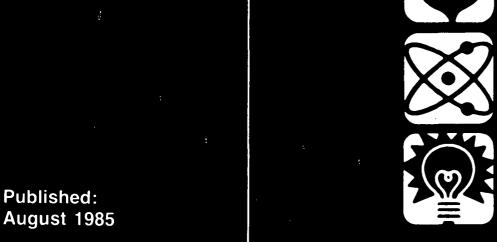
DOE/EIA-0035(85/05)

# Monthly Energy Review

**Energy Information Administration** Washington, D.C.

May 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.

### **Subscriptions**

This publication is available on an annual subscription basis from the Superintendent of Documents, U.S. Government Printing Office (GPO). Prices and ordering information for this and other Energy Information Administration (EIA) publications may be obtained from the GPO or the EIA's National Energy Information Center. Addresses and telephone numbers appear below. An order form is included in the back of this publication for your convenience.

National Energy Information Center, El-20 **Energy Information Administration**Room 1F-048, Forrestal Building
Washington, D.C. 20585
(202) 252-8800

Superintendent of Documents U.S. Government Printing Office Washington, D.C. 20402 (202) 783-3238

### Information

Questions on energy statistics may be directed to the National Energy Information Center at the address and phone number shown above.

Released for printing: August 26, 1985

# Monthly Energy Review

May 1985

Published: August 1985

This report was prepared by the Energy Information Administration, the independent statistical and analytical agency within the Department of Energy. The information contained herein should not be construed as advocating or necessarily reflecting any policy position of the Department of Energy or any other organization.

Energy Information Administration Office of Energy Markets and End Use U.S. Department of Energy Washington, D.C. 20585 DOE/EIA-0035(85/05)
Distribution Category UC-98







### **Contacts**

The *Monthly Energy Review* is prepared in the Statistics Branch of the Office of Energy Markets and End Use, Energy Information Administration, under the direction of Katherine E. Seiferlein (202) 252-5692.

Questions and comments concerning the contents of the *Monthly Energy Review* may be referred to Julia F. Hutchins (202) 252-5138 or the following subject specialists:

Special F	eatures	Barbara T. Fichman (202) 252-5737
Part 1.	Energy Summary	Roberta Searles (202) 252-5736
Part 2.	Consumption	Roberta Searles (202) 252-5736
Part 3.	Petroleum	Christine D. Gray (202) 252-8995
Part 4.	Natural Gas	Gordon W. Koelling (202) 252-6305
Part 5.	Oil and Gas Resource Development	Lawrence R. Mangen (202) 252-4804
Part 6.	Coal	Judith L. Wood (202) 252-5228
Part 7.	Electric Utilities	
rait /.	Generation, Consumption, and Stocks	Vicki Moorhead
	Generation, Consumption, and Stocks	(202) 252-6521
	Sales	• •
	Sales	(202) 252-2028
Part 8.	Nuclear	Thomas S. Murphy (202) 252-9866
		, ,
Part 8. Part 9.	Price	, ,
	Price Petroleum	(202) 252-9866
	Price	(202) 252-9866 Annie P. Whatley
	Price Petroleum Heating Oil	(202) 252-9866  Annie P. Whatley (202) 252-6612
	Price Petroleum	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks
	Price Petroleum Heating Oil	(202) 252-9866  Annie P. Whatley (202) 252-6612
	Price Petroleum Heating Oil	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks (202) 252-9795
	Price Petroleum Heating Oil	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks (202) 252-9795  Kenneth M. McClevey
	Price Petroleum Heating Oil All Other Petroleum Natural Gas Electric Utilities	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks (202) 252-9795  Kenneth M. McClevey (202) 252-5310
	Price Petroleum Heating Oil	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks (202) 252-9795  Kenneth M. McClevey (202) 252-5310 Gordon W. Koelling
	Price Petroleum Heating Oil All Other Petroleum  Natural Gas Electric Utilities  All Other Natural Gas	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks (202) 252-9795  Kenneth M. McClevey (202) 252-5310
	Price Petroleum Heating Oil All Other Petroleum Natural Gas Electric Utilities	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks (202) 252-9795  Kenneth M. McClevey (202) 252-5310 Gordon W. Koelling
	Price Petroleum Heating Oil  All Other Petroleum  Natural Gas Electric Utilities  All Other Natural Gas  Electricity Fuel Costs to Steam Plants	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks (202) 252-9795  Kenneth M. McClevey (202) 252-5310 Gordon W. Koelling (202) 252-6305  Kenneth M. McClevey (202) 252-6310
	Price Petroleum Heating Oil All Other Petroleum  Natural Gas Electric Utilities  All Other Natural Gas Electricity	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks (202) 252-9795  Kenneth M. McClevey (202) 252-5310 Gordon W. Koelling (202) 252-6305  Kenneth M. McClevey (202) 252-6310
	Price Petroleum Heating Oil  All Other Petroleum  Natural Gas Electric Utilities  All Other Natural Gas  Electricity Fuel Costs to Steam Plants	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks (202) 252-9795  Kenneth M. McClevey (202) 252-5310 Gordon W. Koelling (202) 252-6305  Kenneth M. McClevey (202) 252-6310
Part 9.	Price Petroleum Heating Oil  All Other Petroleum  Natural Gas Electric Utilities  All Other Natural Gas  Electricity Fuel Costs to Steam Plants  Prices for Privately Owned Utilities	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks (202) 252-9795  Kenneth M. McClevey (202) 252-5310 Gordon W. Koelling (202) 252-6305  Kenneth M. McClevey (202) 252-5310 Charlene Harris-Russell
Part 9.	Price Petroleum Heating Oil All Other Petroleum	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks (202) 252-9795  Kenneth M. McClevey (202) 252-5310 Gordon W. Koelling (202) 252-6305  Kenneth M. McClevey (202) 252-5310 Charlene Harris-Russell (202) 252-2028
Part 9.	Price Petroleum Heating Oil  All Other Petroleum  Natural Gas Electric Utilities  All Other Natural Gas  Electricity Fuel Costs to Steam Plants  Prices for Privately Owned Utilities	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks (202) 252-9795  Kenneth M. McClevey (202) 252-5310 Gordon W. Koelling (202) 252-6305  Kenneth M. McClevey (202) 252-5310 Charlene Harris-Russell (202) 252-2028
Part 9.	Price Petroleum Heating Oil All Other Petroleum	(202) 252-9866  Annie P. Whatley (202) 252-6612 Bruce H. Bawks (202) 252-9795  Kenneth M. McClevey (202) 252-5310 Gordon W. Koelling (202) 252-6305  Kenneth M. McClevey (202) 252-5310 Charlene Harris-Russell (202) 252-2028

Additional information on all energy statistics available from the Energy Information Administration may be obtained from the National Energy Information Center (202) 252-8800.

### **Contents**

	Page
Part 1. Energy Summary	1
Overview	2 4
Production of Energy by Source	6
Net Imports of Energy by Source	8
Merchandise Trade Value	10
Cooling Degree-Days	12
Energy Indicators	14
•	
Part 2. Consumption  Consumption of Energy by End-Use Sector	19 20
Consumption of Energy by the Residential and Commercial Sector	20
Consumption of Energy by the Industrial Sector	24
Consumption of Energy by the Transportation Sector	26
Energy Input at Electric Utilities	28
• •	
Part 3. Petroleum	35
Crude Oil and Petroleum Products Overview	36 40
Crude Oil Supply and Disposition  Crude Oil and Petroleum Product Imports	40
Finished Motor Gasoline Supply and Disposition	44
Distillate Fuel Oil Supply and Disposition	46
Residual Fuel Oil Supply and Disposition	48
Liquefied Petroleum Gases Supply and Disposition	50
Other Petroleum Products Supply and Disposition	52
Part 4. Natural Gas	55
Production Summary, Supply and Disposition	56
Natural Gas Consumption	58
Underground Natural Gas Storage	59
•	
Part 5. Oil and Gas Resource Development	63 64
Seismic Crews and Rotary Rigs  Exploratory and Development Wells and Footage Drilled	65
Part 6. Coal	69
Overview	70
Consumption and Stocks by End-Use Sector	· 72
Part 7. Electric Utilities	75
Electricity Generation and Sales	76
Primary Energy Consumed to Produce Electricity	78
Coal and Petroleum Stocks	80
Petroleum Consumption and Stocks by Prime Mover Type	82
Part 8. Nuclear	83
Nuclear Power Plant Operations	84
Status of Nuclear Reactor Units	86
Part 9. Price	89
Crude Oil Price Summary	90
Crude Oil Imports	92
U.S. City Average Retail Motor Gasoline	94
Residual Fuel Oil	95
Additional Petroleum Products	96
No. 2 Distillate to Residences by State	98
Natural Gas	100
Electricity	102
Part 10. International	105
Crude Oil Production	106
Petroleum Consumption	108
Petroleum Stocks	110
Nuclear Electricity Generation	112
Conversion Factors	115
Glossary	123





### **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.

Changes in 1981 Petroleum Data Series	May	1981
Information Services of the Energy Information Administration	September	1981
An Overview of Natural Gas Markets	December	1981
The Interstate and Intrastate Natural Gas Markets	January	1982
Natural Gas Drilling and Production Under the Natural Gas Policy Act	February	1982
Impacts of Financial Constraints on the Electric Utility Industry	October	1982
The Effect of Weather on Energy Use	April	1983
Trends in U.S. Energy Since 1973	May	1983
Data Series on Petroleum Use at Electric Utilities	July	1983
Residential Energy Consumption, 1978 Through 1981	September	1983
Exploring for Oil and Gas	November	1983
The Influence of Federal Actions on Petroleum Exploration	December[2]	1983
Aggregate Statistics: Accurate or Misleading?	December[3]	1983
Estimating Well Completions	March	1985

### **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 Liqu	ids	
Reserves, 1981 Annual Report	September	1982
Energy Company Development Patterns in the	•	
Postembargo Era, Volume One	November	1982
Residential Energy Consumption Survey:		
Consumption and Expenditures	January	1983
Residential Energy Consumption Survey:	•	
Housing Characteristics	February	1983
Energy Price and Expenditure Data Report, 1970-	<i>1980</i> July	1983
Railroad Deregulation: Impact on Coal		1983
Port Deepening and User Fees: Impact on U.S. C.	oal ExportsAugust	1983
U.S. Crude Oil, Natural Gas, and Natural Gas Liqu	nids	
Reserves, 1982 Annual Report	September	1983
Annual Energy Review 1983	February	1984
State Energy Data Report, Consumption Estimate	s, 1960-1982March	1984
Annual Energy Outlook 1983	March	1984
State Energy Price and Expenditure Report, 1970	- <i>1981</i> May	1984
Solar Collector Manufacturing Activity 1983	June	1984
Estimates of U.S. Wood Energy Consumption, 19	90-1983September	1984
International Energy Annual 1983	September	1984
Energy Conservation Indicators 1983 Annual Rep	ortNovember	1984
Annual Energy Outlook 1984	December	1984
Annual Energy Review 1984		1985
Performance Profiles of Major Energy Producers	1983 February	1985
State Energy Price and Expenditure Report 197	0-1982March	1985
State Energy Data Report, Consumption Estimate	s, 1960-1983April	1985

### **Production**

Energy production during May 1985 totaled 5.5 quadrillion Btu, a 2.4-percent decrease compared with the level of production during May 1984. Coal production and natural gas production each decreased 3.6 percent. Petroleum production was slightly higher compared with production in the previous May. Production of all other forms of energy combined decreased 3.7 percent compared with production 1 year earlier.

### Consumption

Energy consumption during May 1985 totaled 5.8 quadrillion Btu, 0.7 percent below the level of consumption during May 1984. Natural gas consumption decreased 7.3 percent and petroleum consumption was down 1.0 percent. Coal consumption increased 8.5 percent. Consumption of all other forms of energy combined decreased 4.7 percent compared with consumption during May 1984.

### **Net Imports**

Net imports of energy during May 1985 totaled 0.7 quadrillion Btu, 7.9 percent below the level of net imports during May 1984. Net imports of petroleum decreased 3.8 percent, while net imports of natural gas increased 6.6 percent. Net exports of coal were up 11.3 percent compared with the level in May 1984.

### **Energy Summary** (Quadrillion (1015) Btu)

		May		С	umulativ	e January	ry through May		
	1985	1984	Percent Change <sup>1</sup>	1985	1985 Daily Rate	1984	1984 Daily Rate	Percent Change	
<b>Total Production</b>	5.541	5.679	-2.4	27.278	0.181	27.776	0.183	-1.1	
Petroleum <sup>2</sup>	1.810	1.808	0.1	8.779	0.058	8.766	0.058	0.8	
Natural Gas (Dry)	1.411	1.464	-3.6	7.285	0.048	7.567	0.050	-3.1	
Coal	1.711	1.775	-3.6	8.101	0.054	8.322	0.055	-2.0	
Other <sup>3</sup>	0.608	0.632	-3.7	3.113	0.021	3.121	0.021	0.4	
Total Consumption	5.825	5.866	-0.7	31.704	0.210	31.943	0.210	-0.1	
Petroleum⁴	2.592	2.619	-1.0	12.778	0.085	13.075	0.086	-1.6	
Natural Gas⁵	1.184	1.277	-7.3	8.419	0.056	8.668	0.057	-2.2	
Coal	1.417	1.306	8.5	7.235	0.048	6.924	0.046	5.2	
Other <sup>6</sup>	0.632	0.664	-4.7	3.272	0.022	3.276	0.022	0.5	
Net Imports	0.745	0.809	-7.9	3.186	0.021	3.953	0.026	-18.9	
Petroleum <sup>7</sup>	0.894	0.930	-3.8	3.508	0.023	4.252	0.028	-17.0	
Natural Gas	0.067	0.063	6.6	0.423	0.003	0.355	0.002	20.1	
Coal®	(0.240)	(0.216)	(11.3)	(0.904)	(0.006)	(0.808)	(0.005)	(12.6)	
Other <sup>a</sup>	0.024	0.032	-24.8	0.159	0.001	0.154	0.001	3.5	

Includes supplemental gaseous fuels.

# ummar

Based on daily rates prior to rounding.
 Includes crude oil, lease condensate, and natural gas plant liquids.
 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 refined petroleum products and natural gas plant liquids.

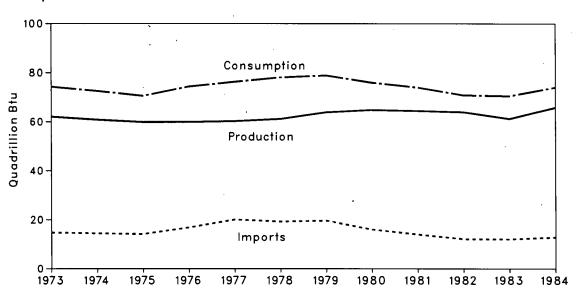
Includes supplemental gaseous rues.
 Other is hydroelectric and nuclear electric power; electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems; and net imports of electricity and coal coke.
 Includes crude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

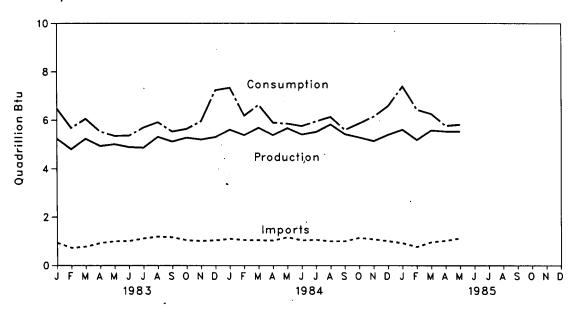
<sup>Parentheses indicate exports are greater than imports.
Other is net imports of electricity and coal coke.</sup> 

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

### Overview

### Yearly





### Overview<sup>1</sup>

		Production <sup>2</sup>	Consumption <sup>2</sup>	Imports <sup>2</sup>	Exports	Net Imports
			Qu	uadrillion (1015) B	ltu	
1973	Total	62.067	74.288	14.730	2.051	12.680
1974	Total	60.841	72.548	14.412	2.223	12.190
1975	Total	59.865	70.551	14.111	2.359	11.752
1976	Total	59.896	74.366	16.837	2.189	14.648
1977	Total	60.222	76.292	20.090	2.072	18.018
1978	Total	61.106	78.091			
1979	Total			19.254	1.931	17.323
1980	Total	63.810	78.900	19.616	2.871	16.745
		64.764	75.955	15.971	3.724	12.247
1981	Total	64.424	73.989	13.974	4.329	9.644
1982	Total	63.892	70.842	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	5.533	0.931	0.314	0.617
	May	5.006	5.355	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	5.120	5.538	1.172	0.323	0.849
	October	5.280	5.648	1.051	0.325	0.726
	November	5.208	5.966	1.019	0.280	0.739
	December	5.308	7.246	1.047	0.290	0.758
	Total	61.196	70.497	12.024	3.719	8.306
1984	January	5.619	R7.343	R1.107	R0.248	R0.859
	February	5.388	R6.191	R1.058	R0.221	R0.837
	March	5.700	R6.636	R1.052	0.316	R0.736
	April	5.390	R5.907	1.039	R0.327	0.712
	May	5.679	R5.866	R1.174	R0.365	R0.809
	June	5.414	R5.769	R1.044	0.367	R0.677
	July	5.524	R5.959	R1.069	R0.327	R0.743
	August	5.832	R6.139	R1.008	R0.359	R0.649
	September	5.428	R5.609	R1.009	R0.355	R0.654
	October	5.289	R5.875	1.148	R0.296	R0.852
	November	5.142	R6.152	R1.090	R0.271	R0.819
	December	5.400	R6.588	R1.017	R0.361	R0.657
	Total	65.806	R74.033	R12.816	R3.812	R9.004
1985	January	5.618	7.402	0.929	0.307	0.622
	February	5.187	R6.439	0.772	0.307	0.465
	March	R5.588	R6.263	0.968	0.311	0.657
	April	R5.345	R5.775	1.029	0.332	0.698
	May	5.541	5.825	1.133	0.388	0.745
	Year to Date	27.278	31.704	4.832	1.646	3.186

<sup>&</sup>lt;sup>1</sup>For definitions, see Notes on the last page of this section.

<sup>2</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.

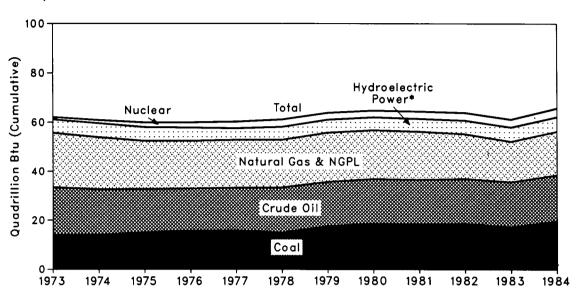
R = Revised data.

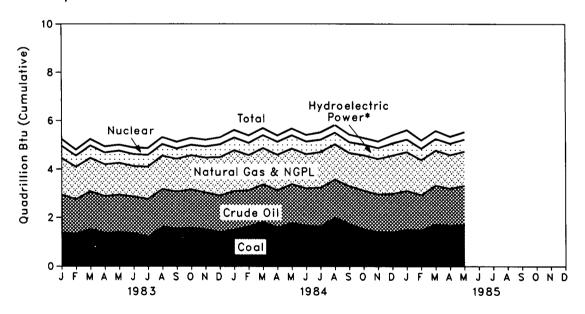
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Data do not include geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric

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

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

### Yearly





<sup>\*</sup>Includes other.

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

		Coal	Crude Oil <sup>1</sup>	NGPL <sup>2</sup>	Natural Gas (Dry)	Hydro- electric Power <sup>3</sup>	Nuclear Electric Power	Other•	Total	Year to Date
			•			adrillion (10 <sup>1</sup>		· · · · · · ·	. • • • • • • • • • • • • • • • • • • •	
1973	Total	14.000	19.493	2.569	22.187	2.861	0.910	0.046	62.067	
1974	Total	14.080	18.575	2.471	21.210	3.177	1.272	0.056	60.841	
1975	Total	14.995	17.729	2.374	19.640	3.155	1.900	0.030	59.865	
1976	Total	15.659	17.729	2.327	19.480	2.976	2.111	0.072	59.896	
1977	Total	15.758	17.252	2.327 2.327	19.460	2.333	2.702	0.081		
									60.222	
1978	Total	14.912	18.434	2.245	19.485	2.937	3.024	0.068	61.106	
1979	Total	17.549	18.104	2.286	20.076	2.931	2.776	0.089	63.810	
1980	Total	18.600	18.249	2.254	19.907	2.900	2.739	0.114	64.764	
1981	Total	18.379	18.146	2.307	19.699	2.758	3.008	0.127	64.424	
1982	Total	18.641	18.309	2.191	18.255	3.256	3.131	0.108	63.892	
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	800.0	4.803	10.040
	March	1.520	1.564	0.183	1.376	0.319	0.261	0.009	5.233	15.274
	April	1.364	1.527	0.173	1.300	0.316	0.244	0.009	4.933	20.207
	May	1.394	1.552	0.178	1.305	0.329	0.240	0.007	5.006	25.213
	June	1.363	1.508	0.175	1.245	0.324	0.263	0.009	4.889	30.102
	July	1.218	1.553	0.183	1.325	0.297	0.279	0.012	4.866	34.968
	August	. 1.617	1.561	0.186	1.375	0.272	0.286	0.015	5.312	40.280
	September	1.551	1.528	0.184	1.340	0.229	0.273	0.014	5.120	45.400
	October November	1.583 1.515	1.577 1.526	0.191 0.189	1.415 1.432	0.219 0.260	0.281 0.273	0.015 0.013	5.280 5.208	50.680 55.888
	December	1.405	1.526	0.189	1.432	0.260	0.273	0.013	5.308	61.196
	Total	17.252	18.392	2.184	16.530	3.502	3.203	0.133	61.196	01.190
	Total									
1984	January	1.508	1.594	0.193	1.679	0.314	0.320	0.011	5.619	5.619
	February	1.636	1.493	0.188	1.455	0.294	0.310	0.013	5.388	11.007
	March	1.811	1.559	0.196	1.499	0.321	0.298	0.015	5.700	16.707
	April	1.592 1.775	1.542	0.192 0.198	1.469 1.464	0.316	0.264 0.282	0.014 0.014	5.390 5.679	22.097 27.776
	May	1.775	1.610 1.540	0.198	1.464	0.336 0.304	0.282	0.014	5.679 5.414	33.190
	June July	1.644	1.598	0.192	1.417	0.304	0.276	0.013	5.524	38.714
	August	1.995	1.584	0.201	1.450	0.265	0.322	0.016	5.832	44.546
	September	1.735	1.565	0.197	1.378	0.221	0.318	0.015	5.428	49.974
	October	1.525	1.601	0.202	1.454	0.220	0.270	0.016	5.289	55.264
	November	1.410	1.562	0.199	1.452	0.235	0.268	0.016	5.142	60.406
	December	1.393	1.600	0.202	1.578	0.272	0.337	0.018	5.400	65.806
	Total	19.696	18.848	2.362	17.765	3.387	3.573	0.174	65.806	
1985	January	1.510	1.605	0.202	1.598	0.290	0.395	0.018	5.618	5.618
	February	1.490	1.450	0.181	1.442	0.273	0.336	0.016	5.187	10.805
	March	1.726	1.605	0.198	R1.442	0.260	0.339	0.018	R5.588	R16.393
	April	1.664	1.539	0.190	R1.391	0.258	0.289	0.015	R5.345	R21.738
	May	1.711	1.613	0.197	1.411	0.279	0.313	0.016	5.541	27.278
	Year to Date	8.101	7.812	0.968	7.285	1.360	1.671	0.083	27.278	

¹Includes 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.

