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Short-Term ENERGY OUTLOOK

QUARTERLY PROJECTIONS

1995 1st Quarter

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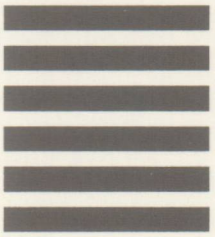

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Quarterly Projections

First Quarter 1995

Energy Information Administration
Office of Energy Markets and End Use
U.S. Department of Energy
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Preface

The Energy Information Administration (EIA) prepares quarterly, short-term energy supply, demand, and price projections for publication in February, May, August, and November in the *Short-Term Energy Outlook (Outlook)*. An annual supplement analyzes the performance of previous forecasts, compares recent projections with those of other forecasting services, and discusses current topics related to the short-term energy markets. (See *Short-Term Energy Outlook Annual Supplement*, DOE/EIA-0202.)

The forecast period for this issue of the *Outlook* extends from the first quarter of 1995 through the fourth quarter of 1996. Values for the fourth quarter of 1994, however, are preliminary EIA estimates (for example, some monthly values for petroleum supply and disposition are derived in part from weekly data reported in the *Weekly Petroleum Status Report*) or are calculated from model simulations using the latest exogenous information available (for example, electricity sales and generation are simulated using actual weather data). The historical energy data, compiled into the first quarter 1995 version of the Short-Term Integrated Forecasting System (STIFS) database, are mostly EIA data regularly published in the *Monthly Energy Review, Petroleum Supply Monthly*, and other EIA publications. Minor discrepancies between the data in these publications and the historical data in this *Outlook* are due to independent rounding. The STIFS database is archived quarterly and is available from the National Technical Information Service.

The cases are produced using the Short-Term Integrated Forecasting System (STIFS). The STIFS model is driven principally by three sets of assumptions or inputs: estimates of key macroeconomic variables, world oil price assumptions, and assumptions about the severity of weather. Macroeconomic estimates are produced by DRI/McGraw-Hill but are adjusted by EIA to reflect EIA assumptions about the world price of crude oil, energy product prices, and other assumptions which may affect the macroeconomic outlook. The EIA model is available on computer tape from the National Technical Information Service.

Treatment of Petroleum Supply Monthly Reporting Change

The Energy Information Administration began reporting the series "Motor Gasoline Product Supplied" (equated in this report with gasoline demand) on a new basis for monthly data for January 1993 forward. These new-basis data are included in this issue of the *Outlook*. The reporting changes reflect data relating to fuel ethanol blended into gasoline as well as certain changes in product classification affecting reported motor gasoline quantities. Beginning with the fourth quarter 1993 edition of the *Outlook*, any references to data series affected by these changes are, for periods prior to 1993, strictly in terms of the new-basis definition. Thus, history for motor gasoline and miscellaneous product demands were restated so as to make comparisons as consistent as possible. Appendix B from the third quarter 1993 *Outlook* provides details on the significance of the data restatement.

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Highlights

Crude Oil and Product Prices to Rise Slightly Over the Next 2 Years

Crude oil prices are expected to rise steadily during the next 2 years, assuming no major disruption of supplies. From $15.65 per barrel at end-December 1994, crude oil prices are projected to climb to $18 per barrel by the end of 1996. Petroleum product prices are expected to rise slowly, reflecting both the increase in crude oil prices as well as special factors, such as the recent introduction of reformulated gasoline.

Winter Fuels Demand Likely to Diminish Versus 1993-1994 Heating Season

Barring a return of the cold weather patterns experienced during the first quarter of 1994, the most likely scenario is for a decline in heating fuel demand, compared with the same period last year, resulting in no growth in distillate fuel oil demand for 1995. Because deliveries of natural gas were less affected by last year's severe winter, demand is projected to register continued steady growth, even though some weakness this winter is expected compared to last year.

Petroleum Demand Growth to Slow in 1995 and 1996.

In 1994, accelerating economic growth, oil price declines, and the extreme winter weather during the first quarter accounted for much of the 430,000 barrels per day increase in U.S. petroleum demand. Slower economic growth, firmer product prices and assumed normal weather patterns are expected to slow domestic demand growth to an average of 250,000 barrels per day during the forecast period, or 1.3 percent in 1995 and 1.4 in 1996.

Electricity Demand Continues to Grow Steadily

Electricity demand is expected to grow at 2.0 percent in 1995 and 2.5 percent in 1996. The commercial sector is expected to account for the bulk of that growth.

Natural Gas Demand for Generation of Electricity Growing Fastest

Having grown by 2.5 percent in 1994, natural gas demand is projected to increase more slowly in 1995 and 1996 along with the economy. Most of 1994's robust growth was attributed to the increase in demand related to electricity generation. 1995 and 1996 are expected to witness continued growth in this area, accounting for more than one-third of the total growth in natural gas demand.

Coal Demand Increases Driven by Electricity Demand

Growth in electricity demand will be the only major source of growth in coal demand during the forecast period. Coal production, which gained almost 80 million tons in 1994 as a result of labor disputes in the previous year, is expected to increase by over 20 million tons during 1995 and 1996.

Note: The data referenced may be found in Table 1 or in the tables located in the back of this report.

Table 1. U.S. Energy Supply and Demand Summary

	Price Case[a]	Year				Annual Percentage Change		
		1993	1994	1995	1996	1993-1994	1994-1995	1995-1996
Real Gross Domestic Product (GDP)								
(billion 1987 dollars)	Mid	**5135**	**5333**	*5458*	*5572*	**3.9**	*2.4*	*2.1*
Imported Crude Oil Price	Low			*13.00*	*13.00*		*-16.3*	*0.0*
(nominal dollars per barrel)	Mid	**16.13**	**15.53**	*16.77*	*17.76*	**-3.7**	*7.9*	*5.9*
	High			*19.89*	*21.52*		*28.0*	*8.2*
Petroleum Supply								
Crude Oil Production[b]	Low			*6.24*	*5.88*		*-6.0*	*-5.8*
(million barrels per day)	Mid	**6.85**	**6.64**	*6.50*	*6.27*	**-3.0**	*-2.1*	*-3.4*
	High			*6.66*	*6.57*		*0.3*	*-1.4*
Total Petroleum Net Imports (including SPR)	Low			*8.75*	*9.37*		*9.7*	*7.1*
(million barrels per day)	Mid	**7.62**	**7.98**	*8.37*	*8.76*	**4.7**	*4.9*	*4.7*
	High			*8.11*	*8.32*		*1.6*	*2.6*
Energy Demand								
World Petroleum								
(million barrels per day)	Mid	**66.7**	*67.5*	*68.6*	*69.8*	*1.2*	*1.6*	*1.8*
U.S. Petroleum	Low			*18.03*	*18.38*		*2.1*	*1.9*
(million barrels per day)	Mid	**17.24**	**17.67**	*17.90*	*18.16*	**2.5**	*1.3*	*1.4*
	High			*17.80*	*18.01*		*0.7*	*1.2*
Natural Gas	Low			*21.20*	*21.54*		*1.9*	*1.6*
(trillion cubic feet)	Mid	**20.30**	**20.81**	*21.26*	*21.73*	**2.5**	*2.2*	*2.2*
	High			*21.30*	*21.82*		*2.4*	*2.4*
Coal								
(million short tons)	Mid	**926**	**940**	*953*	*970*	**1.5**	*1.4*	*1.8*
Electricity[c]								
(billion kilowatthours)	Mid	**2862**	**2944**	*3001*	*3077*	**2.8**	*2.0*	*2.5*
Gross Energy[d]								
(quadrillion Btu)	Mid	**86.4**	**88.2**	*89.6*	*91.3*	**2.1**	*1.5*	*1.9*
Gross Energy Demand per Dollar of GDP								
(thousand Btu per 1987 Dollar)	Mid	**16.83**	**16.55**	*16.42*	*16.38*	**-1.7**	*-0.8*	*-0.2*
Renewable Energy as Percent of Total	Mid	**7.4**	**7.3**	*7.5*	*7.6*			

[a] Refers to the imported cost of crude oil to U.S. refiners assumed for the scenario depicted. In all cases on this table, the mid macroeconomic case and normal weather are used.

[b] Includes lease condensate.

[c] Refers to utility sales only. Total annual electricity sales for historical periods are derived from the sum of monthly sales figures based on submissions by electric utilities of Form EIA-826, "Monthly Electric Utility Sales and Revenue Report with State Distributions." These historical values differ from annual sales totals based on Form EIA-861, reported in several EIA publications, but match alternate annual totals reported in EIA's *Electric Power Monthly*, DOE/EIA-0226.

[d] The gross energy concept shown here is revised to match that presented in Energy Information Administration, *Annual Energy Review 1993 (AER)*, DOE/EIA-0384(93), Table 10.1. 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 that published in the *MER* or the *AER*.

SPR: Strategic Petroleum Reserve.

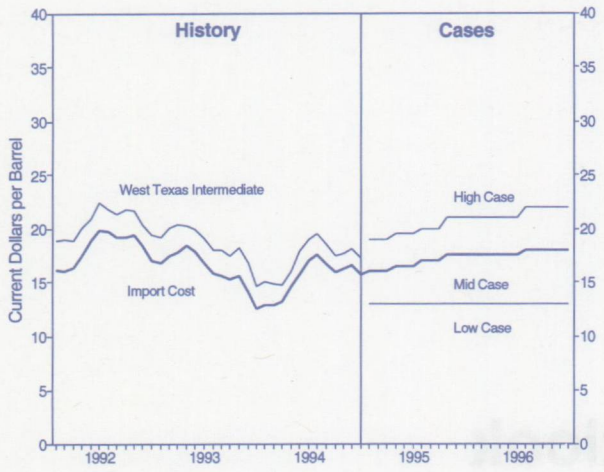
Notes: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(94/12); *Petroleum Supply Monthly*, DOE/EIA-0109(94/12); *Petroleum Supply Annual 1993*, DOE/EIA-0340(93)/2; *Natural Gas Monthly*, DOE/EIA-0130(94/12); *Electric Power Monthly*, DOE/EIA-0226(94/11); and *Quarterly Coal Report*, DOE/EIA-0121(94/3Q). Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL1194.

The Outlook

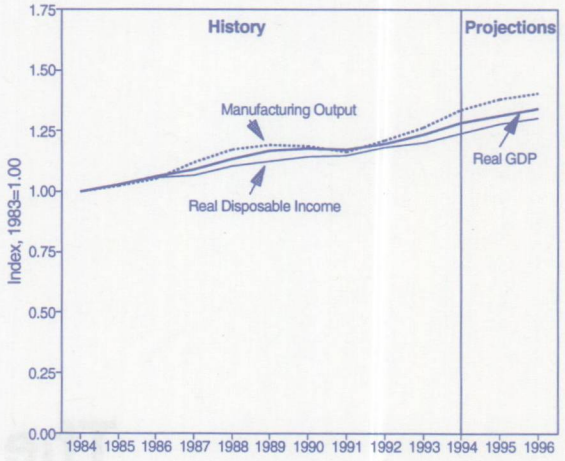
Outlook Assumptions

Figure 1. U.S. Monthly Crude Oil Prices



Sources: First Quarter 1995 STIFS database and Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 38.

Figure 2. U.S. Macroeconomic Indicators



Sources: First Quarter 1995 STIFS database, U.S. Commerce Department, and Federal Reserve Board. Details provided in Figure References section, p. 38.

World Oil Prices

- Three price scenarios are addressed here, as significant uncertainty surrounds the world oil market. In the mid-price case, the world oil price (the average cost of imported crude for U.S. refiners), is expected to increase gradually from about $15.65 per barrel in December 1994 to $18 by late 1996, assuming some increase in OPEC production (Figure 1 and Table 5).

- The low-price scenario ($13 per barrel) assumes that world demand growth is minimal due to worldwide recession, and/or oil markets are oversupplied.

- The high-price scenario (world oil price rises to $22 per barrel by late 1996) assumes that world oil demand increases, or supply shortfalls, cause stocks to be drawn down, resulting in a tight market situation.

Economic Outlook

- U.S. economic growth is expected to continue above 3.0 percent through the beginning of 1995 before slowing for the remainder of the year. In 1995, real GDP grows by 2.4 percent as output, final sales, and real consumption slow due to expected increases in both interest rates and prices (Figure 2 and Table 2).

- Higher prices and slower employment gains should dampen growth in real disposable income to 2.7 percent in 1995, compared with 1994 growth of 3.5 percent. Manufacturing production slows as production costs increase.

- Early in 1996, the economy experiences higher unemployment, lower interest rates, and lower manufacturing utilization. During the second half of the year, the economy, led by investment growth, begins to strengthen, although GDP is expected to show a modest 2.1 percent growth for the year.

Weather Assumptions

- Heating and cooling degree-days are assumed normal in the forecast period (beyond January 1995). For 1995, this implies milder weather for the first quarter than in the same period of 1994, although peak-period cooling demand and fourth quarter heating demand this year are likely to exceed 1994 levels (Table 2).

Special Assumptions for Environmental, Tax, and Other Energy-Related Policies

This section summarizes the potential impacts of current legislative actions on the short-term energy forecasts for the United States and shows how these impacts are incorporated in this *Outlook*. The impacts are anticipated to directly affect energy prices, consumption, or production.

Effective Date	Description	Impact on Forecast
Autumn 1993	FERC Order 636-A implemented.	Market-driven changes will continue. Reliance on natural gas storage levels for peak demand likely to rise, but pricing expected to be more competitive.
October 1993	Motor Fuel Tax Increase	Federal excise tax increase of 4.3 cents per gallon for motor gasoline and diesel fuel, and 48.5 cents per thousand cubic feet for compressed natural gas used in motor vehicles.
October 1994	Third season for oxygenated gasoline required to be sold in carbon monoxide nonattainment areas during winter months of each year.	Motor gasoline prices expected to be 3 to 5 cents per gallon higher in the nonattainment areas, compared with other regions, raising national prices by an average of 1 to 2 cents per gallon during winter months.[4]
January 1995	Phase I reformulated gasoline in 9 high-ozone cities plus opt-in areas.	Approximately 4 to 6 cents per gallon higher cost in affected cities.[5]
January 1995	Phase I reduction in sulfur dioxide emissions from electric utility steam generation units fired by fossil fuels, by a system of tradeable allowances, switching or blending with lower sulfur fuels, and retrofitting with scrubbers.	Electricity prices will be slightly higher than would otherwise be the case.

[1] Oil production impacts are estimates from the Energy Information Administration, Office of Oil and Gas, Reserves and Natural Gas Division.

[2] Environmental Protection Agency, *Technical Guidance: Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities*, EPA-450/391-022A, November 1991.

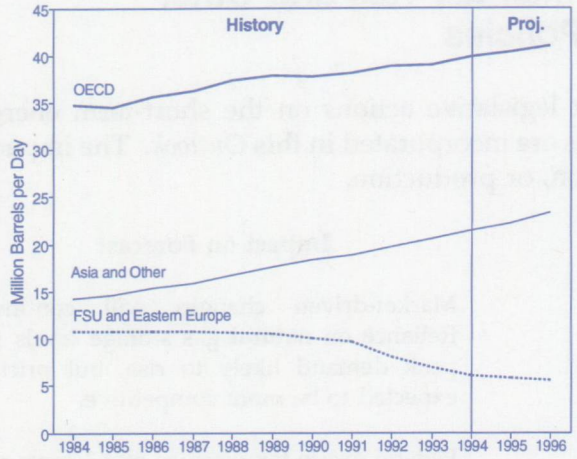
[3] Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

[4] Energy Information Administration, "Demand, Supply, and Price Outlook for Oxygenated Gasoline, Winter 1992-1993", *Monthly Energy Review*, DOE/EIA-0035(92/08), (Washington, DC, August 1992), pp. 5 and 9.

[5] Energy Information Administration, "The Energy Administration's Assessment of Reformulated Gasoline", SR/00G/94-01/1, (Washington DC, October 1994), p. 56.

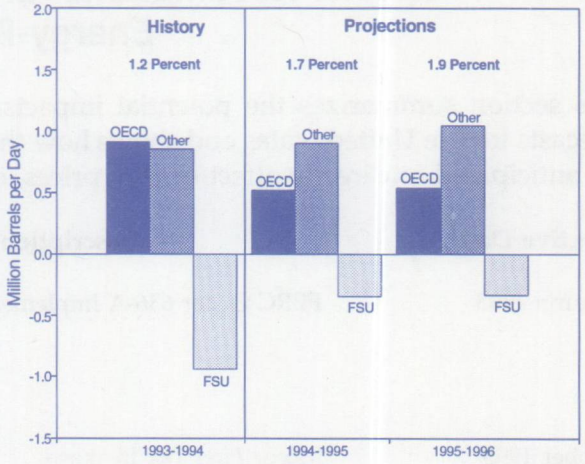
International Oil Demand

Figure 3. World Petroleum Demand



Sources: Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 38.

Figure 4. World Oil Demand Changes by Region



Sources: Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 38.

- World oil demand is expected to rise by about 1.1 million barrels per day in 1995 and an additional 1.2 million barrels per day in 1996, after increasing by only 800,000 barrels per day in 1994. This development reflects increased oil demand growth in the developing world and a smaller decline in demand in the former Soviet Union (FSU). After declining by about 900,000 barrels per day in 1994, oil demand in the FSU and Eastern Europe is expected to decline by about 300,000 barrels per day in 1995 and 1996 (Table 4). As these countries attempt to move toward Western-style economies, oil demand should decline by a smaller amount each succeeding year.

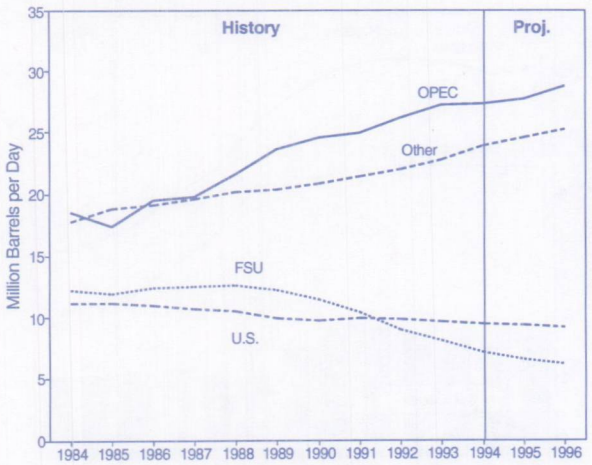
- Oil demand in countries of the Organization for Economic Cooperation and Development (OECD) is expected to increase by about 500,000 barrels per day in 1995, due in part to a 230,000 barrel per day increase in the United States. Oil demand in OECD countries is expected to grow by an additional 500,000 barrels per day in 1996, with nearly half the increase from the United States (Figure 3).

- Oil demand in Asia is expected to increase by 6 percent in 1995 and 1996. In Latin America, Africa, and the Middle East, oil demand is estimated to grow by 2 to 4 percent in 1995 and 1996.[1]

- After rising by nearly 800,000 barrels per day in 1994, oil demand in the non-OECD countries, excluding the FSU and Eastern Europe, is expected to rise by about 800,000 barrels per day in 1995, and by another 1.0 million barrels per day in 1996. Oil demand in these countries continues to increase substantially each year as robust economic growth continues (Figure 4).

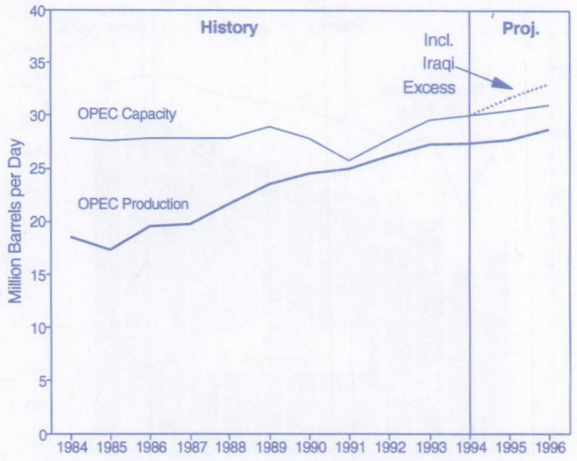
- The expected effect of the assumed rates of economic growth in the OECD and in the developing countries, combined with a slower decline rate in the economies of the FSU, is a 2.3 million barrels per day increase in world oil demand between 1994 and 1996 (Table 4).

Figure 5. World Oil Production



Sources: Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 38.

Figure 6. OPEC Oil Production and Capacity



Sources: Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 38.

- After increasing by an estimated 50,000 barrels per day in 1994, world petroleum production is expected to increase by 400,000 barrels per day in 1995, and by 1.1 million barrels per day in 1996 (Table 4 and Figure 5).

- A large share of this increase will come from the Organization of Petroleum Exporting Countries (OPEC). OPEC production is expected to increase by 300,000 barrels per day in 1995, and by almost 1.1 million barrels per day in 1996.

- Petroleum production in the North Sea is expected to increase by over 200,000 barrels per day in 1995, and by another 300,000 barrels per day in 1996. Production by non-OPEC developing countries is expected to rise by 400,000 barrels per day in 1995, and by another 300,000 barrels per day in 1996.

- U.S. petroleum production is expected to continue its declining trend throughout the forecast period, falling by an annual average of 200,000 barrels per day between 1994 and 1996 (Table 7).

