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DOE/EIA-0035(85/12)

# Monthly Energy Review

**Energy Information Administration** Washington, DC

1985 Annual Data and Summaries

December 1985



### Monthly Energy Review

The *Monthly Energy Review* presents current data on production, consumption, stocks, imports, exports, and prices of the principal energy commodities in the United States. Also included are data on international production of crude oil, consumption of petroleum products, petroleum stocks, and production of electricity from nuclear-powered facilities.

Publication of this report is in keeping with responsibilities given the Energy Information Administration in Public Law 95-91 (Section 205(a)(2)) that states:

"The Administrator shall be responsible for carrying out a central, comprehensive, and unified energy data and information program which will collect, evaluate, assemble, analyze and disseminate data and information ...."

The *Monthly Energy Review* is intended to provide timely energy information to Members of Congress, to Federal and State agencies, and to the general public.

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Monthly Energy Review December 1985 Energy Information Administration



# Monthly Energy Review

#### **Energy Information Administration**

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# December 1985

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### Articles

Feature articles on energy-related subjects are occasionally included in this publication. The following articles have appeared in issues since the beginning of 1981. A list of the articles included prior to 1981 may be found in any issue published from 1981 through 1983.

Natural Gas Drilling and Production Under the Natural Gas Policy Act February Impacts of Financial Constraints on the Electric Utility IndustryOctober The Effect of Weather on Energy Use	1981 1982 1982 1982 1983 1983 1983 1983 1983

### **Highlights**

Summaries of Energy Information Administration reports have appeared as "Highlights" in this publication since 1982. The following is a list of all the reports that have been summarized in previous issues.

U.S. Crude Oil, Natural Gas, and Natural Gas Liquids	
Reserves, 1981 Annual ReportSeptember	1982
Energy Company Development Patterns in the	
Postembargo Era, Volume OneNovember	1982
Residential Energy Consumption Survey:	
Consumption and ExpendituresJanuary	1983
Residential Energy Consumption Survey:	
Housing Characteristics	1983
Energy Price and Expenditure Data Report, 1970-1980July	1983
Railroad Deregulation: Impact on CoalAugust	1983
Port Deepening and User Fees: Impact on U.S. Coal ExportsAugust	1983
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids	
Reserves, 1982 Annual ReportSeptember	1983
Annual Energy Review 1983 February	
State Energy Data Report, Consumption Estimates, 1960-1982March	1984
Annual Energy Outlook 1983March	
State Energy Price and Expenditure Report, 1970–1981	1984
Solar Collector Manufacturing Activity 1983 June	1984
Estimates of U.S. Wood Energy Consumption, 1980–1983September	1984
International Energy Annual 1983September	1984
Energy Conservation Indicators 1983 Annual ReportNovember	1984
Annual Energy Outlook 1984 December	1984
Annual Energy Review 1984January	
Performance Profiles of Major Energy Producers 1983 February	
State Energy Price and Expenditure Report 1970-1982	1985
State Energy Data Report, Consumption Estimates, 1960-1983April	1985
Annual Outlook for U.S. Electric Power 1985 June	1985
Short-Term Energy Outlook, Volume 1, October 1985August	
Analysis of Growth in Electricity Demand, 1980-1984August	
Profiles of Foreign Direct Investment in U.S. Energy 1984November	1985

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### **Highlights**

### Performance Profiles of Major Energy Producers 1984

#### Introduction

The Energy Information Administration's Financial Reporting System (FRS) collects financial data from 25 of the largest U.S. energy companies (see box). In 1984, those companies produced more domestic petroleum<sup>1</sup> than all other U.S. companies combined. The FRS collects financial and operating information on a uniform, segmented basis. Comparability of information across energy lines of business is unique to this reporting system.

#### **Financial Overview**

In 1984, the U.S. gross national product rose 7 percent in real terms. The strong economic growth benefited all sectors of the economy, some more than others. In the petroleum industry, a limited increase in demand offset weak U.S. crude oil prices somewhat, but the financial performance of most major energy companies did not match that of other large U.S. companies. FRS companies' net income fell 2.8 percent from the 1983 level, compared to a 22.3-percent increase in net income of the Standard and Poor's Group of 400 industrials (S&P 400)

<sup>1</sup>In this report, "petroleum" refers to crude oil (including natural gas liquids) and natural gas.

#### **The 25 FRS Companies**

Amerada Hess, American Petrofina, Ashland Oil, Atlantic Richfield, Burlington Northern, Chevron Corporation, Coastal Corporation, Du Pont, Exxon, Getty Oil, Gulf Oil, Kerr-McGee, Mobil Corporation, Occidental Petroleum, Phillips Petroleum, Shell Oil, Standard Oil Company (Indiana), Standard Oil Company (Ohio), Sun Company, Superior Oil, Tenneco, Texaco, Unocal, Union Pacific, and U.S. Steel.

In 1984, Chevron acquired Gulf Oil, Mobil acquired Superior Oil, and Texaco acquired Getty Oil, but because financial reports were available for the three acquired companies, they continued to be treated as separate companies in 1984.

(Table 1). As a result, the rate of return for the FRS companies was lower than for other large U.S. industrial corporations.

#### **Domestic Petroleum**

Most of the FRS companies' assets, as well as their new investments, have been devoted to petroleum production, refining, and marketing. In 1984, FRS companies' net income from domestic petroleum operations totaled \$15.8 billion, more than 20 percent below the level of the peak year 1981. Net income from production rose from \$12.2 billion in 1983 to \$13.3 billion in 1984, and net income from regulated pipelines rose from \$2.0 billion to \$2.5 billion. In contrast, net income from refining and marketing operations deteriorated sharply, falling from \$1.6 billion in 1983 to \$0.1 billion in 1984 as product prices declined and refinery expenses rose. Profit rates for both the production and the refining and marketing segments fell to their lowest points since 1977. In contrast, the profit rate from the pipelines segment increased from the 1983 level and significantly exceeded those of the other segments (Figure 1).

#### **Foreign Petroleum**

World oil demand increased slightly in 1984, up for the first time since 1979, and crude oil prices, although sometimes weak on the spot market, rose in most countries as the U.S. dollar appreciated. In that environment, FRS companies' foreign oil production

#### Table 1. Financial Items for FRS Companies and the S&P 400, 1984

	_	illion ollars	Percent Change from 1983		
Item	FRS	S&P 400	FRS	S&P 400	
Operating Income	50.1	174.0	3.9	6.9	
Other Income*	-2.7	-10.7	NM	NM	
Income Taxes	-26.1	-70.1	2.6	7.5	
Net Income	21.3	93.2	-2.8	22.3	

\*"Other income" includes other revenue and expense, extraordinary items, and accounting changes.

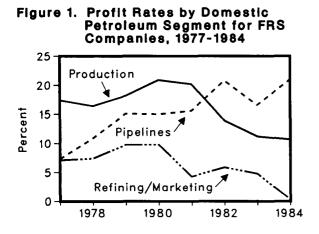
NM=Not meaningful. Source: Energy Information Administration (EIA), *Performance Profiles of Major Energy Producers 1984*, DOE/EIA-0206(84) (Washington, DC, January 1986), p. 10. rose 9.4 percent in 1984, with production in Europe (primarily from the North Sea) accounting for about one-third of the total. FRS companies' net income from foreign petroleum production rose 2.9 percent to \$7.5 billion. In contrast, net income from foreign refining and marketing fell 45.7 percent to \$0.7 billion as weak product demand and competition due to excess refining capacity resulted in drastically reduced refining margins.

Imports of crude oil (including natural gas liquids) by FRS companies rose for the first time since 1978, up 7.0 percent to 2.4 million barrels per day. The share of imports from Arab members of the Organization of Petroleum Exporting Countries (OPEC) rose slightly to 20.4 percent in 1984 but remained well below the 49.4-percent share recorded in 1980 (Figure 2). Almost 40 percent of FRS crude oil imports in 1984 originated in the Western Hemisphere.

#### **Other Energy Activities**

U.S. coal production reached a record high of almost 900 million short tons in 1984. Of that total, FRS companies produced 226 million short tons (25 percent). Despite a 4.8-percent decline in the average price of coal (excluding anthracite) sold by FRS companies, net income from coal operations rose more than 20 percent and apparent rates of return approached those recorded for chemicals and for petroleum production.

In contrast, uranium sales and production by FRS companies declined and operating losses exceeded \$150 million. Additions to investment in place in nuclear operations fell to less than one-fifth of the 1981 level as FRS companies continued to withdraw from the industry.



Note: Profit rates are measured as contribution to net income divided by net investment in place. Source: EIA, *Performance Profiles of Major Energy Producers* 1984, DOE/EIA-0206(84) (Washington, DC, January 1986), p. 54.

FRS companies also continued to phase out oil shale and coal gasification projects in 1984. In contrast, new investments in geothermal energy more than tripled, reaching \$578 million. For the first time, renewable energy activities accounted for more than half of all investments in nonconventional energy.

#### **Nonenergy Activities**

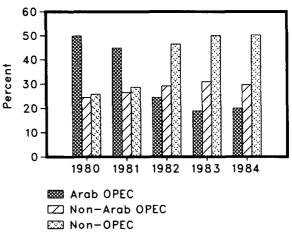
FRS companies' nonenergy lines of business accounted for \$60 billion in assets in 1984 (versus \$228 billion in petroleum). Nonenergy activities yielded the greatest gains in revenue of all FRS companies' businesses, an increase of \$5 billion. These improvements were closely correlated with gains in economic activity for the economy as a whole.

Chemical industry activities showed the greatest gain in revenues, accounting for about half of the total gain, while other nonenergy lines of business—for example, retailing and mineral mining—showed more modest improvements. Despite revenue gains, however, nonenergy rates of return remained below petroleum production rates of return, and several FRS companies discontinued some nonenergy activities.

#### The Report

*Performance Profiles of Major Energy Producers 1984* evaluates financial information and compares foreign and domestic petroleum activities with other energy operations and with nonenergy operations. An appendix contains statistical tables that provide detailed financial and operating data reported by FRS companies for 1983 and 1984.

Figure 2. FRS Crude Oll Imports by Source, 1980-1984



Source: EIA, Performance Profiles of Major Energy Producers 1984, DOE/EIA-0206(84) (Washington, DC, January 1986), p. 115.

#### Production

Energy production during December 1985 totaled 5.5 quadrillion Btu, a 2.0-percent increase compared with the level of production during December 1984. Coal production increased 9.5 percent and petroleum production was up 0.5 percent. Natural das production decreased 4.2 percent compared with production in the previous December. Production of all other forms of energy combined increased 5.0 percent compared to December 1984 levels.

#### Consumption

Energy consumption during December 1985 totaled 7.2 quadrillion Btu, 8.5 percent above the level of consumption during December 1984. Natural gas consumption rose 10.4 percent, coal consumption increased 9.4 percent, and petroleum consumption was up 7.4 percent. Consumption of all other forms of energy combined increased 5.4 percent compared with consumption during December 1984.

#### **Net Imports**

Net imports of energy during December 1985 totaled 0.8 guadrillion Btu, 22.3 percent above the level of net imports during December 1984. Net imports of petroleum were up 20.6 percent, and net imports of natural gas increased 13.5 percent. Net exports of coal were up 8.6 percent from the level in December 1984.

### **Energy Summary**

(Quadrillion (10<sup>15</sup>) Btu)

		December			Cumulative January through December					
	1985	1984	Percent Change <sup>1</sup>	1985	1985 Daily Rate	1984	1984 Daily Rate	Percent Change <sup>1</sup>		
Total Production	5.515	5.408	2.0	64.726	0.177	65.852	0.180	-1.4		
Petroleum <sup>2</sup>	1.804	1.795	0.5	21.142	0.058	21.122	0.058	0.4		
Natural Gas (Dry)	1.520	1.587	-4.2	16.887	0.046	17.931	0.049	-5.6		
Coal	1.539	1.405	9.5	19.388	0.053	19.723	0.054	-1.4		
Other <sup>3</sup>	0.652	0.621	5.0	7.309	0.020	7.075	0.019	3.6		
Total Consumption	7.157	6.597	8.5	73.835	0.202	74.108	0.202	-0.1		
Petroleum•	2.761	2.571	7.4	30.852	0.085	31.051	0.085	-0.4		
Natural Gas⁵	2.098	1.901	10.4	17.763	0.049	18.507	0.051	-3.8		
Coal	1.608	1.470	9.4	17.499	0.048	17.074	0.047	2.8		
Other®	0.689	0.654	5.4	7.721	0.021	7.475	0.020	3.6		
Net Imports	0.798	0.652	22.3	7.792	0.021	8.955	0.024	-12.8		
Petroleum <sup>7</sup>	0.844	0.700	20.6	8.894	0.024	9.888	0.027	-9.8		
Natural Gas	0.101	0.089	13.5	0.876	0.002	0.787	0.002	11.7		
Coals	(0.183)	(0.169)	(8.6)	(2.389)	(0.007)	(2.119)	(0.006)	(13.1)		
Other	0.036	0.032	13.1	0.412	0.001	0.400	0.001	3.3		

<sup>1</sup> Based on daily rates prior to rounding.

 <sup>3</sup> Includes crude oil, lease condensate, and natural gas plant liquids.
 <sup>3</sup> Other is hydroelectric and nuclear electric power, and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.

Includes petroleum products. Includes supplemental gaseous fuels.

Octive suppremental gaseous rules.
 Other is hydroelectric and nuclear electric power; electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems; and net imports of electricity and coal coke.
 Includes crude oil, lease condensate, petroleum products, pentanes plus, unfinished oils, gasoline blending components, and imports of crude oil for the Strategic Petroleum Reserve.

Parentheses indicate exports are greater than imports.
 Other is net imports of electricity and coal coke.

Note: • Totals may not equal sum of components due to independent rounding.

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#### 1985 Year-End Summary

U.S. energy production during 1985 was 64.7 quadrillion British thermal units (Btu), 1.4 percent<sup>1</sup> below the record level attained in 1984 (Figure 1). U.S. consumption of energy totaled 73.8 quadrillion Btu, about the same as in 1984 but well below the 78.9 quadrillion Btu consumed during the peak year of 1979.

Net imports of energy fell from 9.0 quadrillion Btu in 1984 to 7.8 quadrillion Btu in 1985, a 12.8-percent decline that brought net imports to the second lowest level since the 1973-1974 oil embargo. Net imports remained significantly below the all-time high of 18.0 quadrillion Btu reached in 1977.

#### Production

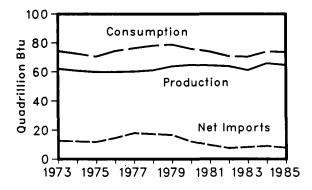
As the rate of growth of the U.S. economy slowed in 1985, two of the three major fossil fuels registered declines. Coal production fell to 19.4 quadrillion Btu in 1985, down 1.4 percent from the record level attained in 1984. Natural gas production was down 5.6 percent to 16.9 quadrillion Btu, well below the 22.2-quadrillion-Btu level of 1973.

In contrast, production of crude oil (including natural gas plant liquids) in 1985 rose 0.4 percent to 21.1 quadrillion Btu, as increases in Alaskan production more than offset production declines in the Lower-48 States. The 1985 level, however, remained below the 1973 level of 22.1 quadrillion Btu.

Coal-fired generation of electricity rose for the third year in a row and nuclear-based generation rose for the fifth year in a row, both to record levels. In

<sup>1</sup>All statistics for 1985 are preliminary. Percentage changes are calculated using daily rates prior to rounding.

#### Figure 1. U.S. Energy Production, Consumption, and Net Imports, 1973-1985



Source: Energy Information Administration calculations based on data reported in Part 1 of this publication.

contrast, 1985 generation from petroleum, the electric utilities' most expensive fuel, fell for the seventh year in a row.

#### Consumption

Consumption of both petroleum and natural gas fell in 1985 but continued to account for about two-thirds of the U.S. total. Petroleum consumption decreased 0.4 percent to 30.9 quadrillion Btu despite declines in the refiner acquisition cost of crude oil. Natural gas consumption fell 3.8 percent to 17.8 quadrillion Btu.

Consumption of motor gasoline increased for the third year in a row. As of the end of November 1985, consumption of distillate fuel oil lagged year-earlier levels, but a colder-than-normal December caused consumption for the year to exceed that of 1984. Residual fuel oil consumption, on the other hand, fell for the eighth consecutive year.

In contrast to the other major fossil fuels, coal consumption rose 2.8 percent to the record level of 17.5 quadrillion Btu in 1985. Drawdowns of stockpiles accumulated in 1984 as a precaution against a coal miners' strike contributed to the domestic coal supply in 1985.

#### imports

Energy net imports declined dramatically in 1985 and the U.S. energy trade deficit improved compared to 1984 levels. Because petroleum and coal account for most of the U.S. energy trade, a 9.8-percent decline in petroleum net imports coupled with a 13.1-percent increase in coal net exports overwhelmed an 11.7-percent rise in net imports of natural gas.

Net imports of crude oil fell to 3.0 million barrels per day and net imports of products fell to 1.3 million barrels per day in 1985. A lower level of imports for the Strategic Petroleum Reserve and inventory drawdowns in anticipation of lower world oil prices both contributed to the decrease in petroleum net imports in 1985.

Arab members of the Organization of Petroleum Exporting Countries (OPEC) supplied an average of 0.5 million barrels per day of petroleum to the United States in 1985, down from 0.8 million barrels per day the previous year. By comparison, imports from Mexico and Canada rose to about 1.6 million barrels per day in 1985.

#### Production of Energy by Source-Quarterly Summary

		Coal	Crude Oil <sup>1</sup>	NGPL <sup>2</sup>	Natural Gas (Dry)	Hydro- electric Power <sup>3</sup>	Nuclear Electric Power	Other	Total
					Quadrillic	on (10¹⁵) Btu			
1973	Total	13.993	19.493	2.569	22.187	2.861	0.910	0.046	62.060
1974	Total	14.074	18.575	2.471	21.210	3.177	1.272	0.056	60.835
1975	Total	14.990	17.729	2.374	19.640	3.155	1.900	0.072	59.860
1976	Total	15.654	17.262	2.327	19.480	2.976	2.111	0.081	59.891
1977	Total	15.755	17.454	2.327	19.565	2.333	2.702	0.082	60.219
1978	1st Quarter	1.955	4.431	0.555	5.014	0.753	0.767	0.019	13.495
	2nd Quarter	4.417	4.658	0.563	4.834	0.829	0.658	0.013	15.973
	3rd Quarter	4.001	4.680	0.561	4.807	0.710	0.796	0.018	15.574
	4th Quarter	4.536	4.664	0.567	4.830	0.644	0.802	0.018	16.061
	<b>Total</b>	<b>14.910</b>	<b>18.434</b>	<b>2.245</b>	<b>19.485</b>	<b>2.937</b>	<b>3.024</b>	<b>0.068</b>	<b>61.103</b>
1979	1st Quarter	4.028	4.455	0.550	5.084	0.756	0.849	0.020	15.742
	2nd Quarter	4.583	4.502	0.570	4.953	0.831	0.539	0.021	15.998
	3rd Quarter	4.262	4.524	0.571	4.889	0.660	0.727	0.023	15.654
	4th Quarter	4.667	4.623	0.595	5.151	0.684	0.661	0.025	16.406
	<b>Total</b>	<b>17.539</b>	<b>18.104</b>	<b>2.286</b>	<b>20.076</b>	<b>2.931</b>	<b>2.776</b>	<b>0.089</b>	<b>63.800</b>
1980	1st Quarter	4.619	4.588	0.578	5.287	0.746	0.644	0.024	16.486
	2nd Quarter	4.753	4.552	0.571	4.885	0.864	0.605	0.028	16.258
	3rd Quarter	4.449	4.549	0.547	4.706	0.666	0.752	0.031	15.701
	4th Quarter	4.776	4.559	0.558	5.029	0.624	0.738	0.032	16.316
	<b>Total</b>	<b>18.597</b>	<b>18.249</b>	<b>2.254</b>	<b>19.907</b>	<b>2.900</b>	<b>2.739</b>	<b>0.114</b>	<b>64.761</b>
1981	1st Quarter	4.799	4.481	0.581	4.995	0.678	0.743	0.033	16.310
	2nd Quarter	3.032	4.519	0.570	4.942	0.754	0.679	0.031	14.527
	3rd Quarter	5.233	4.569	0.575	4.881	0.683	0.821	0.033	16.795
	4th Quarter	5.313	4.577	0.581	4.880	0.644	0.765	0.030	16.790
	<b>Total</b>	<b>18.377</b>	<b>18.146</b>	<b>2.307</b>	<b>19.699</b>	<b>2.758</b>	<b>3.008</b>	<b>0.127</b>	<b>64.422</b>
1982	1st Quarter	4.943	4.502	0.547	4.916	0.879	0.760	0.023	16.570
	2nd Quarter	4.813	4.561	0.537	4.572	0.884	0.747	0.025	16.137
	3rd Quarter	4.479	4.623	0.541	4.385	0.749	0.840	0.030	15.647
	4th Quarter	4.405	4.624	0.566	4.382	0.745	0.785	0.030	15.536
	<b>Total</b>	<b>18.639</b>	<b>18.309</b>	<b>2.191</b>	<b>18.255</b>	<b>3.256</b>	<b>3.131</b>	<b>0.108</b>	<b>63.890</b>
1983	1st Quarter	4.241	4.550	0.541	4.215	0.922	0.776	0.028	15.273
	2nd Quarter	4.121	4.587	0.526	3.851	0.970	0.747	0.026	14.828
	3rd Quarter	4.385	4.642	0.553	4.040	0.798	0.838	0.041	15.297
	4th Quarter	4.503	4.613	0.564	4.424	0.812	0.842	0.039	15.796
	<b>Total</b>	<b>17.250</b>	<b>18.392</b>	<b>2.184</b>	<b>16.530</b>	<b>3.502</b>	<b>3.203</b>	<b>0.133</b>	<b>61.194</b>
1984	1st Quarter	4.911	4.646	0.555	4.682	0.922	0.919	0.039	16.675
	2nd Quarter	5.068	4.693	0.560	4.393	0.949	0.814	0.041	16.519
	3rd Quarter	5.385	4.746	0.576	4.342	0.770	0.939	0.044	16.801
	4th Quarter	4.359	4.763	0.582	4.515	0.722	0.866	0.050	15.857
	<b>Total</b>	<b>19.723</b>	<b>18.848</b>	<b>2.274</b>	<b>17.931</b>	<b>3.363</b>	<b>3.538</b>	<b>0.174</b>	<b>65.852</b>
1985	1st Quarter	R4.673	4.660	0.559	4.541	0.817	1.059	0.052	R16.361
	2nd Quarter	R5.006	4.711	R0.558	R4.056	0.784	0.929	R0.048	R16.091
	3rd Quarter	R4.886	4.744	0.560	R4.018	0.630	1.129	0.054	R16.021
	4th Quarter	4.823	4.768	0.581	4.272	0.721	1.028	0.060	16.253
	<b>Total</b>	<b>19.388</b>	<b>18.884</b>	<b>2.258</b>	<b>16.887</b>	<b>2.952</b>	<b>4.144</b>	<b>0.213</b>	<b>64.726</b>

Includes lease condensate.

\*Natural gas plant liquids. \*Includes industrial and utility production of hydroelectric power. \*Other is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems. R=Revised data.

 Notes: • Geographic coverage is the 50 States and the District of Columbia.
 Totals may not equal sum of components due to independent rounding.
 Data do not include geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric utilities.

Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

### Consumption of Energy by Source-Quarterly Summary

		Coal	Natural Gas¹	Petroleum	Hydro- electric Power <sup>2</sup>	Nuclear Electric Power	Other <sup>3</sup>	Total
				Qua	drillion (1015)	Btu		
1973	Total	12.971	22.512	34.840	3.010	0.910	0.039	74.282
1974	Total	12.663	21.732	33.455	3.309	1.272	0.112	72.543
1975	Total	12.663	19.948	32.731	3.219	1.900	0.086	70.546
1976	Total	13.584	20.345	35.175	3.066	2.111	0.081	74.362
1977	Total	13.922	19.931	37.122	2.515	2.702	0.097	76.289
1978	1st Quarter	3.150	6.561	9.971	0.804	0.767	0.026	21.280
	2nd Quarter	3.269	4.247	9.081	0.880	0.658	0.057	18.193
	3rd Quarter	3.727	3.926	9.178	0.762	0.796	0.056	18.446
	4th Quarter	3.619	5.265	9.735	0.696	0.802	0.053	20.170
	<b>Total</b>	<b>13.765</b>	<b>20.000</b>	<b>37.965</b>	<b>3.141</b>	<b>3.024</b>	<b>0.193</b>	<b>78.088</b>
1979	1 st Quarter	3.769	6.648	10.072	0.808	0.849	0.029	22.174
	2nd Quarter	3.572	4.423	8.837	0.883	0.539	0.046	18.300
	3rd Quarter	3.876	4.085	8.879	0.713	0.727	0.047	18.326
	4th Quarter	3.823	5.510	9.337	0.737	0.661	0.030	20.098
	<b>Total</b>	<b>15.039</b>	<b>20.666</b>	<b>37.123</b>	<b>3.141</b>	<b>2.776</b>	<b>0.152</b>	<b>78.898</b>
1980	1st Quarter	3.995	6.606	9.143	0.800	0.644	0.023	21.212
	2nd Quarter	3.546	4.255	8.177	0.919	0.605	0.014	17.516
	3rd Quarter	4.020	3.977	8.123	0.721	0.752	0.019	17.612
	4th Quarter	3.861	5.553	8.759	0.678	0.738	0.023	19.612
	<b>Total</b>	<b>15.423</b>	<b>20.391</b>	<b>34.202</b>	<b>3.118</b>	<b>2.739</b>	<b>0.079</b>	<b>75.952</b>
1981	1st Quarter	4.069	6.237	8.391	0.763	0.743	0.029	20.232
	2nd Quarter	3.677	4.337	7.732	0.841	0.679	0.025	17.291
	3rd Quarter	4.191	3.997	7.785	0.770	0.821	0.032	17.596
	4th Quarter	3.971	5.355	8.023	0.731	0.765	0.025	18.870
	<b>Total</b>	<b>15.908</b>	<b>19.926</b>	<b>31.931</b>	<b>3.105</b>	<b>3.008</b>	<b>0.111</b>	<b>73.989</b>
1982	1 st Quarter	4.046	6.396	7.745	0.948	0.760	0.019	19.915
	2nd Quarter	3.556	3.841	7.535	0.937	0.747	0.018	16.634
	3rd Quarter	3.990	3.532	7.419	0.834	0.840	0.023	16.638
	4th Quarter	3.730	4.738	7.532	0.842	0.785	0.027	17.653
	<b>Total</b>	<b>15.322</b>	<b>18.507</b>	<b>30.232</b>	<b>3.561</b>	<b>3.131</b>	<b>0.086</b>	<b>70.840</b>
1983	1st Quarter	3.737	5.369	7.311	1.008	0.776	0.025	18.226
	2nd Quarter	3.569	3.572	7.293	1.048	0.747	0.021	16.251
	3rd Quarter	4.440	3.317	7.626	0.901	0.838	0.038	17.160
	4th Quarter	4.152	5.093	7.824	0.914	0.842	0.034	18.859
	Total	<b>15.898</b>	<b>17.352</b>	<b>30.054</b>	<b>3.871</b>	<b>3.203</b>	<b>0.118</b>	<b>70.495</b>
1984	1st Quarter	4.314	R6.031	7.909	1.012	0.919	0.041	R20.226
	2nd Quarter	4.009	R3.980	7.675	1.043	0.814	0.038	R17.558
	3rd Quarter	4.490	R3.579	7.755	0.891	0.939	0.040	R17.694
	4th Quarter	4.260	R4.918	7.712	0.829	0.866	0.044	R18.629
	<b>Total</b>	<b>17.074</b>	<b>R18.507</b>	<b>31.051</b>	<b>3.774</b>	<b>3.538</b>	<b>0.163</b>	<b>R74.108</b>
1985	1st Quarter	R4.398	5.927	R7.661	0.916	1.059	0.054	R20.015
	2nd Quarter	R4.143	R3.552	R7.572	0.875	0.929	R0.043	R17.114
	3rd Quarter	R4.573	R3.355	R7.710	0.749	1.129	0.048	R17.563
	4th Quarter	4.385	4.929	7.909	0.838	1.028	0.055	19.143
	<b>Total</b>	<b>17.499</b>	<b>17.763</b>	<b>30.852</b>	<b>3.377</b>	<b>4.144</b>	<b>0.200</b>	<b>73.835</b>

<sup>1</sup>Includes supplemental gaseous fuels. <sup>2</sup>Includes industrial and utility production and net imports of electricity. <sup>3</sup>Other is net imports of coal coke and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.

R=Revised data.

Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
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Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

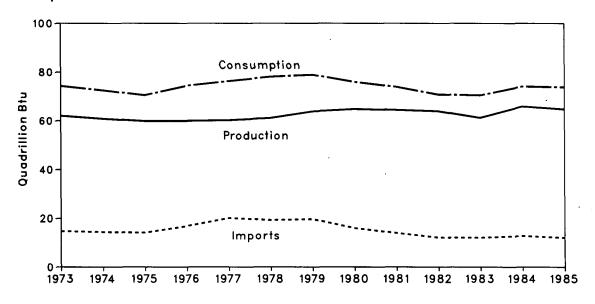
### Net Imports<sup>1</sup> of Energy by Source—Quarterly Summary

		Coal	Crude Oil <sup>2</sup>	Refined Petroleum Products <sup>3</sup>	Natural Gas	Electricity	Coal Coke	Total
				Qua	drillion (1015	) Btu		
1973	Total	(1.422)	6.883	6.097	0.981	0.148	(0.007)	12.680
1974	Total	(1.568)	7.389	5.273	0.907	0.133	0.056	12.190
1975	Total	(1.738)	8.708	3.800	0.904	0.064	0.014	11.752
1976	Total	(1.567)	11.221	3.982	0.922	0.089	0.000	14.648
1977	Total	(1.401)	13.921	4.321	0.981	0.182	0.015	18.018
1978	1st Quarter	(0.036)	3.138	1.112	0.241	0.050	0.007	4.512
	2nd Quarter	(0.306)	3.063	0.891	0.214	0.051	0.044	3.959
	3rd Quarter	(0.264)	3.422	0.942	0.209	0.052	0.038	4.399
	4th Quarter	(0.398)	3.502	0.987	0.276	0.052	0.035	4.453
	<b>Total</b>	(1.004)	<b>13.125</b>	<b>3.932</b>	<b>0.941</b>	<b>0.204</b>	<b>0.125</b>	<b>17.323</b>
1979	1st Quarter	(0.277)	3.311	1.051	0.307	0.052	0.009	4.453
	2nd Quarter	(0.452)	3.252	0.787	0.307	0.052	0.025	3.972
	3rd Quarter	(0.455)	3.417	0.826	0.295	0.053	0.024	4.159
	4th Quarter	(0.517)	3.348	0.939	0.333	0.053	0.005	4.160
	<b>Total</b>	<b>(1.702)</b>	<b>13.328</b>	<b>3.603</b>	<b>1.243</b>	<b>0.211</b>	<b>0.063</b>	<b>16.745</b>
1980	1st Quarter	(0.363)	3.021	0.902	0.326	0.054	0.000	3.940
	2nd Quarter	(0.652)	2.696	0.625	0.203	0.054	(0.014)	2.913
	3rd Quarter	(0.678)	2.446	0.626	0.174	0.055	(0.011)	2.611
	4th Quarter	(0.698)	2.423	0.760	0.254	0.055	(0.009)	2.783
	<b>Total</b>	<b>(2.391)</b>	1 <b>0.586</b>	<b>2.912</b>	<b>0.957</b>	<b>0.217</b>	<b>(0.035)</b>	<b>12.247</b>
1981	1st Quarter	(0.578)	2.368	0.729	0.244	0.086	(0.004)	2.846
	2nd Quarter	(0.529)	2.127	0.552	0.185	0.087	(0.005)	2.416
	3rd Quarter	(0.883)	2.239	0.628	0.184	0.088	(0.001)	2.254
	4th Quarter	(0.929)	2.119	0.613	0.242	0.088	(0.006)	2.128
	<b>Total</b>	<b>(2.918)</b>	<b>8.854</b>	<b>2.522</b>	<b>0.855</b>	<b>0.347</b>	<b>(0.016)</b>	<b>9.644</b>
1982	1st Quarter	(0.668)	1.524	0.569	0.257	0.070	(0.004)	1.748
	2nd Quarter	(0.826)	1.672	0.466	0.190	0.053	(0.007)	1.549
	3rd Quarter	(0.655)	1.970	0.536	0.181	0.086	(0.008)	2.111
	4th Quarter	(0.619)	1.751	0.557	0.268	0.097	(0.004)	2.050
	<b>Total</b>	<b>(2.768)</b>	<b>6.917</b>	<b>2.128</b>	<b>0.896</b>	<b>0.306</b>	( <b>0.022)</b>	<b>7.457</b>
1983	1st Quarter	(0.392)	1.224	0.373	0.285	0.086	(0.003)	1.572
	2nd Quarter	(0.525)	1.686	0.539	0.186	0.079	(0.005)	1.959
	3rd Quarter	(0.572)	2.110	0.743	0.170	0.103	(0.003)	2.551
	4th Quarter	(0.524)	1.711	0.696	0.243	0.101	(0.004)	2.223
	<b>Total</b>	<b>(2.013)</b>	<b>6.731</b>	<b>2.351</b>	<b>0.883</b>	<b>0.369</b>	<b>(0.016)</b>	<b>8.306</b>
1984	1st Quarter	(0.393)	1.575	0.924	0.220	0.090	0.002	2.418
	2nd Quarter	(0.620)	1.820	0.712	0.184	0.094	(0.003)	2.186
	3rd Quarter	(0.656)	1.747	0.675	0.152	0.121	(0.003)	2.036
	4th Quarter	(0.451)	1.775	0.659	0.231	0.107	(0.007)	2.315
	<b>Total</b>	<b>(2.119)</b>	<b>6.918</b>	<b>2.970</b>	<b>0.787</b>	<b>0.411</b>	( <b>0.011)</b>	<b>8.955</b>
1985	1st Quarter	R(0.480)	1.245	R0.582	0.279	0.099	0.002	R1.727
	2nd Quarter	R(0.624)	1.696	R0.681	0.194	0.091	(0.005)	R2.033
	3rd Quarter	R(0.664)	1.595	R0.571	R0.163	0.119	(0.006)	R1.777
	4th Quarter	(0.621)	1.867	0.657	0.240	0.116	(0.005)	2.254
	<b>Total</b>	<b>(2.389)</b>	<b>6.403</b>	<b>2.491</b>	<b>0.876</b>	<b>0.425</b>	<b>(0.013)</b>	<b>7.792</b>

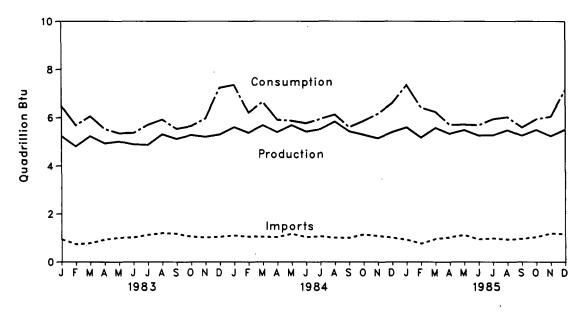
<sup>1</sup>Net imports equals imports minus exports. Parentheses indicate exports are greater than imports. <sup>2</sup>Includes crude oil, lease condensate, and imports of crude oil for the Strategic Petroleum Reserve. <sup>3</sup>Includes refined petroleum products, unfinished oils, natural gasoline, and plant condensate. R=Revised data. Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

# Energy Summary Overview

Yearly



Monthly



6

**Overview**<sup>1</sup>

		Production <sup>2</sup>	<b>Consumption</b> <sup>2</sup>	Imports <sup>2</sup>	Exports	Net Imports
			Qu	adrillion (1015) E	ltu	
1973	Total	62.060	74.282	14.731	2.051	12.680
1974	Total	60.835	72.543	14.412	2.223	12.190
1975	Total	59.860	70.546	14.111	2.359	11.752
1976	Total	59.891	74.362	16.837	2.189	14.648
1977	Total	60.219	76.289	20.090	2.072	
1978	Total					18.018
		61.103	78.088	19.254	1.931	17.323
1979	Total	63.800	78.898	19.616	2.871	16.745
1980	Total	64.761	75.952	15.971	3.724	12.247
1981	Total	64.422	73.989	13.974	4.329	9.644
1982	Total	63.890	70.840	12.093	4.636	7.457
1983	January	5.237	6.483	0.942	0.301	0.641
	February	4.803	5.685	0.732	0.264	0.468
	March	5.233	6.058	0.783	0.319	0.464
	April	4.933	5.532	0.931	0.314	0.617
	May	5.006	5.354	1.005	0.348	0.657
	June	4.889	5.364	1.018	0.334	0.684
	July	4.866	5.700	1.124	0.273	0.851
	August	5.312	5.922	1.199	0.348	0.852
	September October	5.120	5.538	1.172	0.323	0.849
	November	5.280	5.648	1.051	0.325	0.726
	December	5.208 5.308	5.966 7.246	1.019 1.047	0.280 0.290	0.739
	Total	61.194	7.246 70.495	12.024	3.719	0.758 <b>8.306</b>
	iviai		70.493	12.024	3.7 18	0.300
1984	January	5.609	7.364	1.102	0.247	0.854
	February	5.380	6.210	1.053	0.221	0.832
	March	5.686	6.652	1.047	0.315	0.732
	April	5.401	5.912	1.035	0.327	0.708
	May	5.691	5.872	1.170	0.365	0.805
	June	5.427	5.774	1.040	0.367	0.673
	July	5.528	5.951	1.065	0.326	0.739
	August	5.837	6.133	1.005	0.359	0.646
	September	5.436	5.610	1.005	0.355	0.651
	October November	5.300	5.869	1.144	0.295	0.848
	December	5.149 5.408	6.164	1.085	0.271	0.814
	Total		6.597	1.012	0.360	0.652
	IOTAI	65.852	74.108	12.763	3.808	8.955
1985	January	R5.600	R7.362	R0.922	R0.305	R0.617
	February	R5.181	R6.414	R0.765	R0.305	R0.460
	March	R5.579	R6.240	R0.961	R0.310	R0.651
	April	R5.337	R5.704	R1.023	R0.330	R0.692
	May	R5.489	R5.718	R1.126	R0.387	R0.740
	June	R5.265	R5.692	R0.942	R0.341	R0.601
	July	R5.275	R5.941	R0.980	R0.326	R0.654
	August	R5.485	R6.025	R0.937	R0.417	R0.520
	September	R5.261	R5.597	R0.966	R0.363	R0.603
	October	R5.496	R5.941	R1.035	R0.363	R0.672
	November	R5.241	R6.046	R1.188	R0.404	R0.784
	December	5.515	7.157	1.163	0.365	0.798
	Total	64.726	73.835	12.007	4.215	7.792

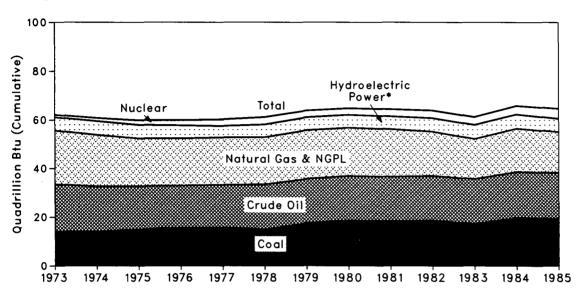
<sup>1</sup>For definitions, see Notes on the last page of this section. <sup>a</sup>The sum of domestic energy production and net imports of energy does not equal domestic energy consumption. The difference is attributed to stock changes; losses and gains in conversion, transportation, and distribution; the addition of blending compounds; shipments of anthracite to U.S. Armed Forces in Europe; and adjustments to account for discrepancies between reporting systems. R=Revised data. Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. • Data do not include geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric utilities.

utilities.

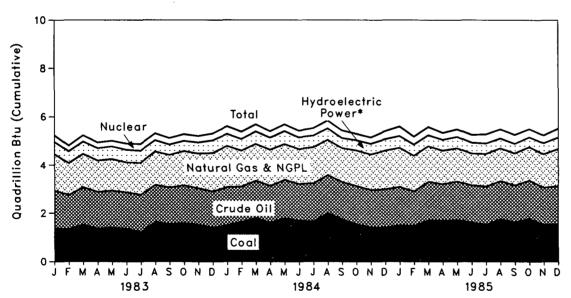
Source: • Energy Information Administration calculations based on data appearing elsewhere in this publication.

Production of Energy by Source

Yearly



Monthly



\*Includes other.

#### **Production of Energy by Source**

		Coal	Crude Oll <sup>1</sup>	NGPL <sup>2</sup>	Natural Gas (Dry)	Hydro- electric Power³	Nuclear Electric Power	Other•	Total	Year to Date
					Qu	adrillion (10 <sup>1</sup>	⁵) Btu			
1973	Total	13.993	19.493	2.569	22.187	2.861	0.910	0.046	62.060	
1974	Total	14.074	18.575	2.471	21.210	3.177	1.272	0.056	60.835	
1975	Total	14.990	17.729	2.374	19.640	3.155	1.900	0.072	59.860	
1976	Total	15.654	17.262	2.327	19.480	2.976	2.111	0.081	59.891	
1977	Total	15.755	17.454	2.327	19.565	2.333	2.702	0.082	60.219	
1978	Total	14.910	18.434	2.245	19.485	2.937	3.024	0.068	61.103	
1979	Total	17.539	18.104	2.286	20.076	2.931	2.776	0.089	63.800	
1980	Total	18.597	18.249	2.254	19.907	2.900	2.739	0.114	64.761	
1981	Total	18.377	18.146	2.307	19.69 <del>9</del>	2.758	3.008	0.127	64.422	
1982	Totai	18.639	18.309	2.191	18.255	3.256	3.131	0.108	63.890	
1983	January	1.384	1.564	0.188	1.509	0.308	0.273	0.011	5.237	5.237
	February	1.338	1.422	0.169	1.329	0.295	0.242	0.008	4.803	10.040
	March	1.520	1.564	0.183	1.376	0.319	0.261	0.009	5.233	15.273
	April	1.364	1.527	0.173	1.300	0.316	0.244	0.009	4.933	20.206
	May	1.394	1.552	0.178	1.305	0.329	0.240	0.007	5.006	25.212
	June	1.363	1.508 1.553	0.175 0.183	1.245	0.324 0.297	0.263 0.279	0.009 0.012	4.889 4.866	30.101 34.967
	July August	1.218 1.617	1.553	0.185	1.325 1.375	0.297	0.275	0.012	5.312	40.278
	September	1.551	1.528	0.184	1.340	0.229	0.273	0.014	5.120	45.398
	October	1.583	1.577	0.191	1.415	0.219	0.281	0.015	5.280	50.678
	November	1.515	1.526	0.189	1.432	0.260	0.273	0.013	5.208	55.886
	December	1.405	1.510	0.184	1.577	0.333	0.287	0.011	5.308	61.194
	Total	17.250	18.392	2.184	16.530	3.502	3.203	0.133	61.194	
1984	January	1.495	1.594	0.186	1.695	0.311	0.317	0.011	5.609	5.609
	February	1.622	1.493	0.181	1.472	0.292	0.307	0.013	5.380	10.989
	March	1.795	1.559	0.189	1.515	0.318	0.295	0.015	5.686	16.675
	April	1.601	1.542	0.185	1.483	0.314	0.262	0.014	5.401	22.076
	May	1.785	1.610	0.191	1.478	0.333	0.279	0.014 0.013	5.691	27.766 33.193
	June July	1.682 1.646	1.540 1.598	0.184 0.193	1.432 1.485	0.302 0.288	0.273 0.305	0.013	5.427 5.528	38.721
	August	1.999	1.584	0.193	1.463	0.263	0.303	0.016	5.837	44.559
	September	1.739	1.565	0.190	1.394	0.219	0.315	0.015	5.436	49.995
	October	1.536	1.601	0.195	1.465	0.219	0.268	0.016	5.300	55.295
	November	1.417	1.562	0.192	1.463	0.233	0.265	0.016	5.149	60.444
	December	1.405	1.600	0.195	1.587	0.270	0.333	0.018	5.408	65.852
	Total	19.723	18.848	2.274	17.931	3.363	3.538	0.174	65.852	
1985	January	R1.494	1.605	0.194	1.610	0.288	0.391	0.018	R5.600	R5.600
	February	R1.473	1.450	0.174	1.465	0.271	0.333	0.016	R5.181	R10.782
	March	R1.706	1.605	0.191	1.465	0.258	0.335	0.018	R5.579	R16.361
	April May	R1.680	1.539	0.183	1.378	0.256	0.286	R0.016 0.016	R5.337	R21.698
	May June	R1.719 R1.607	1.613 1.560	0.190 0.185	R1.363 R1.315	0.277 0.250	0.310 0.333	0.016	R5.489 R5.265	R27.187 R32.452
	July	R1.517	1.601	0.185	R1.348	0.250	0.333	0.018	R5.275	R37.727
	August	R1.746	1.599	0.191	R1.344	0.210	0.376	0.018	R5.485	R43.212
	September	R1.622	1.544	0.181	R1.326	0.197	0.373	0.018	R5.261	R48.473
	October	R1.761	1.608	0.190	R1.373	0.210	0.337	0.017	R5.496	R53.969
	November	R1.523	1.554	0.192	R1.379	0.246	0.326	0.021	R5.241	R59.210
	December	1.539	1.606	0.199	1.520	0.265	0.365	0.022	5.515	64.726
	Total	19.388	18.884	2.258	16.887	2.952	4.144	0.213	64.726	

Includes lease condensate.

Includes lease condensate.
Natural gas plant liquids.
Includes industrial and utility production of hydroelectric power.
Other is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.
R = Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Data do not include geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric utilities.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

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Monthly Energy Review December 1985 **Energy Information Administration** 

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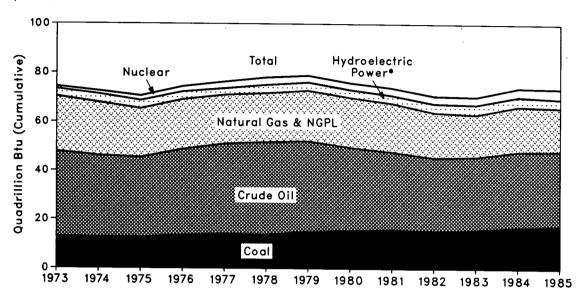
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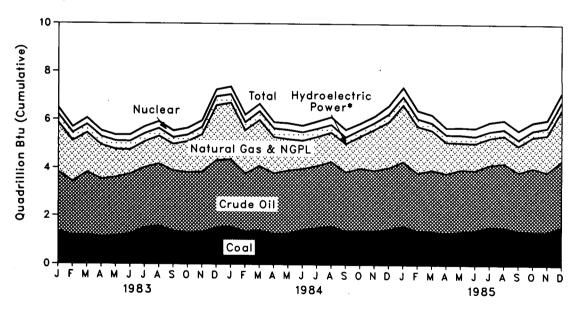
### **Consumption of Energy by Source**



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#### Monthly



\*Includes other.

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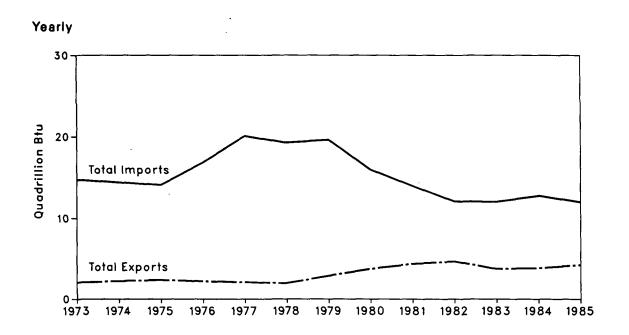
#### **Consumption of Energy by Source**

		Coal	Natural Gas'	Petro- leum	Hydro- electric Power <sup>2</sup>	Nuclear Electric Power	Other <sup>3</sup>	Total	Year to Date
					Quadrillior	n (10¹⁵) Btu			
1973	Total	12.971	22.512	34.840	3.010	0.910	0.039	74.282	
1974	Total	12.663	21.732	33.455	3.309	1.272	0.112	72.543	
1975	Total	12.663	19.948	32.731	3.219	1.900	0.086	70.546	
1976	Total	13.584	20.345	35.175	3.066	2.111	0.081	74.362	
1977	Total	13.922	19.931	37.122	2.515	2.702	0.097	76.289	
1978	Total	13.765	20.000	37.965	3.141	3.024	0.193	78.088	
1979	Total	15.039	20.666	37.123	3.141	2.776	0.152	78.898	
1980	Total	15.423	20.391	34.202	3.118	2.739	0.079	75.952	
1981	Total	15.908	19.926	31.931	3.105	3.008	0.111	73.989	
1982	Total	15.322	18.507	30.232	3.561	3.131	0.086	70.840	
						•	0.009	6 490	6 490
1983	January February	1.360 1.180	2.036 1.693	2.467 2.239	0.337	0.273 0.242	0.009	6.483 5.685	6.483 12.168
	March	1.196	1.640	2.604	0.348	0.242	0.009	6.058	18.226
	April	1.140	1.416	2.383	0.344	0.244	0.006	5.532	23.758
	May	1.172	1.153	2.431	0.352	0.240	0.006	5.354	29.112
	June	1.257	1.004	2.480	0.351	0.263	0.009	5.364	34.476
	July	1.499	1.066	2.517	0.328	0.279	0.010	5.700	40.176
	August	1.574	1.146	2.594	0.307	0.286	0.015	5.922	46.098
	September	1.366	1.104	2.515	0.266	0.273	0.013	5.538	51.636
	October	1.305	1.285	2.507	0.256	0.281	0.014	5.648	57.284
	November	1.325	1.550	2.514	0.292	0.273	0.012 0.008	5.966 7.246	63.249 70.495
	December Total	1.522 <b>15.898</b>	2.259 <b>17.352</b>	2.803 <b>30.054</b>	0.366 <b>3.871</b>	0.287 <b>3.203</b>	0.008 0.118	70.495	70.495
				30.034		3.203			
1984	January	1.552	2.330	2.810	0.344	0.317	0.012	7.364	7.364
	February	1.359	1.793	2.415	0.320	0.307	0.015	6.210	13.574
	March	1.403	1.908	2.684	0.348	0.295	0.014	6.652	20.226 26.138
	April May	1.272 1.298	1.501 1.303	2.520 2.612	0.344 0.366	0.262 0.279	0.014 0.013	5.912 5.872	32.010
	June	1.439	1.175	2.542	0:333	0.273	0.013	5.774	37.784
	July	1.519	1.197	2.592	0.325	0.305	0.012	5.951	43.736
	August	1.587	1.208	2.695	0.309	0.319	0.014	6.133	49.868
	September	1.384	1.173	2.468	0.256	0.315	0.014	5.610	55.479
	October	1.395	1.322	2.612	0.260	0.268	0.013	5.869	61.347
	November	1.394	1.695	2.529	0.266	0.265	0.014	6.164	67.511
	December	1.470	1.901	2.571	0.303	0.333	0.017	6.597	74.108
	Total	17.074	18.507	31.051	3.774	3.538	0.163	74.108	
1985	January	R1.603	2.334	R2.695	0.321	0.391	0.018	R7.362	R7.362
	February	R1.408	1.942	R2.409	0.304	0.333	0.017	R6.414	R13.775
	March	R1.387	1.651	R2.558	0.291	0.335	0.018	R6.240	R20.015
	April May	R1.323 R1.388	1.311 R1.122	R2.479 R2.581	0.288	0.286 0.310	0.016	R5.704	R25.719 R31.437
	June	R1.432	R1.122	R2.501	0.304 0.282	0.310	0.013 0.014	R5.718 R5.692	R37.129
	July	R1.585	R1.109	R2.590	0.262	0.333	0.014	R5.941	R43.070
	August	R1.563	R1.142	R2.678	0.249	0.376	0.017	R6.025	R49.094
	September	R1.425	R1.103	R2.442	0.240	0.373	0.015	R5.597	R54.692
	October	R1.389	R1.289	R2.658	R0.252	0.337	0.016	R5.941	R60.632
	November	R1.387	R1.542	R2.490	0.283	0.326	0.018	R6.046	R66.678
	December	1.608	2.098	2.761	0.303	0.365	0.021	7.157	73.835
	Total	17.499	17.763	30.852	3.377	4.144	0.200	73.835	

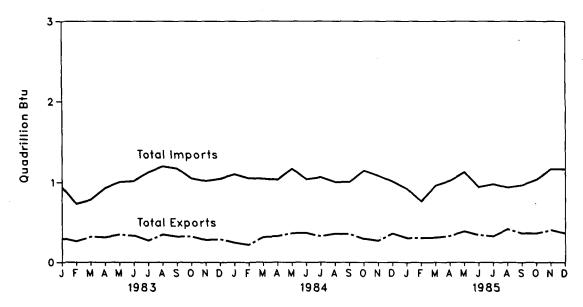
<sup>1</sup>Includes supplemental gaseous fuels.
<sup>2</sup>Includes industrial and utility production and net imports of electricity.
<sup>3</sup>Other is net imports of coal coke and electricity produced from geothermal, wood, waste, wind, photoveltaic, and solar thermal energy sources connected to electric utility distribution systems.
R = Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
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Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

**Energy Imports and Exports** 



Monthly



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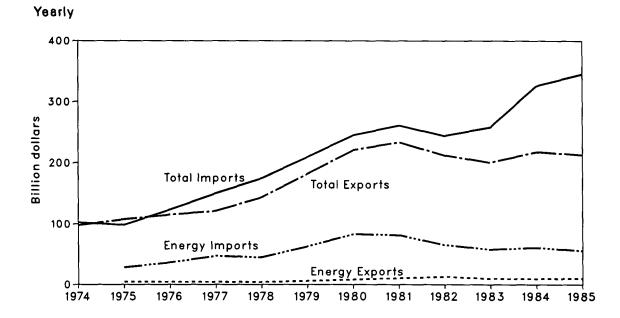
#### Net Imports<sup>1</sup> of Energy by Source

		Coal	Crude Oil <sup>2</sup>	Petro- leum Products <sup>3</sup>	Natural Gas	Electric- ity	Coal Coke	Total	Year to Date
					Quadrill	ion (1015) Btu			
1973	Total	(1.422)	6.883	6.097	0.981	0.148	(0.007)	12.680	
1974	Totai	(1.568)	7.389	5.273	0.907	0.133	0.056	12.190	
1975	Total	(1.738)	8.708	3.800	0.904	0.064	0.014	11.752	
1976	Total	(1.567)	11.221	3.982	0.922	0.089	0.000	14.648	
1977	Total	(1.401)	13.921	4.321	0.981	0.182	0.015	18.018	
1 <del>9</del> 78	Total	(1.004)	13.125	3.932	0.941	0.204	0.125	17.323	
1979	Total	(1.702)	13.328	3.603	1.243	0.211	0.063	16.745	
1980	Total	(2.391)	10.586	2.912	0.957	0.217	(0.035)	12.247	
1981	Total	(2.918)	8.854	2.522	0.855	0.347	(0.016)	9.644	
1982	Total	(2.768)	6.917	2.128	0.896	0.306	(0.022)	7.457	
1983	January	(0.116)	0.514	0.105	0.110	0.028	(0.001)	0.641	0.641
	February	(0.113)	0.327	0.134	0.092	0.029	(0.001)	0.468	1.108
	March April	(0.162) (0.157)	0.382 0.530	0.134 0.148	0.083 0.071	0.028 0.028	(0.001) (0.002)	0.464 0.617	1.572 2.190
	May	(0.180)	0.556	0.202	0.071	0.023	(0.002)	0.657	2.847
	June	(0.188)	0.600	0.188	0.057	0.028	(0.001)	0.684	3.531
	July	(0.159)	0.673	0.252	0.054	0.032	(0.002)	0.851	4.382
	August	(0.217)	0.732	0.252	0.051	0.034	(0.001)	0.852	5.233
	September	(0.195)	0.705	0.239	0.065	0.037	(0.001)	0.849	6.082
	October	(0.209)	0.597	0.241	0.061	0.037	(0.001)	0.726	6.809
	November	(0.153)	0.551	0.233	0.077	0.032	(0.001)	0.739	7.548
	December <b>Total</b>	(0.162) ( <b>2.013)</b>	0.563 <b>6.731</b>	0.222 <b>2.351</b>	0.105 <b>0.883</b>	0.032 <b>0.369</b>	(0.003) <b>(0.016)</b>	0.758 <b>8.306</b>	8.306
1984	January	(0.132)	0.524	0.336	0.092	0.032	0.001	0.854 0.832	0.854 1.686
	February March	(0.109) (0.152)	0.467 0.584	0.379 0.209	0.064 0.063	0.028 0.029	0.002 (0.001)	0.832	2.418
	April	(0.199)	0.567	0.244	0.066	0.020	0.000	0.708	3.126
	May	(0.215)	0.672	0.255	0.061	0.032	(0.001)	0.805	3.931
	June	(0.205)	0.581	0.213	0.056	0.031	(0.002)	0.673	4.605
	July	(0.215)	0.639	0.228	0.050	0.037	(0.001)	0.739	5.344
	August	(0.214)	0.552	0.214	0.049	0.046	(0.002)	0.646	5.990
	September	(0.228)	0.556	0.233	0.052	0.037	0.000	0.651	6.640
	October November	(0.173) (0.109)	0.652 0.591	0.269 0.223	0.062 0.079	0.041 0.033	(0.003) (0.003)	0.848 0.814	7.489 8.303
	December	(0.169)	0.533	0.223	0.079	0.033	(0.003)	0.652	8.955
	Total	(2.119)	6.918	2.970	0.787	0.411	(0.011)	8.955	0.000
1985	January	(0.150)	0.462	R0.172	0.099	E0.033	0.000	R0.617	R0.617
	February	R(0.156)	0.311	R0.176	0.094	E0.033	0.001	R0.460	R1.076
	March	(0.174)	0.473	R0.233	0.085	E0.033	0.000	R0.651	R1.727
	April	(0.181)	0.553	R0.217	0.070	E0.032	0.001	R0.692	R2.420
	May	R(0.239)	0.627	R0.262	0.065	E0.027	(0.003)	R0.740	R3.159
	June July	(0.205) R(0.188)	0.515 0.548	R0.203 R0.205	0.058 0.054	E0.032 E0.037	(0.002) (0.002)	R0.601 R0.654	R3.761 R4.415
	August	(0.268)	0.548	R0.180	R0.054	E0.037	(0.002)	R0.520	R4.935
	September	R(0.208)	0.529	R0.187	R0.056	E0.043	(0.003)	R0.603	R5.538
	October	(0.227)	0.578	R0.213	R0.066	RE0.042	(0.001)	R0.672	R6.210
	November	R(0.211)	0.667	R0.221	R0.072	E0.037	(0.003)	R0.784	R6.994
	December	(0.183)	0.622	0.222	0.101	E0.037	(0.001)	0.798	7.792
	Total	(2.389)	6.403	2.491	0.876	E0.425	(0.013)	7.792	

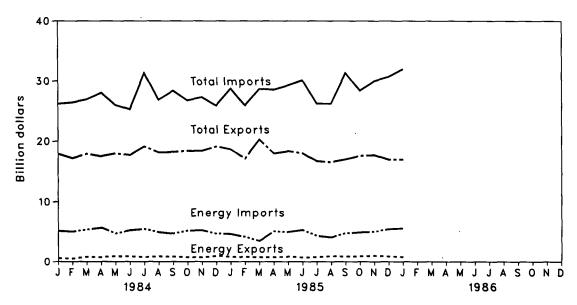
<sup>a</sup>Net imports equals imports minus exports. Parentheses indicate exports are greater than imports. <sup>a</sup>Includes crude oil, lease condensate, and imports of crude oil for the Strategic Petroleum Reserve. <sup>a</sup>Includes petroleum products, unfinished oils, pentanes plus, and gasoline blending components. E=Estimated value. R= Revised data. Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

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Merchandise Trade Value







#### **Merchandise Trade Value**

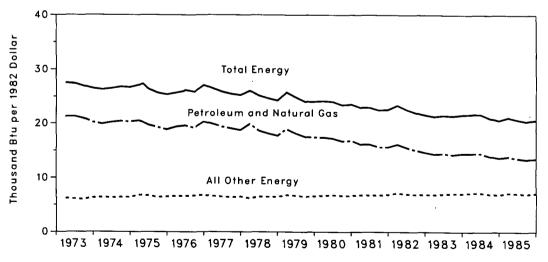
		Exports			Imports			Trade Balance		
		Energy	All Other	Total	Energy	All Other	Total	Energy	All Other	Total
						Million dolla	urs			
1974	Total	NA	NA	98,092	NA	NA	102,559	NA	NA	-4,467
1975	Total	4,470	103,182	107,652	28,325	70,178	98,503	-23,855	33,004	9,149
1976	Total	4,226	110,997	115,223	36,384	87,093	123,477	-32,158	23,904	-8,254
1977	Total	4,184	117,048	121,232	47,153	103,237	150,390	-42,969	13,811	-29,158
1978	Total	3,882	139,799	143,681	44,763	129,994	174,757	-40,881	9,805	-31,076
197 <del>9</del>	Total	5,675	176, 185	181,860	63,077	146,381	209,458	-57,402	29,803	-27,599
1980	Total	7,982	212,644	220,626	82,924	161,947	244,871	-74,942	50,698	-24,244
1981	Total	10,279	223,398	233,677	81,360	179,622	260,982	-71,081	43,776	-27,305
1982	Total	12,729	199,464	212,193	65,409	178,543	243,952	-52,680	20,921	-31,759
1983	January	1,142	16,090	17,232	5,142	14,985	20,127	-4,000	1,105	-2,895
	February	833	15,479	16,312	3,704	15,100	18,804	-2,871	378	-2,493
	March	822	15,868	16,690	3,865	15,663	19,528	-3,043	206	-2,837
	April	850	15,245	16,095	3,763	16,151	19,914	-2,913	-906	-3,819
	May	750	14,905	15,655	5,033	16,413	21,446	-4,283	-1,508	-5,791
	June	791	16,168	16,959	4,767	16,149 16.664	20,916 21,828	-3,976	19 -821	-3,957 -5,341
	July	644 824	15,842	16,486 16,582	5,164	10,004	21,020	-4,520 -4,879	-1,253	-6,132
	August September	778	15,758 16,479	17,257	5,703 5,571	16,880	22,714	-4,879	-402	-5,195
	October	699	16,334	17,033	5,872	18,461	24,333	-5,173	-2,127	-7,300
	November	689	16,374	17,063	4,951	18,164	23,115	-4,262	-1,790	-6,052
	December	739	16,559	17,298	4,417	18,559	22,976	-3,678	-2,000	-5,678
	Total	9,500	190,986	200,486	57,952	200,096	258,048	-48,452	-9,110	-57,562
1984	January	582	17,307	17,889	5,089	21,116	26,205	-4,507	-3,809	-8,316
	February	502	16,706	17,208	5,006	21,414	26,420	-4,504	-4,708	-9,212
	March	790	17,116	17,906	5,323	21,625	26,948	-4,533	-4,510	-9,043
	April	759	16,761	17,520	5,629	22,445	28,074	-4,870	-5,683	-10,553 -8,034
	May June	901 872	17,077 16,833	17, <del>9</del> 78 17,705	4,696 5,206	21,316 20,073	26,012 25,279	-3,795 -4,334	-4,239 -3,237	-7,571
	July	765	18,389	19,154	5,206	25,900	31,334	-4,334 -4,669	-3,237	-12,180
	August	878	17,245	18,123	4,886	21,980	26,866	-4,008	-4,735	-8,743
	September	820	17,390	18,210	4,663	23,746	28,409	-3,843	-6,357	-10,200
	October	757	17,654	18,411	5,168	21,615	26,783	-4,411	-3,961	-8,372
	November	712	17,683	18,395	5,207	22,124	27,331	-4,495	-4,442	-8,937
	December	973	18,169	19,142	4,672	21,261	25,933	-3,699	-3,092	-6,791
	Total	9,311	208,554	217,865	60,980	264,746	325,726	-51,669	-56,192	-107,861
1985	January	804	R17,869	R18,673	R4,597	R24,176	R28,773	R-3,793	R-6,307	R-10,100
	February	786	R16,357	R17,143	R4,130	R21,811	R25,941	R-3,344	R-5,454	R-8,798
	March	754	R19,576	R20,330	R3,464	R25,261	R28,725	R-2,710	R-5,685	R-8,395
	April	738	R17,235	R17,973	R5,048	R23,524	R28,572	R-4,310	R-6,289	R-10,599
	May	837	R17,500	R18,337	R4,916	R24,386	R29,302	R-4,079	R-6,886	R-10,965
	June	708	R17,304	R18,012	R5,278	R24,858	R30,136	R-4,570	R-7,554	R-12,124
	July	760	R15,967	R16,727	R4,294	R21,953	R26,247	R-3,534	R-5,987	R-9,521 R-9,662
	August September	934 868	R15,650	R16,584	R4,068	R22,179	R26,247	R-3,134	R-6,529 R-10,430	R-9,663 R-14,315
•	September October	903	R16,166 R16,715	R17,034 R17,618	R4,753 R4,859	R26,596 R23,570	R31,349 R28,429	R-3,665 R-3,956	R-6,855	R-14,315 R-10,811
	November	903	R16,730	R17,721	R5,005	R25,005	R30,010	R-4,014	R-8,276	R-12,290
	December	888	R16,106	R16,994	R5,431	R25,297	R30,728	R-4,543	R-9,191	R-13,734
	Total	9,971	R203,175	R213,146	R55,843	R289,433	345,276	R-45,872		R-132,129
1985	January	812	16,194	17,006	5,563	26,442	32,005	-4,751	-10,248	-14,999

R=Revised data. NA=Not available.
Notes: • Annual totals are unadjusted and may not equal the sum of monthly totals, which are adjusted for seasonal and working-day variation, if present and identifiable.
• The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory (which is comprised of the 50 States, the District of Columbia, and Puerto Rico) and the Virgin Islands. Additional Notes and Sources: • See the last page of this section.

