86
Total Demand	16.33	16.72	17.34	17.37	17.04	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.43	19.46
Total Petroleum Net Imports	5.44	5.91	6.59	7.20	7.16	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.83	10.41
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	331	349	330	341	323	325	318	335	337	303	284	305	324	301	312
Total Motor Gasoline		226	228	213	220	219	216	226	215	202	195	210	216	194	203
Jet Fuel	50	50	44	41	52	49	43	40	47	40	40	44	45	41	<i>4</i> 3
Distillate Fuel Oil		134	124	106	132	144	141	141	145	130	127	138	156	129	125
Residual Fuel Oil	47	47	45	44	49	50	43	44	42	37	46	40	45	39	44
Other Oils [†]	265	260	267	257	261	267	263	273	275	258	250	259	291	262	266

a.Includes lease condensate.

Net imports equals gross imports plus SPR imports minus exports.

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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, with the following exception: recent petroleum demand and supply data displayed here reflect the incorporation of resubmissions of the data as reported in EIA's Petroleum Supply Monthly, TableC1. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

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

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

(Trillion Cubic Feet)

								Year							
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Supply															
Total Dry Gas Production	16.06	16.62	17.10	17.31	17.81	17.70	17.84	18.10	18.82	18.60	18.79	18.90	18.86	18.67	18.97
Net Imports	0.69	0.94	1.22	1.27	1.45	1.64	1.92	2.21	2.46	2.69	2.78	2.84	2.99	3.32	3.58
Supplemental Gaseous Fuels	0.11	0.10	0.10	0.11	0.12	0.11	0.12	0.12	0.11	0.11	0.11	0.10	0.12	0.12	0.13
Total New Supply	16.86	17.66	18.42	18.69	19.38	19.45	19.88	20.42	21.39	21.40	21.69	21.84	21.97	22.11	22.68
Total Underground Storage															
Opening	6.45	6.57	6.55	6.65	6.33	6.94	6.78	6.64	6.65	6.97	6.50	6.51	6.52	7.04	6.86
Closing	6.57	6.55	6.65	6.33	6.94	6.78	6.64	6.65	6.97	6.50	6.51	6.52	7.04	6.86	6.68
Net Withdrawals	-0.12	0.02	-0.10	0.33	-0.61	0.16	0.14	-0.01	-0.32	0.46	-0.01	-0.01	-0.52	0.18	0.18
Total Supply	16.74	17.68	18.32	19.02	18.77	19.61	20.02	20.42	21.08	21.86	21.68	21.84	21.45	22.29	22.86
Balancing Item ^a	-0.52	-0.47	-0.29	-0.22	-0.05	-0.58	-0.47	-0.14	-0.37	-0.28	0.29	0.13	-0.12	-0.84	-0.31
Total Primary Supply	16.22	17.21	18.03	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.97	21.33	21.45	22.56
Demand															
Lease and Plant Fuel	0.92	1.15	1.10	1.07	1.24	1.13	1.17	1.17	1.12	1.22	1.25	1.20	1.24	1.23	1.24
Pipeline Use	0.49	0.52	0.61	0.63	0.66	0.60	0.59	0.62	0.69	0.70	0.71	0.75	0.73	0.74	0.75
Residential	4.31	4.31	4.63	4.78	4.39	4.56	4.69	4.96	4.85	4.85	5.24	4.98	4.48	4.64	4.99
Commercial	2.32	2.43	2.67	2.72	2.62	2.73	2.80	2.86	2.90	3.03	3.16	3.22	3.02	3.08	3.36
Industrial (Incl. Nonutilities)	5.58	5.95	6.38	6.82	7.02	7.23	7.53	7.98	8.17	8.58	8.87	8.84	8.60	8. 4 9	8.48
Cogenerators ^b	NA	NA	NA	NA	1.30	1.41	1.70	1.80	1.98	2.18	2.30	2.16	2.14	2.19	2.23
Other Nonutil. Gen. b	NA	NA	NA	NA	0.09	0.16	0.18	0.22	0.16	0.17	0.16	0.18	0.18	0.18	0.19
Electric Utilities	2.60	2.84	2.64	2.79	2.79	2.79	2.77	2.68	2.99	3.20	2.73	2.97	3.26	3.27	3.74
Total Demand	16.22	17.21	18.03	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.97	21.33	21.45	22.56

^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.