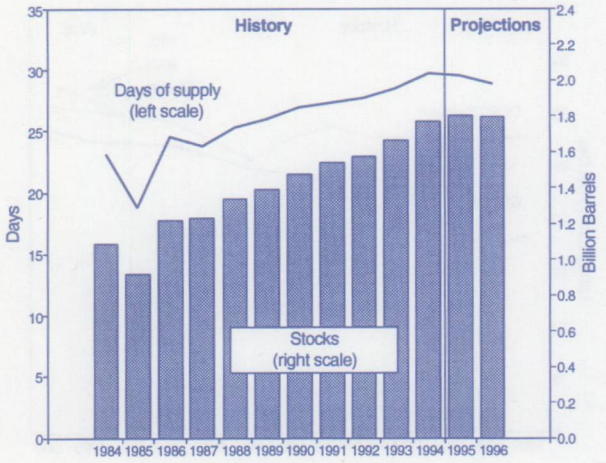
- In the FSU, petroleum production is expected to continue to fall, albeit at an attenuated rate compared to recent years. Following a nearly 1.0 million barrel per day decline in 1994, production is expected to decline by about 500,000 barrels per day in 1995, and by a further 400,000 barrels per day in 1996.

- With OPEC production projected to increase significantly in 1996, excess OPEC production capacity is expected to decrease in 1996 as capacity increases less than production (Figure 6).

- Average OPEC excess production capacity is expected to be 2.8 million barrels per day in 1995, and only 2.2 million barrels per day in 1996. Most of the excess capacity in 1996 is from Saudi Arabia (1.5 million barrels per day), Kuwait (225,000 barrels per day), and the United Arab Emirates (160,000 barrels per day).[2] Iraq could add nearly 2 million barrels per day by end-1995 to OPEC capacity if United Nations sanctions were dropped.

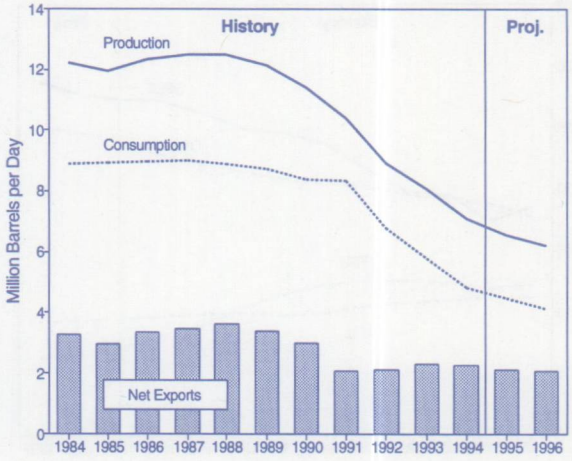
World Oil Stocks and Net Trade

Figure 7. Market Economies' Commercial Oil Stocks



Sources: Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 38.

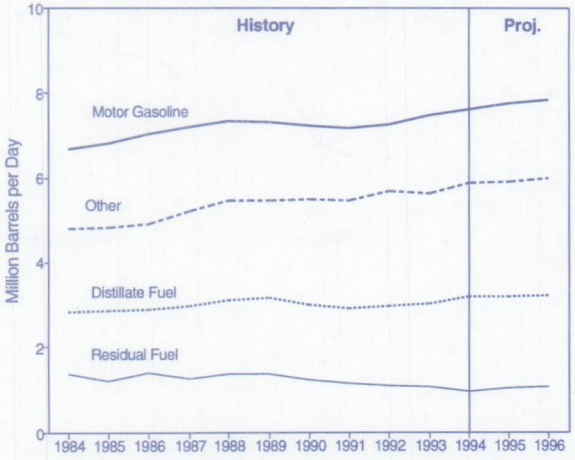
Figure 8. FSU Oil Output, Demand, and Net Exports



Sources: Energy Information Administration, Energy Markets and Contingency Information Division. Details provided in Figure References Section, p. 38.

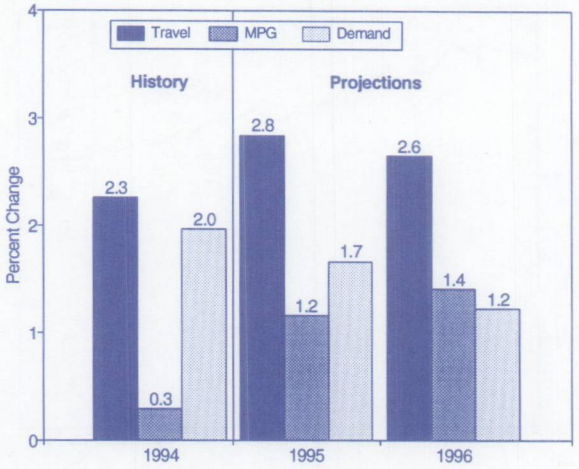
- Petroleum stock levels in the Market Economies (which exclude the former centrally planned economies) have increased each year since 1986, and this *Outlook* projects that stock levels will continue to increase slightly between 1994 and 1996 (Figure 7).
- "Days of Supply" is the number of days of consumption that can be supplied by non-government stocks above the minimum operating level. Because consumption is expected to increase significantly while stocks are expected to increase only slightly, the "Days of Supply" rises in 1994 before declining in 1995 and 1996. However, this measure would still remain at adequate levels through the forecast, as end-1996 levels would be slightly higher than end-1993 levels.
- Net exports from the FSU are estimated to decline from 2.3 million barrels per day in 1994 to 2.1 million barrels per day in 1995 and 1996 (Figure 8 and Table 4). This reflects the expectation that the sharp decline in consumption that occurred after 1991, and counterbalanced production losses, will steadily moderate through the forecast.
- Although exports of petroleum are a major source of hard currency for the FSU, and thus a strong incentive in maintaining exports, expected oil production declines will make it difficult for the FSU to maintain oil exports even at the sharply reduced levels of recent years.
- An exacerbation of this situation, such as would occur if consumption in the region stabilized or began to grow again, could add significantly to production requirements in OPEC. The situation in the FSU is one of the main wildcards in the world oil market over the next 2 years.

Figure 9. U.S. Petroleum Demand



Sources: Fourth Quarter 1994 STIFS database. Details provided in Figure References Section, p. 38.

Figure 10. Gasoline Market Indicators



Sources: Fourth Quarter 1994 STIFS database. Details provided in Figure References Section, p. 38.

- Having grown by 2.5 percent in 1994, U.S. petroleum demand is projected to increase by 1.3 percent in 1995, and 1.4 percent in 1996 (Figure 9 and Table 7). A slowdown in economic growth through the forecast interval and the assumptions of normal weather account for much of the moderation in demand growth.

- Motor gasoline demand in 1994 is estimated to have increased by 2.0 percent despite an only 2.3-percent increase in highway travel due to severe winter weather. Assumptions of normal weather in 1995 result in a 2.8-percent increase in travel and, hence, a 1.7-percent increase in consumption despite slower growth in personal income. The 2.6-percent increase in 1996 travel reflects continued increases in personal income. Projected fuel efficiency increases averaging only 1.3 percent reflect a lack of fuel economy growth in new vehicles; increasing consumer preference for minivans and light trucks; less retirement of older, less fuel-efficient, vehicles; and the introduction of reformulated gasoline in 1995 (Figure 10 and Table 3).

- After increasing by 4.3 percent in 1994, jet fuel demand is projected to increase by 2.0 percent in 1995 and 2.6 percent in 1996 (Table 7). Air-travel capacity (available ton-miles) will grow by an average 3.3 percent per year, implying increased efficiencies of about 1.0 percent.

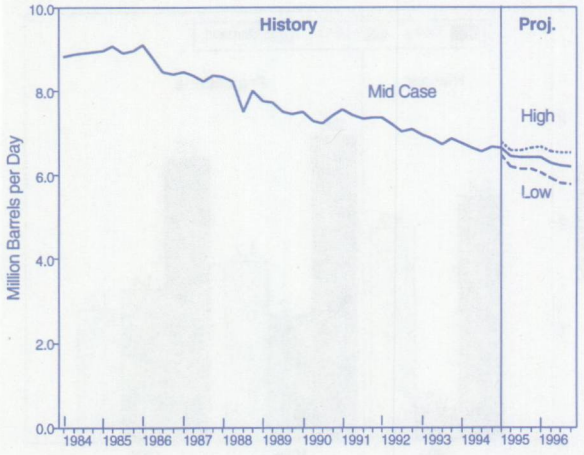
- Because of the 5.3-percent weather-related increase in demand in 1994, distillate demand is expected to remain flat in 1995, and increase by 1.0 percent in 1996 (Table 7).

- Having declined an estimated 9.9 percent in 1994 despite the severe first-quarter weather, residual fuel oil demand is projected to stage a modest recovery during the forecast period, averaging 5.8 percent per year.

- Boosted by a severe winter, 1994 growth in other oils was 4.0 percent. Assumptions of normal weather result in virtually no growth in 1995, and 0.9-percent growth in 1996.

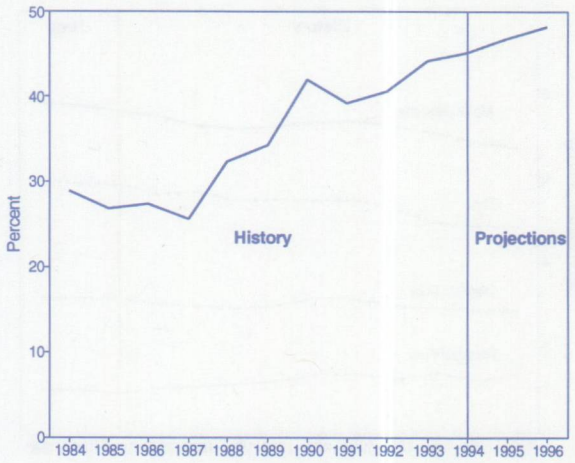
U.S. Oil Supply

Figure 11. U.S. Crude Oil Production



Sources: First Quarter 1995 STIFS database and Energy Information Administration, Reserves and Natural Gas Division. Details provided in Figure References Section, p. 38.

Figure 12. U.S. Net Oil Imports' Share of Demand



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

- At mid-case prices, total U.S. domestic crude oil production is expected to decline by 140,000 barrels per day (2.1 percent) in 1995, and by an additional 230,000 barrels per day (3.4 percent) in 1996 (Table 7 and Figure 11).

- Oil production in the lower 48 States is expected to drop by 70,000 barrels per day in 1995, and by 110,000 barrels per day in 1996 (Table 7). Oil production from new projects in Federal offshore waters (the Santa Ynez unit in the Pacific, and the Auger project in the Gulf of Mexico) is expected to account for about 2.9 percent of total U.S. oil production by the end of 1994, if development goes as scheduled. Production from the Point Arguello Field in the Pacific Federal Offshore is expected to be maintained at 80,000 barrels per day through the forecast period.[3]

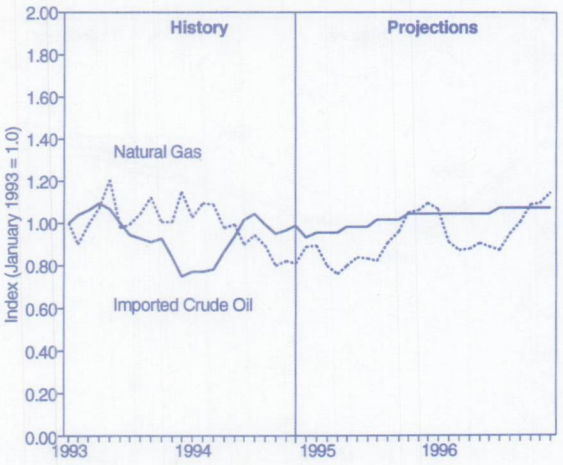
- Oil production in Alaska is expected to decline by 3.9 percent in 1995, and by another 8.0 percent in 1996 (Table 7). The Point McIntyre Field started producing in late 1993 and is expected to produce about 125,000 barrels per day during the forecast period. The Niakuk Field came online in the second quarter of 1994 and is expected to produce about 15,000 barrels per day during the forecast period.[4] Installation of additional gas handling facilities in the Prudhoe Bay Field is complete.

- Crude oil production could be as high as 6.53 million barrels per day by the fourth quarter of 1996, given the high price case (Table 8) and production from new projects in the Federal Offshore, or as low as 5.76 million barrels per day under the low price scenario (Table 6).

- Declining oil production and rising demand in the United States means an increase in net imports of crude oil and products of 780,000 barrels per day between 1994 and 1996. Total net imports should equal 48.2 percent of total petroleum demand in 1996 in the base case (Figure 12). The net import share of demand could range from 51.0 percent in the low price case to 46.2 percent in the high price case in 1996 (Tables 6 and 8).

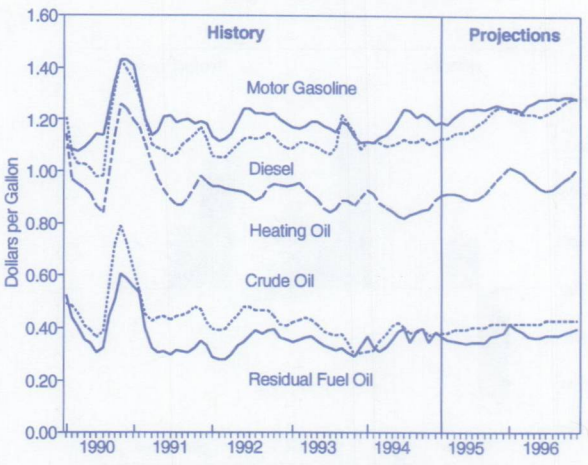
- According to Baker Hughes, Inc., the rig count for 1993 averaged 754 and is expected to average 776 in 1994. The rig count is expected to increase to 850 in 1995 and to 906 in 1996.[5]

Figure 13. U.S. Oil and Gas Prices



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

Figure 14. Petroleum Product Prices



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

- In 1994, international and domestic energy markets alternately depressed producer prices for crude oil and natural gas. Just as crude oil was recovering much of the $4- to $5-per-barrel decline between the second quarter of 1993 and the first quarter of 1994, domestic natural gas wellhead prices entered a downward spiral that yielded an estimated loss of 21 percent between the first and last quarters of 1994 (Figure 13 and Table 5).

- Through the third quarter of 1994, operating income for domestic oil and gas producers was significantly depressed. Major companies reported reductions in upstream income of about 17, percent while independents' operating profits from oil and gas production fell nearly 80 percent over the same period.[6] Despite the upswing in oil prices during the second half of 1994, depressed gas prices are likely to leave the domestic oil and gas industry with mixed results for the year.

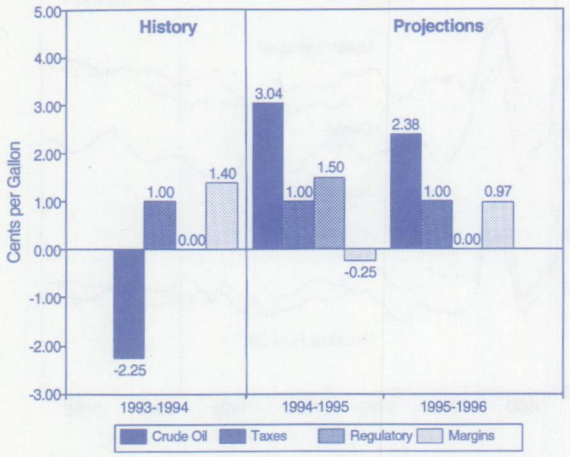
- From the 1994 average of around $15.50 per barrel, crude oil prices are expected to rise about $1.25 per barrel in 1995 in response to increases in world demand. In addition, evident resolve among OPEC producers to control excess output reaffirms the belief that prices will rise steadily over the next two years, with a $2 or more net gain between 1994 and 1996 in the base case (see Table 5 and "Outlook Assumptions," p.4).

- While natural gas wellhead prices are expected to gradually recover by late 1995 because of assumptions of normal winter weather, prospects for annual average prices above $2 per thousand cubic feet before 1997 have diminished.

- Petroleum product prices will generally look higher in early 1995, with most of the upward movement attributable to much higher crude oil acquisition costs for refiners (Figure 14). Assumed adjustments to inventory imbalances, appearing in late 1994, will complicate the story somewhat across product types. Petroleum product prices will probably continue to increase in 1996 so long as crude oil prices continue to rise.

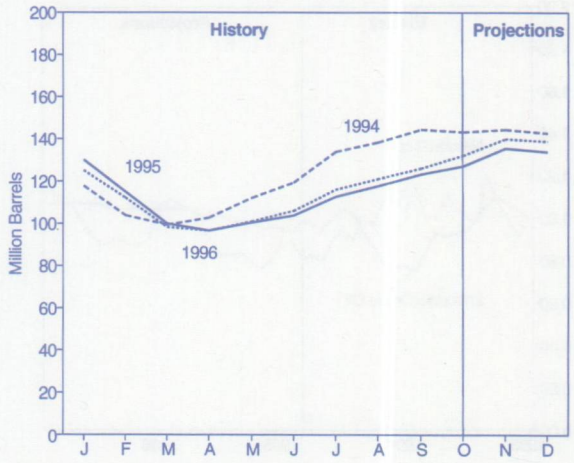
U.S. Energy Prices

Figure 15. Motor Gasoline Price Components (Year-to-Year Change)



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

Figure 16. Distillate Inventories



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

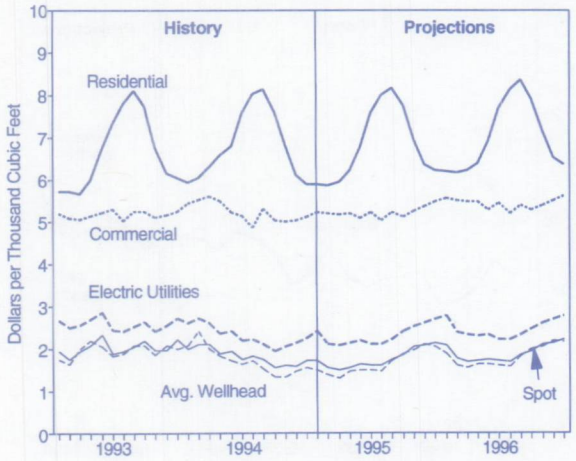
- In 1995, gasoline prices are expected to be about 4 percent above the 1994 average, with another 3 percent increase expected in 1996. The 1995 rise is due mainly to higher crude costs, but also to increased costs for newly required reformulated gasolines (up to 2 cents per gallon nationally) and to higher expected demand (Figure 15). The demand increase is related to weather-reduced travel demand last winter in the Eastern United States because of the extreme cold and icy conditions last January and February. Also, gasoline inventories ended 1994 somewhat below normal, although more balanced levels are assumed to emerge by the 1995 driving season.

- While reformulated gasoline (RFG) supply costs should add an extra 1-2 cents per gallon to the price of motor gasoline in the United States overall, costs are expected to rise 4-6 cents in the mandated areas.[7] The previously anticipated possibility of tight supply situations eased considerably in December, when the Environmental Protection Agency (EPA) allowed 28 counties in Pennsylvania, 9 in New York, and 2 in Maine to opt out of the program, resulting in a decrease in projected RFG demand and lower spot RFG prices. Refiners reduced RFG production accordingly, keeping RFG supply and demand balanced.[8]

- Abnormally mild weather on the East Coast from November 1994 through January 1995 has lead to low consumption and excess stock levels of distillate fuel oil (Figure 16). As a result, residential heating oil prices in the first quarter of 1995 are projected to be lower than year-ago levels. This expectation follows from the fact that fuel oil margins (and prices) were pushed well above normal levels last January and February due to the unusually cold weather.

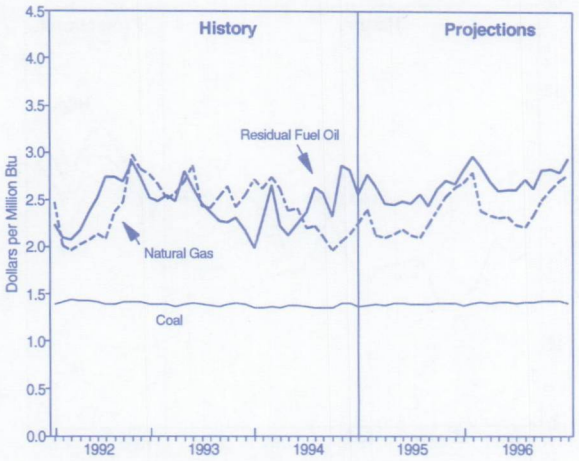
- Third quarter 1994 net income for the U.S. majors' domestic downstream operations fell by 33 percent from the previous year, while independent refiners' income fell by about 12 percent.[9] Gross refiner margins should rise over the next 2 years, but refiner net income may not increase significantly if reformulated gasoline costs prove difficult to fully recover.

Figure 17. Natural Gas Prices by Sector



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

Figure 18. Fossil Fuel Prices to Electric Utilities



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

- Residential natural gas prices increased by 3.5 percent in 1994 (Figure 17 and Table 5). This increase may have been due to the higher costs associated with industry restructuring under FERC Order 636. They are projected to remain relatively flat in average annual terms in 1995 as the first quarter 1995 price is likely to be less than in the same quarter of the prior year due to the lower projected wellhead prices for that period.

- In 1991 and 1992, natural gas generally had a price advantage over residual fuel oil in the electric utility sector (Figure 18). In 1993, residual fuel prices were somewhat lower as demand fell. In 1994, the prices of the two competing fuels have reversed, a trend that is expected to continue through 1996.