Energy Indicator—Energy Consumption per Dollar of Gross National Product (Seasonally Adjusted)

		Annual Rate		Energy Consumption per Dollar of GNP (Seasonally Adjusted)					
		of Energy Consumption	• • • • • • • • • • • • • • • • • • • •		Petroleum and Natural Gas	All Other Energy			
		Quadrillion Btu	Trillion 1982 dollars	Th	ousand Btu per 1982 doll	ar			
1973	Year	74.282	2.744	27.1	20.9	6.2			
1974	Year	72.543	2.729	26.6	20.9				
1975	Year	70.546	2.695	26.2		6.4			
1975	Year	74.362			19.6	6.6			
1970			2.827	26.3	19.6	6.7			
	Year	76.289	2.959	25.8	19.3	6.5			
1978	Year	78.088	3.115	25.1	18.6	6.5			
1979	Year	78.898	3.192	24.7	18.1	6.6			
1980	Year	75.952	3.187	23.8	17.1	6.7			
1981	Year	73.989	3.249	22.8	16.0	6.8			
1982	Year	70.840	3.166	22.4	15.4	7.0			
1983	1st Quarter <sup>1</sup>	68.032	3.191	21.3	14.4	6.9			
	2nd Quarter <sup>1</sup>	69.936	3.259	21.5	14.5	7.0			
	3rd Quarter <sup>1</sup>	71.302	R3.330	R21.4	R14.3	R7.1			
	4th Quarter <sup>1</sup>	72.655	3.357	21.6	14.5	7.1			
	Year	70.495	R3.278	21.5	14.5	7.0			
1984	1st Quarter <sup>1</sup>	74.841	3.449	21.7	14.5	7.2			
	2nd Quarter <sup>1</sup>	75.645	3.493	21.7	14.5	7.2			
	3rd Quarter <sup>1</sup>	73.602	3.510	21.0	14.0	7.0			
	4th Quarter <sup>1</sup>	72.369	3.516	20.6	13.7	6.9			
	Year	74.108	3.492	21.2	14.2	7.0			
1985	1st Quarter <sup>1</sup>	R74.752	3.548	21.1	13.9	7.2			
	2nd Quarter <sup>1</sup>	R73.541	3.557	20.7	13.6	7.1			
	3rd Quarter <sup>1</sup>	R73.948	3.584	R20.4	R13.4	7.0			
	4th Quarter <sup>1</sup>	74.115	3.595	20.6	13.5	7.1			
	Year	73.835	3.571	20.7	13.6	7.1			

# Quarterly Energy Consumption per Dollar of Gross National Product<sup>1</sup> (Seasonally Adjusted)



<sup>1</sup>Quarterly data are seasonally adjusted and shown at annual rates.

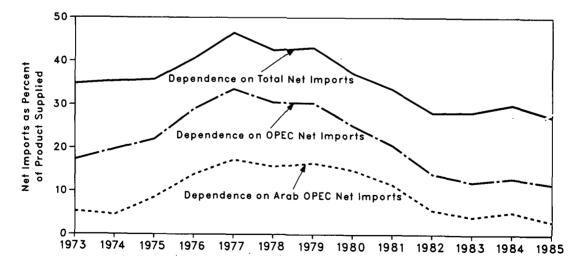
R = Revised data. Notes: • Geographic coverage is the 50 States and the District of Columbia. • Yearly data may not equal average of quarters due to seasonality adjustments and independent rounding. Sources: • See the last page of this section.

#### Energy Indicator—U.S. Dependence on Petroleum Net Imports<sup>1</sup>

			Net Imports <sup>2</sup>			Net Imports as Percent of U.S. Petroleum Products Supplied				
		From Arab OPEC <sup>3</sup> Countries	From All OPEC <sup>4</sup> Countries	From All Countries	Petroleum Products Supplied	From Arab OPEC <sup>3</sup> Countries	From All OPEC <sup>4</sup> Countries	From All Countries		
Annua	I Rate	Thousand barrels per day				Percent				
1973	Average	914	2,991	6,025	17,308	5.3	17.3	34.8		
1974	Average	752	3,277	5,892	16,653	4.5	19.7	35.4		
1975	Average	1,382	3,599	5,846	16,322	8.5	22.0	35.8		
1976	Average	2,423	5,063	7,090	17,461	13. <del>9</del>	29.0	40.6		
1977	Average	3,184	6,190	8,565	18,431	17.3	33.6	46.5		
1978	Average	2,962	5,747	8,002	18,847	15.7	30.5	42.5		
1979	Average	3,054	5,633	7,985	18,513	16.5	30.4	43.1		
1980	Average	2,549	4,293	6,365	17.056	14.9	25.2	37.3		
1981	Average	1,844	3,315	5,401	16,058	11.5	20.6	33.6		
1982	Average	852	2,136	4,298	15,296	5.6	14.0	28.1		
1983	1st Quarter	351	1,174	3,079	15,026	2.3	7.8	20.5		
	2nd Quarter	444	1,708	4,237	14,825	3.0	11.5	28.6		
	3rd Quarter	860	2,501	5,370	15,333	5.6	16.3	35.0		
	4th Quarter	857	1,972	4,536	15,732	5.4	12.5	28.8		
	Average	630	1,843	4,312	15,231	4.1	12.1	28.3		
1984	1st Quarter	769	1,878	4,802	16,110	4.8	11.7	29.8		
	2nd Quarter	907	2,278	4,853	15,632	5.8	14.6	31.0		
	3rd Quarter	877	2,080	4,590	15,625	5.6	13.3	29.4		
	4th Quarter	715	1,912	4,618	15,538	4.6	12.3	29.7		
	Average	817	2,037	4,715	15,726	5.2	13.0	30.0		
1985	1st Quarter	327	1,364	3,564	15,807	2.1	8.6	22.5		
	2nd Quarter	536	1,837	4,567	15,452	3.5	11.9	29.6		
	3rd Quarter	292	1,767	4,116	15,562	1.9	11.4	26.4		
	4th Quarter	733	2,284	4,798	15,965	4.6	14.3	30.1		
	Average	473	1,816	4,264	15,697	3.0	11.6	27.2		

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#### U.S. Dependence on Petroleum Net Imports



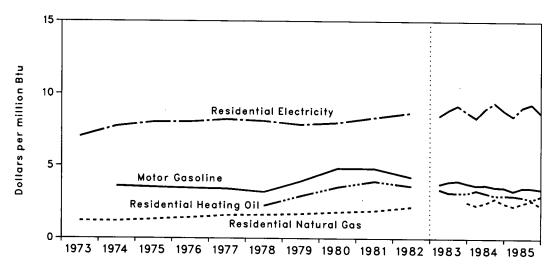
<sup>1</sup>Beginning in October 1977, Strategic Petroleum Reserves are included. <sup>a</sup>Net imports equals imports minus exports. Imports from OPEC countries exclude indirect imports which are petroleum products imported primarily from Caribbean and West European areas and refined from crude oil produced in OPEC countries. <sup>a</sup>Includes Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates. <sup>4</sup>Includes Arab OPEC countries plus Ecuador, Gabon, Indonesia, Iran, Nigeria, and Venezuela. Notes: • Geographic coverage is the 50 States and the District of Columbia. • Annual averages may not equal average of quarters due to independent rounding. Sources: • See the last page of this section.

Monthly Energy Review December 1985 **Energy Information Administration** 

### Energy Indicator—Cost of Fuels to End Users in Constant (1972) Dollars<sup>1</sup>

			Regular Gasoline		lential ng Oil	Residential Natural Gas		Residential Electricity	
		Cent/gal	\$/MMBtu	Cent/gal	\$/MMBtu	Cent/Mcf	\$/MMBtu	Cent/kWh	\$/MMBtu
1973	Average	NA	NA	NA	NA	121.4	1.19	2.39	7.00
1974	Average	45.1	3.61	NA	NA	121.3	1.18	2.63	7.71
1975	Average	44.1	3.53	NA	NA	132.9	1.30	2.73	8.00
1976	Average	43.4	3.47	NA	NA	145.5	1.43	2.74	8.03
1977	Average	42.9	3.43	NA	NA	162.2	1.59	2.80	8.21
1978	Average	40.1	3.21	31.4	2.26	164.2	1.62	2.76	8.09
1979	Average	49.4	3.95	40.6	2.93	171.8	1.69	2.67	7.83
1980	Average	60.5	4.84	49.4	3.56	186.8	1.82	2.72	7.97
1981	Average	60.4	4.83	54.9	3.96	197.3	1.92	2.85	8.35
1982	Average	53.0	4.24	50.3	3.63	224.1	2.19	2.97	8.70
1983	1st Quarter	47.1	3.77	47.3	3.41	NA	NA	2.89	8.47
	2nd Quarter	49.3	3.94	44.2	3.19	NA	NA	3.03	8.88
	3rd Quarter	50.0	4.00	43.9	3.17	NA	NA	3.14	9.20
	4th Quarter	47.9	3.83	, 43.9	3.17	260.9	2.53	2.99	8.76
	Average	48.6	3.89	45.3	3.27	254.5	2.47	3.01	8.82
1984	1st Quarter	46.1	3.69	46.4	3.35	239.2	2.32	2.85	8.35
	2nd Quarter	46.5	3.72	43.9	3.17	256.1	2.49	R3.07	R9.00
	3rd Quarter	44.9	3.59	41.6	3.00	286.9	2.79	R3.21	R9.41
	4th Quarter	44.5	3.56	41.7	3.01	253. <del>5</del>	2.46	R3.03	R8.88
	Average	45.5	3.64	43.9	3.17	246.5	2.39	3.04	8.91
1985	1st Quarter	41.7	3.33	41.5	2.99	R234.9	2.28	2.89	8.47
	2nd Quarter	44.4	3.55	40.2	2.90	255.5	2.48	3.10	9.09
	3rd Quarter	44.2	3.53	38.1	2.75	R275.3	R2.67	3.18	9.32
	4th Quarter	43.0	3.44	41.2	2.97	234.9	2.28	2.97	8.70
	Average	44.8	3.58	41.0	2.96	238.4	2.31	3.03	8.88

### Average Cost of Fuels to End Users in Constant (1972) Dollars<sup>1</sup>



<sup>1</sup>Fuel costs shown on this page are calculated using the Urban Consumer Price Index developed by the Bureau of Labor Statistics. See the Conversion Factors section of this report.

R=Revised data. NA=Not available.

Notes: • Geographic coverage is the 50 States and the District of Columbia.

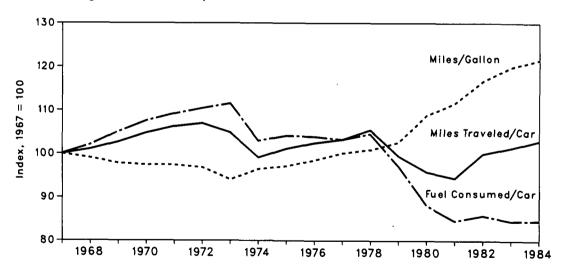
Annual averages may not equal average of quarters due to independent rounding.

Sources: • See the last page of this section.

### Energy Indicator—U.S. Passenger Car Efficiency

	Average Fuel Consumed per Car			e Miles I per Car	Average Miles Traveled per Gallon of Fuel Consumed		
	Gallons	Index	Miles	Index	Miles	Index	
1967	684	100.0	9,531	100.0	13.93	100.0	
1968	698	102.0	9,627	101.0	13.79	99.0	
1969	718	105.0	9,782	102.6	13.63	97.8	
1970	735	107.5	9,978	104.7	13.57	97.4	
1971	746	109.1	10,121	106.2	13.57	97.4	
1972	755	110.4	10,184	106.9	13.49	96.8	
1973	763	111.5	9,992	104.8	13.10	94.0	
1974	704	102.9	9,448	99.1	13.43	96.4	
1975	712	104.1	9,634	101.1	13.53	97.1	
1976	711	103.9	9,763	102.4	13.72	98.5	
1977	706	103.2	9,839	103.2	13.94	100.1	
1978	715	104.5	10,046	105.4	14.06	100.9	
1979	664	97.1	9,485	99.5	14.29	102.6	
1980	603	88.2	9,135	95.8	15.15	108.8	
1981	579	84.6	9,002	94.4	15.54	111.6	
1982	587	85.8	9,533	100.0	16.25	116.7	
1983	578	84.5	9,654	101.3	16.70	119.9	
1984†	579	84.6	9,809	102.9	16.94	121.6	

U.S. Passenger Car Efficiency Index



†Preliminary data. Note: • Geographic coverage is the 50 States and the District of Columbia. Sources: • See the last page of this section.

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### Population-Weighted Heating Degree-Days<sup>1</sup>

	February 1 through February 28					Cumulative July 1 through February 28				
Census				Percent	Change				Percent	Change
Divisions	Normal <sup>2</sup>	1985	1986	Normal to 1986	1985 to 1986	Normai <sup>2</sup>	1985	1986	Normal to 1986	1985 to 1986
New England CT, ME, MA, NH, RI, VT	1,074	1,199	1,102	2.6	-8.1	4,723	4,643	4,690	-0.7	1.0
Middle Atlantic NJ, NY, PA	999	950 <sup>°</sup>	1,023	2.4	7.7	4,293	4,048	4,169	-2.9	3.0
Eastern North Central IL, IN, MI, OH, WI	1,076	1,163	1,082	0.6	-7.0	4,736	4,811	4,907	3.6	2.0
Western North Central IA, KS, MN, MO, NE, ND, SD	1,107	1,188	1,123	1.4	-5.5	5,061	5,240	5,442	7.5	3.9
South Atlantic DE, FL, GA, MD and DC, NC, SC, VA, WV	551	534	492	-10.7	-7.9	2,364	2,252	2,184	-7.6	-3.0
Eastern South Central AL, KY, MS, TN	639	722	52 <del>9</del>	-17.2	-26.7	2,827	2,796	2,595	-8.2	-7.2
Western South Central AR, LA, OK, TX	435	541	353	-18.9	-34.8	1,930	2,058	1,785	-7.5	-13.3
Mountain AZ, CO, ID, MT, NV, NM, UT, WY	793	901	712	-10.2	-21.0	4,004	4,340	4,050	1.1	-6.7
Pacific Coast CA, OR, WA	453	480	395	-12.8	-17.7	2,239	2,436	2,233	-0.3	-8.3
U.S. Average <sup>3</sup>	785	818	755	-3.8	-7.7	3,504	3,523	3,484	-0.6	-1.1

<sup>1</sup> See Note 6 on the last page of this section for explanation of degree-days.
 <sup>2</sup> Normal is based on calculations of data from 1951 through 1980.
 <sup>3</sup> Excludes Alaska and Hawaii.
 Source: • See Note 6 on the last page of this section.

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### Notes and Sources for the Energy Summary Section

#### Notes

1. Energy Production: Production of energy includes production of coal, crude oil and lease condensate, natural gas plant liquids, natural gas (dry), electric utility and industrial production of hydroelectric power, electricity generated from nuclear power, and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems. The volumetric data are converted to approximate heat contents (Btu values) of these energy sources using the conversion factors provided in the Conversion Factors section of this publication.

2. Energy Consumption: Consumption of energy includes consumption of coal, natural gas (including supplemental gaseous fuels), petroleum products supplied, electric utility and industrial production of hydroelectric power, net imports of electric interaction burdenelectric power, net imports of electricity produced from hydroelectric power, net imports of coal coke, electricity generated from nuclear power, and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems. Approximate heat contents (Btu values) are derived using the conversion factors provided in the Conversion Factors section of this publication.

3. Energy Imports: Energy imports include imports of coal, crude oil (including crude oil imported for the Strategic Petroleum Reserve), petroleum products, natural gas, elec-tricity produced from hydroelectric power, and coal coke. Approximate heat contents (Btu values) are derived using the conversion factors provided in the Conversion Factors section of this publication. For further information on elec-tricity, see the note and sources for imports and exports of electricity in Note 7 of the Notes and Sources for the Consumption Section.

4. Energy Exports: Energy exports include coal, crude oil, petroleum products, natural gas, electricity produced from hydroelectric power, and coal coke. Approximate heat con-tents (Btu values) are derived using the conversion factors provided in the Conversion Factors section of this publication. For more information on electricity, see the note and sources for imports and exports of electricity in Note 7 of the Notes and Sources for the Consumption Section.

5. Merchandise Trade Value: The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs merchandise from foreign countries into the U.S. customs territory (which includes the 50 States, the District of Colum-bia, and Puerto Rico) and the Virgin Islands. The statistics exclude imports into Guam, American Samoa, and other U.S. possessions, as well as shipments between the United States and Puerto Rico and the Virgin Islands, between the United States and other U.S. possessions, and between any of these outlying areas. From January 1981 forward, import data presented are on a customs value basis. All other values are on a free alongside ship (f.a.s.) basis. Monthly data are adjusted for seasonal and working-day variation, if present and identifiable: annual data are unadjusted, and data are adjusted for seasonal and working-day variation, in present and identifiable; annual data are unadjusted, and annual totals may not equal sum of monthly totals. Statistics include nonmonetary gold. Statistics exclude Department of Defense Military Program Grant-Aid shipments. "All Other" and "Total" columns include foreign exports (i.e., re-exports). The "Energy" columns include mineral fuels, lubri-cants, and related material. "Imports" represent general imports (i.e., entries for immediate consumption, entries into customs bonded warehouses, and entries for the Strategic Petroleum Reserve). "Trade Balance" is exports minus imports; a positive balance indicates a surplus trade value and a negative balance indicates a deficit trade value. The "All Other" columns are calculated by subtracting "Energy" from "Total."

6. Degree-Days: Degree-days are relative measurements of outdoor air temperature. Cooling degree-days are defined as deviations of the mean daily temperature at a sampling station above a base temperature equal to 65 °F by convention. Heating degree-days are deviations of the mean daily temperature below 65 °F. For example, if a weather station degree-days for that station would be 13 (and heating degree-days, 0). A weather station recording a mean daily temperature of 40 °F would report 25 heating degree-days (and 0 cooling degree-days).

There are several degree-day data bases maintained by the National Oceanic and Atmospheric Administration. The information published in the *Monthly Energy Review* (MER) is developed by the National Weather Service Climate Analysis Center, Camp Springs, Maryland. The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations around the country. The temperature infor-mation recorded at these weather stations is used to calculate statewide degree-day averages based on population. The State figures are then aggregated into Census Divisions and into the national average. The population weights currently used represent resident State population data estimated for 1980 by the U.S. Department of Commerce, Bureau of the Census. The data shown in the MER are available sooner than the Historical Climatology Series 5-1 and 5-2 developed by the National Climatic Center, Asheville, NC, which compiles data from some 8,000 weather stations.

#### Sources

Merchandise Trade Value: • 1974 through 1980: U.S. Department of Commerce, Bureau of the Census, "Highlights of U.S. Export and Import Trade," FT990 (January 1982), Appendix for total imports and exports. Energy imports and exports from U.S. Department of Commerce, Bureau of the Census, "Summary of U.S. Export and Import Merchandise Trade," December issues, plus Bureau of the Census reports EA691 "Exports from the Virgin Islands to Foreign Countries," and IA245V "U.S. Imports for Consump-tion and General Imports into the Virgin Islands." • 1981 forward: U.S. Department of Commerce, Bureau of

the Census, "Summary of U.S. Export and Import Merchan-dise Trade," most recent monthly issue.

Gross National Product: • U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business. U.S. Dependence on Petroleum Net Imports: • Imports

U.S. Dependence on Petroleum Net Imports: • Imports and products supplied—Part 3 of this publication.
 • Exports—1973 through 1976: Bureau of Mines, *Mineral Industry Surveys*; 1977 through 1980: Energy Information Administration (EIA), *Energy Data Reports*, "Petroleum Statement, Annual"; 1981-1984: EIA, *Petroleum Supply* Annual; 1985: EIA, *Petroleum Supply Monthly*.
 Cost of Fuels to End Users in Constant (1972) Dollars:
 • Leaded Regrutar Motor Caseline—Bureau of Labor Statis.

 Leaded Regular Motor Gasoline—Bureau of Labor Statistics (BLS).

tics (BLS). • Residential Heating Oil—EIA, 1983 forward: EIA Form-782A, "Refiners/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA Form-782B, "Resel-lers/Retailers' Monthly Petroleum Product Sales Report." Prices prior to 1983 are EIA estimates using data from FEA Form P112-M1/EIA-9, "No. 2 Heating Oil Supply/Price Mo-nitoring Report" and EIA Form 9-A, "No. 2 Distillate Price Monitoring Report." See Note 8 in the Notes and Sources for the Price Section for additional information for the Price Section for additional information.

 Residential Natural Gas—EIA, Annual data from Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." Monthly data from Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers.

 Residential Electricity—Federal Energy Regulatory Com-mission (FERC), 1973 through February 1980: FPC Form 5, Mission (FERC), 1973 through February 1980: FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 forward: FERC Form 5, "Electric Utility Company Monthly Statement."
 Deflator (The Urban Consumer Price Index)—BLS.
 U.S. Passenger Car Efficiency: Indices prepared from statistics published by the U.S. Department of Transporta-tions Endered History (Company Monthly Statement)

tion, Federal Highway Administration, Federal Highway Sta-tistics Division, "Highway Statistics," Table VM-1.

Total U.S. energy consumption in 1985 was 73.8 quadrillion Btu, a daily average of 0.1 percent below the 1984 level. Petroleum products accounted for 41.8 percent of the energy consumed in 1985; natural gas, 24.1 percent; and coal, 23.7 percent.

Residential and commercial sector consumption was 26.8 quadrillion Btu in 1985, up a daily average of 1.6 percent from the 1984 level. This sector consumed 36.3 percent of the 1985 total, up from its 35.7-percent share in 1984.

Industrial sector consumption was 27.0 quadrillion Btu in 1985, a daily average decrease of 2.4 percent from the 1984 level. The industrial sector accounted for 36.6 percent of the 1985 total consumption, down from its 37.5percent share in 1984. Transportation sector consumption of energy was 20.0 quadrillion Btu in 1985, a daily average of 0.9 percent more than the 1984 level. This sector consumed 27.1 percent of the 1985 total, up from the sector's 26.8-percent share in 1984.

The electric utilities consumption of energy was an estimated 26.5 quadrillion Btu in 1985, 2.2 percent higher, on a daily basis, than in 1984. Coal contributed 54.9 percent of the energy consumed by electric utilities in 1985, while nuclear electric power contributed 15.7 percent; hydroelectric power, 12.6 percent; natural gas, 11.8 percent; petroleum products, 4.1 percent; and geothermal, wood, waste, wind, photovoltaic, and solar thermal energy, 0.8 percent.

Consumption Summary for December 1985 is on page 34.

#### **Consumption Summary for 1985**

#### (Quadrillion (10<sup>15</sup>) Btu)

Sector Residential and Electric **Energy Source** Commercial Industriai Transportation Utilities Total Coal 2.775 0.000 17.499 0.184 14.540 Natural Gas<sup>1</sup> 7.049 7.053 0.522 3.136 17.763 **Petroleum Products** 2.598 7.718 19.446 1.090 30.852 Hydroelectric Power 0.000 0.033 0.000 3.344 3.377 Nuclear Electric Power 0.000 0.000 0.000 4.144 4.144 0.000 (0.013)Net Imports of Coal Coke (0.013)0.000 0.000 Other<sup>2</sup> 0.000 0.000 0.000 0.213 0.213 **Primary Consumption** 9.831 17.566 19.968 26.468 73.835 Electricity 5.047 2.820 0.012 (7.879)**Net Energy Consumption** 14.878 20.386 19.980 55.244 **Electrical System Energy** Losses 11.907 6.654 0.028 (18.589)18.589 **Total Energy Consumption** 26.785 27.040 20.007 73.835

Includes supplemental gaseous fuels. Transportation sector is pipeline fuel only.

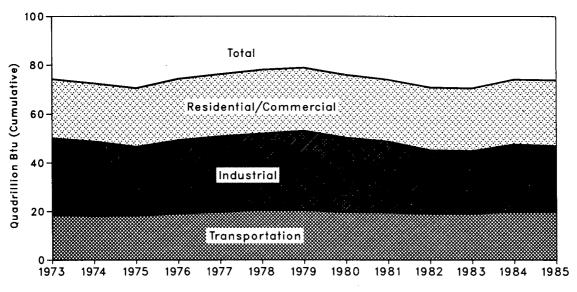
<sup>2</sup> Other is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.

Notes: • Totals may not equal sum of components due to independent rounding and the use of sector-specific conversion factors.

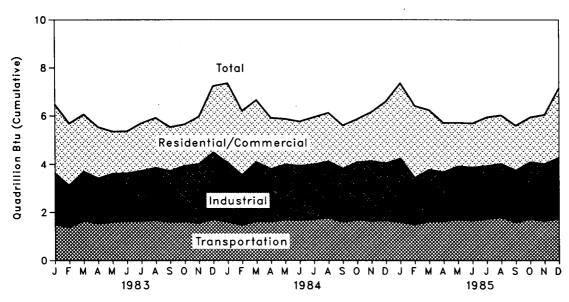
Additional notes and sources are provided on the last four pages of this section.

### Consumption of Energy by End-Use Sector









#### **Consumption of Energy by End-Use Sector**

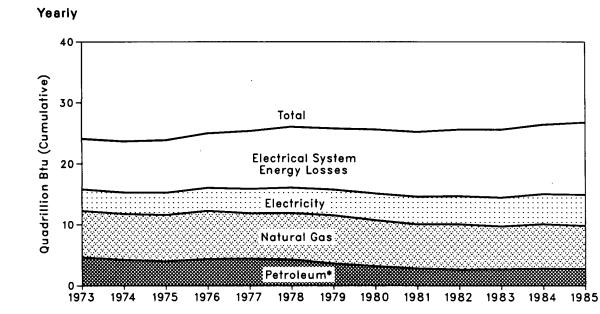
		Residential and Commercial	Industrial	Transportation	Total
		Commercial		•	IVai
				n (10¹⁵) Btu	
1973	Total	24.142	31,537	18.596	74.282
1974	Total	23.726	30.697	18.113	72.543
1975	Total	23.899	28.407	18.240	70.546
1976	Total	25.018	30.243	19.093	74.362
1977	Total	25.384	31.089	19.808	76.289
1978	Total	26.084	31.414	20.589	78.088
1979	Total	25.808	32.624	20.464	78.898
1980	Total	25.655	30.605	19.693	75.952
1981	Total	25.241	<b>29.251</b>	19.495	73.989
1982	Total	25.630 <sup>,</sup>	26.140	19.066	70.840
1983	January	R2.842	R2.135	R1.504	6.483
	February	R2.561	R1.747	R1.378	5.685
	March	R2.360	R2.037	R1.659	6.058
	April	R2.112	R1.884	R1.540	5.532
	May	R1.745	R2.010	R1.601	5.354
	June	R1.733	R1.990	R1.638	5.364
	July	R1.968	R2.081	R1.647	5.700
	August	R2.062	R2.180	R1.675	5.922
	September October	R1.812 R1.712	R2.128 R2.322	R1.597 R1.615	5.538 5.648
	November	R1.957	R2.446	R1.564	5.966
	December	R2.748	R2.785	R1.713	7.246
	Total	R25.615	R25.746	R19.132	70.495
1984	January	R3.300	R2.451	R1.610	7.364
1004	February	R2.652	R2.076	R1.482	6.210
	March	R2.557	R2.452	R1.644	6.652
	April	R2.114	R2.180	R1.625	5.912
	May	R1.882	R2.286	R1.708	5.872
	June	R1.831	R2.252	R1.689	5.774
	July	R1.951	R2.280	R1.718	5.951
	August	R2.007	R2.344	R1.778	6.133
	September	R1.786	R2.211	R1.614	5.610
	October	R1.780	R2.392	R1.696	5.869
	November	R2.025	R2.491	R1.646	6.164
	December	R2.553	R2.374	R1.669	6.597
	Total	R26.438	R27.789	R19.878	74.108
1985	January	R3.109	R2.651	R1.600	R7.362
	February	R2.968	R1.948	R1.497	R6.414
	March	2.460	R2.154	R1.628	R6.240
	April	R2.027	R2.043	R1.639	R5.704
	May June	R1.801 R1.819	R2.211 R2.210	R1.709	R5.718
	July	R2.004	R2.201	R1.662 R1.733	R5.692 R5.941
	August	R2.004	R2.201	R1.802	R6.025
	September	R1.848	R2.159	R1.590	R5.597
	October	R1.846	R2.355	R1.740	R5.941
	November	R2.031	R2.367	R1.648	R6.046
	December	2.869	2.524	1.761	7.157
	Total	26.785	27.040	20.007	73.835
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See page 38 for explanation of revisions.

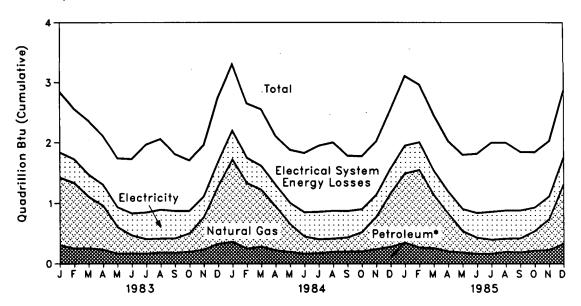
R = Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding and the use of preliminary conversion factors after 1981.
Additional Notes and Sources: • See the last four pages of this section.

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### Consumption of Energy by the Residential and Commercial Sector



Monthly



•Includes coal.

### Consumption of Energy by the Residential and Commercial Sector

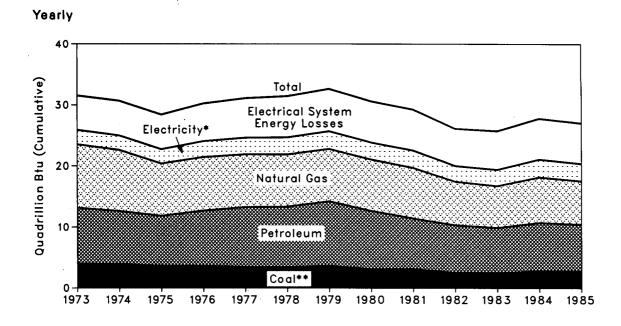
		Coal	Natural Gas <sup>1</sup>	Petroleum	Electricity	Electrical System Energy Losses	. Total	Year to Date
				(	Quadrillion (1015)	Btu		
1973	Total	0.054	7 606		, ,	8.377	24.142	
		0.254	7.626	4.391	3.495			
1974	Total	0.257	7.518	3.996	3.475	8.480	23.726	
1975	Total Total	0.209	7.581	3.805	3.604	8.700	23.899	
1976	Total	0.203	7.866	4.181	3.747	9.021	25.018	
1977	Total	0.205	7.461	4.206	3.955	9.556	25.384	
1978	Total	0.214	7.624	4.070	4.116	10.061	26.084	
1979	Total	0.187	7.891	3.448	4.184	10.100	25.808	
1980	Total	0.145	7.539	3.035	4.355	10.580	25.655	
1981	Total	0.168	7.242	2.634	4.497	10.700	25.241	
1982	Total	0.188	7.433	2.449	4.566	10.993	25.630	
1983	January	0.020	1.118	R0.289	0.413	1.003	R2.842	R2.842
	February	0.018	1.087	R0.236	0.390	0.831	R2.561	R5.404
	March	0.013	0.852	R0.246	0.365	0.885	R2.360	R7.764
	April	0.018	0.727	R0.215	0.351	0.801	R2.112	R9.876
	May	0.011	0.441	R0.156	0.327	0.810	R1.745	R11.621 R13.354
	June July	0.009 0.014	0.300 0.241	R0.162 R0.155	0.359 0.435	0.903 1.123	R1.733 R1.968	R15.322
	August	0.013	0.233	R0.173	0.435	1.171	R2.062	R17.385
	September	0.017	0.240	R0.164	0.450	0.940	R1.812	R19.197
	October	0.019	0.307	R0.180	0.366	0.841	R1.712	R20.909
	November	0.020	0.531	R0.216	0.350	0.841	R1.957	R22.866
	December	0.025	0.949	R0.307	0.402	1.065	R2.748	R25.615
	Total	0.196	7.025	R2.499	4.680	11.214	R25.615	
1984	January	0.024	R1.363	R0.339	0.476	1.098	R3.300	R3.300
	February	0.021	R1.086	R0.230	0.418	0.897	R2.652	R5.952
	March	0.015	0.943	R0.270	0.394	0.935	R2.557	R8.509
	April	0.022	R0.727	R0.201	0.360	0.804	R2.114	R10.624
	May	0.013	R0.460	R0.182	0.355	0.872	R1.882	R12.506
	June	0.010 0.016	R0.286	R0.158	0.395	0.981	R1.831	R14.337 R16.288
	July August	0.015	0.232 R0.222	R0.161 R0.181	0.449 0.456	1.093 1.133	R1.951 R2.007	R18.295
	September	0.020	0.235	R0.183	0.433	0.915	R1.786	R20.081
	October	0.016	0.320	R0.190	0.377	0.876	R1.780	R21.861
	November	0.017	R0.531	R0.225	0.372	0.879	R2.025	R23.885
	December	0.022	R0.886	R0.261	0.410	0.975	R2.553	R26.438
	Total	0.212	R7.292	R2.582	4.894	11.458	R26.438	
1985	January	0.019	R1.145	R0.332	0.457	R1.155	R3.109	R3.109
	February	0.017	R1.281	R0.253	0.458	R0.958	R2.968	R6.076
	March	0.012	R0.881	R0.249	0.400	R0.918	2.460	R8.536
	April	0.018	R0.620	R0.189	0.371	R0.830	R2.027	R10.563
	May	0.011	R0.353	R0.176	0.366	R0.895	R1.801	R12.364
	June	0.008	R0.268	0.158	0.405	R0.979	R1.819	R14.183
	July August	0.012 0.011	0.234 R0.220	R0.156 R0.187	0.457	R1.145 R1.121	R2.004 R2.004	R16.188 R18.191
	September	0.011	R0.220 R0.236	R0.187 R0.175	0.463 0.457	R0.965	R2.004 R1.848	R20.040
	October	0.015	R0.323	R0.203	0.390	R0.913	R1.846	R21.885
	November	0.019	R0.504	R0.213	0.381	R0.915	R2.031	R23.917
	December	0.025	0.984	0.306	0.443	1.112	2.869	26.785
	Total	0.184	7.049	2.598	5.047	11.907	26.785	

See page 38 for explanation of revisions.

<sup>1</sup>Includes supplemental gaseous fuels.
R=Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Additional Notes and Sources: • See the last four pages of this section.

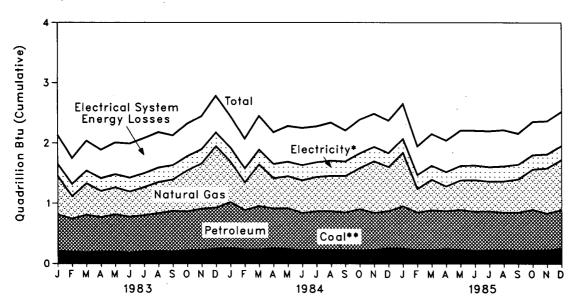
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### Consumption of Energy by the Industrial Sector



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Monthly



\*Includes hydroelectric power.
\*\*Includes net imports of coal coke.

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#### **Consumption of Energy by the Industrial Sector**

		Coal	Natural Gas¹	Petro- leum	Hydro- electric Power	Net Imports of Coal Coke	Electricity	Electrical System Energy Losses	Total	Year to Date
					Q	uadrillion (10	)15) Btu			
1973	Total	4.057	10.388	9.113	0.035	(0.007)	2.341	5.611	31.537	
1974	Total	3.870	10.003	8.698	0.033	0.056	2.337	5.700	30.697	
1975	Total	3.667	8.532	8.151	0.032	0.014	2.346	5.665	28.407	
1976	Total	3.661	8.761	9.018	0.033	0.000	2.573	6.198	30.243	
1977	Total	3.454	8.636	9.786	0.033	0.015	2.682	6.484	31.089	
1978	Total	3.314	8.539	9.890	0.032	0.125	2.761	6.755	31.414	
1979	Total	3.593	8.549	10.576	0.034	0.063	2.873	6.936	32.624	
1980	Total	3.155	8.394	9.524	0.033	(0.035)	2.781	6.752	30.605	
1981	Total	3.157	8.257	8.295	0.033	(0.016)	2.817	6.707	29.251	
1982	Total	2.552	7.116	7.798	0.033	(0.022)	2.542	6.121	26.140	
										D0 405
1983	January February	0.211 0.196	0.645 0.374	R0.599 R0.544	0.003 0.003	(0.001) (0.001)	0.198 0.201	0.480 0.430	R2.135 R1.747	R2.135 R3.882
	March	0.190	0.527	R0.618	0.003	(0.001)	0.201	0.430	R2.037	R5.919
	April	0.205	0.438	R0.563	0.003	(0.002)	0.207	0.430	R1.884	R7.804
	May	0.198	0.452	R0.614	0.003	(0.002)	0.214	0.529	R2.010	R9.814
	June	0.182	0.420	R0.592	0.003	(0.001)	0.226	0.568	R1.990	R11.804
	July	0.206	0.470	R0.592	0.003	(0.002)	0.227	0.585	R2.081	R13.885
	August	0.209	0.518	R0.624	0.002	(0.001)	0.238	0.590	R2.180	R16.065
	September	0.203	0.524	R0.666	0.002	(0.001)	0.238	0.496	R2.128	R18.193
	October	0.217	0.681	R0.646	0.002	(0.001)	0.235	0.541	R2.322	R20.515
	November	0.227	0.752	R0.683	0.002	(0.001)	0.230	0.553	R2.446	R22.961
	December	0.249	1.019	R0.680	0.002	(0.003)	0.229	0.607	R2.785	R25.746
	Total	2.490	6.821	R7.421	0.033	(0.016)	2.648	6.349	R25.746	
1984	January	0.256	R0.675	R0.764	0.003	0.001	-0.228	0.525	R2.451	R2.451
	February	0.237	R0.460	R0.651	0.003	0.002	0.230	0.494	R2.076	R4.528
	March	0.238	0.694	R0.716	0.003	(0.001)	0.238	0.564	R2.452	R6.979
	April	0.253	R0.502	R0.660	0.003	0.000	0.236	0.526	R2.180	R9.159
	May	0.245	R0.531	R0.673	0.003	(0.001)	0.241	0.593	R2.286	R11.445
	June	0.225	R0.546	R0.613	0.003	(0.002)	0.249	0.619	R2.252	R13.698
	July August	0.227 0.230	0.570 R0.588	R0.640 R0.638	0.003 0.002	(0.001)	0.245 0.254	0.596 0.632	R2.280 R2.344	R15.978 R18.322
	September	0.223	0.604	R0.636	0.002	(0.002) 0.000	0.254	0.632	R2.344	R20.533
	October	0.222	0.683	R0.683	0.002	(0.003)	0.243	0.562	R2.392	R22.924
	November	0.232	R0.860	R0.611	0.002	(0.003)	0.234	0.554	R2.491	R25.415
	December	0.255	R0.734	R0.615	0.002	(0.001)	0.227	0.541	R2.374	R27.789
	Total	2.842	R7.448	R7.889	0.033	(0.011)	2.868	6.721	R27.789	
1985	January	R0.248	R0.886	R0.704	0.003	0.000	0.229	R0.580	R2.651	R2.651
	February	R0.229	R0.395	R0.617	0.003	0.001	0.227	R0.476	R1.948	R4.599
	March	R0.230	R0.508	R0.655	0.003	0.000	0.230	R0.528	R2.154	R6.753
	April	R0.245	R0.412	R0.627	0.003	0.001	0.234	R0.523	R2.043	R8.796
	May	R0.237	R0.492	R0.657	0.003	(0.003)	0.239	R0.586	R2.211	R11.006
	June	R0.217	0.528	R0.646	0.003	(0.002)	0.239	R0.578	R2.210	R13.216
	July	R0.222	R0.496	R0.647	0.003	(0.002)	0.238	R0.596	R2.201	R15.417
	August	R0.226	R0.523	R0.619	0.002	(0.001)	0.248	R0.601	R2.217	R17.634
	September	R0.219	R0.554	R0.630	0.002	(0.003)	0.244	R0.514	R2.159	R19.794
	October	R0.221	R0.670	R0.674	0.002	(0.001)	0.236	R0.553	R2.355	R22.149
	November December	R0.229	R0.755	R0.603	0.002	(0.003)	0.229	R0.551	R2.367	R24.516
	Total	0.252	0.835	0.640	0.002	(0.001)	0.226	0.569	2.524	27.040
	rotai	2.775	7.053	7.718	0.033	(0.013)	2.820	6.654	27.040	

#### See page 38 for explanation of revisions.

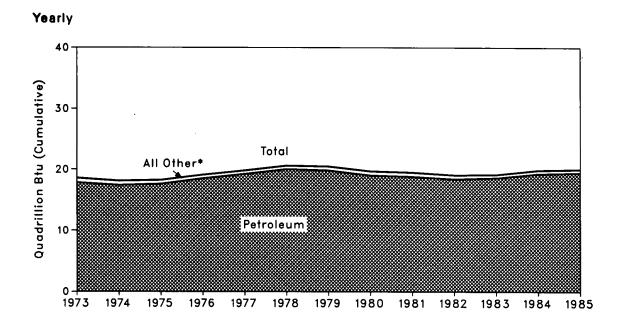
Includes supplemental gaseous fuels.
R=Revised data.
Notes: 

Geographic coverage is the 50 States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
Additional Notes and Sources: 

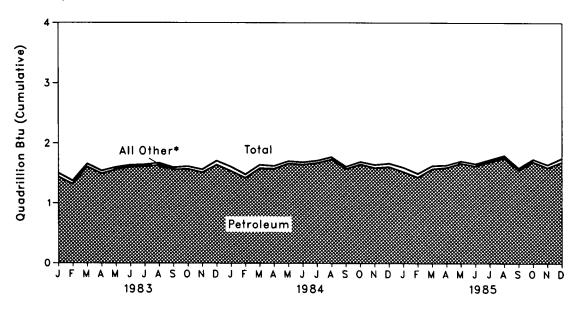
See the last four pages of this section.

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### Consumption of Energy by the Transportation Sector



Monthly



\*Includes coal, natural gas, electricity, and electrical system energy losses.

#### **Consumption of Energy by the Transportation Sector**

		Coal	Natural Gas <sup>1</sup>	Petroleum	Electricity	Electrical System Energy Losses	Total	Year to Date
				Qua	drillion (10¹⁵) Btu			
1973	Total	0.003	0.743	17.821	0.009	0.020	18.596	
1974	Total	0.002	0.685	17.396	0.009	0.022	18.113	
1975	Total	0.001	0.595	17.610	0.010	0.025	18.240	
1976	Total	(2)	0.559	18.499	0.010	0.025	19.093	
1977	Total	(2)	0.543	19.230	0.010	0.025	19.808	
1978	Total	(2)	0.539	20.019	0.009	0.022	20.589	
1979	Total	(2)	0.612	19.817	0.010	0.025	20.464	
1980	Total	(2)	0.648	19.009	0.011	0.026	19.693	
1981	Total	(2)	0.657	18.800	0.011	0.026	19.495	
1982	Total	(²)	0.613	18.417	0.011	0.026	19.066	
1983	January	(2)	0.059	R1.442	0.001	0.002	R1.504	R1.504
	February	(2)	0.049	R1.325	0.001	0.002	R1.378	R2.882
	March	(2)	0.047	R1.608	0.001	0.002	R1.659	R4.541
	April	( <sup>2</sup> )	0.041 0.034	R1.496 R1.564	0.001 0.001	0.002 0.002	R1.540 R1.601	R6.080 R7.682
	May June	(2) (2)	0.029	R1.606	0.001	0.002	R1.638	R9.320
	July	(2)	0.023	R1.613	0.001	0.002	R1.647	R10.967
	August	(2)	0.033	R1.639	0.001	0.002	R1.675	R12.642
	September	(2)	0.032	R1.562	0.001	0.002	R1.597	R14.239
	October	(2)	0.037	R1.575	0.001	0.002	R1.615	R15.854
	November	(2)	0.045	R1.516	0.001	0.002	R1.564	R17.419
	December	(2)	0.066	R1.644	0.001	0.002	R1.713	R19.132
	Total	(2)	0.504	R18.591	0.011	0.026	R19.132	
1984	January	( <sup>2</sup> )	0.069	R1.538	0.001	0.002	R1.610	R1.610
	February March	(2) (2)	0.053 0.057	R1.427 R1.584	0.001 0.001	0.002 0.002	R1.482 R1.644	R3.093 R4.737
	April	(*) (2)	0.044	R1.578	0.001	0.002	R1.625	R6.361
	May	(²)	0.038	R1.667	0.001	0.002	R1.708	R8.070
	June	(2)	0.035	R1.650	0.001	0.002	R1.689	R9.758
	July	(2)	0.035	R1.679	0.001	0.002	R1.718	R11.476
	August	(2)	0.036	R1.738	0.001	0.002	R1.778	R13.254
	September	(2)	0.034	R1.577	0.001	0.002	R1.614	R14.867
	October November	( <sup>2</sup> )	0.039 0.049	R1.654 R1.593	0.001 0.001	0.002 0.002	R1.696 R1.646	R16.563 R18.209
	December	(2) (2)	0.049	R1.610	0.001	0.002	R1.669	R19.878
	Total	(2)	0.545	R19.295	0.011	0.027	R19.878	
1985	January	(2)	0.069	R1.527	0.001	0.003	R1.600	R1.600
	February	(2)	0.057	R1.438	0.001	0.002	R1.497	R3.097
	March	(2)	0.048	R1.576	0.001	0.002	R1.628	R4.725
	April	(2)	0.038	R1.598	0.001	0.002	R1.639	R6.364
	May June	(2) (2)	0.033	R1.673	0.001	0.002	R1.709 R1.662	R8.073
	July	(*) (2)	0.033 0.033	R1.626 R1.696	0.001 0.001	0.002 0.003	R1.662	R9.735 R11.468
	August	( <sup>2</sup> )	0.034	R1.764	0.001	0.002	R1.802	R13.269
	September	( <sup>2</sup> )	R0.032	R1.555	0.001	0.002	R1.590	R14.859
	October	(2)	R0.038	R1.699	0.001	0.002	R1.740	R16.599
	November	(2)	R0.045	R1.599	0.001	0.002	R1.648	R18.247
	December	(2)	0.062	1.696	0.001	0.002	1.761	20.007
	Total	(2)	0.522	19.446	0.012	0.028	20.007	

#### See page 38 for explanation of revisions.

- <sup>1</sup>Pipeline fuel only, including supplemental gaseous fuels. <sup>2</sup>Since 1976, the amount of coal consumed by the transportation sector has been negligible. R=Revised data.
- Notes: 

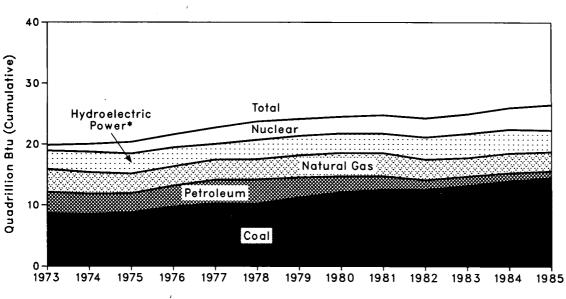
   Geographic coverage is the 50 States and the District of Columbia.
   Totals may not equal sum of components due to independent rounding.

   Additional Notes and Sources: 

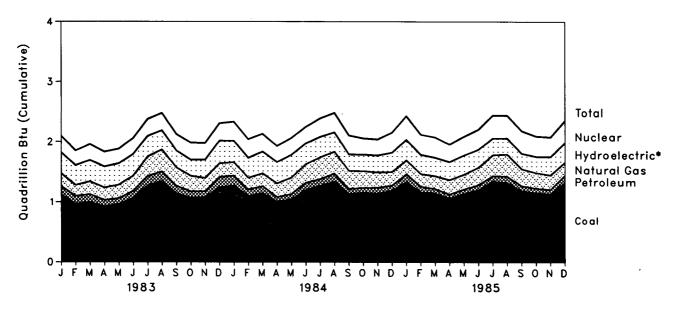
   See the last four pages of this section.

**Energy Input at Electric Utilities** 





#### Monthly



\*includes other.

#### **Energy Input at Electric Utilities**

			Natural	Petro-	Hydro- electric	Nuclear Electric			Year to
		Coal	Gas <sup>1</sup>	leum²	Power <sup>3</sup>	Power	Other*	Total	Date
					Quadrillion	(1015) Btu			
1973	Totai	8.658	3.748	3.515	2.975	0.910	0.046	19.852	
1974	Total	8.534	3.519	3.365	3.276	1.272	0.056	20.022	
1975	Total	8.786	3.240	3.166	3.187	1.900	0.072	20.350	
1976	Total	9.720	3.152	3.477	3.032	2.111	0.081	21.574	
1977	Total	10.262	3.284	3.901	2.482	2.702	0.082	22.713	
1978	Total	10.238	3.297	3.987	3.110	3.024	0.068	23.724	
1979	Total	11.260	3.613	3.283	3.107	2.776	0.089	24.128	
1980	Total	12.123	3.810	2.634	3.085	2.739	0.114	24.505	
1981	Total	12.583	3.768	2.202	3.072	3.008	0.127	24.760	
1982	Total	12.582	3.342	1.568	3.528	3.131	0.108	24.259	
1983	January	1.128	0.215	0.137	0.334	0.273	0.011	2.097	2.097
	February	0.967	0.182	0.134	0.321	0.242	0.008	1.855	3.952
	March	0.996	0.214	0.133	0.345	0.261	0.009	1.958 1.833	5.909 7.743
	April May	0.921 0.965	0.20 <del>9</del> 0.225	0.110 0.0 <del>9</del> 7	0.341 0.349	0.244 0.240	0.009 0.007	1.833	9.626
	June	1.064	0.255	0.119	0.349	0.240	0.007	2.059	11.685
	July	1.276	0.324	0.156	0.325	0.279	0.012	2.373	14.058
	August	1.348	0.363	0.158	0.304	0.286	0.015	2.474	16.531
	September	1.146	0.307	0.123	0.264	0.273	0.014	2.127	18.658
	October	1.071	0.259	0.106	0.253	0.281	0.015	1.986	20.644
	November	1.082	0.221	0.099	0.290	0.273	0.013	1.977	22.621
	December	1.249	0.225	0.171	0.363	0.287	0.011	2.307	24.929
	Total	13.213	2.998	1.544	3.838	3.203	0.133	24.929	
1984	January	1.271	0.223	0.169	0.341	0.317	0.011	2.331	2.331
	February	1.103	0.194	0.108	0.318	0.307	0.013	2.042	4.373
	March	1.151	0.213	0.115	0.345	0.295	0.015	2.134	6.507 8.436
	April May	1.004 1.045	0.228 0.274	0.081 0.090	0.341 0.362	0.262 0.279	0.014 0.014	1.929 2.064	10.500
	June	1.202	0.308	0.030	0.330	0.273	0.014	2.247	12.747
	July	1.274	0.361	0.111	0.323	0.305	0.013	2.387	15.135
	August	1.338	0.362	0.137	0.307	0.319	0.016	2.478	17.613
	September	1.140	0.301	0.083	0.254	0.315	0.015	2.108	19.721
	October	1.155	0.279	0.084	0.258	0.268	0.016	2.060	21.781
	November	1.144	0.253	0.100	0.264	0.265	0.016	2.043	23.824
	December	1.193	0.225	0.086	0.301	0.333	0.018	2.156	25.980
	Total	14.020	3.220	1.286	3.741	3.538	0.174	25.980	
1985	January	R1.334	0.233	0.132	0.318	0.391	0.018	R2.425	R2.425
	February	R1.163	0.208	0.101	0.302	0.333	0.016	R2.122	R4.547
	March April	R1.147 R1.066	0.213 0.241	0.077 0.066	0.288 0.285	0.335 0.286	0.018 R0.016	R2.079 R1.960	R6.626 R8.586
	May	R1.143	0.241	0.075	0.285	0.288	0.016	R2.090	R10.676
	June	R1.205	0.291	0.082	0.279	0.333	0.016	R2.206	R12.882
	July	R1.348	0.347	0.090	0.257	0.380	0.018	R2.440	R15.321
	August	R1.323	0.366	0.107	0.247	0.376	0.018	R2.437	R17.758
	September	R1.191	0.282	0.082	0.238	0.373	0.018	R2.183	R19.941
	October	R1.153	0.257	0.082	R0.250	0.337	0.017	R2.095	R22.036
	November	R1.139	0.238	0.075	0.281	0.326	0.021	R2.079	R24.116
	December	1.329	0.216	0.120	0.300	0.365	0.022	2.353	26.468
	Total	14.540	3.136	1.090	3.344	4.144	0.213	26.468	

Includes supplemental gaseous fuels.
 Includes petroleum products reported as "oil consumed in steam plants" through 1979 and "heavy oil" from 1980 forward, which are assumed to be residual fuel oil; petroleum products reported as "oil consumed in gas turbine and internal combustion engine plants" through 1979 and "light oil" from 1980 forward, which are assumed to be distillate fuel oil and kerosene; and petroleum coke.
 Includes net imports of electricity.
 Other is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric to electric.

utility distribution systems. R=Revised data.

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Notes: • Geographic coverage is the 50 States and the District of Columbia.

• Totals may not equal sum of components due to independent rounding. Additional Notes and Sources: • See the last four pages of this section.

### **Consumption Summary for December 1985**

(Quadrillion (1015) Btu)

		Se	ctor		
Energy Source	Residential and Commercial	Industrial	Transportation	Electric Utilities	Total
Coal	0.025	0.252	0.000	1.329	1.608
Natural Gas <sup>1</sup>	0.984	0.835	0.062	0.216	2.098
Petroleum Products	0.306	0.640	1.698	0.120	2.761
Hydroelectric Power	0.000	0.002	0.000	0.300	0.303
Nuclear Electric Power	0.000	0.000	0.000	0.365	0.365
Net Imports of Coal Coke	0.000	(0.001)	0.000	0.000	(0.001)
Other <sup>2</sup>	0.000	0.000	0.000	0.022	0.022
			<u> </u>		<u></u>
Primary Consumption	1.314	1.729	1.757	2.353	7.157
Electricity	0.443	0.226	0.001	(0.670)	
Net Energy Consumption	1.757	1.956	1.758		5.474
Electrical System Energy Losses	1.112	0.569	0.002	(1.683)	1.683
Total Energy Consumption	2.869	2.524	1.761		7.157

Includes supplemental gaseous fuels. Transportation sector is pipeline fuel only.
 Other is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.
 Notes: 

 Totals may not equal sum of components due to independent rounding and the use of sector-specific conversion factors.
 Additional notes and sources are provided on the next four pages.

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### **Notes and Sources for the Consumption Section**

1. Total Energy Consumed: Total energy consumed includes coal, natural gas (including supplemental gaseous fuels), petroleum products supplied, electric utility and industrial generation of hydroelectric power, net imports of electricity generated from hydroelectric power, electricity generated from nuclear power, and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems. Data do not include geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric utilities.

2. Economic Sectors: Energy use is assigned to the major economic sectors according to the following guidelines as closely as possible:

- Residential and Commercial Sector— private household establishments (which consume energy primarily for space heating, water heating, air conditioning, lighting, refrigeration, cooking, and clothes drying); nonmanufacturing business establishments, including hotels, motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises; health, social, and educational institutions; and Federal, State, and local governments. Street lights, pumps, bridges, and public swimming pools are also included.
- · Industrial Sector-manufacturing, construction, mining, agriculture, fishing, and forestry establishments.
- Transportation Sector-private and public vehicles that move people and commodities. Included are automo-biles, trucks, buses, motorcycles, railroads and railways (including streetcars), aircraft, ships, barges, and natural gas pipelines.
- Electric Utility Sector-privately and publicly owned es-tablishments that generate electricity primarily for use by the public.

3. Conversion Factors: See the Conversion Factors section of this publication.

4. Coal: Coal is anthracite, bituminous coal, (including subbituminous coal), and lignite.

Sources.

- 1973 through September 1977: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), Minerals Yearbook and Minerals Industry Surveys.
- Electric Utilities-October 1977 forward: Energy Information Administration (EIA), EIA Form 759 (formerly FPC Form 4), "Monthly Power Plant Report."
- Other Industrial—October 1977 through December 1979: EIA, EIA Form 3, "Monthly Fuel Consumption Report Manufacturing Plants"; January 1980 forward: EIA, EIA Form 3, "Quarterly Fuel Consumption Report Manufacturing Plants" and EIA Form 6, "Coal Distribution Report.<sup>3</sup>
- Coke Plants—October 1977 through December 1980: EIA, EIA Form 5/5A, "Coke and Coal Chemicals -Monthly/Annual"; January 1981 forward: EIA, EIA Form 5/5A, "Coke and Coal Chemicals Quarter-ly/Annual."
- Residential and Commercial—October 1977 through December 1979: EIA, EIA Form 2, "Monthly Coal Report, Retail Dealers and Upper Lake Docks"; January 1980 forward: EIA, EIA Form 6, "Coal Distribution Report.'

5. Natural Gas: Natural gas consumption by end-use sector is based on data presented in the table titled "Natural Gas Consumption" in Part 4. For the Part 2 consumption section, lease and plant fuel consumption are added to the industrial sector deliveries and pipeline fuel represents the transportation sector's use of natural gas. Values in Btu are derived using the conversion factors provided in the Conversion Factors section of this publication.

Sources:

- 1973 through 1975: DOI, BOM, Minerals Yearbook, "Natural Gas" chapter. 1976 through 1978: EIA, Energy Data Reports, "Natu-
- ral Gas, Annual."
- 1979: EIA. Natural Gas Production and Consumption 1979
- 1980 through 1984: EIA, Natural Gas Annual.
- 1985 forward: EIA, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," and EIA computations.
- Electric utilities consumption-1973 through 1976: FPC Form 4, "Monthly Power Plant Report."
- 1977 through 1981: Federal Energy Regulatory Com-mission (FERC), FPC Form 4, "Monthly Power Plant Report.'
- 1982 forward: EIA, EIA Form 759, "Monthly Power Plant Report.'
- American Gas Association, "Monthly Gas Utility Statistical Report.'

6. Petroleum: Petroleum consumption by end-use is the sum of all individual petroleum products estimated to be consumed in each end-use sector. First, total consumption by product is determined. Petroleum consumption in this section of the *Monthly Energy Review* is the series called "petroleum products supplied" in Part 3.

- Sources for petroleum products supplied by individual products are:
- 1973 through 1975: DOI, BOM, Mineral Industry Surveys, "Petroleum Statement, Annual."
- 1976 through 1980: EIA, Energy Data Reports, "Petro-leum Statement, Annual."
  - 1981 through 1984: EIA, Petroleum Supply Annual.
- 1985 forward: EIA, Petroleum Supply Monthly.

Specific petroleum products' end-use allocation procedures follow:

- Aviation Gasoline-All product supplied is assigned to the transportation sector.
- · Asphalt-All product supplied is assigned to the industrial sector.

#### Distillate Fuel

Electric Utility Sector, All Periods. Monthly and annual consumption in 1973 through 1979 is assumed to be the amount of oil (minus small amounts of kerosene and kerosene-type jet fuel deliveries) reported as consumed in internal combustion and gas turbine engine plants. From January 1980, electric utility consumption of distil-late fuel is assumed to be the petroleum products reported as "light oil" (minus small amounts of kerosene deliveries through 1982) consumed at utilities.

Sources: 1973 through September 1977—FPC Form 4, "Monthly Power Plant Report," October 1977 through 1981—FERC, FPC Form 4, "Monthly Power Plant Report," 1982 forward—EIA, Form EIA-759, "Monthly Power Plant Report." Non-Electric Utility Sectors, Annual Estimates

Through 1984.