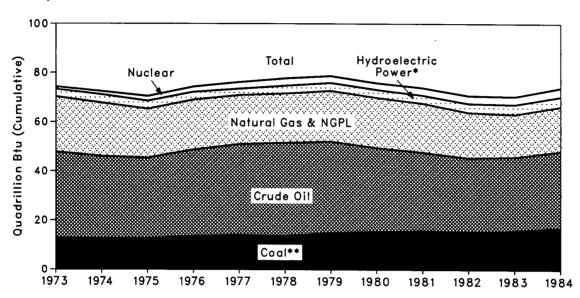
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Data do not include geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric utilities.

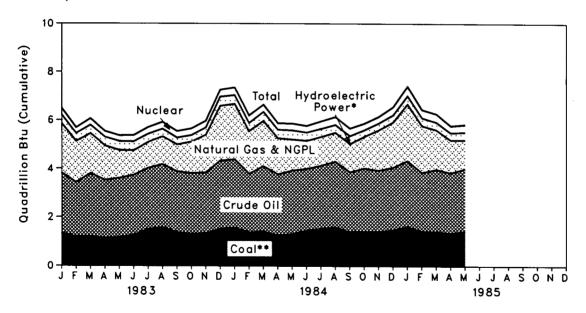
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

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

### Consumption of Energy by Source

### Yearly





<sup>\*</sup>Includes other.
\*\*Includes net imports of coal coke.

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

			•				Net			
•		Coal	Natural Gas¹	Petro- leum	Hydro- electric Power <sup>2</sup>	Nuclear Electric Power	Imports of Coal Coke <sup>3</sup>	Other•	Total	Year to Date
		ooui	dus	icum				Ounc.	i Otai	Date
				•		adrillion (101	•			
1973	Total	12.978	22.512	34.840	3.010	0.910	(0.008)	0.046	74.288	
1974	Total	12.668	21.732	33.455	3.309	1.272	0.056	0.056	72.548	
1975	Total	12.668	19.948	32.731	3.219	1.900	0.014	0.072	70.551	
1976	Total	13.589	20.345	35.175	3.066	2.111	0.000	0.081	74.366	
1977	Total	13.925	19.931	37.122	2.515	2.702	0.015	0.082	76.292	
1978	Total	13.767	20.000	37.965	3.141	3.024	0.125	0.068	78.091	
1979	Total	15.042	20.666	37.123	3.141	2.776	0.063	0.089	78.900	
1980	Total	15.426	20.391	34.202	3.118	2.739	(0.035)	0.114	75.955	
1981	Total	15.908	19.926	31.931	3.105	3.008	(0.016)	0.127	73.989	
1982	Total	15.324	18.507	30.232	3.561	3.131	(0.022)	0.108	70.842	
1983	January	1.360	2.036	2.467	0.337	0.273	(0.001)	0.011	6.483	6.483
	February	1.180.	1.693	2.239	0.323	0.242	(0.001)	0.008	5.685	12.168
	March	1.196	1.640	2.604	0.348	0.261	(0.001)	0.009	6.058	18.226
	April	1.140	1.416	2.383	0.344	0.244	(0.002)	0.009	5.533	23.759
	May	. 1.173	1.153	2.431	0.352	0.240	(0.002)	0.007	5.355	29.113
	June	1.257	1.004	2.480	0.351	0.263	(0.001)	0.009	5.364	34.478
	July.	1.500	1.066	2.517	0.328	0.279	(0.002)	0.012	5.700	40.178
	August	1.574	1.146	2.594	0.307	0.286	(0.001)	0.015	5.922	46.100
	September	1.367	1.104	2.515	0.266	0.273	(0.001)	0.014	5.538	51.638
	October	1.305	1.285	2.507	0.256	0.281	(0.001)	0.015	5.648	57.285
	November	1.326	1.550	2.514	0.292	0.273	(0.001)	0.013	5.966	63.252
	December	1.523	2.259	2.803	0.366	0.287	(0.003)	0.011	7.246	70.497
	Total	15.900	17.352	30.054	3.871	3.203	(0.016)	0.133	70.497	
1984	January	1.561	2.288	2.817	R0.346	0.320	0.001	0.011	R7.343	R7.343
	February	1.367	1.755	2.421	R0.323	0.310	0.002	0.013	R6.191	R13.534
	March	1.411	1.871	2.691	R0.350	0.298	(0.001)	0.015	R6.636	R20.170
	April	1.279	1.476	2.526	R0.347	0.264	0.000	0.014	R5.907	R26.077
	May	1.306	1.277	2.619	R0.368	0.282	(0.001)	0.014	R5.866	R31.943
	June	1.448	1.151	2.549	R0.335	0.276	(0.002)	0.013	R5.769	R37.712
	July August	1.528 1.596	1.184 1.193	2.599 2.702	R0.328 R0.311	0.308 0.322	(0.001)	0.013 0.016	R5.959 R6.139	R43.671 R49.809
	September	1.392	1.153	2.702	R0.258	0.322	(0.002) 0.000	0.015	R5.609	R55.418
	October	1.403	1.308	2.619	R0.262	0.310	(0.003)	0.015	R5.875	R61,293
	November	1.402	1.664	2.536	R0.268	0.270	(0.003)	0.016	R6.152	R67.445
	December	1.479	1.872	2.578	R0.305	0.337	(0.001)	0.018	R6.588	R74.033
	Total	17.172	18.192	31.132	R3.802	3.573	(0.011)	0.174	R74.033	111 4.000
1985	January	1.627	2.332	2.707	0.323	0.395	10.000	0.018	7.402	7.402
,,,,,	February	1.430	R1.930	2.420	0.306	0.336	0.001	0.016	R6.439	R13.841
	March	1.408	R1.636	2.569	0.293	0.339	0.000	0.018	R6.263	R20.104
	April	1.353	R1.337	2.490	0.290	0.289	0.001	0.015	R5.775	R25.878
	May	1.417	1.184	2.592	0.307	0.313	(0.003)	0.016	5.825	31.704
	Year to Date	<b>7.235</b> .	8.419	12.778	1.519	1.671	0.000	0.083	31.704	

.. .

Includes supplemental gaseous fuels.
Includes industrial and utility production and net imports of electricity.

Parentheses indicate exports are greater than imports of electricity.

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

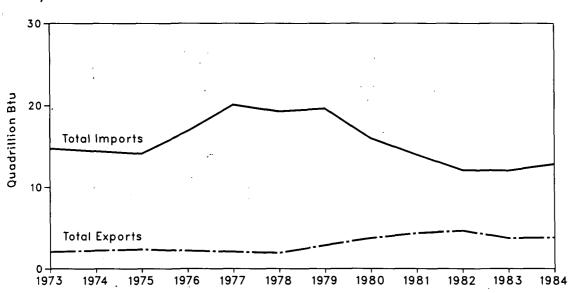
R = Revised data.

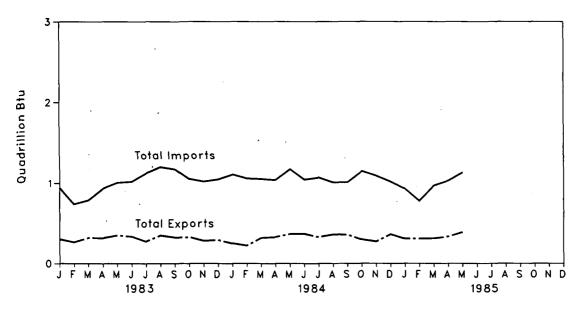
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Data do not include geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric utilities.

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

### **Energy Imports and Exports**

### Yearly





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

		Coal	Crude Oil²	Refined Petro- leum Products <sup>3</sup>	Natural Gas	Electri- city	Coal Coke	Total	Year to Date
					Quadrilli	on (10¹⁵) Btu			
1973	Total	(1.422)	6.883	6.097	0.981	0.148	(800.0)	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	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	(0.162)	0.382	0.134	0.083	0.028	(0.001)	0.464	1.572
	April	(0.157)	0.530	0.148	0.071	0.028	(0.002)	0.617	2.190
	May June	(0.180) (0.188)	0.556 0.600	0.202 0.188	0.057 0.057	0.023 0.028	(0.002) (0.001)	0.657 0.684	2.847 3.531
	July	(0.159)	0.673	0.166	0.057	0.028	(0.001)	0.851	4.382
	August	(0.139)	0.732	0.252	0.051	0.032	(0.002)	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	(0.162)	0.563	0.222	0.105	0.032	(0.003)	0.758	8.306
	Total	(2.013)	6.731	2.351	0.883	0.369	(0.016)	8.306	
1984	January	(0.132)	0.524	0.340	0.094	R0.033	0.001	R0.859	R0.859
	February	(0.109)	0.467	0.382	0.066	R0.029	0.002	R0.837	R1.696
	March	(0.152)	0.584	0.211	0.065	R0.029	(0.001)	R0.736	R2.432
	April	(0.200)	0.567	0.247	0.068	0.030	0.000	0.712	R3.144
	May	(0.216)	0.672	0.258	0.063	R0.033	(0.001)	R0.809	R3.953
	June	(0.206)	0.581	0.216	0.057	R0.031	(0.002)	R0.677	R4.630
	July	(0.215)	0.639	0.231	0.051	R0.038	(0.001)	R0.743	R5.373
	August	(0.214) (0.228)	0.552 0.556	0.216 0.236	0.050 0.053	R0.046	(0.002)	R0.649	R6.022
	September October	(0.226)	0.652	0.236	0.053	R0.038 R0.041	0.000 (0.003)	R0.654 R0.852	R6.677 R7.529
	November	(0.173)	0.591	0.225	0.084	R0.033	(0.003)	R0.819	R8.348
	December	(0.169)	0.533	0.169	0.001	R0.033	(0.003)	R0.657	R9.004
	Total	(2.122)	6.918	3.003	0.803	R0.414	(0.011)	R9.004	110.004
4		•							
1985	January	(0.151)	0.462	0.176	0.101	E0.033	0.000	0.622	0.622
	February March	(0.157)	0.311	0.180 0.238	0.096	E0.033	0.001	0.465	1.087
	March April	(0.174) (0.182)	0.473 0.553	0.238	0.087 0.072	E0.033 E0.033	0.000 0.001	0.657 0.698	1.744 2.441
	May	(0.162)	0.553	0.267	0.072	E0.033	(0.003)	0.696	3.186
	Year to Date	(0.904)	2.426	1.082	0.423	E0.159	0.000)	3.186	3.100
	. car to bate	(0.504)	2.720	1.002	V.720	LU. 133	V.VV	J. 100	

¹Net imports equals imports minus exports. Parentheses indicate exports are greater than imports. ¹Includes crude oil, lease condensate, and imports of crude oil for the Strategic Petroleum Reserve. ¹Includes refined petroleum products, unfinished oils, natural gasoline, and plant condensate.

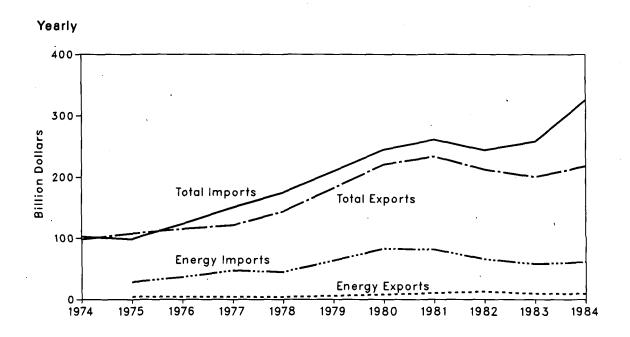
E = Estimated value. R = Revised data.

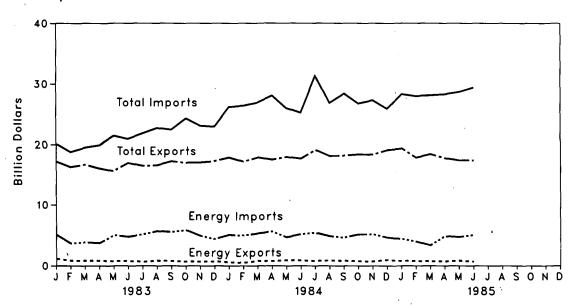
Notes: • Geographic coverage is the 50 States and the District of Columbia.

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

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

### Merchandise Trade Value





### **Merchandise Trade Value**

		Exports				Imports			Trade Balance		
		Energy	All Other	Total	Energy	All Other	Total	Energy	All Other	Total	
					1	Million dolla	ırs				
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	
1979	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	-27,55 <del>5</del> -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	20,916	-3,976	19	-3,957	
	July	644	15,842	16,486	5,164	16,664	21,828	-4,520	-821	-5,341	
	August	824	15,758	16,582	5,703	17,011	22,714	-4,879	-1,253	-6,132	
	September	778	16,479	17,257	5,571	16,880	22,451	-4,793	-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 5,070	
	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	
	May	901	17,077	17,978	4,696	21,316	26,012	-3,795	-4,239	-8,034	
	June	872	16,833	17,705	5,206	20,070	25,276 31,334	-4,334 4,660	-3,237 -7,511	-7,571 12,180	
	July	765 878	18,389 17,245	19,154 18,123	5,434	25,900 21,980	26,866	-4,669 4,008	-7,511 -4,735	-12,180 -8,743	
	August September	820	17,245	18,210	4,886 4,663	23,746	28,409	-4,008 -3,843	-4,735 -6,357	-0,743	
	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	18,597	19,401	4,434	23,863	28,297	-3,630	-5,266	-8,896	
1303	February	786	17,067	17,853	3,989	23,996	27,985	-3,203	-6,928	-10,131	
	March	754	17,692	18,446	3,351	24,778	28,129	-2,597	-7.086	9.683	
	April	738	17,041	17,779	4,876	23,419	28,295	-4,138	-6.378	-10,516	
	May	837	16,577	17,414	4,748	23,937	28,685	-3,911	-7,360	-11,271	
	June	708	16,730	17,438	5,088	24,337	29,425	-4,380	-7,607	-11,987	
	Year to Date	4,627	103,705	108,332	26,486	144,330	170,816	-21,859	-40,625	-62,484	

NA=Not available.

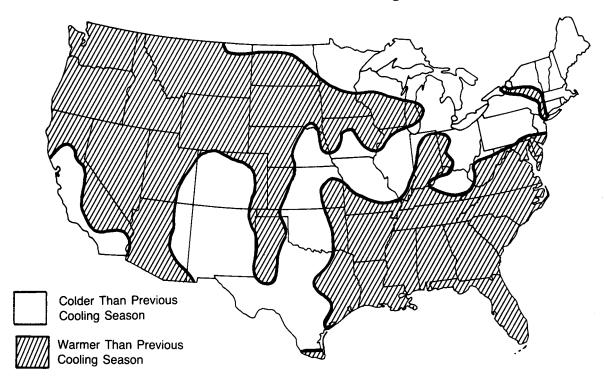
Notes: • Annual totals are unadjusted and may not equal the sum of monthly totals, which are adjusted for seasonal and working-day variation, if present and identifiable.

• 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.

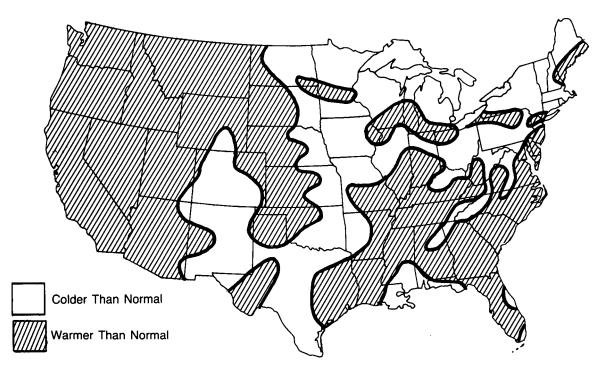
Additional Notes and Sources: • See the last page of this section.

Cooling Degree-Days Accumulated from January 1, 1985 through July 27, 1985

### **Departure from Previous Cooling Season**



### **Departure from Normal**



Source: • Department of Commerce—National Oceanic and Atmospheric Administration.

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

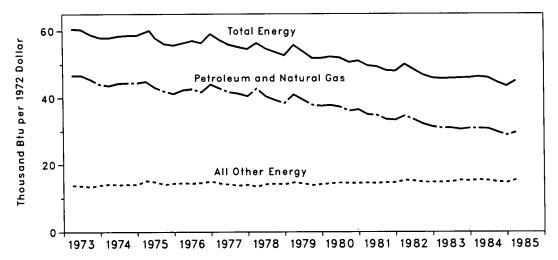
		l through	July 31		Cumulative January 1 through July 31					
Census				Percent	Percent Change				Percent	Change
Divisions	Normal <sup>2</sup>	1984	1985	Normal to 1985	1984 to 1985	Normal <sup>2</sup>	1984	1985	Normal to 1985	1984 to 1985
New England CT, ME, MA, NH, RI, VT	183	171	178	-2.7	4.1	255	286	221	-13.3	-22.7
Middle Atlantic NJ, NY, PA	250	192	235	-6.0	22.4	408	366	354	-13.2	-3.3
Eastern North Central IL, IN, MI, OH, WI	249	194	224	-10.0	15.5	456	403	396	-13.2	-1.7
Western North Central IA, KS, MN, MO, NE, ND, SD	319	290	303	-5.0	4.5	620	523	522	-15.8	-0.2
South Atlantic DE, FL, GA, MD and DC, NC, SC, VA, WV	404	350	397	-1.7	13.4	1,039	964	1,088	4.7	12.9
Eastern South Central AL, KY, MS, TN	413	344	400	-3.1	16.3	924	806	906	-1.9	12.4
Western South Central AR, LA, OK, TX	561	529	519	-7.5	-1.9	1,405	1,350	1,382	-1.6	2.4
<b>Mountain</b> AZ, CO, ID, MT, NV, NM, UT, WY	324	310	337	4.0	8.7	603	642	708	17.4	10.3
Pacific Coast CA, OR, WA	195	250	241	23.6	-3.6	277	357	378	36.5	5.9
U.S. Average <sup>3</sup>	317	284	308	-2.8	8.5	659	624	653	-0.9	4.6

<sup>&</sup>lt;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.

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

		Annual Rate		Energy Consumption	on per Dollar of GNP (Se	asonally Adjusted)
		of Energy Gross Nati Consumption Product (G		Total Energy	Petroleum and Natural Gas	All Other Energy
		Quadrillion Btu	Trillion 1972 dollars	Th	ousand Btu per 1972 doll	ar
1973	Year	74.288	1.254	59.2	45.7	13.5
1974	Year	72.548	1.246	58.2	44.3	13.9
1975	Year	70.551	1.232	57.3	42.8	14.5
1976	Year	74.366	1.298	57.3	42.8	14.5
1977	Year	76.292	1.370	55.7	41.6	14.1
1978	Year	78.091	1.439	54.3	40.3	14.0
1979	Year	78.900	1.479	53.3	39.1	14.2
1980	Year	75.955	1.475	51.5	37.0	14.5
1981	Year	73.989	1.512	48.9	34.3	14.6
1982	Year	70.842	1.480	47.9	34.3 32.9	15.0
1902	i cai	70.042	1.400	47.5	32.5	15.0
1983	1st Quarter <sup>1</sup>	68.231	1.491	45.8	31.0	14.8
	2nd Quarter <sup>1</sup>	70.000	1.525	45.9	31.0	14.9
	3rd Quarter <sup>1</sup>	71.250	1.550	46.0	30.6	15.4
	4th Quarter <sup>1</sup>	72.453	1.573	46.1	30.9	15.2
	Year	70.497	1.535	45.9	30.9	15.0
1984	1st Quarter <sup>1</sup>	R74.720	1.611	46.4	30.9	15.5
	2nd Quarter <sup>1</sup>	R75.513	1.639	46.1	30.8	15.3
	3rd Quarter <sup>1</sup>	R73.530	1.645	44.7	29.8	14.9
	4th Quarter <sup>1</sup>	R72.396	1.662	43.6	28.9	14.7
	Year	R74.033	1.639	45.2	30.1	15.1
1985	1st Quarter <sup>1</sup>	R75.145	1.664	45.2	29.7	15.5

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



<sup>&</sup>lt;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.

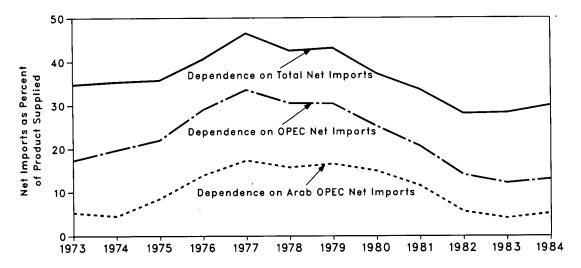
### Energy Indicator—U.S. Dependence on Petroleum Net Imports<sup>1</sup>

Net Imports<sup>2</sup>

Net Imports as Percent of U.S. Petroleum Products Supplied

			Mer IIIIborra			0.5. reti bledili Froducts Supplied			
		Arab OPEC <sup>3</sup> All OPEC <sup>4</sup> All Produc		Petroleum Products Supplied	From Arab OPEC <sup>3</sup> Countries	From All OPEC <sup>4</sup> Countries	From All Countries		
Annua	l Rate		Thousand ba	arrels 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	13.9	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 '	

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



<sup>&</sup>lt;sup>1</sup>Beginning in October 1977, Strategic Petroleum Reserves are included.

<sup>2</sup>Net imports equals imports minus exports. Imports from OPEC countries exclude indirect imports which are refined products imported primarily from Caribbean and West European areas and refined from crude oil produced in OPEC countries.

<sup>3</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.

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

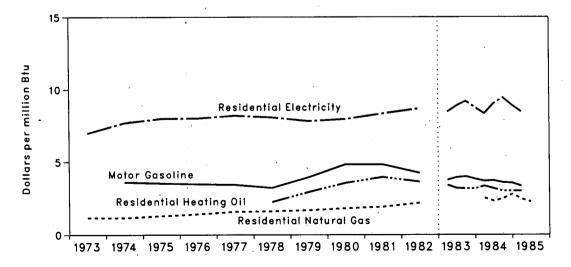
Annual averages may not equal average of quarters due to independent rounding.
 Sources: See the last page of this section.

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

		Leaded Regular Motor Gasoline		Residential Heating 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	NÀ	NA	3.14	9.20
	4th Quarter	47.9	3.83	43.9	3.17	R260.9	R2.53	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	R239.2	R2.32	2.85	8.35
	2nd Quarter	46.5	3.72	43.9	3.17	R255.7	R2.48	3.08	9.03
	3rd Quarter	44.9	3.59	41.6	3.00	R286.9	R2.78	3.22	9.44
	4th Quarter	44.5	3.56	41.7	3.01	R253.5	R2.46	3.04	8.91
	Average	45.5	3.64	43.9	3.17	R246.5	R2.39	3.04	8.91
1985	1st Quarter	41.7	3.33	41.5	2.99	R234.1	R2.27	2.89	8.47

Revisions to the residential natural gas prices reflect changes in the primary data series. See page 101.

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



<sup>&</sup>lt;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

Hele costs shown on this page are calculated using the orban consumer rice incomes the Conversion Factors section of this report.

R = Revised data. NA = Not available.

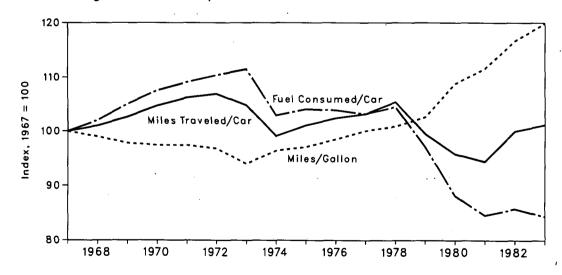
Note: • Geographic coverage is the 50 States and the District of Columbia.