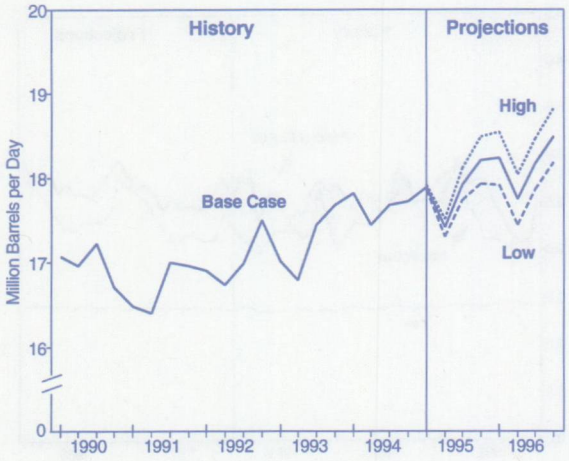
- Hopes for natural gas wellhead price recovery are tempered by the general expectation that gas demand will grow more slowly in 1995 than in 1994 (see "Natural Gas Demand," p. 15). This projection reflects the relatively low likelihood that the cold winter of 1994 (or something worse) will be repeated and the likelihood that the economy in 1995 will not match its 1994 average rate of growth.

- Spot natural gas wellhead prices in the last quarter of 1994 averaged about 50 cents per thousand cubic feet below year-ago levels.[10] This was largely the result of notably high levels of underground storage, and lower demand caused by the very mild weather on the East Coast (the month of November was the 4th warmest on record).[11] Continuation of this mild weather through January 1995 is expected to result in low natural gas wellhead prices through the first half of 1995. The 1995 average wellhead price is projected to decline by 7 cents per thousand cubic feet compared to 1994 (Figure 16 and Table 5).

- High storage levels, better overall inventory management, continued increases in Canadian natural gas imports, and moderate crude oil prices will all contribute to the decline in wellhead prices through 1995. In 1996, the average annual wellhead price is projected to increase by 14 cents per thousand cubic feet. Most of the 1996 change is related to the temporarily depressed gas market in the current quarter.

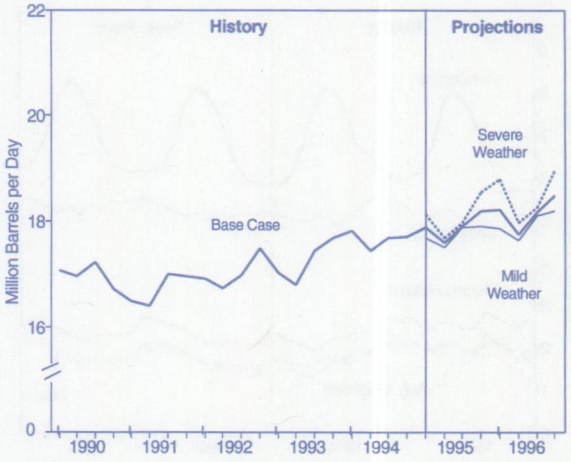
U.S. Oil Demand and Supply Sensitivities

Figure 19. Total Petroleum Demand: Macro Cases



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

Figure 20. Total Petroleum Demand: Weather Cases



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

- The petroleum demand and supply outlook for the mid-price case is based on normal temperatures and a particular set of macroeconomic assumptions. To enhance the usefulness of the mid-case forecast, ranges of possible outcomes for petroleum demand and supply, using alternative macroeconomic, price, and weather assumptions, are also derived (Table 9). Plausible macroeconomic and weather-related petroleum demand cases are illustrated in Figures 19 and 20.

- The petroleum price sensitivity assumes that nonpetroleum prices remain constant. The weather sensitivities assume deviations above and below normal that correspond to one-half of the largest quarterly deviations from normal in heating and cooling degree-days over the last 15 years.

- A 1-percent increase in real GDP raises petroleum demand by about 142,000 barrels per day. The impact of shifts in economic growth varies depending upon distribution of incremental growth across energy-intensive and non-energy-intensive sectors.

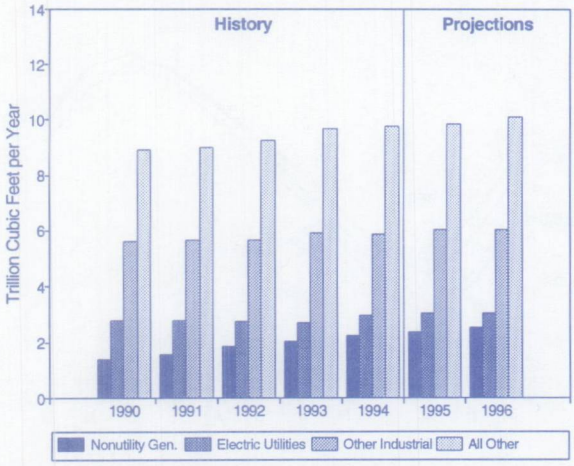
- A $1-per-barrel increase in crude oil prices, assuming no price response from non-petroleum energy sources, reduces demand by about 39,000 barrels per day.

- A $1-per-barrel increase in crude oil prices boosts domestic oil supply (crude oil and natural gas liquids production) by about 67,000 barrels per day.

- A 1-percent increase in heating degree-days increases demand by about 22,000 barrels per day. The impact of heating degree-day deviations from normal is not likely to be symmetrical. Extremely cold weather could result in indirect effects on fuel oil markets due to potential natural gas supply constraints that have no counterparts in the case of mild weather (Figure 21).

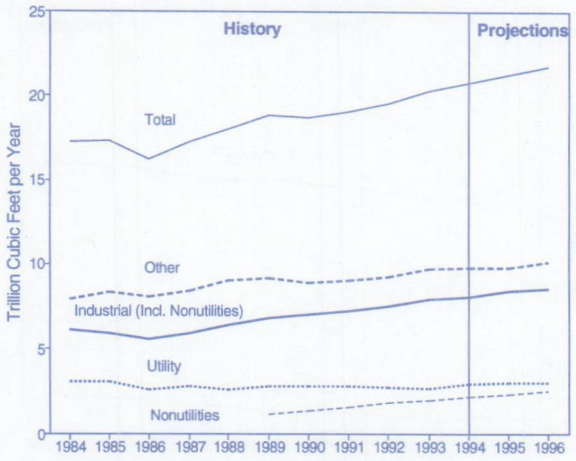
- A 1-percent increase in cooling degree-days increases petroleum demand by about 6,000 barrels per day.(See Appendix A for sensitivity calculation methodology.)

Figure 21. Natural Gas Demand for Power Generation and Other Uses



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

Figure 22. U.S. Natural Gas Demand Trends



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

- Gas demand in 1994 was an estimated 20.81 trillion cubic feet, an increase of 2.5 percent compared with 1993. In 1995 and 1996, gas demand growth is expected to slow from 1994 levels along with the economy. Gas demand growth is projected to grow by 2.2 percent in 1995 and 1996 (Figure 21 and Table 11).

- Strong economic growth, a reduction of hydropower capacity on the West Coast, and increasing market share of natural gas over oil are the main factors explaining high gas use for electricity generation, the fastest growing sector in 1994. Both utility and nonutility natural gas generation rose about 10 percent.

- Of the 925 billion cubic feet in additional gas demand expected for the 1994 to 1996 period, over 40 percent (390 billion cubic feet) is expected to be the result of increased electric power generation. In the electricity generation sector, nonutility gas generation is expected to grow at 6.8 percent in 1995, and 6.1 percent in 1996, considerably faster than utility gas generation. Electric utility gas generation is projected at 2.2 percent in 1995 and 1.0 percent in 1996 (Figure 22).

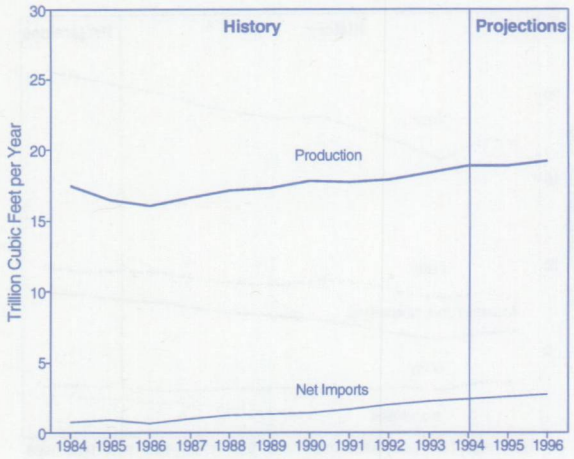
- Industrial demand (excluding nonutility electricity generation) for natural gas is forecast to increase by 2.8 percent in 1995, but show no growth in 1996, as the economy slows and gas prices rise.

- The relatively moderate temperatures of the summer, fall and winter months of 1994, i.e., second through fourth quarters, were reflected in the lack of residential sector growth in 1994, despite the severity of the first quarter. Under the assumption of normal weather in the forecast years, residential sector demand in 1995 and 1996 is expected to be up by 2.4 and 3.9 percent, respectively. This growth also reflects the continued addition of new natural gas customers.

- Commercial sector demand, after rising along with the economy and weather factors in 1994, should decline slightly in 1995 and may not exceed 1994 levels until 1996.

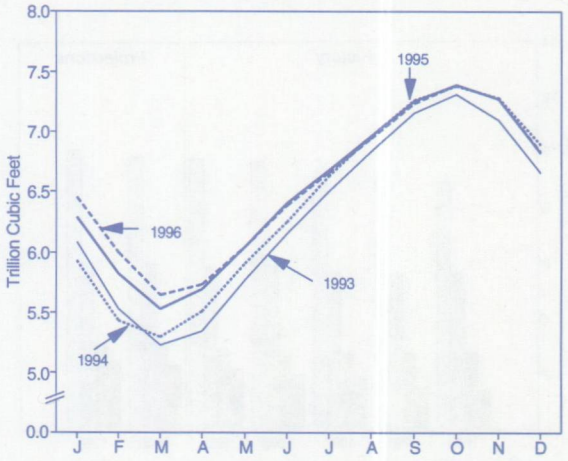
U.S. Natural Gas Supply

Figure 23. U.S. Dry Gas Production and Net Imports



Sources: First Quarter 1995 STIFS database and Energy Information Administration, Reserves and Natural Gas Division. Details provided in Figure References Section, p. 38.

Figure 24. Total Gas in Underground Storage



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

- U.S. dry gas production continued to rise steadily in 1994, and is estimated to have grown by 2.8 percent over the previous year. Some slowing in the rate of production increase, to less than 1 percent, is expected in 1995, as excess U.S. productive capacity narrows and Canadian imports compete with domestic production. Dry gas production in 1995 is projected at 18.9 trillion cubic feet, and in 1996, at 19.2 trillion cubic feet (Figure 23 and Table 11).

- Natural gas storage levels on December 1 were more than 10 percent higher than at the same time last year because of mild temperatures (Figure 24).[12] High gas storage levels in both the U.S. and Canada have been a major influence on the natural gas market since mid-summer, weakening gas wellhead prices in the North American market. According to a recent report on storage by Natural Resources Canada, storage development will tend to lower both peak and average annual prices, and lessen price volatility as it increases peak supplies and allows wells to produce at higher average annual rates.[13]

- The increased importance of gas storage stems from FERC Order 636's restructuring of gas markets, the closer balance of demand and wellhead capacity, and the effects of storage levels on gas prices. Gas storage development in both the U.S. and Canada is expected to grow significantly within the next few years.

- Net natural gas imports are estimated to have grown by 9.4 percent in 1994 to meet over 11 percent of total U.S. gas demand. Imports of competitively priced gas from Canada have tended to take the pressure off domestic production. Imports are forecast to continue to expand, by 5.7 percent in 1995, and 7.8 percent in 1996, and are expected to amount to 12.7 percent of total U.S. demand in 1996.

- U.S. dry gas productive capacity has been generally declining since 1992,[14] when gas wellhead prices fell and drilling declined. Productive capacity is expected to continue to decline slowly through the forecast period at projected gas wellhead prices.

Natural Gas Production Forecasts

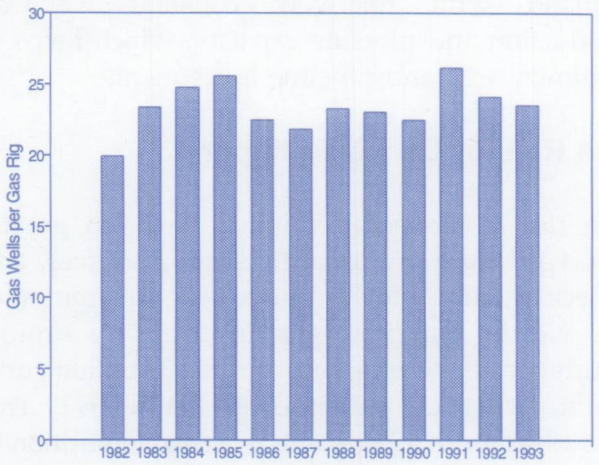
Since 1986, US natural gas demand has been on a steady upward trend, rising by an average of 3 percent annually. As a result of this demand increase, production has also been increasing steadily, rising by an average of 1.8 percent annually.[15] In 1994, the gas industry was producing more gas at a lower price due to increased competition and greater flexibility of operations stemming from deregulation, and technological improvements in exploration and development.[16] Gas supply and demand have moved into closer balance as the large excess productive capacity, i.e., the "gas bubble," that was a feature of the 1980's, has diminished. As a result, gas prices are more responsive to market fundamentals, while the resource base remains adequate to support production increases.

More Gas at Lower Prices

U.S. gas well completions have generally declined since 1986, when average gas wellhead prices dropped from $2.51 to $1.94 per thousand cubic feet.[17] However, U.S. total discoveries of gas per gas well have increased significantly. Total gas discoveries per exploratory well completion have risen from 12.2 billion cubic feet in 1986 to 23.1 billion cubic feet in 1993 (see Table on p. 19). During the 3 years prior to 1986, when wellhead prices were averaging almost $2.60 per thousand cubic foot, gas discoveries averaged 8 billion cubic feet (bcf) per gas exploratory well. The explanation is that because of lower prices the industry has focussed exploration in areas where a higher payoff per well is expected. In addition, there have been significant improvements in exploration technology and drilling technology, and increased competition that has come from industry restructuring.

Technological advances have improved the industry's ability to find and develop new gas reserves at competitive prices. Rig efficiency has generally been improving over the past 8 years. Since 1986, rig efficiency has increased by 6.4 percent (Figure 25), and real drilling costs have declined by almost 29 percent.[18]

Figure 25. Gas Well Completions per Gas Rig



Sources: Details provided in Figure References Section, p. 38.

Seasonality of Production and Consumption is Diminishing

Over the past few years, the differences between the highest and lowest monthly levels of consumption and production, i.e., seasonality, have been gradually declining. The primary reason for the decline is the development of a more efficient market, due largely to deregulation, in which supply and demand drive price changes. Probably the most important factor in this change has been the increased utilization of storage, as both injections and withdrawals of gas have increased throughout the year. Increased gas production has tended to be concentrated in the traditionally off-peak summer months, and is largely dedicated to injecting gas into storage for winter use, as well as to meet incremental demand from electric utilities and industrial cogenerators. This allows more constant wellhead production and contributes to

higher utilization of production and transmission facilities.[19]

The growing importance of gas storage, both seasonal and short-term, has been prompted by the decline in gas production capacity, as well as by the easier access to, and more widespread ownership of, storage which is the result of FERC Order 636.[20] Storage is used to balance variable demand with relatively constant wellhead production and pipeline capacity, which helps to minimize well and pipeline investment.

The Role of Canadian Imports

The rise in Canadian imports has also greatly eased pressure on domestic supply sources, and reflects the trend toward increasing integration of the North American gas industry.[21] Annual natural gas net imports rose from 689 billion cubic feet in 1986 to 2.2 trillion cubic feet in 1993. This was a leap from 4.2 percent of U.S. consumption to 10.5 percent. Net imports are estimated at 2.42 trillion cubic feet in 1994 and are forecast to rise to 2.75 trillion cubic feet by 1996. Canada's large resource base and competitively priced gas supplies provide increased supply options, particularly in the Northeast and Western United States.

Production Capacity

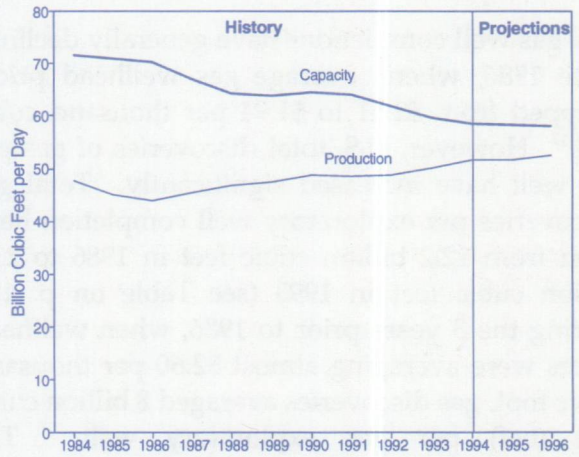
The trends of increasing gas demand and production have been accompanied by a decline in gas production capacity.[22] Annual average production capacity declined from 70.3 billion cubic feet per day in 1986 to 59.6 billion cubic feet per day in 1994, a drop of 18 percent. This was due to rising production and the decline in gas well completions that resulted from the drop in gas wellhead prices in 1986. Production capacity has been moving closer to gas demand levels, achieving a tighter balance between demand and supply, and effecting the gradual rise in wellhead prices since 1993.

Gas production capacity during the forecast period is projected to continue a slow decline. In 1996, production capacity is forecast at 56.9 billion cubic feet per day, while production is projected to reach 52.7, leaving an average surplus capacity of 4.2 billion cubic feet per day (Figure 26).

Gas Well Drilling

Total gas well completions in 1993 exceeded oil well completions for the first time ever, increasing by over 7 percent from 1992 levels to 8,560.[23] This was not only due to the 17 percent increase in average gas wellhead prices, but also to the tax credit for unconventional coalbed methane and tight-sand gas wells. The gas rig count forecast for 1996, based on average wellhead prices of $1.90 per thousand cubic feet, is 460 active gas rigs. This compares with an estimated average rig count

Figure 26. Dry Gas Production and Wellhead Productive Capacity



Sources: Details provided in Figure References Section, p. 38.

in 1994 of 416. Rig count and drilling are projected to rise despite wellhead prices under 2 dollars per thousand cubic feet because of steadily rising demand and steadily declining production capacity.[24]

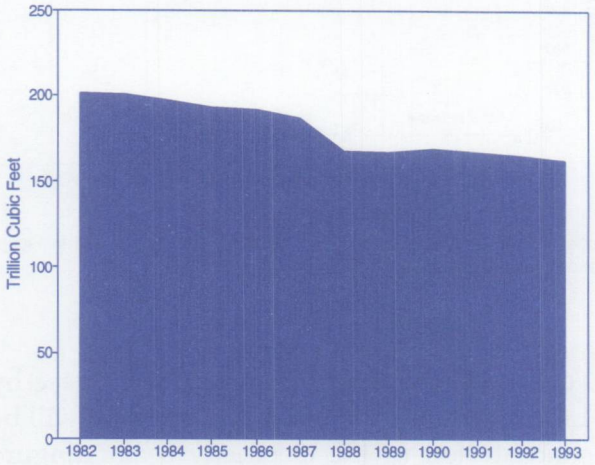
Gas Reserves

Since 1986, gas reserves have declined an average of 2.6 percent every year except for 1990 (when it increased), despite the drop in drilling (Figure 27). Total proved reserves in 1993 were 162.4 trillion cubic feet, compared with 191.6 trillion cubic feet in 1986. Large revisions and adjustments to the existing resource base resulting from new information about known gas reservoirs have been the major support for sustaining gas reserves during the past 5 years. In 1993, 42 percent of total gas additions were accounted for by reserve revisions resulting from new information about known gas reservoirs.[25]

Total gross new additions to proved natural gas reserves in 1993 were 14.97 trillion cubic feet compared with new additions in 1986 of 13.83 trillion cubic feet.[26] New discoveries were up substantially in 1993, but lower revisions and adjustments, in conjunction with increased production, were responsible for the 1993 net decline in reserves.

However, increased natural gas prices and drilling helped to hold the reserves decline to 1.6 percent. The turnaround in drilling combined with higher gas finding rates is expected to allow the gas industry to maintain adequate supplies.[27]

Figure 27. U.S. Dry Gas Proved Reserves



Sources: Details provided in Figure References Section, p. 38.

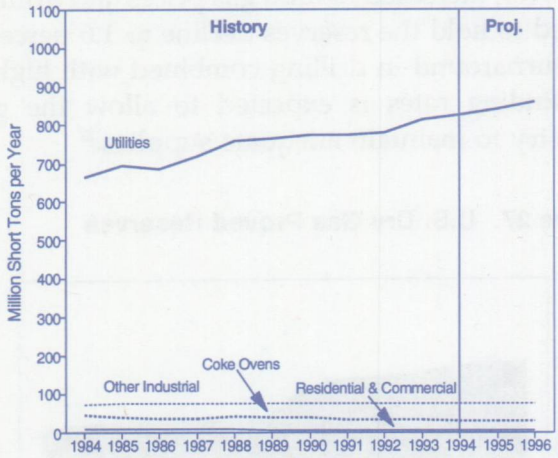
Selected Natural Gas Reserves and Production Data, 1986-1993

Year	Active Rigs	Wells Completed	Total Discoveries	Dry Gas Produced	Proved Reserves
			Trillion Cubic Feet		
1986	362	8135	8.94	15.61	191.59
1987	355	7757	7.18	16.11	187.21
1988	354	8238	10.35	16.67	168.02
1989	401	9225	10.03	16.98	167.12
1990	464	10440	12.37	17.23	169.35
1991	351	9166	7.54	17.20	167.06
1992	331	7975	7.05	17.42	165.02
1993	364	8564	8.87	17.79	162.42

[28]Sources: See Text References and Notes, p. 36.