The aggregate non-electric utility use of distillate fuel is total distillate fuel supplied minus the electric utility consumption. The non-electric utility annual totals are allocated into the individual non-electric utility sectors in proportion to the individual horr-electric utility sectors in proportion to the amount of distil-late fuel delivered to end users, grouped into sec-tors from EIA's "Deliveries of Fuel Oil and Kerosene" ("Deliveries") reports (based primarily on data collected by Form EIA-821, previously

 Prom EIA-172) as follows:
 Residential sector deliveries are directly from the "Deliveries" reports for 1979 through 1984. Prior to 1979, each year's deliveries subtotal of the besting due industrial extensor is polit into the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares;

### Notes and Sources for the Consumption Section (continued)

#### 6. Petroleum (continued):

- Distillate Fuel (continued)
  - Non-Electric Utility Sectors, Annual Estimates Through 1984 (cont'd).
    - Commercial sector deliveries are directly from Commercial sector deliveries are directly from the "Deliveries" reports for 1979 through 1984. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares; Industrial sector deliveries for 1979 through 1984 are the sum of deliveries for industrial, farm, oil company, off-highway, diesel, and all other uses. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category is
    - subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares, and this estimated industrial portion is added to oil company, off-highway diesel, and all other uses; and
  - Transportation sector deliveries are the sum of deliveries for railroad, vessel bunkering, on-highway diesel, and military uses for all years.
     Non-Electric Utility Sectors, Monthly Estimates
  - Through 1984.
    - Residential and commercial sector monthly consumption is estimated by allocating the annual sumption is estimated by allocating the annual sector estimates to months in proportion to each month's share of the year's sales of No. 2 heating oil as reported in the "Monthly Report of Heating Oil Sales" by the Ethyl Corporation from 1973 through 1980, the American Petrole-um Institute for 1981 and 1982, and the Form EIA-782A, "Refiners/Gas Plant Operators' Monthly Petroleum Product Sales Report," for 1983 and 1984 1983 and 1984.
    - The transportation sector highway use portion is allocated into the months in proportion to each month's share of the year's total sales for highway use as reported by the Federal Highway Administration's Table MF-25, "Private and Commercial Highway Use of Special Fuels by Months." The remaining transportation use of distillate fuel (i.e., for railroads, vessel bunker-ing, and military use) is evenly distributed over the months, adjusted for the number of days per month.
    - Industrial sector monthly estimates are made by subtracting the residential and commercial, transportation, and electric utility sector estimates from each month's total distillate fuel supplied.
  - Non-Electric Utility Sectors, 1985 Forward. Each month's non-electric utility consumption subtotal is disaggregated into the major end-use sectors in proportion to the shares each sector held of the non-electric utility subtotal in the same month in 1984
  - Jet Fuel-Through 1982, small amounts of kerosenetype jet fuel were consumed by the electric utility sector. Kerosene-type jet fuel deliveries to electric utilities as reported on the FERC-423 (formerly FPC-423) were used as estimates of this consumption. All remaining jet fuel (kerosene-type and naphtha-type) is consumed by the transportation sector.
- Kerosene—Total product supplied monthly is allocated to the major end-use sectors in proportion to annual deliveries grouped into end-use sectors from EIA's "Deliveries of Fuel Oil and Kerosene" ("Deliveries") reports (based primarily on data collected by Form EIA-821, previously Form EIA-172) as follows:
   Residential sector deliveries are directly from the "Deliveries" reports for 1979 through 1984. Deliveries for 1984 are used as estimates for succeeding periods. Prior to 1979, each year's deliveries category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares; 1979 shares;

- Commercial sector deliveries are directly from the "Deliveries" reports for 1979 through 1984. Deliveries for 1984 are used as estimates for succeed-ing periods. Prior to 1979, each year's deliveries category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares; and
- Industrial sector deliveries are directly from the "Deliveries" reports for 1979 through 1984. Deliv-"Deliveries" reports for 1979 through 1984. Deliv-eries for 1984 are used as estimates for succeed-ing periods. Prior to 1979, each year's deliveries category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares, and this estimated industrial (includ-ing farm) portion is added to "all other uses."
- Liquefied Petroleum Gases (LPG) —The annual shares of LPG's total consumption that are estimated to be consumed by each end-use sector are applied to each month's total LPG consumption (i.e., product supplied) to create monthly end-use consumption esti-material to the sector and the sector a mates. The annual end-use shares are calculated in the following manner:
  - Sales of LPG to the residential and commercial sector are converted from thousand gallons per year to thousand barrels per year and are assumed to be the annual consumption of LPG by the sector;
  - The quantity of LPG sold each year that is consumed in internal combustion engines is allocated between the transportation and industrial sectors according to a 5-year moving average of the per-centage of carburetors sold to each end-use category. The proportions range from 31 percent trans-portation and 69 percent industrial in 1973 to 60 percent transportation and 40 percent industrial in 1984.
  - LPG consumed annually by the industrial sector is LPG consumed annually by the industrial sector is estimated as the difference between LPG's total supplied and the estimated consumption by the sum of the residential and commercial sector and the transportation sector. The industrial sector in-cludes LPG used by chemical plants as raw materi-als or solvents and for use in the production of purpted support regions that use as supportion. synthetic rubber; refinery fuel use; use as synthetic natural gas feedstock and use in secondary recovery projects; all farm use; LPG sold to gas utility companies for distribution through the mains; and a portion of the use of LPG as an internal combustion engine fuel.

The sources of the annual sales data for creating annual end-use shares are:

- 1973 through 1982: EIA's "Sales of Liquefied Pe-troleum Gases and Ethane" reports, based primari-ly on data collected by Form EIA-174.
- 1983: End-use consumption estimates for 1983 are based on 1982 end-use consumption estimates because the collection of data under Form EIA-174
- was discontinued after data year 1982. 1984: American Petroleum Institute (API), '1984 Sales of Natural Gas Liquids and Liquefied Refin-ery Gases' (October 1985) based on an LPG sales survey jointly sponsored by API, the Gas Processors Association, and the National Liquefied Petroleum Gas Association.
- Succeeding periods: The 1984 source is used to estimate succeeding periods.
- Lubricants—Total product supplied is allocated to the industrial and transportation sectors for all months according to proportions developed from annual sales of lubricants to those two sectors from U.S. Department of Commerce, Bureau of the Census, *Current Industrial Reports*, "Sales of Lubricating and Industrial Oils and Greases." The 1973 shares are applied to 1973 and 1974; the 1975 shares are applied to 1975 and 1976; and the 1977 shares are applied to 1977 forward. forward.

(Notes and Sources for the Consumption Section are continued on the next page.)

### Notes and Sources for the Consumption Section (continued)

#### 6. Petroleum (continued):

- Motor Gasoline—Total product supplied monthly is allocated to the major end-use sectors in proportion to aggregations of annual sales categories formed from the U.S. Department of Transportation, Federal High-way Administration, *Highway Statistics*, Tables MF-21, MF-24, and MF-25, as follows: — Commercial sales are the sum of sales for public
  - non-highway use, miscellaneous use, and unclassified use:
  - Industrial sales are the sum of sales for agriculture, construction, and industrial and commercial use as classified in the Highway Statistics; and
  - Transportation sales are the sum of sales for highway use (minus the sales of special fuels, which are primarily diesel fuel and are accounted for in the transportation sector of distillate fuel) and sales for marine use.
- **Petroleum Coke**—The portion consumed by the elec-tric utility sector is from EIA Form 759, "Monthly Power Plant Report" (formerly FPC Form 4). The remaining petroleum coke is assigned to the industrial sector.

#### Residual Fuel

Electric Utility Sector, All Periods.

Monthly and annual consumption 1973 through 1979 is assumed to be the amount of oil reported as consumed in steam-electric power plants. From January 1980, electric utility consumption of residual fuel is assumed to be the petroleum products reported as "heavy oil" consumed at utilities.

reported as "neavy oil" consumed at utilities. Sources: 1973 through September 1977—FPC Form 4, "Monthly Power Plant Report;" October 1977 through 1981—FERC, FPC Form 4, "Monthly Power Plant Report;" 1982 forward—EIA, Form EIA-759, "Monthly Power Plant Report." **Non-Electric Utility Sectors, Annual Estimates** 

Through 1984.

The aggregate non-electric utility use of residual fuel is total residual fuel supplied minus the electric utility consumption. The non-electric utility annual totals are allocated into the individual non-electric utility sectors in proportion to the amount of residual fuel delivered to end users, grouped into sectors from EIA's "Deliveries of Fuel Oil and Kerosene" ("Deliveries") reports (based primarily on data col-lected by Form EIA-821, previously Form EIA-172) as follows

- Commercial sector deliveries are directly from the "Deliveries" reports for 1979 through 1984. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category is split into commercial and industrial in proportion to the 1979 shares;
- Industrial sector deliveries for 1979 through 1984 are the sum of deliveries for industrial, oil company, and all other uses. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category is split into commercial and industrial in proportion to the 1979 shares; and this estimated industrial portion is added to oil company and all other uses; and
- Transportation sector deliveries are the sum of deliveries for railroad, vessel bunkering, and military uses for all years. Non-Electric Utility Sectors, Monthly Estimates
- - Non-Electric ounty sectors, means and the sector of the sector monthly consumption is estimated by allocating the annual commercial sector estimates to months in proportion to each an intervention of the year's sales of No. 2 fuel tor estimates to months in proportion to each month's share of the year's sales of No. 2 fuel oil as reported in the "Monthly Report of Heat-ing Oil Sales" by the Ethyl Corporation for 1973 through 1980, the American Petroleum Institute for 1981 and 1982, and the Form EIA-782A, "Refiners/Gas Plant Operators' Monthly Petro-leum Product Sales Report," for 1983 and 1984 1984.

- Transportation sector monthly estimates are made by evenly distributing the annual sector estimate over the months, adjusted for the number of days per month.
- Industrial sector monthly estimates are made by subtracting the commercial, transportation, and electric utility sector estimates from each month's total residual fuel supplied.
   Non-Electric Utility Sectors, 1985 Forward.
- Each month's non-electric utility consumption subtotal is disaggregated into the major end-use sectors in proportion to the shares each sector held of the non-electric utility subtotal in the same month in 1984.
- · Road Oil-All product supplied is assigned to the industrial sector.
- All Other Petroleum Products—The product supplied of all remaining petroleum products is assigned to the industrial sector.

7. Hydroelectric Power: Includes electricity generated by hydroelectric power at electric utilities, small amounts in the industrial sector, and net imports of electricity, which are assumed to be generated by hydroelectric power and are included in the hydroelectricity in the electric utilities sector.

- Sources for electric utilities sector:
- 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report."
- 1977 through 1981: FERC, FPC Form 4, "Monthly Power Plant Report."
- 1982 forward: EIA, EIA Form 759, "Monthly Power Plant Report.

Sources for industrial sector:

- 1973 through 1978: FPC Forms 4 and 12-C. 1979: FPC Form 4 and EIA estimates.
- 1980 forward: EIA estimates. Note: For 1977 forward, monthly data are not available from above sources and were estimated by seasonalizing the annual numbers in proportion to each month's hydroelectricity generation in the electric utility sector. Note for imports and exports of electricity:
- Monthly electricity imports and exports estimates for 1982 forward were revised in the May 1984 Monthly Energy Review. The revisions do not cause discontinuity in the annual data series: the data continue to come from the same source. The monthly data series, however, are discontinuous because monthly data series, now January 1982 forward are now available from the same source as the annual data. Estimates for monthly values prior to 1982, published in previous issues, were developed by converting the annual values to a delive values prior to 1982, published in previous issues, were developed by converting the annual value to a daily rate and multiplying by the number of days in the month. Accordingly, month-to-month analyses are not comparable when taken across the transition date of January 1982. Monthly analyses on either side of that date will be comparable. There is no known bias in either the annual data or the monthly data since Janu-ary 1982. ary 1982.

- Sources for imports and exports of electricity:
   1973 through 1980: DOE, Economic Regulatory Administration, "Report on Electric Energy Exchanges with Canada and Mexico.
- 1981: DOE, Office of Energy Emergency Operations, "Report on Electric Energy Exchanges with Canada and Mexico for Calendar Year 1981," April 1982 (revised June 1982).
- 1982 through 1982; DOE, Economic Regulatory Admin-istration, ERA-781, "Annual Report of International Electric Import/Export Data."
- 1985 forward: EIA estimates.

(Notes and Sources for the Consumption Section are continued on the next page.)

### Notes and Sources for the Consumption Section (continued)

8. Nuclear Electric Power and Geothermal, Wood, Waste, Wind, Photovoltaic, and Solar Thermal Energy Sources Connected to Electric Utility Distribution Systems:

Sources:

- 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report.
- 1977 through 1981: FERC, FPC Form 4, "Monthly Power Plant Report.'
- 1982 forward: EIA, EIA Form 759, "Monthly Power Plant Report.'

9. Net imports of Coal Coke: Net imports means imports minus exports, and the parentheses indicate that exports are greater than imports.

Sources:

- 1973 through 1975: DOI, BOM, Minerals Yearbook, "Coke and Coal Chemicals," chapter.
- 1976 through 1980: EIA, Energy Data Report, "Coke and Coal Chemicals," annual.
- 1981: EIA, Energy Data Report, "Coke Plant Report," quarterly.
- 1982 forward: EIA, Quarterly Coal Report.

10. Electricity: Sales of electricity represent consumption. From the sources cited below the following electricity sales categories are available: residential, commercial, industrial, and other. For the end-use estimates in this section, the "other" category (which is primarily sales for use in government buildings) is added to the commercial sector except for approximately 4 percent, which represents the transportation sector use of electricity, primarily by railroads and railways. Sales of electricity are converted into Btu at the rate of 3,412 Btu per kilowatthour.

Sources of sales data:

- 1973 through 1976: FPC, Form 5, "Monthly Statement of Electric Operating Revenue and Income.
- 1977 through February 1980: EIA, FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income.
- March 1980 through December 1982: EIA, FERC Form 5, "Electric Utility Company Monthly Statement." January 1983 forward: EIA, EIA Form 826, "Electric Utility Company Monthly Statement."

11. Electrical System Energy Losses: Electrical system energy losses are calculated as the difference between total energy input at electric utilities and the total energy content of electricity sold to end-use consumers. Most of these losses occur at steam-electric power plants (conventional and nuclear) in the conversion of heat energy into mechanical energy to turn electric generators. This loss is a thermodynamically necessary feature of the steam-electric cycle. Part of the energy input-to-output losses are a result of imputing fossil energy equivalent inputs for hydroelectric and other energy sources, since there is no generally accepted practice for measuring these thermal conversion rates. In addition to conversion losses, other losses include power plant use of electricity, transmission and distribution of electricity from power plants to end-use consumers (also called "line-losses"), and unaccounted for electricity. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales. Overall, approximately 67 percent of total energy input is lost in conversion; of electricity generated, approximately 5 percent is lost in plant use and 9 percent in transmission and distribution. Calculated electrical system energy losses may be less than actual losses, because primary consumption does not include the energy equivalent of utility purchases of electricity from non-electric utilities and from Canada and Mexico, although they are included in electricity sales.

### **Explanation of Revisions**

Petroleum end-use revisions reflect the following:

- The implementation of the revised 1983 deliveries data and the 1984 deliveries data for distillate fuel. residual fuel, and kerosene based on Form EIA-821 and published in the July 1985 Petroleum Marketing Monthly, (DOEIA-0380(85/07)). "Annual Report on Sales of Fuel Oil and Kerosene, 1984."
- The incorporation of volumes data for 1983 and 1984 sales to end users and resellers from Form EIA-782A, "Refiners/Gas Plant Operators' Monthly Petroleum Product Sales Report," to estimate distillate fuel used monthly by the residential and commercial sectors and residual fuel used monthly by the commercial sector.

Domestic crude oil production during January 1986 was estimated to be 8.9 million barrels per day, 0.1 percent above both the December 1985 rate and the rate in January 1985.

Total petroleum imports averaged 5.2 million barrels per day in January 1986, 8.2 percent less than the December 1985 rate but 19.3 percent more than the January 1985 rate.

In January 1986, 16.4 million barrels per day of petroleum products were supplied for domestic use, 0.6 percent below the level in December 1985 but 1.9 percent above the level of the previous January. Motor gasoline accounted for 40.0 percent of the total; distillate fuel oil, 21.0 percent; and residual fuel oil, 8.1 percent.

Motor gasoline supplied during January 1986 averaged 6.6 million barrels per day, 2.7 percent below the rate in December 1985 but 3.7 percent above the rate of the previous January. Stocks of motor gasoline totaled 238 million barrels at the end of January 1986, 15 million barrels above the level at the end of December 1985 and 4 million barrels above the stocks level 1 year earlier.

In January 1986, 3.5 million barrels of distillate fuel oil were supplied per day, 6.8 percent higher than the December 1985 rate but 0.2 percent lower than the January 1985 rate. Distillate fuel oil ending stocks for January 1986 were 138 million barrels, 6 million barrels lower than the stocks level in the previous month and 4 million barrels lower than the January 1985 ending stocks level.

Residual fuel oil supplied in January 1986 averaged 1.3 million barrels per day, 6.3 percent lower than in December 1985 and 10.4 percent lower than the January 1985 rate. Residual fuel oil stocks measured 47 million barrels at the end of January 1986, 4 million barrels lower than the level in the previous month, and the same stocks level as 1 year earlier. oart 3

Revised January 1986 and estimated February 1986 petroleum data were not available for publication in this issue of the *Monthly Energy Review*.

\*Estimates for the most current month are based on Energy Information Administration (EIA) weekly data (except crude production) and will be revised to conform with data from the EIA Petroleum Reporting System as available. For the most recent month, crude production is an EIA estimate based on historical and provisional data through October 1985. The total import data above include imports into the Strategic Petroleum Reserve.

### **Crude Oil<sup>1</sup> and Petroleum Products Overview**

		Fie	eld Product	ion	Stock	Withdrawal <sup>2</sup>		Ending Stocks <sup>3</sup>
		Total Domestic <sup>4</sup>	Crude Oil	Naturai Gas Plant Liquids	Crude Oil³	Petroleum Products	Petroleum Products Supplied	Crude Oil <sup>s</sup> and Petroleum Products
				Thousand	barrels per d	ay		Million barrels
1973	Average	10,975	9,208	1,738	11	-146	17,308	1,008
1974	Average	10,498	8,774	1,688	-62	-117	16,653	°1,074
1975	Average	10,045	8,375	1,633	<sup>8</sup> -17	°-145	16,322	1,133
1976	Average	9,774	8,132	1,603	-39	96	17,461	1,112
1977	Average	9,913	8,245	1,618	-170	-378	18,431	1,312
1978	Average	10,328	8,707	1,567	-78	172	18,847	1,278
1979	Average	10,179	8,552	1,584	-148	-25	18,513	1,341
1980	Average	10,214	8,597	1,573	-98	-42	17,056	*1,392
1981	Average	10,230	8,572	1,609	<sup>8</sup> -290	*130	16,058	1,484
1982	Average	10,252	8,649	1,550	-136	283	15,296	°1,430
1983	January	10,331	8,697	1,580	*-499	<b>°772</b>	14,722	1,452
	February	10,388	8,758	1,575	-320	1,113	14,792	1,430
	March	10,279	8,700	1,541	83	1,810	15,541	1,372
	April	10,322	8,776	1,506	-402	308	14,692	1,374
	May	10,190	8,631	1,493	-15	-602	14,505	1,394
	June	10,261	8,667	1,523	-122	-276	15,289	1,405
	July	10,228	8,636	1,539	233	-909	15,019	1,426
	August	10,284	8,679	1,562	-796	-271	15,480	1,460
	September	10,447	8,784	1,602	-23 <del>9</del>	-621	15,506	1,485
	October	10,434	8,771	1,604	-274	-442	14,962	1,508
	November	10,461	8,770	1,641	114	-182	15,500	1,510
	December	9,983	8,397	1,544	-329	2,133	16,726	1,454
	Average	10,299	8,688	1,559	-214	234	15,231	
1984	January	10,477	8,868	1,572	-328	1,115	16,801	1,429
	February	10,565	8,874	1,635	197	-1,374	15,437	1,463
	March	10,319	8,672	1,599	-25	641	16,050	1,444
	April	10,531	8,862	1,619	-476	-106	15,568	1,462
	Мау	10,623	8,955	1,614	-677	-434	15,620	1,496
	June	10,507	8,852	1,613	-104	-109	15,709	1,503
	July	10,587	8,885	1,634	-169	-169	15,498	1,513
	August September	10,478 10,692	8,809	1,637	250	252	16,116	1,498
	October	10,608	8,993 8,906	1,660 1,649	260 -759	-769	15,247 15,616	1,513
	November	10,689	8,979	1,678	-236	-246 -177	15,627	1,544 1,556
	December	10,578	8,897	1,649	-290	293	15,375	1,556
	Average	10,554	8,879	1,630	-199	-81	15,726	1,000
1985	January	10,612	8,929	1,642	18	1,443	16,142	1,510
	February	10,598	8,928	1,629	281	1,232	15,975	1,467
	March	10,588	8,927	1,615	-165	426	15,321	1,459
	April	10,481	8,842	1,600	-534	46	15,345	1,474
	May	10,619	8,969	1,607	-696	-386	15,460	1,508
	June	10,622	8,965	1,614	296	-378	15,551	1,510
	July	10,537	8,904	1,591	300	-449	15,517	1,515
	August	10,597	8,895	1,612	170	542	16,039	1,493
	September	10,520	8,874	1,584	-33	-211	15,115	1,500
	October	10,610	8,943	1,605	71	170	15,923	1,492
	November	10,694	8,932	1,681	-246	-750	15,411	1,522
•	December	10,683	8,930	1,680	-31	1219	16,541	1,516
	Average	10,597	8,920	1,622	-49	155	15,697	
1986	January†	NA	8,942	NA	-72	349	16,443	1,517

<sup>1</sup>Includes lease condensate.
<sup>3</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.
<sup>3</sup>Stocks are totals as of end of period.
<sup>4</sup>Includes crude oil, natural gas plant liquids, other hydrocarbons, and alcohol.
<sup>4</sup>Includes stocks located in the Strategic Petroleum Reserve.
<sup>4</sup>Includes crude oil for storage in the Strategic Petroleum Reserve.
<sup>4</sup>Includes crude oil for storage in the Strategic Petroleum Reserve.
<sup>7</sup>Net imports equals imports minus exports.
<sup>9</sup>In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stocks withdrawal calculations. See Note 5 on the last page of this section.

Footnotes continued on following page.

#### Monthly Energy Review December 1985 **Energy Information Administration**

### Crude Oil<sup>1</sup> and Petroleum Products Overview (continued)

			Imports			Exports		
		Total	Crude Oil <sup>e</sup>	Petroleum Products	Total	Crude Oil	Petroleum Products	Net imports <sup>7</sup>
				Th	ousand barrels	s per day		
1973	Average	6,256	3,244	3,012	231	2	229	6,025
1974	Average	6,112	3,477	2,635	221	3	218	5,892
1975	Average	6,056	4,105	1,951	209	6	204	5,846
1976	Average	7,313	5,287	2,026	223	8	215	7,090
1977	Average	8,807	6,615	2,193	243	50	193	8,565
1978	Average	8,363	6,356	2,008	362	158	204	8,002
1979	Average	8,456	6,519	1,937	471	235	236	7,985
1980	Average	6,909	5,263	1,646	544	287	258	6,365
1981	Average	5,996	4,396	1,599	595	228	367	5,401
1982	Average	5,113	3,488	1,625	815	236	579	4,298
1983	January	4,438	2,964	1,474	973	117	856	3,464
	February	3,726	2,267	1,459	865	262	603	2,861
	March	3,690	2,290	1,400	801	174	627	2,889
	April	4,727	3,118	1,609	809	88	721	3,918
	May	5,089	3,360	1,729	848	280	568	4,241
	June	5,326	3,577	1,749	774	144	630	4,552
	July	5,741	3,871 4,227	1,870 1,933	571 663	145 172	426 491	5,170 5,496
	August September	6,159 6,129	4,227 4,210	1,919	684	177	507	5,496
	October	5,258	3,446	1,812	576	140	436	4,682
	November	5,210	3,337	1,873	679	186	494	4,531
	December	5,033	3,213	1,820	639	95	544	4,394
	Average	5,051	3,329	1,722	739	164	575	4,312
1984	January	5,430	3,055	2,375	575	153	422	4,855
	February	5,693	2,950	2,743	582	185	397	5,111
	March	5,301	3,470	1,832	840	236	605	4,461
	April	5,372	3,417	1,955	655	172	483	4,717
	May	5,979	3,942	2,036	766	219	548	5,212
	June	5,482	3,546	1,936	864 536	222 108	642 429	4,618
	July August	5,407 5,044	3,646 3,248	1,761 1,796	732	190	429 542	4,871 4,312
	September	5,252	3,342	1,909	664	162	502	4,588
	October	5,779	3,751	2,028	599	141	458	5,179
	November	5,587	3,583	2,004	854	202	652	4,733
	December	4,933	3,136	1,796	986	185	801	3,947
	Average	5,437	3,426	2,011	722	181	541	4,715
1985	January	4,376	2,700	1,676	792	144	647	3,584
	February	3,921	2,126	1,795	857	221	636	3,064
	March	4,689	2,808	1,881	694	189	505	3,996
	April	5,252	3,401	1,851	764	236	528	4,488
	May	5,718	3,724	1,994	705	250	455	5,012
	June	4,877	3,175 3,189	1,702	692 675	226	467 521	4,185
	July August	4,921 4,682	3,169	1,732 1,572	675 749	154 241	521 508	4,246 3,934
	September	4,082 4,977	3,213	1,764	806	188	618	4,171
	October	5,153	3,325	1,828	690	123	567	4,463
	November	6,216	4,105	2,111	1,036	286	750	5,180
	December	5,689	3,640	2,049	925	197	728	4,763
	Average	5,045	3,216	1,830	781	204	577	4,264
1986	January†	5,221	3,315	1,906	NA	NA	NA	NA

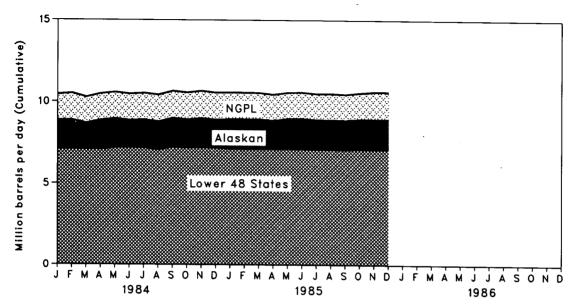
Footnotes continued. †Italics denote estimates based upon preliminary data. NA = Not available. Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Sources: • See the last page of this section.

Monthly Energy Review December 1985 Energy Information Administration

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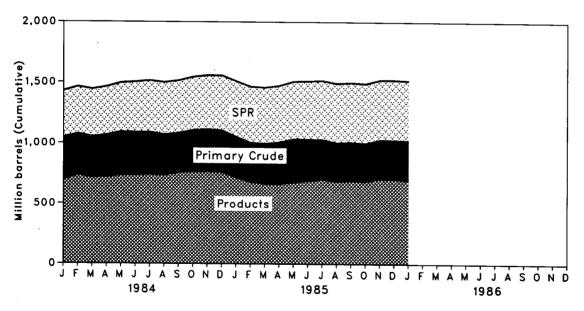
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### Overview



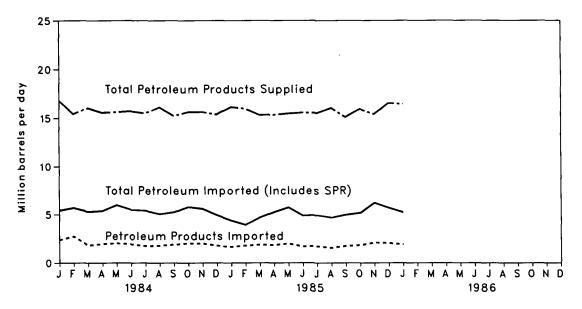
### Production of Crude Oil and Natural Gas Plant Liquids

### **Ending Stocks**

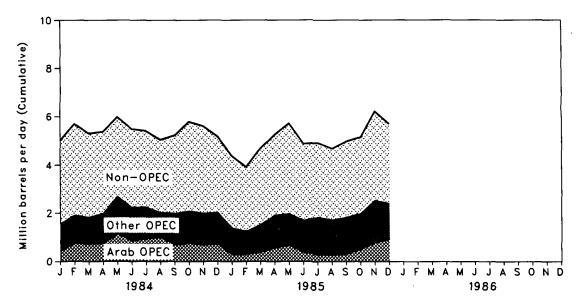








#### Petroleum Imports by Source



### Crude Oil<sup>1</sup> Supply and Disposition

		Supply									
		Field Pro	oduction		Imports		Stock W	"ithdrawal <sup>3</sup>	Unaccounted		
		Total Domestic	Alaskan	Total	SPR•	Other	SPR.	Other	for Crude Oil		
					Thousand	l barrels per d	ay				
1973	Average	9,208	198	3,244		3,244	-	11	3		
1974	Average	8,774	193	3,477		3,477		-62	-25		
1975	Average	8,375	191	4,105		4,105		-17	17		
1976	Average	8,132	173	5,287		5,287		-39	77		
1977	Average	8,245	464	6,615	21	6,594	-20	-150	-6		
1978	Average	8,707	1,229	6,356	162	6,195	-163	- 130	-57		
1979	Average	8,552	1,401	6,519	67	6,452		-81			
1980	Average	8,597	1,401	5,263	44		-67		-11		
1981		•				5,219	-45	-52	34		
	Average	8,572	1,609	4,396	256	4,141	-336	°46	83		
1982	Average	8,649	1,696	3,488	165	3,323	-174	38	71		
1983	January	8,697	1,732	2,964	219	2,746	-219	°-280	170		
	February	8,758	1,717	2,267	197	2,070	-197	-123	262		
	March	8,700 8,776	1,732	2,290	201	2,089	-184	267	31		
	April May	8,631	1,721 1,662	3,118 3,360	205 289	2,913 3,071	-197 -293	-205 278	98		
	June .	8,667	1,687	3,300	190	3,387	-293	66	169 370		
	July	8,636	1,715	3,871	274	3,597	-264	497	-167		
	August	8,679	1,697	4,227	350	3,876	-358	-438	281		
	September	8,784	1,738	4,210	309	3,901	-307	68	-30		
	October	8,771	1,733	3,446	202	3,244	-201	-73	44		
	November	8,770	1,720	3,337	171	3,166	-135	250	34		
	December	8,397	1,711	3,213	193	3,020	-252	-78	117		
	Average	8,688	1,714	3,329	234	3,096	-234	20	114		
1984	January	8,868	1,752	3,055	200	2,855	-173	-155	211		
	February	8,874	1,749	2,950	85	2,866	-96	293	386		
	March	8,672	1,570	3,470	148	3,322	-147	122	110		
	April	8,862	1,770	3,417	170	3,248	-170	-307	325		
	May	8,955	1,764	3,942	246	3,696	-245	-432	309		
	June	8,852	1,659	3,546	309	3,237	-309	205	246		
	July August	8,885 8,809	1,695 1,722	3,646 3,248	329 180	3,317	-328 -179	159 429	-164		
	September	8,993	1,761	3,240	53	3,068 3,289	-179 -53	429 314	293 -94		
	October	8,906	1,732	3,751	187	3,265	-186	-573	291		
	November	8,979	1,781	3,583	219	3,364	-207	-29	47		
	December	8,897	1,720	3,136	229	2,907	-241	-50	262		
	Average	8,879	1,722	3,426	197	3,229	-195	-4	185		
1985	January	8,929	1,788	2,700	223	2,478	-223	241	23		
	February	8,928	1,787	2,126	98	2,028	-97	378	346		
	March	8,927	1,786	2,808	48	2,760	-48	-117	92		
	April	8,842	1,699	3,401	108	3,293	-111	-423	411		
	May	8,969	1,827	3,724	222	3,501	-225	-471	457		
	June	8,965	1,828	3,175	155	3,020	-155	451	202		
	July	8,904 8,895	1,802 1,801	3,189 3,110	226 116	2,963	-225	525	295		
	August September	8,895	1,801	3,110	71	2,995 3,142	-116 -71	286 38	195 126		
	October	8,943	1,822	3,325	20	3,142	-71 -20	38 91	48		
	November	8,932	1,821	4,105	53	4,053	-20 -53	-193	-35		
	December	8,930	1,821	3,640	74	3,565	-60	28	-35 298		
	Average	8,920	1,799	3,216	118	<b>3,098</b>	-117	68	204		
1986	January†	8,942	1,822	3,315	58	3,257	-41	-31	NA		

<sup>1</sup>Includes lease condensate.
<sup>2</sup>Stocks are totals as of end of period.
<sup>3</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.
<sup>4</sup>Strategic Petroleum Reserve.
<sup>8</sup>Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.
<sup>9</sup>Stocks of Alaskan crude oil in transit were included beginning in January 1981. Stock withdrawals are calculated using new basis stock levels. See Notes 5 and 6 on the last page of this section.
Footnotes continued on following page.

### Crude Oil<sup>1</sup> Supply and Disposition (continued)

		Supply		Dispos	Ending Stocks <sup>2</sup>				
		Crude Used Directly <sup>s</sup>	Crude Losses	Refinery Inputs	Exports	Product Supplied <sup>s</sup>	Total	SPR4	Other Primary
			Thousan	d barrels per d	Jay			Million barr	els
1973	Average	-19	13	12,431	2		242		242
1974	Average	-15	13	12,133	3		265		265
1975	Average	-17	13	12,442	6		271		271
1976	Average	-18	15	13,416	8		285		285
1977	Average	-14	16	14,602	50		348	7	340
1978	Average	-14	16	14,739	158		376	67	309
1979	Average	-13	16	14,648	235		430	91	339
1980	Average	-13	15	13,481	287		<sup>6</sup> 466	108	°358
1981	Average	-58	5	12,470	228		594	230	363
1982	Average	-59	3	11,774	236		°644	294	350
1983	January	NA	2	11,143	117	71	660	301	360
	February	NA	3	10,633	262	71	669	306	363
	March	NA	2	10,859	174	70	667	312	355
	April	NA	2	11,433	88	68	679	318	361
	May	NA	1	11,800	280	63	679	327	353
	June	NA	(s)	12,284	144	64	683	332	351
	July	NA	2	12,360	145	65	676	341	335
	August	NA	1	12,152	172	64	700	352	349
	September	NA	1	12,482	177	66	708	361	347
	October	NA	1	11,782	140 186	63 64	716 713	367 371	349 341
	November December	NA NA	2 1	12,004 11,234	95	64 67	723	379	341
	Average	NA	2	11,685	164	66	720	013	044
4004		NA	-	11,587	153	64	733	384	349
1984	January February	NA	1	12,157	185	65	733	387	349
	March	NA	2	11,926	236	62	728	392	336
	April	NA	1	11,891	172	64	742	397	346
	May	NA	2	12,247	219	62	763	404	359
	June	NA	2	12,255	222	61	767	414	353
	July	NA	2	12,028	108	60	772	424	348
	August	NA	1	12,346	190	63	764	429	335
	September	NA	3	12,271	162	66	756	431	325
	October	NA	1	11,978	141	69	780	437	343
	November	NA	(s)	12,108	202 185	62	787 796	443 451	344 345
	December	NA NA	(s) 2	11,755 <b>12,044</b>	185	64 <b>64</b>	790	431	345
	Average								
1985	January	NA	1	11,456	144	69	793	457	336
	February	NA ·	1	11,393 11,404	221 189	66 60	786 791	460 462	325 329
	March	NA NA	1	11,404	236	69 67	807	462	329
	April May	NA	(s) 1	12,141	250	62	828	472	356
	June	NA	1	12,355	226	56	819	477	343
	July	NA	i	12,477	154	55	810	484	327
	August	NA	(s)	12,073	241	55	805	487	318
	September	NA	(s)	11,937	188	55	806	489	317
	October	NA	(s)	12,209	123	55	804	490	314
	November	NA	1	12,411	286	59	811	491	320
	December	NA	1	12,575	197	63	812	493	319
	Average	NA	1	12,025	204	61			
1986	January†	NA	NA	12,480	NA	NA	820	494	326

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Footnotes continued. †Italics denote estimates based upon preliminary data. NA = Not available. (s) = Less than 500 barrels per day. Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Sources: • See the last page of this section.

**Crude Oil and Petroleum Product Imports** 

Saudi         Saudi         United Arabia         Indo- Emirates         Indo- nesia         Iran         Nigeria         Citer         Total OPEC         Total Arabia           1973         Average         136         164         466         71         213         223         459         1,135         106         2,993         915           1974         Average         180         4         461         74         300         469         713         379         89         3,200         752           1975         Average         180         4         461         74         300         469         713         379         89         3,200         752           1975         Average         282         433         1,230         254         535         191         645         226         5,751         2,983         1,83         1,861           1980         Average         636         658         1,356         281         420         304         1,60         620         462         226         5,751         2,983         1,412         5,771         2,983         1,412         5,771         2,983         1,412         5,771         2,983         1,412 <th></th> <th></th> <th colspan="11">Imports from OPEC Sources<sup>1</sup></th>			Imports from OPEC Sources <sup>1</sup>										
Algeria         Libya         Arabia         Emirates         nesia         tran         Nigeria         zueia         OPEC         OPEC </th <th></th> <th></th> <th></th> <th></th> <th>Saudi</th> <th></th> <th>Indo-</th> <th></th> <th></th> <th>Vene-</th> <th>Other</th> <th>Total</th> <th></th>					Saudi		Indo-			Vene-	Other	Total	
1973       Average       136       164       486       71       213       223       459       1,135       106       2,983       915         1975       Average       130       4       461       74       300       469       713       979       68       3,280       752         1975       Average       432       453       1,330       254       539       288       1,025       700       134       5,066       2,424       3,185         1977       Average       649       654       1,144       365       573       555       919       645       226       5,751       2,963         1979       Average       646       654       1,141       365       514       410       600       690       212       5,637       3,066         1981       Average       170       28       552       92       246       35       514       412       97       2,146       854         1982       Average       170       28       552       92       246       35       514       412       97       2,146       854         1982       January       207       0       2			Algeria	Libya	Arabia			Iran	Nigeria	• - · · •			OPEC <sup>3</sup>
1974       Average       190       4       461       74       900       469       713       975       88       3,280       752         1975       Average       282       232       715       117       390       280       762       702       122       3,601       7,383         1976       Average       559       723       1,380       335       541       535       1,143       690       226       5,751       2,963         1977       Average       636       658       1,356       281       420       304       1,080       660       212       5,537       3,056         1980       Average       311       319       1,129       81       366       0       620       406       90       3,323       1,848         1982       Average       311       319       1,129       81       366       0       620       406       90       3,323       1,848         1983       January       207       0       282       242       35       514       412       97       2,146       854         1983       January       207       162       (s)       210 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th>Thousa</th><th>nd barrel</th><th>s per day</th><th></th><th></th><th></th><th></th></t<>							Thousa	nd barrel	s per day				
1976       Average       282       232       716       117       380       280       762       702       112       3,601       1,383         1976       Average       432       453       1,230       254       539       298       1,025       700       134       5,666       2,424         1977       Average       649       654       1,144       385       573       555       919       645       226       5,751       2,963         1979       Average       488       554       1,261       172       346       9       657       491       130       4,300       2,551         1981       Average       170       26       552       92       246       35       514       412       97       2,146       654         1982       Average       170       282       47       255       43       166       52       125       1,42       337       54       1,412       537         Fobruary       115       0       216       9       170       0       122       12       405       37       385       69       1,771       420       3125       1,432       389	1973	Average	136	164	486	71	213	223	459	1,135	106	2,993	915
1975       Average       282       232       715       117       390       280       762       702       122       3,601       1,383         1976       Average       559       723       1,380       335       541       535       1141       690       287       6,193       3,185         1977       Average       649       654       1,144       385       573       555       919       645       226       5,751       2,963         1980       Average       448       554       1,261       172       348       9       857       461       130       4,300       2,251         1981       Average       170       26       552       92       248       35       514       412       97       2,146       854         1982       January       207       0       282       47       255       43       186       537       538       1,71       420       337       54       1,412       537       3,4132       338       467       332       130       132       1432       389       467       332       181       320       122       145       1432       389       341 <td>1974</td> <td>Average</td> <td>190</td> <td>4</td> <td>461</td> <td>74</td> <td>300</td> <td>469</td> <td>713</td> <td>979</td> <td>88</td> <td>3,280</td> <td>752</td>	1974	Average	190	4	461	74	300	469	713	979	88	3,280	752
1976       Average       432       453       1,200       254       539       298       1,025       700       134       5,066       2,424         1977       Average       649       654       1,144       365       573       555       1143       690       212       5,637       3,056         1978       Average       636       658       1,356       281       420       304       1,080       690       212       5,637       3,056         1980       Average       311       319       1,129       81       366       0       620       406       90       3,232       1,648         1982       Average       311       319       1,129       81       366       0       620       406       90       3,232       1,646       333         1982       Average       310       0       213       0       122       106       313       1412       537       545       633       1464       420       1171       420       338       1,442       303       336       441       421       1171       420       338       1,442       303       144       1251       1666       132	1975	Average	282	232	715	117	390	280	762	702	122	-	
1977       Average       559       723       1,300       335       541       535       1,143       690       287       6,133       3,165         1978       Average       636       656       1,344       385       571       553       1919       645       226       5,751       2,963         1980       Average       638       554       1,221       172       346       9       857       481       130       4,300       2,5637       3,056         1981       Average       117       26       552       92       246       35       514       412       97       2,146       884         1982       Average       170       226       552       92       246       30       136       037       54       1,412       537         March       630       0       122       12       246       92       337       308       455       69       1,771       420         June       300       0       182       64       464       112       555       433       118       1973       528       1,910       907       33       138       1973       528       1,323	1976	Average	432	453	1,230	254	53 <del>9</del>	298	1,025	700	134	•	
1978       Average       646       654       1,144       385       573       555       919       645       226       5,751       2,963         1970       Average       636       656       1,356       281       420       304       1,080       690       212       5,637       3,056         1981       Average       311       319       1,129       81       366       0       620       406       90       3,323       1,448         1982       Average       311       319       1,129       81       366       0       620       406       90       3,323       1,448         1983       January       207       0       282       47       255       43       186       337       54       1,412       537         February       115       0       113       0       138       0       121       440       201       1,066       183         April       227       0       162       (8)       210       0       186       535       169       1,771       420         June       300       0       188       40       466       38       467       1	1977	Average	559	723	1,380	335	541	535		690			•
1979       Average       636       656       1,366       281       420       304       1,080       690       212       5,637       3,068         1980       Average       486       554       1,261       172       346       9       857       481       130       4,300       2,558         1982       Average       170       26       552       92       248       35       514       412       97       2,146       684         1983       January       207       0       282       47       255       43       186       337       54       1,412       537         March       63       0       103       0       138       0       121       440       201       1,066       1838         May       266       0       122       12       405       37       3364       455       69       1,771       420       301       321       1482       54       544       181       1,232       389       438       243       213       214       415       133       213       131       1,973       528       1,910       307       337       30       338       463	1978	Average	649	654	1,144	385	573	555	919		226	•	
1980       Average       488       554       1,261       172       348       9       657       481       130       4,300       2,513         1981       Average       311       319       1,229       81       366       0       620       406       90       3,323       1,848         1982       Average       311       319       1,229       81       366       0       620       406       90       3,323       1,848         1983       January       207       0       282       47       255       43       166       337       54       1,112       537         March       63       0       103       0       138       0       121       440       201       1,066       183         May       283       0.6       122       12       24       463       37       385       455       69       1,771       420         June       300       0       188       40       466       38       467       335       136       1,773       528         June       300       0       638       16       368       121       510       86       324<	1979	Average	636	658	1,356	281	420	304	1,080	690	212	•	
1981       Average       311       319       1,129       81       366       0       620       406       90       3,323       1,448         1983       January       207       0       226       552       92       248       35       511       412       97       2,146       854         1983       January       207       0       224       47       255       43       186       337       54       1,142       537         February       115       0       214       9       217       0       382       303       28       1,068       338         April       227       0       162       (s)       138       0       121       440       201       1,068       183         June       300       0       188       404       466       38       467       335       138       1,973       22.85       606         August       378       0       448       52       433       213       464       511       230       237       168       31,98       464       511       230       237       168       31,96       210       215       452       135	1980	Average	488	554		172	348			481	130	•	
1982       Average       170       26       552       92       248       35       514       412       97       2,146       854         1983       January       207       0       282       47       255       43       186       337       54       1,142       537         February       115       0       103       0       138       0       121       440       201       1,066       183         April       227       0       162       (s)       210       0       186       533       455       69       1,771       420         June       300       0       188       40       466       38       457       335       138       1,973       528         August       378       0       448       52       433       213       464       511       230       2,728       903         September       210       638       16       368       122       155       184       1,969       826         Average       240       0       337       30       338       48       302       415       163       1,969       826         Avera	1981	Average	311	319	1,129	81	366	0				•	
February         115         0         214         9         217         0         52         353         58         1,068         335           March         63         0         103         0         138         0         121         440         201         1,066         183           April         227         0         162         (s)         210         0         186         523         125         1,432         389           May         286         0         122         12         405         37         385         455         69         1,771         420           June         300         188         40         464         112         255         434         187         2,251         606           August         378         0         448         52         433         13         464         511         202         2,108         983           November         124         0         545         56         302         21         215         159         1,910         807           December         144         0         545         56         302         21         215	1982	Average	170	26	552	92	248	35	514			•	
March         63         0         103         0         138         0         121         440         201         1,066         183           April         227         0         162         (s)         210         0         186         523         125         1,432         389           May         286         0         122         12         405         37         385         455         69         1,771         420           June         300         0         188         40         466         38         467         335         138         1,973         528           July         283         0         587         21         601         86         324         442         221         2,595         1,084           October         261         0         638         16         368         12         307         337         169         2,108         938           November         184         0         545         56         302         21         215         452         135         1,910         807           March         285         0         310         112         283         6	1983	January	207		282	47	255	43	186	337	54	1,412	537
April         227         0         162         (s)         210         0         186         523         125         11422         385           May         286         0         122         12         405         37         385         6455         69         1,771         420           June         300         0         188         40         466         38         467         335         188         1,973         528           July         283         0         182         64         464         112         525         434         187         2,251         1064           August         378         0         448         52         433         221         2,595         1,084           October         261         0         638         16         368         302         21         215         452         135         1,910         807           December         144         0         545         56         302         21         215         452         135         1,910         807           Average         240         0         337         30         338         48         302		•									28		338
May         266         0         122         12         405         37         385         455         593         1,771         420           June         300         0         188         40         466         38         467         335         138         1,973         528           August         378         0         448         52         433         213         464         511         230         2,728         903           September         261         0         638         16         366         12         307         337         169         2,108         338           November         184         0         545         56         302         21         215         452         135         1,910         807           December         144         0         569         45         294         9         329         415         163         1,969         826           Average         240         0         337         30         338         48         302         422         144         1,862         632           February         369         7         324         33         267								-					
Jure         300         0         188         40         466         38         467         335         138         1,973         526           July         283         0         182         64         464         112         525         434         187         2,251         606           August         378         0         587         21         501         86         324         432         221         2,595         1,084           October         261         0         538         16         368         12         307         337         169         2,108         388           November         184         0         545         56         302         21         215         452         135         1,969         826           Average         240         0         337         30         338         48         302         422         144         1,862         632           1984         January         242         0         477         114         289         0         243         549         51         1,966         842           February         369         7         324         33								-					
July         283         0         182         64         464         112         525         434         187         2,251         600           August         378         0         448         52         433         213         464         511         230         2,728         903           September         261         0         638         16         366         12         307         337         169         2,108         938           November         184         0         545         56         302         21         215         452         135         1,910         807           December         144         0         569         45         294         9         329         415         163         1,969         826           Average         240         0         337         30         338         48         302         422         144         1,862         632           1984         January         242         0         477         114         289         0         243         549         51         1,966         842           March         285         0         310         112 <td></td> <td>•</td> <td></td>		•											
August September         378         0         448         52         433         213         464         511         230         2,728         903           September         423         0         587         21         501         86         324         432         221         2,595         1,084         0         938         November         184         0         545         56         302         21         215         452         135         1,910         807           December         144         0         569         45         294         9         329         415         163         1,969         826           Average         240         0         337         30         338         48         302         422         144         1,862         632           1984         January         242         0         477         114         289         0         243         549         51         1,965         842           February         369         7         324         33         267         0         243         549         51         1,965         842           June         302         0													
September         423         0         587         21         501         86         324         432         221         2,595         1,084           October         261         0         638         16         368         12         307         337         169         2,108         938           November         184         0         545         56         302         21         215         452         135         1,910         807           December         144         0         569         45         294         9         329         415         163         1,969         826           Average         240         0         337         30         338         48         302         422         144         1,862         632           1984         January         242         0         477         114         289         0         243         549         51         1,965         822           March         285         0         310         112         283         67         269         358         127         1,811         723           April         280         0         322         240													
October         261         0         638         16         368         12         307         337         169         2,108         938           November         184         0         545         56         302         21         215         452         135         1,910         807           December         144         0         569         45         294         9         329         415         163         1,969         826           Average         240         0         337         30         338         48         302         422         144         1,862         632           1984         January         242         0         477         114         289         0         243         549         51         1,965         842           February         369         7         324         33         267         0         244         478         174         1,866         751           March         280         0         320         95         226         0         288         527         242         2,677         1,146           June         302         0         411         464													
November         184         0         545         56         302         21         215         452         135         1,910         807           December         144         0         569         45         294         9         329         415         163         1,969         826           Average         240         0         337         30         338         48         302         422         144         1,862         632           1984         January         242         0         477         114         289         0         243         549         51         1,965         842           February         369         7         324         33         267         0         244         478         174         1,996         751           March         285         0         310         112         283         67         269         358         127         1,811         723           March         285         0         310         112         284         0         243         640         171         2,227         838           June         302         0         413         82												•	
December         144         0         569         45         294         9         329         415         163         1,969         826           Average         240         0         337         30         338         48         302         422         144         1,862         632           1984         January         242         0         477         114         289         0         243         549         51         1,965         842           February         369         7         324         33         267         0         244         478         174         1,896         751           March         285         0         310         112         283         67         269         358         1,962         735           May         471         0         329         240         479         0         289         627         242         2,677         1,146           June         302         0         411         46         415         0         204         539         242         2,241         946           August         404         0         388         82         281													
Average         240         0         337         30         338         48         302         422         144         1,862         632           1984         January         242         0         477         114         289         0         243         549         51         1,965         842           February         369         7         324         33         267         0         244         478         174         1,896         751           March         285         0         310         112         283         67         269         358         127         1,811         723           April         280         0         329         240         479         0         289         627         242         2,677         1,146           June         302         0         411         46         415         0         243         640         171         2,227         838           July         332         0         421         113         333         17         160         715         147         2,002         688           October         333         0         287         114		December	144	Ó									
February         369         7         324         33         267         0         244         478         174         1,896         751           March         285         0         310         112         283         67         269         358         127         1,811         723           April         280         0         320         95         226         0         288         593         158         1,962         735           May         471         0         329         240         479         0         289         627         242         2,677         1,146           June         302         0         429         112         384         0         204         539         242         2,241         946           August         404         0         438         82         281         0         114         475         216         2,002         688           October         333         0         287         114         421         0         208         585         115         2,062         754           November         298         0         183         124         424		Average	240	0	337	30	338	48	302	422	144	•	
March         285         0         310         112         283         67         269         358         127         1,811         723           April         280         0         320         95         226         0         288         593         158         1,962         735           May         471         0         329         240         479         0         289         627         242         2,677         1,146           June         302         0         429         112         384         0         204         539         242         2,241         946           August         404         0         438         82         281         0         114         475         216         2,009         993           September         359         0         159         113         333         17         160         715         147         2,002         688           October         333         0         287         114         421         0         208         585         115         2,062         754           November         298         0         183         124         424	1984	•	-								51		842
April       280       0       320       95       226       0       288       593       158       1,962       735         May       471       0       329       240       479       0       289       627       242       2,677       1,146         June       302       0       411       46       415       0       243       640       171       2,227       838         July       332       0       429       112       384       0       204       539       242       2,241       946         August       404       0       438       82       281       0       114       475       216       2,009       993         September       359       0       159       113       333       17       160       715       147       2,002       688         October       333       0       287       114       424       24       163       564       173       1,954       668         December       204       0       224       211       314       12       166       459       174       1,765       723         Average       323		•	-					-				•	
May         471         0         329         240         479         0         289         627         242         2,677         1,146           June         302         0         411         46         415         0         243         640         171         2,227         838           July         332         0         429         112         384         0         204         539         242         2,241         946           August         404         0         438         82         281         0         114         475         216         2,009         993           September         359         0         159         113         333         17         160         715         147         2,002         688           October         333         0         287         114         421         0         208         585         115         2,062         754           November         298         0         183         124         424         24         163         564         173         1,954         668           December         204         0         224         211         314												•	
June         302         0         411         46         415         0         243         640         171         2,227         838           July         332         0         429         112         384         0         204         539         242         2,241         946           August         404         0         438         82         281         0         114         475         216         2,009         993           September         359         0         159         113         333         17         160         715         147         2,062         754           November         298         0         183         124         424         24         163         564         173         1,954         668           December         204         0         224         211         314         12         166         459         174         1,765         723           Average         323         1         325         117         343         10         216         548         166         2,049         819           1985         January         95         0         106         60 <td></td> <td>•</td> <td></td>		•											
July       332       0       429       112       384       0       204       539       242       2,241       946         August       404       0       438       82       281       0       114       475       216       2,009       993         September       359       0       159       113       333       17       160       715       147       2,002       688         October       333       0       287       114       421       0       208       585       115       2,062       754         November       298       0       183       124       424       24       163       564       173       1,954       668         December       204       0       224       211       314       12       166       459       174       1,765       723         Average       323       1       325       117       343       10       216       548       166       2,049       819         1985       January       95       0       106       60       274       0       262       481       89       1,367       289         Feb		•											
August         404         0         438         82         281         0         114         475         216         2,009         993           September         359         0         159         113         333         17         160         715         147         2,002         688           October         333         0         287         114         421         0         208         585         115         2,062         754           November         298         0         183         124         424         24         163         564         173         1,954         668           December         204         0         224         211         314         12         166         459         174         1,765         723           Average         323         1         325         117         343         10         216         548         166         2,049         819           1985         January         95         0         106         60         274         0         262         481         89         1,367         289           February         174         0         108												•	
September         359         0         159         113         333         17         160         715         147         2,002         688           October         333         0         287         114         421         0         208         585         115         2,062         754           November         298         0         183         124         424         24         163         564         173         1,954         668           December         204         0         224         211         314         12         166         459         174         1,765         723           Average         323         1         325         117         343         10         216         548         166         2,049         819           1985         January         95         0         106         60         274         0         262         481         89         1,367         289           February         174         0         108         0         232         0         131         524         64         1,233         307           March         252         0         85         52 </td <td></td> <td>•</td> <td></td>												•	
October         333         0         287         114         421         0         208         585         115         2,062         754           November         298         0         183         124         424         24         163         564         173         1,954         668           December         204         0         224         211         314         12         166         459         174         1,765         723           Average         323         1         325         117         343         10         216         548         166         2,049         819           1985         January         95         0         106         60         274         0         262         481         89         1,367         289           February         174         0         108         0         232         0         131         524         64         1,233         307           March         252         0         85         52         283         0         180         575         84         1,512         390           June         178         5         26         81			359									•	
December         204         0         224         211         314         12         166         459         174         1,765         723           Average         323         1         325         117         343         10         216         548         166         2,049         819           1985         January         95         0         106         60         274         0         262         481         89         1,367         289           February         174         0         108         0         232         0         131         524         64         1,233         307           March         252         0         85         52         283         0         180         575         84         1,512         390           April         286         8         186         70         313         0         280         669         86         1,899         561           May         281         0         49         128         211         0         381         549         354         1,953         669           June         178         5         26         81         439<		October	333	0	287	114	421	0	208				
Average         323         1         325         117         343         10         216         548         166         2,049         819           1985         January         95         0         106         60         274         0         262         481         89         1,367         289           February         174         0         108         0         232         0         131         524         64         1,233         307           March         252         0         85         52         283         0         180         575         84         1,512         390           April         286         8         186         70         313         0         280         669         86         1,899         561           May         281         0         49         128         211         0         381         549         354         1,953         669           June         178         5         26         81         439         0         357         444         152         1,682         379           July         136         10         44         13         389		November							163		173	1,954	668
1985         January         95         0         106         60         274         0         262         481         89         1,367         289           February         174         0         108         0         232         0         131         524         64         1,233         307           March         252         0         85         52         283         0         180         575         84         1,512         390           April         286         8         186         70         313         0         280         669         86         1,899         561           May         281         0         49         128         211         0         381         549         354         1,953         669           June         178         5         26         81         439         0         357         444         152         1,682         379           July         136         10         44         13         389         42         376         559         248         1,817         298           August         135         0         46         17         377													
February         174         0         108         0         232         0         131         524         64         1,233         307           March         252         0         85         52         283         0         180         575         84         1,512         390           April         286         8         186         70         313         0         280         669         86         1,899         561           May         281         0         49         128         211         0         381         549         354         1,953         669           June         178         5         26         81         439         0         357         444         152         1,682         379           July         136         10         44         13         389         42         376         559         248         1,817         298           August         135         0         46         17         377         85         194         563         290         1,707         280           September         147         0         27         57         206         43		Average										·	819
March         252         0         85         52         283         0         180         575         84         1,512         390           April         286         8         186         70         313         0         280         669         86         1,899         561           May         281         0         49         128         211         0         381         549         354         1,953         669           June         178         5         26         81         439         0         357         444         152         1,682         379           July         136         10         44         13         389         42         376         559         248         1,817         298           August         135         0         46         17         377         85         194         563         290         1,707         280           September         147         0         27         57         206         43         263         820         243         1,805         302           October         177         20         251         17         278         41	1985								_				
April         286         8         186         70         313         0         280         669         86         1,899         561           May         281         0         49         128         211         0         381         549         354         1,953         669           June         178         5         26         81         439         0         357         444         152         1,682         379           July         136         10         44         13         389         42         376         559         248         1,817         298           August         135         0         46         17         377         85         194         563         290         1,707         280           September         147         0         27         57         206         43         263         820         243         1,805         302           October         177         20         251         17         278         41         282         712         196         1,973         520           November         185         11         430         34         356													
May28104912821103815493541,953669June1785268143903574441521,682379July136104413389423765592481,817298August13504617377851945632901,707280September14702757206432638202431,805302October1772025117278412827121961,973520November18511430343561143087833002,522773December23206421530504216251492,389913		April				52				5/5		1,512	
June1785268143903574441521,682379July136104413389423765592481,817298August13504617377851945632901,707280September14702757206432638202431,805302October1772025117278412827121961,973520November18511430343561143087833002,522773December23206421530504216251492,389913													
July136104413389423765592481,817298August13504617377851945632901,707280September14702757206432638202431,805302October1772025117278412827121961,973520November18511430343561143087833002,522773December23206421530504216251492,389913													
August13504617377851945632901,707280September14702757206432638202431,805302October1772025117278412827121961,973520November18511430343561143087833002,522773December23206421530504216251492,389913													
September         147         0         27         57         206         43         263         820         243         1,805         302           October         177         20         251         17         278         41         282         712         196         1,973         520           November         185         11         430         34         356         114         308         783         300         2,522         773           December         232         0         642         15         305         0         421         625         149         2,389         913		•											
October         177         20         251         17         278         41         282         712         196         1,973         520           November         185         11         430         34         356         114         308         783         300         2,522         773           December         232         0         642         15         305         0         421         625         149         2,389         913		•											
November         185         11         430         34         356         114         308         783         300         2,522         773           December         232         0         642         15         305         0         421         625         149         2,389         913			177	20	251	17	278						
	•	-								783	300	2,522	773
Average 190 4 167 45 306 27 287 608 189 1,825 475													
		Average	190	4	167	45	306	27	287	608	189	1,825	475

<sup>1</sup>Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as petroleum products that were refined from crude oil produced in OPEC countries. <sup>2</sup>Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar. <sup>3</sup>Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar. Footnotes continued on following page.

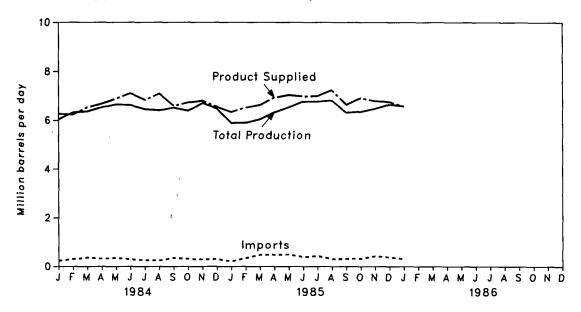
**Crude Oil and Petroleum Product Imports (continued)** 

		Imports from Non-OPEC Sources										
		Bahamas	Canada	Mexico	Nether- lands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico	Virgin Islands	Other Non- OPEC	Total Non- OPEC	Totai Imports
						Thousa	nd barrels p	er day				
1973	Average	174	1,325	16	585	255	15	99	329	465	3,263	6,256
1974	Average	164	1,070	8	511	251	8	90	391	340	2,832	6,112
1975	Average	152	846	71	332	242	14	90	406	300	2,454	6,056
1976	Average	118	599	87	275	274	31	88	422	353	2,247	7,313
1977	Average	171	517	179	211	289	126	105	466	550	2,614	8,807
1978	Average	160	467	318	229	253	180	94	429	484	2,613	8,363
1979	Average	147	538	439	231	190	202	92	431	548	2,819	8,456
1980	Average	78	455	533	225	176	176	88	388	491	2,609	6,909
1981	Average	74	447	522	197	133	375	62	327	534	2,672	5,996
1982	Average	65	482	685	175	112	456	50	316	627	2,968	5,113
1983	January	68 92	534	849	228	73	314	40 50	299	621	3,026	4,438
	February March	92 86	586 488	722 775	183 187	81 78	193 240	43	192 162	558 565	2,658 2,624	3,726 3,690
	April	174	466 454	981	216	85	421	20	183	759	2,024 3,295	4,727
	May	135	518	944	153	108	484	42	235	699	3,318	5,089
	June	137	586	830	173	120	440	48	262	757	3,353	5,326
	July	69	634	849	198	107	369	37	364	864	3,490	5,741
	August	144	542	906	197	90	461	40	313	738	3,431	6,159
	September	148	533	849	261	82	475	33	307	845	3,534	6,129
	October	171	532	771	172	106	414	48	357	580	3,151	5,258
	November	148	556	726	144	110	334	55	427	801	3,300	5,210
	December	127	604	710	153	113	429	22	278	628	3,063	5,033
	Average	125	547	826	189	96	382	40	282	701	3,189	5,051
1984	January	159	635	710	279	54	382	53	390	804	3,465	5,430
	February	156	620	748	289	77	344	58	418	1,087	3,797	5,693
	March	90	694	716	169	93	434	34	248	1,013	3,490	5,301
	April	95	705	869	207	91	282	37	257	869	3,410	5,372
	May	31 52	722 506	676 754	192 234	57	429 345	38 53	336 268	819 939	3,302	5,979
	June July	14	506	754	234	104 120	345	27	200	939 934	3,255 3,166	5,482 5,407
	August	57	547	640	206	98	388	34	236	829	3,035	5,044
	September	98	550	780	133	103	490	38	250	808	3,249	5,252
	October	151	682	827	112	122	486	37	321	979	3,717	5,779
	November	88	640	841	181	115	544	44	283	897	3,633	5,587
	December	75	675	686	161	98	337	46	235	855	3,168	4,933
	Average	88	630	748	188	94	402	42	294	902·	3,388	5,437
1985	January	90	610	765	125	113	345	32	235	695	3,009	4,376
	February	37	730	649	39	119	150	50	213	702	2,688	3,921
	March	32	900	921	52	137	141	29	235	730	3,177	4,689
	April	0	880	950	18	107	214	42	205	937	3,353	5,252
	May	66	796	959	22	126	419	37	252	1,088	3,765	5,718
	June	21	716	712	30	92	481	23	271	848	3,195	4,877
	July	36	610	813	26	133	323	14	236	912	3,104	4,921
	August	19	679	859	18	121	336	28	241	673	2,975	4,682
	September	30 14	807	852	29 5	134	311	26 21	173 260	811	3,173	4,977
	October November	14	836 757	744 899	30	92 100	372 387	21 26	325	834 1,159	3,180 3,695	5,153 6,216
	December	45	893	644	29	96	273	12	314	994	3,300	5,689
	Average	34	768	815	35	114	314	28	247	866	3,221	5,045
	21010B0	~~					~ 1 7			~~~	<b>U</b> ,221	0,040

Imports from Non-OPEC Sources<sup>4</sup>

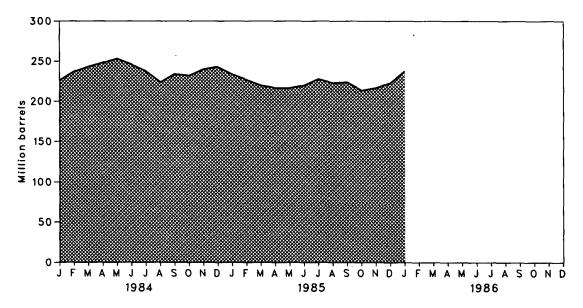
Footnotes continued. Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as petroleum products that were refined from crude oil produced in OPEC countries. (s) = Less than 500 barrels per day. Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. • Beginning in October 1977, Strategic Petroleum Reserve imports are included. Sources: • See the last page of this section.