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

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

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

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

(Million Short Tons)

							Year								
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Supply															
Production	890.3	918.8	950.3	980.7	1029.1	996.0	997.5	945.4	1033.5	1033.0	1063.9	1089.9	1118.1	1104.1	1134.0
Appalachia	NA	NA	NA	464.8	489.0	457.8	456.6	409.7	445.4	434.9	451.9	467.8	460.4	443.0	461.0
Interior	NA	NA	NA	198.1	205.8	195.4	195.7	167.2	179.9	168.5	172.8	170.9	168.4	161.2	155.5
Western	NA	NA	NA	317.9	334.3	342.8	345.3	368.5	408.3	429.6	439.1	451.3	489.4	499.9	517.5
Primarv Stock Levels ^a															
Opening	33.1	32.1	28.3	30.4	29.0	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.1	34.4
Closing	32.1	28.3	30.4	29.0	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.1	34.4	34.6
Net Withdrawals	1.0	3.8	-2.1	1.4	-4.4	0.4	-1.0	8.7	-7.9	-1.2	5.8	-5.3	-2.2	1.8	-0.3
Imports	2.2	1.7	2.1	2.9	2.7	3.4	3.8	7.3	7.6	7.2	7.1	7.5	8.7	9.0	10.2
Exports	85.5	79.6	95.0	100.8	105.8	109.0	102.5	74.5	71.4	88.5	90.5	83.5	78.0	61.2	62.7
Total Net Domestic Supply	808.0	844.7	855.3	884.2	921.6	890.9	897.8	886.9	961.8	950.4	986.3	1008.5	1046.6	1053.7	1081.3
Committee Democrate Copper, minimum	000.0	•			·-···										
Secondary Stock Levels b															
Opening	170.2	175.2	185.5	158.4	146.1	168.2	167.7	163.7	120.5	136.1	134.6	123.0	106.4	129.5	151.0
Closing	175.2	185.5	158.4	146.1	168.2	167.7	163.7	120.5	136.1	134.6	123.0	106.4	129.5	151.0	155.3
Net Withdrawals	-5.0	-10.2	27.0	12.3	-22.1	0.5	4.0	43.2	-15.7	1.5	11.7	16.6	-23.1	-21.6	-4.3
Waste Coal Supplied to IPPs ^c	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.4	7.9	8.5	8.8	8.1	9.5	10.3	12.7
Total Supply	803.1	834.4	882.3	896.5	899.4	891.4	907.8	936.5	954.0	960.4	1006.7	1033.2	1033.0	1042.4	1089.7
Demand															
Coke Plants	35.9	37.0	41.9	40.5	38.9	33.9	32.4	31.3	31.7	33.0	31.7	30.2	28.2	27.8	27.8
Electricity Production															
Electric Utilities	685.1	717.9	758.4	766.9	773.5	772.3	779.9	813.5	817.3	829.0	874.7	900.4	910.9	897.1	932.1
Nonutilities (Excl. Coaen.) d	NA	NA	NA	0.9	1.6	10.2	14.6	17.1	19.5	20.8	22.2	21.6	29.1	<i>4</i> 5.1	52.9
Retail and General Industry e	75.6	75.2	76.3	82.3	83.1	81.5	80.2	81.1	81.2	78.9	76.9	77.1	75.7	75.7	77.0
Total Demand	796.6	830.0	876.5	890.6	897.1	897.8	907.0	943.1	949.7	961.7	1005.6	1029.2	1043.9	1045.6	1089.7
- 3.5 3.11d.1d		000.0	3. 0.0	300.0	55	000	000	0 .0.1	0.0	00		. 020.2		10 10.0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Discrepancy f	6.5	4.4	5.8	5.9	2.4	-6.4	8.0	-6.6	4.3	-1.3	1.2	4.0	-10.9	-3.2	0.0

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

^bSecondary stocks are held by users. It includes an estimate of stocks held at utility plants sold to nonutility generators.

^cEstimated independent power producers (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes, 1.2 million tons in 1999 and 3.1 million tons in 2000.

^dEstimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA). Quarterly coal consumption estimates for 1998 and projections for 1999 and 2000 are based on (1) estimated consumption by utility power plants sold to nonutility generators during 1998 and 1999, and (2) annual coal-fired generation at nonutilities from Form EIA-867 (Annual Nonutility Power Producer Report).