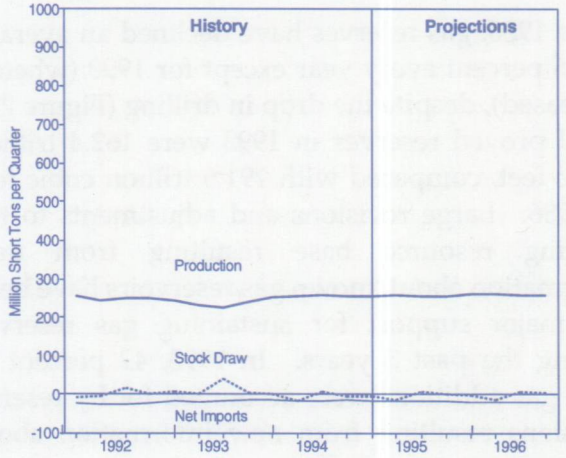
U.S. Coal Demand and Supply

Figure 28. U.S. Coal Demand Trends



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

Figure 29. Components of U.S. Coal Supply



Sources: First Quarter 1995 STIFS database and Energy Information Administration, Office of Coal, Nuclear, Electric, and Alternative Fuels. Details provided in Figure References Section, p. 38.

- Total coal demand is expected to increase by 1.4 percent in 1995 (Table 12). Growth will be concentrated in the electricity sector (Figure 28). Coal demand in 1996 is expected to grow by 1.8 percent.

- Electric utility coal demand is expected to increase by 1.7 percent in 1995. Growing demand for electricity, combined with little growth in electricity generation from nuclear power, leads to a 2.1 percent increase in utility coal demand for 1996 (Table 12). Coal-fired electricity generation accounts for approximately 57 percent of electricity produced by utilities, and 16 percent of electricity generated by nonutility power producers.

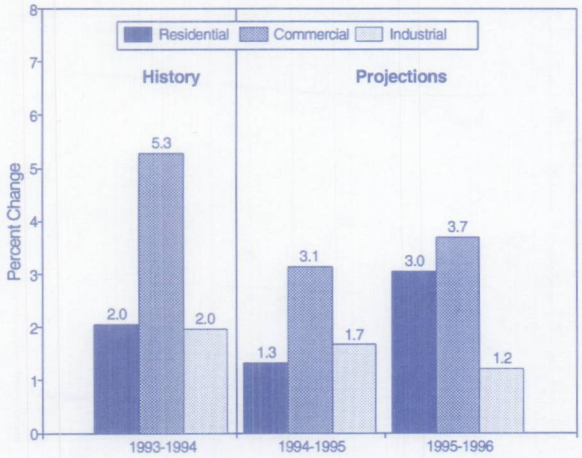
- Demand for coal at coke plants is expected to remain flat, at 30 million tons annually, throughout the forecast. A modest increase in steel output last year was accompanied by a decline in coking coal demand and coal coke output. Slower economic growth in 1996 continues to depress demand for metallurgical coal in the United States.

- Coal demand by the retail and general industry sectors should fall by about 1 percent in 1995. Consumption in 1996 is expected to decrease by an additional 0.9 percent. Demand from these sectors shrinks as milder weather is assumed, and coal begins to be displaced to meet environmental regulations and conservation initiatives.

- After 3 consecutive years of decline, U.S. coal exports are expected to experience growth in 1995, increasing by 6.5 percent. Exports should continue growing in 1996, as worldwide demand improves with a growing global economy (Table 12).

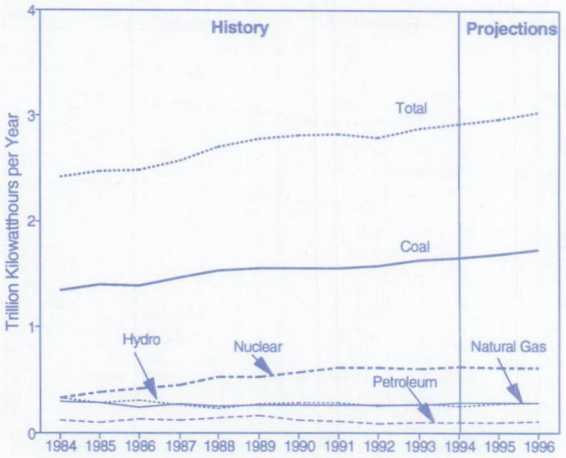
- Coal production is expected to grow by only 0.8 percent in 1995, despite increases in overall demand (Figure 29). Production grows by 1.5 percent in 1996, raising the annual rate to 23.6 million short tons above the 1994 level.

Figure 30. Electricity Demand Changes by Sector



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

Figure 31. U.S. Electricity Supply Trends



Sources: First Quarter 1995 STIFS database and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels. Details provided in Figure References Section, p. 38.

- Total electricity demand growth in 1994 is estimated to have increased at a rate of 3.0 percent. Demand is expected to continue to rise steadily through 1996, but at a slower rate than in 1994 due to the slowing economy and assumed normal weather.

- Growth in residential demand for electricity in 1995 is projected at 1.3 percent, down from 1994 due to weather-related factors. However, in 1996 residential growth is expected to expand at a faster rate than in 1994, despite lower rates of economic growth. Commercial sector demand is projected to rise by 3.1 percent in 1995 and 3.7 percent in 1996, due primarily to expanding employment (Figure 30 and Table 13).

- Industrial demand growth in 1995 is projected at 1.7 percent, and in 1996, at 1.2 percent, reflecting the decline in economic growth (Table 13).

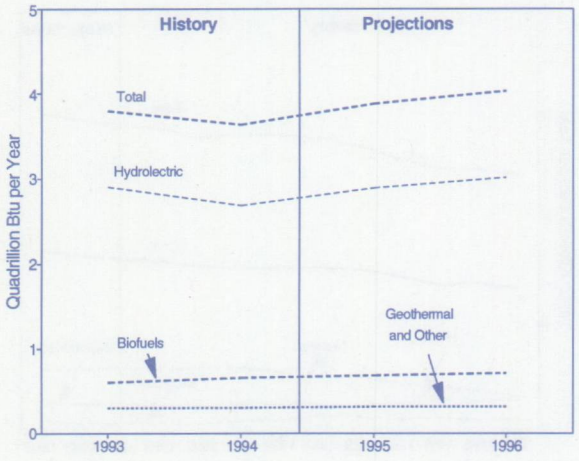
- U.S. utilities are expected to generate about 1.6 and 2.1 percent more electricity in 1995 and 1996, respectively. Nonutility generation is expected to increase at even faster rates of 6.6 percent in 1995, and 6.0 percent in 1996, as a result of capacity additions.

- Hydropower generation by electric utilities is expected to recover in 1995 from relatively low 1994 levels, edging out oil and gas generation (Figure 31). Nuclear power plants, which ran at above expected utilization rates this year, are expected to run at lower rates next year.

- Net imports of electricity from Canada grew significantly in 1994, due mainly to increased interruptible purchases of surplus electricity from Ontario Hydro and Hydro Quebec. Imports will continue to be high in 1995 and 1996, although lower than 1994, as the surplus electricity may be needed to meet internal Canadian demand.

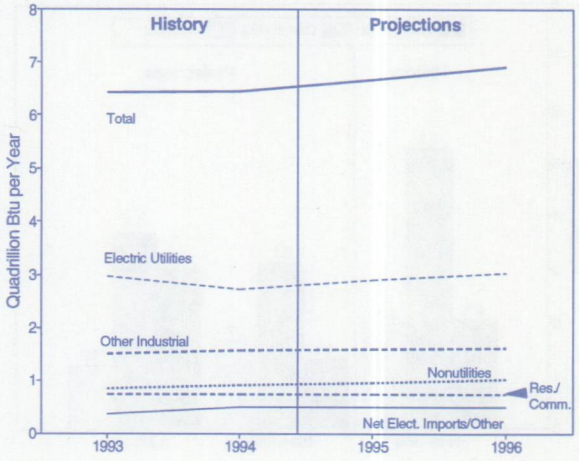
U.S. Renewable Energy Demand

Figure 32. Renewable Energy Use for Electricity



Sources: First Quarter 1995 STIFS database. Details provided in Figure References Section, p. 38.

Figure 33. Renewable Energy Use by Sector



Sources: First Quarter 1995 STIFS database and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels. Details provided in Figure References Section, p. 38.

- Renewable energy use in the United States amounted to approximately 6.42 quadrillion Btu (quads), or about 7.4 percent of total domestic gross energy demand in 1993 (Tables 1 and 14). In 1994, renewables remained about flat, mainly due to an overall reduction in hydroelectric power availability. For 1995 and 1996, renewables growth should resume as hydroelectric sources recover and use of biomass nonutility power generation expands.

- More than half of all renewable energy use measured by EIA is associated with the production of electricity. While the biggest component of electricity producers' use of renewables is hydroelectric power generated by electric utilities, a significant and growing share of renewables use is observed at nonutility generating facilities (Figure 32).

- Most of the industrial use of renewables involves biofuels, principally wood and wood by-products. However, all of the major forms of renewables use at nonutilities (including hydropower) seem to be growing.

- On balance, it is expected that of a 0.24 quad increase over the three year period of 1993 through 1996 in total renewables use in the power generation sector, about 75 percent will have come from expansion of nonutility power.

- Currently, aside from power generation, the most significant area of renewables use is in the industrial sector, accounting for 24 percent of the total in 1994 (Figure 33). This component relates principally to biofuels.

- Renewables use in the combined residential and commercial sector, at about 0.75 quad in 1994, accounts for about 12 percent of total domestic renewables demand. Most of this energy relates to estimates of wood used for home heating, with only a very small amount having to do with solar heating.

- A fairly significant portion of total renewables demand is net electricity imports (6.6 percent of the total in 1994). This category is counted as renewable energy because it stems largely from hydropower output in Canada.[29]

Table 2. U.S. Macroeconomic and Weather Assumptions

	Macro Case	1994 1st	1994 2nd	1994 3rd	1994 4th	1995 1st	1995 2nd	1995 3rd	1995 4th	1996 1st	1996 2nd	1996 3rd	1996 4th	Year 1994	Year 1995	Year 1996
Macroeconomic [a]																
Real Gross Domestic Product (billion 1987 dollars)	High					*5446*	*5492*	*5539*	*5596*	*5634*	*5665*	*5704*	*5754*		*5518*	*5689*
	Mid	**5261**	**5314**	**5359**	*5397*	*5433*	*5448*	*5463*	*5488*	*5518*	*5549*	*5587*	*5635*	*5333*	*5458*	*5572*
	Low					*5420*	*5405*	*5386*	*5380*	*5402*	*5432*	*5470*	*5517*		*5398*	*5455*
Percentage Change from Prior Year	High					*3.5*	*3.3*	*3.4*	*3.7*	*3.5*	*3.2*	*3.0*	*2.8*		*3.5*	*3.1*
	Mid	**3.7**	**4.1**	**4.3**	*3.4*	*3.3*	*2.5*	*1.9*	*1.7*	*1.6*	*1.8*	*2.3*	*2.7*	*3.9*	*2.4*	*2.1*
	Low					*3.0*	*1.7*	*0.5*	*-0.3*	*-0.3*	*0.5*	*1.5*	*2.5*		*1.2*	*1.1*
Annualized Percent Change from Prior Quarter	High					*3.6*	*3.4*	*3.5*	*4.1*	*2.7*	*2.2*	*2.7*	*3.5*			
	Mid	**3.3**	**4.0**	**3.4**	*2.8*	*2.7*	*1.1*	*1.1*	*1.8*	*2.2*	*2.2*	*2.7*	*3.5*			
	Low					*1.8*	*-1.1*	*-1.4*	*-0.5*	*1.7*	*2.2*	*2.7*	*3.5*			
GDP Implicit Price Deflator (Index, 1987=1.000)	High					*1.280*	*1.285*	*1.290*	*1.295*	*1.304*	*1.313*	*1.322*	*1.331*		*1.287*	*1.318*
	Mid	**1.250**	**1.259**	**1.264**	*1.271*	*1.281*	*1.288*	*1.296*	*1.303*	*1.313*	*1.322*	*1.331*	*1.340*	*1.261*	*1.292*	*1.327*
	Low					*1.282*	*1.291*	*1.302*	*1.311*	*1.322*	*1.331*	*1.340*	*1.349*		*1.296*	*1.336*
Percentage Change from Prior Year	High					*2.4*	*2.1*	*2.0*	*1.9*	*1.9*	*2.2*	*2.5*	*2.8*		*2.1*	*2.3*
	Mid	**1.7**	**2.0**	**2.2**	*2.5*	*2.5*	*2.3*	*2.5*	*2.5*	*2.5*	*2.6*	*2.7*	*2.8*	*2.1*	*2.4*	*2.7*
	Low					*2.5*	*2.6*	*3.0*	*3.1*	*3.1*	*3.1*	*2.9*	*2.9*		*2.8*	*3.0*
Real Disposable Personal Income (billion 1987 Dollars)	High					*3921*	*3964*	*4000*	*4044*	*4078*	*4098*	*4122*	*4152*		*3982*	*4113*
	Mid	**3779**	**3812**	**3839**	*3898*	*3911*	*3931*	*3942*	*3962*	*3990*	*4010*	*4033*	*4062*	*3832*	*3936*	*4024*
	Low					*3902*	*3897*	*3884*	*3880*	*3902*	*3921*	*3944*	*3973*		*3891*	*3935*
Percentage Change from Prior Year	High					*3.7*	*4.0*	*4.2*	*3.8*	*4.0*	*3.4*	*3.0*	*2.7*		*3.9*	*3.3*
	Mid	**3.3**	**3.0**	**3.5**	*4.0*	*3.5*	*3.1*	*2.7*	*1.6*	*2.0*	*2.0*	*2.3*	*2.5*	*3.5*	*2.7*	*2.2*
	Low					*3.2*	*2.3*	*1.2*	*-0.5*	*0.0*	*0.6*	*1.5*	*2.4*		*1.5*	*1.1*
Manufacturing Production (Index, 1987=1.000)	High					*1.237*	*1.258*	*1.274*	*1.289*	*1.296*	*1.304*	*1.318*	*1.336*		*1.264*	*1.314*
	Mid	**1.168**	**1.189**	**1.205**	*1.221*	*1.231*	*1.236*	*1.235*	*1.234*	*1.238*	*1.245*	*1.259*	*1.276*	*1.196*	*1.234*	*1.254*
	Low					*1.224*	*1.213*	*1.196*	*1.180*	*1.179*	*1.186*	*1.199*	*1.216*		*1.203*	*1.195*
Percentage Change from Prior Year	High					*5.9*	*5.8*	*5.7*	*5.5*	*4.7*	*3.7*	*3.5*	*3.7*		*5.7*	*3.9*
	Mid	**4.4**	**5.9**	**6.6**	*6.3*	*5.3*	*3.9*	*2.5*	*1.1*	*0.6*	*0.8*	*1.9*	*3.4*	*5.8*	*3.2*	*1.7*
	Low					*4.8*	*2.0*	*-0.7*	*-3.4*	*-3.6*	*-2.2*	*0.3*	*3.0*		*0.6*	*-0.7*
OECD Economic Growth (percent) [b]														2.9	2.6	2.6
Weather [c]																
Heating Degree-Days																
U.S.		**2438**	**488**	**110**	*1439*	*2269*	*524*	*89*	*1636*	*2354*	*524*	*89*	*1636*	*4475*	*4518*	*4603*
New England		**3631**	**860**	**246**	*1980*	*3192*	*915*	*171*	*2269*	*3306*	*915*	*171*	*2269*	*6717*	*6546*	*6660*
Middle Atlantic		**3081**	**674**	**152**	*1724*	*2993*	*716*	*105*	*2026*	*3028*	*716*	*105*	*2026*	*5631*	*5839*	*5875*
U.S. Gas-Weighted		**2496**	**520**	**116**	*1527*	*2375*	*539*	*81*	*1686*	*2451*	*539*	*81*	*1686*	*4659*	*4681*	*4757*
Cooling Degree-Days (U.S.)		**34**	**374**	**742**	*70*	*30*	*334*	*758*	*72*	*30*	*334*	*758*	*72*	*1220*	*1193*	*1193*

[a] Macroeconomic projections from DRI/McGraw-Hill model forecasts are seasonally adjusted at annual rates and modified as appropriate to the mid world oil price case. These mid-case macroeconomic projections are then modified by the low and high world oil price cases (as shown in Table 5) and by various explicit economic assumptions, with the low world oil price case applied to the high macroeconomic case, and the high world oil price case applied to the low macroeconomic case.

[b] OECD: Organization for Economic Cooperation and Development.

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

Note: Historical data are printed in bold, forecasts are in italic.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(94/12); U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, October 1994; U.S. Department of Commerce, National Oceanic and Atmospheric Administration, *Monthly State, Regional, and National Heating/Cooling Degree Days Weighted by Population*; Federal Reserve System, *Statistical Release G.17(419)*, October 1994. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL1194.

Table 3. U.S. Energy Indicators: Mid World Oil Price Case

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Macroeconomic [a]															
Real Fixed Investment (billion 1987 dollars)	**873**	**892**	**899**	*920*	*934*	*943*	*949*	*953*	*957*	*962*	*971*	*982*	*896*	*945*	*968*
Real Exchange Rate (index)	**1.289**	**1.260**	**1.211**	*1.166*	*1.182*	*1.201*	*1.203*	*1.202*	*1.205*	*1.211*	*1.232*	*1.255*	*1.232*	*1.197*	*1.226*
Business Inventory Change (billion 1987 dollars)	**9.9**	**0.7**	**11.9**	*16.1*	*17.5*	*12.3*	*7.3*	*2.2*	*1.6*	*1.3*	*0.6*	*1.9*	*9.6*	*9.8*	*1.4*
Wholesale Price Index (index, 1980-1984=1.000)	**1.197**	**1.199**	**1.207**	*1.220*	*1.239*	*1.249*	*1.259*	*1.267*	*1.275*	*1.281*	*1.289*	*1.296*	*1.206*	*1.254*	*1.285*
Consumer Price Index (index, 1980-1984=1.000)	**1.467**	**1.477**	**1.490**	*1.501*	*1.516*	*1.528*	*1.540*	*1.553*	*1.566*	*1.579*	*1.592*	*1.606*	*1.484*	*1.534*	*1.586*
Petroleum Product Price Index (index, 1980-1984=1.000)	**0.550**	**0.581**	**0.636**	*0.602*	*0.635*	*0.627*	*0.616*	*0.621*	*0.669*	*0.653*	*0.643*	*0.639*	*0.593*	*0.625*	*0.651*
Non-Farm Employment (millions)	**112.0**	**113.0**	**113.9**	*114.6*	*115.2*	*115.7*	*116.2*	*116.5*	*116.9*	*117.3*	*117.7*	*118.2*	*113.4*	*115.9*	*117.5*
Commercial Employment (millions)	**74.5**	**75.4**	**76.1**	*76.7*	*77.2*	*77.7*	*78.1*	*78.5*	*78.9*	*79.3*	*79.8*	*80.2*	*75.7*	*77.9*	*79.6*
Total Industrial Production (index, 1987=1.000)	**1.156**	**1.174**	**1.188**	*1.199*	*1.207*	*1.211*	*1.211*	*1.211*	*1.214*	*1.221*	*1.232*	*1.248*	*1.179*	*1.210*	*1.229*
Housing Stock (millions)	**107.4**	**107.8**	**108.1**	*108.5*	*108.8*	*109.2*	*109.5*	*109.8*	*110.1*	*110.4*	*110.7*	*111.0*	*108.0*	*109.3*	*110.6*
Miscellaneous															
Gas Weighted Industrial Production (index, 1987=1.000)	**1.136**	**1.157**	**1.163**	*1.175*	*1.180*	*1.181*	*1.171*	*1.167*	*1.166*	*1.169*	*1.177*	*1.192*	*1.158*	*1.175*	*1.176*
Vehicle Miles Traveled (million miles per day)	**5808**	**6660**	**6857**	*6301*	*6030*	*6831*	*7042*	*6450*	*6200*	*7012*	*7222*	*6623*	*6409*	*6591*	*6765*
Vehicle Fuel Efficiency (miles per gallon)	**19.24**	**20.64**	**20.86**	*19.26*	*19.37*	*20.81*	*21.03*	*19.72*	*19.66*	*21.10*	*21.32*	*19.99*	*20.02*	*20.25*	*20.53*
Real Vehicle Fuel Cost (cents per mile)	**3.93**	**3.76**	**3.94**	*4.14*	*4.04*	*3.86*	*3.83*	*4.10*	*4.04*	*3.81*	*3.78*	*4.01*	*3.94*	*3.95*	*3.90*
Air Travel Capacity (available ton-miles)	**340.2**	**362.4**	**379.0**	*364.1*	*361.5*	*374.1*	*393.7*	*377.6*	*370.9*	*382.6*	*402.5*	*386.4*	*361.5*	*376.8*	*385.7*
Aircraft Utilization (revenue ton-miles)	**185.9**	**205.8**	**220.7**	*198.4*	*191.0*	*208.8*	*226.1*	*202.7*	*194.5*	*212.8*	*230.8*	*207.3*	*202.8*	*207.2*	*211.4*
Aircraft Yield (cents per ton-mile)	**13.90**	**13.33**	**11.81**	*12.85*	*13.42*	*12.67*	*11.69*	*12.80*	*13.68*	*12.87*	*11.85*	*12.94*	*12.92*	*12.60*	*12.79*
Residential Natural Gas Customers (millions)	**53.87**	**53.70**	**53.55**	*54.26*	*54.75*	*54.59*	*54.32*	*54.82*	*55.71*	*55.53*	*55.27*	*55.74*	*53.85*	*54.62*	*55.56*
Commercial Natural Gas Customers (millions)	**4.52**	**4.47**	**4.41**	*4.49*	*4.62*	*4.57*	*4.50*	*4.60*	*4.73*	*4.67*	*4.60*	*4.69*	*4.47*	*4.57*	*4.67*
Raw Steel Production (millions)	**23.92**	**24.56**	**24.04**	*24.25*	*23.80*	*24.46*	*24.10*	*24.31*	*23.94*	*24.15*	*23.87*	*24.31*	*96.78*	*96.68*	*96.27*

[a] Macroeconomic projections from DRI/McGraw-Hill model forecasts are seasonally adjusted at annual rates and modified as appropriate to the mid world oil price case. These mid-case macroeconomic projections are then modified by the low and high world price cases (as shown in Table 5) and by various explicit economic assumptions, with low world oil price case applied to the high macroeconomic case, and high world oil price case applied to the low macroeconomic case.