### Finished Motor Gasoline Supply and Disposition



Products Supplied, Total Production, and Imports

**Ending Stocks** 



: 1.1

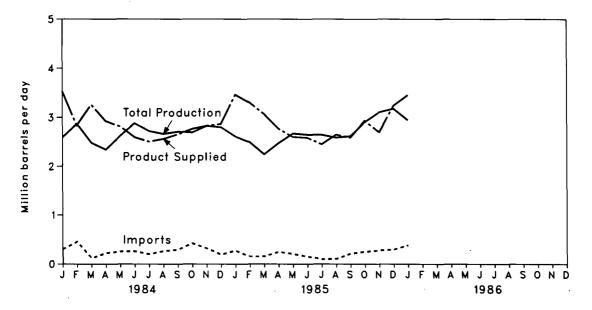
#### **Finished Motor Gasoline Supply and Disposition**

		Supply				Dis		Ending Stocks <sup>1</sup>		
		Total				P	roduct Suppl	led	Total	Finished
		Total Production	Imports <sup>2</sup>	Stock Withdrawal <sup>2</sup> <sup>3</sup>	Exports	Total	Unleaded*	Unleaded Percent	Motor Gasoline <sup>s</sup>	Motor Gasoline
				Thousan	d barrels per	r day		of Total	Million	barrels
1973	Average	6,535	134	9	4	6,674			209	
1974	Average	6,360	204	-24	2	6,537			•218	
1975	Average	6,520	184	•-28	2	6,675			235	
1976	Average	6,841	131	10	3	6,978			231	
1977	Average	7,033	217	-72	2	7,177	1,976	27.5	258	
1978	Average	7,169	190	54	1	7,412	2,521	34.0	238	
1979	Average	6,852	181	2	(S)	7,034	2,798	39.8	237	
1980	Average	6,506	140	-66	1	6,579	3,067	46.6	•261	
1981	Average <sup>7</sup>	6,405	157	•28	2	6,588	3,264	49.5	253	
1982		6,338	197	25	20	6,539	3,409	52.1	•235	
	Average	-		-		-				
1983	January	6,065	153	°-167	(S)	6,051	3,364	55.6	250	207
	February	5,848	128	24	(s)	6,000	3,264	54.4	250	207
	March	5,906	186	768	23	6,836	3,622	53.0	223	183
	April	6,201	255	-3	1 1	6,452	3,492	54.1 53.8	221 223	183 185
	May	6,397	305 277	-83 84	22	6,617 6,994	3,558 3,792	53.8 54.2	223	183
	June July	6,655 6,707	302	-225	18	6,765	3,746	55.4	223	190
	August	6,537	250	-225	13	6,936	3,836	55.3	226	185
	September	6,611	279	-149	14	6,727	3,691	54.9	229	189
	October	6,188	330	72	2	6,588	3,711	56.3	227	187
	November	6,634	269	-298	2	6,603	3,692	55.9	236	196
	December	6,308	224	339	25	6,846	3,966	57.9	222	186
	Average	6,340	247	45	10	6,622	3,647	55.1		
1984	January	6,036	231	-1	1	6,265	3,605	57.5	226	186
	February	6,317	299	-383	2	6,231	3,585	57.5	237	197
	March	6,359	355	-176	9	6,528	3,750	57.4	243	202
	April	6,525	319	-167	(s)	6,676	3,857	57.8	248	207
	May	6,650	346	-105	(s)	6,890	4,004	58.1	253	210
	June	6,619	296	209	17	7,107	4,214	59.3	246	204
	July	6,450	247	142	9	6,830	4,057	59.4	238	200
	August	6,405	242	447	1	7,093	4,283	60.4	224	186
	September	6,516	349	-275	2	6,588	3,973	60.3	234	194
	October	6,388	308	34	1	6,729	4,093	60.8	232	193
	November	6,709	286	-183	11	6,800	4,245	62.4 63.6	240 243	199 205
	December	6,478 6,452	308	-215	16	6,555	4,168		243	205
	Average	6,453	299	-54	6	6,693	3,987	59.6		
1985	January	5,889	204	245	2	6,336	4,026	63.5	234	198
	February	5,900	347	277	2	6,521	4,048	62.1	227	190
	March	6,041	473	118	3	6,629	4,189	63.2	220	186
	April	6,322	475	145	11	6,931	4,377	63.1	217	182
	May	6,533	487	25	8	7,036	4,422	62.8	217	181
	June	6,766 6,762	384	-168 -174	7	6,975 6,997	4,456 4,536	63.9 64.8	220 228	186 192
	July	6,763 6,810	426 302	-174 129	18 4	6,997 7,236	4,536 4,753	65.7	228	188
	August September	6,810 6,315	313	16	6	6,639	4,755 4,374	65.9	223	187
	October	6,350	323	261	19	6,914	4,488	64.9	214	179
	November	6,476	418	-88	17	6,790	4,490	66.1	217	182
	December	6,649	379	-259	18	6,752	4,548	67.4	:223	190
	Average	6,404	378	43	10	6,815	4,395			
1986	January†	6,577	307	-294	NA	6,572	NA	NA	238	199
				•						

<sup>1</sup>Stocks are totals as of end of period. <sup>2</sup>Beginning in 1981, excludes blending components. <sup>3</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.

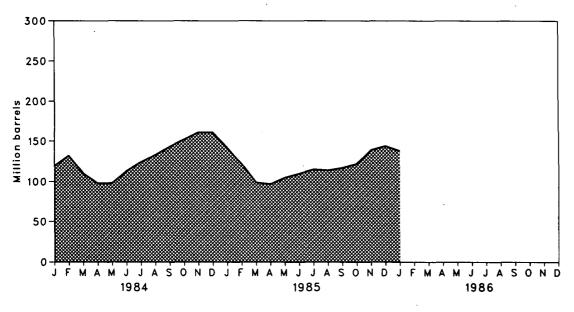
A negative number indicates an increase in stocks and a positive number indicates a decrease.
Includes gasohol.
Includes motor gasoline blending components.
In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Note 5 on the last page of this section.
Beginning in January 1981, survey forms were modified. See Note 2 on the last page of this section.
Italics denote estimates based upon preliminary data. NA = Not available. (s) = Less than 500 barrels per day.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

### Distillate Fuel Oil Supply and Disposition



Product Supplied, Total Production, and Imports





#### **Distillate Fuel Oil Supply and Disposition**

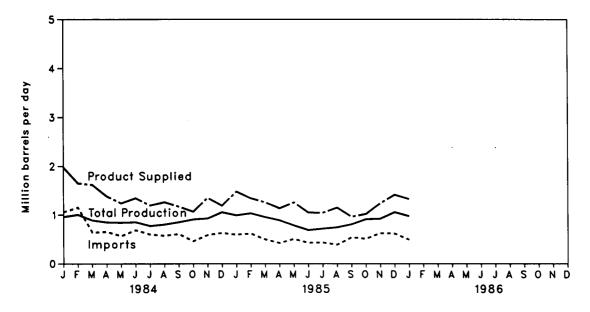
			Sup	ply		Dispo	sition	Ending Stocks <sup>1</sup>	
		Total Production	Imports	Stock Withdrawal <sup>2</sup>	Crude Used Directly <sup>3</sup>	Exports	Product Supplied <sup>3</sup>		
				Thousand ba	arreis per day			Million barrels	
1973	Average	2,822	392	-115	2	9	3,092	196	
1974	Average	2,669	289	-9	2	2	2,948	<b>•200</b>	
1975	Average	2,654	155	•40	2	1	2,851	209	
1976	Average	2,924	146	62	1	1	3,133	186	
1977	Average	3,278	250	-176	1	1	3,352	250	
1978	Average	3,167	173	93	1	3	3,432	216	
1979	Average	3,153	193	-34	1	3	3,311	229	
1980	Average	2,662	142	64	1	3	2,866	+205	
1981	Average <sup>5</sup>	2,613	173	•38	10	5	2,829	192	
1982	Average	2,606	93	35	10	74	2,671	4179	
		•							
1983	January	2,321	68	<b>1</b> 580	NA	173	2,797	168	
	February	2,135	59	691	NA	105	2,780	148	
	March	1,993	42	971	NA	59	2,947	118	
	April	2,171	73	500	NA	47	2,697	103	
	May	2,444	147	-186	NA	50	2,354	109	
	June	2,546	179 267	-161 -546	NA NA	40 55	2,524 2,270	114 131	
	July	2,604 2,615	301	-546 -379	NA	43	2,270	142	
	August September	2,739	259	-379	NA	43 37	2,495	154	
	October	2,681	260	-276	NA	55	2,611	163	
	November	2,680	203	45	NA	54	2,874	161	
	December	2,522	221	676	NA	54	3,365	140	
	Average	2,456	174	124	NA	64	2,690		
1984	January	2,591	299	676	NA	40	3,525	119	
	February	2,867	454	-446	NA	41	2,834	132	
	March	2,479	115	731	NA	66	3,259	110	
	April	2,342	220	396	NA	32	2,926	98	
	May	2,624	253	-15	NA	48	2,814	98	
	June	2,880	256	-490	NA	53	2,593	113	
	July	2,719	199	-373	NA	40	2,504	124	
	August	2,661	259	-287	NA	74	2,559	133	
	September	2,707	291	-321	NA	22	2,654	143	
	October	2,691	421	-300	NA	47	2,765	152	
	November	2,826	316	-291	NA	24	2,827	161	
	December Average	2,798 <b>2,681</b>	190 <b>272</b>	-3 <b>-57</b>	NA NA	120 <b>51</b>	2,865 <b>2,845</b>	161	
1985		2,608	271	624	NA	41	3,462	142	
1903	January February	2,491	148	724	NA	64	3,299	122	
	March	2,244	153	715	NA	44	3,069	99	
	April	2,474	244	75	NA	27	2,767	97	
	May	2,670	203	-243	NA	31	2,600	105	
	June	2,645	147	-177	NA	30	2,584	110	
	July	2,644	95	-177	NA	112	2,450	115	
	August	2,587	101	58	NA	100	2,646	114	
	September	2,614	208	-115	NA	121	2,586	117	
	October	2,902	247	-149	NA	67	2,932	122	
	November	3,101	272	-585	NA	92	2,696	139	
	December	3,176	291	-150	NA	81	3,236	.144	
	Average	2,681	199	47	NA	67	2,859		
1986	January†	2,946	383	205	NA	NA	3,455	138	

Stocks are totals as of end of period.

\*A negative number indicates an increase in stocks and a positive number indicates a decrease. \*Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Note 4 on the last page of this section.

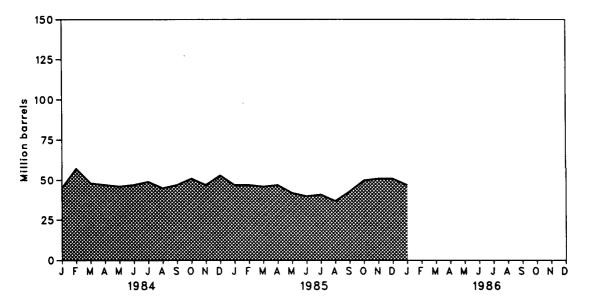
this section. In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calcula-tions. See Note 5 on the last page of this section. Beginning in January 1981, survey forms were modified. See Note 2 on the last page of this section. †Italics denote estimates based upon preliminary data. NA = Not available. Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Sources: • See the last page of this section.

### **Residual Fuel Oil Supply and Disposition**





#### **Ending Stocks**



#### **Residual Fuel Oil Supply and Disposition**

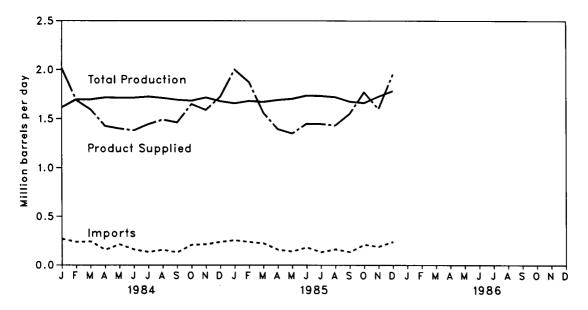
			Sup	ply		Dispo	sition	Ending Stocks <sup>1</sup>
		Total Production	Imports	Stock Withdrawal <sup>2</sup>	Crude Used Directly <sup>3</sup>	Exports	Product Supplied <sup>3</sup>	
				Thousand ba	rrels per day			Million barrels
1973	Average	971	1,853	5	17	23	2,822	53
1974	Average	1,070	1,587	-17	13	14	2,639	460
1975	Average	1,235	1,223	12	15	15	2,462	74
1976	Average	1,377	1,413	5	17	12	2,801	72
1977	Average	1,754	1,359	-48	13	6	3,071	90
1978	Average	1,667	1,355	-1	13	13	3,023	90
1979	Average	1,687	1,151	-15	12	9	2,826	96
1980	Average	1,580	939	10	12	33	2,508	492
1981	Average <sup>5</sup>	1,321	800	•37	48	118	2,088	78
1982	Average	1,070	776	32	48	209	1,716	466
1983	January	972	691	<b>*258</b>	NA	294	1,626	61
1000	February	857	647	257 ·	NA	191	1,570	53
	March	835	686	227	NA	169	1,579	46
	April	941	753	-10	NA	310	1,374	47
	May	936	738	-141	NA	190	1,342	51
	June	828	677	36	NA	218	1,323	50
	July	769	684	-64	NA	90	1,299	52
	August	710	739	. 115	NA	165	1,400	48
	September October	826 807	706 638	-47 -50	NA NA	134 153	1,351 1,243	50 51
	November	845	780	-97	NA	167	1,362	54
	December	897	649	182	NA	141	1,587	49
	Average	852	699	55	NA	185	1,421	
1984	January	961	1,059	110	NA	151	1,979	45
	February	1,003	1,151	-416	NA	87	1,651	57
	March	889	636	298	NA	204	1,619	48
	April	847	651	15	NA	130	1,384	47
	May	840	565	32	NA	200	1,237	46
	June	849	685 597	-15 -76	NA NA	176 99	1,344	47 49
	July August	770 800	597	-78 149	NA	260	1,192 1,261	49 45
	September	850	606	-74	NA	214	1,168	47
	October	907	461	-127	NA	174	1,066	51
	November	928	585	125	NA	286	1,352	47
	December	1,053	627	-193	NA	299	1,189	53
	Average	891	681	-12	NA	190	1,369	
1985	January	991	594	208	NA	312	1,481	47
	February	1,031	614	-7	NA	295	1,343	47
	March	954	496	22	NA	216	1,256	46
	April	888	422	-11	NA	167	1,133	47
	May	780 686	505 426	156 53	NA NA	185 118	1,255 1,047	42 40
	June July	686 714	426 431	-20	NA NA	83	1,047	40 41
	August	741	386	125	NA	106	1,146	37
	September	804	537	-193	NA	188	961	43
	October	912	509	-221	NA	184	1,017	50
	November	922	623	-33	NA	275	1,237	51
	December	1,055	613	-2	NA	250	1,416	:51
	Average	873	512	7	NA	197	1,194	
1986	January†	975	491	<i>89</i>	NA	NA	1,327	47

 Stocks are totals as of end of period.
 A negative number indicates an increase in stocks and a positive number indicates a decrease.
 Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Note 4 on the last page of this section.

In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Note 5 on the last page of this section.
 Beginning in January 1981, survey forms were modified. See Note 2 on the last page of this section.

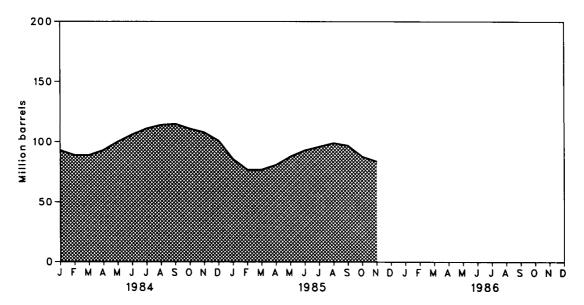
Halics denote estimates based upon preliminary data. NA = Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

### Liquefled Petroleum Gases Supply and Disposition



Product Supplied, Total Production, and Imports

#### Ending Stocks



#### Liquefied Petroleum Gases<sup>1</sup> Supply and Disposition

		Supply				Ending Stocks <sup>2</sup>		
		Total Production	Imports	Stock Withdrawal <sup>3</sup>	Refinery Inputs	Exports	Product Supplied	
				Thousand bar	rels per day	Million barrels		
1973	Average	1,600	132	-35	220	27	1,449	99
1974	Average	1,565	123	-38	220	25	1,406	•113
1975	Average	1,527	112	<b>-35</b>	246	26	1,333	125
1976	Average	1,535	130	24	260	25	1,404	116
1977	Average	1,566	161	-55	233	18	1,422	136
1978	Average	1,537	123	12	239	20	1,413	132
1979	Average	1,556	217	70	236	15	1,592	111
1980	Average	1,535	216	-27	233	21	1,469	•120
1981	Average	1,571	244	-18	289	42	1,466	135
1982	Average	1,528	226	111	300	65	1,499	494
1983	January	1,611	240	•520	313	118	1,939	86
	February	1,600	305	128	244	76	1,713	82
	March	1,543	166	-9	197	127	1,377	82
	April	1,607	124	-156	198	116	1,260	87
	May	1,613	167	-225	207	84	1,263	94
	June	1,664	172	-334	203	5 <del>9</del>	1,241	104
	July	1,656	191	-221	217	55	1,354	111
	August	1,586	160	-199	229	29	1,289	117
	September	1,705	178	-30	236	86	1,531	118
	October	1,688	160	-81	268	32	1,467	120
	November December	1,785 1,645	180 247	70 575	362 363	33 66	1,640 2,038	118 •101
	Average	1,642	190	4	253	73	1,509	101
4004	•	-						00
1984	January February	1,615 1,696	269 237	•494 122	340 324	23 41	2,015 1,690	93 89
	March	1,696	237	12	288	68	1,593	89
	April	1,716	155	-139	253	54	1,426	93
	May	1,714	211	-240	244	42	1,399	100
	June	1,714	158	-201	237	53	1,380	106
	July	1,725	132	-139	232	43	1,444	111
	August	1,711	154	-100	241	34	1,490	114
	September	1,693	128	-50	283	26	1,462	115
	October	1,684	207	138	322	56	1,650	111
	November	1,716	212	89	376	52	1,588	108
	December	1,679	237	239	349	82	1,724	101
	Average	1,697	195	19	291	48	1,572	
1985	January	1,658	255	466	309	70	2,001	86
	February	1,682	237	338	313	72	1,872	77
	March	1,672	223	-13	270	52	1,560	77
	April	1,691 1,703	156 138	-115 -217	260 235	78 40	1,394 1,349	81 88
	May June	1,736	138	-217	235	40 51	1,449	93
	July	1,733	131	-107	244	68	1,447	96
	August	1,721	161	-103	267	80	1,432	99
	September	1,675	132	84	311	29	1,551	97
	October	1,661	209	270	322	47	1,770	88
	November	1,727	188	135	360	88	1,600	84
	December	1,783	239	374	367	75	1,953	73
	Average	1,704	187	77	292	62	1,614	

<sup>1</sup>Includes ethane, propane, normal butane, and isobutane.
<sup>3</sup>Stocks are totals as of end of period.
<sup>3</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.
<sup>4</sup>In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Note 5 on the last page of this section.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

#### Other Petroleum Products<sup>1</sup> Supply and Disposition

		Supply				Ending Stocks <sup>2</sup>		
		Total Production	Imports	Stock Withdrawal <sup>3</sup>	Refinery Inputs	Exports	Product Supplied	<u> </u>
				Thousand bar	rels per day	Million barrels		
1973	Average	3,693	502	-9	750	166	3,270	208
1974	Average	3,558	432	-28	665	174	3,123	<b>*218</b>
1975	Average	3,424	277	1-2	537	160	3,002	219
1976	Average	3,643	206	-5	524	175	3,145	220
1977	Average	3,912	205	-27	514	165	3,410	230
1978	Average	4,046	166	14	492	167	3,568	225
1979	Average	4,153	195	-37	352	209	3,749	238
1980	Average	3,956	210	-23	311	198	3,634	1247
1981	Average	3,739	226	•46	723	199	3,088	282
1982	Average	3,453	334	80	787	211	2,869	1253
1983		3,194	322	4-419	588	271		
1903	January February	3,194	322	12	673	271	2,239	271
	March	3,381	319	-147	572	232	2,658 2,732	270 275
	April	3,299	404	-24	592	243	2,840	275
	May	3,405	374	35	705	242	2,866	275
	June	3,610	444	96	717	292	3,144	272
	July	3,636	425	148	735	209	3,265	267
	August	3,695	482	30	668	242	3,297	266
	September	3,792	497	-6	788	236	3,255	266
	October	3,578	424	-107	711	195	2,990	270
	November	3,568	441	95	912	238	2,957	267
	December	3,123	479	361	883	257	2,823	*256
	Average	3,460	411	6	712	242	2,923	
1984	January	3,376	517	<b>•-163</b>	570	207	2,953	253
	February	3,595	602	-250	754	225	2,966	261
	March	3,512	485	-227	527	258	2,988	268
	April	3,584	610	-211	623	268	3,092	274
	May	3,683	662	-105	764	257	3,218	277
	June	3,869	541 587	391	1,232	343	3,223	265
	July August	3,864 3,848	569	277 41	1,022 637	238 172	3,467 3,650	257 256
	September	3,848	536	-50	699	238	3,308	256
	October	3,585	632	-30	709	180	3,336	257
	November	3,532	606	81	945	279	2,997	254
	December	3,379	434	464	1,016	284	2,977	240
	Average	3,632	565	23	791	245	3,183	
1985	January	3,258	352	-102	494	223	2,792	243
	February	3,385	449	-99	658	204	2,874	246
	March	3,436	536	-415	627	190	2,739	259
	April	3,570	553	-49	776	245	3,054	. 260
	May	3,677	661	-106	883	191	3,158	264
	June	3,927	564	87	878	261	3,439	261
	July	3,998	649	31	910	241	3,525	260
	August	4,078	622	335	1,292	218	3,523	250
	September	3,874	574	-1	846	274	3,323	250
	October November	3,800 3,815	541 610	9 -177	867 939	250 277	3,234 3,029	249 255
	December	3,663	527	253	939 1,020	305	3,029 3,121	255 247
	Average	3,883 3,708	554	-19	851	240	3,153	641
	Average	5,700	554	-13	001	240	0,100	

<sup>1</sup>Includes pentanes plus, other hydrocarbons and alcohol, unfinished oil, gasoline blending components, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.
<sup>3</sup>Stocks are totals as of end of period.
<sup>3</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.
<sup>4</sup>In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Note 5 on the last page of this section.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding. Sources: • See the last page of this section.

### Notes and Sources for the Petroleum Section

#### Notes

1. During 1981 the listing (frame) of operators of all facilities required to complete each monthly survey was updated. The refinery frame was found to be complete and accurate, although the frames for bulk terminals, pipelines, and crude oil stocks facilities were found to be outdated. A variety of sources (published directories, listings, and exploratory surveys) were researched for potential new respondents. As a result of this research, a significant number of respondents were added to the frames. The increase in the respondents for the frames affects the stocks of crude oil and petroleum products. For further details, see the Energy Information Administration (EIA), Petroleum Supply Monthly

2. Research conducted by the EIA in the latter half of 1980 indicated changes had taken place in the petroleum industry that were not being adequately reflected in the EIA survey forms. First, the flows of unfinished oils and the redesignation of finished products were not being accurately de-scribed on the EIA survey forms. Second, a substantial amount of motor gasoline was being produced at non-refinery "downstream blending stations" but was not being reported. Although empirical information is not available to precisely measure the historical effects, estimates of the magnitude of the differences in the major series affected are shown in the EIA, *Petroleum Supply Monthly*. Beginning in January 1981, the EIA modified its survey forms, changed definitions of gasoline (motor and aviation), and added the non-refinery blenders previously not reported.

3. Motor Gasoline: Beginning in January 1981, the EIA expanded its universe to include non-refinery blenders; redefined motor gasoline into two categories (finished leaded and finished unleaded); and separated blending components from finished motor gasoline as a reporting category. Also, survey forms were modified to describe refinery operations more accurately. For further details, see the EIA, *Petroleum Supply Monthly*.

4. Distillate and Residual Fuel Oils: The requirement to report crude oil burned on leases and pipelines as either distillate or residual fuel oil has been eliminated. Prior to January 1981, the refinery input of unfinished oils number typically exceeded the number for available supply of unfin-ished oils. This was assumed to be due to the redesignation of distillate and residual fuel oils received as such, but used as an unfinished oil input by the receiving refinery. This imbalance between supply and disposition of unfinished oils would then be subtracted from the production of distillate and residual fuel oils. Two-thirds of this difference was subtracted from distillate and one-third from residual. Beginning in January 1981, the EIA modified its survey forms to account for redesignated product and discontinued the above-mentioned adjustment. For further details, see the EIA, Petroleum Supply Monthly.

5. New Stock Basis: In January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock withdrawal calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been: • Crude Oil: 1982—645 (Total) and 351 (Other Primary)

Crude Oil and Petroleum Products: 1974-1,121; 1980-

1,420; and 1982-1,462. Motor Gasoline: 1974--225; 1980-263; 1982-244 (To-

tal) and 203 (Finished). • Distillate Fuel Oil: 1974–224; 1980–205; and 1982– 186

• Residual Fuel Oil: 1974-75; 1980-91; and 1982-68.

Liquefied Petroleum Gases: 1974-113;1980-128; and 1982-103.

 Other Petroleum Products: 1974—220; 1980—249; and 1982-259.

 Stock withdrawal calculations beginning in 1975, 1981, and 1983, were made using new basis stock levels.

In January 1984, changes were made in the reporting of natural gas liquids. As a result, unfractionated stream, which was formerly included in "Other Petroleum Products Supply and Disposition" table, is now reported on a component basis (ethane, propane, normal butane, isobutane and pen-tanes plus). Most of these stocks will now appear in the "Liquefied Petroleum Gases Supply and Disposition" table. This change will affect stocks reported and stock withdraw-als in each table. Under new basis, end-of-year 1983 stocks, in million barrels would have been:
Liquefied Petroleum Gases: 1983—108.
Other Petroleum Products: 1983—248.

6. Stocks of Alaskan crude oil in transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock withdrawal calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Other Primary).

#### Sources

• 1973 through 1976: U.S. Department of the Interior, Statement, Annual" and "PAD Districts Supply/Demand, "Petroleum

Annual." • 1977 through 1980: Energy Information Administration (EIA), Energy Data Reports, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual" and unleaded gasoline data from Monthly Petroleum Statistics Report. • January 1981 through December 1984: EIA, Petroleum Supply Annual. • January 1985 through December 1985: Detailed statistics

 January 1985 through December 1985: Detailed statistics in appropriate issues of the Petroleum Supply Monthly (except domestic crude oil production).

January 1986: Estimates based on EIA weekly data (except domestic crude oil production).

January 1985 through January 1986: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey.

Total dry natural gas production in the United States during January 1986 was an estimated 1.5 trillion cubic feet. This was 6.9 percent less than in January 1985.

Consumption of natural and supplemental gas in January 1986 was an estimated 1.9 trillion cubic feet. This was 15.2 percent lower than in January 1985.

Deliveries to residential consumers during December 1985 (latest data available) were 627 billion cubic feet, 10.8 percent higher than in December 1984. Consumption by residential users during 1985 totaled 4.4 trillion cubic feet, 3.1 percent lower than in the previous year. Total deliveries to industrial consumers during December 1985 were an estimated 720 billion cubic feet. This was 16.5 percent higher than in December 1984. Estimated consumption by industrial users during 1985 totaled 5.8 trillion cubic feet, 5.2 percent below the 1984 level.

Imports of natural gas in January 1986 were an estimated 97 billion cubic feet, 6.7 percent lower than in the previous January. There were no imports of Algerian liquefied natural gas (LNG) during January 1986.

Stocks of working gas\* in underground natural gas storage reservoirs at the end of January 1986 totaled 2,213 billion cubic feet. This was 1.3 percent below stocks available a year earlier. Net withdrawals from storage during January 1986 were 395 billion cubic feet, 36.6 percent less than during the previous January.

\*Gas available for withdrawal.

### **Production Summary**

		Gross Wet Gas Withdrawals <sup>1</sup>	Used for Repressuring <sup>2</sup>	Nonhydro- carbon Gas Removed <sup>3</sup>	Vented and Flared	Marketed Production (Wet)*	Extraction Loss <sup>3</sup>	Total Dry Gas Production⁵
				1	Billion cubic fe	et .		
1973	Total	24,067	1.171	NA	248	°22.648	917	<b>*21,731</b>
1974	Total	22,850	1.080	NA	169	°21,601	887	°20,713
1975	Total	21,104	861	NA	134	<sup>6</sup> 20,109	872	*19,236
1976	Total	20,944	859	NA	132	°19,952	854	*19,098
1977	Total	21,097	935	NA	137	°20,025	863	•19,163
1978	Total	21,309	1,181	NA	153	°19,974	852	°19,122
1978	Total	21,883	1,245	NA	167	°20,471	808	°19,663
1979	Total	21,800	1,365	199	125	20,180	777	19,403
1980	Total	21,587	1,312	222	98	19,956	775	19,181
1981			1,388	208	93	18,520	762	17,758
	Total	20,210	-					
1983	January	1,688	125	20	7	1,536	72	1,464
	February	1,488	111	17	7	1,353	64 66	1,289
	March	1,552	125 123	18 16	8 8	1,401 1,323	62	1,335 1,261
	April May	1,470 1,467	114	17	9	1,328	62	1,266
	June	1,415	121	19	7	1,268	60	1,208
	July	1,502	128	18	8	1,348	63	1,285
	August	1,555	127	20	8	1,400	66	1,334
	September	1,514	123	19	8	1,364	64	1,300
	October	1,591	125	18	8	1,440	68	1,372
	November	1,602	117	19	9	1,457	68	1,389
	December	1,753	119	21	8	1,605	75	1,530
	Total	18,597	1,458	222	95	16,822	790	16,033
1984	January	1,887	135	21	9	1,723	79	1,644
	February	1,650	127	17	8	1,497	69	1,428
	March	1,693	125	19	9	1,540	71 69	1,469
	April	1,666 1,668	132 138	18 19	9 9	1,507 1,503	69	1,438 1,434
	May June	1,619	135	18	9	1,456	67	1,389
	July	1,676	135	20	10	1,509	69	1,440
	August	1,653	137	19	9	1,487	68	1,419
	September	1,574	132	16	9	1,417	65	1,352
	October	1,661	143	19	9	1,490	69	1,421
	November	1,656	142	17	10	1,487	68	1,419
	December	1,789	146	21	8	1,613	74	1,539
	Total	20,192	1,630	224	108	18,230	838	17,392
1985	January	1,788	124	20	7	1,637	75	1,562
	February	1,635	122	18	6	1,489	68	1,421
	March	1,651	137	19	6	1,490	69	1,421
	April	1,563	137	18	6	1,401	64	1,337
	May	R1,545	133	19	7	R1,386	64	R1,322
	June July	R1,487 R1,531	126 133	17 20	6 7	R1,336 R1,370	61 63	R1,275 R1,307
	August	R1,520	R127	19	7	R1,367	R63	R1,304
	September	R1,503	R133	R17	RÓ	R1.348	R62	R1,286
	October	R1,553	R132	R19	R6	R1,396	R64	R1,332
	November	R1,565	R136	20	7	R1,402	R64	R1,338
	December	R1,722	R149	R21	R7	R1,545	R71	R1,474
	Total	R 19,063	R1,589	R227	R78	R 17, 167	R788	R 16,379
1986	January	1,699	147	21	7	1,524	70	1,454

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<sup>1</sup>Gas withdrawn from gas and oil wells.
<sup>2</sup>Gas returned to formations for repressuring, pressure maintenance, and cycling.
<sup>3</sup>For definitions and further explanations, see Notes on the last two pages of this section.
<sup>4</sup>Equal to gross withdrawals minus volumes used for repressuring, volumes of nonhydrocarbon gases removed, and volumes vented and flared. See Note 2 on the last two pages of this section for further explanation.
<sup>4</sup>Equal to marketed production (wet) minus extraction loss.
<sup>4</sup>May include unknown quantities of nonhydrocarbon gases.
R = Revised data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.

Totals may not equal sum of components due to independent rounding.
Italics denote estimated data. Data for 1973 through 1984 are final. All other data are preliminary unless otherwise indicated. Sources: • See the last page of this section.

#### Supply and Disposition of Natural Gas

		Supply					Disposition				
		Total Dry Gas Production	With- drawals from Storage <sup>1</sup>	Supple- mental Gaseous Fuels <sup>2</sup>	Imports <sup>2</sup>	- Total Supply/ Disposition <sup>3</sup>	Additions to Storage <sup>1</sup>	Exports <sup>2</sup>	Consump- tion <sup>2</sup>	Un- accounted for <sup>s</sup>	
					E	Billion cubic fee	t				
1973	Total	<b>•</b> 21,731	1,533	NA	1,033	24,297	1,974	77	22,049	196	
1974	Total	<b>•20,713</b>	1,701	NA	959	23,373	1,784	77	21,223	28 <del>9</del>	
1975	Totai	<b>19,236</b>	1,760	NA	953	21,949	2,104	73	19,538	235	
1976	Total	19,098	1,921	NA	964	21,983	1,756	65	19,946	216	
1977	Total	+19,163	1,750	NA	1,011	21,924	2,307	56	19,521	41	
1978	Total	•19,122	2,158	NA	966	22,245	2,278	53	19,627	287	
1979	Total	19,663	2,047	NA	1,253	22,964	2,295	56	20,241	372	
1980	Total	19,403	1,972	155	985	22,515	1,949	49	19,877	640	
1981	Total	19,181	1,930	176	904	22,191	2,228	59	19,404	501	
1982	Total	17,758	2,164	145	933	21,000	2,472	52	18,001	475	
1983	January	1,464	474	15	112	2,065	26	5	1,975	59	
	February	1,289	341	13	95	1,738	39	5	1,642	52	
	March	1,335	280	12	86	1,713	63	5	1,591	54	
	April	1,261	171	11	74	1,517	88	5	1,373	51	
	May	1,266	43	9	61	1,379	205	5	1,118	51	
	June	1,208	23	8	59	1,298	273	3	974	48	
	July	1,285	26	8	58	1,377	287	5	1,034	51	
	August	1,334	37	9	56	1,436	265 277	6	1,112	53 52	
	September	1,300	28 42	9 10	67 64	1,404 1,488	183	4 4	1,071 1,246	52 55	
	October November	1,372 1,389	169	12	80	1,650	86	5	1,503	56	
	December	1,530	634	17	107	2,288	31	5	2,191	61	
	Total	16,033	2,270	132	920	19,354	1,822	55	16,835	5642	
1984	January	1,644	580	13	97	2,334	55	5	2,260	14	
	February	1,428	310	10	69	1,817	61	5	1,739	12	
	March	1,469	371	10	69	1,919	49	6	1,851	13	
	April	1,438	102	8	71	1,619	147	5	1,456	11	
	May	1,434	31	7	66	1,538	259	5	1,264	10	
	June	1,389	28	7	59	1,483	329	3	1,140	11 12	
	July	1,440	29 31	7 8	55 54	1,531 1,512	353 324	5 5	1,161 1,172	11	
	August September	1,419 1,352	31	8	54 57	1,448	295	5	1,138	10	
	October	1,421	48	8	67	1,544	233	5	1,282	10	
	November	1,419	231	11	84	1,745	85	5	1,644	11	
	December	1,539	309	13	94	1,955	94	5	1,844	12	
	Total	17,392	2,098	110	843	20,443	2,295	55	17,951	°143	
1985	January	1,562	659	16	104	2,341	35	5	2,264	37	
	February	1,421	437	14	98	1,970	48	4	1,884	34	
	March	1,421	213	13	89	1,736	97	4	1,601	34	
	April	1,337	94	10	75	1,516	207	5	1,272	32	
	May	R1,322	25	8	70	R1,425	300	5	R1,088	32	
	June	R1,275	33	10	63	R1,381	260	5	R1,085	31 P21	
	July	R1,307 R1,304	45 50	10 R10	60 R57	R1,422 R1,421	309 277	6 5	R1,076 R1,108	R31 R31	
	August September	R1,286	20	9	R60	R1,375	270	5 4	R1,070	31	
	October	R1,332	20 69	12	R70	R1,483	197	4	R1,250	R32	
	November	R1,338	201	10	R76	R1,625	93	4	R1,496	R32	
	December	R1,474	526	R12	R105	R2,117	43	4	R2,035	R35	
	Total	16,379	2,373	136	R927	R19,812	2,135	55	R17,229	R392	
1986	January	1,454	447	15	97	2,013	52	5	1,921	35	

<sup>1</sup>Monthly and annual data for 1980 through 1984 include underground storage and liquefied natural gas storage. All other data include underground storage only. Computation procedures are discussed in Note 8 on the last two pages of this section. <sup>3</sup>For definitions and further explanations, see Notes on the last two pages of this section. <sup>3</sup>Data for 1978 through 1982 do not include intransit receipts and deliveries. <sup>4</sup>May include unknown quantities of nonhydrocarbon gases. <sup>5</sup>See Note 7 on the last two pages of this section. R=Revised data. NA=Not available. Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. • Italics denote estimated data. Data for 1973 through 1984 are final. All other data are preliminary unless otherwise indicated. Sources: • See the last page of this section.

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#### **Natural Gas<sup>1</sup>** Consumption

		Lease and Plant Fuel							
			Pipeline Fuel	Residential	Commercial <sup>2</sup>	Industrial	Electric Utilities	Total	- Total Consumption
					Billion	cubic feet			
1973	Totol	1,496	728	4,879	2,597	8,689	3,660	19,825	22,049
	Total Total	•	669	•		8,292	3,443	19,025	•
1974	Total	1,477		4,786	2,556				21,223
1975	Total	1,396	583	4,924	2,508	6,968	3,158	17,558	19,538
1976	Total	1,634	548	5,051	2,668	6,964	3,081	17,764	19,946
1977	Total	1,659	533	4,821	2,501	6,815	3,191	17,329	19,521
1978	Total	1,648	530	4,903	2,601	6,757	3,188	17,449	19,627
1979	Total	1,499	601	4,965	2,786	6,899	3,491	18,141	20,241
1980	Total	1,026	635	4,752	2,611	7,172	3,682	18,216	19,877
1981	Total	928	642	4,546	2,520	7,128	3,640	17,834	19,404
1982	Total	1,109	596	4,633	2,606	5,831	3,226	16,295	18,001
1983	January	89	57	718	366	537	208	1,829	1,975
	February	79	48	694	360	284	177	1,515	1,642
	March	81	46	541	285	430	208	1,464	1,591
	April	77	40	464	241	348	203	1,256	1,373
	May	77	33	277	151	362	218	1,008	1,118
	June	74	28	181	110	333	248	872	974
	July	78	30	134	100	378	314	926	1,034
	August	81	32	123	103	421	352	999 961	1,112
	September	79	31 36	128 179	105 119	429 577	299 251	1,126	1,071
	October November	84 85	36 44	330	185	645	251	1,120	1,246 1,503
	December	93	64	612	308	896	214	2,034	2,191
	Total	978	490	4,381	2,433	5,643	2,911	15,367	16,835
				•			•	•	
1984	January	102	67	R886	R437	R553	215	2,091	2,260
	February	88	51 55	R700 605	R354 311	R359 583	187 206	1,600 1,705	1,739
	March	91 89	55 43	805 R463	243	8398 R398	208	1,705	1,851 1,456
	April May	89	43 37	287	R160	R426	265	1,324	1,264
	June	86	34	170	R108	R444	298	1,020	1,140
	July	89	34	128	97	464	349	1,038	1,161
	August	88	35	R118	98	R483	350	1,049	1,172
	September	84	33	127	101	502	291	1,021	1,138
	October	88	38	183	128	575	270	1,156	1,282
	November	88	48	323	R193	R747	245	1,508	1,644
	December	95	54	R566	R294	R618	217	1,695	1,844
	Totai	1,077	529	4,555	2,524	6,153	3,111	16,345	17,951
1985	January	97	67	742	R370	R763	225	2,100	2,264
	February	88	55	836	R408	R296	201	1,741	1,884
	March	88	47	R566	289	R405	206	1,466	1,601
	April	83	37	397	R205	R317	233	1,152	1,272
	May	82	32	213	R130	R395	236	R974	R1,088
	June	79	32	157	R103	433	281	R974	R1,085
	July	81	32	130	97 B05	R401	335	R963 R994	R1,076
	August	R81	33 B21	119 B120	R95	R426 R457	354 273	R994 R959	R1,108 R1,070
	September October	R80 R83	R31 R37	R129 R189	R100 R125	R457 R568	273	R1,130	R1,250
	November	R83	R44	R306	R125	R650	230	R1,369	R1,496
	December	91	60	627	328	720	209	1,884	2,035
	Total	1,016	507	4,412	2,432	5,831	3,030	15,706	17,229
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<sup>1</sup>Includes supplemental gaseous fuels. <sup>2</sup>Includes deliveries to local, State, and Federal agencies engaged in nonmanufacturing activities.

R=Revised data.

Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Data for 1973 through December 1984 are final. All other data are preliminary unless otherwise indicated. Sources: • See the last page of this section.

#### **Underground Natural Gas Storage—All Operators**

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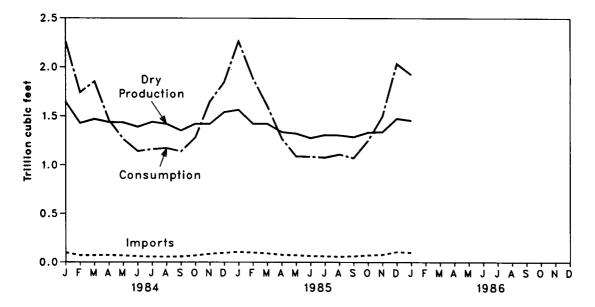
		Natural Gas in Underground Storage at End of Period		from San	Vorking Gas ne Period us Year	Storage Activity			
		Base Gas	Working Gas	Total <sup>1</sup>	Volume	Percent	Injections	Withdrawals	Net <sup>2</sup>
				Volumes in	billion cubic fee	t			
1973	Total	2,864	2,034	4,898	305	17.6	1,974	1,533	441
1974	Total	2,912	2,050	4,962	16	0.8	1,784	1,701	83
1975	Total	3,162	2,212	5,374	162	7.9	2,104	1,760	344
1976	Total	3,323	1,926	5,250	-286	-12.9	1,756	1,921	-165
1977	Total	3,391	2,475	5,866	549	28.5	2,307	1,750	557
1978	Total	3,473	2,547	6,020	72	2.9	2,278	2,158	120
1979	Total	3,553	2,753	6,306	207	8.1	2,295	2,047	248
1980	Total	3,642	2,655	6,297	-99	-3.6	1,896	1,910	-14
1981	Total	3,752	2,817	6,569	162	6.1	2,180	1,887	293
1982	Total	3,808	3,071	6,879	255	9.0	2,399	2,094	306
1983	January	3,813	2,644	6,457	462	21.2	24	449	-424
	February	3,811	2,356	6,167	569 544	31.9 33.9	36 59	325 266	-289 -207
	March	3,812	2,148	5,959 5,893	398	23.8	59 82	160	-207
	April May	3,818 3,818	2,074 2,222	5,893 6,041	188	23.8 9.3	191	40	151
	May June	3,819	2,222	6,272	85	3.6	255	22	234
	July	3,826	2,696	6,522	-8	-0.3	268	25	243
	August	3,823	2,908	6,732	-89	-3.0	247	35	212
	September	3,823	3,141	6,964	-110	-3.4	258	26	232
	October	3,825	3,270	7,095	-94	-2.8	171	40	131
	November	3,841	3,175	7,015	-134	-4.1	80	158	-78
	December	3,847	2,595	6,442	-476	-15.5	29	597	-567
	Total						1,700	2,142	-442
1984	January	3,847	2,091	5,937	-553	-20.9	54	571	-517
1904	February	3,828	1,876	5,704	-480	-20.4	60	305	-244
	March	3,824	1,572	5,396	-575	-26.8	48	365	-317
	April	3,822	1,620	5,442	-454	-21.9	144	100	44
	May	3,827	1,843	5,670	-379	-17.1	254	30	244
	June	3,828	2,141	5,969	-313	-12.7	323	27	296
	July	3,829	2,456	6,285	-239	-8.9	346	28	317
	August	3,829	2,740	6,569	-168	-5.8	318	30	288
	September	3,829	2,996	6,825	-144	-4.6	289	30	259
	October	3,837	3,175	7,011	-95	-2.9	242	47	195
	November	3,900	3,015	6,915	-160	-5.0	83	227	-145
	December	3,830	2,876	6,706	281	10.8	92	304	-213
	Total						2,252	2,064	188
1985	January	3,841	2,242	6,083	151	7.2	35	659	-623
	February	3,841	1,853	5,694	-23	-1.2	48	437	-389
	March	3,835	1,743	5,578	171	10.8	97	213	-116
	April	3,831	1,859	5,691	239	14.8	207	94	113
	May	3,837	2,129	5,965	286	15.5	300	25	275
	June	3,839	2,351	6,191	211	9.8	260	33	227
	July	3,849	2,605	6,454	149	6.1	309	45	264
	August	3,849	2,832	6,681	92	3.4	277	50	227
	September	3,849	3,082	6,931	85	2.9	270	20	250
	October November	3,851	3,207	7,059	33 72	1.0 2.4	197 93	69 201	128 -108
	December	3,847 3,842	3,087 2,609	6,934 6,451	-267	-9.3	93 43	526	-483
	Total	0,042	2,009	0,401	-201	-9.5	2,135	2,373	-483 -238
1986	January	3,842	2,213	6,055	-29	-1.3	52	447	-395

<sup>1</sup>Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1978--6,890; 1979--6,929; 1980--7,434; 1981--7,805; 1982--7,915; 1983--7,985; 1984--8,043; and 1985--8,087. Current total capacity is 8,086. <sup>2</sup>Positive numbers indicate injections are greater than withdrawals. Negative numbers indicate withdrawals are greater than injections. Net injections or withdrawals may not equal the difference between applicable ending stocks. See Note 8 on the last two pages of this section. Notes: • Geographic coverage is the 50 States and the District of Columbia.

Totals may not equal sum of components due to independent rounding.
Data for 1978 through 1984 are final. All other data are preliminary unless otherwise indicated.

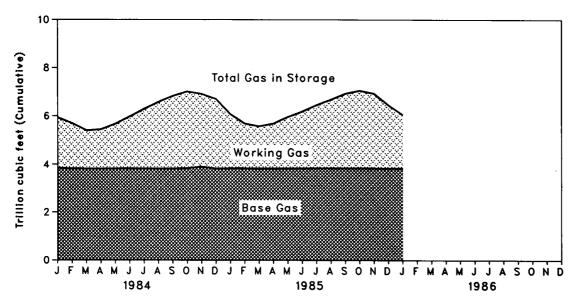
Sources: • See the last page of this section.

### Overview



**Consumption, Dry Production, and Imports** 





### Notes and Sources for the Natural Gas Section

#### Notes

1. Nonhydrocarbon Gases Removed: Annual data on nonhydrocarbon gases removed from marketed production-carbon dioxide, helium, hydrogen sulfide, and (EIA) Natural Gas Annual 1984. These data are not avail-(EIA) Natural Gas Annual 1994. These data are not avair-able for periods prior to 1980. For 1984, of the 32 producing States, 24 reported data on nonhydrocarbon gases remov-ed. These 24 States accounted for 57 percent of total 1984 gross withdrawals. In addition, gross withdrawals data from two States, which together accounted for 39 percent of the 1984 total production, did not include all or most of the nonhydrocarbon gases removed on leases. No estimates are made for the two States not reporting nonhydrocarbon gases removed. For further information, see the EIA Natural Gas Monthly.

Monthly data are reported by two States and computed for seven States. All monthly data are considered prelimi-nary until after publication of the EIA *Natural Gas Annual* for that year. For further information on methods of estimating preliminary monthly data, see the EIA Natural Gas Monthly.

Monthly data are revised and considered final after publication of the EIA Natural Gas Annual by proportionally allocating the differences between annual data published in the EIA Natural Gas Annual and the sum of the preliminary monthly data (January-December).

2. Production: Annual data. Final annual data are from the EIA Natural Gas Annual 1984.

Estimated Monthly Data. All data for the two most recent months presented are estimated. Some of the data for earlier months are also estimated or computed. For a discussion of computation and estimation procedures, see the EIA Natural Gas Monthly.

Preliminary monthly data. All monthly data are consid-Gas Annual for that year. Preliminary monthly data are consid-gathered from reports from the Interstate Oil Compact Commission and the U.S. Minerals Management Service. Volumetric data are converted, as necessary to a standard 14.73 psia pressure base. Unless there are major changes, data are not revised until after publication of the EIA Natural Gas Annual.

Final monthly data. The difference between annual pro-duction data published in the EIA *Natural Gas Annual 1984* and the sum of preliminary monthly data (January-December) is allocated proportionally to the preliminary monthly data.

3. Extraction Loss: Extraction loss is the reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants. Annual data for extraction loss are from the EIA *Natural* 

Gas Annual for which they have been estimated based on the type and quantity of liquid products extracted from the gas stream and the calculated volume of such products at standard conditions. For a detailed explanation of the calculations used to derive estimated extraction losses, see the EIA Natural Gas Annual.

Preliminary monthly data are estimated based on extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Monthly data are revised and considered final after the publication of the EIA Natural Gas Annual. Final monthly data are estimated by allocating annual extraction loss data to each month based on its total natural gas disposition.

4. Supplemental Gaseous Fuels: Supplemental gaseous fuels are mainly synthetic natural gas, propane-air, and refinery gas. Other gases may also be included such as, coke oven gas, biomass gas, manufactured gas, and air injected for Btu stabilization.

Annual data beginning with 1980 are from the EIA Natural Gas Annual 1984. Unknown quantities of supplemental gaseous fuels are included in consumption data for 1979 and earlier years.

All monthly data are considered preliminary until after the publication of the EIA Natural Gas Annual for that year.

Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the monthly sum of these three elements to compute a monthy supplemental gaseous fuels figure.

5. Imports and Exports: The United States imports natural gas via pipeline from Mexico and Canada, and liquefied natural gas via tanker from Algeria. The United States

natural gas via tanker from Algeria. The United States exports natural gas via pipeline to Mexico and Canada and liquefied natural gas via tanker to Japan. Annual and final monthly data are published from the annual Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," which requires data to be re-ported by month for the calendar year.

Preliminary monthly data are EIA estimates. For a discussion of estimation procedures, see the EIA Natural Gas Monthly. Preliminary data are revised after the publication of the EIA U.S. Imports and Exports of Natural Gas for that vear

6. Consumption: Consumption includes pipeline fuel use, lease and plant fuel use, and deliveries to consuming sectors

All final data are from the EIA, Natural Gas Annual. All monthly data are considered preliminary until after publica-tion of the EIA *Natural Gas Annual*. For more detailed information on the methods of estimating preliminary and final monthly data, see the EIA *Natural Gas Monthly*.

7. Unaccounted for: The "Unaccounted for" category represents the following: (1) quantities lost; (2) the net result of flow data metered at varying temperature and pressure conditions and converted to a standard temperature and pressure base; (3) metering inaccuracies; (4) differences between billing cycle and calendar period time frames; (5) the effect of variations in company accounting and billing practices; and (6) imbalances from EIA's merger of data reporting systems which vary in scope, format, definitions, and type of respondents. The increase of almost 0.2 trillion and type of respondents. The increase of almost 0.2 timion cubic feet (Tcf) in the "Unaccounted for" category in 1983 followed by a decline of 0.5 tillion cubic feet in 1984 reflected unusually large differences resulting from the use of the annual billing cycle (essentially December 15, through the feither. the following December 14) consumption data in conjunc-tion with calendar year supply data. Record cold tempera-tures during the last half of December 1983 resulted in a reported 0.3 Tcf increase in net withdrawals from underground storage for peak shaving as compared with the same period in 1982, but the effect of this cold weather was reflected primarily in 1984 consumption data. For underground storage data, see Table F2 in the May 1985 Natural Gas Monthly, which was published in July 1985.

8. Natural Gas Storage: Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals from the quantity in storage at the end of the previous period. This difference is due to changes in the quantity of native gas included in the base gas and/or losses in base gas due to migration from storage reservoirs.

Migration from storage reservoirs. All monthly data concerning underground storage are collected from the essentially identical Forms FPC-8 and EIA-191. Monthly data are revised after publication of the EIA Underground Natural Gas Storage in the United States for that heating year (April through March). In addition, injection and withdrawal data from the FPC-8/EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the EIA Natural Gas Annual.

The final monthly and annual storage and withdrawal data for 1980 through 1984 include both underground and liquefied natural gas (LNG) storage. Underground storage data are taken from the FPC-8/EIA-191 survey in the following manner. Annual data on LNG additions and with drawals are taken from Form EIA-176. Monthly data are estimated by computing the ratio of each month's under-ground storage additions and withdrawals to annual underground storage additions and withdrawals to annual under-annual LNG data.

#### Notes and Sources for the Natural Gas Section (continued)

#### Sources

Production: 1973 through 1984: Energy Information Admin-istration (EIA), *Natural Gas Annual 1984;* January 1985 forward: State reports to the Interstate Oil Compact Com-mission, data from the U.S. Minerals Management Service, and EIA estimates for States that do not report monthly data on a regular or timely basis. **Extraction Loss, Consumption, and Unaccounted For:** 1973 through 1984: EIA, *Natural Gas Annual 1984;* January 1985 forward: EIA computations.

1985 forward: EIA computations.

Withdrawals from and Additions to Storage: 1973 through 1984: EIA, *Natural Gas Annual 1984;* January 1985 forward: Form FPC-8 and Form EIA-191, "Underground Gas Storage Report."

Supplemental Gaseous Fuels: 1980 through 1984: EIA, Natural Gas Annual 1984; January 1985 forward: EIA computations.

Imports and Exports: 1973 through 1984: Form FPC-14, "Imports and Exports of Natural Gas"; January 1985 forward: EIA computations.

End-Use Consumption: • All data except electric utility-1973 through 1984: EIA, *Natural Gas Annual, 1984*; January 1985 forward: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," and EIA computations.

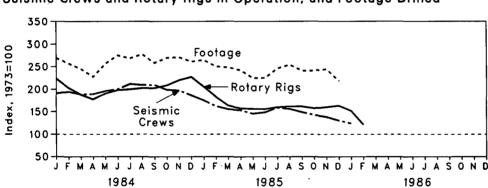
• Electric utility data—EIA, Form 759, "Monthly Power Plant Report" (formerly Form FPC-4). **Underground Storage:** 1973 and 1974: American Gas Association, *Gas Facts;* 1975 through 1979: EIA, Form FPC-8 and Form EIA-191, and the *Natural Gas Annual;* 1980 forward: EIA, Form FPC-8, Form EIA-191, and Form 176, "Manual Dependent of Natural Complemental Complemental "Annual Report of Natural and Supplemental Gas Supply and Disposition."

### **Oil and Gas Resource Development**

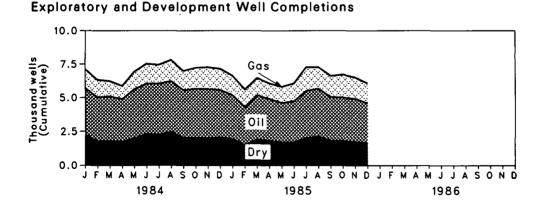
In January 1986, the 310 crews engaged in seismic exploration were 29.4 percent fewer than those in January 1985. The 39 marine vessels were 15.2 percent fewer and the 271 land crews were 31.0 percent fewer than those in January 1985. Additional crews were working during the month but not counted because adverse weather conditions prevented them from meeting the survey requirement of working for half of the month.

The February 1986 rotary rig count of 1,444 was 34.0 percent less than the February 1985 count of 2,188. The 164 rigs operating offshore were 29.6 percent fewer and the 1,280 rigs onshore were 34.5 percent fewer than those operating in February 1985.

Total exploration and development well completions in 1985 were an estimated 77,100, 8.1 percent less than completions in 1984 and a 14.5-percent drop from the record 90,130 in 1984. Oil well completions were an estimated 37,900 in 1985. 10.5 percent fewer than in 1984. The 17,460 estimated gas well completions were 3.9 percent more than the 16.810 estimated in 1984 and the only gain in resource development data in 1985. Total footage drilled in 1985 was 336.0 million feet, a decrease of 8.1 percent compared with the footage drilled in 1984.



## Seismic Crews and Rotary Rigs in Operation, and Footage Drilled



# **Oil and Gas Resource Development**

### Seismic Crews and Rotary Rigs

			Crews Engaged in Seismic Exploration			y Rigs in Oper	ation
		Offshore	Onshore	Total	Offshore	Onshore	Total
		Μ	lonthly average	ge	N	Neekly average	1
1973	Average	23	227	250	84	1,110	1,194
1974	Average	31	274	305	94	1,378	1,472
1975	Average	30	254	284	106	1,554	1,660
1976	Average	25	237	262	129	1,529	1,658
1977	Average	27	281	308	167	1,834	2,001
1978	Average	25	327	352	185	2,074	2,259
1979	Average	30	370	400	207	1,970	2,177
1980	Average	37	493	530	231	2,678	2,909
1981	Average	44	637	681	256	3,714	3,970
1982	Average	57	531	588	243	2,862	3,105
1983	January	49	407	456	218	2,404	2,622
	February	47	404	451	216	1,976	2,192
	March	45	402	447	210	1,793	2,003
	April	39	410	449	213	1,633	1,846
	May June	39 43	410 428	449 471	209	1,717	1,926
	July	46	437	483	202 178	1,777 1,861	1,979 2,039
	August	49	435	484	181	1,975	2,039
	September	57	444	501	175	2,077	2,252
	October	50	448	498	177	2,205	2,382
	November	49	446	495	159	2,413	2,572
	December	48	445	493	210	2,570	2,780
	Average	47	426	473	196	2,033	2,232
1984	January	50	427	477	216	2,450	2,666
	February March	53 47	433	486	202	2,221	2,423
	April	50	424 423	471 473	198 203	2,047 1,917	2,245 2,120
	May	46	444	490	203	2,075	2,120
	June	45	455	500	205	2,158	2,363
	July	47	482	529	206	2,180	2,386
	August	53	470	523	216	2,201	2,417
	September	52	472	524	214	2,206	2,420
	October	48	449	497	223	2,269	2,492
	November December	49 52	444 414	493 466	232	2,397	2,629
	Average	49	414	400 <b>494</b>	242 <b>213</b>	2,471 <b>2,215</b>	2,713 <b>2,428</b>
1985	January	46	393	439	242	2,210	2,452
	February	46	360	406	233	1,955	2,188
	March	48	340	388	223	1,732	1,955
	April	47	336	383	210	1,667	1,877
	May	41	323	364	200	1,665	1,865
	June July	47	324	371	203	1,653	1,858
	August	47 49	350 341	397 390	194 197	1,715	1,909
	September	49	323	372	197	1,734 1,733	1,931 1,930
	October	45	312	357	195	1,684	1,879
	November	41	305	346	187	1,725	1,912
	December	R39	287	R326	190	1,760	1,950
	Average	45	333	378	206	1,774	1,980
1986	January	39	271	310	175	1,635	1,810
	February	NA 39	NA 271	NA 310	164	1,280	1,444
	Average <sup>2</sup>	38	271	310	168	1,459	1,627

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<sup>1</sup>Monthly data are averages of 4- or 5-week reporting periods and are not calendar months. Average of available data. R = Revised data. NA = Not available.Note: • Geographic coverage is the 50 States and the District of Columbia. Sources: • See the last page of this section.

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# **Oil and Gas Resource Development**

#### **Exploratory and Development Wells and Footage Drilled**

			Exploratory and Well Com			
		Oil	Gas	Dry	Total	Total Footage
			Thousar	nd wells		Million feet
1973	Total	10.25	6.97	10.47	27.69	139.42
1974	Total	13.66	7.17	12.20	33.03	153.79
1975	Total	16.98	8.17	13.74	38.89	181.05
1976	Total	17.70	9.44	13.80	40.94	187.29
1977	Total	18.70	12.12	15.04	45.86	215.70
1978	Total	19.06	14.40	16.59	50.05	238.39
1979	Total	20.70	15.17	16.04	51.91	243.69
1980	Total	32.24	17.19	20.30	69.73	312.03
1981	Total	42.91	19.97	27.25	· 90.13	409.13
1982	Total	38.82	18.80	25.97	83.59	375.77
1983	January	3.47	1,44	2.13	7.04	29.74
	February	2.59	1.10	1.74	5.43	23.72
	March	2.93	1.09	1.88	5.90	25.93
	April	2.61	0.89	1.62	5,12	22.60
	May	2.69	0.95	1.83	5.47	23.96
	June	2.91	1.06	1.89	5.86	23.76
	July	3.09	1.11	1.97	6.17	24.79
	August	3.43	1.35	2.09	6.87	27.08
	September	3.27	1.28	2.00	6.55	26.77
	October	3.34	1.43	2.18	6.95	29.09
	November	3.32	1.29	2.14	6.75	28.56
	December	3.05	1.35	1.95	6.35	27.42
	Total	36.70	14.34	23.42	74.46	313.42
1984	January	3.45	1.41	2.25	7.11	31.90
	February	3.24	1.31	1.78	6.33	28.50
	March	3.31	1.14	1.78	6.23	28.98
	April May	3.14 3.63	0.98	1.75 1.99	5.87	26.03
	June	3.03	1.31 1.47	2.32	6.93 7.52	30.41 31.53
	July	3.78	1.41	2.26	7.45	31.79
	August	3.76	1.59	2.46	7.81	32.87
	September	3.52	1.42	2.05	6.99	29.64
	October	3.61	1.57	2.05	7.23	31.93
	November	3.65	1.63	1.99	7.27	31.07
	December	3.51	1.57	2.07	7.15	30.94
	Total	42.33	16.81	24.75	83.89	365.59
1985	January	3.25	1.45	1.92	6.62	31.38
	February	2.78	1.31	1.52	5.61	26.79
	March	3.27	1.28	1.91	6.46	29.38
	April	3.08	1.17	1.82	6.07	27.75
	May	2.91	1.21	1.70	5.82	26.59
	June	3.04	1.33	1.70	6.07	25.79
	July August	3.49 3.53	1.76 1.62	2.03 2.13	7.28 7.28	29.12
	September	3.53	1.57	2.13 1.81	6.62	30.15 27.60
	October	3.24	1.70	1.81	6.72	28.54
	November	3.20	1.58	1.72	6.50	27.99
	December	2.92	1.48	1.67	6.07	25.84
	Total	R37.90	17.46	21.74	R77.10	R336.00

Because the American Petroleum Institute is in the process of modifying the system used to process well completion data, well completion statistics for January were not available for publication in this issue of the Monthly Energy Review. January statistics are expected to be available for publication in the next issue.

<sup>1</sup>Data exclude service wells and stratigraphic and core tests.

R=Revised data.

Note: • Geographic coverage is the 50 States and the District of Columbia.

Totals and averages may not equal sum of components due to subsequent revisions and independent rounding.
Due to the method of estimation, data shown on this page are frequently revised. See the last page of this section for further explanation.

Source: . See the last page of this section.