• 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		Averag Traveled		Average Miles Traveled per Gall of Fuel Consume		
	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†	577	84.4	9,641	101.2		16.70	119.9

### 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.

### 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 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 sections of the sections of the conversion factors. tion of this publication.
- 2. Energy Consumption: Consumption of energy includes consumption of coal, natural gas (including supplemental gaseous fuels), refined petroleum products supplied, electric utility and industrial production of hydroelectric 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), refined petroleum products, natural gas, electricity 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 electricity, 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, refined petroleum products, natural gas, electricity 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 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 territory (which includes the 50 United States, the District of Columbia, and Puerto Rico) and the Virgin Islands. The statistics exclude imports into Guam, American Samoa, and other U.S. possessions as well as phipments between the 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 workingday variation, if 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., reexports). The "Energy" columns include mineral fuels, lubricants, 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 conven-

tion. Heating degree-days are deviations of the mean daily temperature below 65 °F. For example, if a weather station recorded a mean daily temperature of 78 °F, cooling 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 information 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 lights of U.S. Export and Import Trade," F1990 (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 Consumption 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 Merchanders."

 1981 forward: U.S. Department of Commerce, Bureau of the Census, "Summary of U.S. Export and Import Merchandise 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 and products supplied—Part 3 of this publication.
 • Exports—1973 through 1976: Bureau of Mines, Mineral Industry Surveys; 1977 through 1982: Energy Information Administration (EIA), Energy Data Reports, "Petroleum Statement, Annual"; 1983 forward: EIA, Petroleum Statement Monthly ment, Monthly

Cost of Fuels to End Users in Constant (1972) Dollars: Leaded Regular Motor Gasoline—Bureau of Labor Statis-

- tics (BLS).

   Residential Heating Oil—EIA, 1983 forward: EIA Form-782A, "Refiners/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA Form-782B, "Resellers/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 Monitoring 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.

   Residential Natural Gas—FIA Appual data from Form
- 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." to Consumers.
- Residential Electricity—Federal Energy Regulatory Commission (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: • Indexes prepared from statistics published by the U.S. Department of Transportation, Federal Highway Administration, Federal Highway Statistics Division, "Highway Statistics," Table VM-1.

Total U.S. energy consumption in May 1985 was 5.8 quadrillion Btu, 0.7 percent below the May 1984 level. Petroleum products accounted for 44.5 percent of the energy consumed in May 1985, while coal accounted for 24.3 percent and natural gas accounted for 20.3 percent.

The transportation sector used 64.8 percent of the petroleum products consumed in May 1985 and the industrial sector used 26.4 percent. Of natural gas consumed, the industrial sector used 45.8 percent; the residential and commercial sector, 30.8 percent; and electric utilities, 20.5 percent. Most of the coal used (81.7 percent) was consumed by electric utilities. The residential and commercial sector used 60.4 percent of total electricity sales, while the industrial sector used 39.4 percent.

Residential and commercial sector consumption was 1.8 quadrillion Btu in May 1985, down 3.9 percent from the level in May 1984. This sector consumed 30.9 percent of the May 1985 total, down from its 31.9-percent share in May 1984.

Industrial sector consumption was 2.3 quadrillion Btu in May 1985, up 1.2 percent from the May 1984 level. The industrial sector accounted for 39.6 percent of the May 1985 total consumption, up from the industrial sector's 38.9-percent share in May 1984.

Transportation sector consumption of energy was 1.7 quadrillion Btu in May 1985, the same as the May 1984 level. This level accounted for 29.5 percent of the May 1985 total consumption compared with 29.3 percent of total consumption in May 1984.

The electric utilities consumption of energy was an estimated 2.1 quadrillion Btu in May 1985, 1.6 percent higher than in May 1984. Coal contributed 54.9 percent of the energy consumed by electric utilities in May 1985, while nuclear electric power contributed 14.9 percent; hydroelectric power, 14.4 percent; natural gas, 11.5 percent; petroleum products, 3.6 percent; and geothermal, wood, waste, wind, photovoltaic, and solar thermal energy, 0.8 percent.

### Consumption Summary for May 1985 (Quadrillion (1015) Btu)

	Sector							
Energy Source	Residential and Commercial	Industrial	Transportation	Electric Utilities	Total			
Coal	0.012	0.249	0.000	1.157	1.417			
Natural Gas <sup>1</sup>	0.365	0.542	0.034	0.243	1.184			
Petroleum Products	0.153	0.684	1.680	0.075	2.592			
Hydroelectric Power	0.000	0.003	0.000	0.303	0.307			
Nuclear Electric Power	0.000	0.000	0.000	0.313	0.313			
Net Imports of Coal Coke	0.000	(0.003)	0.000	0.000	(0.003)			
Other <sup>2</sup>	0.000	0.000	0.000	0.016	0.016			
Primary Consumption	0.530	1.475	1.714	2.107	5.825			
Electricity	0.366	0.239	0.001	(0.606)				
Net Energy Consumption	0.896	1.715	1.715		4.325			
Electrical System Energy Losses	0.906	0.593	0.002	(1.501)	1.501			
Total Energy Consumption	1.801	2.307	1.717		5.825			

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

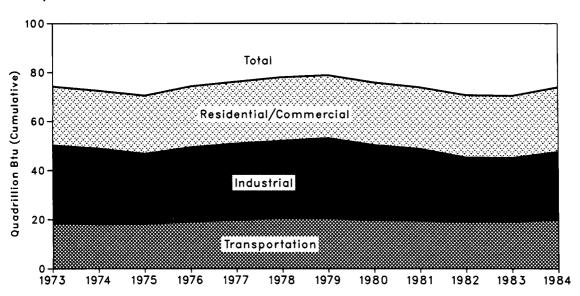
# Consumption

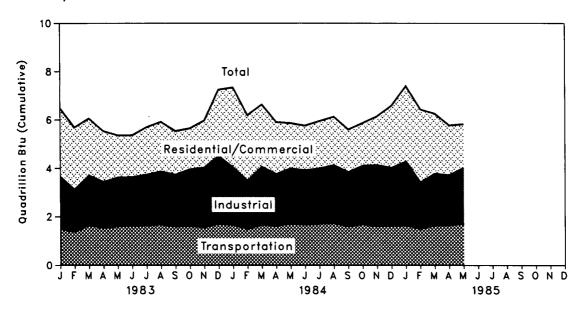
Includes supplemental gaseous fuels.
 Other is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems

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

### Consumption of Energy by End-Use Sector

### Yearly





### Consumption of Energy by End-Use Sector

		Residential and			
		Commercial	Industrial	Transportation	Total
			Quadrillion	n (10¹⁵) Btu	
1973	Total	24.147	31,538	18.596	74.288
1974	Total	23.729	30.699	18.113	72.548
1975	Total	23.902	28.409	18.240	70.551
1976	Total	25.020	30.245	19.093	74.366
1977	Total	25.386	31.090	19.808	76.292
1978	Total	26.085	31.415	20.589	78.091
1979	Total	25.809	32.625	20.464	78.900
1980	Total	25.65 <u>6</u>	30.606	19.693	75.955
1981	Total	25.244	29.252		
1982	Total	25.632		19.495	73.989
	1 Olai	23.032	26.140	19.066	70.842
1983	January	2.820	2.156	1.506	6.483
	February	2.556	1.751	1.379	5.685
	March	2.351	2.046	1.660	6.058
	April	2.088	1.907	1.541	5.533
	May	1.733	2.021	1.603	5.355
	June	1.723	2.000	1.639	5.364
	July August	1.957 2.048	2.091	1.648	5.700
	September	1.798	2.193 2.141	1.676 1.598	5.922 5.538
	October	1,692	2.141	1.616	5.648
	November	1,944	2.459	1.566	5.966
	December	2.731	2.801	1.714	7.246
	Total	25.441	25.908	19.146	70.497
1984	January	R3.310	R2.366	1.666	R7.343
	February	R2.695	R1.997	1.500	R6.191
	March	R2.572	2.391	1.673	R6.636
	April	2.141	2.134	1.637	R5.907
	May	R1.874	R2.279	1.717	R5.866
	June	R1.846	2.247	1.673	R5.769
	July	R1.961	R2.271	1.723	R5.959
	August September	R2.002 R1.767	R2.393	1.738	R6.139
	October	R1.767	R2.233 R2.419	R1.608	R5.609
	November	R2.016	2.515	1.687 1.619	R5.875 R6.152
	December	R2.567	2.392	1.629	R6.588
	Total	R26.517	R27.637	19.870	R74.033
1985	January	3.111	2.634	1.652	7.402
	February	3.001	R1.924	1.511	R6.439
	March	2.476	R2.131	R1.655	R6.263
	April	2.056	R2.071	R1.652	R5.775
	May	1.801	2.307	1.717	5.825
	Year to Date	12.445	11.068	8.187	31.704

R=Revised data.

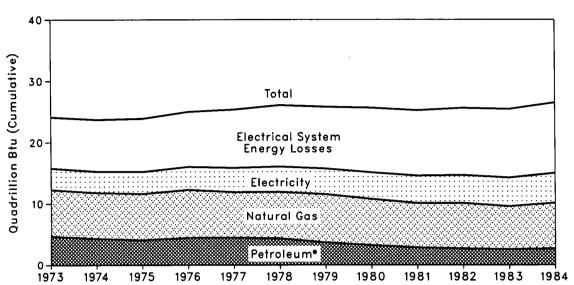
Notes: • Geographic coverage is the 50 States and the District of Columbia.

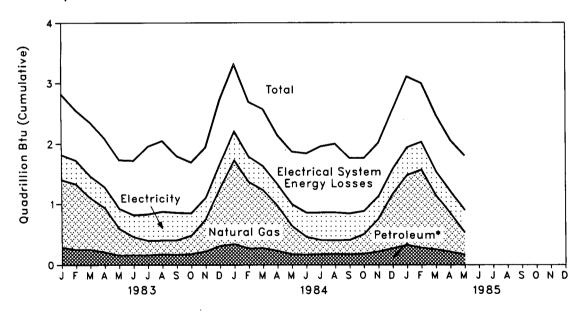
• Totals may not equal sum of components due to independent rounding and the use of preliminary conversion factors after 1981.

Additional Notes and Sources: • See the last four pages of this section.

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







<sup>\*</sup>Includes coal.

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

						Electrical System	•	Year
	•	Coal	Natural Gas¹	Petroleum	Electricity	Energy Losses	Total	to Date
				(	Quadrillion (1015)	Btu		
1973	Total	0.259	7.626	4.391	3.495	8.377	24.147	
1974	Total	0.260	7.518	3.996	3.475	8.480	23.729	
1975	Total	0.212	7.581	3.805	3.604	8.700	23.902	
1976	Total	0.206	7.866	4.181	3.747	9.021	25.020	
1977	Total	0.207	7.461	4.206	3.955	9.556	25.386	
1978	Total	0.215	7.624	4.070	4.116	10.061	26.085	
1979	Total	0.188	7.891	3.448	4.184	10.100	25.809	
1980	Total	0.147	7.539	3.035	4.355	10.580	25.656	
1981	Total	0.171	7.242	2.634	4.497	10.700	25.244	
1982	Total	0.189	7.433	2.449	4.566	10.993	25.632	
	I Otal						25.632	
1983	January	0.021	1.118	0.266	0.413	1.003	2.820	2.820
	February	0.018	1.087	0.231	0.390	0.831	2.556	5.376
	March	0.013	0.852	0.236	0.365	0.885	2.351	7.727
	April	0.018	0.727	0.190	0.351	0.801	2.088	9.815
	May	0.011	0.441	0.144	0.327	0.810	1.733	11.548
	June .	0.009	0.300	0.152	0.359	0.903	1.723	13.271
	July	0.014	0.241	0.144	0.435	1.123	1.957	15.228
	August September	0.013 0.018	0.233 0.240	0.159 0.150	0.472 0.450	1.171	2.048	17.276
	´October	0.019	0.240	0.150	0.450	0.940 0.841	1.798 1.692	19.074
	November	0.019	0.531	0.202	0.350	0.841	1.944	20.766 22.709
	December	0.025	0.949	0.290	0.402	1.065	2.731	25.441
	Total	0.197	7.025	2.322	4.681	11.215	25.441	25.441
1984	January	0.024	1.384	0.320	0.476	R1.106	R3.310	R3.310
	February	0.021	1.104	0.247	0.418	R0.904	R2.695	R6.005
	March	0.015	0.961	0.261	0.394	0.942	R2.572	R8.578
	April	0.022	0.742	0.207	0.360	0.810	2.141	R10.719
	May	0.013	0.470	0.159	0.355	R0.877	R1.874	R12.593
	June	0.010	0.294	0.159	0.395	R0.987	R1.846	R14.439
	July	0.016	0.237	0.158	0.449	R1.100	R1.961	R16.399
	August	0.015	0.227	0.164	0.456	R1.140	R2.002	R18.401
	September	0.020	0.240	0.152	0.433	R0.921	R1.767	R20.168
	October	0.016	0.327	0.165	0.377	R0.881	R1.767	R21.934
	November	0.017	0.542	0.200	0.372	R0.885	R2.016	R23.951
	December	0.022	0.903	0.250	0.410	R0.982	R2.567	R26.517
	Total	0.213	7.431	2.443	4.895	R11.535	R26.517	
1985	January	0.019	1.157	0.309	0.457	1.169	3.111	3.111
	February	0.017	1.293	0.263	0.458	0.971	3.001	6.112
	March	0.012	0.893	0.242	0.400	0.929	2.476	8.588
	April	0.020	0.632	0.194	0.371	0.840	2.056	10.644
	May	0.012	0.365	0.153	0.366	0.906	1.801	12.445
	Year to Date	0.080	4.339	1.161	2.051	4.814	12.445	

:

Includes supplemental gaseous fuels.

R = Revised data.

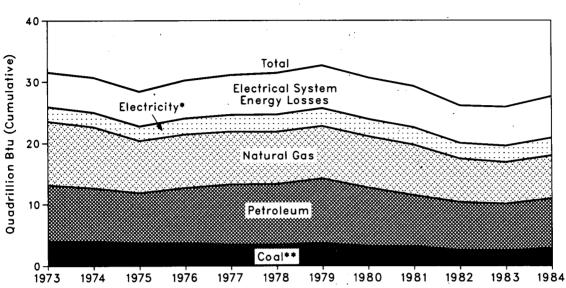
Notes: • Geographic coverage is the 50 States and the District of Columbia.

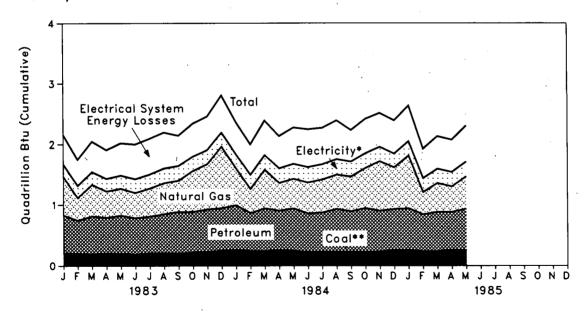
• Totals may not equal sum of components due to independent rounding.

Additional Notes and Sources: • See the last four pages of this section.

### Consumption of Energy by the Industrial Sector







<sup>\*</sup>Includes hydroelectric power.
\*\*Includes net imports of coal coke.

### Consumption of Energy by the Industrial Sector

•			٠.	•	l le calente	Net		Electrical		W
		•	Natural	Petro-	Hydro- electric	Imports of Coal		System Energy		Year to
		Coal	Gas <sup>1</sup>	leum	Power	Coke	Electricity	Losses	Total	Date
		Out	Gas	leam			•	LUSSES	iotai	Date
						uadrillion (10				
1973	Total	4.059	10.388	9.113	0.035	(0.008)	2.341	5.611	31.538	
1974	Total	3.872	10.003	8.698	0.033	0.056	2.337	5.700	30.699	
1975	Total	3.669	8.532	8.151	0.032	0.014	2.346	5.665	28.409	
1976	Total	3.663	8.761	9.018	0.033	0.000	2.573	6.198	30.245	
1977	Total	3.456	8.636	9.786	0.033	0.015	2.682	6.484	31.090	
1978	Total	3.315	8.539	9.890	0.032	0.125	2.761	6.755	31.415	
1979	Total	3.594	8.549	10.576	0.034	0.063	2.873	6.936	32.625	
1980	Total	3.156	8.394	9.524	0.033	(0.035)	2.781	6.752	30.606	
1981	Total	3.158	8.257	8.295	0.033	(0.016)	2.817	6.707	29.252	
1982	Total	2.552	7.116	7.798	0.033	(0.022)	2.542	6.121	26.140	
1983	January	0.211	0.645	0.620	0.003	(0.001)	0.198	0.480	2.156	2.156
	February	0.196	0.374	0.548	0.003	(0.001)	- 0.201	0.430	1.751	3.907
	March	0.187	0.527	0.626	0.003	(0.001)	0.206	0.498	2.046	5.953
	April	0.205	0.438	0.586	0.003	(0.002)	0.207	0.471	1.907	7.860
	May	0.198	0.452	0.625	0.003	(0.002)	0.214	0.529	2.021	9.881
	June	0.182	0.420	0.601	0.003	(0.001)	0.226	0.568	2.000	11.881
	July	0.206	0.470	0.602	0.003	(0.002)	0.227	0.585	2.091	13.972
	August	0.209	0.518	0.638	0.002	(0.001)	0.238	0.590	2.193	16.165
	September	0.203	0.524	0.679	0.002	(0.001)	0.238	0.496	2.141	18.306
	October	0.217	0.681	0.666	0.002	(0.001)	0.235	0.541	2.342	20.648
	November	0.227	0.752	0.695	0.002	(0.001)	0.230	0.553	2.459	23.107
	December	0.249	1.019	0.696	0.002	(0.003)	0.229	0.607	2.801	25.908
	Total	2.490	6.821	7.583	0.033	(0.016)	2.648	6.349	25.908	
1984	January	0.258	0.615	0.732	0.003	0.001	0.228	R0.529	R2.366	R2.366
	February	0.238	0.406	0.621	0.003	0.002	0.230	R0.497	R1.997	4.363
	March	0.240	0.643	0.701	0.003	(0.001)	0.238	0.568	2.391	6.754
	April	0.255	0.464	0.647	0.003	0.000	0.236	0.530	2.134	R8.888
	May	0.246 0.226	0.497 0.517	0.693 0.632	0.003 0.003	(0.001)	0.241	R0.597	R2.279	R11.167
	June July	0.228	0.517	0.632	0.003	(0.002)	0.249 0.245	0.622 R0.600	2.247 R2.271	R13.414
	August	0.231	0.553	0.701	0.003	(0.001) (0.002)	0.245	R0.636	R2.393	R15.685 R18.079
	September	0.224	0.579	0.667	0.002	0.002)	0.243	R0.518	R2.233	R20.312
	October	0.223	0.665	0.723	0.002	(0.003)	0.242	R0.566	R2.419	R22.730
	November	0.233	0.821	0.669	0.002	(0.003)	0.234	R0.557	2.515	R25.245
	December	0.257	0.691	0.671	0.002	(0.001)		. R0.545	2.392	R27.637
	Total	2.860	7.022	8.100	0.033	(0.011)	2.868	R6.766	R27.637	
1985	January	0.254	0.875	0.685	0.003	0.000	0.229	0.587	2.634	2.634
	February	0.234	R0.374	0.603	0.003	0.001	0.227	0.482	R1.924	R4.559
	March	0.235	R0.483	0.645	0.003	0.000	0.230	0.534	R2.131	R6.689
	April	0.258	R0.426	0.621	0.003	0.001	0.234	0.529	R2.071	R8.760
	May	0.249	0.542	0.684	0.003	(0.003)	0.239	0.593	2.307	11.068
	Year to Date	1.230	2.700	3.239	0.015	0.000	1,159	2.725	11.068	

Includes supplemental gaseous fuels.

R = Revised data.

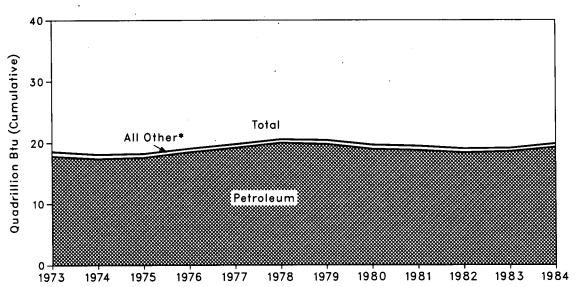
Notes: • Geographic coverage is the 50 States and the District of Columbia.

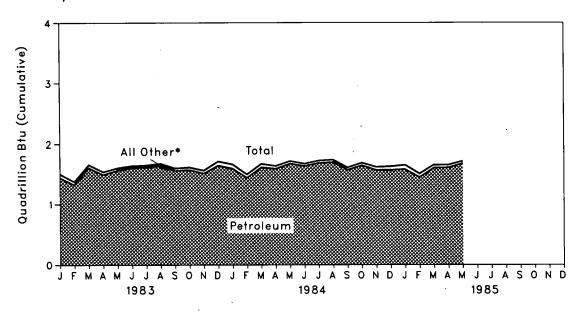
• Totals may not equal sum of components due to independent rounding.

Additional Notes and Sources: • See the last four pages of this section.

### Consumption of Energy by the Transportation Sector

### Yearly





<sup>. •</sup>Includes coal, natural gas, electricity, and electrical system energy losses.

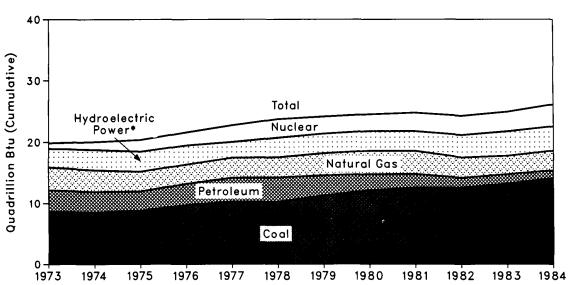
### Consumption of Energy by the Transportation Sector

						Electrical		Year
			Naturai			System		tear to
		Coal	Gas <sup>1</sup>	Petroleum	Electricity	Energy Losses	Total	Date
		<b>0</b> 2 3			•		, otal	Date
40=0	<b>-</b>				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	( <sup>2</sup> )	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	1,444	0.001	0.002	1.506	1.506
	February	(2)	0.049	1.327	0.001	0.002	1.379	2.885
	March	(2)	0.047	1.609	0.001	0.002	1.660	4.545
	April	(2)	0.041	1.497	0.001	0.002	1.541	6.086
	May	(2)	0.034	1.566	0.001	0.002	1.603	7.688
	June	(2)	0.029	1.607	0.001	0.002	1.639	9.327
	July	(2)	0.031	1.614	0.001	0.002	1.648	10.975
	August	(2)	0.033	1.640	0.001	0.002	1.676	12.651
	September	(2)	0.032	1.563	0.001	0.002	1.598	14.249
	October	(2)	0.037	1.576	0.001	0.002	1.616	15.866
	November	(2)	0.045	1.517	0.001	0.002	1.566	17.431
	December	(2)	0.066	1.645	0.001	0.002	1.714	19.146
	Total	<b>(</b> <sup>2</sup> <b>)</b>	0.504	18.605	0.011	0.026	19.146	
1984	January	(2)	0.067	1.596	0.001	0.002	1.666	1.666
	February	(2)	0.052	1.445	0.001	0.002	1.500	3.166
	March	(2)	0.055	1.615	0.001	0.002	1.673	4.839
	April	(2)	0.043	1.591	0.001	0.002	1.637	6.475
	May	(2)	0.037	1.677	0.001	0.002	1.717	8.192
	June	(2)	0.033	1.637	0.001	0.002	1.673	9.866
	July August	(2) (2)	0.034 0.035	1.686 1.700	0.001 0.001	0.002	1.723	11.589
	September	(²)	0.033	1.572	0.001	0.002 0.002	1.738 R1.608	13.327 14.935
	October	(²)	0.034	1.646	0.001	0.002	1.687	16.622
	November	(²)	0.048	1.568	0.001	0.002	1.619	18.241
	December	(²)	0.055	1.571	0.001	0.002	1.629	19.870
	Total	(2)	0.531	19.303	0.011	0.002	19.870	13.070
4005							-	
1985	January	(2)	0.068	1.581	0.001	0.002	1.652	1.652
	February March	(2)	0.056 B0.047	1.452	0.001	0.002	1.511	3.163
	March April	(2) (2)	R0.047 R0.039	1.605 1.610	0.001 0.001	0.002 0.002	R1.655 R1.652	R4.818 R6.470
	May	(-) (2)	0.034	1.680	0.001	0.002	1.717	8.187
	Year to Date	(°) (²)	0.244	7.927	0.001			0.107
	rear to Date	(7)	U.244	1.921	0.003	0.011	8.187	

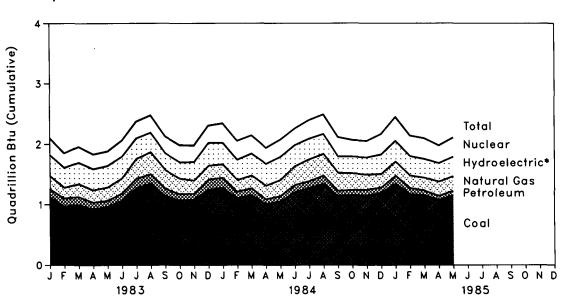
¹Includes supplemental gaseous fuels.
²Since 1976, the amount of coal consumed by the transportation sector has been negligible.
R=Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Additional Notes and Sources: • See the last four pages of this section.