Note: Historical data are printed in bold, forecasts are in italic.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(94/12); U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, October 1994; U.S. Department of Commerce, National Oceanic and Atmospheric Administration, *Monthly State, Regional, and National Heating/Cooling Degree Days Weighted by Population*; Federal Reserve System, *Statistical Release G.17(419)*, October 1994. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL1194.

Table 4. International Petroleum Supply and Demand: Mid World Oil Price Case
(Million Barrels per Day, Except Closing Stocks)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Demand [a]															
OECD															
U.S. (50 States)	**17.8**	**17.4**	**17.7**	*17.7*	*17.9*	*17.6*	*17.9*	*18.2*	*18.2*	*17.8*	*18.2*	*18.5*	*17.7*	*17.9*	*18.2*
U.S. Territories	**0.2**	**0.3**	**0.2**	*0.3*	*0.2*	*0.3*	*0.2*	*0.3*	*0.2*	*0.3*	*0.2*	*0.3*	*0.3*	*0.3*	*0.3*
Canada	**1.7**	**1.6**	**1.7**	*1.7*	*1.7*	*1.7*	*1.7*	*1.7*	*1.7*	*1.7*	*1.8*	*1.8*	*1.7*	*1.7*	*1.7*
Europe [b]	**13.6**	**13.3**	**13.5**	*14.1*	*13.8*	*13.5*	*13.7*	*14.3*	*14.0*	*13.6*	*13.8*	*14.4*	*13.6*	*13.8*	*14.0*
Japan	**6.2**	**5.1**	**5.5**	*6.1*	*6.3*	*5.1*	*5.6*	*6.2*	*6.3*	*5.2*	*5.7*	*6.3*	*5.7*	*5.8*	*5.9*
Australia and New Zealand	**0.9**	**0.9**	**0.9**	*1.0*	*0.9*	*0.9*	*1.0*	*1.0*	*0.9*	*0.9*	*1.0*	*1.0*	*0.9*	*0.9*	*1.0*
Total OECD	**40.5**	**38.7**	**39.6**	*40.8*	*40.8*	*39.1*	*40.1*	*41.6*	*41.4*	*39.5*	*40.7*	*42.2*	*39.9*	*40.4*	*41.0*
Non-OECD															
Former Soviet Union	**5.3**	**4.4**	**4.6**	*4.9*	*4.8*	*4.4*	*4.2*	*4.5*	*4.4*	*4.1*	*3.9*	*4.2*	*4.8*	*4.5*	*4.1*
Europe	**1.4**	**1.3**	**1.2**	*1.3*	*1.4*	*1.3*	*1.3*	*1.3*	*1.5*	*1.4*	*1.3*	*1.4*	*1.3*	*1.3*	*1.4*
China	**3.1**	**3.2**	**3.3**	*3.4*	*3.2*	*3.3*	*3.4*	*3.5*	*3.6*	*3.6*	*3.6*	*3.7*	*3.2*	*3.3*	*3.6*
Other Asia	**6.8**	**6.6**	**6.5**	*7.3*	*7.2*	*7.0*	*6.9*	*7.7*	*7.7*	*7.4*	*7.3*	*8.2*	*6.8*	*7.2*	*7.6*
Other Non-OECD	**11.3**	**11.4**	**11.5**	*11.7*	*11.6*	*11.7*	*11.8*	*12.0*	*11.9*	*12.0*	*12.1*	*12.3*	*11.5*	*11.8*	*12.1*
Total Non-OECD	**27.9**	**26.9**	**27.1**	*28.5*	*28.3*	*27.7*	*27.5*	*29.1*	*29.1*	*28.4*	*28.2*	*29.7*	*27.6*	*28.1*	*28.8*
Total World Demand	**68.4**	**65.5**	**66.7**	*69.4*	*69.1*	*66.8*	*67.7*	*70.7*	*70.5*	*67.9*	*68.9*	*71.9*	*67.5*	*68.6*	*69.8*
Supply [c]															
OECD															
U.S. (50 States)	**9.4**	**9.3**	**9.3**	*9.5*	*9.4*	*9.3*	*9.3*	*9.3*	*9.2*	*9.1*	*9.1*	*9.1*	*9.4*	*9.3*	*9.1*
Canada	**2.3**	**2.3**	**2.3**	*2.4*	*2.3*	*2.3*	*2.3*	*2.3*	*2.3*	*2.3*	*2.4*	*2.4*	*2.3*	*2.3*	*2.3*
North Sea [d]	**5.2**	**5.3**	**5.3**	*5.7*	*5.6*	*5.4*	*5.5*	*5.8*	*5.9*	*5.7*	*5.8*	*6.1*	*5.4*	*5.6*	*5.9*
Other OECD	**1.4**	**1.4**	**1.5**	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*
Total OECD	**18.3**	**18.3**	**18.4**	*19.0*	*18.8*	*18.5*	*18.6*	*18.9*	*18.9*	*18.6*	*18.7*	*19.0*	*18.5*	*18.7*	*18.8*
Non-OECD															
OPEC	**27.3**	**27.3**	**27.3**	*27.5*	*27.5*	*27.5*	*27.7*	*28.1*	*28.4*	*28.5*	*28.8*	*29.3*	*27.3*	*27.7*	*28.8*
Former Soviet Union	**7.2**	**7.0**	**7.2**	*7.1*	*6.6*	*6.4*	*6.7*	*6.6*	*6.2*	*6.0*	*6.4*	*6.3*	*7.1*	*6.6*	*6.2*
China	**2.9**	**2.9**	**3.0**	*3.0*	*2.9*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*
Mexico	**3.2**	**3.2**	**3.2**	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*	*3.2*	*3.3*	*3.3*
Other Non-OECD	**8.5**	**8.6**	**8.6**	*8.7*	*8.8*	*8.9*	*8.9*	*9.1*	*9.1*	*9.2*	*9.2*	*9.4*	*8.6*	*8.9*	*9.2*
Total Non-OECD	**49.1**	**49.0**	**49.2**	*49.5*	*49.1*	*49.0*	*49.6*	*50.0*	*50.0*	*50.0*	*50.7*	*51.2*	*49.2*	*49.4*	*50.5*
Total World Supply	**67.4**	**67.3**	**67.6**	*68.5*	*68.0*	*67.5*	*68.2*	*68.9*	*68.9*	*68.6*	*69.4*	*70.2*	*67.7*	*68.2*	*69.3*
Stock Changes and Statistical Discrepancy															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR)	**0.8**	**-0.4**	**-0.7**	*0.4*	*0.4*	*-0.6*	*-0.3*	*0.2*	*0.6*	*-0.6*	*-0.2*	*0.2*	*0.0*	*-0.1*	*0.0*
Other	**0.8**	**-1.3**	**-0.8**	*0.0*	*0.3*	*-0.7*	*-0.7*	*1.0*	*0.5*	*-0.7*	*-0.8*	*1.0*	*-0.3*	*0.0*	*0.0*
Total Stock Withdrawals	**1.5**	**-1.7**	**-1.4**	*0.4*	*0.6*	*-1.3*	*-1.0*	*1.3*	*1.1*	*-1.2*	*-1.0*	*1.2*	*-0.3*	*-0.1*	*0.0*
Statistical Discrepancy	**-0.5**	**0.0**	**0.5**	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.1*	*0.5*	*0.5*
Closing Stocks (billion barrels) [e]	**5.5**	**5.7**	**5.8**	*5.8*	*5.7*	*5.8*	*5.9*	*5.8*	*5.7*	*5.8*	*5.9*	*5.8*	*5.8*	*5.8*	*5.8*
Non-OPEC Supply	**40.0**	**40.0**	**40.4**	*41.0*	*40.5*	*40.1*	*40.5*	*40.8*	*40.5*	*40.1*	*40.6*	*40.9*	*40.4*	*40.5*	*40.5*
Net Exports from Former Soviet Union	**1.8**	**2.5**	**2.6**	*2.2*	*1.8*	*2.0*	*2.5*	*2.1*	*1.8*	*2.0*	*2.5*	*2.1*	*2.3*	*2.1*	*2.1*

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

[b] OECD Europe includes eastern Germany.

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

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

[e] Excludes stocks held in the Former CPEs.

OECD: Organization for Economic Cooperation and Development

OPEC: Organization of Petroleum Exporting Countries

SPR: Strategic Petroleum Reserve

Former CPEs: Albania, Bulgaria, Cambodia, China, Cuba, the Czech and Slovak Federal Republic, Hungary, Laos, Mongolia, North Korea, Poland, Romania, the Former Soviet Union, Vietnam, and Former Yugoslavia

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

Sources: Energy Information Administration, *International Petroleum Statistics Report*, DOE/EIA-0520(94/12); and *International Energy Annual 1993*, DOE/EIA-0219(93); Organization for Economic Cooperation and Development, Annual and Monthly Oil Statistics Database through December 1994.

Table 5. U.S. Energy Prices
(Nominal Dollars)

	Price Case	1994 1st	1994 2nd	1994 3rd	1994 4th	1995 1st	1995 2nd	1995 3rd	1995 4th	1996 1st	1996 2nd	1996 3rd	1996 4th	Year 1994	Year 1995	Year 1996
Imported Crude Oil [a]	Low					13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00		13.00	13.00
(dollars per barrel)	Mid	**13.01**	**15.80**	**16.73**	16.16	16.00	16.50	17.00	17.50	17.50	17.50	18.00	18.00	15.53	16.77	17.76
	High					19.00	19.50	20.00	21.00	21.00	21.00	22.00	22.00		19.89	21.52
Natural Gas Wellhead	Low					1.56	1.42	1.51	1.76	1.60	1.51	1.64	1.89		1.56	1.66
(dollars per thousand cubic feet)	Mid	**2.08**	**1.87**	**1.71**	1.64	1.60	1.61	1.75	2.09	1.85	1.74	1.84	2.16	1.83	1.76	1.90
	High					1.66	1.96	2.07	2.45	2.30	2.18	2.24	2.57		2.04	2.32
Petroleum Products																
Gasoline Retail [b]	Low					1.13	1.15	1.15	1.15	1.14	1.17	1.17	1.17		1.15	1.16
(dollars per gallon)	Mid	**1.11**	**1.15**	**1.23**	1.21	1.19	1.23	1.24	1.25	1.24	1.27	1.28	1.29	1.17	1.23	1.27
	High					1.24	1.30	1.31	1.33	1.32	1.35	1.37	1.38		1.29	1.36
No. 2 Diesel Oil, Retail	Low					1.05	1.07	1.09	1.14	1.13	1.12	1.12	1.16		1.09	1.13
(dollars per gallon)	Mid	**1.10**	**1.10**	**1.12**	1.12	1.12	1.15	1.18	1.24	1.23	1.22	1.24	1.28	1.11	1.18	1.24
	High					1.19	1.22	1.25	1.32	1.31	1.30	1.33	1.37		1.25	1.33
No. 2 Heating Oil, Wholesale	Low					0.49	0.45	0.45	0.48	0.46	0.44	0.45	0.48		0.47	0.46
(dollars per gallon)	Mid	**0.52**	**0.49**	**0.51**	0.51	0.51	0.52	0.55	0.59	0.58	0.55	0.57	0.60	0.51	0.55	0.58
	High					0.54	0.58	0.62	0.68	0.67	0.64	0.67	0.70		0.61	0.67
No. 2 Heating Oil, Retail	Low					0.89	0.85	0.81	0.87	0.90	0.85	0.82	0.88		0.87	0.88
(dollars per gallon)	Mid	**0.91**	**0.87**	**0.83**	0.85	0.90	0.91	0.90	0.98	1.01	0.96	0.94	1.00	0.88	0.93	0.99
	High					0.92	0.96	0.97	1.06	1.09	1.05	1.04	1.10		0.97	1.08
No. 6 Residual Fuel Oil, Retail [c]	Low					13.28	11.88	11.57	12.37	12.78	11.32	11.26	12.13		12.32	11.94
(dollars per barrel)	Mid	**14.38**	**13.84**	**15.83**	15.73	15.50	14.43	14.46	15.68	16.85	15.32	15.58	16.44	14.85	15.07	16.12
	High					17.71	16.64	16.68	18.28	19.46	17.94	18.56	19.42		17.39	18.91
Electric Utility Fuels																
Coal	Low					1.36	1.37	1.36	1.36	1.37	1.38	1.37	1.37		1.36	1.37
(dollars per million Btu)	Mid	**1.36**	**1.38**	**1.35**	1.39	1.38	1.40	1.40	1.40	1.40	1.42	1.42	1.42	1.37	1.39	1.42
	High					1.40	1.43	1.43	1.43	1.45	1.46	1.47	1.47		1.42	1.46
Heavy Fuel Oil [d]	Low					2.27	2.06	2.07	2.20	2.20	1.97	2.02	2.16		2.16	2.09
(dollars per million Btu)	Mid	**2.38**	**2.26**	**2.54**	2.74	2.62	2.46	2.53	2.73	2.84	2.60	2.71	2.86	2.47	2.59	2.76
	High					2.97	2.81	2.89	3.15	3.25	3.01	3.19	3.33		2.96	3.20
Natural Gas	Low					2.14	1.96	2.01	2.32	2.23	2.06	2.13	2.42		2.09	2.19
(dollars per million Btu)	Mid	**2.65**	**2.31**	**2.10**	2.13	2.20	2.15	2.24	2.61	2.48	2.29	2.34	2.68	2.25	2.29	2.43
	High					2.28	2.46	2.52	2.92	2.89	2.68	2.69	3.03		2.55	2.80
Other Residential																
Natural Gas	Low					5.87	6.54	7.80	6.23	6.03	6.61	7.94	6.40		6.26	6.39
(dollars per thousand cubic feet)	Mid	**6.08**	**6.84**	**7.88**	6.15	5.90	6.64	7.95	6.40	6.19	6.78	8.12	6.54	6.37	6.35	6.56
	High					5.98	6.78	8.27	6.69	6.49	7.17	8.60	6.89		6.52	6.90
Electricity	Low					8.0	8.6	8.8	8.4	8.1	8.7	8.9	8.5		8.4	8.5
(cents per kilowatthour)	Mid	**7.9**	**8.6**	**8.9**	8.5	8.2	8.8	9.1	8.7	8.4	9.0	9.3	8.8	8.5	8.7	8.9
	High					8.8	9.5	9.8	9.3	9.2	9.9	10.2	9.7		9.3	9.8

[a] Cost of imported crude oil to U.S.
[b] Average for all grades and services.
[c] Average for all sulfur contents.
[d] Includes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Data are estimated for the fourth quarter of 1994. Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. Price cases are derived by simulating all energy product price models under the assumptions of the three world oil price cases using the mid macroeconomic case and normal weather assumptions for all simulations. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(94/12); and *Petroleum Marketing Monthly*, DOE/EIA-0380(94/12).

Table 6. U.S. Petroleum Supply and Demand: Low World Oil Price Case
(Million Barrels per Day, Except Closing Stocks)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Supply															
Crude Oil Supply															
Domestic Production [a]	**6.75**	**6.62**	**6.54**	*6.65*	*6.47*	*6.27*	*6.13*	*6.11*	*6.06*	*5.90*	*5.80*	*5.76*	*6.64*	*6.24*	*5.88*
Alaska	**1.61**	**1.53**	**1.50**	*1.58*	*1.54*	*1.45*	*1.39*	*1.42*	*1.41*	*1.33*	*1.29*	*1.29*	*1.55*	*1.45*	*1.33*
Lower 48	**5.14**	**5.09**	**5.04**	*5.08*	*4.93*	*4.82*	*4.74*	*4.69*	*4.66*	*4.57*	*4.51*	*4.46*	*5.08*	*4.79*	*4.55*
Net Imports (including SPR) [b]	**6.13**	**7.04**	**7.63**	*6.91*	*6.91*	*7.63*	*7.87*	*7.49*	*7.28*	*7.94*	*8.20*	*8.12*	*6.93*	*7.48*	*7.89*
Gross Imports (excluding SPR)	**6.18**	**7.14**	**7.71**	*7.02*	*7.02*	*7.74*	*7.95*	*7.59*	*7.40*	*8.05*	*8.28*	*8.22*	*7.01*	*7.58*	*7.99*
SPR Imports	**0.03**	**0.02**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.01*	*0.00*	*0.00*
Exports	**0.09**	**0.11**	**0.07**	*0.10*	*0.12*	*0.11*	*0.08*	*0.10*	*0.12*	*0.11*	*0.08*	*0.10*	*0.09*	*0.10*	*0.10*
Other SPR Supply	**0.00**	**0.00**	**0.00**	*0.00*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.00*	*0.01*	*0.01*
SPR Stock Withdrawn or Added (-)	**-0.04**	**-0.02**	**0.00**	*0.00*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*
Other Stock Withdrawn or Added (-)	**-0.02**	**0.17**	**-0.09**	*-0.01*	*-0.04*	*-0.03*	*-0.01*	*0.03*	*0.00*	*-0.02*	*0.00*	*0.03*	*0.01*	*-0.01*	*0.00*
Product Supplied and Losses	**-0.01**	**-0.01**	**-0.01**	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*
Unaccounted-for Crude Oil	**0.33**	**0.34**	**0.29**	*0.25*	*0.26*	*0.27*	*0.27*	*0.26*	*0.26*	*0.27*	*0.27*	*0.27*	*0.30*	*0.27*	*0.27*
Total Crude Oil Supply	**13.13**	**14.15**	**14.37**	*13.80*	*13.59*	*14.13*	*14.24*	*13.89*	*13.60*	*14.08*	*14.25*	*14.17*	*13.87*	*13.96*	*14.02*
Other Supply															
NGL Production	**1.65**	**1.71**	**1.77**	*1.74*	*1.71*	*1.71*	*1.71*	*1.74*	*1.72*	*1.72*	*1.72*	*1.74*	*1.72*	*1.72*	*1.73*
Other Hydrocarbon and Alcohol Inputs	**0.26**	**0.21**	**0.26**	*0.27*	*0.33*	*0.34*	*0.34*	*0.34*	*0.34*	*0.34*	*0.34*	*0.34*	*0.25*	*0.34*	*0.34*
Crude Oil Product Supplied	**0.01**	**0.01**	**0.01**	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*
Processing Gain	**0.70**	**0.76**	**0.77**	*0.80*	*0.76*	*0.79*	*0.80*	*0.79*	*0.76*	*0.79*	*0.80*	*0.80*	*0.76*	*0.78*	*0.79*
Net Product Imports [c]	**1.26**	**1.19**	**1.08**	*0.66*	*1.16*	*1.30*	*1.26*	*1.38*	*1.39*	*1.54*	*1.47*	*1.55*	*1.05*	*1.28*	*1.49*
Gross Product Imports [c]	**2.08**	**1.96**	**1.90**	*1.63*	*2.12*	*2.20*	*2.13*	*2.35*	*2.33*	*2.44*	*2.35*	*2.53*	*1.89*	*2.20*	*2.41*
Product Exports	**0.83**	**0.77**	**0.82**	*0.96*	*0.96*	*0.90*	*0.87*	*0.97*	*0.94*	*0.90*	*0.88*	*0.98*	*0.85*	*0.93*	*0.92*
Product Stock Withdrawn or Added (-) [d]	**0.83**	**-0.59**	**-0.58**	*0.43*	*0.41*	*-0.56*	*-0.30*	*0.22*	*0.58*	*-0.55*	*-0.21*	*0.19*	*0.02*	*-0.06*	*0.00*
Total Supply	**17.84**	**17.45**	**17.69**	*17.72*	*17.96*	*17.72*	*18.08*	*18.36*	*18.39*	*17.93*	*18.39*	*18.82*	*17.67*	*18.03*	*18.38*
Demand															
Motor Gasoline	**7.19**	**7.68**	**7.83**	*7.79*	*7.45*	*7.87*	*8.04*	*7.86*	*7.58*	*7.98*	*8.14*	*7.97*	*7.62*	*7.81*	*7.92*
Jet Fuel	**1.51**	**1.53**	**1.54**	*1.55*	*1.54*	*1.52*	*1.59*	*1.59*	*1.59*	*1.57*	*1.64*	*1.63*	*1.53*	*1.56*	*1.61*
Distillate Fuel Oil	**3.53**	**3.03**	**2.96**	*3.29*	*3.46*	*3.10*	*3.01*	*3.26*	*3.51*	*3.12*	*3.05*	*3.36*	*3.20*	*3.21*	*3.26*
Residual Fuel Oil	**1.24**	**0.98**	**0.88**	*0.79*	*1.19*	*1.02*	*0.98*	*1.20*	*1.35*	*1.05*	*1.04*	*1.27*	*0.97*	*1.10*	*1.18*
Other Oils [e]	**4.35**	**4.22**	**4.48**	*4.29*	*4.32*	*4.21*	*4.45*	*4.45*	*4.37*	*4.21*	*4.50*	*4.59*	*4.34*	*4.36*	*4.42*
Total Demand	**17.82**	**17.45**	**17.69**	*17.72*	*17.96*	*17.72*	*18.08*	*18.36*	*18.39*	*17.93*	*18.38*	*18.82*	*17.67*	*18.03*	*18.38*
Total Petroleum Net Imports	**7.38**	**8.23**	**8.72**	*7.58*	*8.06*	*8.94*	*9.13*	*8.87*	*8.67*	*9.48*	*9.67*	*9.67*	*7.98*	*8.75*	*9.37*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR) [f]	**338**	**322**	**330**	*331*	*334*	*337*	*338*	*335*	*335*	*337*	*337*	*335*	*331*	*335*	*335*
Total Motor Gasoline	**214**	**212**	**205**	*211*	*214*	*219*	*215*	*226*	*224*	*224*	*210*	*222*	*211*	*226*	*222*
Finished Motor Gasoline	**176**	**177**	**169**	*170*	*174*	*182*	*176*	*186*	*184*	*186*	*171*	*183*	*170*	*186*	*183*
Blending Components	**38**	**35**	**36**	*40*	*40*	*38*	*39*	*39*	*40*	*38*	*39*	*39*	*40*	*39*	*39*
Jet Fuel	**38**	**42**	**45**	*47*	*45*	*44*	*45*	*46*	*46*	*46*	*46*	*48*	*47*	*46*	*48*
Distillate Fuel Oil	**100**	**120**	**145**	*142*	*100*	*104*	*123*	*134*	*99*	*106*	*126*	*139*	*142*	*134*	*139*
Residual Fuel Oil	**41**	**39**	**44**	*42*	*39*	*41*	*42*	*46*	*40*	*43*	*43*	*45*	*42*	*46*	*45*
Other Oils [g]	**257**	**291**	**317**	*274*	*282*	*323*	*334*	*286*	*276*	*317*	*330*	*283*	*274*	*286*	*283*
Total Stocks (excluding SPR)	**987**	**1025**	**1086**	*1047*	*1014*	*1068*	*1096*	*1073*	*1020*	*1072*	*1093*	*1072*	*1047*	*1073*	*1072*
Crude Oil in SPR	**590**	**592**	**592**	*592*	*593*	*594*	*595*	*596*	*598*	*599*	*600*	*601*	*592*	*596*	*601*
Total Stocks (including SPR)	**1578**	**1616**	**1677**	*1639*	*1607*	*1662*	*1691*	*1670*	*1618*	*1671*	*1693*	*1673*	*1639*	*1670*	*1673*