### Notes and Sources for the Oil and Gas Resource Development Section

#### Notes

Beginning in the March 1985 Monthly Energy Review (MER), the Energy Information Administration (EIA) revised the exploratory and development wells drilled data series. In order to present a consistent series, historical as well as current statistics were adjusted.

In previous issues, the MER published statistics based on data on well completions reported to the American Petroleum Institute during a given month, as opposed to data on wells actually completed during the month. Because of the time lag from date of well completion to date of reporting, data on well completions reported are not as accurate an indicator of drilling activity as are data on well completions. For example, during 1982 well completions reported continued to rise even though the number of wells actually completed fell. Starting in the March 1985 issue of the MER, published figures have been EIA estimates of the number of wells actually completed in a given month and are shown in thousands, rounded to two decimal places. The associated footage drilled is shown in millions, also rounded to two decimal places.

The EIA estimates are calculated using an adjustment process that imputes total well counts and footage by type and class based on partial counts of well completions available from the reported data. That is, based on statistical analysis of the incomplete reported data, the process imputes the missing portions to determine values for total well completions and footage. Estimates for a given month are first published in the MER for that month, that is,

estimates for June 1984 are first published in the June 1984 MER. Revisions to the estimates are scheduled for the 6th, 12th, and 24th months following initial publication, as newly reported data refine the accuracy of the estimate. Unsched-uled revisions to the published data will also be made when the latest estimate differs by more than 15 percent during the first 5 months, more than 10 percent during the next 6 months 5 percent during the next 6 months, more than 5 percent during the following 6 months, or more than 2 percent thereafter through 5 years. After 5 years, the actual reported data will be published.

The three well types considered are oil, gas, and dry. By convention, wells with both oil and gas zones are categoriz-ed as oil. Well classes are either development or exploratory; wells in any other class have been deleted. Exploratory well categories considered are new field wildcat, new pool wildcat, deeper pool test, shallower pool test, or extension (American Association of Petroleum Geologists well classification codes 1 through 5).

Additional information may be obtained from "Estimating Well Completions," the feature article published in the March 1985 Monthly Energy Review.

#### Sources

Crews Engaged: Society of Exploration Geophysicists, "Monthly Seismic Crew Count" and annual reports pub-lished in their bulletins, *Geophysics* and *Leading Edge*.
 Rotary Rigs: Hughes Tool Company, "Rotary Rigs Running—by State."
 Wells and Ecotage Defiled. ElA computatione based on the state of the st

· Wells and Footage Drilled: EIA computations based on well reports submitted to the American Petroleum Institute.

Coal production in January 1986 totaled 74.5 million short tons. This was 6.3 million short tons (9.2 percent) above the amount produced in January 1985, and a record high for the month of January.

Electric utility coal consumption in December 1985 totaled 63.4 million short tons, reversing the downward trend of the previous 4 months. Based on preliminary data, total coal consumption at power plants reached a record 693.5 million short tons in 1985, 4.4 percent above the amount consumed in 1984.

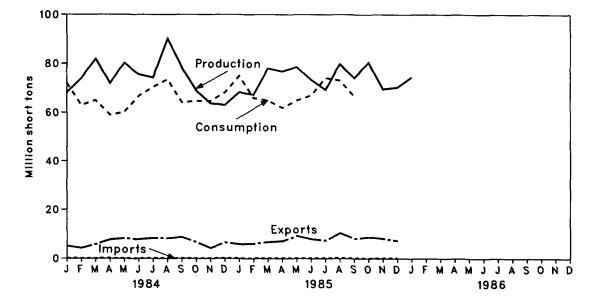
Electric utility coal stocks at the end of December 1985 totaled 156.4 million short tons, the lowest monthly level of the year. The stockpile level was 13.0 percent less than stocks at the end of December 1984, which were high due to earlier anticipation of a coal-miners' strike.

Coal exports in December 1985 totaled 7.2 million short tons, 10.6 percent above the 6.5 million short tons exported in December 1984. Coal exports in 1985 totaled 92.7 million short tons, 13.7 percent above the 81.5 million short tons exported in 1984. Coal exports during 1985 reached the third-highest level following 112.5 million short tons in 1981 and 106.3 million short tons in 1982. Most of the increase in coal exports in 1985 was due to a doubling of bituminous steam coal exports to Europe. Metallurgical coal exports, totaling

60.3 million short tons, 5.9 percent more than in 1984. Bituminous steam coal exports totaled 31.0 million short tons in 1985 (up 30.4 percent), from the 1984 level. Anthracite and lignite exports totaled, 1.3 million short tons in 1985, almost twice the 1984 tonnage. Nearly 47 percent of the total coal exports were shipped from Norfolk, Virginia. Worldwide in 1985, the quantity of U.S. coal exports ranked second, following coal exported from Australia. Of the 61 countries that received U.S. coal during the year, most exports were to Canada (16.4 million short tons), Japan (15.4 million short tons), and Italy (10.3 million short tons). Based on an average value of \$48.18 per short ton, U.S. coal exports in 1985 were valued at approximately \$4.5 billion and made a positive contribution to the U.S. balance of trade.

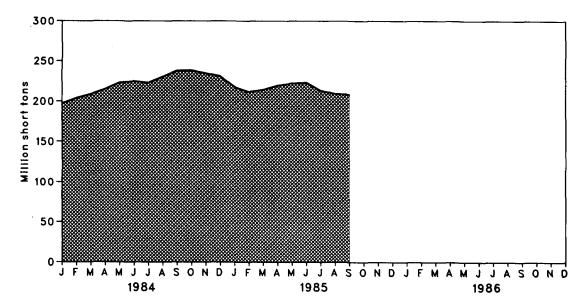
Coal imports in December 1985 totaled 260,000 short tons, which were 94.0 percent above the 134,000 short tons imported in December 1984. Total 1985 coal imports were nearly 2.0 million short tons, 51.8 percent more than in 1984 and the highest level since 1979. Coal was imported chiefly from South Africa (0.9 million short tons), Colombia (0.4 million short tons), and Canada (0.6 million short tons). Total coal imports in 1985 were valued at approximately \$70 million, based on an average value of \$36.04 per short ton.











**Overview** 

1973         Total         596,566         592,564         127         53,687         NA NA           1974         Total         610,023         56,6402         2,080         60,661         NA           1975         Total         654,641         562,641         940         66,309         NA           1976         Total         670,0164         622,225         2,2453         40,714         NA           1977         Total         670,164         622,225         2,953         40,714         NA           1978         Total         620,703         702,728         1,194         91,742         228,037           1980         Total         829,700         770,72,728         1,194         91,742         228,032           1981         Total         829,700         770,72,728         1,043         112,641         209,423           1982         Total         829,700         702,728         1,043         112,241         209,423           1983         January         62,731         63,019         71         4,382         220,413           March         86,654         54,642         71         4,382         220,413           Jure         16,			Production	Consumption	Imports <sup>1</sup>	Exports <sup>2</sup>	Stocks <sup>3</sup>
1974         Total         510,023         558,402         2,080         60,661         NA           1975         Total         654,441         562,841         940         66,309         NA           1976         Total         684,441         562,841         940         66,309         NA           1977         Total         697,205         625,225         2,963         60,021         NA           1977         Total         670,164         625,225         2,963         66,042         202,472           1980         Total         823,775         732,627         1,043         112,541         220,423           1982         Total         838,112         706,911         742         106,277         232,038           1983         January         62,2731         63,019         76         4,471         229,713           March         68,966         54,544         120         6,297         232,038           1983         January         63,271         52,816         144         6,115         223,643           June         61,797         56,237         133         7,279         234,794           June         61,797         56,237				Tho	usand short tons		
1975         Total         610,023         558,402         2,080         66,619         NA           1975         Total         664,913         603,790         1,203         60,021         NA           1977         Total         670,014         625,221         1,647         543,912         NA           1978         Total         670,104         625,225         2,953         40,714         NA           1979         Total         627,113         680,524         2,069         66,042         202,472           1980         Total         623,775         732,627         1,043         112,541         229,433           1982         Total         638,112         706,911         742         106,277         232,038           1982         January         62,731         63,019         78         4,471         229,713           March         68,896         54,434         120         6,292         236,445           Jure         61,797         56,237         133         7,279         234,794           Jure         61,797         56,237         133         7,279         234,794           Jure         63,713         70,541         102	1973	Total	598.568	562,584	127	53,587	NA
1976         Tetal         654,641         562,641         940         66,309         NA           1976         Total         664,913         603,790         1,037         664,313         NA           1977         Total         697,205         625,221         1,647         54,312         NA           1978         Total         627,016         625,225         2,953         40,714         NA           1979         Total         623,700         702,729         1,194         91,742         228,407           1980         Total         623,713         63,019         76         4,471         229,138           1983         January         62,731         63,019         76         4,471         229,143           March         68,896         55,434         120         6,291         232,182           April         61,877         52,816         144         6,115         232,192           June         61,797         58,237         103         7,292         235,445           June         63,710         54,327         103         7,292         235,445           July         55,213         69,478         87         6,140         218,			•		2,080	60,661	NA
1977         Total         697,205         625,291         1,203         60,021         NA           1977         Total         697,205         625,291         1,647         54,312         NA           1978         Total         670,164         625,225         2,953         40,714         NA           1990         Total         629,700         702,729         1,194         91,742         228,407           1980         Total         823,775         732,627         1,043         112,541         209,423           1983         January         62,731         630,019         76         4,471         223,103           1983         January         60,654         54,692         71         4,382         220,413           March         61,897         52,816         144         6,115         232,657           June         61,797         58,237         133         7,279         234,794           July         55,213         69,478         87         614.00         216,145           Ageit         73,291         71,917         7,555         208,993         211,153           September         70,312         65,317         70,541         102 </td <td></td> <td></td> <td></td> <td>•</td> <td></td> <td></td> <td>NA</td>				•			NA
1977         Total         697,205         625,225         2,953         40,714         NA           1978         Total         670,164         625,225         2,953         40,714         NA           1979         Total         829,700         702,729         1,194         91,742         222,472           1980         Total         829,700         702,729         1,043         112,541         228,042           1981         Total         823,775         732,827         1,043         112,541         228,071           1982         Total         633,112         706,911         742         106,277         232,038           1983         Jaruary         62,731         63,019         78         4,471         228,713           March         68,896         55,434         120         6,291         232,167           May         63,210         54,327         102         6,952         234,749           July         55,213         69,478         87         6,140         218,145           August         73,267         62,391         121,375         73,552         208,993           October         71,379         73,56         1,271         7				-	1,203	60,021	NA
1978         Total         670,164         625,225         2,953         40,714         MA           1979         Total         781,134         680,524         2,056         66,042         202,472           1980         Total         823,775         722,282         1,194         91,742         228,407           1981         Total         823,775         722,2827         1,043         112,541         208,423           1982         Total         83112         706,911         742         106,277         232,038           1983         January         62,731         63,019         78         4,471         229,713           February         60,654         54,682         71         4,382         230,413           March         68,896         55,434         120         6,291         232,169           June         61,797         56,237         133         7,279         234,794           July         55,213         69,478         87         6,140         218,145           August         73,291         72,947         115         8,380         211,515           July         57,251         60,464         190         8,131         213,975<						54,312	NA
1979         Total         781,134         680,524         2,059         66,042         202,472           1980         Total         829,700         702,729         1,194         91,742         228,407           1981         Total         823,775         732,627         1,043         112,541         228,038           1982         Total         838,112         706,911         742         106,277         232,038           1983         January         62,731         63,019         78         4,471         229,713           March         66,896         55,434         120         6,291         232,182           April         61,877         52,816         144         6,115         232,624           June         61,797         56,237         133         7,279         234,794           July         55,213         69,478         87         6,140         218,145           August         70,312         63,317         97         7,525         208,993           October         71,754         60,454         190         8,131         213,975           Total         782,971         77,077         77,772         1984         January         6			•	-			NA
1980         Total         829,700         702,728         1,194         91,742         228,407           1981         Total         823,775         732,627         1,043         112,541         209,423           1982         January         62,731         63,019         78         44,471         229,713           February         60,654         54,692         71         4,382         230,413           March         66,896         55,434         120         6,291         232,198           April         61,837         52,816         144         6,115         232,567           March         66,896         54,327         102         6,952         235,445           June         61,797         58,237         133         7,279         234,794           July         55,213         69,478         87         6,140         218,145           August         73,291         72,947         115         8,380         211,153           September         70,312         63,317         97         7,525         208,993           October         71,754         60,454         190         8,131         213,975           November         68,68			•				202,472
1991         Total         823,775         732,627         1,043         112,541         209,423           1982         Total         838,112         706,911         742         106,277         232,038           1983         Jaruary         60,654         54,4692         71         4,382         230,413           March         68,896         55,434         120         6,291         232,182           April         61,837         52,816         144         6,115         232,647           June         63,210         54,327         102         6,952         235,445           July         55,213         69,478         87         6,140         218,145           August         73,221         72,947         115         8,380         211,153           September         70,312         63,317         97         7,525         208,993           November         68,684         61,411         32         5,838         213,651           December         67,921         71,919         81         5,062         196,985           February         73,670         62,994         140         4,251         203,771           March         81,524				-			
1992         Total         838,112         706,911         742         106,277         232,038           1983         January         62,731         63,019         78         4,471         229,713           March         68,896         55,434         120         6,291         232,182           April         61,837         52,816         144         6,115         232,527           May         63,210         54,327         102         6,952         235,445           June         61,797         56,237         133         7,279         234,794           August         73,291         72,947         115         6,380         211,153           September         70,312         63,317         97         7,525         206,993           October         71,754         60,454         190         8,131         213,975           November         68,864         61,411         32         5,838         213,651           December         63,713         70,541         102         6,269         202,584           Total         782,091         73,670         62,994         140         4,251         203,771           March         81,524 <td></td> <td></td> <td></td> <td>•</td> <td></td> <td></td> <td>209,423</td>				•			209,423
February         E0654         54,692         71         4,382         220,413           March         68,896         55,434         120         6,291         232,182           April         61,837         52,816         144         6,115         232,567           May         63,210         54,327         102         6,352         225,445           June         61,797         58,237         133         7,279         234,794           July         55,213         69,478         87         6,140         218,145           August         73,291         72,947         115         8,360         211,153           September         70,312         63,317         97         7,525         206,939           October         63,713         70,541         100         8,131         213,975           November         68,684         61,411         32         5,838         213,651           December         63,713         70,541         102         6,269         202,544           May         81,524         650,289         140         4,251         203,717           May         81,524         650,289         14,01         4,251						106,277	232,038
February         60,654         54,692         71         4,382         230,413           March         68,896         55,434         120         6,291         232,182           April         61,837         52,816         144         6,115         232,567           May         63,210         54,327         102         6,952         235,445           June         61,797         56,237         133         7,279         234,744           July         55,213         69,478         87         6,140         218,145           August         73,291         72,947         115         8,330         211,153           September         70,312         63,317         97         7,525         208,930           October         71,754         60,454         190         8,131         213,975           November         68,84         61,411         32         5,838         213,651           December         63,713         70,541         10,21         77,772           1984         January         67,921         71,919         81         5,062         196,985           February         73,670         62,944         140         4,251	1983	January	62,731		78	4,471	229,713
April         61,837         52,816         144         6,115         222,567           May         63,210         54,327         102         6,952         235,445           June         61,797         56,237         133         7,279         234,794           July         55,213         69,478         87         6,140         218,145           August         73,291         72,947         115         8,380         211,153           September         70,312         63,317         97         7,525         208,993           October         71,754         60,454         190         8,131         213,975           November         68,684         61,411         32         5,838         213,651           December         63,713         70,541         102         6,269         202,594           Total         782,091         71,919         81         5,062         196,985           April         72,751         58,946         140         4,251         203,771           March         81,524         65,026         55         5,813         208,548           April         72,751         58,946         148         7,686		February	60,654	54,692			
May         63,210         54,327         102         6,952         235,445           June         61,797         58,237         133         7,279         234,794           July         55,213         69,478         87         6,140         218,145           August         73,291         72,947         115         8,380         211,153           September         70,312         63,317         97         7,525         208,993           October         71,754         60,454         190         8,131         213,975           November         68,684         61,411         32         5,838         213,651           December         63,713         70,551         102         6,269         202,584           Total         782,091         736,672         1,271         77,772           1984         January         67,921         71,919         81         5,062         196,985           April         72,751         58,946         148         7,686         223,622           June         76,402         66,707         49         7,828         224,905           July         74,785         70,422         193         8,318		March				•	
June         61,797         58,237         133         7,279         234,794           July         55,213         69,478         87         6,140         218,145           August         73,291         72,947         115         8,380         211,153           September         70,312         63,317         97         7,525         208,993           October         71,754         60,454         190         8,131         213,975           November         68,684         61,411         32         5,838         213,651           December         63,713         70,541         102         6,269         20,584           Totai         782,091         736,672         1,271         77,772           1984         January         67,921         71,919         81         5,062         196,985           April         72,751         58,946         146         7,688         215,023           May         81,073         60,164         72         8,221         223,022           June         76,402         66,707         49         7,828         224,905           July         74,765         70,422         193         8,318		April					
July         55,213         69,478         87         6,140         218,145           August         73,291         72,947         115         8,380         211,153           September         70,312         63,317         97         7,525         208,993           October         71,754         60,454         190         8,131         213,975           November         68,864         61,411         32         5,838         213,651           December         63,713         70,541         102         6,269         202,584           Total         782,091         736,672         1,271         77,772           1984         January         67,921         71,919         81         5,062         196,985           February         73,670         62,994         140         4,251         203,771           March         81,524         65,028         55         5,813         208,548           April         72,751         58,946         148         7,686         224,905           June         76,402         66,707         49         7,828         224,905           July         74,785         70,422         193         8,318							
August         73,291         72,947         115         6,380         211,153           September         70,312         63,317         97         7,525         208,993           October         71,754         60,454         190         8,131         213,975           November         68,684         61,411         32         5,838         213,651           December         63,713         70,541         102         6,269         202,594           Total         782,091         736,672         1,271         77,772           1984         January         67,921         71,919         81         5,062         196,985           February         73,670         62,994         140         4,251         203,771           March         81,524         65,028         55         5,813         208,548           April         72,751         58,946         148         7,668         215,023           June         76,402         66,707         49         7,828         223,188           July         74,785         70,422         193         8,318         223,118           July         74,785         70,422         193         8,318							
September         70,312         63,317         97         7,525         208,993           October         71,754         60,454         190         8,131         213,975           November         68,684         61,411         32         5,838         213,651           December         63,713         70,541         102         6,269         202,594           Total         782,091         736,672         1,271         77,772           1984         January         67,921         71,919         81         5,062         196,985           February         73,670         62,994         140         4,251         203,771           March         81,524         65,028         55         5,613         208,548           April         72,751         58,946         144         7,688         215,023           June         76,402         66,707         49         7,828         224,905           July         74,785         70,422         193         8,318         223,118           August         90,823         73,558         147         8,235         230,224           September         78,984         64,613         66         4,190 </td <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td>•</td>		•					•
October         71,754         60,454         190         8,131         213,975           November         68,084         61,411         32         5,038         213,651           December         63,713         70,541         102         6,269         202,554           Total         782,091         736,672         1,271         77,772           1984         January         67,921         71,919         81         5,062         196,985           February         73,670         62,994         140         4,251         203,771           March         81,524         65,028         55         5,813         206,548           April         72,751         58,946         148         7,688         215,023           June         76,402         66,707         49         7,828         224,905           July         74,785         70,422         193         8,318         223,118           August         90,823         73,558         147         8,235         230,224           September         78,984         64,613         68         4,190         234,702           December         63,815         68,147         134         6,526 </td <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td>·</td>		•					·
November         68,684         61,411         32         5,838         213,651           December         63,713         70,541         102         6,269         202,584           Total         782,091         736,672         1,271         77,72           1984         January         67,921         71,919         81         5,062         196,985           February         73,670         62,994         140         4,251         203,771           March         81,524         65,028         55         5,813         208,548           April         72,751         58,946         148         7,688         213,622           June         76,402         66,707         49         7,828         224,905           July         74,785         70,422         193         8,318         223,118           August         90,823         73,558         147         8,235         230,224           September         78,984         64,613         68         4,190         234,702           December         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,286         81,483							
December         63,713         70,541         102         6,269         202,584           Total         782,091         736,672         1,271         77,772           1984         January         67,921         71,919         81         5,062         196,985           February         73,670         62,994         140         4,251         203,771           March         81,524         65,028         55         5,813         208,548           April         72,751         58,946         148         7,688         215,023           May         81,073         60,164         72         8,221         223,282           June         76,402         66,707         49         7,828         224,905           July         74,785         70,422         193         8,318         223,172           October         69,785         64,664         104         6,641         238,350           November         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,286         81,483           1985         Januaryt         67,319         65,881         101         6,030							
Total         782,091         736,672         1,271         77,772           1984         January         67,921         71,919         81         5,062         196,985           February         73,670         62,994         140         4,251         203,771           March         81,524         65,028         55         5,813         208,544           April         72,751         58,946         148         7,688         215,023           May         81,073         60,164         72         8,221         223,262           June         76,402         66,707         49         7,828         224,905           July         74,765         70,422         193         8,318         223,118           August         90,823         73,558         147         8,235         230,224           September         78,984         64,133         95         8,710         237,720           December         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,286         81,483         245,517           1985         Januaryt         68,259         74,978         126							
February         73,670         62,994         140         4,251         203,771           March         81,524         65,028         55         5,813         208,548           April         72,751         58,946         148         7,686         215,023           May         81,073         60,164         72         8,221         223,262           June         76,402         66,707         49         7,828         224,905           July         74,785         70,422         193         8,318         223,118           August         90,823         73,558         147         8,235         230,224           September         78,984         64,133         95         8,710         237,720           October         69,785         64,664         104         6,641         238,350           November         64,388         64,613         68         4,190         234,702           December         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,286         81,483           1985         January†         67,319         65,881         101         6,030			782,091		1,271		
March         81,524         65,028         55         5,813         208,548           April         72,751         58,946         148         7,686         215,023           May         81,073         60,164         72         8,221         223,262           June         76,402         66,707         49         7,828         224,905           July         74,785         70,422         193         8,318         223,118           August         90,823         73,558         147         8,235         230,224           September         78,984         64,133         95         8,710         237,720           October         69,785         64,664         104         6,641         238,350           November         64,388         64,613         68         4,190         234,702           December         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,286         81,483         215,017           I985         Januaryt         66,259         74,978         126         5,817         217,975           Februaryt         67,319         65,881         101 <td>1984</td> <td>January</td> <td>67,921</td> <td>71,919</td> <td></td> <td></td> <td>196,985</td>	1984	January	67,921	71,919			196,985
April         72,751         58,946         148         7,688         215,023           May         81,073         60,164         72         8,221         223,262           June         76,402         66,707         49         7,628         224,905           July         74,785         70,422         193         8,318         223,118           August         90,823         73,558         147         8,235         230,224           September         78,984         64,133         95         8,710         237,720           October         69,785         64,664         104         6,6641         238,350           November         64,388         64,613         68         4,190         234,702           December         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,286         81,483         211,804           Marcht         77,989         64,892         103         6,696         214,517           Aprilt         76,783         61,900         203         7,065         219,944           Mayt         78,574         64,911         159         9,231			73,670	62,994			
May         81,073         60,164         72         8,221         223,262           June         76,402         66,707         49         7,828         224,905           July         74,785         70,422         193         8,318         223,118           August         90,823         73,556         147         8,235         230,224           September         78,984         64,133         95         8,710         237,720           October         69,785         64,664         104         6,641         238,350           November         64,388         64,613         68         4,190         234,702           December         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,266         81,483           1985         January†         67,319         65,881         101         6,030         211,804           March†         77,989         64,892         103         6,696         214,517           April†         76,783         61,900         203         7,065         219,944           May†         78,574         64,911         159         9,231							
June         76,402         66,707         49         7,828         224,905           July         74,785         70,422         193         8,318         223,118           August         90,823         73,558         147         8,235         230,224           September         78,984         64,133         95         8,710         237,720           October         69,785         64,664         104         6,641         238,350           November         64,388         64,613         68         4,190         234,702           December         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,286         81,483         217,975           February†         67,319         65,881         101         6,030         211,804           March†         77,989         64,892         103         6,696         214,517           April†         76,783         61,900         203         7,065         219,944           May†         78,574         64,911         159         9,231         222,580           July†         69,348         74,162         177         7,314							
July         74,785         70,422         193         8,318         223,118           August         90,823         73,558         147         8,235         230,224           September         78,984         64,133         95         8,710         237,720           October         69,785         64,664         104         6,641         238,350           November         64,388         64,613         68         4,190         234,702           December         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,286         81,483         221,180           1985         January†         68,259         74,978         126         5,817         217,975           February†         67,319         65,881         101         6,030         211,804           March†         77,989         64,892         103         6,696         214,517           April†         76,783         61,900         203         7,065         219,944           May†         78,574         64,911         159         9,231         222,580           June†         73,436         66,985 <td< td=""><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td></td<>				-			
August         90,823         73,558         147         8,235         230,224           September         78,984         64,133         95         8,710         237,720           October         69,785         64,664         104         6,641         238,350           November         64,388         64,613         68         4,190         234,702           December         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,286         81,483           1985         January†         67,319         65,881         101         6,030         211,804           March†         77,989         64,892         103         6,696         214,517           April†         76,783         61,900         203         7,065         219,944           May†         78,574         64,911         159         9,231         222,580           June†         73,436         66,985         138         7,913         223,423           July†         69,348         74,162         177         7,314         213,455           August†         79,818         73,099         264         10,4				•			
September         78,984         64,133         95         8,710         237,720           October         69,785         64,664         104         6,641         238,350           November         64,388         64,613         68         4,190         234,702           December         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,286         81,483           1985         Januaryt         68,259         74,978         126         5,817         217,975           Februaryt         67,319         65,881         101         6,030         211,804           Marcht         77,989         64,892         103         6,696         214,517           Aprilt         76,783         61,900         203         7,065         219,944           Mayt         78,574         64,911         159         9,231         222,580           Junet         73,436         66,985         138         7,913         223,423           Julyt         69,348         74,162         177         7,314         213,455           August         79,818         73,099         264         10			•	-			
October         69,785         64,664         104         6,641         238,350           November         64,388         64,613         68         4,190         234,702           December         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,286         81,483           1985         January†         68,259         74,978         126         5,817         217,975           February†         67,319         65,881         101         6,030         211,804           March†         77,989         64,892         103         6,696         214,517           April†         76,783         61,900         203         7,065         219,944           May†         78,574         64,911         159         9,231         222,423           June†         73,436         66,985         138         7,913         223,423           July†         69,348         74,162         177         7,314         213,455           August†         79,818         73,099         264         10,422         209,455           September†         74,134         66,651         182 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
November         64,388         64,613         68         4,190         234,702           December         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,286         81,483           1985         January†         68,259         74,978         126         5,817         217,975           February†         67,319         65,881         101         6,030         211,804           March†         77,989         64,892         103         6,696         214,517           April†         76,783         61,900         203         7,065         219,944           May†         78,574         64,911         159         9,231         222,580           June†         73,436         66,985         138         7,913         223,423           July†         69,348         74,162         177         7,314         213,455           August†         79,818         73,099         264         10,422         209,455           September†         74,134         66,651         182         8,095         208,632           October†         80,488         NA         128         8		•					
December         63,815         68,147         134         6,526         231,300           Total         895,921         791,296         1,286         81,483           1985         January†         68,259         74,978         126         5,817         217,975           February†         67,319         65,881         101         6,030         211,804           March†         77,989         64,892         103         6,696         214,517           April†         76,783         61,900         203         7,065         219,944           May†         78,574         64,911         159         9,231         222,580           June†         73,436         66,985         138         7,913         223,423           July†         69,348         74,162         177         7,314         213,455           August†         79,818         73,099         264         10,422         209,455           September†         74,134         66,651         182         8,095         208,632           October†         80,488         NA         128         8,744         NA           November†         69,608         NA         111         8,134 <td></td> <td></td> <td></td> <td></td> <td>68</td> <td></td> <td>234,702</td>					68		234,702
1985         January†         68,259         74,978         126         5,817         217,975           February†         67,319         65,881         101         6,030         211,804           March†         77,989         64,892         103         6,696         214,517           April†         76,783         61,900         203         7,065         219,944           May†         78,574         64,911         159         9,231         222,580           June†         73,436         66,985         138         7,913         223,423           July†         69,348         74,162         177         7,314         213,455           August†         79,818         73,099         264         10,422         209,455           September†         74,134         66,651         182         8,095         208,632           October†         80,488         NA         128         8,744         NA           November†         69,608         NA         111         8,134         NA           December†         70,338         NA         260         7,220         NA           Total         886,096         613,460         1,952         <		December	63,815	68,147	134	6,526	231,300
February†         67,319         65,881         101         6,030         211,804           March†         77,989         64,892         103         6,696         214,517           April†         76,783         61,900         203         7,065         219,944           May†         78,574         64,911         159         9,231         222,580           June†         73,436         66,985         138         7,913         223,423           July†         69,348         74,162         177         7,314         213,455           August†         79,818         73,099         264         10,422         209,455           September†         74,134         66,651         182         8,095         208,632           October†         80,488         NA         128         8,744         NA           November†         69,608         NA         111         8,134         NA           December†         70,338         NA         260         7,220         NA           Total         886,096         613,460         1,952         92,680		Total	895,921	791,296	1,286	81,483	
March†       77,989       64,892       103       6,696       214,517         April†       76,783       61,900       203       7,065       219,944         May†       78,574       64,911       159       9,231       222,580         June†       73,436       66,985       138       7,913       223,423         July†       69,348       74,162       177       7,314       213,455         August†       79,818       73,099       264       10,422       209,455         September†       74,134       66,651       182       8,095       208,632         October†       80,488       NA       128       8,744       NA         November†       69,608       NA       111       8,134       NA         December†       70,338       NA       260       7,220       NA         Total       886,096       613,460       1,952       92,680	1985	January†					
April†76,78361,9002037,065219,944May†78,57464,9111599,231222,580June†73,43666,9851387,913223,423July†69,34874,1621777,314213,455August†79,81873,09926410,422209,455September†74,13466,6511828,095208,632October†80,488NA1288,744NANovember†69,608NA1118,134NADecember†70,338NA2607,220NATotal886,096613,4601,95292,6801				-			
May†       78,574       64,911       159       9,231       222,580         June†       73,436       66,985       138       7,913       223,423         July†       69,348       74,162       177       7,314       213,455         August†       79,818       73,099       264       10,422       209,455         September†       74,134       66,651       182       8,095       208,632         October†       80,488       NA       128       8,744       NA         November†       69,608       NA       111       8,134       NA         December†       70,338       NA       260       7,220       NA         Total       886,096       613,460       1,952       92,680							•
June†73,43666,9851387,913223,423July†69,34874,1621777,314213,455August†79,81873,09926410,422209,455September†74,13466,6511828,095208,632October†80,488NA1288,744NANovember†69,608NA1118,134NADecember†70,338NA2607,220NATotal886,096613,4601,95292,680							•
July†69,34874,1621777,314213,455August†79,81873,09926410,422209,455September†74,13466,6511828,095208,632October†80,488NA1288,744NANovember†69,608NA1118,134NADecember†70,338NA2607,220NATotal886,096613,4601,95292,680							
August†79,81873,09926410,422209,455September†74,13466,6511828,095208,632October†80,488NA1288,744NANovember†69,608NA1118,134NADecember†70,338NA2607,220NATotal886,096613,4601,95292,680613,460							
September†         74,134         66,651         182         8,095         208,632           October†         80,488         NA         128         8,744         NA           November†         69,608         NA         111         8,134         NA           December†         70,338         NA         260         7,220         NA           Total         886,096         613,460         1,952         92,680							
October†         80,488         NA         128         8,744         NA           November†         69,608         NA         111         8,134         NA           December†         70,338         NA         260         7,220         NA           Total         886,096         613,460         1,952         92,680		· · · · · · · · · · · · · · · · · · ·					
November†         69,608         NA         111         8,134         NA           December†         70,338         NA         260         7,220         NA           Total         886,096         613,460         1,952         92,680						8,744	
December† 70,338 NA 260 7,220 NA Total 886,096 613,460 1,952 92,680		· · · · · · · · · · · · · · · · · · ·		NA	111	8,134	
			70,338		260		NA
1986 January† 74,524 NA NA NA NA		Total	886,096	613,460	1,952	92,680	
	1986	January†	74,524	NA	NA	NA	NA

Includes Puerto Rico.

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<sup>1</sup>Includes Puerto Rico.
 <sup>2</sup>Excludes shipments of anthracite to U.S. Armed Forces overseas (revised from 347,000 to 218,000 short tons in 1982, 341,000 short tons in 1983, 298,000 short tons in 1984, and 240,000 short tons in 1985).
 <sup>3</sup>Stocks held by electric utilities, coke plants, general industry, and coal producers and distributors at the end of period. Excludes stocks held at retail dealers for consumption by the residential and commercial sector.
 †Preliminary data. NA=Not available.
 Notes: • Geographic coverage is the 50 States and the District of Columbia.
 • Totals may not equal sum of components due to independent rounding.
 • See Note on the last page of this section for methodology used to calculate production, consumption, and stocks.
 Sources: • See the last page of this section.

# Consumption by End-Use Sector<sup>1</sup>

			industrial			
		Electric Utilities	Coke Plants	Other Industrial Including Transportation	Residential and Commercial	Total
				Thousand short tons	S	
1973	Total	389,212	94,101	68,154	11,117	562,584
1974	Total	391,811	90,191	64,983	11,417	558,402
1975	Total	405,962	83,598	63,670	9,410	562,641
1976	Total	448,371	84,704	61,799	8,916	603,790
1977	Total	477,126	77,739	61,472	8,954	625,291
1978	Total	481,235	71,394	63,085	9,511	625,225
1979	Total	527,051	77,368	67,717	8,388	680,524
1980	Total	569,274	66,657	60,347	6,451	702,729
1981	Total	596,797	61,014	67,395	7,421	732,627
1982	Total	593,666	40,908	64,097	8,240	706,911
1983	January	53,351	2,813	5,970	884	63,019
1300	February	45,772	2,742	5,405	773	54,692
	March	47,110	2,567	5,206	551	55,434
	April	43,589	3,206	5,254	767	52,816
	May	45,691	3,151	5,023	463	54,327 58,237
	June	50,338	2,734	4,798	367 599	69,478
	July	60,390	3,269	5,220 5,362	566	72,947
	August	63,767	3,252 3,196	5,156	752	63,317
	September	54,212 50,689	3,307	5,659	799	60,454
	October	51,185	3,335	6,046	845	61,411
	November December	59,117	3,461	6,880	1,082	70,541
	Total	625,211	37,033	65,980	8,448	736,672
1984	January	60,225	3,791	6,858	1,045	71,919
1004	February	52,257	3,592	6,230	915	62,994
	March	54,534	3,843	5,999	652	65,028
	April	47,565	4,180	6,273	928	58,946 60,164
	May	49,507	4,100	5,997	560 443	66,707
	June	56,971	3,564	5,729 5,730	694	70,422
	July	60,359	3,639 3,620	5,886	656	73,558
	August	63,396 54,045	3,557	5,659	872	64,133
	September October	54,753	3,317	5,902	692	64,664
	November	54,229	3,346	6,305	733	64,613
	December	56,560	3,473	7,176	938	68,147
	Total	664,399	44,022	73,745	9,130	791 <b>,296</b>
1985	January†	63,629	3,463	7,063	823	74,978
1000	February†	55,463	3,282	6,416	720	65,881
	March†	54,690	3,511	6,178	513	64,892
	April†	50,854	3,851	6,432	764	61,900 64,911
	May†	54,523	3,778	6,149 5 874	461 365	66,985
	June†	57,462	3,284	5,874 5,928	523	74,162
	July†	64,274 63,096	3,437 3,420	6,089	494	73,099
	August† September†	56,780	3,361	5,854	656	66,651
	October†	54,969	NA	NA	NA	NA
	November†	54,311	NA	NA	NA	NA
	December†	63,402	NA	NA	NA	NA
	Total	693,454	31,387	55,983	5,318	613,460

See Note 2 on the last page of this section.
†Preliminary data. NA = Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

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### **Stocks at End of Period**

			Consu				
	_	Electric	Coke	Other	<u> </u>	Producers and	
		Utilities	Plants	Industrial	Total <sup>1</sup>	Distributors	Total <sup>1</sup>
				Thousand s	hort tons		
1973	Year	86,967	6,998	10,370	104,335	NA	NA
1974	Year	83,509	6,209	6,605	96,323	NA	NA
1975	Year	110.724	8,797	8,529	128,050	NA	NA
1976	Year	117,436	9.902	7,100	134,438	NA	NA
1977	Year	133,219	12,816	11,063	157,098	NA	NA
1978	Year	128,225	8,278	9.048	145,551	NA	NA
1979	Year	159,714	10,155	11,777	181,646	20,826	202,472
1979	Year	183,010	9,067	11,951	204,028	24,379	228,407
1980	Year	168,893	6,475	9,906	185,274	24,149	209,423
		•	4,642	9,479	195,254	36,784	232,038
1982	Year	181,132	4,042			•	•
1983	January	178,604	4,338	8,960	191,902	37,811	229,713
	February	179,101	4,034	8,439	191,574	38,839	230,413
	March	180,671	3,728	7,916	192,315	39,867	232,182
	April	181,371	4,089	7,942	193,402	39,165	232,567
	May	184,567	4,450	7,965	196,982	38,463	235,445
	June	184,236	4,812	7,985	197,033	37,761	234,794
	July	168,566	4,489	8,167	181,222	36,923	218,145
	August	162,557	4,165	8,345	175,067	36,086	211,153
	September	161,384	3,842	8,518	173,743	35,249	208,993
	October	166,574	4,010	8,582	179,166	34,809	213,975
	November	166,457	4,178	8,645	179,281	34,370	213,651
	December	155,598	4,346	8,710	168,654	33,931	202,584
1984	January	149,403	4,947	8,593	162,943	34,042	196,985
	February	155,593	5,548	8,476	169,617	34,154	203,771
	March	159,775	6,149	8,359	174,283	34,265	208,548
	April	165,592	7,171	9,137	181,900	33,123	215,023
	May	173,171	8,194	9,915	191,280	31,982	223,262
	June	174,155	9,217	10,693	194,065	30,841	224,905
	July	171,095	9,658	11,904	192,657	30,461	223,118
	August	176,928	10,099 `	13,116	200,143	30,081	230,224
	September	183,151	10,541	14,327	208,019	29,701	237,720
	October	184,779	9,083	13,324	207,186	31,164	238,350
	November	182,130	7,625	12,320	202,075	32,627	234,702
	December	179,727	6,166	11,317	197,211	34,090	231,300
1985	January†	167,524	5,583	10,423	183,530	34,445	217,975
	February†	162,476	4,999	9,529	177,004	34,800	211,804
	March†	166,313	4,415	8,635	179,363	35,155	214,517
	April†	171,651	4,472	8,688	184,811	35,133	219,944
	May†	174,198	4,530	8,740	187,468	35,112	222,580
	June†	174,953	4,587	8,793	188,333	35,090	223,423
	July†	165,910	4,171	9,105	179,186	34,269	213,455
	August†	162,837	3,754	9,417	176,008	33,447	209,455
	September†	162,939	3,338	9,729	176,006	32,626	208,632
	October†	166,749	NA	NA	NA	NA	NA
	Novembert	164,073	NA	NA	NA	NA	NA
	December†	156,376	NA	NA	NA	NA	NA

<sup>1</sup>Excludes stocks held at retail dealers for consumption by the residential and commercial sector.
†Preliminary data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

### Notes and Sources for the Coal Section

#### Notes

1. Production: Preliminary monthly estimates of national coal production are the sum of weekly estimates developed by the Energy Information Administration (EIA) and pub-lished in the Weekly Coal Production report. When a week lished in the Weekly Coal Production report. When a week extends into a new month, production is allocated on a daily basis and added to the appropriate month. Weekly esti-mates are based on Association of American Railroads (AAR) data showing the number of railcars loaded with coal during the week by Class I and certain other railroads. This number is converted into tons of coal by EIA using the average number of tons of coal per railcar loaded reported in the most recent Quarterly Freight Commodity Statistics from the Interstate Commerce Commission (ICC). If an average coal tonnage per railcar loaded is not available for average coal tonnage per railcar loaded is not available for a specific railroad, the national average is used. To derive the estimate of total weekly production, the total rail ton-nage for the week is divided by the ratio of quarterly production shipped by rail and total quarterly production. Data for the corresponding quarter of previous years are used to derive this factor because data for the current quarter are not yet available. This method also ensures that

quarter are not yet available. This method also ensures that the seasonal variations in production are preserved. When preliminary quarterly data become available, the monthly and weekly estimates are adjusted to conform to the quarterly figure. The adjustment procedure uses State-level production data and is explained in the *Quarterly Coal Report*. Initial estimates of annual production published in January of the following year are based on preliminary production data covering the first 9 months (three quarters) and weekly/monthly estimates for the fourth quarter. The fourth quarter estimates may or may not be revised when fourth quarter estimates may or may not be revised when preliminary data become available in March of the following year, depending on the magnitude of the difference between the estimates and the preliminary data. In any event, all quarterly, monthly, and weekly production figures are adjusted to conform to the final annual production data published in the Monthly Energy Review in the fall of the following year.

2. Consumption: Both monthly and quarterly consumption for electric utility plants are taken directly from reported data. Prior to 1980, monthly consumption at coke plants was also taken directly from reported data. Since that time, it has been estimated by proportioning reported quarterly data using the ratios of monthly to quarterly consumption in 1979, the last year in which monthly data were reported. Quarterly consumption is taken directly from reported data. Prior to 1978, monthly consumption for the other indus-

Prior to 1978, monthly consumption for the other indus-trial sector (i.e., all industrial users minus coke plants) was derived by using reported data to modify baseline consumption figures from the most recent Bureau of the Census Annual Survey of Manufactures or Census of Manufactures. For 1978 and subsequent years, monthly figures were de-rived from data reported on Forms EIA-3 and EIA-6. Begin-ning in 1980, monthly figures have been estimated by proportioning derived quarterly data using the ratios of monthly to quarterly consumption in 1979, the last year in which monthly data were reported on Form EIA-3. Quarterly consumption for the other industrial sector is derived from reported data by adding beginning stocks at manufacturing plants to current receipts and subtracting ending stocks at manufacturing plants. In this calculation, current receipts are taken as the greater of either reported receipts from manu-facturing plants (Form EIA-3) or reported shipments to the other industrial sector (Form EIA-6), thereby ensuring that agriculture, forestry, fishing, mining, and construction con-sumption are included where appropriate.

Prior to 1980, monthly consumption for the residential and commercial sector was derived by using reported data to modify baseline figures developed by the Bureau of Mines. Since that time, it has been estimated by proportion-ing reported quarterly data using the ratios of monthly to quarterly consumption in 1979, the last year in which month-ly data were reported on Form EIA-2. During 1981 and 1982, the estimates were also modified to reflect air temperature degree-days. Quarterly consumption is taken directly from reported data and is defined as distribution to the residential and commercial sector as reported by coal producers and distributors on Form EIA-6.

3. Stocks: Both monthly and quarterly stocks at electric utility plants are taken directly from reported data. Prior to 1980, monthly stocks at coke plants were also taken directly from reported data. Since that time, they have been estimated by using one-third of the current quarterly change to indicate the monthly change in stocks. Quarterly stocks are taken directly from data reported on Form EIA-5.

Prior to 1978, stocks for the other industrial sector were derived by using reported data to modify baseline figures from a one-time Bureau of Mines survey of consumers. During the period 1978 through 1982, they were derived by judgmentally proportioning reported quarterly data based on representative seasonal patterns of supply and demand. Since that time, they have been estimated as indicated above for coke plants. Quarterly stocks are taken directly from data reported on Form EIA-3 and therefore include only manufacturing industries: data for agriculture, forestry, fishing, mining, and construction stocks are not available.

Prior to 1980, monthly and quarterly stock data for the residential and commercial sector were taken directly from reported data. Monthly and guarterly stock data are not available for the residential and commercial sector after December 1979.

Quarterly stocks at producers and distributors are taken directly from reported data. Monthly data are estimated by using one-third of the current quarterly change to indicate the monthly change in stocks.

4. Imports and Exports: All coal import and export figures are taken directly from data reported monthly by the Bureau of the Census.

Additional information concerning coal production, con-sumption, and stock data and estimation procedures may be obtained in EIA's *Quarterly Coal Report*, DOE/EIA-0121.

#### Sources

Production: 1973 through September 1977: Bureau of Mines, Minerals Yearbook and Mineral Industry Surveys; October 1977 forward: Energy Information Administration (EIA), Weekly Coal Production.

(EIA), Weekly Coal Production. **Consumption and Stocks:** 1973 through September 1977: Bureau of Mines, *Minerals Yearbook* and *Mineral Industry Surveys* (except Residential and Commercial Consumption and Stocks and Producers and Distributors Stocks); Electrical William October 1072 (consumption

e Electric Utilities—October 1977 forward: EIA, Form EIA-759 (formerly FPC Form 4), "Monthly Power Plant Report."
Coke Plants—October 1977 through December 1980: EIA, Form EIA-5/5A, "Coke and Coal Chemicals-Monthly/Annual"; January 1981 forward: EIA, Form EIA-5/5A, "Coke Plant Report-Quarterly/Annual Supplement."

5/5A, "Coke Plant Report-Quarterly/Annual Supplement." 5/5A, "Coke Plant Report-Quarterly/Annual Supplement." • Other Industrial—October 1977 through December 1979: EIA, Form EIA-3, "Monthly Fuel Consumption Report-Manufacturing Plants"; January 1980 forward: EIA, Form EIA-3, "Quarterly Fuel Consumption Report-Manufacturing Plants" and Form EIA-6, "Coal Distribution Report."

Plants" and Form EIA-6, "Coal Distribution Report." • Residential and Commercial Consumption and Stocks— 1973 through 1976: Bureau of Mines, *Minerals Yearbook*; January 1977 through September 1977: Bureau of Mines, Form 6-1400-M, "Monthly Coal Report, Retail Dealers— Upper Lake Docks"; October 1977 through December 1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers— Upper Lake Docks"; January 1980 forward: EIA, Form EIA-6, "Coal Distribution Report," (stock data are not collected). •Producers and Distributors Stocks—January 1980 forward: EIA, Form EIA-6, "Coal Distribution Report." Imports and Exports: Bureau of the Census, U.S. Depart-

imports and Exports: Bureau of the Census, U.S. Department of Commerce, Monthly Reports IM-145 (Imports) and EM-522 (Exports).

During December 1985, electric utilities generated 219.2 billion kilowatthours of electricity, 9.6 percent above the December 1984 generation level. Coal-fired generation totaled 127.8 billion kilowatthours, 12.5 percent above the December 1984 level. Nuclear generation totaled 33.8 billion kilowatthours, 9.4 percent above the December 1984 level. Hydroelectric generation was 25.3 billion kilowatthours in December 1985, 1.9 percent below the December 1984 level. Natural gasfired generation was 20.0 billion kilowatthours, 4.2 percent below the level 1 year earlier. Petroleum-fired generation totaled 11.2 billion kilowatthours, 41.3 percent above the December 1984 level.

Sales of electricity to all ultimate consumers in the United States in December 1985 were 196.4 billion kilowatthours, 5.1 percent above December 1984 sales. Sales to residential consumers during December 1985 were 72.2 billion kilowatthours, 7.9 percent above the level of sales during the same month in 1984. Commercial sales were 51.3 billion kilowatthours, 10.3 percent more than the amount sold to commercial consumers in December 1984. Sales to industrial consumers totaled 66.4 billion kilowatthours in December 1985, 0.3 percent less than the 1984 figure. In December 1985, other sales totaled 6.5 billion kilowatthours, 5.5 percent below the December 1984 level.

Sales of electricity to all ultimate consumers in the United States during 1985 were 2,309 billion kilowatthours, 1.4 percent above 1984 sales. Sales to residential consumers during 1985 were 791 billion kilowatthours, 1.7 percent above residential sales in 1984. Commercial sales were 608 billion kilowatthours, 5.1 percent more than the amount sold to commercial consumers during 1984. Sales to industrial consumers totaled 827 billion kilowatthours in 1985, 1.7 percent less than the 1984 industrial sales. In 1985, other sales totaled 84 billion kilowatthours, 3.0 percent above the 1984 level.

Electric utility petroleum consumption (excluding petroleum coke) during December 1985 was 19.1 million barrels, 39.6 percent above the December 1984 level. Coal consumption during December 1985 was 63.4 million short tons, 12.1 percent above the December 1984 rate. During December 1985, electric utilities consumed 209.1 billion cubic feet of natural gas, 3.7 percent below the December 1984 consumption level.

On December 31, 1985, utility stocks of anthracite, bituminous coal, and lignite totaled 156.4 million short tons. These stockpiles were 13.0 percent below the level of December 31, 1984. Petroleum stocks (excluding petroleum coke) on December 31, 1985, totaled 73.6 million barrels, 16.0 percent below the level on the same date in 1984. Part

### Net Electricity Generation by Primary Energy Source

		Coal	Petroleum	Natural Gas²	Nuclear Electric Power	Hydro- electric Power	Other <sup>3</sup>	Total
				Mi	llion kilowatthou	ırs		
1973	Total	847,651	314,343	340,858	83,479	272,083	2,294	1,860,710
1974	Total	828,433	300,931	320,065	113,976	301,032	2,703	1,867,140
1975	Total	852,786	289,095	299,778	172,505	300,047	3,437	1,917,649
1976	Total	944,391	319,988	294,624	191,104	283,707	3,883	2,037,696
1977	Total	985,219	358,179	305,505	250,883	220,475	4,063	2,124,323
1978	Total	975,742	365,060	305,391	276,403	280,419	3,315	2,206,331
1979	Total	1,075,037	303,525	329,485	255,155	279,783	4,387	2,247,372
1980	Total	1,161,562	245,994	346,240	251,116	276.021	5,506	2,286,439
1981	Total	1,203,203	206,421	345,777	272,674	260,684	6,054	2,294,812
1982	Totai	1,192,004	146,797	305,260	282,773	309,213	5,164	2,234,012
1983	January	108,164	12,880	19,721	25,073	29,235	506	195,579
	February	92,692	12,586	16,659	22,198	27,950	395	172,479
	March	95,598	12,556	19,686	23,890	30,302	455	182,488
	April	88,114	10,337	19,174	22,335	29,989	424	170,372
	May	91,296	9,050	20,445	22,051	31,194	356	174,392
	June	101,512	11,139	23,091	24,152	30,692	462	191,048
	July	121,560	14,710	29,615	25,602	28,113	565	220,165
	August	129,313	14,731	33,147	26,201	25,828	738	229,957
	September	108,868	11,299	28,040	25,007	21,712	678	195,604
	October	101,951	9,941	23,783	25,797	20,747	712	182,931
	November	103,225	9,229	20,169	25,010	24,678	637	182,949
	December	117,131	16,041	20,567	26,361	31,691	528	212,319
1004	Total	1,259,424	144,499	274,098	293,677	332,130	6,456	2,310,285
1984	January	120,850	15,939	20,245	29,313	29,737	547	216,632
	February	104,706	10,053	17,827	28,436	27,900	643	189,564
	March April	111,158	10,806	19,645	27,345	30,435	719	200,107
	May	97,542 100,139	7,450	21,197	24,231	29,970	695	181,084
	June	115,426	8,422 11,152	25,304	25,867	31,814	673	192,217
	July	121,094	10,397	28,345 33,327	25,299 28,284	28,773 27,495	654	209,648
	August	127,744	12,836	33,292	29,493	25,137	648 794	221,245 229,296
	September	108,862	7,713	27,839	29,146	20,911	728	195,198
	October	110,801	7,874	25,783	24,774	20,887	819	190,936
	November	109,759	9,232	23,728	24,575	22,259	827	190,380
	December	113,601	7,935	20,863	30,872	25,834	892	199,996
	Total	1,341,681	119,808	297,394	327,634	321,150	8,638	2,416,304
1985	January	129,066	12,076	22,001	36,186	27,498	906	227,733
	February	111,994	9,264	19,370	30,809	25,880	803	198,121
	March	111,223	7,116	19,813	31,041	24,583	930	194,707
	April	104,706	6,015	22,409	26,458	24,370	783	184,740
	May	111,384	6,858	22,465	28,697	26,415	816	196,635
	June	115,276	7,575	26,714	30,837	23,834	788	205,025
	July August	128,880	8,289	32,191	35,184	21,283	885	226,712
	September	126,550 114,630	9,858	33,915	34,812	19,981	934	226,050
	October	111,053	7,435 7,515	26,169	34,508	18,810	887	202,438
	November	108,813	7,009	24,059 22,451	31,205 30,166	20,048	849	194,730
	December	127,784	11,213	22,451 19,981	33,782	23,496 25,346	1,031	192,966
	Total	1,401,359	100,222	<b>291,539</b>	383,688	25,546 <b>281.544</b>	1,109	219,215
		1,000	100,222	201,000	303,000	201,944	10,720	2,469,072

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<sup>1</sup>Includes fuel oil No. 2, No. 4, No. 5, No. 6, crude oil, kerosene, and petroleum coke.
<sup>2</sup>Includes supplemental gaseous fuels.
<sup>3</sup>Other is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • 1973 through September 1977: Federal Power Commission, Form 4, "Monthly Power Plant Report"; • October 1977 through 1981: Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report"; • 1982 forward: Energy Information Administration Form 759, "Monthly Power Plant Report."

**Electricity Sales**<sup>1</sup>

		Residential	Commercial	Industrial	Other <sup>2</sup>	Total
			Millic	on kilowatthours		
1973	Total	579,231	388,266	686.085	59,328	1,712,910
1974	Total	578,184	384,826	684,875	58,039	1,705,924
1975	Total	588,140	403,049	687,680	68,222	1,747,091
1976	Total	606,452	425.094	754,069	69,631	1,855,246
1977	Total	645,239	446,514	786,037	70,571	1,948,361
1978	Total	674,466	461,163	809,078	73,215	2,017,922
1979	Total	682,819	473,307	841,903	73,070	2,071,099
1980	Total	•	•	•	73,732	2.094.449
1981	Total	717,495	488,156	815,067	· -	
		722,265	514,338	825,742	84,756	2,147,101
1982	Total	729,519	526,397	744,949	85,575	2,086,440
1983	January	69,967	44,019	57,938	7,252	179,176
	February	65,039	42,475	59,032	6,919	173,465
	March	58,912	41,518	60,261	6,893	167,584
	April	56,284	40,679	60,548	6,296	163,807
	May	49,669	40,305	62,729	6,216	158,919
	June	54,138	45,086	66,152	6,228	171,604
	July	69,965	51,013	66,424	6,752	194,153
	August	78,374	53,245	69,611	6,885	208,115
	September	73,197	52,147	69,618	6,960	201,922
	October	55,374	45,517	68,924	6,492	176,307
	November	53,704	42,666	67,544	6,560	170,474
	December	66,326	45,119	67,217	6,765	185,428
	Total	750,948	543,788	775,999	80,219	2,150,955
1984	January	83,295	49,243	66,70 <del>9</del>	7,289	206,537
	February	69,818	46,293	67,445	6,690	190,246
	March	63,656	R45,232	69,684	6,902	185,475
	April	56,373	43,052	69,048	6,339	174,813
	May	53,519	44,150	70,774	6,559	175,003
	June	59,955	49,454	73,037	6,714	189,160
	July	71,020	53,922	71,843	7,006	203,791
	August	73,138	53,603	74,534	7,089	208,364
	September	67,456	52,854	71,275	6,780	198,365
	October	55,965	48,061	70,945	6,732	181,702
	November	56,543	45,937	68,688	6,840	178,008
	December	66,915	46,481	66,606	6,908	186,910
	Total	777,654	578,281	840,588	81,849	2,278,372
1985	January	77,242	49,634	67,220	7,270	201,365
	February	78,011	49,406	66,582	7,046	201,045
	March	63,981	46,629	67,437	6,875	184,922
	April	56,025	45,826	68,445	7,049	177,345
	May	52,842	47,711	70,140	6,903	177,596
	June	60,612	51,582	70,141	6,861	189,196
	July	71,027	56,109	69,761	7,136	204,034
	August	73,311	55,544	72,789	7,278	208,922
	September	71,064	55,960	71,402	7,224	205,650
	October	57,515	50,201	69,158	6,883	183,757
	November	56,794	47,843	67,159	7,264	179,061
	December†	72,192	51,289	66,383	6,528	196,392
	Total†	790,616	607,734	826,618	84,317	2,309,285

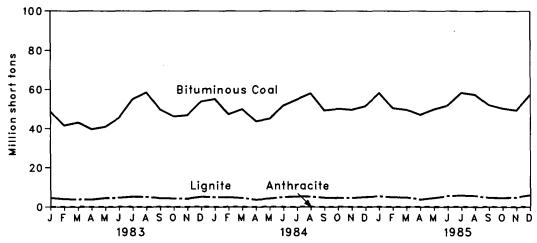
Electricity sales to all ultimate consumers.
Includes sales of electricity to Government, railways, street lighting authorities, and sales not included elsewhere.
Initial estimates.
Notes: 

Geographic coverage is the 50 States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
Sources: Energy Information Administration (EIA), 

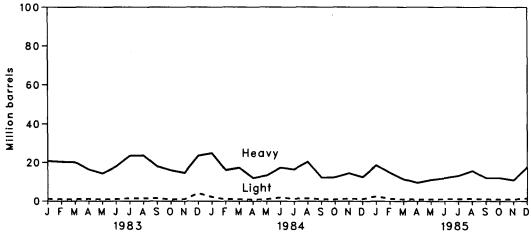
1973 through February 1980: FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income";
March 1980 through December 1982: FERC Form 5, "Electric Utility Company Monthly Statement";
January 1983 forward: Form EIA 826, "Electric Utility Company Monthly Statement."

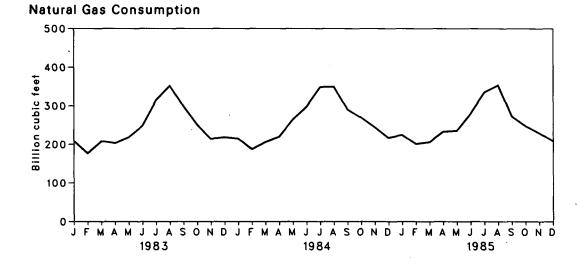
### **Primary Energy Consumed to Produce Electricity**











Monthly Energy Review December 1985 Energy Information Administration

#### **Primary Energy Consumed to Produce Electricity**

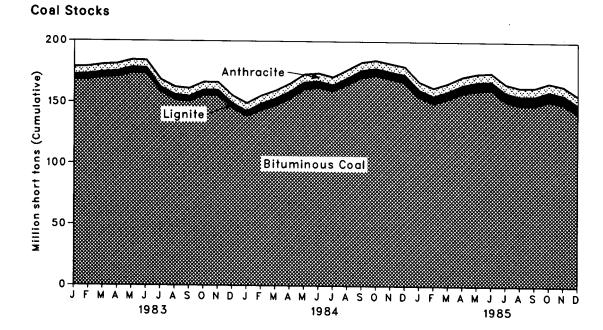
		<u> </u>	Coa	I			Petro	bleum		Natural Gas¹
		Anthracite	Bituminous Coal	Lignite	Total	Heavy <sup>2</sup>	Light <sup>a</sup>	Total Liquids	Petroleum Coke	
			Thousand sl	hort tons		The	ousand barr	els	Thousand short tons	Million cubic feet
1973	Total	1,443	376,975	10,794	389,212	(•)	(*)	560,248	507	3,660,172
1974	Total	1,498	378,643	11,670	391,811	Ö	Ö	536,274	625	3,443,428
1975	Total	1,480	388,523	15,960	405,962	Ö	(·)	506,128	70	3,157,669
1976	Total	1,350	425,205	21,817	448,371	()	ĕ	555,920	68	3,080,868
1977	Total	1,425	451,051	24,650	477,126	Ö	(*)	623,705	98	3,191,200
1978	Total	1,064	448,763	31,407	481,235	Ö	()	635,839	398	3,188,363
1979	Total	1,046	488,129	37,876	527,051	()	(')	523,297	268	3,490,523
1980	Total	951	526,680	41,642	569,274	391,163	29,051	420,214	179	3,681,595
1981	Total	1,221	550,784	44,792	596,797	329,798	21,313	351,111	139	3,640,154
1982	Total	1,075	543,346	49,245	593,666	234,434	15,337	249,771	149	3,225,518
1000		•	-		•	•	-			
1983	January	73 73	48,695	4,583 4,032	53,351 45,772	20,728 20,305	1,110 984	21,838 21,289	17 19	208,341 176,965
	February March	75	41,668 43,165	4,032 3,870	45,772	20,303	945	21,209	16	208,013
	April	92	39,716	3,781	43,589	16,374	1,054	17,429	24	202,917
	May	104	41.002	4,585	45,691	14,360	937	15,297	30	218,184
	June	88	45,560	4,690	50,338	17,892	1,020	18,912	23	247,825
	July	89	55,082	5,219	60,390	23,383	1,433	24,815	25	314,357
	August	92	58,475	5,200	63,767	23,622	1,543	25,165	24	352,031
	September	86	49,745	4,381	54,212	18,021	1,507	19,529	25	298,517
	October	91	46,263	4,335	50,689	15,993	870	16,863	22	251,151
	November December	86 88	46,883 53,854	4,216 5,176	51,185 59,117	14,690 23,440	1,075 4,034	15,766 27,474	17 21	214,275 218,191
	Total	1,036	570,108	54,067	625,211	23,440 228,984	16,512	245,497	261	2,910,767
		•		•	•	•	-			
1984	January	98 75	55,142	4,985	60,225	24,745	2,176	26,921	24 21	215,027 187,259
	February March	75 69	47,279 49,921	4,904 4,543	52,257 54,534	16,091 17,274	1,018 1,016	17,108 18,290	18	206,171
	April	83	43,779	3,703	47,565	11,971	831	12,802	22	220,005
	May	99	45,115	4,294	49,507	13,327	1,010	14,337	23	264,522
	June	102	51,757	5,112	56,971	17,363	1,927	19,289	23	297,560
	July	100	54,928	5,331	60,359	16,453	1,259	17,712	22	348,848
	August	97	58,026	5,273	63,396	20,337	1,522	21,859	20	349,878
	September	81	49,288	4,675	54,045	12,235	996	13,231	21	290,595
	October	83	50,091	4,578	54,753	12,450	965	13,415	19	269,629
	November December	91 93	49,595 51,418	4,543 5,050	54,229 56,560	14,543 12,499	1,326 1,146	15,870 13,645	17 20	244,637 217,210
	Total	1,070	606,339	56,990	664,399	189,289	15,190	204,479	252	3,112,342
1005			-		•	•	•	-		
1985	January	88 70	58,139	5,402	63,629	18,574	2,478	21,052 16,044		224,873 201,160
	February March	78	50,453 49,699	4,940 4,913	55,463 54,690	14,729 11,323	1,315 970	12,294	17 16	206,247
	April	92	47,024	3,738	50,854	9,561	905	10,466		233,201
	May	98	49,818	4,607	54,523	11,046	959	12,004		235,626
	June	90	51,812	5,561	57,462	12,005	1,090	13,095		280,722
	July	92	58,350	5,833	64,274	13,238	1,109	14,347	20	335,185
	August	96	57,324	5,676	63,096	15,730	1,338	17,067		353,541
	September	74	52,031	4,675	56,780	11,994	979	12,973		272,618
	October	85	50,265	4,619	54,969	12,056	969	13,026		248,154
	November December	83 86	49,315	4,913	54,311	10,923	1,021	11,944 19,052		230,003 209,087
	Total	1,033	57,270 621 498	6,046	63,402 602.454	17,612	1,440 14 573			
	i Vlai	1,033	631,498	60,923	693,454	1 <b>58,790</b>	14,573	173,363	231	3,030,417

<sup>1</sup>Includes supplemental gaseous fuels. <sup>2</sup>Heavy oil includes Grade Nos. 4, 5, and 6, and residual fuel oils. <sup>3</sup>Light oil includes Grade No. 2 heating oil, kerosene, and jet fuel. <sup>4</sup>Prior to 1980, petroleum consumption data were not disaggregated by type of fuel. Disaggregation by prime mover type is provided in the last table of this section.