^eSynfuels plant demand in 1993 was 1.7 million tons per quarter and is assumed to remain at that level.

f Total Demand includes estimated IPP consumption.

⁹The 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.

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

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

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

(Billion Kilowatt-hours)

•	•						Year								
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Supply															
Net Utility Generation															
Coal	1385.8	1463.8	1540.7	1553.7	1559.6	1551.2	1575.9	1639.2	1635.5	1652.9	1737.5	1787.8	1807.5	1772.6	1849.0
Petroleum	136.6	118.5	148.9	158.3	117.0	111.5	88.9	99.5	91.0	60.8	67.3	77.8	110.2	102.4	82.0
Natural Gas	248.5	272.6	252.8	266.6	264.1	264.2	263.9	258.9	291.1	307.3	262.7	283.6	309.2	312.5	357.1
Nuclear	414.0	455.3	527.0	529.4	576.9	612.6	618.8	610.3	640.4	673.4	674.7	628.6	673.7	715.3	696.8
Hydroelectric	290.8	249.7	222.9	265.1	279.9	275.5	239.6	265.1	243.7	293.7	328.0	337.2	304.4	298.0	289.5
Geothermal and Other a	11.5	12.3	12.0	11.3	10.7	10.1	10.2	9.6	8.9	6.4	7.2	7.5	7.2	3.7	2.3
Subtotal	2487.3	2572.1	2704.3	2784.3	2808.2	2825.0	2797.2	2882.5	2910.7	2994.5	3077.4	3122.5	3212.2	3204.6	3276.6
Nonutility Generation ^b	NA	NA	NA	NA	221.5	253.3	301.8	325.2	354.9	375.9	382.4	384.7	378.6	440.8	464.0
Total Generation	NA	NA	NA	NA	3029.6	3078.3	3099.0	3207.8	3265.6	3370.4	3459.9	3507.2	3590.7	3645.4	3740.5
Net Imports	35.9	46.3	31.8	11.0	2.3	19.6	25.4	27.8	44.8	39.2	38.0	36.6	28.8	27.0	27.4
Total Supply	NA	NA	NA	NA	3032.0	3098.0	3124.4	3235.6	3310.5	3409.6	3497.9	3543.8	3619.5	3672.4	3767.9
Losses and Unaccounted for ^c	NA	NA	NA	NA	206.2	214.2	223.7	236.3	225.7	238.4	242.3	242.8	216.1	237.1	256.2
Demand															
Electric Utility Sales															
Residential	819.1	850.4	892.9	905.5	924.0	955.4	935.9	994.8	1008.5	1042.5	1082.5	1075.8	1127.7	1141.0	1174.9
Commercial	630.5	660.4	699.1	725.9	751.0	765.7	761.3	794.6	820.3	862.7	887.4	928.4	968.5	976.4	1000.8
Industrial	830.5	858.2	896.5	925.7	945.5	946.6	972.7	977.2	1008.0	1012.7	1030.4	1032.7	1040.0	1050.0	1060.5
Other	88.6	88.2	89.6	89.8	92.0	94.3	93.4	94.9	97.8	95.4	97.5	1032.7	1040.0	101.8	1000.1
Subtotal	2368.8	2457.3	2578.1	2646.8	2712.6	2762.0	2763.4	2861.5	2934.6	3013.3	3097.8	3139.8	3239.8	3269.3	3343.3
Nonutility Own Use b	NA	NA	NA	NA	113.2	121.7	137.3	137.8	150.2	158.0	157.8	161.2	163.6	166.0	168.5
Total Demand	NA	NA	NA	2744.0	2825.8	2883.7	2900.7	2999.2	3084.8	3171.3	3255.6	3301.0	3403.4	3435.2	3511.7
Memo:															
Nonutility Sales															
to Electric Utilities ^d	NA	NA	NA	NA	108.2	131.6	164.4	187.5	204.7	217.9	224.7	223.5	215.0	274.9	295.5

^aOther includes generation from wind, wood, waste, and solar sources. ^bFor 1989 to 1991, estimates for nonutility generation are estimates made by the Energy Markets and Contingency Information Division, based on Form EIA-867 (Annual Nonutility Power Producer Report) data. Historical data and Projections for the same items are from the Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration, based on Form EIA-867.

^cBalancing item, mainly transmission and distribution losses.

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

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

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