[a] Includes lease condensate.
[b] Net imports equals gross imports plus SPR imports minus exports.
[c] Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.
[d] Includes an estimate of minor product stock change based on monthly data.
[e] Includes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.
[f] Includes crude oil in transit to refineries.
[g] Includes stocks of all other oils such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

SPR: Strategic Petroleum Reserve
NGL: Natural Gas Liquids

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

Sources: Historical data: Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109(93/01-94/12); and *Weekly Petroleum Status Report*, DOE/EIA-0208(various issues).

Table 7. U.S. Petroleum Supply and Demand: Mid World Oil Price Case
(Million Barrels per Day, Except Closing Stocks)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Supply															
Crude Oil Supply															
Domestic Production [a]	**6.75**	**6.62**	**6.54**	*6.65*	*6.65*	*6.51*	*6.41*	*6.42*	*6.41*	*6.29*	*6.21*	*6.19*	*6.64*	*6.50*	*6.27*
Alaska	**1.61**	**1.53**	**1.50**	*1.58*	*1.58*	*1.49*	*1.43*	*1.46*	*1.45*	*1.37*	*1.33*	*1.33*	*1.55*	*1.49*	*1.37*
Lower 48	**5.14**	**5.09**	**5.04**	*5.08*	*5.07*	*5.02*	*4.98*	*4.96*	*4.96*	*4.91*	*4.88*	*4.86*	*5.08*	*5.01*	*4.90*
Net Imports (including SPR) [b]	**6.13**	**7.04**	**7.63**	*6.91*	*6.70*	*7.35*	*7.57*	*7.08*	*6.84*	*7.49*	*7.78*	*7.53*	*6.93*	*7.18*	*7.41*
Gross Imports (excluding SPR)	**6.18**	**7.14**	**7.71**	*7.02*	*6.82*	*7.46*	*7.65*	*7.18*	*6.95*	*7.60*	*7.87*	*7.63*	*7.01*	*7.28*	*7.51*
SPR Imports	**0.03**	**0.02**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.01*	*0.00*	*0.00*
Exports	**0.09**	**0.11**	**0.07**	*0.10*	*0.12*	*0.11*	*0.08*	*0.10*	*0.12*	*0.11*	*0.08*	*0.10*	*0.09*	*0.10*	*0.10*
Other SPR Supply	**0.00**	**0.00**	**0.00**	*0.00*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.00*	*0.01*	*0.01*
SPR Stock Withdrawn or Added (-)	**-0.04**	**-0.02**	**0.00**	*0.00*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*
Other Stock Withdrawn or Added (-)	**-0.02**	**0.17**	**-0.09**	*-0.01*	*-0.04*	*-0.03*	*-0.01*	*0.03*	*0.00*	*-0.02*	*-0.01*	*0.03*	*0.01*	*-0.01*	*0.00*
Product Supplied and Losses	**-0.01**	**-0.01**	**-0.01**	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*
Unaccounted-for Crude Oil	**0.33**	**0.34**	**0.29**	*0.25*	*0.26*	*0.27*	*0.27*	*0.26*	*0.26*	*0.27*	*0.27*	*0.27*	*0.30*	*0.26*	*0.26*
Total Crude Oil Supply	**13.13**	**14.15**	**14.37**	*13.80*	*13.56*	*14.09*	*14.23*	*13.79*	*13.50*	*14.01*	*14.24*	*14.01*	*13.87*	*13.92*	*13.94*
Other Supply															
NGL Production	**1.65**	**1.71**	**1.77**	*1.74*	*1.71*	*1.71*	*1.72*	*1.74*	*1.73*	*1.72*	*1.72*	*1.75*	*1.72*	*1.72*	*1.73*
Other Hydrocarbon and Alcohol Inputs	**0.26**	**0.21**	**0.26**	*0.27*	*0.33*	*0.34*	*0.34*	*0.34*	*0.34*	*0.34*	*0.34*	*0.34*	*0.25*	*0.34*	*0.34*
Crude Oil Product Supplied	**0.01**	**0.01**	**0.01**	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*
Processing Gain	**0.70**	**0.76**	**0.77**	*0.80*	*0.76*	*0.79*	*0.80*	*0.78*	*0.75*	*0.79*	*0.80*	*0.79*	*0.76*	*0.78*	*0.78*
Net Product Imports [c]	**1.26**	**1.19**	**1.08**	*0.66*	*1.11*	*1.23*	*1.12*	*1.32*	*1.33*	*1.43*	*1.26*	*1.39*	*1.05*	*1.19*	*1.35*
Gross Product Imports [c]	**2.08**	**1.96**	**1.90**	*1.63*	*2.07*	*2.12*	*1.99*	*2.29*	*2.27*	*2.33*	*2.13*	*2.37*	*1.89*	*2.12*	*2.28*
Product Exports	**0.83**	**0.77**	**0.82**	*0.96*	*0.96*	*0.90*	*0.87*	*0.97*	*0.94*	*0.90*	*0.88*	*0.98*	*0.85*	*0.93*	*0.92*
Product Stock Withdrawn or Added (-) [d]	**0.83**	**-0.59**	**-0.58**	*0.43*	*0.41*	*-0.56*	*-0.30*	*0.22*	*0.58*	*-0.55*	*-0.21*	*0.19*	*0.02*	*-0.06*	*0.00*
Total Supply	**17.84**	**17.45**	**17.69**	*17.72*	*17.89*	*17.60*	*17.92*	*18.20*	*18.23*	*17.75*	*18.17*	*18.50*	*17.67*	*17.90*	*18.16*
Demand															
Motor Gasoline	**7.19**	**7.68**	**7.83**	*7.79*	*7.41*	*7.82*	*7.97*	*7.79*	*7.51*	*7.91*	*8.06*	*7.89*	*7.62*	*7.75*	*7.84*
Jet Fuel	**1.51**	**1.53**	**1.54**	*1.55*	*1.54*	*1.52*	*1.59*	*1.58*	*1.59*	*1.56*	*1.63*	*1.63*	*1.53*	*1.56*	*1.60*
Distillate Fuel Oil	**3.53**	**3.03**	**2.96**	*3.29*	*3.46*	*3.09*	*3.00*	*3.25*	*3.49*	*3.10*	*3.03*	*3.31*	*3.20*	*3.20*	*3.23*
Residual Fuel Oil	**1.24**	**0.98**	**0.88**	*0.79*	*1.16*	*0.98*	*0.92*	*1.14*	*1.29*	*0.98*	*0.95*	*1.15*	*0.97*	*1.05*	*1.09*
Other Oils [e]	**4.35**	**4.22**	**4.48**	*4.29*	*4.32*	*4.20*	*4.44*	*4.44*	*4.36*	*4.20*	*4.49*	*4.53*	*4.34*	*4.35*	*4.39*
Total Demand	**17.82**	**17.45**	**17.69**	*17.72*	*17.89*	*17.60*	*17.92*	*18.20*	*18.23*	*17.75*	*18.17*	*18.50*	*17.67*	*17.90*	*18.16*
Total Petroleum Net Imports	**7.38**	**8.23**	**8.72**	*7.58*	*7.81*	*8.58*	*8.69*	*8.40*	*8.17*	*8.92*	*9.04*	*8.92*	*7.98*	*8.37*	*8.76*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR) [f]	**338**	**322**	**330**	*331*	*334*	*337*	*338*	*335*	*335*	*337*	*338*	*335*	*331*	*335*	*335*
Total Motor Gasoline	**214**	**212**	**205**	*211*	*214*	*219*	*215*	*226*	*224*	*224*	*210*	*222*	*211*	*226*	*222*
Finished Motor Gasoline	**176**	**177**	**169**	*170*	*174*	*182*	*176*	*186*	*184*	*186*	*171*	*183*	*170*	*186*	*183*
Blending Components	**38**	**35**	**36**	*40*	*40*	*38*	*39*	*39*	*40*	*38*	*39*	*39*	*40*	*39*	*39*
Jet Fuel	**38**	**42**	**45**	*47*	*45*	*44*	*45*	*46*	*46*	*46*	*46*	*48*	*47*	*46*	*48*
Distillate Fuel Oil	**100**	**120**	**145**	*142*	*100*	*104*	*123*	*134*	*99*	*106*	*126*	*139*	*142*	*134*	*139*
Residual Fuel Oil	**41**	**39**	**44**	*42*	*39*	*41*	*42*	*46*	*40*	*43*	*43*	*45*	*42*	*46*	*45*
Other Oils [g]	**257**	**291**	**317**	*274*	*282*	*323*	*334*	*286*	*276*	*317*	*330*	*283*	*274*	*286*	*283*
Total Stocks (excluding SPR)	**987**	**1025**	**1086**	*1047*	*1014*	*1068*	*1096*	*1073*	*1020*	*1072*	*1093*	*1072*	*1047*	*1073*	*1072*
Crude Oil in SPR	**590**	**592**	**592**	*592*	*593*	*594*	*595*	*596*	*598*	*599*	*600*	*601*	*592*	*596*	*601*
Total Stocks (including SPR)	**1578**	**1616**	**1677**	*1639*	*1607*	*1662*	*1691*	*1670*	*1618*	*1671*	*1693*	*1673*	*1639*	*1670*	*1673*

[a] Includes lease condensate.
[b] Net imports equals gross imports plus SPR imports minus exports.
[c] Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.
[d] Includes an estimate of minor product stock change based on monthly data.
[e] Includes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.
[f] Includes crude oil in transit to refineries.
[g] Includes stocks of all other oils such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

SPR: Strategic Petroleum Reserve
NGL: Natural Gas Liquids

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

Sources: Historical data: Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109(93/01-94/12); and *Weekly Petroleum Status Report*, DOE/EIA-0208(various issues).

Table 8. U.S. Petroleum Supply and Demand: High World Oil Price Case
(Million Barrels per Day, Except Closing Stocks)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Supply															
Crude Oil Supply															
Domestic Production [a]	**6.75**	**6.62**	**6.54**	*6.65*	*6.76*	*6.66*	*6.59*	*6.63*	*6.66*	*6.56*	*6.52*	*6.53*	*6.64*	*6.66*	*6.57*
Alaska	**1.61**	**1.53**	**1.50**	*1.58*	*1.62*	*1.53*	*1.47*	*1.50*	*1.49*	*1.41*	*1.37*	*1.37*	*1.55*	*1.53*	*1.41*
Lower 48	**5.14**	**5.09**	**5.04**	*5.08*	*5.14*	*5.13*	*5.12*	*5.13*	*5.17*	*5.15*	*5.15*	*5.16*	*5.08*	*5.13*	*5.16*
Net Imports (including SPR) [b]	**6.13**	**7.04**	**7.63**	*6.91*	*6.56*	*7.17*	*7.37*	*6.80*	*6.51*	*7.16*	*7.47*	*7.08*	*6.93*	*6.98*	*7.06*
Gross Imports (excluding SPR)	**6.18**	**7.14**	**7.71**	*7.02*	*6.68*	*7.28*	*7.45*	*6.90*	*6.63*	*7.27*	*7.56*	*7.18*	*7.01*	*7.08*	*7.16*
SPR Imports	**0.03**	**0.02**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.01*	*0.00*	*0.00*
Exports	**0.09**	**0.11**	**0.07**	*0.10*	*0.12*	*0.11*	*0.08*	*0.10*	*0.12*	*0.11*	*0.08*	*0.10*	*0.09*	*0.10*	*0.10*
Other SPR Supply	**0.00**	**0.00**	**0.00**	*0.00*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.00*	*0.01*	*0.01*
SPR Stock Withdrawn or Added (-)	**-0.04**	**-0.02**	**0.00**	*0.00*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*
Other Stock Withdrawn or Added (-)	**-0.02**	**0.17**	**-0.09**	*-0.01*	*-0.04*	*-0.03*	*-0.01*	*0.03*	*0.00*	*-0.02*	*-0.01*	*0.03*	*0.01*	*-0.01*	*0.00*
Product Supplied and Losses	**-0.01**	**-0.01**	**-0.01**	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*
Unaccounted-for Crude Oil	**0.33**	**0.34**	**0.29**	*0.25*	*0.26*	*0.27*	*0.27*	*0.26*	*0.25*	*0.27*	*0.27*	*0.26*	*0.30*	*0.26*	*0.26*
Total Crude Oil Supply	**13.13**	**14.15**	**14.37**	*13.80*	*13.53*	*14.05*	*14.21*	*13.71*	*13.42*	*13.96*	*14.24*	*13.90*	*13.87*	*13.87*	*13.88*
Other Supply															
NGL Production	**1.65**	**1.71**	**1.77**	*1.74*	*1.71*	*1.71*	*1.72*	*1.74*	*1.73*	*1.72*	*1.73*	*1.76*	*1.72*	*1.72*	*1.73*
Other Hydrocarbon and Alcohol Inputs	**0.26**	**0.21**	**0.26**	*0.27*	*0.33*	*0.34*	*0.34*	*0.34*	*0.33*	*0.34*	*0.34*	*0.34*	*0.25*	*0.34*	*0.34*
Crude Oil Product Supplied	**0.01**	**0.01**	**0.01**	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*
Processing Gain	**0.70**	**0.76**	**0.77**	*0.80*	*0.75*	*0.79*	*0.80*	*0.78*	*0.75*	*0.78*	*0.80*	*0.79*	*0.76*	*0.78*	*0.78*
Net Product Imports [c]	**1.26**	**1.19**	**1.08**	*0.66*	*1.06*	*1.16*	*1.02*	*1.28*	*1.28*	*1.34*	*1.08*	*1.34*	*1.05*	*1.13*	*1.26*
Gross Product Imports [c]	**2.08**	**1.96**	**1.90**	*1.63*	*2.03*	*2.06*	*1.89*	*2.25*	*2.22*	*2.24*	*1.95*	*2.31*	*1.89*	*2.06*	*2.18*
Product Exports	**0.83**	**0.77**	**0.82**	*0.96*	*0.96*	*0.90*	*0.87*	*0.97*	*0.94*	*0.90*	*0.88*	*0.98*	*0.85*	*0.93*	*0.92*
Product Stock Withdrawn or Added (-) [d]	**0.83**	**-0.59**	**-0.58**	*0.43*	*0.41*	*-0.56*	*-0.30*	*0.22*	*0.58*	*-0.55*	*-0.21*	*0.19*	*0.02*	*-0.06*	*0.00*
Total Supply	**17.84**	**17.45**	**17.69**	*17.72*	*17.81*	*17.49*	*17.80*	*18.08*	*18.10*	*17.60*	*17.99*	*18.33*	*17.67*	*17.80*	*18.01*
Demand															
Motor Gasoline	**7.19**	**7.68**	**7.83**	*7.79*	*7.37*	*7.77*	*7.92*	*7.74*	*7.45*	*7.85*	*8.00*	*7.82*	*7.62*	*7.70*	*7.78*
Jet Fuel	**1.51**	**1.53**	**1.54**	*1.55*	*1.53*	*1.52*	*1.59*	*1.58*	*1.58*	*1.56*	*1.63*	*1.62*	*1.53*	*1.56*	*1.60*
Distillate Fuel Oil	**3.53**	**3.03**	**2.96**	*3.29*	*3.45*	*3.08*	*2.99*	*3.24*	*3.48*	*3.08*	*3.01*	*3.29*	*3.20*	*3.19*	*3.21*
Residual Fuel Oil	**1.24**	**0.98**	**0.88**	*0.79*	*1.14*	*0.94*	*0.87*	*1.10*	*1.24*	*0.93*	*0.88*	*1.09*	*0.97*	*1.01*	*1.03*
Other Oils [e]	**4.35**	**4.22**	**4.48**	*4.29*	*4.31*	*4.18*	*4.42*	*4.43*	*4.34*	*4.18*	*4.47*	*4.51*	*4.34*	*4.34*	*4.38*
Total Demand	**17.82**	**17.45**	**17.69**	*17.72*	*17.81*	*17.49*	*17.80*	*18.08*	*18.10*	*17.60*	*17.99*	*18.33*	*17.67*	*17.80*	*18.01*
Total Petroleum Net Imports	**7.38**	**8.23**	**8.72**	*7.58*	*7.62*	*8.33*	*8.39*	*8.08*	*7.80*	*8.50*	*8.55*	*8.42*	*7.98*	*8.11*	*8.32*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR) [f]	**338**	**322**	**330**	*331*	*334*	*337*	*338*	*335*	*335*	*337*	*338*	*335*	*331*	*335*	*335*
Total Motor Gasoline	**214**	**212**	**205**	*211*	*214*	*219*	*215*	*226*	*224*	*224*	*210*	*222*	*211*	*226*	*222*
Finished Motor Gasoline	**176**	**177**	**169**	*170*	*174*	*182*	*176*	*186*	*184*	*186*	*171*	*183*	*170*	*186*	*183*
Blending Components	**38**	**35**	**36**	*40*	*40*	*38*	*39*	*39*	*40*	*38*	*39*	*39*	*40*	*39*	*39*
Jet Fuel	**38**	**42**	**45**	*47*	*45*	*44*	*45*	*46*	*46*	*46*	*46*	*48*	*47*	*46*	*48*
Distillate Fuel Oil	**100**	**120**	**145**	*142*	*100*	*104*	*123*	*134*	*99*	*106*	*126*	*139*	*142*	*134*	*139*
Residual Fuel Oil	**41**	**39**	**44**	*42*	*39*	*41*	*42*	*46*	*40*	*43*	*43*	*45*	*42*	*46*	*45*
Other Oils [g]	**257**	**291**	**317**	*274*	*282*	*323*	*334*	*286*	*276*	*317*	*330*	*283*	*274*	*286*	*283*
Total Stocks (excluding SPR)	**987**	**1025**	**1086**	*1047*	*1014*	*1068*	*1096*	*1073*	*1020*	*1072*	*1093*	*1072*	*1047*	*1073*	*1072*
Crude Oil in SPR	**590**	**592**	**592**	*592*	*593*	*594*	*595*	*596*	*598*	*599*	*600*	*601*	*592*	*596*	*601*
Total Stocks (including SPR)	**1578**	**1616**	**1677**	*1639*	*1607*	*1662*	*1691*	*1670*	*1618*	*1671*	*1693*	*1673*	*1639*	*1670*	*1673*

[a] Includes lease condensate.
[b] Net imports equals gross imports plus SPR imports minus exports.
[c] Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.
[d] Includes an estimate of minor product stock change based on monthly data.
[e] Includes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.
[f] Includes crude oil in transit to refineries.
[g] Includes stocks of all other oils such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

SPR: Strategic Petroleum Reserve
NGL: Natural Gas Liquids

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

Sources: Historical data: Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109(93/01-94/12); and *Weekly Petroleum Status Report*, DOE/EIA-0208(various issues).