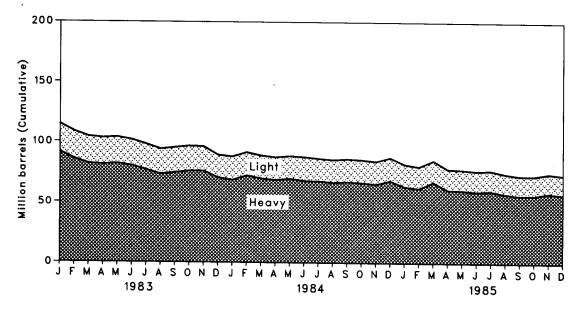
Notes: • Geographic coverage is the 50 States and the District of Columbia.

• Totals may not equal sum of components due to independent rounding. Sources: • 1973 through September 1977: Federal Power Commission, Form 4, "Monthly Power Plant Report"; • October 1977 through 1981: Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report"; • 1982 forward: Energy Information Administration Form 759, "Monthly Power Plant Report."

# Coal and Petroleum Stocks at End of Period



### **Petroleum Stocks**



### **Coal and Petroleum Stocks at End of Period**

			Co	al		Petroleum				
		Anthracite	Bituminous Coai	Lignite	Total	Heavy <sup>1</sup>	Light <sup>2</sup>	Totai Liquids	Petroleum Coke	
			Thousand sh	ort tons		Th	ousand barre	ls	Thousand short tons	
1 <del>9</del> 73	Year	1,066	84,941	961	86,967	(³)	(³)	89,216	312	
1974	Year	930	81,712	867	83,509	(3)	(3)	112,917	35	
1975	Year	982	107,927	1,815	110,724	(*) (*)	(3)	125,257	31	
1976	Year	1,000	114,130	2,306	117,436	(3)	( <sup>3</sup> )	121,696	32	
1977	Year	2,321	128,210	2,688	133,219	(°) (3)	(°)	144,031	44	
1978	Year	2,321	123,020						198	
1979			•	3,027	128,225	(°)	(°)	118,788		
	Year	3,274	152,981	3,459	159,714	(3) 105 051	(°)	131,422	183	
1980	Year	4,741	174,154	4,115	183,010	105,351	30,023	135,374	52	
1981	Year	5,537	158,258	5,098	168,893	102,042	26,094	128,136	42	
1982	Year	6,080	170,480	4,573	181,132	95,515	23,369	118,884	41	
1983	January	6,107	168,287	4,210	178,604	91,523	23,183	114,706	54	
	February	6,104	168,635	4,362	179,101	85,847	22,665	108,512	53	
	March	6,143	170,327	4,201	180,671	81,957	22,387	104,344	54	
	April	6,120	170,815	4,436	181,371	81,243	21,967	103,211	47	
	May	6,145	173,969	4,453	184,567	82,091	21,758	103,849	44	
	June	6,230	173,483	4,524	184,236	80,197	21,471	101,667	52	
	July	6,299	158,701	3,566	168,566	76,881	21,101	97,982	50	
	August	6,380	152,140	4,038	162,557	73,266	20,763	94,029	45	
	September	6,435 6,506	150,778	4,171	161,384	74,560	20,696	95,256	47 53	
	October November	6,531	156,012 155,931	4,056 3,995	166,574 · 166,457	75,949 75,930	20,568 20,271	96,517 96,201	53 63	
	December	6,507	145,250	3,855	155,598	70,573	18,801	89,375	55	
4004					-		•	-		
1984	January	6,500	139,026	3,877	149,403	68,679	19,369	88,048	43	
	February March	6,510 6,519	143,731	5,352	155,593	72,339	19,227	91,566	41	
	April	6,515	147,756 153,300	5,500 5,777	159,775 165,592	69,984 68,771	19,058 18,849	89,042 87,620	45 47	
	May	6,532	161,067	5,573	173,171	69,890	18,695	88,584	51	
	June	6,541	162,426	5,188	174,155	68,098	19,807	87,906	51	
	July	6,530	159,683	4,883	171,095	67,856	18,840	86,696	50	
	August	6,583	164,987	5,358	176,928	66,836	18,795	85,632	47	
	September	6,628	170,987	5,536	183,151	67,370	18,921	86,291	49	
	October	6,674	172,553	5,552	184,779	66,717	18,965	85,682	49	
	November	6,715	169,788	5,627	182,130	65,548	18,875	84,423	43	
	December	6,710	167,118	5,899	179,727	68,503	19,116	87,619	50	
1985	January	6,719	154,999	5,806	167,524	63,546	18,511	82.057	57	
	February	6,736	150,023	5,717	162,476	62,072	18,073	80,145	50	
	March	6,782	153,697	5,834	166,313	62,558	17,804	80,361	43	
	April	6,836	158,174	6,641	171,651	60,889	17,356	78,245	31	
	May	6,905	160,326	6,967	174,198	60,530	17,226	77,756	33	
	June	6,991	161,003	6,959	174,953	59,613	17,093	76,706	33	
	July	7,045	151,815	7,049	165,910	60,116	17,030	77,146	43	
	August	7,109	148,709	7,018	162,837	57,797	16,696	74,493	42	
	September	7,185	148,510	7,243	162,939	56,463	16,409	72,872	40	
	October	7,258	151,999	7,492	166,749	56,634	16,277	72,910	43	
	November December	7,223	149,579	7,270	164,073	58,697	16,149	74,847	47	
	December	7,189	142,144	7,043	156,376	57,279	16,359	73,638	49	

<sup>1</sup>Heavy oil includes Grade Nos. 4, 5, and 6, and residual fuel oils. <sup>2</sup>Light oil includes Grade No. 2 heating oil, kerosene, and jet fuel. <sup>3</sup>Prior to 1980, petroleum stock data were not disaggregated by type of fuel. Disaggregation by prime mover type is provided in the last table of this section.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Sources: • 1973 through September 1977: Federal Power Commission, Form 4, "Monthly Power Plant Report"; • October 1977 through 1981: Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report"; • 1982 forward: Energy Information Administration Form 759, "Monthly Power Plant Report."

### Petroleum Consumption and Stocks by Prime Mover Type

		Petroleum Consumption			Petroleum Stocks at End of Period				
		Steam Plants	GT/IC <sup>1</sup>	Total Liquids	Steam Plants	GT/IC <sup>1</sup>	Total Liquids		
				Thousar	nd barrels				
1973	Total	513,190	47,058	560,248	79,121	10,095	89,216		
1974	Total	483,146	53,128	536,274	97,718	15,199	112,917		
1975	Total	467,221	38,907	506,128	108,825	16,432	125,257		
1976	Total	514,077	41,843	555,920	106,993	14,703	121,696		
977	Total	574,869	48,837	623,705	124,750				
978	Total	588,319	47,520			19,281	144,031		
979	Total	492,606		635,839	102,402	16,386	118,788		
980	Total	•	30,691	523,297	111,121	20,301	131,422		
		401,863	18,351	420,214	117,227	18,147	135,374		
981	Total	339,680	11,431	351,111	112,380	15,756	128,136		
982	Total	243,537	6,234	249,771	105,287	13,597	118,884		
983	January	21,373	465	21,838	101,394	13,312	114,706		
	February	20,885	404	21,289	95,459	13,053	108,512		
	March	20,728	392	21,119	91,394	12,750	104,344		
	April	16,997	432	17,429	90,667	12,544	103,211		
	May	14,968	330	15,297	91,360	12,489	103,849		
	June	18,437	475	18,912	89,283	12,384	101,667		
	July	23,927	888	24,815	85,891	12,091	97,982		
	August	24,166	999	25,165	82,307	11,722	94,029		
	September	18,532	996	19,529	83,511	11,745	95,256		
	October	16,518	345	16,863	84,873	11,644	96,517		
	November	15,336	430	15,766	84,804	11,397	96,201		
	December	25,978	1,496	27,474	78,285	11,090	89,375		
	Total	237,845	7,652	245,497					
984	January	25,838	1,082	26,921	76,756	11,292	88,048		
	February	16,662	447	17,108	80,404	11,163	91,566		
	March	17,881	410	18,290	78,014	11,028	89,042		
	April	12,495	306	12,802	76,721	10,899	87,620		
	Мау	13,896	441	14,337	77,699	10,886	88,584		
	June	17,997	1,293	19,289	76,126	11,780	87,906		
	July	17,085	627	17,712	75,788	10,908	86,696		
	August	20,957	902	21,859	74,832	10,799	85,632		
	September	12,795	436	13,231	75,588	10,703	86,291		
	October	13,019	396	13,415	74,906	10,775	85,682		
	November	15,177	692	15,870	73,833	10,590	84,423		
	December <b>Total</b>	13,247 <b>197,050</b>	398 <b>7,429</b>	13,645 <b>204,479</b>	76,836	10,784	87,619		
985				•					
000	January February	19,842 15,576	1,210	21,052	71,522	10,535	82,057		
	March		467	16,044	70,051	10,094	80,145		
		11,957	337	12,294	70,364	10,845	81,209		
	April May	10,127 11,601	338	10,466	68,641	9,604	78,245		
	June	12,495	403	12,004	68,249	9,507	77,756		
	July	13,840	601 507	13,095	67,468	9,238	76,706		
	August	16,272	795	14,347	67,816	9,330	77,146		
	September	12,485	488	17,067 12,973	65,284	9,209	74,493		
	October	12,643	383	13.026	63,667 63,857	9,205 9,053	72,872		
	November	11,582	362	11,944	66,079	9,053 8,767	72,910 74,847		
	December	18,371	680	19,052	64,678	8,961	73,638		

GT/IC = Gas turbine and internal combustion plants. Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Sources: • 1973 through September 1977: Federal Power Commission, Form 4, "Monthly Power Plant Report"; • October 1977 through 1981: Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report"; • 1982 forward: Energy Information Administration Form 759, "Monthly Power Plant Report."

In December 1985, U.S. nuclear power plants generated a total of 33.8 billion net kilowatthours of electricity while achieving an average capacity factor of 58.1 percent. This generation represents an increase of 9.4 percent compared with December 1984 generation. Nuclear power supplied 15.4 percent of the electricity generated in December 1985.

Palo Verde-2, a 1,307-net-megawatt-electric pressurized-water reactor operated by the Arizona Public Service Company, received a low-power license from the Nuclear Regulatory Commission on December 9. 1985.

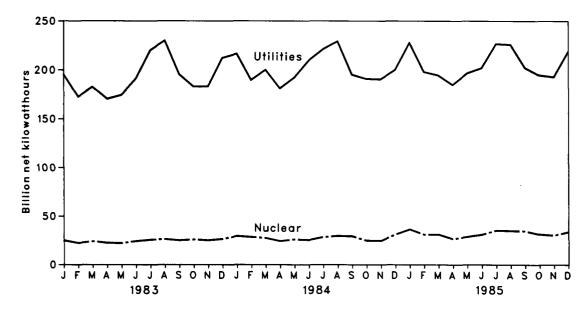
During 1985, 9 nuclear generating units received full-power licenses from the Nuclear Regulatory Commission: Catawba-1, Byron-1, Waterford-3, Palo Verde-1, Wolf Creek, Fermi-2, Limerick-1, Diablo Canyon-2, and River Bend-1. Eight units were declared commercially operable: Susquehanna-2, Callaway-1, Diablo Canyon-2, Catawba-1, Grand Gulf-1, Byron-1, Wolf Creek-1, and Waterford-3. The Nuclear Regulatory Commission was notified in 1985 that one project had been cancelled: Marble Hill-1 and Marble Hill-2. There were no new orders for nuclear generating units during the year.

Nuclear net operable generating capacity was 78.1 million kilowatts in 1985 compared with 69.5 in 1984. Total nuclear generation of 383.7 billion net kilowatthours of electricity in 1985 represents an increase of 17.1 percent compared with 1984 generation. Nuclear power provided 15.5 percent of the electricity generated in 1985 compared with 13.6 in 1984. The average of monthly capacity factors for nuclear power was 58.5 in 1985 and 56.5 in 1984.

There were 95 operable U.S. nuclear power generating units as of December 31, 1985. Of these units, 5 were in power ascension (Diablo Canyon-2, Fermi-2, Limerick-1, Palo Verde-1, and River Bend-1), and 23 units generated no electricity or operated substantially below capacity (Browns Ferry-1, Browns Ferry-2, Browns Ferry-3, Brunswick-2, Davis Besse, Dresden-2, Fort Calhoun, Fort St. Vrain, Hatch-1, Hanford, LaSalle-1, LaSalle-2, North Anna-1, Palisades, Peach Bottom-2, Peach Bottom-3, San Onofre-1, San Onofre-3, Sequoyah-1, Sequoyah-2, St. Lucie-1, Vermont Yankee, and Zion-2). Three units had licenses from the Nuclear Regulatory Commission authorizing fuel-loading and lowpower testing (Millstone-3, Palo Verde-2, and Shoreham).

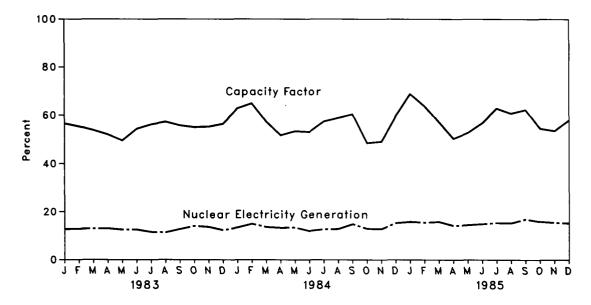
As of December 31, 1985, there were 130 domestic nuclear power generating units in all stages of planning, construction, or operation, with an aggregate design capacity of 121 million net kilowatts.

### **Nuclear Power Plant Operations**



Electricity Generated by Utilities and by Nuclear Power Plants

Nuclear Portion of Electricity Generation and Capacity Factor



#### **Nuclear Power Plant Operations**

		Operable Reactors <sup>1</sup> <sup>2</sup>	Nuclear-Based Electricity Generation	Nuclear Portion of Domestic Electricity Generation	Maximum Dependable Capacity of Operable Reactors <sup>1,3</sup>	Capacity Factor
			Million net kilowatthours	Percent	Million net kilowatts	Percent
1973	Year	39	83,479	4.5	22.900	52.9
1974	Year	48	113,976	6.1	31.710	48.3
1975	Year	54	172,505	9.0	33.312	59.7
1976	Year	60	191,104	9.4	43.277	57.8
1977	Year	65	250,883	11.8	46.046	64.1
1978	Year	70	276,403	12.5	49.629	65.7
1979	Year	68	255,155	11.4	49.326	58.7
1980	Year	70	251,116	11.0	51.059	57.1
1981	Year	74	272,674	11.9	55.534	58.4
1982	Year	77	282,773	12.6	59.552	57.2
1983	January	77	25,073	12.8	59.532	56.6
	February	77	22,198	12. <del>9</del>	59.632	55.4
	March	77	23,890	13.1	59.632	53.9
	April	77	22,335	13.1	59.658	52.1
	May	78	22,051	12.6	59.883	49.5
	June	79	24,152	12.6	61.686	54.4 56.2
	July	79 79	25,602 26,201	11.6 11.4	61.230 61.440	50.2 57.3
	August September	80	25,007	12.8	62.227	55.8
	October	80	25,797	14.1	62.876	55.1
	November	80	25,010	13.7	62.809	55.3
	December	80	26,361	12.4	62.809	56.5
	Year	80	293,677	12.7	62.809	54.8
1984	January	80	29,313	13.5	62.772	62.8
	February	80	28,436	15.0	62.942	64.9
	March	81	27,345	13.7	64.036	57.4
	April	82	24,231	13.4	65.049	51.8
	May	82	25,867	13.5	64.986	53.5
	June	83 83	25,299	12.1 12.8	66.091 66.091	53.2 57.5
	July August	84	28,284 29,493	12.8	67.341	57.5
	September	84	29,146	14.9	67.066	60.4
	October	85	24,774	13.0	68.497	48.5
	November	86	24,575	12.9	69.534	49.1
	December	86	30,872	15.4	69.522	59.7
	Year	86	327,634	13.6	69.522	56.5
1985	January	87	36,186	15.9	70.667	68.8
	February	88	30,809	15.6	71.841	63.8
	March	89	31,041	15.9	72.931	57.2
	April	89	26,458	14.3	72.911	50.4
	May	89	28,697	14.6	72.920	52.9
	June	91	30,837	15.0	75.262	56.9 62 0
	July August	92 94	35,184 34,812	15.5 15.4	75.180 76.897	62.9 60.8
	September	94 94	34,508	17.0	76.955	62.3
	October	94	31,205	16.0	76.877	54.6
	November	95	30,166	15.6	R78.067	R53.7
	December	95	33,782	15.4	†78.087	<b>†58.1</b>
	Year	95	383,688	15.5	<b>†78.087</b>	158.5
			,			,

<sup>1</sup>Monthly data are the status as of the last day of the month. Yearly data are the status as of December 31 of each year. <sup>3</sup>See Note 1 on the last page of this section for the definition. <sup>a</sup>When possible, net maximum dependable capacity (MDC) is used. When a reactor has not operated long enough to permit determination of a net MDC, the net design electrical rating (DER) is used. The capacities for some units have been reduced to reflect the imposition of a "power limit" by the Nuclear Regulatory Commission or by the operating utility. For the definitions of net MDC and net DER, see Note 3 on the last page of this section. <sup>4</sup>For an explanation of the method of calculating the capacity factor, see Note 4 on the last page of this section. <sup>4</sup>Preliminary Data. R = Revised data. Note: • Geographic coverage is the 50 States and the District of Columbia. Sources: • See the last page of this section.

### Status of Nuclear Reactor Units<sup>1</sup>

			ensed eration	Constr Pern					Total Design
		Operable <sup>2</sup>	In Startup <sup>3</sup>	Granted	Pending	On Order	Announced	Total	Capacity*
									Million net kilowatts
1973	Year	39	3	51	58	48	20	219	212
1974	Year	48	5	58	80	28	16	235	234
1975	Year	54	2	69	73	19	19	236	236
1976	Year	60	1	72	66	16	19	234	236
1977	Year	65	1	80	52	13	9	220	220
1978	Year	70	0	90	32	9	4	205	204
1979	Year	68	0	91	21	3	0	183	179
1980	Year	70	2	82	12	3	Ō	169	163
1981	Year	74	Ō	75	11	3	0	163	157
1982	Year	77	2	60	3	2	0	144	135
1983	January	77	2	60	3	2	0	144	135
	February	77	2	60 50	3 3	2	0	144	135
	March	77 77	3 4	59 57		2	0	144	135
	April	78	4 3	57	3 3	2 2	0	143	134
	May June	78 79	3	57 57	3	2	0	143 143	134
	July	79 79	2	57	3	2	0	143	134 134
	August	79 79	2	57	3	2	0	143	134
	September	80	1	57	3	2	0	143	134
	October	80	1	56	2	2	0	143	134
	November	80	1	56	Õ	2	õ	139	133
	December	80	3	53	Ö	2	õ	138	129
1984	January	80	3	51	0	2	0	136	128
	February	80	3	51	ŏ	2	ŏ	136	128
	March	81	3	50	ō	2	Ō	136	128
	April	82	3	49	õ	2	ō	136	128
	May	82	3	49	Ō	2	ō	136	128
	June	83	3	48	0	2	Ó	136	128
	July	83	3	48	Ō	2	Ö	136	128
	August	84	2	44	0	2	0	132	123
	September	84	2	44	0	2.	0	132	123
	October	85	3	42	0	2	0	132	123
	November	86	2	42	0	2	0	132	123
	December	86	6	38	0	2	0	132	123
1985	January	87	5	38	0	2	0	132	123
	February	88	4	38	0	2	0	132	123
	March	89	5	36	0	2	0	132	123
	April	89	6	35	0	2	0	132	123
	May	89	6	35	0	2	0	132	123
	June	91	4	35	0	2	0	132	123
	July	92	3	33	0	2	0	130	121
	August	94	2	32	0	2	0	130	121
	September	94	2	32	0	2	0	130	121
	October	94	2	32	0	2	0	130	121
	November	95 95	2 3	31 30	0	2	0	130	121
	December	90	3	30	U	2	U	130	121

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<sup>1</sup>Monthly data are the status as of the last day of the month. Annual data are the status as of December 31 of each year. <sup>3</sup>See Note 1 on the last page of this section for the definition. <sup>3</sup>See Note 2 on the last page of this section for the definition. <sup>4</sup>Net design electrical rating (DER) is used because many of the units have not had the operational experience needed to determine a net maximum dependable capacity (MDC). See Note 3 on the last page of this section. Note: • Geographic coverage is the 50 States and the District of Columbia. Sources: • See the last page of this section.

### Notes and Sources for the Nuclear Section

#### Notes

1. Operable Reactors: Units that have received Operating Licenses, completed low-power testing, and are authorized to operate at full power (i.e., in receipt of a Full Power Amendment) by the Nuclear Regulatory Commission (NRC), plus the Hanford-N reactor operated by the Department of Energy (DOE). The Hanford-N reactor, with a net capacity of 860 megawatts electric (MWe), is included, although it is not licensed by the NRC, because electricity produced from its output steam is distributed commercially. Similarly, the Shippingport reactor (net capacity of 60 MWe) operated by DOE, was included prior to retirement from service on October 1, 1982, except for the interval from March 1974 through August 1977 when it was excluded because of a major core modification outage. The DOE-operated Experimental Breeder Reactor-2 (EBR-2) is not included because the electricity it generates is not distributed commercially. Five units, each of which has been inoperative for at least 4 years prior to January 1, 1984, are deleted from entries subsequent to their removal from service: Peach Bottom-1 (net capacity of 40 MWe) and Indian Point-1 (net capacity of 265 MWe), both out of service since November 1974; Humboldt Bay (net capacity of 65 MWe), down since August 1976 for major seismic modifications and subsequently offi-cially retired; Dresden-1 (net capacity of 200 MWe), out of service since January 1979 for major modifications and officially retired in August 1984; and Three Mile Island-2 (net capacity of 906 MWe), whose core was severely damaged by a loss-of-coolant accident in March 1979.

2. In Startup: Units that have received Operating Licenses authorizing fuel loading and low-power testing but have not received a Full Power Amendment from the NRC. Without the amendment, these units cannot distribute electricity commercially.

3. Capacity: Nuclear power plants may have more than one type of net capacity rating including:

(a) Net Maximum Dependable Capacity (MDC)-The gross electrical output measured at the output terminals of the turbine generator(s) during the most restrictive seasonal conditions (usually summer) less the station service load. The typical station service load for a nuclear plant is about 5 percent of its gross generation.

(b) Net Design Capacity or Net Design Electrical Rating (DER)—The nominal net electrical output of the unit, specified by the utility and used for plant design.

4. Monthly Capacity Factors: The monthly capacity factors are computed as the actual monthly generation divided by the maximum possible generation for that month. The maximum possible generation is the number of hours in the month multiplied by the net monthly maximum dependable capacity. This fraction is then multiplied by 100 to obtain a percentage. Annual capacity factors are averages of the monthly values for that year.

#### Sources

Reactors Licensed for Operation: Nuclear Regulatory Commission Report NUREG-0020, "Licensed Operating Reactors.'

Electricity Generation: • 1973 through September 1977— Federal Power Commission, Form 4, "Monthly Power Plant Report."

October 1977 through 1981—Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report."
1982 forward—Energy Information Administration, Form EIA-759, "Monthly Power Plant Report."

Maximum Dependable Capacity: Nuclear Regulatory Com-mission Report NUREG-0020, "Licensed Operating Reactors.

Capacity Factor: Energy Information Administration, Office of Coal, Nuclear, Electric, and Alternate Fuels.

Reactor Construction and Planning Data: • 1973 through June 1982---Compiled from various sources, primarily the Department of Energy, Office of Nuclear Reactor Programs, "U.S. Central Station Nuclear Electric Generating Units; Significant Milestones," Nuclear Regulatory Commission Report NUREG-0020, "Licensed Operating Reactors," and from the Energy Information Administration, Office of Coal, Nuclear, Electric, and Alternate Fuels.

Nuclear, Electric, and Alternate Fuels. • July 1982 forward—Nuclear Regulatory Commission Re-port NUREG-0871, "Summary Information Report," Nuclear Regulatory Commission Report NUREG-0020, "Licensed Operating Reactors," and various trade journals. **Total Design Capacity:** Nuclear Regulatory Commission report NUREG-0020, "Licensed Operating Reactors" and Nuclear Regulatory Commission Report NUREG-0871, "Summary Information Report."

### **Crude Oil**

The average price of domestic crude oil purchased at the wellhead was \$24.54 per barrel in December 1985, 2.0 percent below the level in December 1984. The 1985 average price of domestic crude oil was \$24.08, 7.0 percent below the 1984 average.

The 1985 composite refiner acquisition cost of crude oil was 6.5 percent below the 1984 annual level. During December 1985, the composite cost was \$26.82 per barrel, 4.1 percent below the December 1984 average. The cost of imported crude oil was \$26.69 per barrel in December 1985, 4.7 percent below the December 1984 average, while the cost of domestic crude oil was \$26.87, 3.9 percent below the December 1984 average.

### **Motor Gasoline**

The national city average retail price of leaded regular gasoline at all types of stations was \$1.11 per gallon in January 1986, 1.4 percent lower than the price in December 1985. The price of unleaded regular was \$1.19 per gallon in January, down 1.2 percent and the price of unleaded premium was \$1.34 per gallon, down 0.6 percent, from prices during December 1985.

### **Residual Fuel Oil**

The average price, excluding taxes, of residual fuel oil sold to end users (utilities, industry, and other ultimate consumers) in December 1985 was \$0.58 per gallon, 14.0 percent below the December 1984 average. The average price, excluding taxes, of residual fuel oil sold to other-than-ultimate consumers for resale in December 1985 was \$0.55 per gallon, 14.9 percent below the December 1984 average. The 1985 average price to end users was 11.1 percent below the 1984 price, while the average price for resale was 11.9 percent below the 1984 average.

### **Aviation Fuel**

The average price, excluding taxes, of aviation gasoline sold to end users in December 1985 was \$1.17 per gallon, 1.1 percent below the price in the previous month and 4.0 percent below the price in December 1984. The average price, excluding taxes, of kerosene-type jet fuel sold to end users in December 1985 was \$0.81 per gallon, 1.0 percent above the previous month's price but 1.6 percent below the price 1 year earlier.

### No. 2 Distillate Fuel Oil

The national average price of heating oil sold to residential customers in December 1985 was \$1.10 per gallon, 1.7 percent above the price in November 1985 and 5.3 percent above the December 1984 price. The 1985 average was 3.5 percent below the price in 1984. The average price for resale was \$0.83 per gallon in December 1985, 2.0 percent below the price in the previous month, but 7.9 percent above the price in December 1984. The 1985 resale average was down 5.5 percent from the previous year's average.

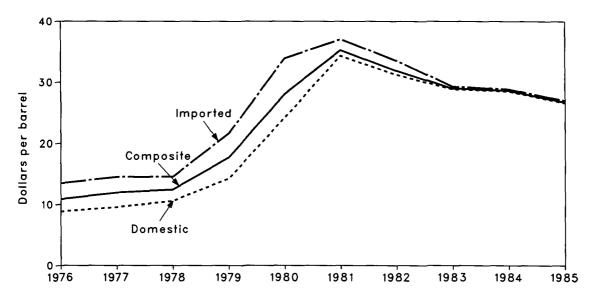
### **Natural Gas**

In December 1985 the average wellhead price of marketed natural gas production was \$2.34 per thousand cubic feet, \$0.23 (8.9 percent) below the December 1984 price. The average price of natural gas delivered to electric utility plants was \$3.43 per thousand cubic feet in November 1985, \$0.29 (7.8 percent) below the November 1984 price. The average price of natural gas used by residential consumers in December 1985 was \$5.72 per thousand cubic feet, \$0.33 (5.5 percent) less than the December 1984 price.

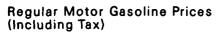
### Electricity

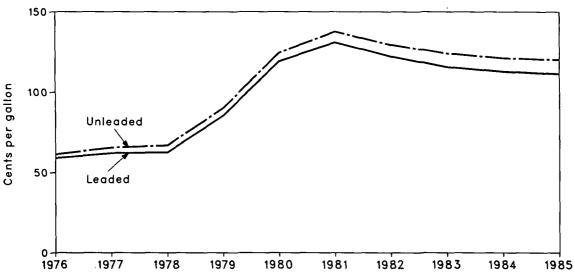
The average retail price of electricity sold by selected privately owned utilities to residential consumers in December 1985 was 7.44 cents per kilowatthour, 3.8 percent below the November 1985 price but 1.5 percent above the December 1984 price. The average price of electricity sold to commercial consumers was 7.29 cents per kilowatthour in December 1985, a 2.7-percent decrease from the previous month's price but up 0.1 percent from the December 1984 price. The average electricity price to industrial users during December 1985 was 5.10 cents per kilowatthour, the same as the previous month's price but 0.6 percent more than during December 1984.

# Price Selected Petroleum Series









#### **Crude Oil Price Summary**

		Actual Domestic	Average FOB Cost of Crude	Average Landed Cost of Crude	Refiner Ac	quisition Cost of	Crude Oil <sup>4</sup>
		Average Wellhead Price <sup>1</sup>	Oil Imports <sup>2</sup>	Oil Imports <sup>3</sup>	Domestic	Imported	Composite
				Dollars per	barrel		
1976	Average	8,19	12.17	13.34	8.84	13.48	10.89
1977	Average	8.57	13.24	14.31	9.55	14.53	11.96
1978	Average	9.00	13.30	14.38	10.61	14.57	12.46
1979	Average	12.64	20.19	21.65	14.27	21.67	17.72
1980	Average	21.59	32.27	33.95	24.23	33.89	28.07
1981	Average	31.77	35.10	36.52	34.33	37.05	35.24
1982	Average	28.52	32.11	33.18	31.22	33.55	31.87
1983	January	27.22	29.47	30.62	30.55	31.40	30.73
1903	February	26.41	25.47	29.08	29.16	30.76	29.49
	March	26.08	26.88	27.84	28.69	28.43	28.64
	April	25.85	27.18	28.24	28.45	27.95	28.33
	May	26.08	27.36	28.55	28.68	28.53	28.64
	June	25.98	27.71	29.00	28.67	29.23	28.85
	July	25.86	27.84	28.99	28.74	28.76	28.75
	August	26.03	27.89	29.22	28.58	29.50	28.88
	September	26.08	27.88	29.24	28.69	29.54	28.97
	October	26.04	27.84	29.08	28.88	29.67	29.14
	November	26.09	27.75	28.93	28.76	29.09	28.85
	December	25.88	27.50	28.58	28.62	29.30	28.83
	Average	26.19	27.73	28.93	28.87	29.30	28.99
1984	January	25.93	27.56	28.49	28.62	28.80	28.67
	February	26.06	27.78	28.89	28.76	28.91	28.81
	March	26.05	27.70	28.69	28.75	28.95	28.81
	April	25.93	27.84	28.91	28.63	29.11	28.77
	May	26.00	27.87	28.94	28.65	29.26	28.83
	June	26.09	27.78	28.89	28.58	29.19	28.77
	July	26.11	27.19	28.32	28.70	29.00	28.79
	August	26.02	27.29	28.20	28.59	28.92	28.69
	September	25.97	27.14	28.14	28.56	28.70	28.60
·	October	25.92	27.15	28.18	28.46	28.79	28.56
	November	25.44	26.91	27.88	28.10	28.74	28.30
	December	25.05	26.69	27.69	27.95	28.02	27.97
	Average	25.88	27.44	28.46	28.53	28.88	28.63
1985	January	24.28	26.10	26.95	26.89	27.51	27.02
	February	23.63	25.90	26.82	26.39	27.05	26.53
	March	23.88	26.32	27.14	26.61	27.23	26.77
	April	24.15	26.58	27.47	26.79	27.61	27.04
	May	24.18	26.25	27.13	26.90	27.62	27.11
	June	24.03	25.69	26.47	26.50	27.27	26.69
	July	24.00	25.41	26.20	26.67	26.46	26.61
	August	23.92	25.48	26.22	26.45	26.62	26.50
	September	23.93	25.43	26.46	26.39	26.59	26.44
	October	24.06	R25.76	R26.73	26.59	26.80	26.65
	November	24.31	R†25.76	R†26.84	26.72	R27.12	26.85
	December†	24.54	25.16	25.99	26.87	26.69	26.82
	Average†	24.08	25.89	26.72	26.65	27.04	26.76

<sup>1</sup>See Note 1 in the Notes and Sources for this section. <sup>2</sup>See Note 2 in the Notes and Sources for this section. <sup>3</sup>See Note 3 in the Notes and Sources for this section. <sup>4</sup>See Note 4 in the Notes and Sources for this section. <sup>†</sup>Preliminary data. R=Revised data. Note: • Geographic coverage is the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and all U.S. Territories and Possessions. Sources: • See the Notes and Sources for this section.

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### FOB Cost of Crude Oil Imports from Selected Countries<sup>1</sup>

		Algeria	Indonesia	Iran	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela
•					Dollars p	ber barrel		Ū	
1976	Average	13.05	12.76	11.61	NA	13.08	11.69	NA	11.32
1977	Average	14.36	13.57	12.67	13.42	14.44	12.37	NA	12.68
1978	Average	14.10	13.64	12.65	13.24	14.04		••••	
1979	Average	20.65	19.35	23.71	20.29		12.70	13.82	12.45
1980	Average	20.05	32.37			21.80	17.63	21.20	17.37
1981				(2)	31.11	35.82	28.53	34.58	24.78
1982	Average	39.09	35.93	(°)	33.13	38.53	32.48	36.08	28.86
	Average	34.23	35.27	30.93	28.07	35.13	33.50	33.46	23.77
1983	January	w	34.71	w	26.90	W	W	32.77	21.58
	February	w	33.74	W	25.69	W	w	30.95	21.82
	March	31.07	29.69	W	24.53	29.52	30.03	29.16	20.04
	April	29.37	29.57	W	24.18	29.63	W	30.07	20.05
	May	29.54	29.31	w	24.60	29.72	w	29.61	19.88
	June	29.80	29.59	w	24.13	29.57	w	28.92	20.80
	July	30.15	29.73	28.41	24.92	29.81	27.91	30.00	19.89
	August	30.32	29.60	28.19	25.15	29.92	27.83	29.88	21.56
	September	30.33	29.77	28.03	25.10	29.59	27.73	30.33	21.81
	October	29.98	29.81	28.29	25.72	30.23	28.24	29.73	23.58
	November	29.75	30.34	W	25.76	29.99	28.22	29.42	23.17
	December	W	29.77	28.30	26.20	29.60	27.18	29.05	24.17
	Average	30.06	29.93	28.25	25.19	29.78	28.03	29.84	21.48
1984	January	27.60	29.89	w	26.22	29.80	27.76	29.29	24.21
	February	28.56	29.09	W	26.04	29.98	26.72	29.70	23.55
	March	28.69	W	NA	26.30	29.89	28.39	29.95	23.86
	April	28.90	29.50	w	26.07	29.93	28.17	29.85	23.93
	May	28.98	29.44	W	26.36	29.67	27.43	29.93	24.07
	June	28.52	29.35	NA	26.58	29.34	w	29.67	24.23
	July	27.43	29.21	w	26.62	29.22	W	28.91	24.37
	August	26.97	W	W	26.71	29.02	W	28.13	23.91
	September	26.90	28.83	NA	26.34	29.24	27.99	27.99	24.57
	October	27.42	28.93	NA	26.44	28.40	W	28.50	24.43
	November	26.50	28.68	NA	26.53	28.32	NA	27.61	24.24
	December	25.13	28.03	NA	26.43	28.11	NA	27.85	24.32
	Average	28.04	29.10	26.93	26.37	29.39	27.60	28.90	24.16
1985	January	25.47	27.43	NA	26.10	27.22	w	w	24.02
	February	W	27.62	NA	26.00	27.41	w	W	24.36
	March	26.50	27.01	W	26.31	28.20	NA	W	24.93
	April	27.47	27.50	W	26.33	27.95	NA	28.09	24.49
	May	W	27.44	W	26.24	27.77	NA	27.41	24.52
	June	W	27.06	W	24.75	27.09	NA	26.65	24.32
	July	W	27.44	W	24.25	27.95	NA	26.58	23.13
	August	NA	26.60	W	24.69	27.82	NA	26.98	22.58
	September	W	25.29	W	24.59	27.97	w	27.67	22.49
	October Novembert	W	26.95 P27.24	W	24.78	28.30	W	28.22	22.81
	Decembert	Ŵ	R27.24 26.77	Ŵ	24.37 23.26	28.67	W	28.65	R23.06
	Average†	26.71	20.77 27.07	Ŵ		29.19		28.04	22.78
	Average	20.11	21.01	vv	25.17	28.03	24.14	27.66	23.61

<sup>1</sup>The Free on Board (FOB) cost at the country of origin excludes all costs related to insurance and transportation. See Note 2 in the Notes and Sources for this section.

\*No crude oil was imported. \*Preliminary data. R = Revised data. NA=Not available. W=Value withheld to avoid disclosure of company data. Note: • Prices through 1980 reflect the period of reporting; prices since then reflect the period of loading. Annual averages are the weighted average of the 12 monthly prices including those prices that were not published. Sources: • See the Notes and Sources for this section.

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### Landed Cost of Crude Oil Imports from Selected Countries<sup>1</sup>

		Algeria	Canada	Indonesia	iran	Mexico	Nigeria	Saudi Arabla	United Kingdom	Venezuela
					D	ollars per ba	rrel			
1975	Average	12.72	12.72	13.79	12.21	NA	12.62	12.30	NA	11.65
1976	Average	13.81	13.57	13.82	12.82	NA	13.80	13.04	NA	11.80
1977	Average	15.20	14.21	14.63	13.80	13.75	15.25	13.61	NA	13.13
1978	Average	14.91	14.50	14.64	13.88	13.54	14.86	13.92	NA	12.83
1979	Average	21.90	20.43	20.69	25.02	20.86	22.96	19.15	22.16	18.18
1980	Average	37.90	30.47	33.92	(2)	31.80	37.05	30.02	35.88	25.86
1981	Average	40.49	32.16	37.57	(') (2)	33.78	39.70	34.19	37.24	29.87
1982	•	35.28	26.92	36.75	32.40	28.64	36.17	35.00	34.28	24.82
	Average									
1983	January	33.20	27.62	36.12	W	27.50	W	W	33.48	23.20
	February	32.17	26.19	35.07	W	26.15	32.24	W	33.33	23.36
	March	31.24	24.78	31.17	W	25.06	30.49	31.63	29.92	21.48
	April	30.55	24.35	31.14	W	24.65	30.63	W	30.84	21.45
	May	30.48	24.32	30.82	W	25.17	30.75	W	30.60	21.24
	June	30.88	24.88	31.40	29.10	24.81	30.56	W	30.02 30.86	22.07 21.30
	July	31.36	25.45	31.46	30.06 29.57	25.34 25.80	30.91 31.21	29.53 29.39	30.86	21.30
	August	31.85	25.45	31.65		25.66	31.21	29.39	30.83	22.02
	September October	31.78 30.97	25.71 26.01	31.27 31.14	29.31 29.73	25.66	31.16	29.53	30.79	24.75
	November	30.96	25.83	31.30	29.73 W	26.29	31.02	29.88	30.33	24.68
	December	30.98	25.63	31.12	28.57	26.88	30.57	28.83	30.00	24.91
	Average	30.23 31.26	25.63	31.57	20.37 29.81	20.00 25.78	30.84	29.76	30.87	22.94
	Average	31.20	23.03	31.37				-	-	
1984	January	29.19	26.44	31.22	W	26.85	30.62	29.67	30.09	25.28
	February	29.73	26.40	30.91	W	26.73	31.29	28.38	30.77	25.21
	March	30.31	26.01	30.81	NA	26.92	30.93	30.20	30.98	24.75
	April	29.81	26.10	31.02	W	26.68	31.08	29.95	30.73	24.86
	May	29.96	27.12	30.80	W	26.92	30.96	28.95	30.75	24.93
	June	29.62	26.00	31.21	NA	27.24	31.05	29.90	30.43	25.29
	July	28.63	27.16	30.26	W	26.98	30.07	W	29.54	25.24
	August	28.16	26.95	30.59	W	26.99	29.99	W	28.93	24.95
	September	27.94	27.03	30.05	Ŵ	26.66	30.60	29.75 28.57	28.81 29.27	25.29 25.49
	October November	28.42 28.12	26.82 26.33	30.11 30.03	W	26.80 26.78	29.47 29.45	28.57 NA	29.27	25.49
	December	27.07	26.53	30.12	NA	26.76	29.45	NA	28.55	25.24
		29.08	26.50 26.59	30.12 30.64	28.67	20.80 26.87	30.50	29.50	20.55 29.60	25.15
	Average	29.00		30.64		20.07				
1985	January	26.28	24.99	29.26	NA	26.46	28.70	w	w	25.18
	February	26.06	24.00	28.73	NA	26.37	28.55	w	w	25.37
	March	27.09	25.13	28.40	W	26.60	29.42	NA	w	25.69
	April	28.28	26.16	29.02	W	26.60	28.99	W	28.57	25.44
	May	W	26.33	28.98	W	26.56	28.69	NA	27.98	25.26
	June	W	26.34	28.73	24.55	25.16	27.81	NA	27.42	25.13
	July	27.35	25.96	28.95	W	24.54	28.56	W	27.28	23.81
	August	W	26.05	28.01	25.70	24.85	28.54	NA	27.69	23.45
	September	W	25.88	26.79	26.47	24.92	28.75	W	28.22	23.29 23.55
	October	W	25.82 D25.74	28.47 B28.07	26.59	25.12	29.06	R26.69	29.00	
	Novembert	W W	R25.74 25.47	R28.97	W	24.70	R29.61 30.38	R25.90 23.80	29.39 28.92	R23.78 23.53
	Decembert Averaget			28.42	W 25.72	23.62				23.53 <b>24.42</b>
	Average†	27.35	25.68	28.62	25.73	25.50	28.95	26.33	28.36	24.42

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<sup>1</sup>See Note 3 in the Notes and Sources for this section. <sup>2</sup>No crude oil was imported. †Preliminary data. R=Revised data. NA=Not available. W=Value withheld to avoid disclosure of company data. Note: • Prices through 1980 reflect the period of reporting; prices since then reflect the period of loading. Annual averages are the weighted average of the 12 monthly prices including those prices that were not published. Sources: • See the Notes and Sources for this section.

### U.S. City Average Retail Prices for Motor Gasoline<sup>1</sup>

		Leaded Regular	Unleaded Regular	Unleaded Premium	Average for Ali Types²
			Cents per gallo	on, including tax	
1974	Average	53.2	NA	NA	NA
1975	Average	56.7	NA	NA	NA
1976	Average	59.0	61.4	NA	NA
1977	Average	62.2	65.6	NA	NA
1978	Average	62.6	67.0	NA	65.2
1979	Average	85.7	90.3	NA	88.2
1980	Average	119.1	124.5	NA	122.1
1981	Average <sup>3</sup>	131.1	137.8	147.0	135.3
1982	Average	122.2	129.6	141.5	135.3
1983	January	114.6	122.8	137.6	
1000	February	109.9	118.7	133.8	121.3 117.0
	March	106.4	115.1	130.8	113.5
	April	113.1	121.5	136.0	119.8
	May	117.7	125.9	139.7	124.3
	June	119.7	127.7	141.1	126.1
	July	120.7	128.8	142.1	127.2
	August	120.3	128.5	141.9	126.9
	September	118.9	127.4	141.0	125.7
	October	117.2	125.5	139.5	123.9
	November	115.6	124.1	138.4	122.4
	December	114.6	123.1	137.6	121.5
	Average	115.7	124.1	138.3	122.5
1984	January	113.1	121.6	136.9	120.0
	February	112.5	120.9	136.1	119.3
	March	112.5	121.0	136.2	119.4
	April	114.5	122.7	137.5	121.1
	May	115.4	123.6	138.0	122.1
	June July	114.7	122.9	137.7	121.4
	August	112.9 111.6	121.2	137.0	119.7
	September	112.0	119.6 120.3	135.5 136.0	118.4 118.9
	October	112.7	120.9	136.5	119.5
	November	112.4	120.7	136.4	119.3
	December	110.9	119.3	135.4	117.9
	Average	112.9	121.2	136.6	119.8
1985	January	106.0	114.8	130.4	114.5
	February	104.1	113.1	129.0	112.8
	March	107.1	115.9	131.0	115.5
	April	111.9	120.5	134.0	119.9
	May	114.4	123.1	136.0	122.3
	June	115.3	124.1	137.1	123.3
	July	115.4	124.2	136.7	123.3
	August September	114.3 112.9	122.9	135.9	122.2
	October	112.9	121.6 120.4	134.9 134.2	120.9
	November	112.3	120.4	133.9	119.8 120.1
	December	112.3	120.8	134.4	120.1
	Average	111.5	120.2	134.0	119.6
1986	January	110.7	119.4	133.6	119.0

<sup>1</sup>See Note 5 in the Notes and Sources for this section.
<sup>2</sup>Also includes types of gasoline not shown separately.
<sup>3</sup>Beginning with September 1981, the Bureau of Labor Statistics changed the weights used in the calculation of average motor gasoline prices. In the average for all types category, gasohol is now included and unleaded premium is weighted more heavily. NA=Not available.
Note: • Geographic coverage for 1974 through 1977 is 56 urban areas. For 1978 forward it is 85 urban areas. Sources: • See the Notes and Sources for this section.

# Monthly Energy Review December 1985 Energy Information Administration

#### Refiner and Gas Plant Operator Sales Prices of Residual Fuel Oil<sup>1</sup>

		Residual Fuel Oll Sulfur Content Less Than or Equal to 1 Percent		Sulfur	ll Fuel Oil Content an 1 Percent	Average		
		Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	
				Cents per gallo	on, excluding tax			
1978	Average	29.3	31.4	24.5	27.5	26.3	29.8	
1979	Average	45.0	46.8	36.6	38.9	39.9	43.6	
1980	Average	60.8	67.5	47.9	52.3	52.8	60.7	
1981	Average	74.8	82.9	62.2	67.3	66.3	75.6	
1981	•	69.5	74.7	57.2	61.1	61.2	67.6	
1902	Average	09.3	74.7	57.2	01.1	01.2	07.0	
1983	January	65.0	70.5	57.0	60.1	60.3	64.2	
	February	63.0	66.0	55.7	58.5	58.5	62.0	
	March	60.0	66.2	55. <del>9</del>	57.0	57.7	60.9	
	April	60.1	64.3	56.5	58.7	57.7	61.0	
	May	62.6	66.9	57.8	59.7	59.2	63.2	
	June	63.2	69.2	58.5	60.1	60.2	64.7	
	July	65.2	70.4	60.5	61.4	62.2	65.9	
	August	66.7	71.6	62.0	63.2	63.8	67.7	
	September	67.0	72.6	63.3	65.3	64.6	69.0	
	October	68.8	72.1	62.6	64.9	64.7	68.7	
	November	66.5	70.7	62.2	64.4	63.6	67.4	
	December	67.3	72.0	60.2	63.1	62.3	67.2	
	Average	64.3	69.5	59.1	61.1	60.9	65.1	
1984	January	71.0	73.6	62.3	64.6	64.8	69.0	
	February	71.4	75.1	65.7	65.8	67.5	70.4	
	March	70.5	73.1	61.9	64.7	64.5	68.5	
	April	69.2	73.1	64.7	66.5	66.2	69.1	
	May	68.3	72.7	65.0	67.4	66.0	69.5	
	June	69.8	73.2	66.1	68.9	67.2	71.0	
	July	66.8	71.5	64.0	66.7	65.0	69.0	
	August	65.6	69.5	62.7	65.0	63.6	67.1	
	September	65.9	70.0	63.8	64.9	64.5	67.5	
	October	66.8	70.8	64.3	65.8	65.1	67.8	
	November	66.8	70.4	63.6	65.8	64.6	67.9	
	December	67.5	70.5	63.3	65.6	64.6	67.7	
	Average	68.5	72.0	63.9	65.9	65.4	68.7	
1985	January	67.6	71.1	63.3	66.5	64.7	68.4	
	February	67.6	71.2	63.4	66.3	65.0	68.7	
	March	66.2	70.1	60.8	65.0	62.4	67.2	
	April	63.0	67.5	58.7	61.9	60.2	64.1	
	May	58.1	61.2	53.4	58.0	54.9	59.5	
	June	54.9	59.9	50.6	52.8	52.4	55.6	
	July	56.4	58.9	52.8	54.6	53.9	56.4	
	August	55.1	57.7	52.1	53.7	53.2	55.8	
	September	60.1	62.8	53.1	54.8	56.1	58.6	
	October	60.1	63.6	52.3	53.8	54.9	58.3	
	November	R57.8	61.7	50.7	52.8	R53.6	56.8	
	December†	60.7	62.6	52.2	54.4	55.0	58.2	
	Average†	60.9	64.5	55.9	58.4	57.6	61.1	

Sales for Resale are those made to purchasers who are other-than-ultimate consumers, that is, wholesale sales. Sales to End Users are those made directly to the ultimate consumer including bulk customers such as agriculture, industry, and utilities, as well as residential and commercial customers.
†Preliminary data. R = Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
•Prices prior to January 1983 are Energy Information Administration estimates. See Note 8 in the Notes and Sources for this section for additional information.
Sources: •See the Notes and Sources for this section.

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### Refiner and Gas Plant Operator Sales Prices of Petroleum Products for Resale<sup>1</sup>

		Finished Motor Gasoline <sup>2</sup>	Finished Aviation Gasoline	Kerosene- Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
				Cents p	er gallon, excludir	ig tax	•	
1978	Average	43.4	53.7	38.6	40.4	36.9	36.5	23.7
1979	Average	63.7	72.1	66.0	62.4	56.9	57.4	29.1
1980	Average	94.1	112.8	86.8	86.4	80.3	80.1	41.5
1981	Average	106.4	125.0	101.2	106.6	97.6	97.2	
1982	Average	97.3	123.0	95.3	101.8			46.6
	-					91.4	91.4	42.7
1983	January	88.5	124.8	91.8	94.2	85.7	85.5	47.0
	February	85.4	123.7	89.9	90.0	80.1	80.7	46.7
	March	82.9	121.2	84.5	83.1	76.0	75.2	47.4
	April	86.5	120.0	82.9	84.2	78. <del>9</del>	76.8	50.0
	May	90.4	120.2	84.3	87.7	80.9	80.2	50.5
	June	91.5	115.0	84.1	84.6	80. <del>9</del>	80.3	50.9
	July	92.3	115.2	84.8	85.2	81.7	80.8	50.7
	August	91.5	114.7	85.4	86.7	83.4	81.7	49.8
	September	90.2	113.7	86.3	91.9	85.1	83.5	50.1
	October	88.1	118.9	86.4	90.8	83.5	83.0	49.9
	November	86.6	118.7	84.4	90.4	82.6	82.0	47.3
	December	83.8	118.8	83.6	88.6	80.7	80.1	45.4
	Average	88.2	117.8	85.4	89.2	81.5	80.8	48.4
1984	January	83.2	116.7	86.4	95.9	87.5	82.6	47.7
	February	83.8	116.5	86.5	100.4	89.2	84.5	47.4
	March	84.7	117.1	84.6	91.5	81.3	81.0	45.3
	April	86.9	116.8	84.2	90.7	82.8	80.8	44.6
	May	86.6	117.1	84.3	90.9	83.2	81.9	44.4
	June	84.5	116.8	84.2	88.1	82.4	81.9	44.1
	July	81.7	117.2	82.8	87.6	79.4	79.3	42.3
	August	81.1	116.7	81.0	86.0	77.8	77.7	43.2
	September	82.8	116.8	81.7	88.8	80.0	78.4	44.8
	October	83.6	116.4	82.9	88.9	80.8	80.0	46.1
	November	81.9	114.8	81.4	88.0	79.4	79.0	45.6
	December	78.0	114.0	80.1	86.4	77.1	77.0	43.0 ·
	Average	83.2	116.5	83.0	91.6	82.1	80.3	45.0
1985	January	75.2	114.5	79.5	85.8	75.7	74.9	40.0
	February	76.3	114.0	79.3	86.5	75.2	74.1	39.4
	March	81.0	113.6	78.6	85.7	76.4	75.6	38.0
	April	86.0	112.6	7 <del>9</del> .5	84.7	79.3	79.1	37.9
	Мау	87.5	113.2	78.1	80.4	76.5	78.9	38.1
	June	87.7	113.7	76.0	75.9	72. <del>9</del>	75.5	37.1
	July	87.3	113.6	75.2	76.9	70.3	72.3	36.3
	August	85.0	113.3	76.8	79.7	72.0	72.5	36.5
	September	83.2	113.0	79.2	85.9	77.0	76.3	37.6
	October	83.1	113.0	81.5	90.1	81.7	80.5	39.7
	November	84.7	112.6	83.6	R93.6	84.9	84.3	43.0
	December†	83.0	108.1	83.1	92.7	83.2	82.1	46.9
	Average†	83.5	112.9	79.4	87.4	77.6	77.2	39.7

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<sup>1</sup>Sales for Resale are those made to purchasers who are other-than-ultimate consumers, that is, wholesale sales. Sales to End Users are those made directly to the ultimate consumer including bulk customers such as agriculture, industry, and utilities, as well as residential and commercial customers.
<sup>2</sup>See Note 5 in the Notes and Sources for this section.
†Preliminary data. R=Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
•Prices prior to January 1983 are Energy Information Administration estimates. See Note 8 in the Notes and Sources for this section for additional information.
Sources: • See the Notes and Sources for this section.

#### Refiner and Gas Plant Operator Sales Prices of Petroleum Products to End Users<sup>1</sup>

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		Finished Motor Gasoline <sup>2</sup>	Finished Aviation Gasoline	Kerosene- Type Jet Fuel	Kerosene	No. 2 Fuel Oll	No. 2 Diesei Fuel	Propane (Consumer Grade)
		1		Cents	per gallon, exclud	ing tax		
1978	Average	48.4	51.6	38.7	42.1	40.0	37.7	33.5
1979	Average	71.3	68.9	54.7	58.5	51.6	58.5	35.7
1980	Average	103.5	108.4	86.8	90.2	78.8	81.8	48.2
1981	Average	114.7	130.3	102.4	112.3	91.4	99.5	56.5
1982	Average	106.0	131.2	96.3	108.9	90.5	94.2	59.2
	-							
1983	January	97.1	129.2	94.5	104.5	100.9	89.2	72.7
	February	92.5	127.2	92.6	101.4	97.0	84.0	71.7
	March	89.8	126.6	90.6	97.1	93.0	78.0	68.1
	April	94.7	125.2	88.8	93.4	89.1	78.8	68.6 72.2
	May	96.6	125.4	87.8	93.8	89.5	81.8	
	June	97.8	125.6	86.3	90.0	87.3	81.5	67.3
	July	98.8	125.1 125.9	85.6	89.0	85.1	82.0 83.0	66.4 68.9
	August	98.4	125.9	85.5	90.8 92.7	86.1	84.8	74.9
	September October	96.9 95.4	124.2	86.1 86.0	98.9	88.0 89.0	84.8 84.2	69.6
	November	93.9	124.7	85.8	100.0	90.1	83.5	72.8
	December	92.4	124.5	85.5	96.6	92.1	82.2	76.4
	Average	95.4	125.5	83.5 87.8	96.1	91.6	82.6	70.9
	-							
1984	January	90.6	123.9	85.8	106.8	97.7	84.4	76.8
	February	90.2	123.7	86.5	117.9	104.6	87.4	76.3
	March	90.7	123.8	85.6	111.3	94.7	83.2	76.4
	April	92.9	124.4	85.1	105.8	91.9	82.4	76.5
	May	93.4	123.9	85.2	102.4	90.9	83.2	70.4
	June	92.5	124.6	84.5	94.3	86.9	84.0	70.6
	July	90.4	124.3	84.1	90.6	84.3	81.3	69.6
	August	89.2	123.2	83.4	92.8	82.8	79.7	71.9
	September	89.7	123.7	83.1	99.2	84.3	80.2	73.4
	October	90.5	123.3	83.2	102.7	87.3	81.6	74.1
	November	89.9	119.3	82.4	106.1	87.7	80.7	73.8
	December	88.0	121.9	82.2	101.4	88.1	79.4	70.0
	Average	90.7	123.4	84.2	103.6	91.6	82.3	73.7
1985	January	84.6	121.7	81.4	106.0	87.0	77.6	78.8
	February	83.6	121.1	80.9	103.7	86.1	76.7	76.1
	March	87.1	121.4	80.4	103.1	86.0	77.0	74.6
	April	92.4	121.2	80.1	101.0	85.8	79.9	75.7
	May	94.4	121.9	79.5	94.1	82.2	79.7	70.5
	June	95.2	121,7	78.6	88.2	77.8	77.2	66.8
	July	95.4	120.2	78.2	86.0	72.4	74.5	62.9
	August	94.0	118.9	77.7	89.9	74.4	73.8	62.9
	September	91.9	119.5	78.1	96.0	81.1	78.1	63.8
	October	90.8	118.9	78.8	100.4	85.2	81.6	69.7
	November	R91.7	R118.3	80.1	106.7	R91.3	85.4	72.2
	December†	92.0	117.0	80.9	111.5	92.3	85.6	75.2
	Average†	91.2	120.1	79.5	103.0	84.8	78.9	71.6

'Sales for Resale are those made to purchasers who are other-than-ultimate consumers, that is, wholesale sales. Sales to End Users are those made directly to the ultimate consumer including bulk customers such as agriculture, industry, and utilities, as well as residential and commercial customers.
\*See Note 5 in the Notes and Sources for this section.
†Preliminary data. R=Revised data.
Notes: 

 Geographic coverage is the 50 States and the District of Columbia.

\*Prices prior to January 1983 are Energy Information Administration estimates. See Note 8 in the Notes and Sources for this section for additional information.

additional information.

Sources: • See the Notes and Sources for this section.

Sales Prices of No. 2 Distillate to Residences for Selected States<sup>1</sup>

		СТ	ME	MA	NH	RI	νт	DE	DC	MD	NJ	NY	PA	VA
						С	ents per	gallon, e	xcluding t	ax				
1978	Average	50.1	48.6	48.8	50.3	50.7	50.8	47.8	50.7	49.2	49.6	50.1	48.8	49.1
1979	Average	72.0	68.8	70.9	72.5	72.8	72.5	68.2	74.2	70.1	71.0	71.2	69.8	70.4
1980	Average	98.0	96.3	97.8	100.4	101.1	101.5	95.4	102.6	97.9	97.9	98.2	96.4	98.5
1981	Average	121.7	120.4	121.3	123.7	123.8	125.4	117.3	127.4	121.4	121.5	123.2	118.1	120.5
1982	Average	118.3	115.5	117.6	117.4	120.1	120.1	111.3	124.5	117.1	117.4	120.5	113.7	117.7
1983	January	119.5	109.0	116.3	111.6	116.2	121.5	110.5	122.8	115.4	115.7	120.6	113.7	116.0
	February	115.8	103.7	113.2	105.5	112.2	116.9	108.2	119.7	112.6	110.4	117.6	109.6	112.0
	March	108.3	97.4	105.4	100.8	106.8	109.6	103.9	115.3	108.2	104.6	110.2	104.0	106.9
	April	104.5	99.5	104.4	100.9	108.8	110.6	103.0	113.1	107.9	104.4	106.9	101.8	106.7
	Мау	105.9	101.6	107.0	102.6	109.6	111.2	104.6	112.9	108.6	105.5	108.2	103.3	107.2
	June	104.3	102.6	105.9	101.2	112.0	112.8	107.3	114.7	108.3	104.6	110.5	102.2	106.8
	July	104.2	102.6	105.3	104.3	109.1	112.3	107.8	112.8	107.2	104.5	109.9	101.3	107.4
	August	103.8	105.6	105.4	103.5	107.9	111.7	102.5	113.3	107.0	105.5	110.0	101.6	107.7
	September	103.8	103.8	106.2	104.0	108.1	111.0	103.5	113.9	108.1	106.1	110.5	102.8	108.1
	October	104.3	102.9	105.6	103.1	108.0	109.4	103.5	113.4	108.7	105.4	110.3	103.3	104.8
	November	104.1	101.8	106.1	101.5	108.7	109.8	103.7	113.5	108.8	104.6	110.2	103.7	104.9
	December	105.6	102.2	108.1	103.7	109.4	110.0	105.5	114.7	109.2	106.7	110.9	104.6	105.2
	Average	109.1	102.8	109.1	104.1	110.5	112.9	106.0	117.0	110.3	107. <del>9</del>	112.1	105.8	108.7
1984	January	115.7	110.2	114.4	114.0	113.7	116.6	114.8	122.0	115.6	114.1	118.3	112.9	111.4
	February	121.7	112.6	119.7	117.8	117.5	118.9	118.4	128.6	121.9	119.5	124.3	117.4	117.5
	March	114.5	103.3	113.1	108.8	111.7	115.1	111.1	122.6	116.2	113.5	117.0	110.9	112.6
	April	113.4	103.3	112.4	107.7	110.7	113.3	109.9	119.9	115.6	110.6	116.0	107.8	110.8
	May	112.5	102.7	112.5	108.8	111.4	112.2	109.0	119.5	113.0	109.1	114.5	105.8	111.1
	June	110.6	103.7	110.5	104.5	110.8	112.8	107.2	116.3	109.9	107.1	115.0	103.3	108.7
	July	107.4	102.5	107.3	101.9	109.3	108.6	103.7	116.5	109.0	104.9	112.8	99.7	107.2
	August	104.7	98.0	105.5	98.6	106.0	108.0	103.7	109.8	105.2	103.6	110.2	99.6	105.2
	September	105.4	99.1	106.0	101.0	105.9	106.9	102.1	109.9	106.7	104.3	109.3	100.9	105.9
	October	106.2	101.9	106.9	102.2	107.4	108.0	103.5	111.8	107.5	105.7	111.9	101.5	106.7
	November	107.2	100.6	107.2	102.7	106.5	107.5	103.3	111.9	108.2	105.2	111.7	102.9	107.1
	December	106.4	97.9	107.0	103,1	107.1	106.4	102.8	112.9	107.1	104.9	111.3	103.2	107.7
	Average	112.1	103.9	111.6	108.4	111.4	1 <b>11.9</b>	109.6	118.7	113.5	111.0	115.5	107.9	110.5
1985	January	106.9	97.9	107.2	101.3	108.1	106.9	103.8	112.1	107.5	105.0	111.3	102.9	106.2
	February	107.2	98.5	107.1	102.7	106.9	107.3	104.0	117.1	108.6	105.7	112.0	103.2	106.8
	March	106.8	100.6	107.3	103.3	106.2	107.9	104.6	115.9	108.3	105.1	111.3	102.1	105.8
	April	107.0	101.5	106.6	102.2	106.9	106.4	105.1	113.9	109.7	105.2	110.7	100.9	103.8
	May	106.2	99.4	104.5	99.9	102.1	105.4	100.7	112.4	108.1	103.4	109.7	99.8	103.9
	June	103.5	95.4	101.1	94.4	98.6	103.7	96.4	107.1	104.4	99.6	108.1	95.0	104.4
	July	100.2	91.4	98.3	90.9	97.5	101.6	96.2	107.3	101.2	97.4	105.0	92.1	99.6
	August	99.5	91.0	96.1	91.7	95.9	101.5	97.5	105.5	98.9	97.3	105.0	92.5	99.2
	September	100.5	94.0	100.7	97.5	101.0	104.9	98.8	107.1	103.2	101.4	104.5	96.6	102.2
	October	106.4	99.4	104.7	102.3	104.4	106.9	102.7	109.9	106.3	103.4	107.0	98.6	105.8
	November	111.4	R103.7	110.5	R107.7	R111.6	111.2	107.1	R114.5	111.8	R109.3	114.3	105.7	R107.5
	Decembert	114.3	105.6	110.2	109.1	111.1	113.4	110.7	117.0	112.7	112.2	115.0	108.9	110.2
	Average <sup>†</sup>	108.0	99.7	106.8	102.5	106.7	107.8	104.7	114.2	108.8	105.9	111.2	102.2	106.1

<sup>1</sup>The States are listed by geographic region of the country. State names are abbreviated as follows: CT - Connecticut, ME - Maine, MA - Massachusetts, NH - New Hampshire, RI - Rhode Island, VT - Vermont, DE - Delaware, DC - District of Columbia, MD - Maryland, NJ - New Jersey, NY - New York, PA - Pennsylvania, VA - Virginia, WV - West Virginia, IL - Illinois, IN - Indiana, MI - Michigan, MN - Minnesota, OH - Ohio, WI - Wisconsin, ID - Idaho, AK - Alaska, OR - Oregon, WA - Washington. Footnotes continued on following page.