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





### Monthly



•

<sup>\*</sup>Includes other.

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

		Coal	Natural Gas¹	Petro- leum²	Hydro- electric Power <sup>3</sup>	Nuclear Electric Power	Other •	Total	Year to Date
					Quadrillion	(1015) Btu			
1973	Total	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	0.072	21.574	
1977	Total	10.262	3.284	3.901	2.482	2.702	0.081	22.713	
1978	Total	10.238	3.297	3.987	3.110	3.024	0.062	23.724	
1979	Total	11.260	3.613	3.987 3.283	3.110	3.024 2.776			
1980			3.810				0.089	24.128	
	Total	12.123		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	5.909
	April	0.921	0.209	0.110	0.341	0.244	0.009	1.833	7.743
	May	0.965	0.225	0.097	0.349	0.240	0.007	1.883	9.626
	June	1.064	0.255	0.119	0.348	0.263	0.009	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	1.278	0.221	0.169	R0.343	0.320	0.011	R2.342	R2.342
	February	1.109	0.193	0.108	R0.320	0.310	0.013	R2.052	R4.394
	March	1.157	0.212	0.115	R0.347	0.298	0.015	R2.144	R6.539
	April	1.009	0.227	0.081	R0.344	0.264	0.014	1.938	R8.477
	May	1.050	0.272	0.090	R0.365	0.282	0.014	R2.074	R10.551
	June		0.306	0.121	R0.332	0.276	0.013	R2.257	R12.808
	July	1.280 1.345	0.359 0.360	0.111	R0.325 R0.309	0.308 0.322	0.013	R2.397	R15.205
	August September	1.146	0.360	0.137 0.083	R0.256	0.322	0.016	R2.489	R17.694
	October	1.161	0.299	0.083	R0.259	0.318	0.015 0.016	R2.118 R2.070	R19.812
	November	1.150	0.252	0.084	R0.266	0.270	0.016	R2.070	R21.882 R23.934
	December	1.200	0.224	0.100	R0.303	0.200	0.018	R2.032	R26.100
	Total	14.094	3.205	1.286	R3.769	3.573	0.076	R26.100	H20.100
1985	January	1.350	0.232	0.132	0.320	0.395	0.018	2.446	2.446
	February	1.177	0.207	0.101	0.304	0.336	0.016	2.140	4.586
	March	1.160	0.212	0.077	0.290	0.339	0.018	2.096	6.682
	April	1.079	0.240	0.066	0.287	0.289	0.015	1.976	8.658
	May	1.157	0.243	0.075	0.303	0.313	0.016	2.107	10.765
	Year to Date	5.922	1.134	0.451	1.504	1.671	0.083	10.765	

<sup>&</sup>lt;sup>1</sup>Includes supplemental gaseous fuels.

<sup>&</sup>lt;sup>2</sup>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.

<sup>3</sup>Includes net of electricity and the second constant of the second

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.
Additional Notes and Sources: • See the last four pages of this section.

### Notes and Sources for the Consumption Section

- 1. Total Energy Consumed: Total energy consumed includes coal, natural gas (including supplemental gaseous fuels), refined 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. End-Use Sectors: Energy use is assigned to the major end-use sectors according to the following guidelines as closely as possible:
  - Residential and commercial sector—Energy consumed by private household establishments primarily for space heating, water heating, air conditioning, refrigeration, cooking, and clothes drying; by nonmanufactur-ing business establishments, including motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises; by health, social, and educational institutions; and by Federal, State, and local governments.
  - Industrial sector—Energy consumed by manufacturing, construction, mining, agriculture, fishing, and forestry establishments.
  - Transportation sector—Energy consumed to move people and commodities in both the public and private sectors, including military, railroad, vessel bunkering, and marine uses, as well as the pipeline transmission of natural gas.
  - Electric utility sector—Energy consumed by privately-and publicly-owned establishments that generate electricity primarily for resale.
- 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 Year*book 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."
- 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 Quarterly/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 Penert" 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, "Natural Gas, Annual."
  1979: EIA, Natural Gas Production and Consumption
- 1979.
- 1980 and 1982: EIA, Natural Gas Annual. 1983 forward: EIA, Natural Gas Monthly.

Electric utilities consumption—1973 through 1976: FPC

- Form 4, "Monthly Power Plant Report."
  1977 through 1981: Federal Energy Regulatory Commission (FERC), FPC Form 4, "Monthly Power Plant Penert"
- 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 1983: EIA, Petroleum Supply Annual.

• 1984 forward: EIA, Petroleum Supply Monthly.

Specific petroleum products' end-use allocation procedures

- 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 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 distillate fuel is assumed to be the petroleum products reported as "light oil" (minus small amounts of kerosene deliveries through 1982) consumed at utilities. utilities.

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 1983.

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 amount of distillate fuel delivered to end users, grouped into sectors from EIA's "Deliveries of Fuel Oil and Kerosene" ("Deliveries") reports (based primarily on data collected by Form EIA-172) as follows:

Residential sector deliveries are directly from

residential sector deliveries are directly into the "Deliveries" reports for 1979 through 1983. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including term) in constitution to the 1070 above. farm) in proportion to the 1979 shares;

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

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

### Petroleum (continued):

Distillate Fuel (continued)

— Non-Electric Utility Sectors, Annual Estimates
Through 1983 (cont'd).

Commercial sector deliveries are directly from the "Deliveries" reports for 1979 through 1983. 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 1983 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 split into residential company. 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

- Residential and commercial sector monthly consumption is estimated by allocating the annual sector estimates to months in proportion to
- 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 and the American Petroleum Institute since January 1981.

  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 bunkering, and military use) is evenly distributed over the months, adjusted for the number of days per month. 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
- Non-Electric Utility Sectors, 1984 Forward.
  Each month's non-electric utility consumption subtotal is disaggregated into the major end-use sec-tors in proportion to the shares each sector held of the non-electric utility subtotal in the same month in 1983.
- · 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-172) as follows:
  - Residential sector deliveries are directly from the "Deliveries" reports for 1979 through 1983. Deliveries for 1983 are used as estimates for 1984 forward. Prior to 1979, each year's deliveries category called "heating" is split into residential,

- commercial, and industrial in proportion to the 1979 shares;
- Commercial sector deliveries are directly from the "Deliveries" reports for 1979 through 1983. Deliveries for 1983 are used as estimates for 1984 forward. 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 1983. Deliveries for 1983 are used as estimates for 1984 forward. Prior to 1979, each year's deliveries category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 phares and this estimated industrial (including shares, and this estimated industrial (including farm) portion is added to "all other uses."

### Liquefied Petroleum Gases (LPG)

- 1973 through 1982: 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 to create monthly end-use consumption estimates. The annual enduse 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 consumed in internal combustion engines is allocated between the transportation and industrial sectors according to a 5-year moving average of the percentage of carburetors sold to each end-use category. The proportions range from 31 percent transportation and 69 percent industrial in 1973 to 52 percent transportation and 48 percent industrial in 1982.

    LPG consumed annually by the industrial sector
  - 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 includes LPG used by chemical plants as raw materials or solvents and for use in the production of 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 distri-bution through the mains; and a portion of the use of LPG as an internal combustion engine fuel.
- The source of the sales data is EIA's "Sales of Liquefied Petroleum Gases and Ethane" reports, based primarily on data collected by Form EIA-174. 1983 forward: Because the collection of data under Form EIA-174 was discontinued after data year 1982, the 1982 annual end-use shares based on the 1982 sales data are applied for all succeeding periods to estimate LPG end-use consumption.
- · 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.

(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 and added to the major end-use sections in proportion to aggregations of annual sales categories formed from the U.S. Department of Transportation, Federal Highway 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 unclassi-

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 high way 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 electric 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 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. 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 1983

Through 1983.

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 ElA's "Deliveries of Fuel Oil and Kerosene" ("Deliveries") reports (based primarily on data collected by Form EIA-172) as follows:

Commercial sector deliveries are directly from the "Deliveries" reports for 1979 through 1983. 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;

1979 shares;
Industrial sector deliveries for 1979 through 1983 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

Transportation sector deliveries are the sum of deliveries for railroad, vessel bunkering, and

military uses for all years.

Non-Electric Utility Sectors, Monthly Estimates Through 1983.

Commercial sector monthly consumption is estimated by allocating the annual commercial 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 for 1973 through 1980 and the American Petroleum Institute since January 1981.

- 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, 1984 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
- 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 Brough 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, how-ever, are discontinuous because monthly data from ever, are discontinuous because monthly data from 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 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 January 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 1984: DOE, Economic Regulatory Administration, 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:

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,"
- 1982 forward: EIA, Quarterly Coal Report.
- 10. Other Energy: "Other" is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution

Sources: same as Note 8 above, for Nuclear Electric Power.

11. 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.'
- 12. 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.

Domestic crude oil production during July 1985 was estimated to be 8.9 million barrels per day, 0.7 percent lower than the June 1985 rate, but 0.2 percent higher than the rate in July 1984.

Total petroleum imports averaged 4.7 million barrels per day in July 1985, 3.5 percent less than the June 1985 rate and 13.0 percent less than the July 1984 rate.

In July 1985, 15.3 million barrels per day of petroleum products were supplied for domestic use, 1.8 percent below the level in June 1985 and 1.4 percent below the level of the previous July. Motor gasoline accounted for 45.8 percent of the total; distillate fuel oil, 16.0 percent; and residual fuel oil, 6.7 percent.

Motor gasoline supplied during July 1985 averaged 7.0 million barrels per day, 0.4 percent above the rate in June 1985 and 2.5 percent above the rate of the previous July. Stocks of

motor gasoline totaled 226 million barrels at the end of July 1985, 6 million barrels above the level at the end of June 1985 but 12 million barrels below the level 1 year earlier.

In July 1985, 2.5 million barrels of distillate fuel oil were supplied per day, 5.2 percent lower than the June 1985 rate and 2.2 percent lower than the July 1984 rate. Distillate fuel oil stocks for July 1985 were 116 million barrels, 6 million barrels higher than the stocks level of the previous month but 8 million barrels lower than the July 1984 ending stocks level.

Residual fuel oil supplied in July 1985 averaged 1.0 million barrels per day, 2.9 percent lower than in June 1985 and 14.7 percent lower than the July 1984 rate. Residual fuel oil stocks measured 40 million barrels at the end of July 1985, the same level as the previous month, but 9 million barrels less than the ending stocks for July 1984.

<sup>\*</sup>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 April 1984. The total import data above include imports into the Strategic Petroleum Reserve.

### Crude Oil1 and Petroleum Products Overview

		Fie	eld Produc	tion	Stock 1	Withdrawal <sup>2</sup>		Ending Stocks <sup>3</sup>
•		Total Domestic	Crude Oil	Natural Gas Plant Production	Crude Oil <sup>5</sup>	Petroleum Products	Petroleum Products Supplied	Crude Oil <sup>3</sup> and Petroleum Products
				Thousand	barrels per d	lay		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	8 <b>-17</b>	8-14 <b>5</b>	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	_	10,173	8,597	1,573	-98	-42	17,056	*1,392
	Average			•	*-290	*130		
1981	Average	10,230	8,572	1,609		283	16,058	1,484
1982	Average	10,252	8,649	1,550	-136	263	15,296	<sup>8</sup> 1,430
1983	January	10,331	8,697	1,580	8-499	8772	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	-239	-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
	May	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	10,478	8,809	1,637	250	252	16,116	1,498
	September	10,692	8,993	1,660	260	-769	15,247	4,513
	October	10,608	8,906	1,649	-759	-246	15,616	1,544
	November	10,689	8,979	1,678	-236	-177	15,627	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	
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	R296	R-378	R15,551	R1,510
	July†	NA	8,904	NA	<i>397</i>	- <i>595</i>	<i>15,278</i>	1,510
	Average	NA	8,923	NA	-62	246	15,577	

¹Includes lease condensate.
²A negative number indicates an increase in stocks and a positive number indicates a decrease.
³Stocks are totals as of end of period.
⁴Includes crude oil, natural gas plant production, other hydrocarbons, and alcohol.
³Includes stocks located in the Strategic Petroleum Reserve.
⁴Includes crude oil for storage in the Strategic Petroleum Reserve.
³Net imports equals imports minus exports.
⁴In 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.

**Petroleum** 

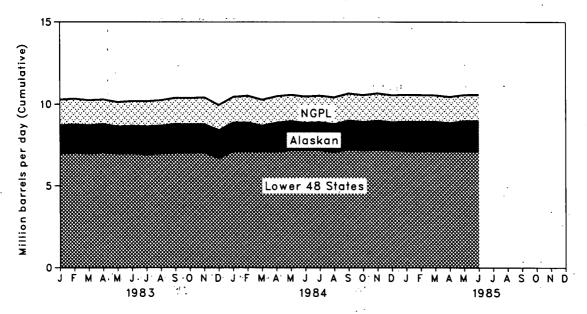
### Crude Oil<sup>1</sup> and Petroleum Products Overview (continued)

		Imports				· —		
		Total	Crude Oil⁵	Petroleum Products	Total	Crude Oil	Petroleum Products	Net Imports <sup>7</sup>
				. 1	housand barrels	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 June	5,089 5,226	3,360	1,729	848	280	568	4,241
	July	5,326 5,741	3,577 3,871	1,749 1,870	774 571	144 145	630	4,552
	August	6,159	4,227	1,933	663	172	426 491	5,170
	September	6,129	4,210	1,919	684	177	507	5,496 5,445
	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 May	5,372 5,070	3,417	1,955	655	172	483	4,717
	June	5,979 5,482	3,942 3,546	2,036 1,936	766 864	219	548	5,212
	July	5,407	3,646	1,761	536	222 108	642 429	4,618
	August	5,044	3,248	1,796	732	190	542	4,871 4,312
	September	5,252	3,342	1,909	664	162	502	4,512
	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 May	5,252 5,719	3,401	1,851	764	236	528	4,488
	May June	5,718 B4 977	3,724	1,994	705	250	455	5,012
	July†	R4,877 <i>4.704</i>	R3,175 <i>3</i> , <i>164</i>	R1,702 <i>1,541</i>	692	226	467	4,185
	Average	4,801	3,024	1,777	* NA <b>NA</b>	NA <b>NA</b>	NA <b>NA</b>	NA <b>NA</b>

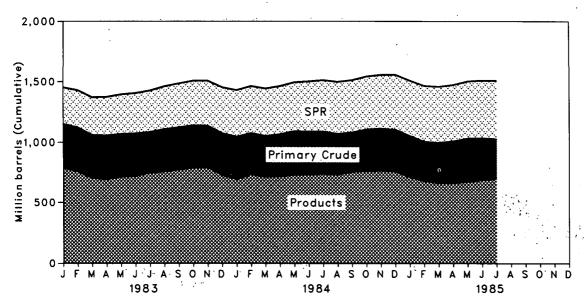
Footnotes continued.
†Italics denote estimates based upon preliminary data. R=Revised data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

### Overview

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

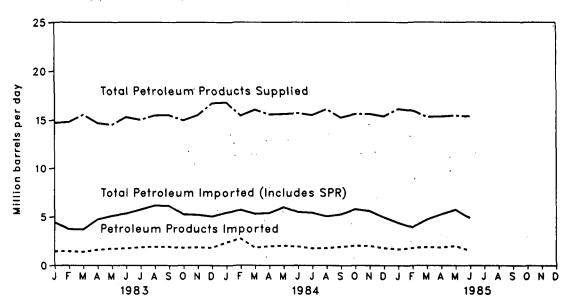


### **Ending Stocks**

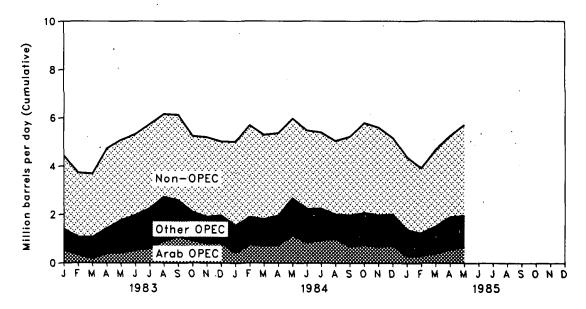


### Overview

### **Products Supplied and Imports**



### Petroleum Imports by Source



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

Supply

			Supply						
		Field Pro	oduction		Imports		Stock W	ithdrawal <sup>3</sup>	Unaccounted
		Total Domestic	Alaskan.	Total	SPR <sup>4</sup>	Other	SPR <sup>4</sup>	Other	for Crude Oil
					Thousan	d barrels per d	lay		
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	84	-57
1979	Average	8,552	1,401	6,519	67	6,452	-67	-81	-57 -11
1980	Average	8,597	1,617	5,263	44	5,219	-45	-52	
1981	Average	8,572	1,609	4,396	256	•			34
	•	•		•		4,141	-336	<b>646</b>	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	6-280	170
	February	8,758	1,717	2,267	197	2,070	-197	-123	262
	March	8,700	1,732	2,290	201	2,089	-184	267	31
	April	8,776	1,721	3,118	205	2,913	-197	-205	98
	May	8,631	1,662	3,360	289	3,071	-293	278	169
	June	8,667	1,687	3,577	190	3,387	-188	66	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	8,885	1,695	3,646	329	3,317	-328	159	-164
	August	8,809	1,722	3,248	180	3,068	-179	429	293
	September	8,993	1,761	3,342	53	3,289	-53	314	-94
	October November	8,906	1,732	3,751	187	3,565	-186	-573	291
	December -	8,979 8,897	1,781 1,720	3,583 3,136	219 229	3,364 2,907	-207 -241	-29 -50	47
	Average	8,879	1,722	3,136 <b>3,426</b>	197	2,907 <b>3,229</b>	-241 -195	-50 <b>-4</b>	262
		•		•					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 <sup>,</sup>	1,827	3,724	222	3,501	-225	-471 D454	457,
	June July†	8,965 <i>8,904</i>	1,828 <i>1,802</i>	R3,175 <i>3,164</i>	R155	R3,020	R-155	R451	202
			•	•	227	2,937	-226	<i>623</i>	NA
	Average	8,923	1,788	3,024	155	2,869	-156	94	· NA

<sup>\*\*</sup>Includes lease condensate.

\*\*Stocks are totals as of end of period.

\*\*A negative number indicates an increase in stocks and a positive number indicates a decrease.

\*Strategic Petroleum Reserve.

\*Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.

\*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	Disposition				Ending Stocks <sup>2</sup>			
		Omuria Hand	0	D - 0'-						
		Crude Used Directly <sup>5</sup>	Crude Losses	Refinery Inputs	Exports	Product Supplied <sup>3</sup>	Total	SPR1	Other Primary	
			Thousar	d barrels per	day			Million barr	els	
1973	Average	-19	13	12,431	2	NA	242		242	
1974	Average	-15	13	12,133	3	NA	265		265	
1975	Average	-17	13	12,442	6	NA	271		271	
1976	Average	-18	15	13,416	8	NA	285		285	
1977	Average	-14	16	14,602	50	NA	348	7	340	
1978	Average	-14	16	14,739	158	NA NA	376	67	309	
1979	Average	-13	16	14,648	235	NA NA	430	91	339	
1980	Average	-13	15	13,481	287	NA NA	4466	108	4358	
1981	Average	-58	5	12,470	228	NA NA	594	230		
1982	Average	-59	3	11,774	236	NA NA	644	230 294	363 350	
				•					350	
1983	January	NA	2	11,143	117	71	660	301	360	
	February	NA	3	10,633	262	71	669	306	363	
	March	NA NA	2	10,859	. 174	70	667	312	355	
	April Mav	NA NA	2 1	11,433	88 280	68	679	318	361	
	June	NA NA		11,800		63	679	327	353	
	July	NA.	(s) 2	12,284 12,360	144 145	64 65	683	332	351	
	August	NA NA	1	12,360	172	64	676 700	341	335	
	September	. NA	. 1	12,132	177	66	700 708	352 361	349 347	
	October	NA	ì	11,782	140	63	708 716	367	347 349	
	November	NA	2.	12,004	186	64	713	371	341	
	December	NA	1	11,234	95	67	723	379	344	
	Average	NA	2	11,685	164	66		0.0	• • • • • • • • • • • • • • • • • • • •	
1984	January	NA	1	11,587	153	64	733	384	349	
	February	NA	1	12,157	185	65	727	387	340	
	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 NA	3	12,271	162	66	756	431	325	
	October November	NA NA	1 (0)	11,978	141	69	780	437	343	
	December	NA NA	(s)	12,108	202	62	787	443	344	
	Average	NA NA	(s) <b>2</b>	11,755 <b>12,044</b>	185 <b>181</b>	64. <b>64</b>	796	451	345	
1985	•	NA		•						
1903	January February	NA NA	1 1	11,456	144	69	793	457	336	
	March	NA NA	1	11,393 11,404	221 189	66 60	786 701	460	325	
	April	NA NA	(s)	11,404	236	69 67	791	462	329	
	May	NA NA	1	12,141	250	62	807 828	465 472	342	
	June	NA	i	R12,355	226	56	R819	472 R477	356 343	
	July†	NA	NÁ	12,526	NA ~	NA .	807	483	343 324	
	Average	NA	NA	11,875	.NA	NA	30,	4 <b>00</b>	027	

Footnotes continued.
†Italics denote estimates based upon preliminary data. R=Revised 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**