Table 9. U.S. Petroleum Demand Sensitivities

	1995	1996
	Four Quarters[a]	Four Quarters[a]
Economic Activity		
Gross Domestic Product (billion 1987 dollars)	*5,398 - 5,518*	*5,455 - 5,689*
Resulting Change in Petroleum Demand (million barrels per day)[b]	*0.30*	*0.62*
Energy Prices		
Imported Crude Oil (nominal dollars per barrel)[c]	*$13.00 - $19.89*	*$13.00 - $21.52*
Resulting Change in Petroleum Demand (million barrels per day)[b]		
Due to Changes in the Crude Oil Price	*-0.24*	*-0.38*
Weather		
Heating Degree-Days[d]	*20.25 - 23.31*	*20.31 - 24.03*
Resulting Change in Petroleum Demand (million barrels per day)	*0.27*	*0.43*
Cooling Degree-Days[d]	*5.57 - 6.58*	*5.57 - 6.58*
Resulting Change in Petroleum Demand (million barrels per day)[b]	*0.06*	*0.11*

[a] In the weather case, calculations apply to certain quarters only, as follows: for heating degree-days: for 1995 and 1996: the average of first and fourth quarters only are used; for cooling degree-days in 1995 and 1996, the average of the second and third quarters is used.
[b] *Ranges of petroleum product supplied associated with varying each determinant (or determinants), holding other things equal.*
[c] Cost of imported crude oil to U.S. refiners.
[d] Heating and cooling degree-days are U.S. 1990 population-weighted.
Source: Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division, Short-Term Integrated Forecasting System.

Table 10. Forecast Components for U.S. Crude Oil Production
(Million Barrels per Day)

	High Price Case	Low Price Case	Difference		
			Total	Uncertainty	Price Impact
United States	*6.53*	*5.76*	*0.78*	*0.17*	*0.60*
Lower 48 States	*5.16*	*4.46*	*0.70*	*0.14*	*0.57*
Alaska	*1.37*	*1.29*	*0.08*	*0.04*	*0.04*

Note: Components provided are for the fourth quarter 1996; totals are from Tables 6 and 8. Totals may not add to sum of components due to independent rounding.
Source: Energy Information Administration, Office of Oil and Gas, Reserves and Natural Gas Division.

Table 11. U.S. Natural Gas Supply and Demand: Mid World Oil Price Case
(Trillion Cubic Feet)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Supply															
Total Dry Gas Production [a]	**4.70**	**4.67**	**4.70**	*4.79*	*4.65*	*4.66*	*4.74*	*4.85*	*4.78*	*4.72*	*4.77*	*4.95*	*18.86*	*18.89*	*19.23*
Net Imports	**0.60**	**0.58**	**0.55**	*0.68*	*0.67*	*0.62*	*0.59*	*0.67*	*0.73*	*0.67*	*0.64*	*0.72*	*2.42*	*2.55*	*2.75*
Supplemental Gaseous Fuels	**0.04**	**0.03**	**0.03**	*0.03*	*0.04*	*0.03*	*0.03*	*0.04*	*0.03*	*0.03*	*0.02*	*0.03*	*0.13*	*0.13*	*0.11*
Total New Supply	**5.34**	**5.28**	**5.28**	*5.51*	*5.36*	*5.31*	*5.36*	*5.55*	*5.55*	*5.42*	*5.43*	*5.70*	*21.41*	*21.57*	*22.09*
Gas in Underground Storage															
Opening	**6.66**	**5.30**	**6.25**	*7.26*	*6.89*	*5.64*	*6.39*	*7.23*	*6.83*	*5.53*	*6.40*	*7.25*	*6.66*	*6.89*	*6.83*
Closing	**5.30**	**6.25**	**7.26**	*6.89*	*5.64*	*6.39*	*7.23*	*6.83*	*5.53*	*6.40*	*7.25*	*6.82*	*6.89*	*6.83*	*6.82*
Net Withdrawals	**1.36**	**-0.95**	**-1.01**	*0.37*	*1.25*	*-0.74*	*-0.84*	*0.39*	*1.30*	*-0.87*	*-0.85*	*0.43*	*-0.23*	*0.06*	*0.01*
Total Supply [a]	**6.70**	**4.34**	**4.27**	*5.88*	*6.61*	*4.56*	*4.51*	*5.95*	*6.85*	*4.55*	*4.58*	*6.13*	*21.18*	*21.63*	*22.11*
Balancing Item [b]	**0.23**	**0.14**	**-0.10**	*-0.63*	*0.11*	*0.27*	*-0.28*	*-0.47*	*0.13*	*0.32*	*-0.27*	*-0.56*	*-0.37*	*-0.37*	*-0.37*
Total Primary Supply [a]	**6.93**	**4.47**	**4.17**	*5.25*	*6.71*	*4.84*	*4.24*	*5.47*	*6.98*	*4.87*	*4.31*	*5.57*	*20.81*	*21.26*	*21.73*
Demand															
Lease and Plant Fuel	**0.31**	**0.31**	**0.31**	*0.32*	*0.33*	*0.31*	*0.30*	*0.31*	*0.32*	*0.30*	*0.30*	*0.31*	*1.24*	*1.25*	*1.24*
Pipeline Use	**0.21**	**0.13**	**0.13**	*0.15*	*0.18*	*0.15*	*0.14*	*0.16*	*0.19*	*0.15*	*0.14*	*0.16*	*0.62*	*0.63*	*0.65*
Residential	**2.44**	**0.80**	**0.40**	*1.26*	*2.26*	*0.97*	*0.42*	*1.36*	*2.41*	*0.99*	*0.43*	*1.39*	*4.91*	*5.02*	*5.22*
Commercial	**1.31**	**0.57**	**0.39**	*0.72*	*1.18*	*0.60*	*0.38*	*0.78*	*1.25*	*0.60*	*0.38*	*0.79*	*2.99*	*2.93*	*3.02*
Industrial (Incl. Cogenerators)	**2.08**	**1.85**	**1.83**	*2.07*	*2.13*	*1.95*	*1.92*	*2.11*	*2.16*	*1.97*	*1.95*	*2.16*	*7.83*	*8.11*	*8.23*
Cogenerators [c]	**0.47**	**0.50**	**0.49**	*0.48*	*0.50*	*0.53*	*0.52*	*0.51*	*0.53*	*0.56*	*0.55*	*0.54*	*1.94*	*2.06*	*2.18*
Electricity Production															
Electric Utilities	**0.51**	**0.74**	**1.04**	*0.66*	*0.56*	*0.78*	*1.01*	*0.67*	*0.57*	*0.77*	*1.03*	*0.68*	*2.95*	*3.01*	*3.04*
Nonutilities (Excl. Cogen.)	**0.07**	**0.07**	**0.07**	*0.07*	*0.08*	*0.08*	*0.08*	*0.08*	*0.08*	*0.09*	*0.09*	*0.08*	*0.28*	*0.31*	*0.34*
Total Demand	**6.93**	**4.47**	**4.17**	*5.25*	*6.71*	*4.84*	*4.24*	*5.47*	*6.98*	*4.87*	*4.31*	*5.57*	*20.81*	*21.26*	*21.73*

[a] Excludes nonhydrocarbon gases removed.

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

[c] Quarterly estimates and projections for gas consumption by nonutility generators are based on estimates for quarterly gas-fired generation at nonutilities, supplied by the Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration (EIA), based on Annual data reported to EIA on Form EIA-867. Detail on Independent power producers share of nonutility generation derived from reference case simulation of the National Energy Modeling System, Office of Integrated Analysis and Forecast, 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 italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(94/12); *Natural Gas Monthly*, DOE/EIA-0130(94/12); *Electric Power Monthly*, DOE/EIA-0226(94/11); Form EIA-867(annual nonutility items).

Table 12. U.S. Coal Supply and Demand: Mid World Oil Price Case
(Million Short Tons)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Supply															
Production	**254.3**	**255.9**	**258.6**	*254.7*	*257.8*	*258.8*	*257.1*	*257.9*	*262.9*	*262.4*	*260.5*	*261.3*	*1023.5*	*1031.6*	*1047.1*
Primary Stock Levels [a]															
Opening	**25.3**	**34.1**	**35.8**	*32.5*	*31.0*	*32.0*	*33.0*	*33.0*	*32.0*	*31.0*	*31.0*	*32.0*	*25.3*	*31.0*	*32.0*
Closing	**34.1**	**35.8**	**32.5**	*31.0*	*32.0*	*33.0*	*33.0*	*32.0*	*31.0*	*31.0*	*32.0*	*32.0*	*31.0*	*32.0*	*32.0*
Net Withdrawals	**-8.8**	**-1.7**	**3.3**	*1.5*	*-1.0*	*-1.0*	*0.0*	*1.0*	*1.0*	*0.0*	*-1.0*	*0.0*	*-5.7*	*-1.0*	*0.0*
Imports	**1.8**	**1.6**	**2.3**	*1.7*	*1.7*	*1.7*	*1.8*	*1.8*	*1.8*	*1.8*	*1.8*	*1.8*	*7.4*	*6.9*	*7.1*
Exports	**14.9**	**17.9**	**19.7**	*17.3*	*18.2*	*18.8*	*18.3*	*19.0*	*19.8*	*20.5*	*20.0*	*20.2*	*69.8*	*74.4*	*80.6*
Total Net Domestic Supply	**232.4**	**237.8**	**244.5**	*240.7*	*240.3*	*240.7*	*240.5*	*241.7*	*245.8*	*243.7*	*241.3*	*242.9*	*955.4*	*963.2*	*973.6*
Secondary Stock Levels [b]															
Opening	**120.5**	**112.1**	**126.5**	*120.9*	*128.1*	*131.3*	*145.6*	*138.0*	*138.6*	*141.9*	*155.7*	*145.4*	*120.5*	*128.1*	*138.6*
Closing	**112.1**	**126.5**	**120.9**	*128.1*	*131.3*	*145.6*	*138.0*	*138.6*	*141.9*	*155.7*	*145.4*	*142.5*	*128.1*	*138.6*	*142.5*
Net Withdrawals	**8.3**	**-14.3**	**5.6**	*-7.2*	*-3.2*	*-14.3*	*7.6*	*-0.6*	*-3.3*	*-13.8*	*10.2*	*2.9*	*-7.6*	*-10.5*	*-3.9*
Total Supply	**240.7**	**223.4**	**250.1**	*233.5*	*237.1*	*226.4*	*248.1*	*241.1*	*242.5*	*229.9*	*251.5*	*245.8*	*947.8*	*952.6*	*969.7*
Demand															
Coke Plants	**7.4**	**7.6**	**7.8**	*7.2*	*7.4*	*7.6*	*7.6*	*7.4*	*7.5*	*7.6*	*7.6*	*7.3*	*30.1*	*30.0*	*30.1*
Electric Utilities	**207.9**	**196.3**	**218.6**	*204.2*	*208.0*	*199.3*	*221.6*	*212.0*	*213.5*	*203.2*	*225.1*	*216.7*	*827.0*	*840.8*	*858.5*
Retail and General Industry [c]	**22.0**	**19.4**	**19.1**	*22.1*	*21.7*	*19.5*	*18.9*	*21.7*	*21.5*	*19.1*	*18.7*	*21.7*	*82.6*	*81.8*	*81.1*
Total Demand	**237.3**	**223.3**	**245.6**	*233.5*	*237.1*	*226.4*	*248.1*	*241.1*	*242.5*	*229.9*	*251.5*	*245.8*	*939.7*	*952.6*	*969.7*
Discrepancy [d]	**3.4**	**0.1**	**4.6**	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*8.1*	*0.0*	*0.0*

[a] Primary stocks are held at the mines, preparation plants, and distribution points.
[b] Secondary stocks are held by users.
[c] Synfuels plant demand in 1993 was 1.7 million tons per quarter, and is assumed to remain at that level in 1994, 1995, and 1996.
[d] Historical period discrepancy reflects an unaccounted-for shipper and receiver reporting difference.

Notes: Rows and columns may not add due to independent rounding. Zeros indicate amounts of less than 50,000 tons. Historical data are printed in bold, forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(94/12); and *Quarterly Coal Report*, DOE/EIA-0221(94/3Q).

Table 13. U.S. Electricity Supply and Demand: Mid World Oil Price Case
(Billion Kilowatthours)

	1994				1995				1996				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1994	1995	1996
Supply															
Net Utility Generation															
Coal	**417.4**	**393.6**	**435.6**	*409.4*	*418.8*	*402.4*	*443.3*	*426.4*	*431.8*	*410.0*	*452.3*	*440.3*	*1656.0*	*1690.9*	*1734.4*
Petroleum	**32.2**	**24.5**	**20.7**	*24.5*	*29.3*	*23.3*	*25.0*	*24.9*	*31.2*	*24.2*	*26.3*	*26.0*	*101.9*	*102.6*	*107.7*
Natural Gas	**49.6**	**71.7**	**100.6**	*62.6*	*52.6*	*73.4*	*95.1*	*63.5*	*53.4*	*72.7*	*97.3*	*63.9*	*284.6*	*284.5*	*287.3*
Nuclear	**154.6**	**143.5**	**174.5**	*158.7*	*160.3*	*142.9*	*168.1*	*152.2*	*159.4*	*144.0*	*168.3*	*152.3*	*631.2*	*623.6*	*624.0*
Hydroelectric	**61.1**	**70.9**	**56.4**	*55.3*	*66.5*	*72.8*	*61.8*	*61.4*	*72.7*	*75.4*	*63.5*	*62.8*	*243.8*	*262.5*	*274.3*
Geothermal and Other [a]	**2.3**	**2.1**	**2.6**	*2.2*	*2.1*	*2.0*	*2.1*	*2.1*	*2.0*	*1.9*	*2.0*	*2.0*	*9.2*	*8.3*	*7.9*
Subtotal	**717.2**	**706.3**	**790.5**	*712.7*	*729.6*	*716.8*	*795.4*	*730.6*	*750.6*	*728.2*	*809.7*	*747.2*	*2926.8*	*2972.4*	*3035.7*
Nonutility Generation [b]															
Coal	**13.9**	**14.7**	**14.6**	*14.3*	*14.9*	*15.7*	*15.6*	*15.3*	*15.8*	*16.7*	*16.6*	*16.3*	*57.6*	*61.6*	*65.4*
Petroleum	**3.5**	**3.7**	**3.7**	*3.6*	*3.8*	*4.0*	*4.0*	*3.9*	*4.1*	*4.4*	*4.3*	*4.3*	*14.4*	*15.8*	*17.1*
Natural Gas	**46.0**	**48.6**	**48.3**	*47.4*	*49.1*	*51.9*	*51.5*	*50.6*	*52.1*	*55.1*	*54.7*	*53.7*	*190.3*	*203.2*	*215.6*
Renewables/Other	**22.3**	**23.6**	**23.4**	*23.0*	*23.6*	*24.9*	*24.7*	*24.3*	*24.8*	*26.2*	*26.0*	*25.6*	*92.2*	*97.5*	*102.7*
Subtotal	**85.7**	**90.6**	**89.9**	*88.3*	*91.4*	*96.6*	*95.9*	*94.2*	*96.9*	*102.4*	*101.6*	*99.8*	*354.6*	*378.1*	*400.8*
Total Generation	**803.0**	**796.9**	**880.4**	*801.1*	*821.0*	*813.4*	*891.3*	*824.8*	*847.5*	*830.5*	*911.3*	*847.0*	*3281.4*	*3350.5*	*3436.4*
Net Imports	**11.4**	**9.8**	**10.7**	*9.2*	*9.7*	*9.2*	*10.4*	*9.2*	*10.2*	*9.6*	*11.0*	*9.6*	*41.2*	*38.5*	*40.4*
Total Supply	**814.4**	**806.8**	**891.1**	*810.2*	*830.7*	*822.6*	*901.7*	*833.9*	*857.7*	*840.2*	*922.3*	*856.6*	*3322.5*	*3389.0*	*3476.8*
Lost and Unaccounted for [c]	**46.5**	**76.3**	**53.5**	*55.2*	*52.1*	*63.3*	*58.9*	*58.8*	*51.4*	*65.3*	*60.4*	*61.0*	*231.5*	*233.1*	*238.0*
Demand															
Electric Utility Sales															
Residential	**273.7**	**220.3**	**283.5**	*236.3*	*265.6*	*235.5*	*279.0*	*247.2*	*278.7*	*241.3*	*285.3*	*253.2*	*1013.8*	*1027.2*	*1058.6*
Commercial	**194.6**	**199.9**	**231.1**	*205.9*	*204.4*	*206.3*	*235.3*	*211.4*	*213.6*	*213.3*	*243.2*	*218.9*	*831.4*	*857.4*	*889.0*
Industrial	**240.3**	**249.5**	**260.5**	*252.0*	*247.0*	*254.3*	*263.9*	*253.8*	*250.5*	*255.2*	*266.6*	*258.9*	*1002.4*	*1019.0*	*1031.2*
Other	**23.6**	**23.0**	**25.2**	*24.2*	*24.3*	*23.7*	*25.5*	*24.2*	*24.6*	*23.8*	*25.8*	*24.5*	*96.0*	*97.7*	*98.6*
Subtotal	**732.2**	**692.8**	**800.3**	*718.3*	*741.2*	*719.8*	*803.6*	*736.6*	*767.3*	*733.7*	*820.9*	*755.5*	*2943.6*	*3001.3*	*3077.4*
Nonutility Gener. for Own Use [b]	**35.6**	**37.7**	**37.4**	*36.7*	*37.4*	*39.5*	*39.2*	*38.5*	*39.0*	*41.2*	*40.9*	*40.2*	*147.4*	*154.6*	*161.4*
Total Demand	**767.9**	**730.4**	**837.7**	*755.1*	*778.6*	*759.3*	*842.8*	*775.1*	*806.4*	*774.9*	*861.9*	*795.7*	*3091.0*	*3155.9*	*3238.8*
Memo:															
Utility Purchases from Nonutilities [b]	**50.1**	**52.9**	**52.6**	*51.6*	*54.1*	*57.1*	*56.7*	*55.7*	*57.9*	*61.1*	*60.7*	*59.6*	*207.2*	*223.6*	*239.3*

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

[b]Electricity received 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.

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

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

Sources: Historical data: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(94/12); *Electric Power Monthly*, DOE/EIA-0226(94/11); Form EIA-867 (annual nonutility items); Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels Energy Information Administration.

Table 14. U.S. Renewable Energy Use by Sector: Mid World Oil Price Case
(Quadrillion Btu)

	Year				Annual Percentage Change		
	1993	1994	1995	1996	1993-1994	1994-1995	1995-1996
Electric Utilities							
Hydroelectric Power [a]	**2.778**	*2.556*	*2.752*	*2.875*	*-8.0*	*7.7*	*4.5*
Geothermal Energy	**0.159**	*0.146*	*0.138*	*0.130*	*-8.3*	*-5.6*	*-5.6*
Biofuels [b]	**0.021**	*0.019*	*0.018*	*0.018*	*-5.4*	*-9.4*	*0.8*
Solar and Wind Energy [c]	**0.000**	*0.000*	*0.000*	*0.000*	*-5.1*	*15.9*	*5.7*
Total	**2.958**	*2.721*	*2.907*	*3.023*	*-8.0*	*6.8*	*4.0*
Nonutility Power Generator							
Hydroelectric Power [a]	**0.119**	*0.124*	*0.134*	*0.145*	*3.9*	*8.6*	*7.6*
Geothermal, Solar and Wind Energy	**0.142**	*0.156*	*0.167*	*0.177*	*10.0*	*6.8*	*6.1*
Biofuels [b]	**0.577**	*0.633*	*0.664*	*0.695*	*9.6*	*5.0*	*4.6*
Total	**0.838**	*0.913*	*0.966*	*1.017*	*8.9*	*5.8*	*5.3*
Total Power Generation	**3.796**	*3.634*	*3.873*	*4.039*	*-4.3*	*6.6*	*4.3*
Other Sectors							
Residential and Commercial [d]	*0.735*	*0.745*	*0.725*	*0.745*	*1.4*	*-2.7*	*2.8*
Industrial (Excl. Nonutilities) [e]	*1.519*	*1.572*	*1.593*	*1.625*	*3.5*	*1.4*	*2.0*
Transportation [f]	*0.076*	*0.077*	*0.088*	*0.088*	*1.7*	*13.8*	*0.3*
Total	*2.330*	*2.395*	*2.406*	*2.459*	*2.8*	*0.5*	*2.2*
Net Imported Electricity [g]	**0.294**	*0.426*	*0.398*	*0.418*	*44.8*	*-6.5*	*5.0*
Total Renewable Energy Demand	*6.421*	*6.454*	*6.677*	*6.916*	*0.5*	*3.5*	*3.6*

[a] Conventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.
[b] Biofuels are fuelwood, wood byproducts, waste wood, municipal solid waste, manufacturing process waste, and alcohol fuels.
[c] Also includes photovoltaic thermal energy.
[d] Includes biofuels and solar energy consumed in the residential and commercial sectors.
[e] Includes industrial hydroelectric power, geothermal energy, biofuels, solar and wind energy consumed in the industrial sector, including consumption by nonutility power generators.
[f] Ethanol blended into gasoline.
[g] Net imports of electricity are included in renewables because they stem principally from hydroelectric power generators in Canada. However, it should be noted that in actuality, only about 76 percent of gross imports of electricity from Canada were attributable to renewable energy sources, based on statistics from Natural Resources Canada, *Electric Power in Canada, 1992*, (Ottawa: 1993), p. 87.
* Less than 500 billion Btu.