Sales Prices of No. 2 Distillate to Residences for Selected States<sup>1</sup> (continued)

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		wv	IL	IN	мі	MN	он	WI	ID	AK	OR	WA	U.S. Average
		** *	16	10	111					AL	Un	WA	Average
						Cen	ts per ga	llon, exclu	iding tax				
1978	Average	46.2	46.5	48.5	47.9	47.8	47.4	44.7	43.6	53.2	45.8	48.6	49.0
1979	Average	65.1	68.8	72.7	70.9	72.4	<b>68.6</b>	67.3	62.1	68.2	68.0	69.7	70.4
1980	Average	92.2	95.8	99.6	97.8	99.9	91.9	91.5	91.6	97.8	97.3	100.8	97.4
1981	Average	115.0	114.9	118.5	118.3	118.4	113.2	109.1	110.4	118.0	111.4	116.5	119.4
1982	Average	109.3	110.9	114.3	113.9	115.1	110.2	107.8	110.4	117.4	111.6	117.6	116.0
1983	January	105.6	103.8	105.7	110.6	107.8	107.9	108.5	109.1	114.6	113.6	117.7	115.0
	February	104.7	99.5	102.8	108.5	101.6	104.4	104.5	104.8	NA	107.8	114.3	111.6
	March	99.2	96.6	95.7	103.7	96.5	98.2	96.8	<del>9</del> 9.6	110.7	101.4	109.0	105.1
	April	97.5	<del>9</del> 7.7	96.8	102.5	100.5	95.8	97.1	99.0	106.6	99.1	106.0	103.5
	May	96.1	100.3	98.2	102.7	101.9	96.5	98.7	99.2	106.0	99.0	105.5	104.8
	June	97.3	100.2	98.2	110.7	102.4	96.1	98.7	98.7	105.0	99.4	105.4	106.0
	July	94.9	99.6	99.4	105.3	102.6	97.3	99.0	99.3	105.8	97.8	105.2	105.0
	August	96.1	100.7	98.9	102.2	104.4	95.2	99.2	98.1	105.1	98.7	104.0	104.9
	September	100.7	102.5	101.4	103.9	103.7	101.2	100.7	98.9	106.2	100.5	105.6	105.7
	October	100.6	101.0	101.5	105.8	104.8	100.2	101.8	99.5	106.1	101.4	106.3	106.0
	November	100.5	100.8	100.7	105.4	104.4	101.0	100.4	99.5	105.5	102.1	106.4	106.0
	December	101.5	99.6	101.1	106.8	104.2	102.1	100.5	100.3	105.5	101.8	106.1	106.7
	Average	101.0	100.4	100.7	106.4	103.1	101.3	101.2	101.8	108.8	103.6	109.0	107.8
1984	January	108.5	104.7	106.0	107.3	106.6	104.6	101.5	100.1	104.1	100.5	103.6	112.0
	February	109.9	105.9	107.3	108.0	102.8	105.7	102.8	101.3	106.5	100.9	103.8	116.9
	March	104.9	102.3	100.6	105.6	105.1	101.7	101.7	97.2	107.3	100.9	104.6	111.3
	April	101.6	100.3	103.4	104.8	103.9	101.9	101.4	96.2	107.3	100.6	105.0	109.8
	May	98.9	102.3	102.4	105.2	105.3	103.1	101.0	98.1	107.2	99.5	104.2	108.4
	June	99.5	101.6	105.9	103.3	104.2	101.7	100.5	93.8	107.8	98.2	103.3	107.2
	July	96.2	99.4	101.4	102.6	105.1	101.8	100.5	93.1	107.2	97.1	100.4	104.8
	August	96.6	98.9	100.3	101.8	104.5	99.5	100.0	97.4	107.3	94.9	99.7	103.3
	September	96.9	98.6	100.7	103.2	103.5	100.1	98.8	98.4	105.0	95.9	100.4	103.6
	October	98.3	97.1	100.9	103.0	103.0	101.2	100.7	99.4	107.8	96.5	100.9	104.9
	November	99.6	95.8	102.3	103.5	103.1	100.8	101.0	97.9	107.8	97.6	101.3	105.3
	December	99.2	94.4	100.9	103.2	102.8	99.3	99.0	98.8	107.5	97.4	100.5	104.8
	Average	102.1	100.1	103.1	105.0	104.1	102.1	101.0	98.5	106.9	99.3	102.6	109.1
1985	January	98.6	95.2	98.6	102.1	99.5	98.3	97.3	96.8	108.6	96.1	100.6	104.9
	February	98.3	94.4	97.8	101.0	99.8	98.7	96.1	96.9	107.6	96.6	99.8	105.3
	March	98.1	94.5	96.3	101.3	101.0	97.9	96.4	96.6	112.8	95.7	100.3	105.0
	April	96.4	96.7	98.6	98.2	101.4	99.9	97.6	96.1	NA	96.5	99.2	105.0
	May	93.8	96.4	101.5	96.8	103.8	99.9	99.6	96.8	106.8	96.7	98.1	103.5
	June	90.7	92.1	97.5	98.2	104.3	97.1	94.2	95.9	107.4	95.5	99.1	100.8
	July	90.2	90.0	93.2	99.4	100.5	92.9	93.0	94.9	108.1	95.3	97.5	98.0
	August	88.6	90.8	93.1	96.8	101.0	91.8	93.0	94.5	107.1	93.0	97.1	97.2
	September October	96.2 98.7	95.6 100.1	95.4 101.1	99.2 101.7	98.6	95.8 98.0	94.9	94.3	109.2	93.9	97.6	99.7
	November	98.7 R105.0	R104.0	R105.2	101.7 R103.5	101.1 R105.6	98.0 R104.4	99.1	97.2 98.0	108.8 R106.2	94.1 99.1	100.0 104.4	103.0 108.6
	Decembert	104.8	103.4	105.2	107.7		105.7	R102.0					108.6
		98.1	97.5			105.0		103.2	99.1	106.7	102.5	106.1	
	Average†	98.1	97.5	99.3	101.9	101.9	99.7	98.3	97.2	108.1	97.0	101.1	105.3

Footnotes continued. †Preliminary data. R=Revised data. NA=Not available. Note: • Prices prior to January 1983 are Energy Information Administration estimates. See Note 8 in the Notes and Sources for this section for additional information. Sources: • See the Notes and Sources for this section.

#### National Average Natural Gas Prices—Previous Series

		Wellhead Price	Imports by Major Interstate Pipeline Companies	Purchased from Producers by Major Interstate Pipeline Companies	Industrial Sales by Major Interstate Pipeline Companies <sup>1</sup>	Purchased by Electric Plants <sup>1</sup> <sup>2</sup>	Residential Price <sup>1 3</sup>
				Dollars per thousa	nd cubic feet <sup>4</sup>		
1973 1974 1975	Average Average Average	0.22 0.30 0.45	NA NA NA	NA NA NA	NA NA NA	0.35 0.49 0.77	1.29 1.43 1.71
1976	Average	0.58	NA	NA	NA	1.06	1.98
1977	Average	0.79	NA	NA	NA	1.33	2.35
1978	Average	0.91	2.21	0.83	1.54	1.48	2.56
1979	Average	1.18	2.60	1.22	2.01	1.80	2.98
1980	Average	1.59	4.42	1.63	2.53	2.28	3.68
1981	Average	1.98	4.84	2.15	3.11	2.91	4.29
1982	Average	2.46	4.94	2.72	3.73	3.49	5.17
1983	January	2.66	5.03	3.06	4.38	²3.57	5.86
	February	2.66	5.09	3.15	4.41	3.41	5.87
	March	2.58	5.01	3.01	4.24	3.45	6.00
	April	2.53	4.58	2.90	4.44	3.35	6.06
	May	2.53	4.40	2.98	4.24	3.55	6.22
	June	2.59	4.41	2.95	4.22	3.58	6.20
	July	2.52	4.31	2.96	4.28	3.72	6.21
	August September	2.58 2.67	3.93 4.02	2.90 2.87	4.23 4.08	3.75 3.70	6.18 6.19
	October	2.58	4.02	2.86	4.00	3.62	6.10
	November	2.60	4.26	2.84	4.26	3.54	6.04
	December	2.61	4.33	2.73	4.12	3.49	6.06
	Average	2.59	4.51	2.93	4.26	3.58	6.06
1984	January	2.67	4.40	2.80	4.25	3.55	5.98
1004	February	2.71	4.37	2.82	3.97	3.61	6.01
	March	2.67	4.40	2.80	4.18	3.52	5.98
	April	2.64	4.23	2.95	4.11	3.57	6.00
	May	2.67	4.15	2.86	4.17	3.75	6.19
	June	2.70	4.25	2.89	4.06	3.76	6.13
	July	2.68	4.15	2.95	4.04	3.89	6.17
	August	2.69	4.12	2.95	4.07	3.80	6.20
	September	2.62	4.34	2.84	4.10	3.83	6.26
	October November	2.63 2.61	4.19 3.43	2.96 3.13	4.06 4.26	3.75 3.72	6.25 6.12
	December	2.57	3.34	2.95	4.22	3.69	6.09
	Average	2.66	4.08	2.91	4.13	3.72	6.06
1985	January	s2.62	3.21	2.89	4.19	3.77	6.19
1905	February	*2.66	3.08	2.87	R3.82	3.72	6.12
	March	⁵2.56	3.29	2.90	4.00	3.79	6.16
	April	s2.58	3.39	2.86	3.96	3.76	6.14
	May	<sup>5</sup> 2.48	3.32	2.89	3.84	3.60	NA
	June	<b>⁵2.52</b>	3.40	3.00	3.86	3.60	NA
	July	⁵2.46	3.41	2.82	3.83	3.59	NA
	August	⁵2.42	3.28	2.69	3.75	3.49	NA
	September	°2.37	3.28	2.76	3.80	3.42	NA
	October	⁵2.35	3.16	2.68	3.99	3.44	NA
	November	2.35	2.88	2.62	3.92	3.43	NA
	December	2.34	NA	NA	NA	NA	NA
	Average	2.48	NA	NA	NA	NA	NA

Previous Data Series. The residential and industrial price series shown on this page are being replaced by the series shown on the following page. Concurrent publication of both previous and current data series will continue until 3 months overlap of industrial data has occurred.

Includes supplemental gaseous fuels.

<sup>an</sup>Clate through December 1982 cover all steam-electric utility plants with a capacity of 25 megawatts or greater. From 1974 through 1982, data include peaking units. Beginning with January 1983, data cover steam-electric utility plants with a capacity of 50 megawatts or greater. <sup>a</sup>Monthly residential prices are Energy Information Administration calculations. See Note 6 in the Notes and Sources for this section for estimation procedures.

<sup>4</sup>Prices shown on this page are intended to include all taxes. See Note 9 in the Notes and Sources for this section. <sup>5</sup>These downward revisions result primarily from the Texas Comptroller of Public Accounts estimated 6 percent reduction in previously reported Texas wellhead prices.

R=Revised data. NA=Not available.

Data for 1973 through December 1984 are final. All other data are preliminary unless otherwise indicated.

Sources: . See the Notes and Sources for this section.

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Notes: • Geographic coverage is the 50 States and the District of Columbia.

#### National Average Natural Gas Prices—Current Series

				or Interstate ne Companies			Delivered	to Consum	Iers <sup>1</sup>	
		Wellhead	Imports	Purchases from Producers	City Gate	Residential	Commercial	industrial	Electric Utilities <sup>2</sup>	Average
				C	ollars per	thousand cubic	c feet <sup>a</sup>			
1973	Average	0.22	NA	NA	NA	1.29	0.94	0.50	0.38	0.73
1974	Average	0.30	NA	NA	NA	1.43	1.07	0.67	0.51	0.89
1975	Average	0.45	NA	NA	NA	1.71	1.35	0.96	0.77	1.19
1976	Average	0.58	NA	NA	NA	1.98	1.64	1.24	1.06	1.47
1977	Average	0.79	NA	NA	NA	2.35	2.04	1.50	1.32	1.78
1978	Average	0.91	2.21	0.83	NA	2.56	2.23	1.70	1.48	1.98
1979	Average	1.18	2.60	1.22	NA	2.98	2.73	1.99	1.81	2.34
1980	Average	1.59	4.42	1.63	NA	3.68	3.39	2.56	2.27	2.91
1981	Average	1.98	4.84	2.15	NA	4.29	4.00	3.14	2.89	3.51
1982	Average	2.46	4.94	2.72	NA	5.17	4.82	3.87	3.48	4.32
1983	-	2.66	5.03	3.06	NA	NA	NA	NA	3.57	NA
1903	January February	2.66	5.03	3.15	NA	NA	NA	NA	3.41	NA
	March	2.58	5.01	3.01	NA	NA	NA	NA	3.45	NA
	April	2.53	4.58	2.90	NA	NA	NA	NA	3.35	NA
	May	2.53	4.40	2.98	NA	NA	NA	NA	3.55	NA
	June	2.59	4.41	2.95	NA	NA	NA	NA	3.58	NA.
	July	2.52	4.31	2.96	NA	NA	NA	NA	3.72	NA
	August	2.58	3.93	2.90	NA	NA	NA	NA	3.75	NA
	September	2.67	4.02	2.87	NA	NA 6.70	NA 5.62	NA NA	3.70 3.62	NA NA
	October November	2.58 2.60	4.03 4.26	2.86 2.84	3.97 3.91	6.30	5.62 5.67	NA	3.52	NA
	December	2.60	4.20	2.73	3.88	5.94	5.62	NA	3.49	NA
	Average	2.59	4.51	2.93	NA	6.06	5.59	4.18	3.58	4.82
4004	-	2.67	4.40	2.80	3.94	5.78	5.49	NA	3.55	NA
1984	January February	2.67	4.40	2.80	4.02	5.84	5.54	NA	3.55	NA
	March	2.67	4.40	2.80	3.91	5.92	5.57	NA	3.52	NA
	April	2.64	4.23	2.95	3.97	5.96	5.52	NA	3.57	NA
	May	2.67	4.15	2.86	3.99	6.27	5.60	NA	3.75	NA
	June	2.70	4.25	2.89	4.04	6.76	5.67	NA	3.76	NA
	July	2.68	4.15	2.95	4.07	7.11	R5.62	NA	3.89	NA
	August	2.69	4.12	2.95	43.69	7.23	R5.48	NA	3.80	NA
	September	2.62	4.34	2.84	4.04	7.17	R5.53	NA	3.83	NA
•	October	2.63	4.19	2.96	3.98	6.80	R5.54	NA	3.75	NA
	November December	2.61 2.57	3.43 3.34	3.13 2.95	3.92 3.98	6.30 6.05	R5.55 R5.60	NA NA	3.72 3.69	NA NA
	Average	2.66	4.08	2.91	3.96	6.12	5.55	4.22	3.72	4.86
1985	January	⁵2.62	3.21	2.89	3.90	5.98	R5.63	NA	3.77	NA
	February	<b>52.66</b>	· 3.08	2.87	3.94	5.87	R5.54	NA	3.72	NA
	March	°2.56	3.29	2.90	3.98	R5.99	R5.59	NA	3.79	NA
	April	<sup>5</sup> 2.58	3.39	2.86	3.91	6.11	R5.64	NA	3.76	NA
	May	°2.48	3.32	2.89	3.91	6.58	R5.55	NA	3.60	NA
	June July	⁵2.52 ⁵2.46	3.40 3.41	3.00 2.82	3.90 3.75	6.96 7.07	R5.59 R5.42	NA NA	3.60 3.59	NA NA
	August	°2.40 ⁵2.42	3.41	2.62	3.75	7.21	R5.39	NA	3.49	NA
	September	•2.37	3.28	2.03	R3.71	R7.06	R5.36	NA	3.43	NA
	October	\$2.35	3.16	2.68	3.60	6.51	R5.29	NA	3.44	NA
	November	2.35	2.88	2.62	3.48	R6.13	R5.35	NA	3.43	NA
	December	2.34	NA	NA	3.47	5.72	5.23	NA	NA	NA
	Average	2.48	NA	NA	3.77	6.13	5.49	NA	NA	NA

Current Data Series. The residential and industrial price series shown on this page are replacing the series shown on the preceding page. The city gate, commercial, and consumer average price series are new. See the last page of this section for a listing of the sources of all data series.

Includes supplemental gaseous fuels.

<sup>a</sup>Data through December 1982 cover all steam-electric utility plants with a capacity of 25 megawatts or greater. From 1974 through 1982, data include peaking units. Beginning with January 1983, data cover steam-electric utility plants with a capacity of 50 megawatts or greater. <sup>a</sup>Prices shown on this page are intended to include all taxes. See Note 9 in the Notes and Sources for this section.

\*The decline from the previous month was primarily the result of refunds in the form of reduced charges. \*These downward revisions result primarily from the Texas Comptroller of Public Accounts estimated 6 percent reduction in previously reported Texas wellhead prices. R=Revised data. NA=Not available.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Data for 1973 through December 1984 are final. All other data are preliminary unless otherwise indicated.

Sources: . See the Notes and Sources for this section.

**Energy Information Administration** 

# Price

### Electricity

	•	Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants <sup>2</sup>			for Selected Privately Owned Utilities <sup>3</sup>						
		Coal	Heavy Oil <sup>4</sup>	Natural Gas <sup>s</sup>	All Fossil Fuels <sup>4</sup>	Residential	Commercial	Industrial	Other	Total <sup>®</sup>	
			Cents per	million Btu			Cents pe	er kilowatthou	r		
1973	Average	40.5	78.5	33.8	47.6	2.54	2.41	1.25	2.10	1.96	
1974	Average	70.9	189.0	48.2	91.4	3.10	3.04	1.69	2.75	2.49	
1975	Average	81.4	200.5	75.2	104.4	3.51	3.45	2.07	3.08	2.92	
1976	Average	84.8	195.2	103.4	111.9	3.73	3.69	2.21	3.27	3.09	
1977	Average	94.7	219.8	129.1	129.7	4.05	4.09	2.50	3.51	3.42	
1978	Average	111.6	212.5	142.2	141.1	4.31	4.36	2.79	3.62	3.69	
1979	Average	122.4	298.8	174.9	163.9	4.64	4.68	3.05	3.96	3.99	
1980	Average	135.1	426.7	219.9	192.8	5.36	5.48	3.69	4.76	4.73	
1981	Average	153.2	533.4	280.5	225.6	6.20	6.29	4.29	5.28	5.46	
1982	Average	164.7	483.2	337.6	224.9	6.86	6.86	4.95	5.92	6.13	
1983	January	²166.8	²448.9	2347.1	²216.7	6.65	6.78	5.03	5.91	6.13	
	February	167.8	441.4	331.9	213. <del>9</del>	6.73	6.86	4.96	5.97	6.12	
	March	168.1	426.0	336.1	215.5	R6.91	R6.92	R4.99	R6.14	R6.19	
	April	168.5	431.6	326.1	215.8	6.91	R6.85	4.92	6.15	6.12	
	May	165.0	446.6	344.3	216.6	7.20	7.04 7.13	4.89 4.96	6.60 6.62	R6.22 6.35	
	June	167.3	453.6 467.0	347.2 361.1	220.9 237.4	7.41 7.50	R7.12	4.98 R5.09	R6.61	R6.54	
	July	165.3 164.3	407.0	363.2	237.4	7.52	7.06	5.01	6.37	6.51	
	August September	163.9	482.8	358.1	226.4	7.55	7.15	5.00	6.58	6.52	
	October	164.6	479.6	350.1	219.8	7.50	7.19	5.01	6.66	6.41	
	November	163.6	472.2	340.5	212.2	7.25	7.13	4.83	6.63	6.23	
	December	162.2	468.7	338.7	219.2	6.97	6.91	4.81	R6.41	6.14	
•	Average	165.6	457.8	347.4	220.6	7.18	7.01	4.97	6.36	6.29	
1984	January	161.6	488.9	343.7	221.0	R6.76	R6.79	4.86	R6.34	R6.13	
	February	164.9	496.3	347.5	217.4	R6.96	R6.99	R4.85	R6.53	6.19	
	March	163.4	484.0	339.8	208.4	R7.16	R7.12	4.88	R6.69	R6.26	
	April	165.7	494.1	344.4	210.6	R7.32	R7.23	R4.87	R6.74	6.30	
	May	168.6	486.9	360.4	220.3	R7.58	R7.28	4.92 R5.10	R6.86 R6.79	R6.39 R6.66	
	June July	169.1 168.2	488.3 474.6	360.9 373.1	223.2 231.3	R7.89 R7.99	7.48 7.51	R5.22	R6.99	6.83	
	August	167.2	474.6	365.6	231.3	R8.05	7.51	R5.16	R6.77	R6.83	
	September	167.4	472.5	368.0	217.5	R8.05	7.64	R5.26	R7.07	R6.89	
	October	168.7	474.1	361.4	218.8	7.95	7.63	R5.14	R6.88	6.71	
	November	166.6	470.6	357.2	216.8	R7.61	R7.42	5.06	R7.00	R6.53	
	December	165.0	480.4	355.4	218.7	R7.33	R7.28	5.07	R6.72	R6.47	
	Average	166.4	481.2	358.3	219.2	R7.54	7.33	R5.04	R6.78	6.52	
1985	January	164.0	472.7	364.2	218.8	7.28	7.25	5.12	6.80	6.52	
	February	167.3	482.4	358.1	218.4	7.19	7.21	5.12	6.77	6.47	
	March	167.5	458.9	365.1	210.2	7.48	7.36	5.13	7.01 6.95	6.55 6.58	
	April	167.7	453.0 405.2	361.7 346.2	210.7 206.2	7.73	7.44 7.55	5.09 5.08	7.09	6.66	
	May June	166.8 165.1	384.8	345.0	208.1	8.15	7.60	5.24	7.07	6.86	
	July	164.2	391.9	344.2	217.2	8.24	7.64	5.36	7.13	7.02	
	August	164.0	380.5	335.0	211.1	8.18	7.55	5.20	7.01	6.92	
	September	163.0	419.0	328.7	204.7	8.18	7.62	5.24	7.08	6.95	
	October	163.4	415.9	330.4	204.4	8.05	7.65	5.19	6.98	6.80	
	November	163.7	397.2	329.4	204.5	7.73	7.49	5.10	6.91 6.73	6.63 6.56	
	December† <b>Average</b>	NA NA	NA NA	NA NA	NA NA	7.44 7.79	7.29 <b>7.48</b>	5.10 <b>5.17</b>	6.73 6.96	6.72	

Average Retail Electricity Prices<sup>1</sup>

**Cost of Fossil Fuels Delivered** 

<sup>1</sup>Prices are calculated by dividing revenues by sales. Revenues may not correspond to sales for a particular month because of utility billing and accounting procedures. This could result in uncharacteristic increases or decreases in the monthly prices. <sup>2</sup>Data through December 1982 cover all steam-electric utility plants with a capacity of 25 megawatts or greater. From 1974 through 1982, data include peaking units. Beginning with January 1983, data cover steam-electric utility plants with a capacity of 50 megawatts or greater.

greater. <sup>3</sup>Data through 1979 cover privately owned electric utilities in Classes A and B. Data for 1980 forward cover selected privately owned electric utilities in Class A whose electric operating revenues were \$100 million or more during the previous year. <sup>4</sup>See Note 7 in the Notes and Sources for this section.

Includes supplemental gaseous fuels.

\*Average price for total sales to ultimate consumers. †Initial estimates. NA=Not available. R=Revised data. Note: • Geographic coverage is the 50 States and the the District of Columbia.

Sources: • See the Notes and Sources for this section.

### Notes and Sources for the Price Section

#### Notes

1. The actual domestic average price represents the average price at which all domestic crude oil is purchased. Prior to February 1976, the domestic crude oil wellhead price represented an estimate of the average of posted prices; after February 1976, the wellhead price represents an average of first sale prices.

2. FOB literally means "Free on Board." It denotes a transaction whereby the seller makes the product available with an agreement on a given port at a given price; it is the responsibility of the buyer to arrange for the transportation and insurance.

3. The landed cost of imported crude oil from selected countries does not represent the total cost of all imported crude. Prior to March 1975, imported crude costs to U.S. company-owned refineries in the Caribbean were not included in the landed cost, and costs of crude oil from countries that export only small amounts to the United States were also excluded. Beginning in March 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

4. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on EIA Form 14, the "Refiners' Monthly Cost Report." These prices were previously published from data collected on ERA Form 49, the "Domestic Crude Oil Entitlements Program Refiners Monthly Report." The ERA Form 49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for EIA Form 14. In accordance with conventions used for ERA Form 49. Also, the respondents for the two forms are essentially the same. However, due to possible different interpretations of the filing requirements and a different method for handling prior period adjustments, care must be taken in comparing the data collected on the two forms.

The refiner acquisition cost of crude oil is the average price paid by refiners for crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC Section 1331. Imported crude oil is either that oil reported on ERA Form 51, the "Transfer Pricing Report," or any crude oil that is not domestic oil. The composite cost is the weighted average of domestic and imported crude oil costs.

Crude oil costs and volumes reported on ERA Form 49 excluded unfinished oils but included the Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on the FEA Form P110-M-1 included unfinished oils but excluded SPR. Imported averages derived from ERA Form 49 exclude oil purchased for SPR, whereas the composite averages derived from ERA Form 49 include SPR. None of the prices derived from EIA Form 14 include either unfinished oils or SPR.

5. Several different series of motor gasoline prices are published in this section. U.S. City Average Retail Prices for Motor Gasoline are calculated monthly by the Bureau of Labor Statistics during the development of the Consumer Price Index (CPI). These prices include all Federal, State, and local taxes paid at the time of sale. For the period 1974 through 1978, prices were collected in 56 urban areas. For the period 1978 forward, prices were collected from a new sample of service stations in 85 urban areas selected to represent all urban consumers—about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-serve).

Refiner and Gas Plant Operator Sales Prices of Finished Motor Gasoline for Resale and to End Users are determined by the Energy Information Administration in a monthly survey of refiners and gas plant operators (Form EIA-782A). The prices do not include any Federal, State, or local taxes paid at the time of sale. Estimates of prices prior to January 1983 are based on FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices," and also exclude all Federal, State, or local taxes paid at the time of sale. Sales for Resale are those made to purchasers who are other-than-ultimate consumers. Sales to End Users are sales made directly to the consumer of the product, including bulk consumers such as agriculture, industry, and utilities, as well as residential and commercial consumers.

6. The monthly national average price of residential natural gas is based on data from the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U) for natural gas (piped) and on data from Form EIA-176. Initial monthly estimates are obtained by multiplying the annual average price of residential natural gas collected on Form EIA-176 by the ratio of monthly values of the natural gas CPI-U for consecutive months. When a subsequent year's annual average price becomes available, the initial monthly estimates are adjusted to this annual average.

7. Heavy fuel oil prices include fuel oils No. 4, No. 5, and No. 6, and topped crude fuel oil prices. The weighted average for all fossil fuels includes both residual fuel oil prices and light oil (No. 2 fuel oil, kerosene, and jet fuel) prices.

8. Starting in January 1983, Form EIA-782, "Monthly Petroleum Product Sales Report," replaced 10 previous surveys. Every attempt was made to continue the most important price series. However, prices published through December 1982 and those published since January 1983 do not necessarily form continuous data series due to changes in survey forms, definitions, instructions, populations, samples, processing systems, and statistical procedures. To provide historical data, continuous annual data series have been generated for 1978–1980, and monthly series for 1981 and 1982, by estimating the prices that would have been published had the EIA-782 survey and system been in operation at that time. This form of estimation was performed after detailed adjustment for product and sales type matching, and for discontinuity due to other factors. An important difference between the previous and present prices is the distinction between wholesale and resale, and between retail and end user. The resale category continues to include sales among resellers. However, bulk sales to utility, industrial, and commercial accounts previously included in the wholesale category are now counted as made to end users. The end user category continues to include retail sales through company owned and operated outlets but also includes the bulk utility, industrial, and commercial sales. Additional information may be found in "Estimated Historic Time Series for the EIA-782," a feature article reprinted from the December 1983 [3] *Petroleum Marketing Monthly* published by the Energy Information Administration.

9. Natural gas prices are intended to include all taxes. Instructions on the data collection forms specifically direct that all U.S., State, and local taxes, surcharges, and/or adjustments billed to consumers are to be included. However, sales and other taxes itemized on consumers' bills are sometimes excluded by the reporting utilities.

(Notes and Sources for the Price Section are continued on the next page.)

# Notes and Sources for the Price Section (continued)

#### Sources

Petroleum and Petroleum Products: • Actual domestic Petroleum and Petroleum Products: • Actual domestic average wellhead prices—Economic Regulatory Administra-tion (ERA), January 1976: FEA Form 90, "Crude Petroleum Production Monthly Report"; February 1976 through Sep-tember 1979: FEA Form P124, "Domestic Crude Oil Pur-chaser's (Monthly) Report"; October 1979 through Decem-ber 1982: ERA Form 182, "Domestic Crude Oil First Pur-chase Report."; January 1983 forward: EIA Form 182, "Do-mestic Crude Oil First Purchase Report" mestic Crude Oil First Purchase Report.

mestic Crude Oil First Purchase Report." • Crude oil imports costs—Energy Information Administra-tion (EIA), 1975 through January 1979: FEA Form F701-M-0, "Transfer Pricing Report"; February 1979 through Sep-tember 1982: ERA Form 51, "Transfer Pricing Report"; October 1982 through June 1984: EP Form 51, "Monthly Foreign Crude Oil Transaction Report"; July 1984 forward: Form EIA-856, "Monthly Foreign Crude Oil Acquisition Penodt" Report.

Heport."
Refiner acquisition costs—EIA, January 1976: FEO Form 96, "Monthly Cost Allocation Report"; February 1976 through June 1978: FEA Form P110-M-1, "Refiners' Monthly Cost Allocation Report"; July 1978 through December 1980: ERA Form 49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report"; January 1981 forward: EIA Form 14, "Refiners' Monthly Cost Report."
U.S. City average retail motor gasoline prices—Bureau of Japor Statistics

Labor Statistics.

 No. 2 Distillate to Residences—January 1983 forward, EIA No. 2 Distillate to Residences—January 1983 forward, EIA Form-782A, "Refiners/Gas Plant Operators' Monthly Petro-leum Product Sales Report" and EIA-782B, "Resel-lers/Retailers' Monthly Petroleum Product Sales Report." Prices prior to January 1983 are EIA estimates using data from FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Sup-ply/Price Monitoring Report" and EIA Form 9A, "No. 2 Distillate Price Monitoring Report." See Note 8 on the previous page for additional information on the estimated data data.

 All other petroleum products—January 1983 forward, ElA
 Form-782A, "Refiners/Gas Plant Operators' Monthly Petro-leum Product Sales Report." Prices prior to January 1983 are ElA estimates using data from FEA Form 302-M-1/ElA-460, "Petroleum Industry Monthly Report for Product Prices." See Note 8 on the previous page for additional information on the optimated data information on the estimated data.

Natural Gas-Previous Series: • Average wellhead price-Annual data through 1982 from EIA, *Natural Gas Annual*, 1973 through 1983. Annual data for 1983 and 1984 from Form EIA-627, "Annual Quantity and Value of Natural Gas Report" and the U.S. Minerals Management Service. Monthly data are estimated primarily on the basis of values reported by State agencies in Mississippi, New Mexico,

Oklahoma, and Texas. These States together account for almost 50 percent of total U.S. marketed production. Monthly data are adjusted to conform with final reported annual data.

 Imports, Purchased from Producers, and Industrial Sales by Major Interstate Pipeline Companies—FERC Form 11, "Interstate Pipeline Company Purchases, and Industrial Sales'

• Electric plant data-EIA, FPC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants.

 Residential Price—Annual data through 1983 from EIA, Natural Gas Annual, 1973 through 1983. Annual data for 1984 from Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." Monthly data are EIA estimates based on the Bureau of Labor Statistics Urban Consumer Price Index (CPI-U) for natural gas and are adjusted to conform with final reported annual data. See

Note 6 on the previous page for estimation procedures. **Natural Gas—Current Series:** Average wellhead— Annual data through 1982 from EIA, *Natural Gas Annual*, *1973* through *1983*. Annual data for 1983 and 1984 from Form EIA-627, "Annual Quantity and Value of Natural Gas Pagent" and the LLS Minoral Management Series Report<sup>1</sup> and the U.S. Minerals Management Service. Monthly data are estimated primarily on the basis of values reported by State agencies in Mississippi, New Mexico, Oklahoma, and Texas. These States together account for almost 50 percent of total U.S. marketed production. Monthly data are adjusted to conform with final reported annual data.

Imports and Purchases from Producers by Major Interstate Pipeline Companies—FERC Form 11, "Interstate Pipeline

Company Purchases, and Industrial Sales".
City Gate—EIA, October 1983 forward: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumars". to Consumers." • Residential,

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• Electric Utilities-EIA, FPC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." Electricity: • Cost of fossil fuels—EIA, FPC Form 423,

"Monthly Report of Cost and Quality of Fuels for Electric Plants.

Retail prices—EIA, January 1973 through February 1980:
 FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 through December 1982: FERC Form 5, "Electric Utility Company Monthly Statement"; January 1983 forward: EIA Form 826, "Electric Utility Company Monthly Statement."

### **Crude Oil Production**

World crude oil production during December 1985 was 56.0 million barrels per day, up slightly from the level in the previous month. Production during 1985 averaged 53.3 million barrels per day, 1.5 percent above the average level in 1984.

Organization of Petroleum Exporting Countries (OPEC) production during December 1985 averaged 18.2 million barrels per day, up 0.4 million from the level during the previous month. Production by the Arab members of OPEC during December 1985 averaged 11.0 million barrels per day, up 0.6 million from the November 1985 level. During December 1985, production increased in Saudi Arabia by 480,000 barrels per day, in Libya by 100,000, and in Kuwait by 30,000. Production decreased in the United Arab Emirates by 25,000 barrels per day. Among non-Arab OPEC countries, production fell in Nigeria by 140,000 barrels per day.

Of the non-OPEC nations, production decreased in the United Kingdom and the United States by 210,000 and 2,000 barrels per day, respectively, during the month, while production in Canada increased by 500,000 barrels per day.

### **Petroleum Consumption**

Preliminary petroleum consumption data for November 1985 were available for France, Italy, the United Kingdom, the United States, and West Germany. Consumption levels in November 1985 were lower than in November 1984 in the United Kingdom by 604,000 barrels per day, in the United States by 216,000, and in West Germany by 186,000. Consumption in France and Italy increased by 66,000 and 84,000 barrels per day, respectively, compared to the November 1984 levels.

### **Petroleum Stocks**

November 1985 preliminary data indicate petroleum stock levels were lower compared with November 1984 levels in four of the five countries reporting. Petroleum stocks were down in Italy by 9.6 percent, in West Germany by 7.5 percent, in the United Kingdom by 2.5 percent, and in the United States by 2.2 percent. Stocks in Japan were 2.3 percent higher than the level 1 year earlier.

### **Nuclear Electricity Production**

In December 1985, the 20 non-Communist nations with nuclear power capacity generated 123.8 gross terawatthours (billion kilowatthours) of nuclear-based electricity, an increase of 14.7 percent compared with December 1984 generation. The United States accounted for 35.7 gross terawatthours (28.8 percent) of total nuclear generation in December 1985. During 1985, 25 nuclear generating units became operable as nuclear operable capacity increased by 27.9 gigawatts (million kilowatts). Nuclear power generation in 1985 increased 19.1 percent compared with 1984 generation.

In Japan, Kyushu Electric Power company's Sendai-2, an 890-gross-megawatt-electric pressurized-water-reactor began commercial operation in November. Sendai-2 had achieved initial criticality in March 1985 and had first produced electricity on April 5, 1985. In Spain, Asco-2, a 930-gross-megawattelectric pressurized-water-reactor was connected to Spain's electrical grid on November 23. Asco-2 is operated by Fuerzas Electricas de Cataluna SA. In France. Electricite de France's Flamaville-1. а 1,345-grossmegawatt-electric pressurized-water-reactor, was connected to France's electrical grid on December 4. Flamaville-1 had achieved initial criticality in September 1985. In India, Mapp-2, a 235-gross-megawatt-electric pressurizedheavy-water-moderated and cooled reactor operated by the India Atomic Power Commission, was synchronized to India's electrical grid on December 8. Mapp-2 first produced electricity on December 9.

With the additions of Sendai-1 in Japan, Asco-2 in Spain, Flamaville-1 in France, and Mapp-2 in India, There were 303 operable nuclear power generating units in non-Communist countries as of December 31, 1985, with a collective gross generating capacity of 230.7 gigawatts. In December 1985, the 95 operable U.S. units accounted for 84.8 gross gigawatts (36.8 percent) of total non-Communist nuclear generating capacity.

### **Crude Oil Production for Major Petroleum Producing Countries**

		<b>B</b> leasia	<b>b</b>	17		•	Saudi	United Arab	Arab Members	indo-	
		Algeria	Iraq	Kuwait <sup>1</sup>	Libya	Qatar	Arabia <sup>1</sup>	Emirates	of OPEC <sup>2</sup>	nesia	Iran
					Thous	sand barr	els per day				
1973	Average	1,097	2,018	3,020	2,175	570	7,596	1,533	18,009	1,339	5,861
1974	Average	1,009	1,971	2,546	1,521	518	8,480	1,679	17,724	1,375	6,022
1975	Average	983	2,262	2,084	1,480	438	7,075	1,664	15,986	1,307	5,350
1976	Average	1,075	2,415	2,145	1,933	497	8,577	1,936	18,578	1,504	5,883
1977	Average	1,152	2,348	1,969	2,063	445	9,245	1,999	19,221	1,686	5,663
1978	Average	1,161	2,563	2,131	1,983	487	8,301	1,831	18,457	1,635	5,242
1979	Average	1,154	3,477	2,500	2,092	508	9,532	1,831	21,094	1,591	3,168
1980	Average	1,012	2,514	1,656	1,787	472	9,900	1,709	19,050	1,577	1,662
1981	Average	805	1,000	1,125	1,140	405	9,815	1,474	15,764	1,605	1,380
1982	Average	710	1,012	823	1,150	330	6,483	1,250	11,758	1,339	2,214
1983	January	685	850	780	1,130	255	4,950	1,062	9,712	1,188	2,716
	February	585	850	895	925	200	3,510	1,062	8,027	984	2,414
	March	585	900 950	965	925	170	3,910	1,037	8,492	1,144	2,213
	April May	685 585	950 1,000	880 1,030	1,030 1,130	260 275	3,930 4,725	1,147 1,177	8,882 9,922	1,358 1,358	2,012 2,313
	June	685	1,000	920	1,130	300	4,725	1,182	9,922	1,358	2,513
	July	685	1,050	1,086	1,130	300	5,536	1,177	10,964	1,445	2,816
	August	685	1,100	1,181	1,130	265	5,931	1,187	11,479	1,445	2,514
	September	685	1,050	1,376	1,180	310	6,026	1,187	11,814	1,425	2,716
	October	685	1,100	1,305	1,180	320	6,005	1,167	11,762	1,474	2,414
	November	685	1,150	1,265	1,180	. 460	5,915	1,197	11,852	1,513	2,313
	December	685	1,050	1,075	1,180	420	5,825	1,197	11,432	1,396	2,313
	Average	660	1,005	1,064	1,105	295	5,086	1,149	10,364	1,343	2,440
1984	January	650	1,100	1,080	1,100	445	5,130	1,200	10,705	1,470	2,200
	February	600	1,000	1,240	1,100	315	5,040	1,200	10,495	1,575	2,300
	March April	600 600	1,200	1,293	1,100	440	4,843	1,205	10,681	1,560	2,400
	May	650	1,200 1,200	1,250 1,200	1,200 1,200	400 400	5,150 5,000	1,205 1,200	11,005 10,850	1,570 1,470	2,200 1,700
	June	700	1,200	1,200	1,250	500	5,000	1,225	11,525	1,520	2,200
	July	650	1,200	1,110	1,100	430	5,010	1,090	10,590	1,390	2,400
	August	650	1,300	1,220	1,000	400	4,520	990	10,080	1,410	1,800
	September	650	1,300	1,183	1,000	480	4,133	1,110	9,856	1,400	1,900
	October	650	1,200	1,129	1,000	380	4,129	1,060	9,548	1,430	2,100
	November	650	1,300	990	1,000	280	3,990	1,060	9,270	1,350	2,400
	December	600	1,300	990	1,000	260	3,590	1,210	8,950	1,450	2,500
	Average	638	1,209	1,157	1,087	394	4,663	1,146	10,294	1,466	2,175
1985	January	600	1,300	1,110	1,000	270	3,510	1,100	8,890	1,310	1,900
	February March	650 690	1,300 1,250	1,125 1,085	1,000	290	4,025	1,160	9,550	1,330	2,100
	April	650	1,250	970	1,000 1,000	315 260	3,835 3,470	1,215 1,215	9,390 8,915	1,300 1,300	2,200 2,300
	May	650	1,300	940	1,100	290	2,590	1,160	8,030	1,200	2,300
	June	600	1,350	920	980	300	2,420	1,100	7,670	1,050	2,200
	July	600	1,400	940	910	320	2,740	1,155	8,065	1,300	2,200
	August	600	1,450	940	910	320	2,340	1,200	7,760	1,300	2,400
	September	650	1,600	980	1,100	295	2,980	1,285	8,890	1,200	2,200
	October	650	R1,710	R1,050	R1,100	R320	R3,850	R1,200	R9,880	R1,200	R2,400
	November December	680 680	R1,720	R1,050	1,200	300	4,200	R1,250	R10,400	R1,300	2,200
	Average	680 <b>642</b>	1,720 <b>1,455</b>	1,080	1,300	300	4,680	1,225	10,985	1,300	2,200
	Aveidye	042	1,400	1,015	1,050	297	3,388	1,193	9,032	1,252	2,192

<sup>1</sup>Includes about one-half of the production in the former Kuwait-Saudi Arabia Neutral Zone. In November 1985, total production in this region amounted to approximately 400,000 barrels per day.
 <sup>3</sup>Arab members of the Organization of Petroleum Exporting Countries (OPEC) include Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates.

\*OPEC total includes production in Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, United Arab Emirates, Indonesia, Iran, Nigeria, Venezuela, Ecuador, and Gabon.

Footnotes continued on following page.

#### Monthly Energy Review December 1985 **Energy Information Administration**

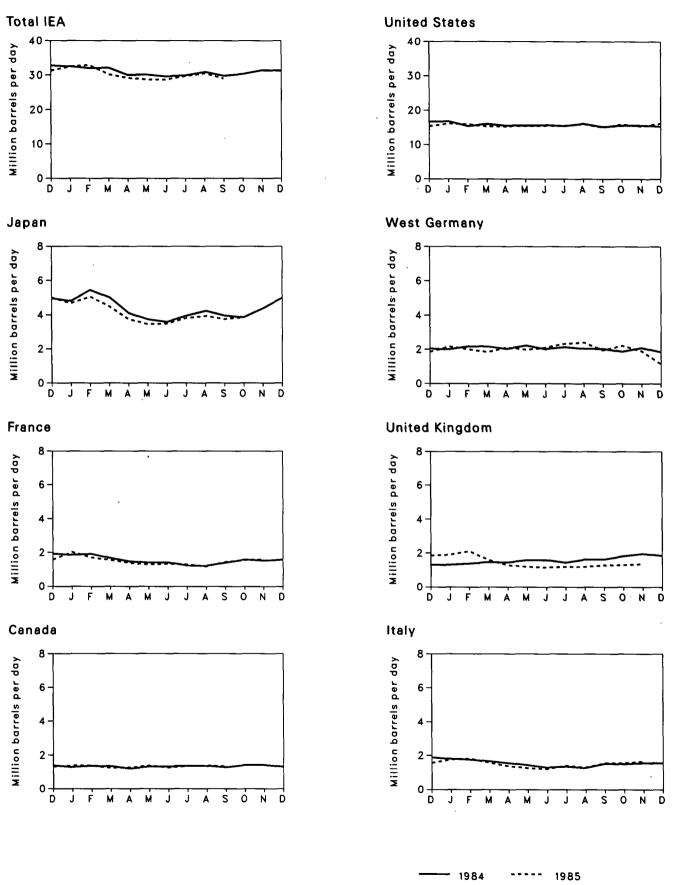
# Crude Oil Production for Major Petroleum Producing Countries (continued)

				•								
		Nigerla	Vene- zuela	Total OPEC <sup>3</sup>	Canada	Mexico	United Kingdom	United States	China	USSR	Other*	World
		-				Thousand	l barrels pe	r day				
1973	Average	2,054	3,366	30,989	1,800	465	2	9,208	1.090	8,465	3,655	55,674
1974	Average	2,255	2,976	30,729	R1,694	571	2	8,774	1,315	9,000	R3,767	55,852
1975	Average	1,783	2,346	27,155	1,439	705	12	8,375	1,490	9,625	4,079	52,880
1976	Average	2,067	2,294	30,738	1,295	831	245	8,132	1,670	10,143	4,258	57,312
1977	Average	2,085	2,238	31,298	1,320	981	768	8,245	1,874	10,682	R4,463	59,685
1978	Average	1,897	2,166	29,805	1,313	1,209	1,082	8,707	2,082	11,185	4,674	60,057
1979	Average	2,302	2,356	30,928	1,496	1,461	1,568	8,552	2,122	11,460	4,948	62,535
1980	Average	2,055	2,168	26,891	1,435	1,936	1,622	8,597	2,114	11,773	5,170	59,538
1981	Average	1,433	2,102	22,646	1,285	2,313	1,811	8,572	2,012	11,907	5,355	55,901
1982	Average	1,295	1,895	18,868	1,271	2,748	2,065	8,649	2,045	11,967	5,639	53,252
1983	January	880	2,098	16,985	1,205	2,983	2,135	8,697	2,085	12,400	6,003	52,493
	February	675	1,791	14,277	1,333	2,298	2,315	8,758	2,110	12,400	6,104	49,595
	March	905	2,093	15,218	1,366	2,418	2,265	8,700	2,110	12,400	6,039	50,516
	April	1,150	1,726	15,524	1,234	2,673	2,170	8,776	2,120	11,990	6,200	50,687
	May	1,625	1,695 1,700	17,284	1,293	2,798	2,235	8,631	2,120	11,895 11,895	6,180 6,280	52,436
	June July	1,535 1,710	1,705	17,345 19,051	1,475 1,450	2,778 2.688	2,045 2,280	8,667 8,636	2,120 2,120	11,895	6,273	52,605 54,393
	August	1,300	1,741	18,895	1,392	2,000	2,290	8,679	2,120	11,895	6,177	54,236
	September	1,220	1,736	19,297	1,406	2,738	2,385	8,784	2,130	11,895	6,243	54,878
	October	1,290	1,750	19,091	1,362	2,663	2,355	8,771	2,130	11,895	6,357	54,624
	November	1,245	1,781	19,090	1,387	2,733	2,490	8,770	2,130	11,895	6,489	54,984
	December	1,310	1,786	18,638	1,372	2,693	2,530	8,397	2,130	11,895	6,524	54,179
	Average	1,241	1,801	17,583	1,356	2,689	2,291	8,688	2,120	12,027	6,239	52,993
1984	January	1,365	1,840	17,980	1,365	2,670	2,525	8,868	2,200	11,950	6,643	54,201
	February	1,565	1,815	18,140	1,445	2,755	2,600	8,874	2,200	11,950	6,629	54,593
	March	1,560	1,815	18,416	1,475	2,710	2,480	8,672	2,200	11,800	6,563	54,316
	April	1,300	1,815	18,300	1,430	2,770	2,475	8,862	2,225	11,800	6,649	54,511
	May	1,300	1,840	17,570	1,415	2,800	2,439	8,955	2,225	11,950	6,724	54,078
	June July	1,400 1,200	1,805 1,860	18,870 17,860	1,470 1,515	2,820 2,845	2,350 2,470	8,852 8,885	2,225 2,305	11,950 11,920	6,834 6,838	55,371 54,638
	August	1,150	1,820	16,670	1,435	2,640	2,300	8,809	2,305	11,920	6,846	52,965
	September	1,400	1,850	16,826	1,330	2,705	2,435	8,993	2,335	11,840	6,957	53,421
	October	1,600	1,800	16,893	1,450	2,675	2,615	8,906	2,335	11,840	7,118	53,832
	November	1,600	1,725	16,760	1,460	2,745	2,605	8,979	2,335	11,800	7,170	53,854
	December	1,600	1,770	16,685	1,445	2,830	2,645	8,897	2,335	11,800	7,211	53,848
	Average	1,419	1,813	17,576	1,436	2,750	2,495	8,879	2,269	11,878	6,847	54,130
1985	January	1,400	1,670	15,580	1,450	2,635	2,780	8,929	2,390	11,700	7,214	52,678
	February	1,690	R1,670	16,770	1,450	2,685	2,650	8,928	2,390	11,700	R7,264	R53,817
	March	1,700	R1,680	16,690	1,500	2,810	2,600	8,927	2,390	11,700	R7,317	R53,954
	April	1,600	1,670	16,215	1,465	2,825	2,635	8,842	2,390	11,700	7,404	53,476
	May	1,450	1,670	14,780	1,475	2,790	2,545	8,969	2,400		R7,363	52,082
	June July	1,100 1,000	1,670 1,670	14,090 14,665	1,450 1,430	2,555 2,620	2,450 2,385	8,965 8,904	2,400	11,750 R11,800	7,164 87 445	R50,724 R51,739
	August	1,200	1,670	14,005	1,450	2,795	2,385	8,895	2,450	11,850		R51,881
	September	1,500	1,670	15,900	1,450	2,815	2,600	8,874		R11,923		R53,202
	October	R1,700	1,670	R17,300	1,450	2,750	R2,690	8,943	2,475		R7,545	R55,113
	November	1,760	1,670	R17,780	1,450	2,795	R2,680	8,932		R11,970		R55,869
	December	1,620	1,670	18,225	1,500	2,795	2,470	8,931	2,475	11,770	7,628	55,974
	Average	1,471	1,671	16,028	1,460	2,740	2,559	8,920	2,428	11,795	7,414	53,343

Footnotes continued. \*Other is a calculated total derived from the difference between world production and the nations represented above. R=Revised data. Notes: • U.S. geographic coverage is the 50 States and the District of Columbia. • Monthly data are often preliminary figures and may not average to the annual totals because of rounding or because updates to the preliminary monthly data are not available. Sources: • See the last page of this section.

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# Petroleum Consumption for Major Non-Communist Industrialized Countries



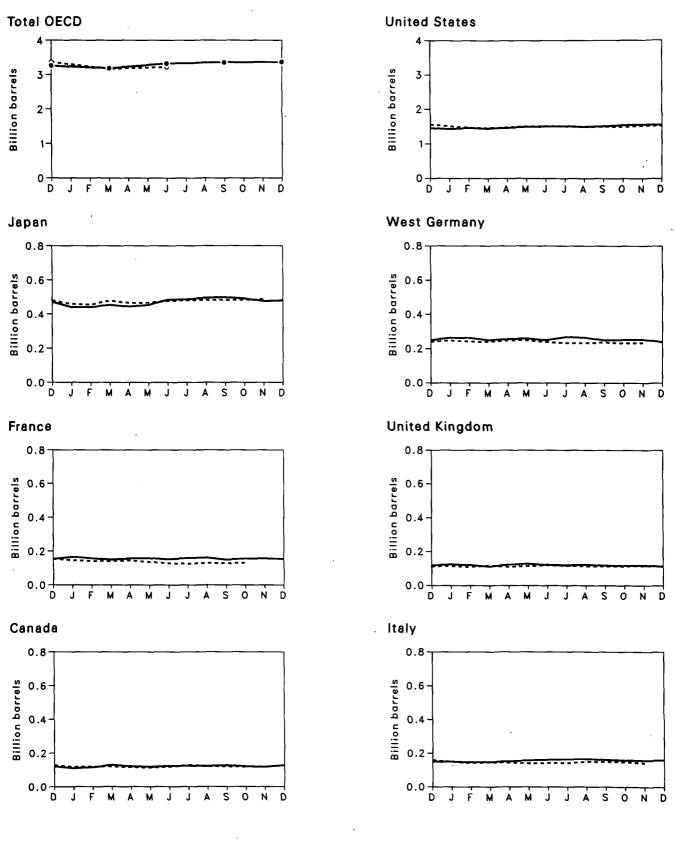
Monthly Energy Review December 1985 Energy Information Administration

### Petroleum Consumption for Major Non-Communist Industrialized Countries<sup>1</sup>

		Canada	France <sup>2</sup>	italy <sup>3</sup>	Japan	United Kingdom	United States	West Germany	Other IEA <sup>s</sup>	Total IEAª
					Thou	sand barrels p	ber day			
1973	Average	1,597	2,219	1,525	5,000	1,958	17,308	2,693	4,069	34,150
1974	Average	1,630	2,094	1,521	4,872	1,829	16,653	2,408	4,047	32,960
1975	Average	1,595	1,925	1,468	4,568	1,633	16,322	2,319	3,905	31,810
1976	Average	1,647	2,075	1,503	4,786	1,601	17,461	2,507	4,265	33,770
1977	Average	1,661	1,973	1,476	5,015	1,655	18,431	2,478	4,214	34,930
1978	Average	1,701	2,077	1,551	5,115	1,683	18,847	2,596	4,387	35,880
1979	Average	1,766	2,107	1,607	5,173	1,690	18,513	2,664	4,487	35,900
1980	Average	1,730	1,965	1,602	4,680	1,420	17,056	2,360	4,152	33,000
1980	•								-	
1981	Average	1,615	1,745	1,705	4,445	1,325	16,058	2,120	4,032	31,300
	Average	1,450	1,645	1,614	4,196	1,337	15,296	2,045	3,962	29,900
1983	January	1,260	1,685	1,675	4,410	1,260	14,722	1,875	3,998	29,200
	February	1,430	1,985	1,865	4,950	1,415	14,792	2,060	4,288	30,800
	March	1,305	1,685	1,605	4,625	1,430	15,541	2,180	4,314	31,000
	April	1,190	1,785	1,415	3,850	1,300	14,692	1,940	3,913	28,300
	May	1,320	1,500	1,470	3,460	1,230	14,505	2,010	3,805	27,800
	June	1,360	1,405	1,475	4,040	1,255	15,289	2,060	4,121	29,600
	July	1,265	1,210	1,365	3,745	1,160	15,019	1,785	3,861	28,200
	August	1,440	1,350	1,315	3,990	1,220	15,480	1,920	4,035	29,400
	September October	1,380	1,415 1,495	1,590 1,625	4,040 3,900	1,300	15,506 14,962	2,040	4,144	30,000 29,300
	November	1,360 1,460	1,800	1,840	3,900 4,290	1,280 1,340	15,500	2,090 2,055	4,083 4,215	30,700
	December	1,400	1,930	1,840	4,290	1,340	16,726	2,055	4,215	32,800
	Average	1,345	1,600	1,590	4,300	1,300 1,290	15,231	2,000 2,005	4,054	29,700
				•						
1984	January	1,300	1,860	1,800	4,800	1,310	16,801	2,000	4,489	32,500
	February	1,370	1,915	1,750	5,450	1,380	15,437	2,180	4,433	32,000
	March	1,350	1,680	1,660	5,020	1,470	16,050	2,170	4,380	32,100
	April May	1,200 1,329	1,475 1,410	1,550 1,435	4,110	1,450	15,568 15,620	2,030	4,092	30,000 30,100
	June	1,330	1,410	1,435	3,740 3,590	1,590 1,585	15,709	2,230 2,020	4,156 4,071	29,600
	July	1,370	1,225	1,350	3,950	1,440	15,498	2,020	4,152	29,900
	August	1,365	1,210	1,270	4,230	1,630	16,116	2,050	4,239	30,900
	September	1,280	1,400	1,525	3,960	1,635	15,247	2,030	4,113	29,800
	October	1,415	1,590	1,500	3,860	1,830	15,616	1,880	4,199	30,300
	November	1,420	1,530	1,560	4,375	1,965	15,627	2,095	4,358	31,400
	December	1,320	1,580	1,560	4,995	1,855	15,375	1,855	4,340	31,300
	Average	1,338	1,523	1,520	4,338	1,595	15,726	2,057	4,226	30,800
1985	January	1,390	2,025	1,765	4,670	1,905	16,142	2,165	4,463	32,500
	February	1,390	1,710	1,810	5,060	2,110	15,975	2,005	4,550	32,900
	March	1,245	1,560	1,575	4,480	1,600	15,321	1,840	4,139	30,200
	April	1,270	1,390	1,370	3,755	1,280	15,345	2,110	4,070	29,200
	May	1,380	1,290	1,255	3,450	1,190	15,460	1,985	3,980	28,700
	June	1,270	1,340	1,205	3,485	1,150	15,551	2,105	3,934	28,700
	July	1,350	1,300	1,400	3,815	1,190	15,517	2,345	4,083	29,700
	August	1,380	1,180	1,300	3,935	1,190	16,039	2,415	4,241	30,500
	September	1,340	1,440	1,550	3,755	1,285	15,115	1,955	4,000	29,000
	October	NA	1,564	1,554	3,860	1,300	15,923	2,230	NA	NA
	November	NA	R1,596	1,644	NA	1,361	15,411	1,909	NA	NA
	December	NA	NA	NA	NA	NA	16,188	1,150	NA	NA
	Average <sup>7</sup>	1,335	1,489	1,491	4,020	1,410	15,666	2,018	4,160	30,138

<sup>1</sup>These data represent inland consumption, i.e., sales of petroleum products excluding refinery fuel, refinery losses, and ocean bunkers except for the United States, where it represents domestic products supplied.
<sup>1</sup>Not a member of the International Energy Agency (IEA).
<sup>1</sup>Principal products only prior to 1981.
<sup>4</sup>Excludes liquefied petroleum gases and condensate.
<sup>6</sup>Other is a calculated total derived from the difference between total IEA consumption and the IEA nations represented above.
<sup>6</sup>The 21 signatory nations of the IEA are listed in Note 1 on the last page of this section.
<sup>7</sup>Average of available data.
R = Revised data. NA = Not available.
Notes: • U.S. geographic coverage is the 50 States and the District of Columbia.
• Data for 1983 through 1985 are preliminary.
Sources: • See the last page of this section.

# Petroleum Stocks for Major Non-Communist Industrialized Countries at End of Period



Monthly Energy Review December 1985 Energy Information Administration o---- 1985

• 1984

Petroleum Stocks for Major Non-Communist Industrialized Countries at End of Period<sup>1</sup>

		Canada	France	Italy	Japan	United Kingdom	United States	West Germany	Other OECD <sup>2</sup>	Total OECD <sup>3</sup>
						Million barrel	s			
1973	Year	149	203	NA	303	156	1.008	NA	NA	NA
1974	Year	164	249	169	370	161	1,074	215	NA	NA
1975	Year	167	225	143	375	164	1,133	190	NA	NA
1976	Year	153	234	142	394	165	1,112	214	NA	NA
1977	Year	167	239	161	409	148	1,312	225	524	3,185
1978	Year	144	201	154	413	157	1,278	238	512	3,097
1979	Year	150	226	163	460	169	1,341	272	594	3,375
1980	Year	164	243	170	495	168	1,392	319	636	3,587
1981	Year	161	214	167	482	143	1,484	297	583	3,531
1982	Year	136	193	179	468	125	1,430	272	557	3,360
						,	•			
1983	January	136	206	170	473	125	1,452	274	NA	NA
	February	133	187	163	450	121	1,430	274	NA	NA
	March	135	162	155	456	120	1,372	262	539	3,201
	April May	123 125	158 164	151 152	422 437	120 123	1,374 1,394	255 274	NA NA	NA NA
	June	113	158	152	437	116	1,394	261	531	3,203
	July	110	174	151	436	119	1,405	270	NA	NA
	August	110	183	161	433	121	1,460	274	NA	NA
	September	125	165	160	452	125	1,485	263	549	3,324
	October	111	170	157	441	129	1,508	267	NA	NA
	November	105	162	150	440	124	1,510	267	NA	NA
	December	120	153	149	471	119	1,454	250	542	3,258
1984	January	109	165	149	441	125	1,429	264	NA	NA
	February	114	157	146	441	121	1,463	263	NA	NA
	March	128	149	148	454	112	1,444	251	500	3,186
	April	120	156	151	444	123	1,462	256	NA	NA
	May	117	157	157	454	128	1,496	260	NA	NA
	June July	122 123	151 159	161 163	484	122 120	1,503	250 269	521 NA	3,324 NA
	August	123	160	165	486 495	120	1,513 1,498	269	NA	NA
	September	126	149	165	495	119	1,490	250	539	3,355
	October	120	155	158	490	118	1,513	252	NA	NA
	November	117	156	157	476	120	1,556	254	NA	NA
	December	127	153	159	480	113	1,556	240	537	3,364
1985	January	117	145	149	459	115	1,510	248	NA	NA
	February	118	141	142	456	110	1,467	242	NA	NA
	March	118	140	145	479	117	1,459	240	475	3,173
	April	115	144	143	465	110	1,474	248	NA	NA
	May June	112 117	135 128	139	467	115	1,508	249 239	NA	NA 3,221
	July	117	128	142 141	477 480	120 117	1,510	239 234	488 NA	3,221 NA
	August	127	120	141	480 482	114	1,515 1,493	234 233	NA	NA
	September	119	129	149	482	115	1,493	233	NA	NA
	October	117	130	147	483	115	1,492	233	NA	NA
	November	NA	NA	R142	R487	117	1,522	R235	NA	NA
	December	NA	NA	NA	NA	NA	1,526	NA	NA	NA

<sup>1</sup>Petroleum stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and petroleum products. Petroleum stocks include all nonmilitary petroleum held for storage, regardless of ownership, within each country in bulk terminals, refinery tanks, pipeline tankage, intercoastal tankers, tankers in port, and inland ship bunkers. Data exclude oil held in pipelines (except for the United States), rail and truck cars, sea-going ships' bunkers, service stations, retail stores, and tankers at sea. <sup>21</sup>'Other OECD' includes Organization for Economic Cooperation and Development (OECD) members not shown. <sup>3</sup>The members of OECD are listed in Note 2 on the last page of this section. R = Revised data. NA=Not available.

Notes: • U.S. geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. • In the United States in January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported. Using the new basis, the end-of-year U.S. stocks, in million barrels, would have been 1,121 in 1974, 1,420 in 1980, and 1,462 in 1982.