### Imports from OPEC Sources<sup>1</sup>

•						p						
		Algeria	Libya	Saudi Arabia	United Arab Emirates	Indo- nesia	Iran	Nigeria	Vene- zuela	Other OPEC <sup>2</sup>	Total OPEC	Total Arab OPEC <sup>3</sup>
				·		Thousa	nd barrel	s per day				
1973	Average	136	164	486	71	. 213	223	459	1,135	106	2,993	915
1974	Average	190	4	461	74	300	469	713	979	88	3,280	752
1975	Average	282	232	715	117	390	280	762	702	122	3,601	1,383
1976	Average	432	453	1,230	254	539	298	1,025	700	134	5,066	2,424
1977	Average	559	723	1,380	335	541	535	1,143	690	287	6,193	3,185
1978	Average	649	654	1,144	385	573	555	919	645	226	5,751	2.963
1979	Average	636	658	1,356	281	420	304	1,080	690	212	5,637	3,056
1980	Average	488	554	1,261	172	348	9	857	481	130	4,300	2,551
1981	Average	311	319	1,129	81	366	0	620	406	90	3,323	
1982	_	170	26	552	92	248	35					1,848
1902	Average	170	20	332	92	240	33	514	412	97	2,146	854
1983	January	207	0	282	47	255	43	186	337	54	1,412	537
	February	115	0	214	9	217	0	92	393	28	1,068	338
	March	63	0	103	0	138	0	121	440	201	1,066	183
	April	227	٠0	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	182	64	464	112	525	434	187	2,251	606
	August	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
	October	261	0	638	16 50	368	12	307	337	169	2,108	938
	November	184 144	0	545 569	56	302 294	21	215	452	135	1,910	807
	December		-		45		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	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	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 November	333 298	0 0	· 287 183	114	421	0	208	585	115	2,062	754
	December	204	0	224	124 · 211	424 314	24 12	163	564	173	1,954	668
	Average	323	1	325	117	343	10	166 <b>216</b>	459 <b>548</b>	174 <b>166</b>	1,765 <b>2,049</b>	723 <b>819</b>
1985	January	95	0	106	60	274	0	262	481	89	1,367	289
	February	174	ŏ	108	0	232	Ö	131	524	64	1,233	307
	March	252	ŏ	85	52	283	ŏ	180	575	84	1,512	390
	April	286	8	186	70	313	ŏ	280	669	86	1,899	561
	May	281	ŏ	49	128	211	Ö	381	549	354	1,953	669
	June	178	5	26	81	439	0	357	444	152	1,682	379
	Average	212	2	93	. 66	292	0	267	540	140	1,612	434

<sup>&</sup>lt;sup>1</sup>Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined 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

			imports from Non-OFEC Sources.										
1973   Average		•	Bahamas	Canada	Mexico	lands	and		_		Non-	Non-	Total Imports
1974         Average         164         1,070         8         511         251         8         90         391         340         2,832         6,152           1975         Average         152         846         71         332         242         14         90         406         300         2,454         6,058           1976         Average         118         599         87         275         274         311         88         422         353         2,247         7,313           1977         Average         160         467         318         229         225         180         94         429         484         2,613         8,651           1980         Average         147         538         439         231         190         202         92         431         548         2,613         8,651           1980         Average         74         447         522         197         133         375         62         327         534         2,609         6,909           1981         Average         65         482         685         175         112         456         50         316         627							Thousa	nd barrels p	er day				
1974         Average         164         1,070         8         511         251         8         90         391         340         2,832         6,152           1975         Average         152         846         71         332         242         14         90         406         300         2,454         6,058           1976         Average         118         599         87         275         274         311         88         422         353         2,247         7,313           1977         Average         160         467         318         229         225         180         94         429         484         2,613         8,651           1980         Average         147         538         439         231         190         202         92         431         548         2,613         8,651           1980         Average         74         447         522         197         133         375         62         327         534         2,609         6,909           1981         Average         65         482         685         175         112         456         50         316         627	1973	Average	174	1,325	16	585	255	15	99	329	465	3.263	6.256
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 94 429 464 2,613 8,363 1979 Average 147 538 439 231 190 202 92 431 548 2,819 4,456 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 5,998 1982 Average 65 462 665 175 112 456 50 316 627 2,968 5,113 1983 Average 65 462 665 175 112 456 50 316 627 2,968 5,113 1983 Average 65 482 665 175 112 456 50 316 627 2,968 5,113 1983 Average 65 72 183 81 193 50 192 558 2,658 3,726 April 174 454 981 216 85 421 20 183 759 3,295 4,727 April 174 454 981 216 85 421 20 183 759 3,295 4,727 April 174 454 981 216 85 421 20 183 759 3,318 5,089 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 December 127 604 710 153 113 429 22 278 628 3,033 8,033 8,034 10 2,000 April 175 532 771 172 106 414 48 357 580 3,151 5,258 190 December 127 604 710 153 113 429 22 278 628 3,063 5,031 April 195 507 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,797 5,693 April 195 660 748 289 77 344 58 418 1,087 3,395 5,504 April 195 660 748 289 77 344 58 418 336 399 3,310 5,307 April 195 660 748 289 77 344 68 33 33	1974	Average	. 164	1,070	8	511	251	8	90	391		•	
1976 Average 118 599 87 275 274 31 88 422 353 2,247 7,313 1977 Average 171 517 179 211 289 126 105 105 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 2,619 8,456 1980 Average 78 455 533 225 176 176 88 388 491 2,609 6,809 1981 Average 74 447 5522 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 68 534 849 228 73 314 40 299 621 3,026 4,438 February 92 556 722 183 81 193 50 192 558 2,658 3,726 March 86 488 775 187 78 240 43 162 555 2,624 3,690 April 174 454 981 216 85 421 20 183 759 3,295 4,727 May 135 518 944 153 108 484 42 235 669 3,318 5,089 Julne 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 November 148 532 874 849 198 107 369 37 364 864 3,490 5,741 November 148 556 726 144 110 334 555 427 801 3,300 5,210 December 148 556 726 144 110 334 555 427 801 3,300 5,201 December 148 556 726 144 110 334 555 427 801 3,300 5,201 December 148 556 726 144 110 334 555 427 801 3,300 5,201 December 148 556 726 144 110 334 555 427 801 3,300 5,201 December 148 556 726 144 110 334 555 427 801 3,300 5,201 December 148 556 726 144 110 334 555 427 801 3,300 5,201 December 148 556 726 144 110 334 555 427 801 3,300 5,201 December 157 604 710 153 113 429 22 778 628 3,063 5,033 Average 125 547 826 189 96 382 40 282 701 3,189 5,065 1394 July 14 577 740 99 120 362 27 29 34 3,66 5,407 August 156 620 748 289 77 344 58 336 819 3,302 5,504 July 14 577 740 99 120 362 27 29 29 34 3,66 5,407 August 57 547 547 640 206 98 388 34 236 829 3,035 5,044 August 57 547 547 640 206 98 388 34 236 829 3,035 5,044 August 57 547 640 206 98 388 34 34 248 1,013 3,490 5,301 August 57 547 640 206 98 388 34 34 248 1,013 3,490 5,301 August 57 547 640 206 98 388 34 34 260 279 93 43 3,66 5,407 August 57 547 640 206 98 388 34 34 260 279 93 43 3,66 5,407 August 57 547 640 206 98 388 34 34 260 279 93 43 3,66 5,407 August 57 547 640 206 98 388 34 34 260 279 93 43 3,66 5,407 August 57 547 64	1975	Average	152	846		332	242	14	90			•	
1976   Average   171   517   179   211   289   126   105   466   550   2,614   8,807   8,180   1979   Average   147   538   439   231   190   202   92   431   548   2,613   8,363	1976 .	Average	118	599	87	275	274	31	88			-	
1978   Average   160   467   318   229   253   180   94   429   484   2,613   8,363   1970   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   5,911   2,968   6,909   6,90	1977	Average	171	517	179	211	289	126	105			•	
1979   Average	1978	Average	160	467	318	229	253	180	94			•	
1980   Average   78	1979	Average	147	538	439		190						
1981   Average	1980	Average	78	455	533	225	176	176				•	
1982         Average         65         482         685         175         112         456         50         316         627         2,968         5,113           1983         January         68         534         849         228         73         314         40         299         558         2,628         3,726           March         86         488         775         187         78         240         43         162         565         2,624         3,690           April         174         454         981         216         85         421         20         183         759         3,295         4,727           May         135         518         944         153         108         484         42         235         699         3,318         5,089           June         137         566         830         173         120         440         48         262         757         3,353         5,326           July         69         634         849         198         107         369         37         364         864         3,491         6,159           September         148         533 <td>1981</td> <td>Average</td> <td></td> <td>447</td> <td>522</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>•</td> <td></td>	1981	Average		447	522							•	
1983	1982	Average	65	482	685								
February   92   586   722   183   81   193   50   192   558   2,658   3,726	1983	January	68	534	849	228	73	314	40	299	621		
March		February	92		722								
May 135 518 944 153 108 484 42 235 699 3,318 5,099   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 31 722 676 192 57 429 38 336 819 3,302 5,979   June 52 506 754 234 104 345 53 268 939 3,255 5,482   July 14 577 740 99 120 362 27 292 934 3,166 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 37 730 669 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 5,5252   May 36 6 796 959 22 126 419 37 252 1,088 3,765 5,718   June 61 716 712 30 92 481 23 271 848 3,195 4,877	•	March		488	775	187	78	240	43				
June							85	421	20	183	759	3,295	- • -
July		•					108	484 ·	42	235	699	3,318	5,089
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 32 40 282 701 3,189 5,051 1984 January 159 635 710 279 54 382 53 390 804 3,465 5,430 March 90 694 716 169 93 434 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 31 722 676 192 57 429 38 336 819 3,302 5,979 June 52 506 754 234 104 345 53 268 939 3,255 5,482 July 14 577 740 99 120 362 27 292 934 3,166 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 5,887 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 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											757	3,353	5,326
September   148   533   849   261   82   475   33   307   845   3,534   6,129													5,741
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 31 722 676 192 57 429 38 336 819 3,302 5,979 June 52 506 754 234 104 345 53 268 939 3,255 5,482 July 14 577 740 99 120 362 27 292 934 3,166 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 Average 88 630 748 188 94 402 42 294 902 3,388 5,437 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 22 271 848 3,195 4,877													
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   722   676   192   57   429   38   336   819   3,302   5,979     June   52   506   754   234   104   345   53   268   939   3,255   5,482     July   14   577   740   99   120   362   27   292   934   3,166   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		1.					_						
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 31 722 676 192 57 429 38 336 819 3,302 5,979  June 52 506 754 234 104 345 53 268 939 3,255 5,482  July 14 577 740 99 120 362 27 292 934 3,166 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													
1984 January 159 635 710 279 54 382 53 390 804 3,465 5,430 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 31 722 676 192 57 429 38 336 819 3,302 5,979 June 52 506 754 234 104 345 53 268 939 3,255 5,482 July 14 577 740 99 120 362 27 292 934 3,166 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 4,66 796 959 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												-	
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 31 722 676 192 57 429 38 336 819 3,302 5,979 June 52 506 754 234 104 345 53 268 939 3,255 5,482 July 14 577 740 99 120 362 27 292 934 3,166 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	1984											•	
March April         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         722         676         192         57         429         38         336         819         3,302         5,979           June         52         506         754         234         104         345         53         268         939         3,255         5,482           July         14         577         740         99         120         362         27         292         934         3,166         5,407           August         57         547         640         206         98         388         34         236         829         3,035         5,047           September         98         550         780         133         103         490         38         250         808         3,249         5,252           October         151         682         827         112 <td>1304</td> <td>•</td> <td></td>	1304	•											
April 95 705 869 207 91 282 37 257 869 3,410 5,372 May 31 722 676 192 57 429 38 336 819 3,302 5,979 June 52 506 754 234 104 345 53 268 939 3,255 5,482 July 14 577 740 99 120 362 27 292 934 3,166 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													5,693
May       31       722       676       192       57       429       38       336       819       3,302       5,979         June       52       506       754       234       104       345       53       268       939       3,255       5,482         July       14       577       740       99       120       362       27       292       934       3,166       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         A		•											
June 52 506 754 234 104 345 53 268 939 3,255 5,482 July 14 577 740 99 120 362 27 292 934 3,166 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		May	31	722	676	192							
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							104	` 345	53				
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	• .								27	292	934	3,166	5,407
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													
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												•	5,252
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													
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													
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													
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	1085	•					-					•	
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	1303												4,376
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		•											
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							-						
June 21 716 712 30 92 481 23 271 848 3,195 4,877	•	•											
100 1100 1100		•	21										
		Average	. 41	772	829	48	116						

Footnotes continued.

Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products that were refined from crude oil produced in OPEC countries.

R = Revised data. (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.

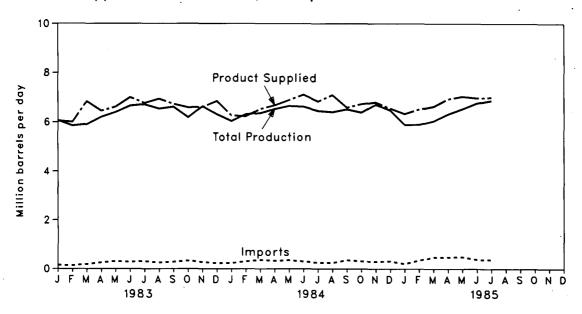
• Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Sources: • See the last page of this section.

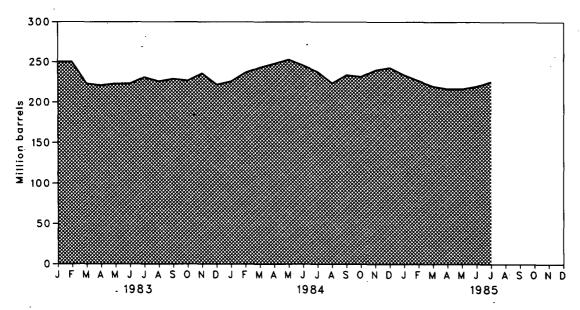
. . . .

### Finished Motor Gasoline Supply and Disposition

### Products Supplied, Total Production, and Imports



### **Ending Stocks**



### Finished Motor Gasoline Supply and Disposition

			Supply			Dis		Ending Stocks <sup>1</sup>		
		Total		Stock		P	roduct Suppl	ied	Total	Finished
		Production	Imports <sup>2</sup>	Withdrawal <sup>2</sup> <sup>3</sup>	Exports	Total	Unleaded <sup>4</sup>	Unleaded Percent	Motor Gasoline <sup>s</sup>	Motor Gasoline
				Thousand	d barreis pe	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			<sup>6</sup> 218	
1975	Average	6,520	184	<b>6-28</b>	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	²261	
1981	Average <sup>7</sup>	6,405	157	<b>628</b>	2	6,588	3,264	49.5	253	
1982	Average	6,338	197	25	20	6,539	•			
	•	•			. 20	0,339	3,409	52.1	<b>°235</b>	
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	6,452	3,492	54.1	221	183
	May	6,397	305	-83	1	6,617	3,558	53.8	223	185
	June	6,655	277	84	22	6,994	3,792	54.2	223	183
	July	6,707 6,537	302 250	-225 161	18	6,765	3,746	55.4	231	190
	August September	6,611	250 279	161 -149	13 14	6,936	3,836	55.3	226	185
	October	6,188	330	-14 <del>9</del> 72	2	6,727 6,588	3,691 3,711	54.9 56.3	229	189
	November	6,634	269	-298	2	6,603	3,692	55.9	227 236	187 196
	December	6,308	224	339	25	6,846	3,966	55.9 57.9	236 222	186
	Average	6,340	247	45	10	6,622	3,647	57.9 <b>55.1</b>	222	100
1984	January	6.036	231	-1	· <b>1</b>	6,265	3,605	57.5	. 000	400
	February	6,317	299	-383	2	6,231	3,585	57.5 57.5	226 237	186
	March	6,359	355	-176	9	6,528	3,750	57.5 57.4	237 243	197 202
	April	6,525	319	-167	(s)	6,676	3,857	57. <del>4</del> 57.8	248	202
	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	240	199
	December	6,478	308 *	-215	16	6,555	4,168	63.6	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	R6,766	R384	R-168	7	R6,975	4,456	63.9	R220	R186
	July†	6,868	<i>378</i>	<i>-236</i>	NA	7,001	NA	NA	226	192
	Average	6,335	393	55	NA	6,778	NA	NA	•	

<sup>&</sup>lt;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.

<sup>4</sup>Includes gasohol.

<sup>5</sup>Includes motor gasoline blending components.

<sup>6</sup>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.

<sup>7</sup>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. R=Revised data. NA=Not available. (s)=Less than 500 barrels per day.

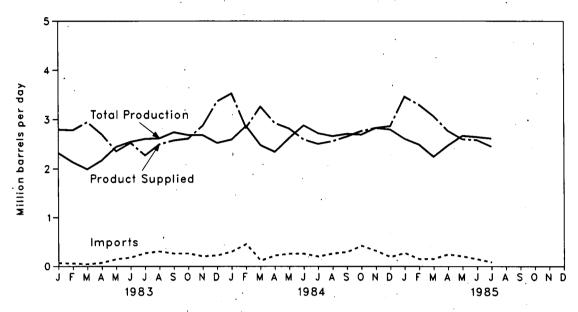
Notes: • Geographic coverage is the 50 States and the District of Columbia.

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

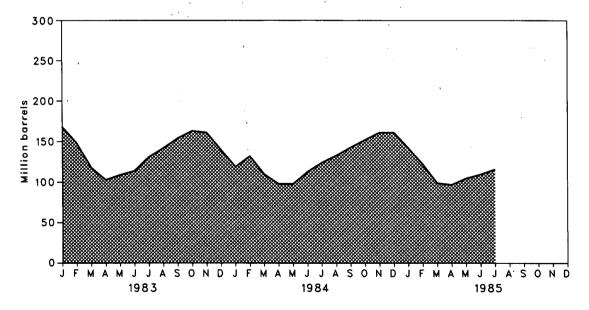
Sources: • See the last page of this section.

### Distillate Fuel Oil Supply and Disposition

### Product Supplied, Total Production, and Imports



### **Ending Stocks**



### Distillate Fuel Oil Supply and Disposition

			Sup	ply		Dispo	esition	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	arrels 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	1200
1975	Average	2,654	155	440	2 、		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	i	3	2,866	1205
1981	Average <sup>5</sup>	2,613	173	438	10	5	2,829	192
1982	Average	2,606	93	35	10	74	2,671	1 <del>32</del> 1179
	_	•		= -			•	
1983	January	2,321	68	<b>1</b> 580	NA	173	2,797	168
	February March	2,135	59	691	NA	105	2,780	148
	April	1,993 2,171	42 73	971 500	NA NA	59	2,947	. 118
	May	2,171 2,444	73 147	-186	NA NA	47 50	2,697	103
	June	2,546	179	-161	NA NA	40	2,354 2,524	109 114
	July	2.604	267	-546	NA NA	55	2,324	131
	August	2,615	301	-379	NA	43	2,495	142
	September	2,739	259	-386	NA	37	2,575	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 July	2,880	256 199	-490 070	NA	53	2,593	113
	August	2,719 2,661	259	-373 -287	NA NA	40 74	2,504	124
	September	2,707	291	-207 -321	NA NA	22	2,559 2,654	133 143
	October	2,691	421	-300	NA	47	2,054	152
	November	2,826	316	-291	NA	24	2,827	161
	December	2,798	190	-3	NA.	120	2.865	161
	Average	2,681	272	-57	NA	51	2,845	101
1985	January	2.608	271	624	NA	41 .	3.462	142
	February	2,491	148	724	NA NA	64	3,462 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	R2,645	R147	R-177	NA	30	R2,584	R110
	July†	2,615	83	<b>-220</b> .	NA	NA	2,450	116
	Average	2,536	179	209	NA	NA	2,886	

<sup>&</sup>lt;sup>1</sup>Stocks are totals as of end of period.

<sup>2</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>3</sup>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.

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.

<sup>\*</sup>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. R=Revised data. NA=Not available.

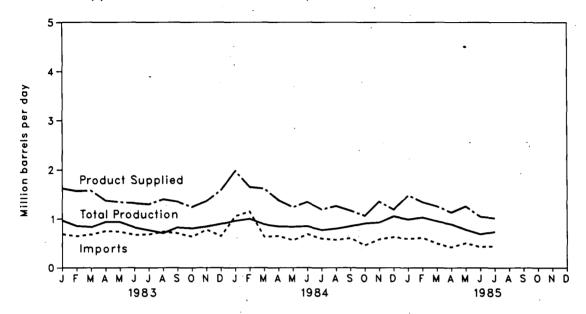
Notes: • Geographic coverage is the 50 States and the District of Columbia.

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

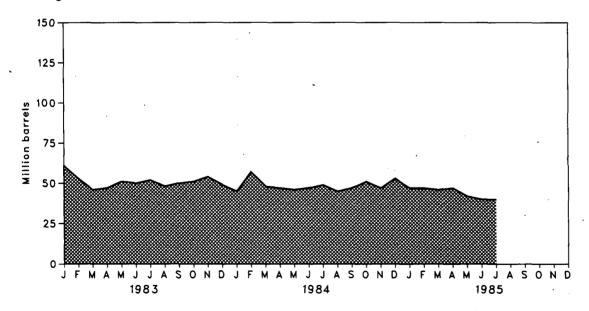
Sources: • See the last page of this section.

### Residual Fuel Oil Supply and Disposition

### Product Supplied, Total Production, and Imports



### **Ending Stocks**



### Residual Fuel Oil Supply and Disposition

		Supply				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	<b>12</b>	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	437	48	118	•	192 78	
1982	Average	1,070	776	32	48	209	2,088 1,716	78 466	
1983	•	ŕ	·				,		
1903	January February	972 857	691 647	⁴258 257	NA NA	294	1,626	61	
	March	835	686	257 227	NA NA	191	1,570	53	
	April	941	753	-10	·NA	169 310	1,579	46	
	May	936	738	-10 -141	NA NA	190	1,374	47	
	June	828	677	36	NA NA	218	1,342 1,323	51 50	
	July	769	684	-64	NA NA	90	1,299	52 52	
	August	710	739	115	NA	165	. 1,400	48	
	September	826	706	-47	NA	134	1,351	50	
	October	807	638	-50	NA	153	1,243	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	R57	
	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	-15	NA	176	1,344	47	
	July August	770 800	597 572	76	NA	99	1,192	49	
	September	850	572 606	149 -74	NA NA	260	1,261	45	
	October	907	461	-74 -127	NA NA	214 174	1,168 1,066	47	
	November	928	585	125	NA NA	286	1,352	51 47	
	December	1,053	627	-193	NA NA	299	1,189	47 53	
	Average	891	681	-12	NA	190	1,369	33	
1985	January	991	594	208	NA		•	47	
. 505	February	1,031	614	206 `-7	NA NA	312 295	1,481 1,343	47	
	March	954	496	22	NA NA	295	1,343	47 46	
	April	888	422	-11	NA NA	167	1,133	46 47	
	May	780	505	156	NA NA	185	1,255	47 42	
	June	R686	R426	, R53	NA	118	R1,047	R40	
	July†	<i>736</i>	445	. 10	NA	NA	1,017	40	
	Average	865	499	63	NA	NA	1,218		

<sup>&</sup>lt;sup>1</sup>Stocks are totals as of end of period.

<sup>2</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>3</sup>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.

<sup>4</sup>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.

<sup>5</sup>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. R = Revised data. NA = Not available.

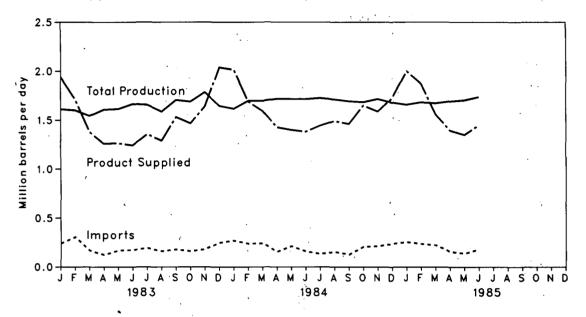
Notes: • Geographic coverage is the 50 States and the District of Columbia.

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

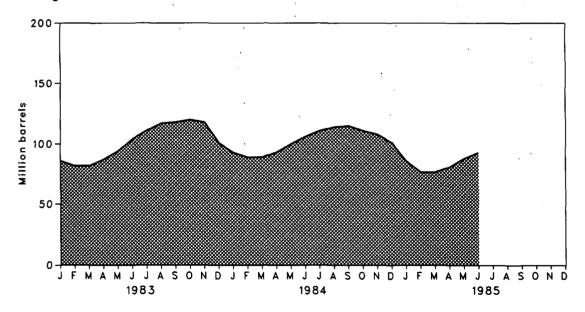
Sources: • See the last page of this section.