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

Sources: Historical data: 1993: Estimates derived from Energy Information Administration, Short-Term Integrated Forecasting System database, first quarter 1995 and Office of Coal, Nuclear, Electric and Alternate Fuels Energy Information Administration; Projections: renewables growth in sectors other than electric utilities taken from Energy Information Administration, *Annual Energy Outlook 1994* database and Office of Coal, Nuclear, Electric and Alternate Fuels Energy Information Administration.

Computation of Petroleum Demand Sensitivities

Table 9 summarizes the response of forecasts of U.S. total petroleum demand to changes in assumptions for economic growth, world crude oil prices, and weather. The values in this table are computed using the Short-Term Integrated Forecasting Model (STIFS). The STIFS model is documented in EIA's *Short-Term Integrated Forecasting System: 1993 Model Documentation Report* (DOE/EIA-M041, May 1993). The purpose of the model is to generate forecasts of U.S. energy supply, demand, and prices. Key inputs include assumptions for the imported price of crude oil, the rate of U.S. economic growth, and weather (cooling and heating degree-days). Forecasts are generated for production, imports, exports, demand, and prices for refined petroleum products, natural gas, coal, and electricity.

A key relationship between petroleum demand and economic activity is shown in Table 9. Gross domestic product (GDP) is varied from low to high for each of the two projection years, and the resulting change in petroleum demand is calculated. For each of the 2 years, the percentage difference in GDP is computed as the difference between the low and high case levels shown in Table 2, divided by the midpoint of this range. Thus, the percentage difference in GDP for 1995 is as follows: (5519 - 5398) / ((5519 + 5398) / 2), or 2.2 percent. For each period, the petroleum demand difference (in million barrels per day) is divided by the percentage difference in GDP. For 1995, the average petroleum demand difference is 300,000 barrels per day; thus, a 1-percent change in GDP corresponds to a change in demand of (300,000/2.2), or 136,000 barrels per day. For 1996, a 4.2-percent change in GDP corresponds to a change in demand of 620,000 barrels per day; thus, a 1-percent change in GDP corresponds to a demand change of 148,000 barrels per day. The average of the 1995 and 1996 results (weighting the 1995 by 365 days and 1996 results by 366 days) is 142,000 barrels per day per 1 percent difference in GDP. Table 9 also shows the differences in petroleum demand due to changes in energy prices caused by varying the world crude oil price. The change in petroleum demand (in million barrels per day) is divided by the change in the crude oil price (in dollars per barrel), and the result is averaged over the two projection years to get an estimate of the change in petroleum demand per dollar of change in the crude oil price.

The influence of weather on petroleum demand is also calculated, using the mid-case values for economic activity and imported crude oil prices. The percentage changes in heating or cooling degree-days are computed and divided by the changes in petroleum demand, and the result is averaged over the two projection periods to get an estimate of the change in petroleum demand per 1-percent change in heating and cooling degree-days. The changes in demand due to changes in heating degree-days apply only to the heating season, roughly the first and fourth quarters of the year, while the changes in demand due to changes in cooling degree-days apply only to the cooling season, roughly the second and third quarters of the year.

Text References and Notes

International Oil Demand

[1] Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

International Oil Supply

[2] Excess capacity data by country provided by Energy Information Administration, Energy Markets and Contingency Information Division.

U.S. Oil Supply

[3] Estimate provided by the Energy Information Administration, Reserves and Natural Gas Division.
[4] Estimate provided by the Energy Information Administration, Reserves and Natural Gas Division.
[5] Drilling rig projections provided by the Energy Information Administration, Reserves and Natural Gas Division.

U.S. Energy Prices

[6] Energy Information Administration, *U.S. Energy Industry Financial Developments: 1994 Third Quarter*, DOE/EIA-0543(94/3Q), Tables 2 and 3.
[7] Energy Information Administration, *Short-Term Energy Outlook Annual Supplement 1994*, DOE/EIA-0202(94), "Demand, Supply and Price Outlook for Reformulated Gasoline, 1995."
[8] AP-Dow Jones News, December 7, 1994.
[9] See Energy Information Administration, *U.S. Energy Industry Financial Developments, 1994 Third Quarter*, DOE/EIA-0543 (94/3Q), Table 3.
[10] *Natural Gas Week*, October 3, 1994.
[11] U.S. Department of Commerce, National Oceanic and Atmospheric Administration, *Monthly State, Regional and National Heating/Cooling Degree Days Weighted by Population.*

U.S. Natural Gas Supply

[12] *Natural Gas Week*, December 19, 1994.
[13] Natural Resources Canada, *Natural Gas Storage: A Canadian Perspective*, November 1994.
[14] Energy Information Administration, Reserves and Natural Gas Division.
[15] Energy Information Administration, *Annual Energy Review 1993*, (DOE/EIA-0384(93), Table 6.1, p. 189.
[16] Energy Information Administration, *Natural Gas 1994: Issues and Trends*, (DOE/EIA-0560(94), p.3.
[17] Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1993 Annual Report*, (DOE/EIA-0216(93), p. 18.
[18] Energy Information Administration, *Annual Energy Review 1993*, (DOE/EIA-0384(93), Table 4.7.
[19] Energy Information Administration, *Natural Gas 1994, Issues and Trends*, (DOE/EIA-0560(94), pp. vii, 31.
[20] Energy Information Administration, *Natural Gas 1994: Issues and Trends*, DOE/EIA-0560(94), p.23.
[21] Energy Information Administration, *Natural Gas 1994: Issues and Trends*, DOE/EIA-0560(94), p.7.
[22] Energy Information Administration, Reserves and Natural Gas Division.
[23] Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1993 Annual Report*, (DOE/EIA-0216(93), Table 4.
[24] Energy Information Administration, Reserves and Natural Gas Division.

[25] Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1993 Annual Report*, DOE/EIA-0216(93), Table 1.

[26] Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1993 Annual Report*, (DOE/EIA-0216(93), Table 1.

[27] Energy Information Administration, *Natural Gas 1994: Issues and Trends*, DOE/EIA-0560(94), p.25.

[28] Active Rigs: Energy Information Administration, *Annual Energy Review 1993*, DOE/EIA- 0384(93), Table 4.3, and Reserves and Natural Gas Division; Well Completions, Total Discoveries, Dry Gas Production, and Proved Reserves: *U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, 1993 Annual Report*, DOE/EIA-0216(93), Tables 1 and 4.

U.S. Renewable Energy Demand

[29] While it is generally true that the majority of these imports stem from hydroelectric power output in Canada, in 1992 about 24 percent of the gross electricity imports from Canada were estimated to be associated with nonrenewable energy sources, Natural Resources Canada, *Electric Power in Canada 1992* (Ottawa, Ontario, 1993), p.87.

Figure References

The following is a list of references for the figures appearing in this issue of the *Short-Term Energy Outlook.* Except where noted, all data for figures are taken from datasets containing monthly values of each variable depicted, aggregated to quarterly or annual values as required using appropriate weights. The datasets are created by particular runs of the Short-Term Integrated Forecasting System (STIFS) Model, depending on the scenario or set of scenarios depicted. Also, except when noted, all figures refer to the base or "BBB" case. Other cases referred to are: the high world oil price "BHB"; low world oil price "BLB"; severe weather "BBS"; mild weather "BBL"; strong economic growth "HBB"; weak economic growth "LBB"; weak economic growth with high world oil prices "WHB"; and strong economic growth with low world oil prices "PLB."

1. **History:** Import cost: Compiled from monthly data for the refiner acquisition cost of imported crude oil used in publication of Energy Information Administration, *Petroleum Marketing Annual 1991,* DOE/EIA-0487(91) and *Petroleum Marketing Annual 1992,* DOE/EIA-0487(92), Table 1 for historical series; for recent values, *Petroleum Marketing Monthly,* DOE/EIA-0380, Table 1; West Texas Intermediate spot price, *Oil and Gas Journal* Database, December 30, 1994. **Projections:** First quarter 1995 STIFS database, BBB, BLB, and BHB cases; and Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

2. **History:** Manufacturing Production: Federal Reserve System, Statistical Release G 17; GDP: U.S. Department of Commerce Bureau of Economic Analysis, *National Income and Product Accounts of the U.S.* **Projections:** DRI/McGraw-Hill Forecast CONTROL1194, modified by EIA's Office of Integrated Analysis and Forecasting with STIFS energy price forecasts.

3. **History:** Compiled from annual data used in publication of Energy Information Administration, *International Energy Annual,* DOE/EIA-0219, Table 8 for historical series; for recent values, *International Petroleum Statistics Report,* DOE/EIA-0520, Table 2.4; Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Administration. **Projections:** Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

4. **History:** Compiled from annual data used in publication of Energy Information Administration, *International Energy Annual,* DOE/EIA-0219(92), Table 8 for historical series; for recent values, *International Petroleum Statistics Report,* DOE/EIA-0520, Table 2.4; and Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Administration. **Projections:** Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

5. **History:** Compiled from annual data used in publication of Energy Information Administration, *International Petroleum Statistics Report,* DOE/EIA-0520, Table 4.1 for historical series and recent data; and Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division. **Projections:** Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

Figure References

6. **History:** Compiled from annual data used in publication of Energy Information Administration, *International Petroleum Statistics Report*, DOE/EIA-0520, Table 4.2 for historical series and recent data; Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Administration. **Projections:** Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

7. **History:** Compiled from annual data used in publication of Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035, Table 10.3 for historical series and recent data. **Projections:** Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

8. **History:** Compiled from annual data used in publication of Energy Information Administration, *International Energy Annual*, DOE/EIA-0219(92), Table 1; Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division. **Projections:** Energy Information Administration, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

9. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Annual, Volume 1*, DOE/EIA-0340/1, Tables S4 through S10; *Petroleum Supply Monthly*, DOE/EIA-0109, Tables S4 through S10, adjusted in years prior to 1993 for new (1993) reporting basis for fuel ethanol blended into motor gasoline (See *Short-Term Energy Outlook*, DOE/EIA-0202(93/3Q), Appendix B). **Projections:** First quarter 1995 STIFS database, case "BBB."

10. **History:** Travel: Compiled from monthly data used in the Federal Highway Administration publication, *Traffic Volume Trends*; Demand: Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Annual, Volume 1*, DOE/EIA-0340/1, Table S4 for historical series, adjusted for 1993 reporting basis (see note 9 above); for recent values, *Petroleum Supply Monthly*, DOE/EIA-0109, Table S4; MPG is calculated as Travel (in miles)/Demand (in gallons). **Projections:** First quarter 1995 STIFS database, case "BBB."

11. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Annual, Volume 1*, DOE/EIA-0340/1, Table S1 for historical series; for recent values, *Petroleum Supply Monthly*, DOE/EIA-0109, Table S1. **Projections:** First quarter 1995 STIFS database, cases "BBB," "WHB," and "PLB;" and EIA's Reserves and Natural Gas Division.

12. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Annual, Volume 1*, DOE/EIA-0340/1, Table S1 for historical series; for recent values, *Petroleum Supply Monthly*, DOE/EIA-0109, Table S1. **Projections:** First quarter 1995 STIFS database, case "BBB." The imports share variable is calculated as the ratio of total net petroleum imports divided by total petroleum demand.

13. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Marketing Annual*, DOE/EIA-0487, Table 1, and *Natural Gas Monthly*, DOE/EIA-0130, Table 4, for historical series; for recent values, *Petroleum Marketing Monthly*, DOE/EIA-0380, Table 1. **Projections:** First quarter 1995 STIFS database.

Figure References

14. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Marketing Annual*, DOE/EIA-0487, Tables 2, 4, and, 15, for historical series; for recent values, *Petroleum Marketing Monthly*, DOE/EIA-0380, Tables 2, 4 and 15. **Projections:** First quarter 1995 STIFS database.

15. **History:** Crude oil cost component: compiled from monthly data used in publication of Energy Information Administration, *Petroleum Marketing Monthly*, DOE/EIA-0380, Table 1; Motor fuel taxes component: Energy Information Administration, *Petroleum Marketing Monthly*, DOE/EIA-0380, Table EN1; regulatory component (oxygenated and reformulated gasoline programs) calculations provided by Tancred C. Lidderdale, Energy Markets and Contingency Information Division, Energy Information Administration. **Projections**: First quarter 1995 STIFS database.

16. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109, Table S5. **Projections:** First quarter 1995 STIFS database, case "BBB."

17. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Natural Gas Monthly*, DOE/EIA-0130, Table 4. **Projections:** First quarter 1995 STIFS database, case "BBB."

18. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Electric Power Monthly*, DOE/EIA-0226, Table 60. **Projections:** First quarter 1995 STIFS database, case "BBB."

19. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Annual, Volume 1*, DOE/EIA-0340/1, Table S1 for historical series adjusted for 1993 reporting basis (see note 9 above); for recent values, *Petroleum Supply Monthly*, DOE/EIA-0109, Table S1. **Projections:** First quarter 1995 STIFS database, cases "BBB," "BBS," and "BBL."

20. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Petroleum Supply Annual, Volume 1*, DOE/EIA-0340/1, Table S1 for historical series adjusted for 1993 reporting basis (see note 9 above); for recent values, *Petroleum Supply Monthly*, DOE/EIA-0109, Table S1. **Projections:** First quarter 1995 STIFS database, cases "BBB," "HBB," and "LBB."

21. **History:** Nonutility Generators, 1989-1993: Energy Information Administration, Form EIA-867 (1993 preliminary); other volumes compiled from monthly data used in publication of Energy Information Administration, *Natural Gas Annual, Volume 2*, DOE/EIA-0131, Table 3 for historical series; for recent values, Energy Information Administration, *Natural Gas Monthly*, DOE/EIA-0130. **Projections:** Nonutility Generators: Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration; other volumes: First quarter 1995 STIFS database, case "BBB."

22. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Natural Gas Annual, Volume 2*, DOE/EIA-0131, Table 3 for historical series; for recent values, Energy Information Administration, *Natural Gas Monthly*, DOE/EIA-0130. **Projections:** First quarter 1995 database, case "BBB."

Figure References

23. **History:** Production and net imports of natural gas compiled from monthly data used in publication of Energy Information Administration, *Natural Gas Annual, Volume 2*, DOE/EIA-0131/2, Table 2 for historical series; for recent production data, *Natural Gas Monthly*, DOE/EIA-0130. **Projections:** First quarter 1995 STIFS database, case "BBB."

24. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Natural Gas Annual, Volume 2*, DOE/EIA-0131, Table 3 for historical series; for recent values, Energy Information Administration, *Natural Gas Monthly*, DOE/EIA-0130. **Projections:** First quarter 1995 STIFS database, case "BBB."

25. Compiled from Energy Information Administration, *Annual Energy Review 1993*, DOE/EIA-0384(93), Tables 4.3 and 4.4.

26. **History**: Productive capacity compiled from monthly data used in publication of Energy Information Administration, *Natural Gas Productive Capacity for the Lower 48 States*, DOE/EIA-0542(92); Production: *Natural Gas Annual, Volume 2*, DOE/EIA-0131/2, Table 2 for historical series; for recent production data, *Natural Gas Monthly*, DOE/EIA-0130. **Projections:** First quarter 1995 STIFS database, case "BBB"; and Energy Information Administration, Reserves and Natural Gas Division.

27. Compiled from Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1993 Annual Report*, DOE/EIA-0216(93), Table 1.

28. **History:** Compiled from quarterly data used in publication of Energy Information Administration, *Quarterly Coal Report*, DOE/EIA-0121, Table 45. **Projections:** First quarter 1995 STIFS database, case "BBB."

29. **History:** Compiled from quarterly data used in publication of Energy Information Administration, *Quarterly Coal Report*, DOE/EIA-0121, Table 1. **Projections:** First quarter 1995 STIFS database, case "BBB"; and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

30. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Electric Power Monthly* , DOE/EIA-0226, Table 51. **Projections:** First quarter 1995 STIFS database, case "BBB."

31. **History:** Compiled from monthly data used in publication of Energy Information Administration, *Electric Power Monthly* , DOE/EIA-0226, Table 3 and Form EIA-759. **Projections:** First quarter 1995 STIFS database, case "BBB"; and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels for hydroelectric and nuclear power forecasts.

32. **History:** 1992: Energy Information Administration, *Annual Energy Review 1993*, DOE/EIA-0384(93), Table 10.1; 1993 (preliminary estimates): First quarter 1995 STIFS database and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels. **Projections:** First quarter 1995 STIFS database and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

Figure References

33. **History:** 1992: Energy Information Administration, *Annual Energy Review 1993*, DOE/EIA-0384(93), Table 10.1; 1993 (preliminary estimates): First quarter 1995 STIFS database and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels. **Projections:** Fourth quarter 1994 STIFS database and Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

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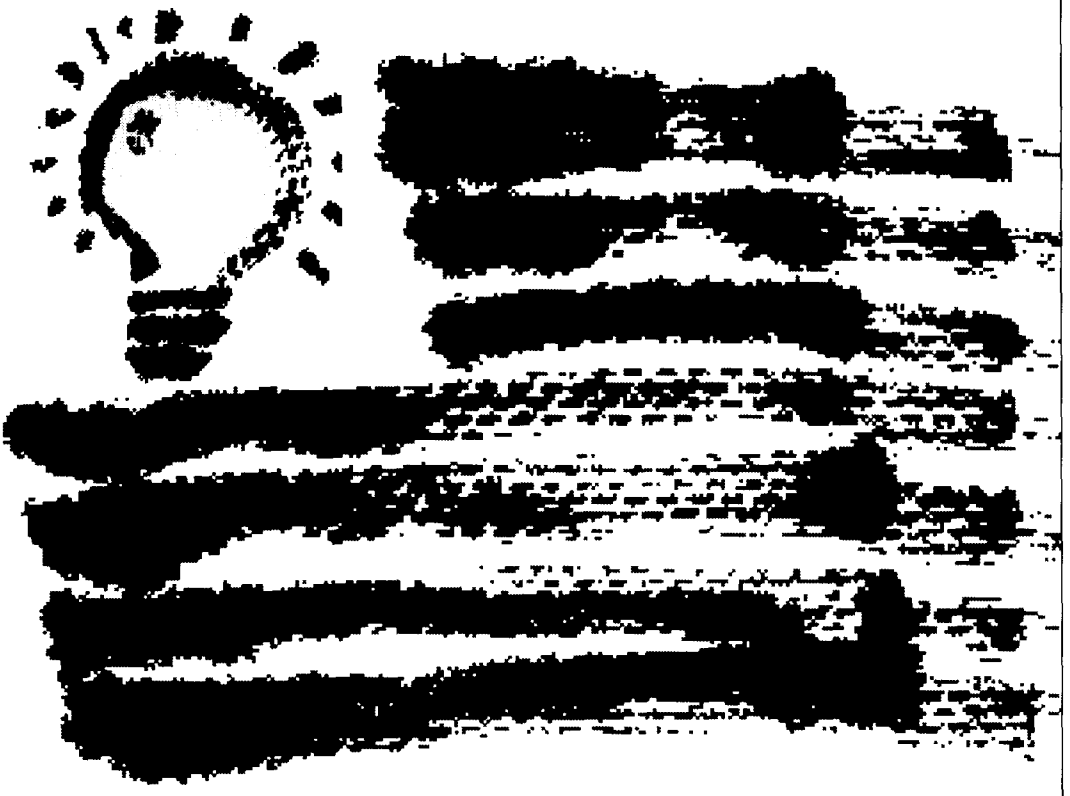

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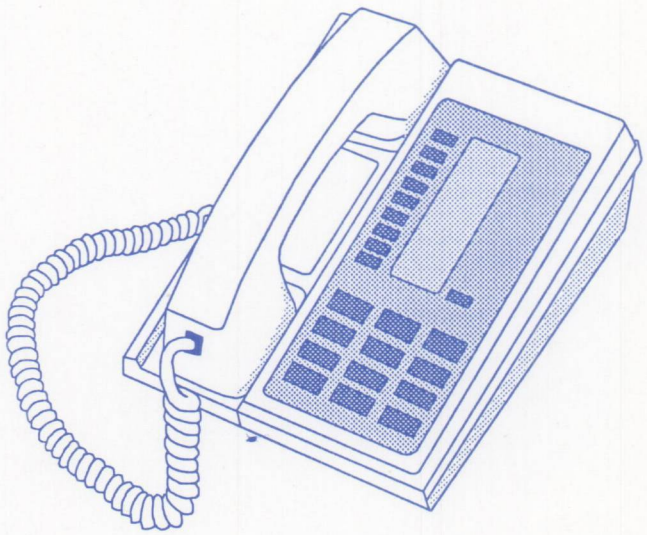

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