Sources: . See the last page of this section.

Nuclear Electricity Generation by Non-Communist Countries<sup>1</sup>

		Argen-									Nether-	Paki-
		tina	Belgium	Brazil	Canada	Finland	France	India	Italy	Japan	lands	stan
						Billion gr	oss kilowa	tthours				
1973	Total	0	0	0	15.3	0	14.7	2.5	3.1	9.4	1.1	0.5
1974	Total	1.0	0.1	0	15.4	0	14.7	1.9	3.4	18.9	3.3	0.6
1975	Total	2.5	6.8	0	13.2	0	18.3	2.5	3.8	21.3	3.3	0.5
1 <del>9</del> 76	Total	2.6	10.0	0	18.0	0	15.8	3.2	3.8	36.6	3.9	0.5
1977	Total	1.6	11.9	0	26.6	2.7	17.9	2.8	3.4	28.2	3.7	0.3
1978	Total	2.9	12.5	0	33.0	3.3	30.6	2.3	4.5	53.1	4.1	0.2
1979	Total	2.7	11.4	0	38.4	6.7	39.9	3.2	2.6	62.0	3.5	(8)
1980	Total	2.3	12.5	0	40.4	7.0	61.2	2.9	2.2	82.8	4.2	0.1
1981	Total	2.8	12.8	0	43.3	14.5	105.2	3.1	2.7	86.0	3.7	0.2
1982	Total	1.9	15.6	0.1	42.6	16.5	108.9	2.2	6.8	104.5	3.9	0.1
	-			0	4.3	1.7	13.8	0.2	0.2	8.0		
1 <del>9</del> 83	January February	0.2 0.2	1.9 1.4	0	4.3 4.5	1.7	10.9	0.2	0.2	8.0 6.8	0.4	(s) 0
	February March	0.2	0.7	(s)	4.5	1.6	11.3	0.1	0.1	7.9	(s) (s)	(s)
	April	0.2	1.6	(s)	4.3	1.5	10.5	0.2	0.1	8.4	0.2	(s)
	May	0.2	2.5	0	3.9	1.2	9.6	0.3	0.7	9.2	0.3	(s)
	June	0.3	2.5	Ő	4.4	1.0	9.3	0.3	0.7	9.1	0.4	(s)
	July	0.3	2.5	0	4.8	1.3	11.0	0.2	0.7	9.6	0.4	Ó
	August	0.3	2.4	0	3.8	1.6	12.1	0.3	0.5	10.5	0.4	(s)
	September	0.5	2.2	0	4.4	1.5	12.4	0.3	0.6	10.1	0.4	(s)
	October	0.3	2.2	0	4.7	1.4	13.0	0.3	0.6	10.3	0.4	(s)
	November	0.4	2.0	(s)	4.3	1.5	13.4	0.2	0.7	9.1	0.4	(s)
	December	0.4	2.1	0.1	5.0	1.7	16.8	0.3	0.7	10.1	0.4	(s)
	Total	3.4	24.1	0.2	53.0	17.4	144.2	2.9	5.8	109.1	3.6	0.2
1984	January	0.7	2.7	(s)	5.0	1.7	18.0	0.3	0.4	10.1	0.3	(s)
	February	0.4	2.3	0.2	4.6	1.6	17.1	0.4	0.6	9.2	0.4	0
	March	0.6	1.9	0.1	5.1	1.7	17.8	0.3	0.7	8.8	0.2	0
	April	0.5 0.5	2.4 2.0	(s) 0.1	4.3 3.6	1.6 1.2	15.4 14.2	0.3 0.5	0.3 0.3	8.9 10.5	0.2 0.4	(s) (c)
	May June	0.5	2.0	0.1	3.0	1.2	14.2	0.5	0.3	9.9	0.4	(s) (s)
	July	0.4	2.4	ŏ	4.4	1.4	13.1	0.5	0.3	10.6	0.4	(s)
	August	0.3	1.9	(s)	4.7	1.4	13.2	0.4	0.8	11.0	0.3	(s)
	September	0.4	1.9	0.3	3.9	1.5	14.7	0.2	0.8	11.4	0.4	(s)
	October	0.1	2.5	0.5	4.5	1.8	16.0	0.4	0.8	11.6	0.4	(s)
	November	(s)	2.6	0.4	4.7	1.7	17.8	0.3	0.8	11.9	0.4	(s)
	December	0.1	2.6	0.4	5.1	1.7	20.9	0.2	0.8	13.2	0.4	(s)
	Total	4.5	27.7	R2.1	53.8	18.5	191.2	4.1	6.9	127.2	3.8	0.3
1985	January	0.2	2.5	0.4	5.7	1.7	21.9	0.2	0.8	12.2	0.4	(s)
	February	0.4	1.7	0.3	5.0	1.6	19.2	0.2	0.7	10.7	0.3	(s)
	March	0.5	2.0	0.3	5.9	1.8	20.6	0.4	0.8	12.0	0.2	0
	April May	0.4 0.4	2.2 2.8	0.1 0.2	5.2 2.4	1.6 1.2	17.7 15.9	0.6 0.5	0.7 0.7	R11.8 R13.1	(s) 0.2	0
	June	0.4	2.8	0.2	4.2	1.2	13.6	0.5	0.6	R12.6	0.2	(s)
	July	0.4	2.5	0.4	5.7	1.4	16.1	0.4	0.6	R12.5	0.4	0.1
	August	0.5	3.2	0.1	6.0	1.5	15.4	0.2	0.5	R12.9	0.4	(s)
	September	0.5	3.3	0.3	5.4	1.6	17.2	0.3	0.3	R12.8	0.4	0
	October	R0.6	3.9	0.4	5.1	1.7	20.0	0.4	0.3	R13.9	0.4	(s)
	November	0.2	3.9	0.3	5.8	1.7	22.1	R0.4	0.3	R13.1	0.4	0.1
	December	0.2	3.9	0.3	6.5	1.7	24.4	0.4	0.6	14.7	0.4	0.1
	Total	4.9	34.5	3.4	62.9	18.8	224.0	4.5	7.0	152.0	3.9	0.3

<sup>1</sup>Figures are for gross electricity generation, as opposed to net electricity generation. Net figures are generally less than gross figures by about 5 percent, which represents the energy consumed by the generating plants themselves. <sup>a</sup>The United Kingdom assesses generation at 4-, 5- or 6-week intervals, rather than by calendar month. R = Revised data. (s) = Less than 0.05 billion gross kilowatthours. Footnotes continued on following page.

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Nuclear Electricity Generation by Non-Communist Countries<sup>1</sup> (continued)

		South Africa	South Korea	Spain	Sweden	Switzer- land	Taiwan	United Kingdom <sup>2</sup>	West Germany	Non- Communist World Excluding U.S.	United States	Total Non- Communist World
				•		Billion g	oss kilov	vatthours				
1973	Total	0	0	6.5	2.1	6.2	0	28.2	11.9	101.4	87.8	189.3
1974	Total	Ő	ō	7.2	2.3	7.0	Ő	33.8	12.0	121.7	124.3	246.0
1975	Total	Ō	Õ	7.5	12.0	7.7	Ō	30.5	21.7	151.8	182.3	334.1
1976	Total	Ő	Ō	7.6	16.0	7.9	0	36.8	24.5	187.1	201.8	388.9
1977	Total	Ō	0.1	6.5	19.9	8.1	0.1	38.1	36.0	207.8	264.2	472.0
1978	Total	Ō	2.3	7.6	23.8	8.3	2.7	36.6	35.7	263.5	292.4	555.9
1979	Total	0	3.2	6.7	21.0	11.8	6.3	38.5	42.2	300.1	270.6	570.7
1980	Total	0	3.5	5.2	26.7	14.3	8.2	37.2	43.7	354.3	265.4	619.8
1981	Total	0	2.9	9.4	37.7	15.2	10.7	38.9	53.4	442.4	288.5	730.9
1982	Total	0	3.8	8.8	38.8	15.0	13.1	44.1	63.4	489.9	298.6	788.5
1983	January	0	0.5	1.0	4.2	1.5	1.5	4.3	6.5	50.0	27.4	77.4
	February	0	0.4	0.9	3.7	1.4	0.8	4.3	5.6	42.7	23.8	66.6
	March	0	0.6	0.9	4.1	1.5	1.8	4.9	6.0	46.7	25.1	71.7
	April	0	0.4 0.2	0.8	3.3 2.4	1.5 1.2	1.7 2.0	4.3 3.4	4.0 2.9	43.1 40.6	23.4 23.9	66.5 64.5
	May June	0	0.2	0.4 0.6	2.4	0.5	2.0	3.4	4.2	42.1	25.7	67.8
	July	ŏ	0.7	0.6	1.6	1.2	1.6	3.4	5.1	44.9	27.3	72.2
	August	ŏ	1.1	1.0	2.7	1.0	1.4	3.7	4.6	47.5	27.9	75.4
	September	0	1.1	1.0	3.0	1.4	1.2	4.4	6.0	50.4	26.3	76.7
	October	0	0.8	1.1	3.6	1.5	1.6	3.7	7.6	53.2	27.6	80.8
	November	0	1.2	1.1	4.5	1.4	1.6	3.9	7.1	52.7	26.6	79.3
	December	0	1.3	1.4	5.0	1.5	1.7	5.5	6.2	60.0	28.6	88.6
	Total	0	9.0	10.7	40.4	15.5	18.9	49.6	65.8	573.9	313.6	887.5
1 <del>9</del> 84	January	0	1.3	1.5	5.3	1.5	1.7	4.4	6.9	61.8	30.8	92.6
	February	0	1.2	1.5	5.0	1.4	1.8	4.6	6.8 7 1	59.1 60.6	29.4 28.6	88.5 89.2
	March April	0 0.1	1.0 0.9	1.4 1.3	5.4 4.5	1.5 1.5	2.0 1.8	4.8 4.2	7.1 7.7	55.8	28.0	80.5
	May	0.1	0.8	1.9	3.3	1.3	1.4	4.3	7.2	53.6	27.3	80.9
	June	0.3	0.7	2.2	2.8	0.6	1.8	4.7	7.1	52.3	26.4	78.8
	July	0.5	0.7	2.5	2.4	1.3	2.7	3.7	6.2	53.2	29.4	82.6
	August	0.7	0.9	2.3	3.5	1.0	2.4	3.6	6.3	54.7	31.8	86.5
	September	0.7	0.9	2.6	4.2	1.4	2.6	4.9	8.1	60.8	30.3	R91.1
	October	0.7	1.3	1.8	5.0	1.5	2.0	4.1 4.4	8.5 9.9	63.5 66.3	26.8 26.2	90.3 R92.4
	November December	0.5 0.6	1.3 0.9	1.9 2.2	4.5 5.4	1.5 1.9	1.8 2.3	4.4 6.3	9.9 10.8	75.9	32.0	107.9
	Total	4.2	11.8	23.1	51.3	16.3	24.3	54.1	92.6	R717.7		R1,061.5
1985	January	0.3	1.1	2.2	5.4	2.2	2.4	5.7	10.8	76.1	38.0	114.1
	February	0	1.2	1.9	5.0	2.0	2.1	5.6	10.1	68.2	32.4	100.5
	March	0	1.5	2.8	5.6	2.2	2.5	6.6	11.7	77.4	32.5	109.9
	April	0	1.3	2.4	4.5	2.2	2.7	5.1	10.6	R69.0	28.3	R97.3
	May	0	1.5	2.3	3.9	1.9	2.8	4.7	9.3	R63.8	31.8 31.0	R95.6
	June	0.1 0.8	1.2 1.1	3.1 2.2	2.6 3.1	1.2 1.3	2.6 2.2	5.1 4.1	9.6 8.4	R62.0 R63.7	31.0 36.4	R93.0 R100.2
	July August	0.8	1.1	2.2 2.1	4.3	1.3	2.2	3.8	9.5	R65.5	36.8	R102.3
	September	1.0	1.3	2.1	4.7	1.0	2.6	4.9	10.3	R70.7	35.9	R106.6
	October	1.1	1.4	2.1	5.4	2.2	2.6	4.3	11.3	R77.2	32.1	R109.3
	November	0.8	1.7	2.1	7.0	2.2	1.7	3.7	11.7	R79.5	31.7	R111.3
	December	0.9	1.9	2.6	6.9	2.2	2.5	6.0	12.3	88.2	35.7	123.8
	Total	5.7	16.5	28.0	58.6	22.4	28.7	59.6	125.7	861.3	402.6	1,263.9

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Footnotes continued. Notes: • U.S. geographic coverage is the 50 States and the District of Columbia. • The sum of the months may not equal the annual total because the annual total may reflect revisions which are not included in the monthly data. Also, the sum of the months may not equal the annual total due to independent rounding. Sources: • See the last page of this section.

### Notes and Sources for the International Section

#### Notes

1. The 21 signatory nations of the International Energy Agency (IEA) are Australia, Austria, Belgium, Canada, Den-mark, West Germany, Greece, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portu-gal, Spain, Sweden, Switzerland, Turkey, the United King-dom, and the United States. Australia and Portugal joined the IEA as new members in 1979 and 1980, respectively. In an effort to maintain comparability within this time series an effort to maintain comparability within this time series, consumption data for these two countries have been incor-porated into the IEA total for all years.

2. The members of the Organization for Economic Coopera-tion and Development (OECD) are Australia, Austria, Bel-gium, Canada, Denmark, Finland, France, West Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Ne-therlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Total OECD includes the U.S. Territories.

#### Sources

Crude Oil Production: • 1973-1984 annual data (except the United States): Energy Information Administration (EIA), 1984 International Energy Annual.

1973–1985 U.S. annual and monthly data: EIA, *Petroleum Supply Monthly.*1983–1985 monthly data (except U.S. and World): Central Intelligence Agency, "International Energy Statistical Re-Intelligence Agency, "International Energy Statistical Review," and other industry sources. • 1983–1985 monthly data for World: Sum of data for all

countries using above sources. Petroleum Consumption: • Central Intelligence Agency, "International Energy Statistical Review" (except the United States).

• U.S. data: EIA, Petroleum Supply Monthly.

International Energy Agency totals for latest months are EIA estimates.

Petroleum Stocks: • U.S. data: EIA. Petroleum Supply Monthly.

Monthly. • Other OECD data: OECD, *Quarterly Oil Statistics;* Comite Professionnel du Petrole, *Bulletin Mensuel.* • Total OECD data: Sum of data for all OECD member countries using above sources. Nuclear Electricity Generation and Capacities: • Nucleonics Week.

### **Conversion Factors**

#### **Units of Measure**

#### Weight

1 metric ton	contains	1,000 kilograms or 2,204.62 pounds	
1 long ton	contains	2,240 pounds	
1 short ton	contains	2,000 pounds	

#### **Conversion Factors for Crude Oil (Average Gravity)**

1 barrel	contains	42 gallons
1 barrel	contains	0.136 metric tons (0.150 short tons)
1 metric ton	contains	7.33 barrels
1 short ton	contains	6.65 barrels

#### **Conversion Factors for Uranium**

1 short ton (U <sub>3</sub> O <sub>5</sub> )	contains	0.769 metric tons of uranium
1 short ton (UF <sub>s</sub> )	contains	0.613 metric tons of uranium
1 metric ton (UF <sub>4</sub> )	contains	0.676 metric tons of uranium

#### **Price Indices**

	Gross National Product Implicit Price Deflator (1982=100)	Consumer Price Index, All Urban Consumers, All Items (1972=100)
1972	46.5	100.0
1973	49.5	106.2
1974	54.0	117.9
1975	59.3	128.7
1976	63.1	136.1
1977	67.3	144.9
1978	72.2	155.9
1979	78.6	173.5
1980	85.7	197.0
1981	94.0	217.4
1982	100.0	230.7
1983	103.9	238.1
1984	108.1	248.3
1985‡	111.7	248.3

t = Preliminary data. Sources: • Gross National Product Implicit Price Deflator—U.S. Department of Commerce, Bureau of

Consumer Price Index, All Urban Consumers, All Items—1967=100.0 from U.S. Department of Labor, Bureau of Labor Statistics. Rebased to 1972=100.0 by Energy Information Administration.

#### **Approximate Heat Content of Petroleum Products**

	Million Btu per Barrei
Asphalt	. 6.636
Aviation gasoline	. 5.048
Butane	
Butane-propane mixture <sup>1</sup>	. 4.130
Distillate fuel oil	. 5.825
Ethane	. 3.082
Ethane-propane mixture <sup>2</sup>	. 3.308
Isobutane	
Jet fuel-kerosene type	. 5.670
Jet fuel-naphtha type	. 5.355
Kerosene	
Lubricants	
Motor gasoline	
Natural gasoline	
Pentanes Plus	. 4.620
Petrochemical feedstocks	
Naphtha 400° F or less	. 5.248
Other oils over 400° F	
Still gas	
Petroleum coke	
Plant condensate	
Propane	
Residual fuel oil	
Road oil	
Special naphtha	5.248
Still gas	
Unfinished oils	. 5.825
Unfractionated stream	
Wax	
Miscellaneous	5.796

<sup>1</sup> 60 percent butane and 40 percent propane. <sup>2</sup> 70 percent ethane and 30 percent propane.

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# **Conversion Factors (continued)**

### Approximate Heat Content of Fuels, 1973-1979

	Units	1973	1974	1975	1976	1977	1978	197 <del>9</del>
Coal								
Production	Million Btu/short ton	23.376	23.072	22.897	22.855	22.597	22.248	22.454
Consumption	Million Btu/short ton	23.057	22.677	22.506	22.498	22.265	22.017	22.100
Non-electric utility users	Million Btu/short ton	24.878	24.783	24.745	24.861	24.701	24.496	24.626
Electric utilities	Million Btu/short ton	22.246	21.781	21.642	21.679	21.508	21.275	21.364
Imports	Million Btu/short ton	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Exports	Million Btu/short ton	26.596	26.700	26.562	26.601	26.548	26.478	26.548
Anthracite								
Production	Million Btu/short ton	22.132	21.711	21.582	22.045	22.661	23.079	23.170
Consumption	Million Btu/short ton	21,464	20.919	20.762	21.254	22.066	22.398	22.069
Non-electric utility users	Million Btu/short ton	22.674	22.330	22.272	22.618	24.101	24.388	24.272
Electric utilities	Million Btu/short ton	17.920	17.200	17.064	17.526	17.244	17.104	17.454
Imports and exports	Million Btu/short ton	25.400	25.400	25.400	25.400	25.400	25.400	25.400
Bituminous coal and lignite								
Production	Million Btu/short ton	23.391	23.087	22.910	22.863	22.597	22.242	22.449
Consumption	Million Btu/short ton	23.391	23.087	22.522	22.603	22.397	22.242	22.449
Residential and commercial	Million Btu/short ton	23.073	22.523	22.258	22.809	22.200	22.014	21.884
Coke plants	Million Btu/short ton	26.800	26.800	26.800	26.800	26.800	26.800	26.800
Other industrial & transportation	Million Btu/short ton	20.000	20.800	22.439	22.528	22.290		22.436
Electric utilities							22.175	
	Million Btu/short ton Million Btu/short ton	22.262	21.799	21.659	21.692	21.521	21.284	21.372
Imports		25.000	25.000	25.000	25.000	25.000	25.000	25.000
Exports	Million Btu/short ton	26.612	26.716	26.573	26.613	26.561	26.501	26.570
Coal coke, imports and exports	Million Btu/short ton	24.800	24.800	24.800	24.800	24.800	24.800	24.800
Crude oil <sup>a</sup>								
Production	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800	5.800
Imports	Million Btu/barrel	5.817	5.827	5.821	5.808	5.810	5.802	5.810
Exports	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800	5.800
Crude oil and petroleum products								
Imports	Million Btu/barrel	5.897	5.884	5.858	5.856	5.834	5.839	5.810
Exports	Million Btu/barrel	5.752	5.774	5.748	5.745	5.797	5.808	5.832
Petroleum products <sup>2</sup>								
Consumption	Million Btu/barrel	5.515	5.504	5.494	5.504	5.518	5.519	5.494
Residential and commercial	Million Btu/barrel	5.387	5.377	5.358	5.383	5.389	5.382	5.471
Industrial	Million Btu/barrel	5.565	5.537	5.527	5.535	5.552	5.546	5.471
Transportation	Million Btu/barrel	5.397	5.394	5.392	5.396	5.402	5.407	5.430
Electric utilities	Million Btu/barrel	6.245	6.238	6.250	6.251	6.249	6.251	6.258
Imports	Million Btu/barrel	5.983	5.959	5.935	5.980	5.908	5.955	5.811
Exports	Million Btu/barrel	5.752	5.773	5.747	5.743	5.796	5.814	5.864
LPG consumption	Million Btu/barrel	3.746	3.730	3.715	3.743	3.677	3.669	3.680
		0.140	0.100	0.770	0.771	0.077	0.000	0.000
Natural gas plant liquids Production	Million Btu/barrel	4.049	4.011	3.984	3.964	3.941	3.925	3.955
	Willion Diar Barrer	4.045	4.071	0.304	0.304	0.041	0.020	0.000
Natural gas	Dhu /oubin (c.st		4 00 /	4 004	4 000		1.040	4 004
Production, dry	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021
Production, wet	Btu/cubic foot	1,093	1,097	1,095	1,093	1,093	1,088	1,092
Consumption		1,021	1,024	1,021	1,020	1,021	1,019	1,021
Non-electric utility users	Btu/cubic foot	1,020	1,024	1,020	1,019	1,019	1,016	1,018
Electric utilities	Btu/cubic foot	1,024	1,022	1,026	1,023	1,029	1,034	1,035
Imports		1,026	1,027	1,026	1,025	1,026	1,030	1,037
Exports	Btu/cubic foot	1,023	1,016	1,014	1,013	1,013	1,013	1,013
Approximate Heat Rates for Electr	icity							
Fossil fuel steam-electric power plant generation <sup>3</sup>	Btu/kilowatthour	10,389	10,442	10,406	10,373	10,435	10,361	10,353
Nuclear power plant generation		10,903	11,161	11,013	11,047	10,769	10,941	10,879
Geothermal energy power plant generation		21,674	21,674	21,611	21,611	21,611	21,611	21,545
Electricity consumption	Btu/kilowatthour	3,412	3,412	3,412	3,412	3,412	3,412	3,412
		•						

<sup>1</sup> Includes lease condensate.
 <sup>2</sup> Weighted averages of the products included in each category are calculated using heat content values shown on the first page of this products.

carculated using near content values shown on the first page of this section. <sup>3</sup> This is used as the thermal conversion factor for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.

Sources: • See "Thermal Conversion Factor Source Documentation" on the following pages.

# **Conversion Factors (continued)**

### Approximate Heat Content of Fuels, 1980-1985

Units						
	1980	1981	1982	1983	1984	1985‡
Million Btu/short ton	22.415	22.309	22.240	22.056	22.014	R21.880
Million Btu/short ton	21.947	21,714	21.675	21.581	21.577	R21.378
Million Btu/short ton	24.731	24,477	24,194	24.093	24.069	R23.647
		21.085		21.133	21.101	R20.968
						25.000
Million Blu/short ton	26.384	26.160	26.223	26.291	26.402	R26.307
Million Btu/short ton	22.869	23.291	23,289	22,734	23,107	R22.846
						R21.781
						R24.421
						17.018
Million Btu/short ton	25.400	25.400	25.400	25.400	25.400	25.400
Million Btu/short ton	22.411	22.302	22.234	22.053	22.009	R21.876
Million Btu/short ton	21.950	21,712	21.671	21.581	21.574	R21.376
Million Btu/short ton	22,488	22 191	22 373	22 934	22,880	R23.056
						26.800
						R21.978
						R20.974
						25.000
Million Btu/short ton	26.404	26.176	26.231	26.300	26.410	R26.320
Million Btu/short ton	24.800	24.800	24.800	24.800	24.800	24.800
Million Btu/barrel	5 800	5 800	5 800	5 800	5,800	5.800
						5.823
Million Blu/barrei	5.800	5.600	5.600	5.000	5.600	5.800
			_			_
						R5.729
Million Btu/barrel	5.820	5.821	5.820	5.800	5.850	R5.814
Million Btu/barrel	5 479	5 448	5 4 1 5	5 406	5 395	R5.385
						R5.252
						R5.246
				-		
						R5.218
	6.254	6.258	6.258	6.255	6.251	R6.247
Million Btu/barrel	5.748	5.659	5.664	5.677	5.613	R5.565
Million Btu/barrel	5.841	5.837	5.829	5.800	5.867	R5.819
Million Btu/barrel	3.674	3.643	3.615	3.614	3.599	R3.615
Million Btu/barrel	3.914	3.930	3.872	3.839	3.812	R3.815
Btu/cubic foot	1,026	1,027	1,028	1,031	1,031	1,031
Btu/cubic foot	1,098	1,103	1,107	1,115	1,109	1,109
Btu/cubic foot	1,026	1,027	1,028	1,031	1,031	1,031
	1,024	1,025	1,026	1,031	1,030	1,030
Btu/cubic foot		1.020	1,020			
Btu/cubic foot			1 000	1 000	1 005	
Btu/cubic foot	1,035	1,035	1,036	1,030	1,035	1,035
			1,036 1,018 1,011	1,030 1,024 1,010	1,035 1,005 1,010	
	Million Btu/short ton Million Btu/barrel Million Btu/barrel	Million Btu/short ton Million Btu/short ton25.000 26.384Million Btu/short ton Million Btu/barrel Million Btu/ba	Million Btu/short ton         25.000         25.000           Million Btu/short ton         26.384         26.160           Million Btu/short ton         21.405         22.080           Million Btu/short ton         22.719         23.749           Million Btu/short ton         22.600         25.000           Million Btu/short ton         22.719         23.749           Million Btu/short ton         25.400         25.400           Million Btu/short ton         22.411         22.302           Million Btu/short ton         24.411         22.302           Million Btu/short ton         24.411         22.302           Million Btu/short ton         24.488         22.191           Million Btu/short ton         24.888         22.191           Million Btu/short ton         24.600         26.800           Million Btu/short ton         25.000         25.000           Million Btu/short ton         25.000         25.000           Million Btu/short ton         26.404         26.176           Million Btu/short ton         24.800         24.800           Million Btu/barrel         5.800         5.800           Million Btu/barrel         5.400         5.400           Million Btu/barrel<	Million Btu/short ton         25.000         25.000         25.000         25.000           Million Btu/short ton         26.384         26.160         26.223           Million Btu/short ton         21.405         22.080         22.485           Million Btu/short ton         22.719         23.749         24.530           Million Btu/short ton         25.400         25.400         25.400           Million Btu/short ton         25.400         25.400         25.400           Million Btu/short ton         21.411         22.302         22.234           Million Btu/short ton         24.850         21.712         21.671           Million Btu/short ton         22.690         25.72         22.694           Million Btu/short ton         22.690         25.72         22.694           Million Btu/short ton         26.600         26.800         26.800           Million Btu/short ton         25.000         25.000         25.000           Million Btu/short ton         26.404         26.176         26.231           Million Btu/short ton         24.800         24.800         24.800           Million Btu/barrel         5.800         5.800         5.800           Million Btu/barrel         5.796 <t< td=""><td>Million Btu/short ton         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         26.223         26.291           Million Btu/short ton         22.869         23.291         23.289         22.734         Million Btu/short ton         22.719         23.749         24.852         21.4536           Million Btu/short ton         22.719         23.749         24.852         21.4536           Million Btu/short ton         22.411         22.302         22.234         22.053           Million Btu/short ton         21.450         21.712         21.671         21.581           Million Btu/short ton         22.488         22.191         22.373         22.934           Million Btu/short ton         22.480         22.572         22.684         22.679           Million Btu/short ton         21.301         21.091         21.200         21.141           Million Btu/short ton         26.000         25.000         25.000         25.000           Million Btu/short ton         26.404         26.176         26.231         26.300           Million Btu/barrel         5.800         <td< td=""><td>Million Btu/short ton         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         26.402           Million Btu/short ton         22.869         23.291         23.289         22.734         23.107           Million Btu/short ton         21.405         22.080         22.485         21.583         22.322           Million Btu/short ton         25.400         25.400         25.400         25.400         25.400           Million Btu/short ton         25.400         25.400         25.400         25.400         25.400           Million Btu/short ton         21.950         21.712         21.671         21.581         21.574           Million Btu/short ton         22.488         22.191         22.373         22.934         22.609           Million Btu/short ton         24.880         26.191         23.373         22.934         22.679         22.524           Million Btu/short ton         24.880         26.00         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800</td></td<></td></t<>	Million Btu/short ton         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         26.223         26.291           Million Btu/short ton         22.869         23.291         23.289         22.734         Million Btu/short ton         22.719         23.749         24.852         21.4536           Million Btu/short ton         22.719         23.749         24.852         21.4536           Million Btu/short ton         22.411         22.302         22.234         22.053           Million Btu/short ton         21.450         21.712         21.671         21.581           Million Btu/short ton         22.488         22.191         22.373         22.934           Million Btu/short ton         22.480         22.572         22.684         22.679           Million Btu/short ton         21.301         21.091         21.200         21.141           Million Btu/short ton         26.000         25.000         25.000         25.000           Million Btu/short ton         26.404         26.176         26.231         26.300           Million Btu/barrel         5.800 <td< td=""><td>Million Btu/short ton         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         26.402           Million Btu/short ton         22.869         23.291         23.289         22.734         23.107           Million Btu/short ton         21.405         22.080         22.485         21.583         22.322           Million Btu/short ton         25.400         25.400         25.400         25.400         25.400           Million Btu/short ton         25.400         25.400         25.400         25.400         25.400           Million Btu/short ton         21.950         21.712         21.671         21.581         21.574           Million Btu/short ton         22.488         22.191         22.373         22.934         22.609           Million Btu/short ton         24.880         26.191         23.373         22.934         22.679         22.524           Million Btu/short ton         24.880         26.00         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800</td></td<>	Million Btu/short ton         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         25.000         26.402           Million Btu/short ton         22.869         23.291         23.289         22.734         23.107           Million Btu/short ton         21.405         22.080         22.485         21.583         22.322           Million Btu/short ton         25.400         25.400         25.400         25.400         25.400           Million Btu/short ton         25.400         25.400         25.400         25.400         25.400           Million Btu/short ton         21.950         21.712         21.671         21.581         21.574           Million Btu/short ton         22.488         22.191         22.373         22.934         22.609           Million Btu/short ton         24.880         26.191         23.373         22.934         22.679         22.524           Million Btu/short ton         24.880         26.00         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800         26.800

<sup>1</sup> Includes lease condensate. <sup>2</sup> Weighted averages of the products included in each category are calculated using heat content values shown on the first page of this

<sup>a</sup> This is used as the thermal conversion factor for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.

 $\protect\$  = Preliminary data. R=Revised data. Sources:  $\bullet$  See "Thermal Conversion Factor Source Documentation" on the following pages.

# **Thermal Conversion Factor Source Documentation**

### Approximate Heat Content of Petroleum Products

**Asphait.** • 1973 forward: The Energy Information Administration (EIA) adopted the thermal conversion factor of 6.636 million British thermal units (Btu) per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956.* 

**Aviation Gasoline.** • 1973 forward: EIA adopted the thermal conversion factor of 5.048 million Btu per barrel as adopted by the Bureau of Mines from the Texas Eastern Transmission Corporation publication *Competition and Growth in American Energy Markets* 1947–1985, 1968.

**Butane.** • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 4.326 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Butane-Propane Mixture.** • 1973 forward: EIA adopted the Bureau of Mines calculation of 4.130 million Btu per barrel based on an assumed mixture of 60 percent butane and 40 percent propane. See "Butane" and "Propane."

**Distillate Fuel Oil.** • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 5.825 million Btu per barrel as reported in a Bureau of Mines internal memorandum, *Bureau of Mines Standard Average Heating Value of Various Fuels, adopted January 3, 1950.* 

**Ethane.** • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 3.082 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Ethane-Propane Mixture.** • 1979 forward: EIA calculated 3.308 million Btu per barrel based on an assumed mixture of 70 percent ethane and 30 percent propane. See "Ethane" and "Propane."

**Isobutane.** • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 3.974 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Jet Fuel, Kerosene Type. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel as published for "Jet Fuel, Commercial" by the Texas Eastern Transmission Corporation in the report *Competition and Growth in American Energy Markets 1947–1985*, 1968. Jet Fuel, Naphtha Type. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 5.355 million Btu per barrel as published for "Jet Fuel, Military" by the Texas Eastern Transmission Corporation in the report *Competition and Growth in American Energy Markets 1947–1985*, 1968.

**Kerosene.** • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel as reported in a Bureau of Mines internal memorandum, *Bureau of Mines Standard Average Heating Values of Various Fuels, adopted January 3, 1950.* 

Lubricants. • 1973 forward: EIA adopted the thermal conversion factor of 6.065 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956.* 

**Miscellaneous Products.** • 1973 forward: EIA adopted the thermal conversion factor of 5.796 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual,* 1956.

**Motor Gasoline.** • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel as published for "Gasoline, Motor Fuel" by the Texas Eastern Transmission Corporation in the report *Competition and Growth in American Energy Markets 1947–1985*, 1968.

**Natural Gasoline.** • 1973 forward: EIA adopted the thermal conversion factor of 4.620 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956.* 

**Pentanes Plus.** • 1984 forward: EIA assumed the thermal conversion factor to be 4.620 million Btu per barrel or equal to that for natural gasoline. See "Natural Gasoline."

**Petrochemical Feedstocks, Naphtha 400 Degrees Fahrenheit or Less.** • 1973 forward: Assumed by EIA to be 5.248 million Btu per barrel, equal to the thermal conversion factor for special naphtha. See "Special Naphtha."

**Petrochemical Feedstock, Oils Over 400 Degrees Fahrenhelt.** • 1973 forward: Assumed by EIA to be 5.825 million Btu per barrel, equal to the thermal conversion factor for distillate fuel oil. See "Distillate Fuel Oil."

**Petrochemical Feedstock, Still Gas.** • 1973 forward: Assumed by EIA to be 6.000 million Btu per barrel, equal to the thermal conversion factor for still gas. See "Still Gas."

**Petroleum Coke.** • 1973 forward: EIA adopted the thermal conversion factor of 6.024 million Btu per barrel as reported in Btu per short ton in the Bureau of Mines internal memorandum *Bureau of Mines Standard Average Heating Value of Various Fuels, adopted January 3, 1950.* The Bureau of Mines calculated this factor by dividing the 30,120,000 Btu per short ton as given in the referenced Bureau of Mines internal memorandum by 5.0 barrels per short ton as given in the Bureau of Mines Form 6-1300-M and successor EIA forms.

**Plant Condensate.** • 1973 forward: Estimated to be 5.418 million Btu per barrel by EIA from data provided by McClanahan Consultants, Inc., Houston, Texas.

**Propane.** • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 3.836 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Residual Fuel Oil.** • 1973 forward: EIA adopted the thermal conversion factor of 6.287 million Btu per barrel as reported in the Bureau of Mines internal memorandum *Bureau of Mines Standard Average Heating Values of Various Fuels, adopted January 3, 1950.* 

Road Oil. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 6.636 million Btu

per barrel which was assumed to be equal to that of asphalt (see "Asphalt") and was first published by the Bureau of Mines in the *Petroleum Statement*, *Annual*, 1970.

**Special Naphtha.** • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 5.248 million Btu per barrel which was assumed to be equal to that of total gasoline (aviation and motor) factor and was first published in the *Petroleum Statement*, *Annual*, 1970.

Still Gas. • 1973 forward: EIA adopted the Bureau of Mines estimated thermal conversion factor of 6.000 million Btu per barrel and first published in the *Petroleum Statement, Annual, 1970.* 

**Unfinished Oil.** • 1973 forward: EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel or equal to that for distillate fuel oil (see "Distillate Fuel Oil") and first published in the *Annual Report to Congress, Volume 3, 1977.* 

**Unfractionated Stream.** • 1979 forward: EIA assumed the thermal conversion factor to be 5.418 million Btu per barrel or equal to that for plant condensate (see "Plant Condensate") and first published in the *Annual Report to Congress, Volume 2, 1981.* 

**Wax.** • 1973 forward: EIA adopted the thermal conversion factor of 5.537 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956.* 

### **Approximate Heat Content of Fuels**

#### Petroleum

**Crude Oil, Exports.** • 1973 forward: Assumed by EIA to be 5.800 million Btu per barrel or equal to the thermal conversion factor for crude oil produced in the United States. See "Crude Oil and Lease Condensate, Production."

**Crude Oil, Imports.** • 1973 forward: Calculated annually by EIA by weighting the thermal conversion factor of each type of crude oil imported by the quantity imported. Thermal conversion factors for each type were calculated on a foreign country basis, by determining the average American Petroleum Institute (API) gravity of crude imported from each foreign country from Form ERA-60 in 1977 and converting average API gravity to average Btu content using National Bureau of Standards, Miscellaneous Publication No. 97, *Thermal Properties of Petroleum Products*, 1933.

**Crude Oil and Lease Condensate, Production.** • 1973 forward: EIA adopted the thermal conversion factor of 5.800 million Btu per barrel as reported in a Bureau of Mines internal memorandum *Bureau of Mines Standard Average Heating Values of Various Fuels adopted January 3, 1950.* 

**Crude Oil and Petroleum Products, Exports.** • 1973 forward: Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product exported and crude oil exported weighted by the quantity of each petroleum product and crude oil exported. See "Petroleum Products, Exports" and "Crude Oil, Exports."

Crude Oil and Petroleum Products, Imports. • 1973 forward: Calculated annually by EIA as the

average of the thermal conversion factors for each petroleum product and each type of crude oil imported weighted by the quantity of each petroleum product and each type of crude oil imported. See "Crude Oil, Imports." and "Petroleum Products, Imports."

**Natural Gas Plant Liquids, Production.** • 1973 forward: Calculated annually by EIA as the average of the thermal conversion factors of each natural gas plant liquid produced weighted by the quantity of each natural gas plant liquid produced.

**Petroleum Products, Consumption.** • 1973 forward: Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed, weighted by the quantity of each petroleum product consumed.

**Petroleum Products, Consumption by Electric Utilities.** • 1973–1984: Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed at electric utilities, weighted by the quantity of each petroleum product consumed at electric utilities. The quantity of petroleum consumed is estimated in the State Energy Data System as documented in the *State Energy Data Report.* • 1985 forward: Estimated by EIA.

**Petroleum Products, Consumption by Industrial Users.** • 1973–1984: Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed in the industrial sector, weighted by the estimated quantity of each petroleum product consumed in the industrial sector. The quantity of petroleum products consumed is estimated in the State Energy Data System as documented in the *State Energy Data Report.* • 1985 forward: Estimated by EIA.

Petroleum Products, Consumption by Residential and Commercial Users. • 1973–1984: Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the residential and commercial sector, weighted by the estimated quantity of each petroleum product consumed in the residential and commercial sector. The quantity of petroleum products consumed is estimated in the State Energy Data System as documented in the *State Energy Data Report.* • 1985 forward: Estimated by EIA.

Petroleum Products, Consumption by Transportation Users. • 1973–1984: Calculated annually by EIA as the average of the thermal conversion factor for all petroleum products consumed in the transportation sector, weighted by the estimated quantity of each petroleum product consumed in the transportation sector. The quantity of petroleum products consumed is estimated in the State Energy Data System as documented in the *State Energy Data Report*. • 1985 forward: Estimated by EIA.

**Petroleum Products, Exports.** • 1973 forward: Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product weighted by the quantity of each petroleum product exported.

**Petroleum Products, Imports.** • 1973 forward: Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product imported weighted by the quantity of each petroleum product imported.

**Petroleum Products, Liquefied Petroleum Gases** (LPG) Consumption. • 1973 forward: Calculated annually by EIA as the average of the thermal conversion factors of each liquefied petroleum gas consumed weighted by the quantity of each liquefied petroleum gas consumed.

### **Natural Gas**

**Natural Gas, Consumption.** • 1973–1979: EIA adopted the thermal conversion factor calculated annually by the American Gas Association (AGA) and published in *Gas Facts,* an AGA annual. • 1980 forward: Calculated annually by EIA by dividing the total heat content of natural gas consumed by the total quantity of natural gas consumed. Heat content and quantity consumed are from Form EIA-176.

Natural Gas, Consumption by Electric Utilities. • 1973 forward: Calculated annually by EIA by dividing the total heat content of natural gas received at electric utilities by the total quantity received at electric utilities. The heat contents and receipts are from FERC Form 423 and predecessor forms.

**Natural Gas, Consumption by Non-Electric Utility Users.** • 1973 forward: Calculated annually by EIA by dividing the heat content of natural gas consumed by non-electric utility consumers by the quantity of nonelectric utility natural gas consumed. Data are from Forms EIA-176, FERC Form 423, EIA-759, and predecessor forms.

**Natural Gas, Exports.** • 1973 forward: Calculated annually by EIA by dividing the heat content of exported natural gas by the quantity of natural gas exported, both reported on Form FPC-14.

**Natural Gas, Imports.** • 1973 forward: Calculated annually by EIA by dividing the heat content of imported natural gas by the quantity of natural gas imported, both reported on Form FPC-14.

**Natural Gas Production, Dry.** • 1973 forward: Assumed by EIA to be equal to the thermal conversion factor for the consumption of dry natural gas. See "Natural Gas, Consumption."

**Natural Gas Production, Wet.** • 1973 forward: Calculated annually by EIA by adding the heat content of dry natural gas production and the total heat content of natural gas plant liquids production and dividing this sum by the total quantity of marketed (wet) natural gas production.

### **Coal and Coal Coke**

Anthracite, Consumption. • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of anthracite consumed by electric utilities and non-electric utilities by the total quantity of anthracite consumed.

Anthracite, Consumption by Electric Utilities. • 1973 forward: Calculated annually by EIA by dividing the heat content of anthracite receipts at electric utilities by the quantity of anthracite received at electric utilities. Heat contents and receipts are from FERC Form 423 and predecessor forms.

Anthracite, Consumption by Non-Electric Utility Users. • 1973 forward: Calculated annually by EIA by dividing the heat content of anthracite production less the heat content of the anthracite consumed at electric utilities, net exports, and shipments to U.S. Armed Forces overseas by the quantity of nonelectric utility anthracite consumption less the quantity of anthracite stock changes, losses, and unaccounted for.

Anthracite, Imports and Exports. • 1973 forward: EIA assumed the anthracite imports and exports to be freshly mined anthracite having an estimated heat content of 25.400 million Btu per short ton.

Anthracite, Production. • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of freshly mined anthracite (estimated to have an average heat content of 25.400 million Btu per short ton) and the heat content of anthracite recovered from culm banks and river dredging (estimated to have an average heat content of 17.500 million Btu per short ton) by the total quantity of anthracite production. **Bituminous Coal and Lignite, Consumption.** • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite consumed by electric utilities, coal coke plants, other industrial plants, the residential and commercial sector, and the transportation sector by the sum of their respective tonnages.

**Bituminous Coal and Lignite, Consumption by Coke Plants.** • 1973 forward: Estimated by EIA to be 26.800 million Btu per short ton based on an input/output analysis of coal carbonization.

**Bituminous Coal and Lignite, Consumption by Electric Utilities.** • 1973 forward: Calculated annually by EIA by dividing the total heat content of bituminous coal and lignite received at electric utilities by the total quantity received at electric utilities. Heat contents and receipts are from FERC Form 423 and predecessor forms.

Bituminous Coal and Lignite, Consumption by Other Industrial and Transportation Users. • 1973: Calculated by EIA through regression analysis measuring the difference between the average Btu value of coal consumed by other industrial users and that of coal consumed at electric utilities in the 1974-1982 period. • 1974 forward: Calculated annually by EIA assuming that the bituminous coal and lignite delivered to other industrial users from each coalproducing district (reported on EIA Form 6 and predecessor Bureau of Mines Form 6-1419-Q) contained a heat value equal to bituminous coal and lignite received at electric utilities from each of the same coal-producing districts (reported on FERC Form 423). The average Btu value of coal by coalproducing district was applied to the volume of deliveries to other industrial users from each coalproducing district, and the sum total of the heat content was divided by the total volume of deliveries.

Bituminous Coal and Lignite, Consumption by Residential and Commercial Users. • 1973: Calculated by EIA through regression analysis measuring the difference between the average Btu value of coal consumed by residential and commercial users and that of coal consumed by electric utilities in the 1974-1982 period. • 1974 forward: Calculated annually by EIA by assuming that the bituminous coal and lignite delivered to residential and commercial users from each coal-producing district (reported on EIA Form 6 and predecessor Bureau of Mines Form 6-1419-Q) contained a heat value equal to bituminous coal and lignite received at electric utilities from each of the same coal-producing districts (reported on FERC Form 423). The average Btu value of coal by coal-producing district was applied to the volume of deliveries to residential and commercial users from

each coal-producing district, and the total of the heat value was divided by the total volume of deliveries.

**Bituminous Coal and Lignite, Exports.** • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of exported metallurgical coal (estimated to average 27.000 million Btu per short ton) and the heat content of exported steam coal (estimated to have an average thermal content of 25.000 million Btu per short ton) by the total quantity of bituminous coal and lignite exported.

**Bituminous Coal and Lignite, Imports.** • 1973 forward: EIA estimated the average thermal conversion factor to be 25.000 million Btu per short ton.

**Bituminous Coal and Lignite, Production.** • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite consumption, net exports, stock changes, and unaccounted for by the sum of their respective tonnages. Consumers' stock changes by sectors were assumed to have the same conversion factor as the consumption sector. Producers' stock changes and unaccounted for were assumed to have the same conversion factor as consumption by all users.

**Coal, Consumption.** • 1973 forward: Calculated annualy by EIA by dividing the sum of the heat content of bituminous coal and lignite and anthracite consumption by the sum of their respective tonnages.

**Coal, Consumption by Electric Utilities.** • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite and anthracite received at electric utilities by the sum of their respective tonnages received.

**Coal, Consumption by Non-Electric Utility Users.** • 1973 forward: Calculated annualy by EIA by dividing the sum of the heat content of bituminous coal and lignite and anthracite consumed by non-electric utility users by the sum of their respective tonnages.

**Coal, Exports.** • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite and anthracite exported by the sum of their respective tonnages.

**Coal, Imports.** • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite and anthracite imported by the sum of their respective tonnages.

**Coal, Production.** • 1973 forward: Calculated annually by EIA by dividing the sum of the total heat content of bituminous coal and lignite and anthracite production by the sum of their respective tonnages.

**Coal Coke, Imports and Exports.** • 1973 forward: EIA adopted the Bureau of Mines estimate of 24.800 million Btu per short ton.

### **Approximate Heat Rates for Electricity**

Fossil Fuel Steam-Electric Power Plant Generation. There is no generally accepted practice for measuring the thermal conversion rates for power plants that generate electricity from hydroelectric, wood and waste, wind photovoltaic, or solar thermal electric energy sources. EIA has selected a rate that is equal to the prevailing annual average heat rate factor for fossil-fueled steam-electric power plants. By using this factor, it is possible to evaluate fossil fuel requirements for replacing these sources during periods of interruption such as drought. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is 3,412 Btu per kilowatthour. • 1973 forward: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States as published by EIA in Historical Plant Cost and Annual Production Expenses for Selected Electric Plants.

Geothermal Energy Power Plant Generation. • 1973-1981: Calculated annually by EIA by weighting the average annual heat rates of operating geothermal units by the installed nameplate capacities as reported on Form FPC-12. • 1982 forward: Estimated annually by EIA based on an informal survey of relevant plants.

Nuclear Power Plant Generation. • 1973 forward: Calculated annually by EIA by dividing the total heat content consumed in reactors at nuclear plants by the total (net) electricity generated by nuclear plants as reported on Form FERC-1, EIA-412 and predecessor forms.

### Glossary

Anthracite. A hard, black, lustrous coal containing a high percentage of fixed carbon and a low percentage of volatile matter. It is often referred to as hard coal. It includes metaanthracite and semianthracite and conforms to ASTM Specification D388 for anthracite.

**ASTM.** The acronym for the American Society for Testing and Materials.

**Base Gas.** The total volume of natural gas in underground storage reservoirs that will maintain the required rate of delivery during an output cycle.

**Bituminous Coal.** Coal that is high in carbonaceous matter having a volatility greater than anthracite and a calorific value greater than lignite. In the United States, it is often referred to as soft coal. In this report, "bituminous coal" includes subbituminous coal and conforms to ASTM Specification D388 for bituminous coal and subbituminous coal. It is used for electricity generation, coke production, and space heating.

British Thermal Unit (Btu). The amount of energy required to raise the temperature of 1 pound of water 1 degree Fahrenheit (°F) at or near 39.2 °F. One Btu is equivalent to about 252 International Steam Table calories. An average Btu content of fuel is a heat value per unit quantity of fuel as determined from tests of fuel samples.

**Butane.** A normally gaseous, paraffinic hydrocarbon ( $C_4H_{10}$ ) extracted from natural gas or refinery gas streams. It includes isobutane (a branch-chain configuration) and normal butane (a straight-chain configuration) and is covered by ASTM Specification 1835 and Natural Gas Processors Specifications for commercial butane. It is used primarily for blending into high-octane gasoline, for residential and commercial heating, and for industrial uses, especially the manufacture of chemicals and synthetic rubber.

Butylene. A normally gaseous, olefinic hydrocarbon ( $C_4H_8$ ) recovered from refinery processes. Quantities are included with "normal butane" data.

**City Gate Price of Natural Gas.** Price of natural gas at the point it is transferred from a pipeline to a local distribution company.

**Coal.** Includes all ranks of coal—anthracite, bituminous coal (including subbituminous coal), and lignite—conforming to ASTM Specification D388.

**Coal Coke.** The strong, porous residue, consisting of carbon and mineral ash, that is formed when the volatile constituents of bituminous coal are driven off by heat in the absence of or in a limited supply of air. It is used primarily in blast furnaces for smelting ores, especially iron ore.

**Crude Oil** (including lease condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are excluded where identifiable.

**Crude Oll Refinery Input.** Total crude oil (including lease condensate) input to crude oil distillation units and other processing units.

**Crude Oll Stocks.** Stocks of crude oil and lease condensate held at refineries, in pipe-lines, at pipeline terminals, and on leases.

**Crude OII Wellhead Price.** The average price at which all domestic crude oil is purchased. Prior to February 1976, the domestic crude oil wellhead price represented an estimate of the average of posted prices; after February 1976, the wellhead price represents an average of first sale prices.

**Degree-Day Normals.** Simple arithmetic averages of monthly or annual degree-days over a long period of time (usually the 30-year period 1951-1980). These may be simple degree-day normals or population-weighted degree-day normals.

**Degree-Days, Cooling.** The number of degrees per day that the daily average temperature is above 65 °F. The daily average temperature is the mean of the maximum and minimum temperatures for a 24-hour period.

Degree-Days, Heating. The number of degrees per day that the daily average

temperature is below 65 °F. The daily average temperature is the mean of the maximum and minimum temperatures for a 24-hour period.

Degree-Days, Population-Weighted, Heating or cooling degree-days weighted by the population of the area in which the degree-days are recorded. To compute State population-weighted degree-days. each State is divided into from one to nine climatically homogeneous divisions which are assigned weights based on the ratio of the population of the division to the total population of the State. Degreeday readings for each division are multiplied by the corresponding population weight for each division and these products are then summed to arrive at the State population-weighted degree-day figure. To compute national population-weighted degree-days. the Nation is divided into nine Census regions comprised of from three to eight States which are assigned weights based on the ratio of the population of the region to the total population of the Nation. Degree-day readings for each region are multiplied by the corresponding population weight for each region and these products are then summed to arrive at the national population-weighted degree-day figure.

**Development Well.** A well drilled within a proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.

**Distillate Fuel Oil.** Light fuel oils distilled during the refining process. Included are products known as No. 1, No. 2, and No. 4 fuel oils; and No. 1, No. 2, and No. 4 diesel fuels, conforming to ASTM Specifications D396 and D975, respectively. These products are used primarily for space heating, on- and off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation.

**Dry Hole.** An exploratory or development well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.

**Electrical System Energy Losses.** The amount of energy lost during generation, transmission, and distribution of electricity, including plant use and unaccounted for electrical energy.

**Electricity Generation.** Net electricity (gross electricity output measured at the generator terminals, minus power plant use) generated at electric utilities. Excludes industrial electricity generation. International data are gross electricity output.

Electricity Sales. The gross electricity output measured at the generator terminals, minus power plant use and transmission and distribution losses. Included in each end-use sector are the following: commercial sales of electricity to businesses that generally require less than 1,000 kilowatts of service; industrial sales of electricity to businesses that generally require more than 1,000 kilowatts of service; residential sales of electricity to residences for household purposes; "other" sales of electricity to government, railways, street lighting authorities, and sales not elsewhere included.

**Electric Utility.** A corporation, person, agency, authority, or other entity that owns or operates facilities for the generation, transmission, distribution, or sale of electricity, primarily for use by the public.

**Ethane.** A normally gaseous, paraffinic hydrocarbon  $(C_2H_e)$  extracted from natural gas or refinery gas streams. It is used primarily as petrochemical feedstock for eventual production of chemicals and plastic materials.

**Ethylene.** A normally gaseous, olefinic hydrocarbon  $(C_2H_4)$  recovered from refinery processes. Quantities are included with "ethane" data.

**Exploratory Well.** A well drilled to find and produce oil or gas in an unproved area; to find a new reservoir in a field previously found to be productive of oil or gas in another reservoir; or to extend the limit of a known oil or gas reservoir.

**Exports.** Shipments of goods from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

**FOB (Free on Board) Price of Imported Crude OII.** The FOB price is the price actually charged at the producing country's port of loading. The reported price includes deductions for any rebates and discounts and additions of premiums where applicable, and should be the actual price paid with no adjustments for credit terms.

**Fossil Fuel Steam-Electric Power Plant.** An electricity generation plant in which the prime mover is a turbine rotated by high-pressure steam produced in a boiler by heat from burning fossil fuels.

Gas Well. A well completed for the production of natural gas from one or more gas zones or reservoirs. Such wells have no completions for the production of crude oil.

Geothermal Energy (As Used at Electric Utilities). Hot water or steam, extracted from geothermal reservoirs in the earth's crust, which is supplied to steam

turbines at electric utilities that drive generators to produce electricity.

**Gross National Product (GNP).** The total value of goods and services produced by the Nation's economy, before deduction of depreciation charges and other allowances for capital consumption. It includes the total purchases of goods and services by private consumers and government, gross private domestic capital investment, and net foreign trade.

**Hydroelectric Power.** Electricity generated by an electric power plant whose turbines are driven by falling water.

**Imports.** Receipts of goods into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories (see "Petroleum Imports").

Isobutane. See "Butane."

Landed Cost of Imported Crude Oil. The price of imported crude oil at the port of discharge. It includes the purchase price at the foreign port plus charges for transporting and insuring the crude oil from the purchase point to the port of discharge. It does not include import tariffs or fees, wharfage charges, or demurrage costs.

Lease and Plant Fuel. Natural gas used in lease operations, as gas processing plant fuel, and as net used for gas lift.

Lease Condensate. A natural gas liquid recovered from gas-well gas (associated and nonassociated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons. Generally, it is blended with crude oil for refining.

Lignite. A brownish-black coal of low rank with a high inherent moisture and volatile matter. It is also referred to as brown coal. It conforms to ASTM Specification D388 for lignite and is used almost exclusively for electric power generation.

Liquefied Petroleum Gases. Ethane, ethylene, propane, propylene, normal butane, butylene, ethanepropane mixtures, propane-butane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

**Motor Gasoline, Finished.** A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines

and conforming to ASTM Specification D439. Included are finished leaded gasoline, finished unleaded gasoline, and gasohol. Excludes blendstock that has not been blended into finished motor gasoline and alcohol that has not been blended into gasohol.

**Motor Gasoline, Leaded Premium.** A gasoline having an antiknock index of 93 with the use of lead additives or which contains more than 0.05 grams of lead per gallon or more than 0.005 grams of phosphorus per gallon. Includes gasohol.

**Motor Gasoline, Leaded Regular.** A gasoline having an antiknock index of 89 with the use of lead additives or which contains more than 0.05 grams of lead per gallon or more than 0.005 grams of phosphorus per gallon.

**Motor Gasoline, Total.** Includes finished leaded motor gasoline (premium and regular), finished unleaded motor gasoline (premium and regular), motor gasoline blending components, and gasohol.

Motor Gasoline, Unleaded Premium. A gasoline having an antiknock index of 90 containing not more than 0.05 grams of lead per gallon and not more than 0.005 grams of phosphorus per gallon. Includes gasohol.

**Motor Gasoline, Unleaded Regular.** A gasoline having an antiknock index of 87 containing not more than 0.05 grams of lead per gallon and not more than 0.005 grams of phosphorus per gallon.

**Natural Gas.** A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in natural reservoirs.

Natural Gas Plant Liguids. Natural gas liquids recovered from natural gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the ASTM and the Gas Processors Association and are classified as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation aasoline. special naphthas. kerosene, distillate fuel oil, and miscellaneous products).

Natural Gas Wellhead Price. The wellhead price of natural gas is calculated by dividing the total reported value at the wellhead by the total quantity produced

as reported by the appropriate agencies of individual producing States and the U.S. Geological Survey. The price includes all costs prior to shipment from the lease including gathering and compression costs in addition to State production, severance, and similar charges.

**Net Electricity Generation.** Gross generation less electricity consumed at the generating plant for station use. Electricity required for pumping at pumpedstorage plants is regarded as plant use and is deducted from gross generation.

Normal Butane. See "Butane."

Nuclear Power. Electricity generated by an electric power plant whose turbines are driven by steam generated in a reactor by heat from the fissioning of nuclear fuel.

**Oil Well.** A well completed for the production of crude oil from one or more oil zones or reservoirs.

**Pentanes Plus.** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. This product includes isopentane, natural gasoline, and plant condensate.

**Petroleum.** A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oils, petroleum products, natural gas plant liquids, and nonhydrocarbon compounds blended into finished petroleum products.

**Petroleum Coke.** A solid residue that is the final product of the cracking process in petroleum refining. It consists of aromatic hydrocarbons very poor in hydrogen. Calcination of petroleum coke can yield almost pure carbon or artificial graphite suitable for production of carbon or graphite electrodes, structural graphite, motor brushes, dry cells, and similar products. This product is reported as marketable or catalyst coke.

**Petroleum Imports.** Imports of petroleum into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, other U.S. territories and possessions, and the U.S. Foreign Trade Zones. Included are imports for the Strategic Petroleum Reserve and withdrawals from bonded warehouses for onshore consumption, offshore bunker use, and military use. Excluded are receipts of foreign petroleum into bonded warehouses and into U.S. territories and U.S. Foreign Trade Zones.

**Petroleum Products.** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400 °F end-point, other oils over 400 °F end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

**Petroleum Products Supplied.** Total petroleum products supplied is the sum of the product supplied for each petroleum product, crude oil, unfinished oils, and gasoline blending components. For each of these, except crude oil, product supplied is calculated by adding refinery production, natural gas plant liquids production, new supply of other liquids, imports, and stock withdrawals; and subtracting stock additions, refinery inputs, and exports. Crude oil product supplied is the sum of crude oil burned on leases and at pipeline pump stations as reported on Form EIA-813.

**Petroleum Stocks, Primary.** Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petrolum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve, is included. Excluded are stocks of foreign origin that are held in bonded warehouse storage.

Photovoltaic and Solar Thermal Energy (As Used at Electric Utilities). Energy radiated by the sun as electromagnetic waves (electromagnetic radiation) that is converted at electric utilities into electricity by means of solar (photovoltaic) cells or concentrating (focusing) collectors.

**Propane.** A normally gaseous, paraffinic, hydrocarbon ( $C_sH_8$ ). It is extracted from natural gas or refinery gas streams and includes all products covered by Gas Processors Association Specifications for commercial propane and HD-5 propane and ASTM Specification D1835. Propane is used primarily for residential and commercial heating and cooling, and also as a fuel for transportation. Industrial uses of propane include use as a petrochemical feedstock.

**Propylene.** A normally gaseous, olefinic hydrocarbon  $(C_{s}H_{e})$  recovered from refinery processes. Quantities are included with "propane" data.

**Refiner Acquisition Cost.** The cost of crude oil to the refiner, including transportation and fees. The composite cost is the weighted average of domestic and imported crude oil costs.

**Residual Fuel Oil.** The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations. Included are No. 5 and No. 6 fuel oils that conform to ASTM Specification D396, Navy Special fuel oil, and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and for various industrial purposes. Imports of residual fuel oil include imported crude oil burned as fuel.

**Rotary Rig.** A machine, used for drilling wells, that employs a rotating tube attached to a bit for boring holes through rock.

**Strategic Petroleum Reserve (SPR).** Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

Subbituminous Coal. A dull, black coal of rank intermediate between lignite and bituminous coal. It conforms to ASTM Specification D388 for subbituminous coal and is used almost exclusively for electric power generation. In this report, quantities are included with "bituminous coal" data.

**Supplemental Gaseous Fuels.** Consists primarily of synthetic natural gas, propane-air, and refinery (still) gas. May also include coke oven gas, biomass gas, manufactured gas, and air injected for Btu stabilization.

Synthetic Natural Gas (SNG). A product resulting from the manufacture, conversion, or reforming of hydrocarbons that may be easily substituted for, or interchanged with, pipeline-quality natural gas. Unaccounted for Crude OII. Represents the arithmetic difference between the indicated demand for crude oil and the total disposition of crude oil. Indicated demand is the sum of crude oil production and imports less changes in crude oil stocks. Total disposition of crude oil is the sum of refinery input of crude oil, exports of crude oil, crude oil burned as fuel, and crude oil losses.

United States. Unless otherwise noted, "United States" in this publication means the 50 States and the District of Columbia. U.S. exports include shipments to U.S. Territories, and imports include receipts from U.S. Territories.

Wind Energy (As Used at Electric Utilities). The kinetic energy of wind converted at electric utilities into mechanical energy by wind turbines (i.e., blade rotating from a hub) that drive generators to produce electricity.

Wood and Waste (As Used at Electric Utilities). Wood energy (see "Wood Energy"), garbage, bagasse, sewerage gas and other industrial, agricultural, and urban refuse used to generate electricity.

**Wood Energy.** Wood and wood products used as fuel. Included are round wood (cord wood), limb wood, wood chips, bark, sawdust, forest residues, charcoal, pulp waste, and spent pulping liquor.

Working Gas. The total volume of gas in a storage reservoir that is in excess of the base gas.

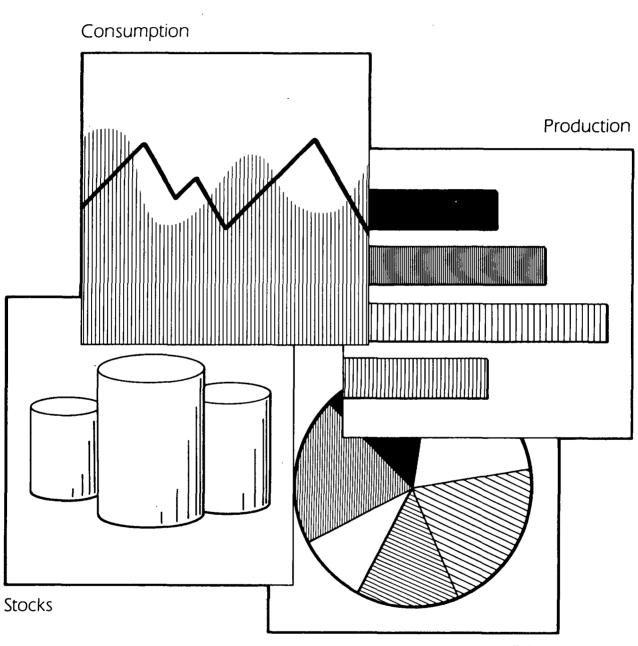
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