### Liquefled Petroleum Gases Supply and Disposition

### Product Supplied, Total Production, and Imports



### **Ending Stocks**



### Liquefied Petroleum Gases¹ Supply and Disposition

			Supply		Disposition					
		Total Production	Imports	Stock Withdrawal³	Refinery Inputs	Exports	Product Supplied			
				Thousand barr	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	1113		
1975	Average	1,527	112	4-35	246	26	1,333	125		
1976	Average	1,535	130	24	260	25	1,404	116		
1977	Average	1,566	161	-55	233	18	•	· -		
1978	Average	1,537	123 <sup>-</sup>	-33 12			1,422	136		
	_	•	-		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	<b>1120</b>		
1981	Average	1,571	244	<b>'-18</b>	· 289	42	1,466	135		
1982	Average	1,528	226	111	300	65	1,499	<b>194</b>		
1983	January	1,611	240	4520	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	59	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	1,785	180	70	362	33	1,640	118		
	December	1,645	247	575	363	66	2,038	4101		
	Average	1,642	190	4	253	73	1,509			
1984	January	1,615	269	4494	340	23	2.015	93		
	February	1,696	237	122	324	41	1,690	89		
	March	1,696	241	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	1,444	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	101		
1985	January	1,658	255	466	309		•			
1303	February	1,682	235 237	466 338		70	2,001	86		
	March	1,662	237		313	72	. 1,872	77		
	April	1,691	223 156	-13	270	52	1,560	77		
	Mav	1,703	138:	-115 -217	260	78	1,394	81.		
	June	1,736	181		235	40	1,349	88		
		•		-173	244	51	1,449	93		
	Average	1,690	:198	45	271	60	1,602			

Includes ethane, propane, normal butane, and isobutane.

2Stocks are totals as of end of period.

3A negative number indicates an increase in stocks and a positive number indicates a decrease.

4In 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			· 1	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	3,693	502	-9	750	166	3,270	208
1974	Average	3,558	432	-28	665	174	3,123	1218
1975	Average	3,424	277	4-2	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	235 225
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	446	723	199	3,088	282
1982	Average	3,453	334	80	787	211	2,869	1253
1983	January	3,194	322	4-419	588	271	2,239	271
	February	3,229	321	12	673	232	2,658	270
	March	3,381	319	-147	572	249	2,732	· 275
	April	3,299	404	-24	592	247	2,840	276
	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	1256
	Average	3,460	411	6	712	242	2,923	
1984	January	3,376	517	<b>4-163</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	391	1,232	343	3,223	265
	July	3,864	587	277	1,022	238	3,467	257
	August	3,848	569	41	637	172	3,650	256
	September	3,759	536	-50	699	238	3,308	257
	October	3,585	632	10	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
	Average	3,542	520	-116	719	219	3,009	•

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.

Stocks are totals as of end of period.

A negative number indicates an increase in stocks and a positive number indicates a decrease.

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 described 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 unfinished 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

- 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 (Total) and 203 (Finished).
- Distillate Fuel Oil: 1974—224; 1980—205; and 1982—
- Residual Fuel Oil: 1974—75; 1980—91; and 1982—68.
- Liquefied Petroleum Gases: 1974-113;1980-128; and
- 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 pentanes 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 withdrawals 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, Bureau of Mines, Mineral Industry Surveys, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand,
- 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 June 1985: Detailed statistics in appropriate issues of the Petroleum Supply Monthly (except domestic crude oil production).
- July 1985: Estimates based on EIA weekly data (except domestic crude oil production).
- January 1985 through July 1985: 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 June 1985 was an estimated 1.3 trillion cubic feet. This was 3.1 percent less than in June 1984. Dry natural gas production during the first half of 1985 totaled 8.4 trillion cubic feet, a daily average of 3.1 percent less than the 8.7 trillion cubic feet produced during the first 6 months of 1984.

Consumption of natural and supplemental gas in June 1985 was an estimated 1.2 trillion cubic feet. This was 3.7 percent higher than in June 1984. Consumption of natural and supplemental gas during the first 6 months of 1985 totaled 9.3 trillion cubic feet, 1.6 percent (on a daily-average basis) below the first-half 1984 consumption level of 9.5 trillion cubic feet.

Deliveries to industrial consumers, the principal end users of natural gas, during May 1985 (latest data available) were an estimated 442 billion cubic feet. This was 11.9 percent higher than in May 1984.

Imports of natural gas in June 1985 were an estimated 65 billion cubic feet, 10.2 percent higher than in the previous June. Receipts of foreign gas during June 1985 included Algerian liquefied natural gas (LNG) equivalent to approximately 3 billion cubic feet. Imports of natural gas in the first 6 months of 1985 totaled 501 billion cubic feet, a daily average of 16.9 percent higher than the imports during the first half of 1984.

Stocks of working gas\* in underground natural gas storage reservoirs at the end of June 1985 totaled 2,351 billion cubic feet. This was 9.8 percent above stocks available a year earlier. Net injections into storage during June 1985 were 224 billion cubic feet, 25.1 percent lower than during the previous June.

# Natural Ga

<sup>\*</sup>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 Production <sup>s</sup>
				·-E	Billion cubic fee	et		
1973	Total	24,067	1,171	NA	248	<sup>6</sup> 22,648	917	<sup>6</sup> 21,731
1974	Total	22,850	1,080	NA	169	<sup>6</sup> 21,601	887	<sup>6</sup> 20,713
1975	Total	21,104	861	NA	134	°20,109	872	*19,236
1976	Total	20,944	859	NA .	132	°19,952	854	<sup>6</sup> 19,098
1977	Total	21,097	935	NA .	137	°20,025	863	<sup>6</sup> 19,163
1978	Total	21,309	1,181	NA NA	153	619,974		•
1979	Total		•		-	•	852	<sup>6</sup> 19,122
		21,883	1,245	NA 100	167	620,471	808	19,663
1980	Total	21,870	1,365	199	125	20,180	777	19,403
1981	Total	21,587	1,312	222	98	19,956	775	19,181
1982	Total	20,210	1,388	208	93	18,520	762	17,758
1983	January	1,688	125	20 ' ,		1,536	72	1,464
	February	1,488	111	17	7	1,353	64	1,289
	March	1,552	125	18	8	1,401	66	1,335
	Apríl	1,470	123	16	8	1,323	62	1,261
	May	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	1,858	119	22	7	1,709	80	1,629
	February	1,621	115	19	6	1,481	70	1,411
	March	1,666	112	21	7	1,526	72	1,454
	April	1,642	120	19	7	1,495	70	1,425
	May	1,644	127	20	7	1,490	70	1,420
	June	1,593	124	20	8	1,442	68	1,374
	July August	1,649 1,628	126 127	19 19	8	1,496	70	1,426
	September	1,547	121	15	8 7	1,475	69 66	1,406
	October	1,634	128	18	7	1,403 1,480	70	1,337 1,410
	November	1,626	124	16	8	1,477	69	. 1,408
	December	1,764	131	21	7	1,606	75	1,531
	Total	19,872	1,474	229	87	18,082	849	17,231
1985	January	1,777	124	20 .	7			
1303	February	1,614	122	18	6	1,626 1,468	76 69	1,550
	March	R1,629	137	19	6	1,466 R1,468	R69	, 1,399 B1 200
	April	R1,576	137 136	18	6	R1,416	R67	R1,399
	May	R1,591	R130	R18	6	R1,437	R68	R1,349 <i>R1,369</i>
	June	1,552	130	. 18	<b>6</b> .	1,398	66	1,332
	Year to Date	9,739	779	111	37	8,813	415	8,398

¹Gas withdrawn from gas and oil wells.
²Gas returned to formations for repressuring, pressure maintenance, and cycling.
³For definitions and further explanations, see Notes on the last two pages of this section.
⁴Equal 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.
⁵Equal to marketed production (wet) minus extraction loss.
⁴May 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.
◆ Italics denote estimated data. Data for 1973 through 1983 are final. All other data are preliminary unless otherwise indicated.
Sources: ◆ See the last page of this section.

Sources: • See the last page of this section.

### Supply and Disposition of Natural Gas

				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	Exports <sup>2</sup>	Consump- tion <sup>2</sup>	Un- accounted for
					Е	Billion cubic fee	t			
1973	Total	121,731	1,533	NA	1,033	24,297	1,974	77	22,049	196
1974	Total	120,713	1,701	NA	959	23,373	1,784	77	21,223	289
1975	Total	119,236	1,760	NA	953	21,949	2,104	73	19,538	235
1976	Total	119,098	1,921	NA	964	21,983	1,756	65	19,946	216
1977	Total	119,163	1,750	NA	1,011	21,924	2,307	56	19,521	41
1978	Total	119,122	2,158	NA	966	22,245	2,278	53		
1979	Total	19,663	2,047	NA NA	1,253	•	•	56	19,627	287
1980	Total	19,403	1,972	155	985	22,964	2,295		20,241	372
1981	Total	•	•			22,515	1,949	49	19,877	640
1982	Total	19,181	1,930	176	904	22,191	2,228	59	19,404	501
		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 50	1,298	273	3	974	48
	July August	1,285 1,334	26 37	8 9	58 50	1,377	287	5	1,034	51
	September	1,300	28	9	56 67	1,436	265	6	1,112	53
•	October	1,372	. 42	10	64	1,404	277	4	1,071	52
	November	1,389	169	12	80	1,488 1,650	183 86	4 5	1,246	55
	December	1,530	634	17	107	2,288	31	5 5	1,503 2,191	56
	Total	16,033	2,270	132	920	19,354	1,822	5 55	16,835	61 <b>*642</b>
1984	January	1,629	563	17	97	2.306	54	5		
.004	February	1,411	300	13	69	1,793	62 62	5 5	2,219	28
	March	1,454	359	14	69	1,896	50	6	1,702 1,815	24
	April	1,425	99	11	、71	1,606	145	5	1,432	25 24
	May	1,420	30	10	66	1,526	258	5	1,239	24
	June	1,374	26	9	59	1,468	325	3	1,116	· 24
	July	1,426	28	9	55	1,518	341	5	1,148	24
	August	1,406	30	9	54	1,499	313	5	1,157	24
	September	1,337	30	9	57	1,433	287	5	1,118	23
	October	1,410	55	10	67	1,542	244	5	1,269	24
	November	1,408	221	12	84	1,725	82	5	1,614	24
	December	1,531	302	14	94	1,941	94	5	1,816	26
	Total	17,231	2,042	137	843	20,253	2,255	55	17,645	294
1985	January	1,550	658	17	104	2,329	35	5	2,262	27
	February	1,399	438	14	98	1,949	49	4	1,872	24
	March	R1,399	208	12	89	R1,708	93	4	R1,587	24
	April	R1,349	99	R13	75	R1,536	211	5	R1,297	R23
	May	R1,369	18	12	R70	R1,469	293	5	R1,148	R23
	June	1,332	34	12	65	1,443	258	5	1,157	23
	Year to Date	8,398	1,455	80	501	10,434	939	28	9,323	144

<sup>\*\*</sup>Monthly and annual data for 1980 through 1983 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.

\*\*For definitions and further explanations, see Notes on the last two pages of this section.

\*\*Data for 1978 through 1982 do not include intransit receipts and deliveries.

\*\*May include unknown quantities of nonhydrocarbon gases.

\*\*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 1983 are final. All other data are preliminary unless otherwise indicated. Sources: • See the last page of this section.

### Natural Gas¹ Consumption

### **Delivered to Consumers**

		Lease and Plant Fuel	Pipeline Electric Fuel Residential Commercial <sup>2</sup> Industrial Utilities			Total	 Total Consumption		
	<b>Y</b>				Billion	cubic feet			•
1973	Total	1,496	728	4,879	2,597	8,689	3,660	19.825	22,049
1974	Total	1,477	669	4,786	2,556	8,292	3,443	19,077	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	17,704	19,521
1978	Total	1,648	530	4,903	2,601	6,757	3,188		
1979	Total	1,499	601	4,965	2,786	6,899		17,449	19,627
1980	Total	1,026	635		•	•	3,491	18,141	20,241
1981				4,752	2,611	7,172	3,682	18,216	19,877
	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 <sub>.</sub>	926	1,034
	August	81	32	123	103	421	352	999	1,112
	September	79	31	128	105	429	299	961	1,071
	October	84	36	179	119	577	251	1,126	1,246
	November	85	44	330	185	645	214	1,374	1,503
	December	93	64	612	308	896	218	2,034	2,191
	Total	978	490	4,381	2,433	5,643	2,911	15,367	16,835
1984	January	99	65	902	440	498	215	2,055	2,219
	February	86	50	714	357	308	187	1,566	1,702
	March	89	53	618	314	535	206	1,673	1,815
	April	87	42	474	246	363	220	1,303	1,432
	May	87	36	293	163	395	265	1,116	1,239
	June	84	32	174	111	417	298	1,000	1,116
	July	87	33	131	99	449	349	1,028	1,148
	August	86	34	120	100	467	350	1,037	1,157
	September	82 86	33 37	129	104	479	291	1,003	1,118
	October November	86	37 47	186 329	131	559 710	270	1,146	1,269
	December :	93	47 53	577	197 299	710	245	1,481	1,614
						577 5 <b>3</b> 53	217	1,670	1,816
	Total	1,052	515	4,647	2,559	5,757	3,111	16,078	17,645
1985	January	94	66	748	374	755	225	2,102	2,262
	February	85	54	. 843	411	278	201	1,733	1,872
	March	R85	R46	573	293	R384	206	R1,456	R1,587
	April	R82	R38	405	208	R331	233	R1,177	R1,297
	May	83	33	221	133	442	236	1,032	1,148
	Year to Date	429	237	2,790	1,419	2,190	1,101	7,500	8,166

Includes supplemental gaseous fuels.

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 1983 are final. All other data are preliminary unless otherwise indicated. Sources: • See the last page of this section.

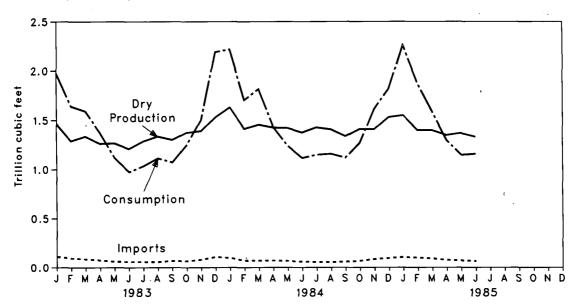
### Underground Natural Gas Storage—All Operators

			Natural Gas in derground Stora at End of Period		from Sar	Working Gas ne Period us Year	. <b>.</b>	y	
		Base Gas	Working Gas	Total	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	
1978	Total	3,473	2,547	6,020	72	2.9	•	.,	557
1979	Total	3,553	2,753	6,306	207	<del>-</del>	2,278	2,158	120
1980	Total	3,642	•	•		8.1	2,295	2,047	248
1981	Total	•	2,655	6,297	-99	-3.6	1,896	1,910	-14
		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	31.9	36	325	-289
	March	3,812	2,148	5,959	544	33.9	59	266	-207
	April	, 3,818	2,074	5,893	398	23.8	82	160	-78
	May	3,818	2,222	6,041	188	9.3	191	40	151
	June	3,819	2,454	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 October	3,823	3,141	6,964	-110	-3.4	258	26	232
	November	3,825 3.841	3,270	7,095	-94	-2.8	171	40	131
	December	3,847	3,175	7,015	-134	-4.1	80	158	-78
	Total	3,047	2,595	6,442	-476	-15.5	29	597	-567
							1,700	2,142	-442
1984	January	3,847	2,091	5,937	-553	-20.9	54	563	-509
	February	3,828	1,876	5,704	-480	-20.4	62	300	-238
	March	3,824	1,572	5,396	-575	-26.8	50	359	-308
	April	3,822	1,620	5,442	-454	-21.9	145	99 .	46
0	May June	3,827	1,843	5,670	-379	-17.1	258	30	227
	July July	3,828	2,141	5,969	-313	-12.7	325	26	299
	August	3,829 3,829	2,456 2,739	6,285	-240	-8.9	341	28	313
	September	3,829	2,739	6,568 6,825	-169	-5.8	313	30	283
	October	3,837.	3,177	7.014	-144 -92	-4.6 -2.8	287	30	257
	November	3,901	3,017	6,918	-92 -158	-2.8 -5.0	244 82	55	189
	December	3,831	2,878	6,710	283	10.9	94	221 302	-139
	Total	0,00.	2,0,0	0,7 10	. 200	10.5	= -		-208
1985		0.040	0.045				2,255	2,042	214
1905	January	3,842	2,245	6,087	154	7.4	35	658	-623
	February March	3,842	1,856	5,698	-20	-1.1	49	438	-389
	April	3,836	1,746	5,582	174	11.0	93	208	-116
	May	3,831 3,837	1,862 2,131	5,693	242	14.9	211	99	112
	June	3,839	2,351	5,968	288	15.6	293	18	274
	Julio	5,055	۱ 50,2	6,190	210	9.8	258	34	224

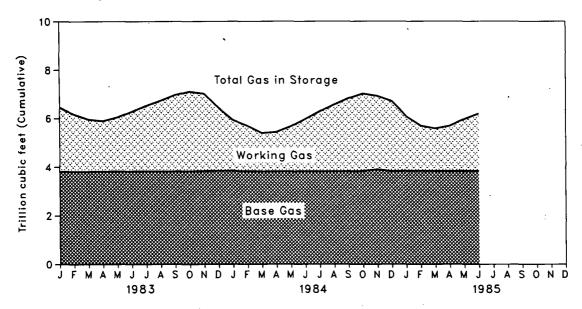
¹Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1978—6,890; 1979—6,929; 1980—7,434; 1981—7,805; 1982—7,915; 1983—7,985; and 1984—8,043. Current total capacity is 8,069. ²Positive numbers indicate injections are greater than withdrawals. Negative numbers indicate 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 1983 are final. All other data are preliminary unless otherwise indicated. Sources: • See the last page of this section.

### Overview

### Consumption, Dry Production, and Imports



### Gas in Storage at End of Period



### Notes and Sources for the Natural Gas Section

### **Notes**

1. Nonhydrocarbon Gases Removed: Annual data on 1. Nonhydrocarbon gases removed from marketed production—carbon dioxide, helium, hydrogen sulfide, and nitrogen—are from the Energy Information Administration (EIA) Natural Gas Annual 1983. These data are not available for periods prior to 1980. For 1983, of the 31 producing States, 20 reported data on nonhydrocarbon gases removal. ed. These 20 States accounted for 56 percent of total 1983 gross withdrawals. In addition, gross withdrawals data from two States, which together accounted for 38 percent of the 1983 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

Monthly data are reported by five States and computed for two States All monthly data are considered preliminary 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 1983.

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.

the EIA Natural Gas Monthly.

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

Final monthly data. The difference between annual production data published in the EIA Natural Gas Annual 1983 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 pro-

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 1983. 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 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 reported 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

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 publication 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 quantities lost; the net result of flow data metered at varying temperature and pressure conditions and converted to a standard temperature and pressure base; metering inaccuracies; differences between billing cycle and calendar period time frames; the effect of variations in company accounting and billing practices; and imbalances from EIA's accounting and billing practices; and imbalances from EIA's merger of data reporting systems which vary in scope, format, definitions, and type of respondents. The increase of 167 billion cubic feet (Bcf) in the "Unaccounted for" category in 1983, as compared to 1982 figures, reflects unusually large differences resulting from the use of the annual billing cycle (nominally December 15, 1982, through December 15, 1982). 1983) for consumption data in conjunction with calendar year supply data. Record cold temperatures during the last half of December 1983 resulted in a reported 333-Bcf 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 only partially reflected in 1983 consumption data. For underground storage data, see Table F2 in the June 1984 Natural Gas Monthly, which was published in August 1984.
- 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.

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 1983 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 withdrawals are taken from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying it to annual LNG data.

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

### Sources

Production: 1973 through 1983: Energy Information Administration (EIA), *Natural Gas Annual 1983*; January 1984 forward: State reports to the Interstate Oil Compact Commission, 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 1983: EIA, *Natural Gas Annual 1983*; January 1984 forward: EIA computations

1984 forward: EIA computations.

Withdrawals from and Additions to Storage: 1973 through 1983: EIA, *Natural Gas Annual 1983*; January 1984 forward: Form FPC-8 and Form EIA-191, "Underground Gas Storage Report."

Supplemental Gaseous Fuels: 1980 through 1983: EIA, Natural Gas Annual 1983; January 1984 forward: EIA com-

putations.

Imports and Exports: 1973 through 1983: Form FPC-14, "Imports and Exports of Natural Gas"; January 1984 forward: EIA computations.

End-Use Consumption: • All data except electric utility—1973 through 1982: EIA, *Natural Gas Annual, 1983*; January 1983 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, "Annual Report of Natural and Supplemental Gas Supply and Disposition.'

### Oil and Gas Resource Development

The 371 crews engaged in seismic exploration in June 1985 were 25.8 percent fewer than those in June 1984, but 1.9 percent more than the seismic crews in the previous month. This was the first increase in the number of crews per month since September 1984. The 47 marine vessels working in June 1985 were 4.4 percent more, but the 324 land crews were 28.8 percent fewer than those working in June 1984. During the first 6 months of 1985, there were 18.8 percent fewer seismic crews working than during the first 6 months of 1984. Land crews working during the first half of 1985 were 20.3 percent fewer, while marine vessels were 5.5 percent fewer, than those during the first half of 1984.

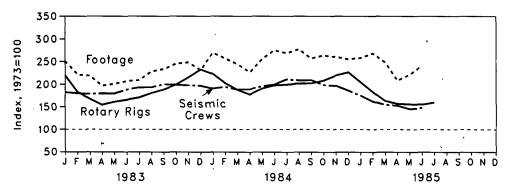
The July 1985 rotary rig count of 1,909 was 20.0 percent less than the July 1984 count of 2,386. The 194 rigs operating offshore in July 1985 were 5.8 percent fewer than the offshore rigs in July 1984. The number of rotary rigs operating in the first 6 months of 1985 was 13.5 percent less than the number in the first half of 1984. The onshore rigs during the first half of 1985 were 15.4

percent fewer, but the offshore rigs were 6.9 percent more, than those operating during the first 6 months of 1984.

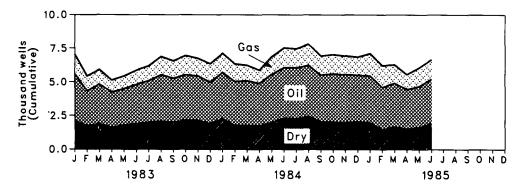
Exploratory and development well completions during June 1985 were an estimated 6,660, 11.4 percent less than the 7,520 wells estimated in June 1984. Oil well completions in June 1985 were an estimated 3,280, 12.1 percent fewer than the 3,730 oil well completions in the previous June. The 1,450 gas well completions in June 1985 were 1.4 percent less than the June 1984 number of 1,470. Total footage drilled in June 1985 was 27.7 million feet, a decrease of 12.1 percent compared with the 31.5 million feet drilled in June 1984.

Estimated exploratory and development well completions during the first half of 1985 were 5.7 percent fewer than those in the first half of 1984. Estimated oil well completions during the first 6 months of 1985 were down 6.8 percent while gas well completions were up 12.5 percent compared with those completions during the first half of 1984.

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



### **Exploratory and Development Well Completions**



Monthly Energy Review May 1985 Energy Information Administration

### Oil and Gas Resource Development

**Seismic Crews and Rotary Rigs** 

Crews Engaged in Seismic Exploration Rotary Rigs in Operation<sup>1</sup>

		Seismic Exploration			Hotary Higs in Operation				
		Offshore	Onshore	Total	Offshore	Onshore	Total		
		, М	onthly avera	ge	N	fonthly averag	je		
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		30	370	400	207	1,970			
	Average						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	00	410	449	209	1,717	1,926		
	June	43	428	471	202	1,777	1,979		
	July	46	437	483	178	1,861	2,039		
	August	49	435	484	181	1,975	2,156		
	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	R2,232		
1984	January	50	427	477	216	2,450	2,666		
	February	53	433	486	202	2,221	2,423		
	March	47	424	471	198	2,047	2,245		
	April	50	423	473	203	1,917	2,120		
	May	46	444	490	202	2,075	2,277		
	June	45 47	455 400	500 ·	205	2,158	2,363		
	July	47 50	482	529 523	206 216	2,180	2,386		
	August	53 53	470 470			2,201	2,417		
	September	52 48	472 449	524 497	214 223	2,206 2,269	2,420 2,492		
	October	48 49	445	493	232	2,397	2,629		
	November December	52	414	493 466	242	2,397 2,471	2,713		
	Average	49	445	494	213	2,215	2,428		
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	47	324	371	203	1,653	1,858		
	July	NA	NA	NA	194	1,715	1,909		
	Average <sup>2</sup>	46	346	392	215	1,800	2,015		

<sup>&</sup>lt;sup>1</sup>Monthly data are averages of 4- or 5-week reporting periods and are not calendar months.

Anothly data are averages of 4- or 5-week reporting periods and are not calendar months.

Average of available data.

R = Revised data.

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

• Averages may not equal sum of components due to independent rounding.

Sources: • Crews Engaged: Society of Exploration Geophysicists, "Monthly Seismic Crew Count" and annual reports published in their bulletins, Geophysics and Leading Edge. • Rotary Rigs: Hughes Tool Company, "Rotary Rigs Running—by State."

### Oil and Gas Resource Development

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

### Exploratory and Development Well Completions<sup>1</sup>

			Well Completions					
		Oil	Gas	Dry	Total	Total Footage		
			Thousa	and wells		Million feet		
1973	Total	10.25	6.97	R10.47	R27.69	139.42		
1974	Total	R13.66	7.17	R12.20	R33.04	R153.79		
1975	Total	16.98	8.17	R13.74	R38.88	R181.05		
1976	Total	R17.70	R9.44	R13.80	R40.94	R187.29		
1977	Total	R18.70	R12.12	R15.04	R45.85	R215.70		
1978	Total	R19.06	R14.40	R16.59	R50.06			
1979	Total	R20.70	R15.17	R16.04		R238.39		
1980	Total				R51.91	R243.69		
		R32.24	R17.19	R20.30	R69.72	R312.03		
1981	Total	R42.91	R19.97	R27.25	R90.14	R409.13		
1982	Total	R38.82	R18.80	R25.97	R83.59	R375.77		
1983	January	R3.47	R1.44	R2.13	R7.05	R29.74		
	February	R2.59	R1.10	1.74	5.43	· R23.72		
	March	R2.93	1.09	1.88	R5.89	R25.93		
	April	R2.61	0.89	R1.62	5.12	22.60		
	May .	R2.69 ·	R0.95	R1.79	R5.43	R23.82		
	June	R2.91	R1.06	F1.89	R5.85	R23.76		
	July	R3.09	1.11	R1.97	6.17	R24.80		
	August	R3.44	1.35	R2.08	6.86	R27.06		
	September	R3.28	R1.29	R1.99	R6.55	R26.81		
	October	R3.36	1.43	2.16	R6.95	R29.07		
	November	R3.31	1.30	R2.13	R6.73	· R28.49		
	December	3.06	1.36	R1.92	R6.34	R27.44		
	Total	R36.73	R14.36	R23.29	R74.38	R313.23		
1984	January	R3.45	R1.41	R2.25	7.11	31.90		
	February	R3.24	R1.31	R1.78	R6.33	R28.50		
	March	R3.31	R1.14	R1.78	R6.24	R28.98		
	April	R3.14	R0.98	R1.75	R5.87	R26.03		
	May	R3.56	R1.31	R1.99	R6.85	R30.25		
	June	R3.73	R1.47	R2.32	R7.52	R31.53		
	July	3.78	R1.41	R2.27	R7.47	R31.85		
	August	R3.77	R1.58	R2.45	R7.80	R32.84		
	September	R3.46	R1.41	R2.05	R6.91	R29.47		
	October	R3.56	R1.42	R2.05	R7.02	R31.24		
	November	R3.58	R1.38	R1.97	R6.94	R29.87		
	December	R3.44	R1.34	R2.06	R6.83	R30.29		
	Total	R42.01	R16.15	R24.71	R82.87	R362.77		
1985	January	3.48	1.65	1.98	7.11	30.60		
	February	3.11	1.61	R1.49	6.01	R28.68		
	March	3.23	1.37	1.67	6.27	R29.47		
	April	2.91	1.10	1.54	5.55	23.92		
	May	3.03	1.39	1.64	6.06	26.29		
	June	3.28	1.45	1.93	6.66	27.70		
	Year to Date	19.04	8.57	10.25	37.66	166.66		
					•			

The American Petroleum Institute (API) recently revised the historical data base on which Energy Information Administration (EIA) well completion and footage drilled estimates are based. The data series shown on this page include both the API data base revisions and EIA estimation revisions.

R=Revised data.

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

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

<sup>Totals may not equal sum of components due to independent rounding.
Due to the method of estimation, data shown on this page are frequently revised. See the last two pages of this section for further explanation.</sup> 

Source: • Energy Information Administration computations based on well reports submitted to the American Petroleum Institute. See the last two pages of this section for further explanation.

### Explanation of Changes in the Oil and Gas Resource Development Section

The data series on rotary rigs in operation is now shown in onshore and offshore categories. The annual line-miles of seismic exploration data series have been discontinued in the Monthly Energy Review because there are no monthly data available. However, those data are published in the Annual Energy Review.

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 have been 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 model 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 cal analysis of the incomplete reported data, the model 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. Unscheduled 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, 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 in the model are oil. gas, and dry. By convention, wells with both oil and gas zones are categorized as oil. Well classes in the model 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).

Analysis of the reported data for completion years 1970 through 1982 showed that the average cumulative coverage within 36 months was 99.2 percent, that is, almost all wells were reported within 3 years after completion. The analysis further showed that 65.6 percent were reported within 3 months, 83.1 percent within 6 months, and 92.9 percent within 1 year after completion. Over that time period, howrever, the reporting process slowed. For instance, in 1971, 75 percent of the completions were reported by the end of the following month. By 1981, only 33 percent of the completions were reported within that time.

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

### **Explanation of Changes in the Oil and Gas Resource Development Section** (Continued)

				New Series							
		Exp	Exploratory and Development Wells Drilled <sup>1 2</sup>				Exploratory and Development Well Completions <sup>1,3</sup>				
		Oil	Gas	Dry	Total	Total Footage	Oil ·	Gas	Dry	Total	Total Footage
		•	Number	of wells		Thousand feet		Thous	and wells		Million feet
1973	· Total	R9,850	R6,370	R10,270	R26,490	R135,849	10.25	6.97	R10.47	R27.69	139.42
1974	Total	R12,748	R7,224	R11,642	R31,614	R150,087	R13.66	7.17	R12.20	R33.04	R153.79
1975	Total	R16,396	R7,575	R13,231	R37,202	R174,230	16.98	8.17	R13.74	R38.88	R181.05
1976	Total	R17,067	R9,103	R13,577	R39,747	R181,681	R17.70	9.44	R13.80	R40.94	R187.29
1977	Total	R18,908	R11,386	R14,678	R44,972	R210,742	R18.70	R12.12	R15.04	R45.85	R215.70
1978	Total	R17,749	R13,048	R16,181	R46,978	R226,605	R19.06	R14.40	R16.59	R50.06	R238.39
1979	Total	R19,369	R14,672	R15,714	R49,755	R238,402	R20.70	R15.17	R16.04		
1980	Total	R26,994	R15,694	R18,074	R60,762	R283.989	R32.24			R51.91	R243.69
1981	Total	R37,639	•		•			R17.19	R20.30	R69.72	R312.03
1982			R17,859	R22,946	R78,444	R360,655	R42.91	R19.97	R27.25	R90.14	R409.13
	Total	R40,209	R18,890	R26,486	R85,585	R394,777	R38.82	R18.80	R25.97	R83.59	R375.77
1983	January	R2,373	R887	R1,637	R4,897	R20,874	R3.47	R1.44	R2.13	R7.05	R29.74
	February	R2,882	R1,182	R2,209	R6,273	R27,639	R2.59	R1.10	1.74	R5.43	R23.72
	March	R3,428	R1,605	2,630	R7,663	R34,201	R2.93	1.09	1.88	R5.89	R25.93
	April	R3,027	R1,391	R1,972	R6,390	R27,340	R2.61	0.89	R1.62	5.12	22.60
	May	'R3,177	R1,740	R1,828	R6,745	R28,474	R2.69	R0.95	R1.79	5.43	R23.82
	June	R3,517	R1,238	R2,105	R6,860	R28,045	R2.91	R1.06	R1.89	R5.85	R23.76
	July	R2,687 R2,636	R1,122 1,080	R1,638	R5,447	R22,925	R3.09	1.11	R1.97	6.17	R24.80
	August September	R3,734	R1,278	R1,533 R2.012	R5,249 R7,024	R22,611	R3.44	1.35	R2.08	6.86	R27.06
	October	R2,969	R1,276	R1,706	R5,892	R30,312 R24,832	R3.36	R1.29 1.43	R1.99 2.16	R6.55 R6.95	R26.81
	November	R3,237	R1,142	R1,700	R6,370	R26,787	R3.31	1.43	R2.13	R6.73	R29.07 R28.49
	December	R3,484	R1,686	R2,210	R7,380	R30,967	3.06	1.36	R1.92	R6.34	R27.44
	Total	R37,151	R15,568	R23,471	R76,190	R325,006	R36.73	R14.36	R23.29	R74.38	R313.23
4004				•	-	•	i	•			
1984	January	<sup>2</sup> R3,257	<sup>2</sup> R1,053	<sup>2</sup> R1,998	2R6,308	<sup>2</sup> R227,861	R3.45	R1.41	R2.25	7.11	31.90
	February March	R3,211 R4,090	R1,396	R2,110 R2,940	R6,717	R27,383	R3.24	R1.31	R1.78	R6.33	R28.50
	April	R2,826	R1,369 R1,158	R1,686	R8,399 R5,670	R34,147 R26,212	R3.31 R3.14	R1.14 R0.98	R1.78 R1.75	R6.24 R5.87	R28.98
	May	R3,132	R1,151	1,637	R5,920	R26,384	R3.56	R1.31	R1.75	R6.85	R26.03 R30.25
	June	R3,714	R1,361	R2,291	R7,366	R32,130	R3.73	R1.47	R2.32	R7.52	R31.53
	July	R2,626	R1,136	R1,828	R5.590	R25,418	3.78	R1.41	R2.27	R7.47	R31.85
	August	R3,967	R1,420	R2,123	7,510	R31,580	R3.77	R1.58	R2.45	R7.80	R32.84
	September	R3,944	R1,336	R2,894	R8,174	R32,889	R3.46	R1:41	R2.05	R6.91	R29.47
	October	R3,437	1,238	R2,056	R6,731	R28,083	R3.56	R1.42	R2.05	R7.02	R31.24
	November	R3,134	R1,064	R1,691	R5,889	R24,269	R3.58	R1.38	R1.97	R6.94	R29.87
	December	R3,724	R1,956	R1,931	R7,611	R31,473	R3.44	R1.34	R2.06	R6.83	R30.29
	Total	R41,062	R15,638	R25,185	R81,885	R347,829	R42.01	R16.15	R24.71	R82.87	R362.77
1985	January	2,440	1,054	1,479	4,973	22,319	3.48	1.65	1.98	7.11	30.60
	February	3,128	1,150	1,867	6,145	27,250	3.11	1.61	R1.49	6.01	∂ R28.68
	March	3,965	1,422	2,921	8,308	37,424	3.23	1.37	1.67	6.27	R29.47
	April	R3,431	1,615	1,980	7,026	33,142	2.91	1.10	1.54	5.55	23.92
	May	R4,167	R1,998	R2,102	R8,267	R36,816	3.03	1.39	1.64	6.06	26.29
	June	2,884	1,449	1,947	6,280	28,254	3.28	1.45	1.93	6.66	27.70

The American Petroleum Institute (API) recently revised the historical data base on which Energy Information Administration (EIA) well completion and footage drilled estimates are based. The data series shown on this page include both the API data base revisions and EIA estimation revisions.

Data exclude service wells and stratigraphic and core tests.

Prior to 1984, weekly data are aggregated into months within quarters using the following number of weeks in the 12 months—(4,4,5), (4,4,5), (4,4,5), and (4,4,5). In 1984, weekly data are aggregated into months differently to more closely represent the actual number of weeks in the calendar months—(5,4,5), (4,5,4), and (4,4,5). Totals reflect subsequent data revisions and therefore may not agree with cumulative monthly data.

Totals may not equal the sum of components due to independent rounding.

R=Revised data.

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

Sources: • Previous Series: 1973 through 1984—American Petroleum Institute, "Monthly Drilling Report" and "Quarterly Review of Drilling Statistics for the United States"; 1985—Energy Information Administration aggregation of American Petroleum Institute data using their pre-1985 methodology.

• New Series: Energy Information Administration computations based on well reports submitted to the American Petroleum Institute.

### Coal

Coal production in June 1985 was 72.5 million short tons, 4.1 percent less than the 75.6 million short tons produced in June 1984.

In the first half of 1985, coal production totaled 438.6 million short tons, down 2.9 percent from 451.7 million short tons in the first half of 1984. Production from east of the Mississippi River was 283.1 million short tons, 7.0 percent below the 304.2 million short tons produced a year earlier. Production from west of the Mississippi River was 153.7 million short tons, 5.4 percent more than the 145.8 million short tons produced in the first 6 months of 1984. When comparing first-half 1985 production in each of the 26 coalproducing States with that State's production during the first half of 1984, 15 of the States produced less coal, while 11 States produced more. The three leading coal-producing States in the first half of 1985 were Kentucky (73.9 million short tons), Wyoming (67.1 million short tons), and West Virginia (64.0 million short tons).

Electric utility coal consumption in May 1985 totaled 54.5 million short tons, 10.1 percent more than consumption in May 1984.

Electric utility coal stocks of 174.2 million short tons at the end of May 1985 were 1.0 million short tons (0.6 percent) above the level 1 year earlier.

Imports of coal in May 1985 totaled 159,000 short tons, 87,000 short tons more than the amount imported in May 1984. Exports of coal in May 1985 totaled 9.2 million short tons, 12.3 percent more than the amount exported during May 1984. Coal exports in May 1985 were principally to Europe (41.3 percent), Canada (30.0 percent), and Japan (14.6 percent).

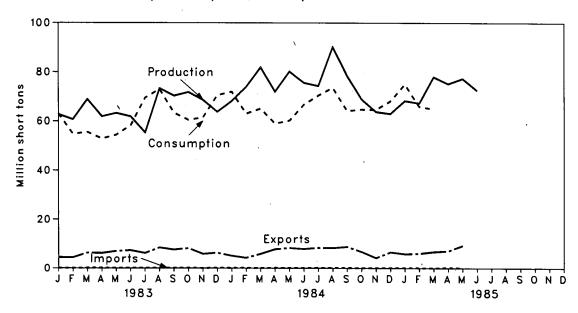
## Part 6 (

### Coal

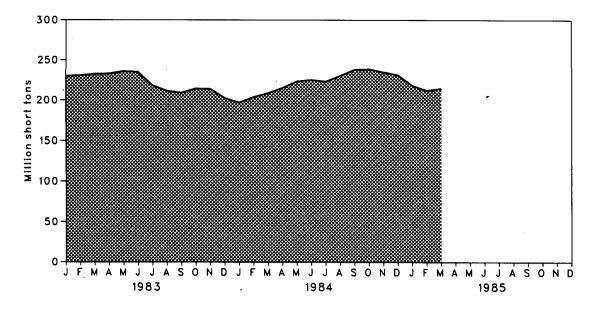
### Coal

### Overview

### Production, Consumption, Imports, and Exports



### Stocks at End of Period



### Coal

### Overview

		Production	Consumption	Imports <sup>1</sup>	Exports <sup>2</sup>	Stocks <sup>3</sup>
	,		Tho	usand short tons	•	
1973	Total	598,568	562,584	127	53,587	NA
1974	Total	610,023	558,402	2,080	60,661	NA NA
1975	Total	654,641	562,641	940	66,309	NA NA
1976	Total	684,913	603,790	1,203	60,021	NA NA
1977	Total	697,205	625,291	1,647	54,312	NA NA
1978	Total	670,164	625,225	2,953	·	
1979	Total	781,134	680,524	•	40,714	NA
1980	Total	829,700		2,059	66,042	202,472
1981	Total		702,729	1,194	91,742	228,407
		823,775	732,627	1,043	112,541	209,423
1982	Total	838,112	. 706,911	742	106,277	232,038
1983	January	62,731	63,019	78	4,471	229,713
	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	58,237	133	7,279	234,794
	July	55,213	69,478	87	6,140	218,145
	August September	73,291 70,312	72,947	115	8,380	211,153
	October	71,754	63,317	97	7,525	208,993
	November	68,684	60,454 61,411	190 32	8,131	213,975
	December	63,713	70,541	102	5,838	213,651
	Total	782,091	736,672		6,269	202,584
4004		•		1,271	77,772	
1984	January†	68,154	71,919	81	5,062	196,985
	February†	73,933	62,994	140	4,251	203,771
	March†	81,864	65,028	55	5,813	208,548
	April† May†	71,939 80,204	58,946	148	7,688	215,023
	Junet	75,586	60,164	72	8,221	223,262
	July†	75,566 74,299	66,707	49	7,828	224,905
	August†	90,163	70,422 73,558	193	8,318	223,118
	September†	78,394	64,133	147 95	8,235	230,224
	October†	68,933	64,664	104	8,710	237,720
	Novembert	63,729	64,613	68	6,641 4,190	238,350
	Decembert	62,946	68,147	134	6,526	234,702
	Total†	890,143	791,296	1,286	81,483	231,300
1985	Januaryt	68,259	74,978	126	. •	047.075
	February†	67,319	65,881	101	5,817	217,975
	March†	77,989	64,892	100	6,030 6,606	211,804
	Aprilt	75,195	, 04,892 NA	203	6,696 7,065	214,517
	Mayt	77,340	NA	159	7,065 9,231	NA NA
	Junet	72,485	NA	NA NA	9,231 NA	NA NA
	Year to Date	438,587	205,751	691	34,839	INA

Beginning in this issue, a data series for total coal stocks replaces the series for total consumer stocks previously shown in this table. The total consumer stocks series will continue to be shown in the last table of this section.

\*Total of available data.

Includes Puerto Rico.

<sup>a</sup>Excludes shipments of anthracite to U.S. Armed Forces overseas (347,000 short tons in 1982, 341,000 short tons in 1983, and 298,000

<sup>\*\*</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.

<sup>†</sup>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.

Coal

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

			Į ln	dustrial		
		Electric Utilities	Coke Plants	Other Industrial Including Transportation	Residential and Commercial	Total
				Thousand short tons		
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
	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
	June	50,338	2,734	4,798	367	58,237
,	July	60,390	3,269	5,220	599	69,478
	August September	63,767 54,212	3,252	5,362	566	72,947
	October	50,689	3,196 3,307	5,156 5.659	752 799	63,317
	November	51,185	3,335	6.046	845	60,454 61,411
	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
	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
	May	49,507	4,100	5,997 5,700	560	60,164
	June July	56,971 60,359	3,564	5,729 5,720	443	66,707
	August	63,396	3,639 3,620	5,730 5.886	694 656	70,422 73,558
	September	54,045	3,557	5,659	872	64,133
	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	791,296
1985	January†	63,629	3,463	7,063	823	74,978
	February†	55,463	3,282	6,416	720	65,881
	March†	54,690	3,511	6,178	513	64,892
	April† May+	50,854 54,522	NA NA	NA NA	NA NA	NA NA
	May† Year to Date <sup>2</sup>	54,523 <b>279,160</b>	NA <b>10,256</b>	NA 19,657	NA <b>2.056</b>	NA <b>205,75</b> 1
				. 5,551	2,000	200,701

<sup>&</sup>lt;sup>1</sup>See Note 2 on the last page of this section.

<sup>2</sup>Total of available data.

†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.

Coal

### Stocks at End of Period

		100

	_						
		Electric Utilities	Coke Plants	Other Industrial	Total	Producers and Distributors	Total <sup>1</sup>
	•			Thousand :	short 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	NA NA
1975	Year	110,724	8,797	8,529	128,050	NA NA	NA NA
1976	Year	117,436	9,902	7,100	134,438	NA NA	NA NA
1977	Year	133,219	12,816	11.063	157,098	NA NA	NA NA
1978	Year	128,225	8,278	9,048	145,551	NA NA	NA NA
1979	Year	159,714	10,155	11,777	181,646		
1980	Year	183,010	9,067	11,951	•	20,826	202,472
1981	Year	168,893	6,475		204,028	24,379	228,407
1982	Year	•	•	9,906	185,274	24,149	209,423
		181,132	4,642	9,479	195,254	36,784	232,038
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 September	162,557 161,384	4,165 3,842	8,345	175,067	36,086	211,153
	October	166,574	3,642 4,010	8,518 8,582	173,743	35,249	208,993
	November	166,457	4,010	8,645	179,166 179,281	34,809	213,975
	December	155,598	4,346	8,710	168,654	34,370 33,931	213,651 202,584
1984	January	149,403	4,947	8.593	·	•	
1304	February	155,593	5,548	8,476	162,943 169,617	34,042	196,985
	March	159,775	6,149	8,359	174,283	34,154	203,771
	April	165,592	7,171	9,137	181,900	34,265 33,123	208,548
	May	173,171	8,194	9,915	191,280	31,982	215,023 223,262
	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	R197,211	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	NA	NA	NA	NA	NA
	May†	174,198	NA	NA	NA	NA	NA

Beginning in this issue, data series showing stocks held by producers and distributors and total coal stocks have been added to this table.

<sup>&</sup>lt;sup>1</sup>Excludes stocks held at retail dealers for consumption by the residential and commercial sector. †Preliminary data. 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.

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 pubby the Energy Information Administration (EIA) and published 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 estimates 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 from the Interstate Commerce Commission (ICC). If an 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 tonnage 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 Statelevel 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 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 industrial 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 derived from data reported on Forms EIA-3 and EIA-6. Beginning 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 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 manufacturing plants (Form EIA-3) or reported shipments to the other industrial sector (Form EIA-6), thereby ensuring that agriculture, forestry, fishing, mining, and construction consumption 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-

Mines. 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 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 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 quarterly stock data are not available for the residential and commercial sector after December 1979.

Quarterly stocks at producers and distributors are taken

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, consumption, 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.

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)

and Stocks and Producers and Distributors Stocks);

 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— 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."

• 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."

• 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 no longer collected).

Producers and Distributors Stocks—January 1980 forward: EIA, Form EIA-6, "Coal Distribution Report."

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

During May 1985, electric utilities generated 196.6 billion kilowatthours of electricity, 2.3 percent above the May 1984 generation level. Coal-fired generation totaled 111.4 billion kilowatthours, 11.2 percent above the May 1984 level. Nuclear generation totaled 28.7 billion kilowatthours, 10.9 percent above the May 1984 level. Hydroelectric generation was 26.4 billion kilowatthours in May 1985, 17.0 percent below the May 1984 level. Natural gasfired generation was 22.5 billion kilowatthours, 11.2 percent below the level 1 year earlier. Petroleum-fired generation totaled 6.9 billion kilowatthours, 18.6 percent below the May 1984 level.

Sales of electricity to all ultimate consumers in the United States in May 1985 were 177.6 billion kilowatthours, 1.5 percent above May 1984 sales. Industrial consumers purchased 70.1 billion kilowatthours in May 1985, 0.9 percent less than the May 1984 figure. Sales to residential consumers during May 1985 were 52.8 billion kilowatthours, 1.3 percent below the level of sales during the same

month in 1984. Commercial sales were 47.7 billion kilowatthours, 8.1 percent more than the amount sold to commercial consumers in May 1984. In May 1985, other sales totaled 6.9 billion kilowatthours, 5.2 percent above the May 1984 level.

Electric utility petroleum consumption (excluding petroleum coke) during May 1985 was 12.0 million barrels, 16.3 percent below the May 1984 level. Coal consumption during May 1985 was 54.5 million short tons, 10.1 percent above the May 1984 rate. During May 1985, electric utilities consumed 235.6 billion cubic feet of natural gas, 10.9 percent below the May 1984 consumption level.

On May 31, 1985, utility stocks of anthracite, bituminous coal, and lignite totaled 174.2 million short tons. These stockpiles were 0.6 percent above the level of May 31, 1984. Petroleum stocks (excluding petroleum coke) on May 31, 1985, totaled 77.8 million barrels, 12.2 percent below the level on the same date in 1984.

### Part 7

# Electric Utilities

### **Net Electricity Generation by Primary Energy Source**

		Coal	Petroleum <sup>1</sup>	Natural Gas²	Nuclear Electric Power	Hydro- electric Power	Other³	Total
				Mil	lion 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	
1980	Total	1,161,562	245,994	346,240	251,116	276,021	5,506	2,247,372
1981	Total	1,203,203	206,421	345,777	272,674	260,684		2,286,439
1982	Total	1,192,004	146,797	305,260	282,773		6,054	2,294,812
	iotai	1,192,004	•	•	202,773	309,213	5,164	2,241,211
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 August	121,560 129,313	14,710	29,615	25,602	28,113	565 700	220,165
	September	108,868	14,731 11,299	33,147 28,040	26,201 25,007	25,828	738	229,957
	October	101,951	9,941	23,783	25,007 25,797	21,712 20,747	678 . 712	195,604
	November	103,225	9,229	20,169	25,797	24,678	637	182,931 182,949
	December	117,131	16,041	20,567	26,361	31,691	528	212,319
	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	111,158	10,806	19,645	27,345	30,435	719	200,107
	April	97,542	7,450	21,197	24,231	29,970	695	181,084
	May	100,139	8,422	25,304	25,867	31,814	673	192,217
	June	115,426	11,152	28,345	25,299	28,773	654	209,648
	July	121,094	10,397	33,327	28,284	27,495	648	221,245
	August	127,744	12,836	33,292	29,493	25,137	794	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 May	104,706	6,015	22,409	26,458	24,370	783	184,740
	Year to Date	111,384 <b>568,374</b>	6,858	22,465	28,697	26,415	816	196,635
	real to Date	500,374	41,328	106,058	153,193	128,746	4,237	1,001,937

Includes fuel oil No. 2, No. 4, No. 5, No. 6, crude oil, kerosene, and petroleum coke.
Includes supplemental gaseous fuels.
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
			Millio	n 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	73,213	
1980	Total	717,495	488,156	815,067	73,770	2,071,099
1981	Total	722,265	514,338	•	•	2,094,449
1982	Total		•	825,742	84,756	2,147,101
1502	lotai	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 <sup>.</sup>	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	66,709	7,289	206,537
	February	69,818	46,293	67,445	6,690	190,246
	March	63,656	45,252	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
	Year to Date	328,100	239,207	339,824	35,143	942,274

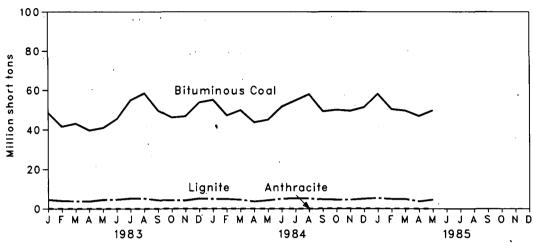
<sup>&</sup>lt;sup>1</sup>Electricity sales to all ultimate consumers.
<sup>2</sup>Includes sales of electricity to Government, railways, street lighting authorities, and sales not included elsewhere.

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

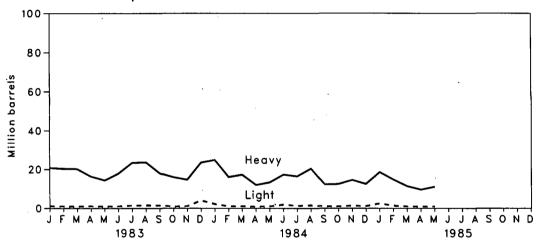
Sources: Energy Information Administration (EIA), • 1973 through February 1980: FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; • March 1980 through December 1982: FERC Form 5, "Electric Utility Company Monthly Statement"; • January 1983 forward: Form EIA 826, "Electric Utility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

### Primary Energy Consumed to Produce Electricity

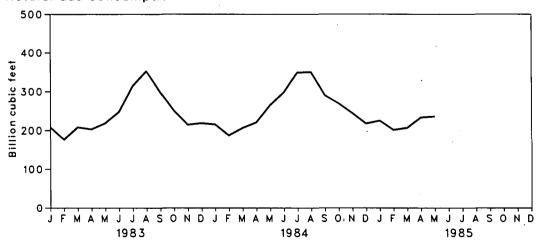
### **Coal Consumption**



### **Petroleum Consumption**



### Natural Gas Consumption



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

		Coal				Petroleum				Natural Gas¹
		Anthracite	Bituminous Coal	Lignite	Total	Heavy²	Light <sup>3</sup>	Total Liquids	Petroleum Coke	
			Thousand sh	ort 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	(4)	<u>(·)</u>	536,274	625	3,443,428
1975	Total	1,480	388,523	15,960	405,962	(4)	(4)	506,128	70	3,157,669
1976	Total	1,350	425,205	21,817	448,371	(4)	(4)	555,920	68	3,080,868
1977	Total	1,425	451,051	24,650	477,126	(4)	(4)	623,705	98	3,191,200
1978	Total	1,064	448,763	31,407	481,235	(4)	(1)	635,839	398	
1979	Total	1,046	488,129	37,876	527,051	(1)		•		3,188,363
1980	Total	951	526,680	41.642	569,274	391.163	(¹)	523,297	268	3,490,523
1981	Total	1,221	550,784	44,792	•	,	29,051	420,214	179	3,681,595
1982	Total	1,075	543,346	49,245	596,797	329,798	21,313	351,111	139	3,640,154
	I Otal	•	343,340	49,245	593,666	234,434	15,337	249,771	149	3,225,518
1983	January	73	48,695	4,583	53,351	20,728	1,110	21,838	17	208,341
	February	73	41,668	4,032	45,772	20,305	984	21,289	19	176,965
	March	75	43,165	3,870	47,110	20,174	945	21,119	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 October	86 91	49,745	4,381	54,212	18,021	1,507	19,529	25	298,517
	November	91 86	46,263 46,883	4,335 4,216	50,689	15,993	870	16,863	22	251,151
	December	88	53,854	5,176	51,185 59,117	14,690 23,440	1,075 4.034	15,766	17	214,275
	Total	1,036	570,108	54,067	625,211	•	•	27,474	21	218,191
	Total	•	370,100	54,067	023,211	228,984	16,512	245,497	261	2,910,767
1984	January	98	55,142	4,985	60,225	24,745	2,176	26,921	24	215,027
	February	75	47,279	4,904	52,257	16,091	1,018	17,108	21	187,259
	March	69	49,921	4,543	54,534	17,274	1,016	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 July	102 100	51,757	5,112	56,971	17,363	1,927	19,289	23	297,560
	August	97	54,928 58,026	5,331 5,373	60,359	16,453	1,259	17,712	22	348,848
	September	81	49,288	5,273 4,675	63,396 54,045	20,337	1,522	21,859	20	349,878
	October	83	50,091	4,673	54,753	12,235 12,450	996 965	13,231	21	290,595
	November	91	49,595	4,543	54,733	14,543	1,326	13,415 15,870	19	269,629
	December	93	51,418	5,050	56,560	12,499	1,146	13,645	17 20	244,637
	Total	1,070	606,339	56,990	664,399	189,289	' <del>-</del> '			217,210
4000		•	·	•	•	•	15,190	204,479	252	3,112,342
1985	January	88	58,139	5,402	63,629	18,574	2,478	21,052	18	224,873
	February	70 70	50,453	4,940	55,463	14,729	1,315	16,044	17	201,160
	March April	78 92	49,699	4,913	54,690	11,323	970	12,294	16	206,247
	May	92 98	47,024 49,818	3,738	50,854	9,561	905	10,466	16	233,201
	Year to Date	96 <b>427</b>		4,607	54,523	11,046	959	12,004	13	235,626
	real to Date	741	255,133	23,600	279,160	65,233	6,626	71,859	80	1,101,107

Includes supplemental gaseous fuels.

2Heavy oil includes Grade Nos. 4, 5, and 6, and residual fuel oils.

3Light oil includes Grade No. 2 heating oil, kerosene, and jet fuel.

4Prior 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.

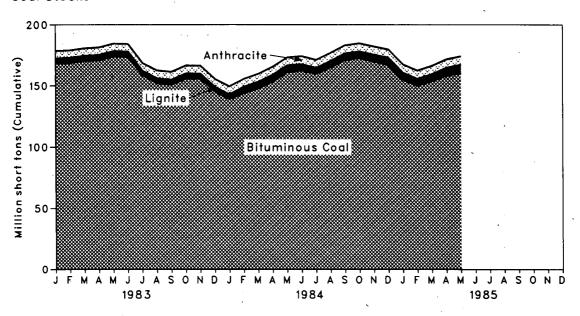
Notes: • Geographic coverage is the 50 States and the District of Columbia.

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

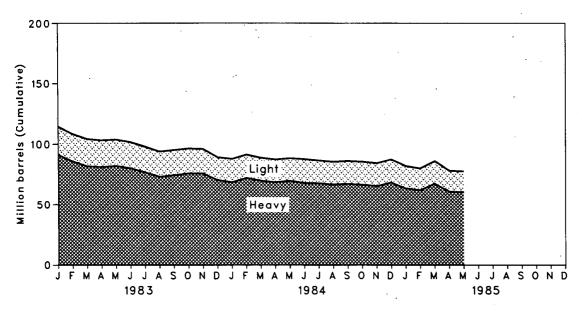
Sources: • 1973 through September 1977: Federal Power Commission, Form 4, "Monthly Power Plant Report"; • October 1977 through 1981: Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report"; • 1982 forward: Energy Information Administration Form 759, "Monthly Power Plant Report."

### Coal and Petroleum Stocks at End of Period

### **Coal Stocks**



### Petroleum Stocks



### Coal and Petroleum Stocks at End of Period

Coal

		<u> </u>		ai 		Petroleum			
		Anthracite	Bituminous Coal	Lignite	Total	Heavy <sup>,</sup>	Light <sup>2</sup>	Total Liquids	Petroleum Coke
			Thousand sh	ort tons		Th	ousand barre	Is	Thousand short tons
1973	Year	1,066	84,941	961	86,967	(3)	(3)	89,216	
1974	Year	930	81,712	867	83,509		(3)	•	312
1975	Year	982	107,927	1,815	110,724	(³)	(3)	112,917	35
1976	Year	1,000	114,130	2,306		(³)	(3)	125,257	31
1977	Year	•	•	•	117,436	(³)	(³)	121,696	32
1978	Year	2,321	128,210	2,688	133,219	(a)	. (3)	144,031	44
1978		2,178	123,020	3,027	128,225	(3)	(3)	118,788	198
1980	Year	3,274	152,981	3,459	159,714	(3)	(2)	131,422	183
	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	150,778	4,171	161,384	74,560	20,696	95,256	47
	October	6,506	156,012	4,056	166,574	75,949	20,568	96,517	53
	November December	6,531	155,931	3,995	166,457	75,930	20,271	96,201	63
	December	6,507	145,250	3,841	155,598	70,573	18,801	89,375	55
1984	January	6,500	139,026	3,877	149,403	68,679	19,369	88,048	43
	February	6,510	143,731	5,352	155,593	72,339	19,227	91,566	41
	March	6,519	147,756	5,500	159,775	69,984	19,058	89,042	45
	April	6,515	153,300	5,777	165,592	68,771	18,849	87,620	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 September	6,583 6,628	164,987	5,358	176,928	66,836	18,795	85,632	47
	October	6,626 6.674	170,987 172,553	5,536	183,151	67,370	18,921	86,291	49
	November	6,715	169,788	5,552 5,627	184,779 182,130	66,717	18,965	85,682	49
	December	6,710	167,118	5,827 5,899	179,727	65,548 68,503	18,875 19,116	84,423 87,619	43 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	57 50
	March	6,782	153,697	5,834	166,313	62,558	18,652	81,209	43
	April	6,836	158,174	6,641	171,651	60,889	17,356	78,245	31
	Мау	6,905	160,326	6,967	174,198	60,530	17,226	77,756	33

Petroleum

<sup>&</sup>lt;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	Total Liquids	Steam Plants	GT/IC <sup>1</sup>	Total Liquids	
			74.4 · 2	Thousa	nd barrels	. 4		
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	
1977	Total	574,869	48,837	623,705	124,750	19,281	144,031	
1978	Total	588,319	47,520	635,839	102,402	16,386	118,788	
1979	Total	492,606	30,691	523,297				
1980	Total	401,863	18,351	•	111,121	20,301	131,422	
		•		420,214	117,227	18,147	135,374	
1981	Total	339,680	11,431	351,111	112,380	15,756	128,136	
1982	Total	243,537	6,234	249,771	105,287	13,597	118,884	
. 1983	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				
1984	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	
	May	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	13,247	398	13,645	76,836	10,784	87,619	
	Total	197,050	7,429	204,479	ė.			
1985	January	19,842	1,210	21,052	71,522	10,535 *	82,057	
	February	15,576	467	16,044	70,051	10,094	80,145	
	March	11,957	, 337	12,294	70,364	10,845	81,209	
	April	10,127	338	10,466	68,641	9,604	78,245	
	May	11,601	403	12,004	68,249	9,507	77,756	
	Year to Date	69,103	2,756	71,859				

<sup>&#</sup>x27;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 May 1985, U.S. nuclear power plants generated a total of 28.7 billion net kilowatthours of electricity, at an average capacity factor of 52.9 percent. This generation represents an increase of 10.9 percent compared with May 1984 generation. Nuclear power supplied 14.6 percent of the electricity distributed in May 1985, compared with 13.5 percent in May of the previous year.

There were 89 operable U.S. nuclear power reactors as of May 31, 1985, with a collective net generating capacity of 72.9 million kilowatts. Of the 89 operable reactors, 5 units were in power ascension (Byron-1, Callaway-1, Catawba-1, Grand Gulf-1, and Waterford-3) and 29 units generated no electricity or operated substantially below capacity in May (Arkansas Nuclear-2, Arnold, Browns Ferry-1,

Browns Ferry-2, Browns Ferry-3, Brunswick-1, Calvert Cliffs-1, Cook-1, Cooper, Crystal River-3, Farley-1, Fitzpatrick, Fort St. Vrain, Hatch-2, LaSalle-2, McGuire-1, Millstone-2, Peach Bottom-2, Point Beach-1, Quad Cities-2, Rancho Seco, Sequoyah-1, Surry-1, Susquehanna-1, Three Mile Island-1, Trojan, Turkey Point-3, WNP-2, and Zion-1). Five units had licenses from the Nuclear Regulatory Commission authorizing fuel-loading and low-power testing (Fermi-2, Diablo Canyon-2, Limerick-1, Palo Verde-1, and Wolf Creek), and one unit (Shoreham) was authorized to load fuel and conduct cold criticality testing.

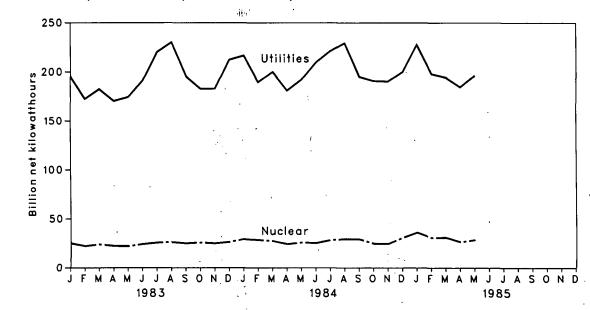
As of May 31, 1985, there were 132 domestic nuclear power plants in all stages of planning, construction, or operation, with an aggregate design capacity of 123 million net kilowatts.

# Part 8 N

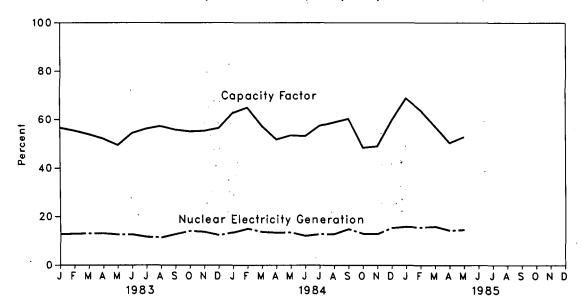
### Nuclear

### **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		
1978	Year	70	276,403		46.046	64.1
1979	Year	68		12.5	49.629	65.7
1980	Year		255,155	11.4	49.326	58.7
		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	12.9	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
	July	79	25,602	11.6	61.230	56.2
	August	79	26,201	11.4	61.440	57.3
	September	80	25,007	12.8	62.227	55.8
	October November	80	25,797	14.1	62.876	55.1
	December	80 80	25,010	13.7	62.809	55.3
`	Year	80 80	26,361 <b>293,677</b>	12.4 <b>12.7</b>	62.809	56.5
				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 June	. 82	25,867	13.5	64.986	53.5
	July	83 83	25,299	12.1	66.091	53.2
	August	84	28,284	12.8	66.091	57.5
	September	84	29,493 29,146	12.9	67.341	58.9
	October	85	24,774	14.9 13.0	67.066	60.4
	November	86	24,575	12.9	68.497 69.534	48.5
	December	86	30,872	15.4	69.522	49.1 59.7
	Year	86	327,634	13.6	<b>69.522</b>	56.5
1985	lanuan:				•	
1500	January Eebruary	87	36,186	15.9	70.667	68.8
	February March	· 88	30,809	15.6	71.841	63.8
	April	. 89	31,041	15.9	72.931	57.2
	May	89	26,458 28,697	14.3	72.911	50.4
		03	20,097	14.6	†72.920	†52.9

¹Monthly data are the status as of the last day of the month. Yearly data are the status as of December 31 of each year.

²See Note 1 on the last page of this section for the definition.

³When 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.

⁴For an explanation of the method of calculating the capacity factor, see Note 4 on the last page of this section.

†Preliminary 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 Peration	Constr Pern					Total
		Operable <sup>2</sup>	In Startup <sup>3</sup>	Granted	Pending	On Order	Announced	Total	Design Capacity <sup>4</sup>
							•		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	、 <b>73</b>	. 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	Ŏ	. 169	163
1981	Year	74	0 .	.75	11	3	o o	163	157
1982	Year	77	2	60	3	2	Ŏ.,	144	135
1983	January	77	2	60	3	2	0	144	135
	February	77	2	60	3	. 2	Ö	144	135
	March	77	3	59	3,	. 2	Ο ,	. 144	135
	April	77	4 .	57	.3	2	0 '	143	134
•	May	78	3	57	`3	2	0	143	134
	June	79	2	. 57	.3	2	0	143	. 134
	July	79	2	57 	3	2	: 0	143	134
	August	79 20	2	57 57	3	2	· 0·	143	134
	September October	80 · 80	1	57 56	3	. 2	0	143'	.134
1	November	80	1.1	56	2 0	2	0	141	133
	December	80	3	53	0 .	, <b>2</b> , <b>2</b> ,	0	139	131
1984		•	•					138	129
1904	January February	80 80	3 3	51 51	0	2	0	136	128
	March	81	3	51 50	0	2	0	136	128
	April	82	3	49	0	2	0	136 136	128
	May	82	. 3	49	Ö	2	0	136	128 128
• .	June	83	3	48	ŏ	2	0	136	128
	July	. 83	3	48	ŏ	5 .	ŏ	136	128
	August	84	2	44	Ö	2'	ŏ	132	123
	September	84	2	44	0 '	2	Ö	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 May	89	6	35	0	2	0	132	123
	May	89	6	35	0	2	0 ·	132	123

<sup>&</sup>lt;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>2</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 officially 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. A sister unit, Three Mile Island-1 (net capacity of 819 MWe), continues to be listed as "Operable" because it could, in theory, return to service once the restraining order imposed by the NRC is lifted.
- 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 a. 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

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 Commission Report NUREG-0020, "Licensed Operating Reac-

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

Reactor Construction and Planning Data: • 1973 through

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.

• July 1982 forward—Nuclear Regulatory Commission Report NUREG-0871, "Summary Information Report," Nuclear Regulatory Commission Report NUREG-0020, "Licensed Operating Reactors," and various trade journals.

Total Design Capacity: Nuclear Regulatory Commission

Total Design Capacity: Nuclear Regulatory Commission report NUREG-0020, "Licensed Operating Reactors" and Nuclear Regulatory Commission Report NUREG-0871, "Summary Information Report."

### **Price**

### Crude Oil

The average price of domestic crude oil purchased at the wellhead was \$24.17 per barrel in May 1985. This was slightly above the previous month's level but 7.0 percent below the level in May 1984.

During May 1985, the composite refiner acquisition cost of crude oil was \$27.11 per barrel, 0.3 percent above the previous month's average of \$27.04. The cost of imported crude oil increased \$0.01 per barrel from the April 1985 level to \$27.62 per barrel in May, 5.6 percent below the May 1984 average. The cost of domestic crude oil in May 1985 was \$26.90, an increase of \$0.11 from the April 1985 average.

### **Motor Gasoline**

The national city average retail price of leaded regular gasoline at all types of stations was \$1.15 per gallon in June 1985, while the price of unleaded regular gasoline was \$1.24 per gallon, and the price of unleaded premium gasoline averaged \$1.37 per gallon. The price of each of these three types of gasoline was 0.8 percent higher than the price for that type in the previous month. During the first half of 1985, the average prices of leaded regular, unleaded regular, and unleaded premium gasolines were 3.5 percent, 2.9 percent, and 3.0 percent, respectively, lower than the comparable prices in the first half of 1984.

### **Residual Fuel Oil**

The average price, excluding taxes, of residual fuel oil sold to end users (utilities, industry, and other ultimate consumers) in May 1985 was \$0.60 per gallon, 7.2 percent below the previous month's price and 14.4 percent below the May 1984 average. The average price, excluding taxes, of residual fuel oil sold to other-than-ultimate consumers for resale in May 1985 was \$0.55 per gallon, 8.8 percent below the April 1985 average and 16.8 percent below the May 1984 average.

### **Aviation Fuel**

The average price, excluding taxes, of aviation gasoline sold to end users in May 1985

was \$1.22 per gallon, 0.6 percent above the price in the previous month but 1.6 percent below the price in May 1984. The average price, excluding taxes, of kerosene-type jet fuel sold to end users in May 1985 was \$0.80 per gallon, down 0.7 percent from the previous month's price and down 6.7 percent from the price 1 year earlier.

### No. 2 Distillate Fuel Oil

The national average price of heating oil sold to residential customers in May 1985 was \$1.03 per gallon. This was 1.8 percent below the price in April 1985 and 4.9 percent below the May 1984 price. The average price for resale was \$0.77 per gallon in May 1985, 8.1 percent below the price in May 1984.

### **Natural Gas**

In April 1985, the average wellhead price of marketed natural gas production was \$2.67 per thousand cubic feet, \$0.01 lower than in March 1985 but \$0.08 (3.1 percent) above the April 1984 price. The average price of natural gas delivered to electric utility plants was \$3.76 per thousand cubic feet in April 1985, \$0.03 lower than the March 1985 price but \$0.19 (5.3 percent) above the April 1984 price. The average price of natural gas used by residential consumers in May 1985 was \$6.49 per thousand cubic feet, \$0.23 (3.7 percent) more than the May 1984 price.

### **Electricity**

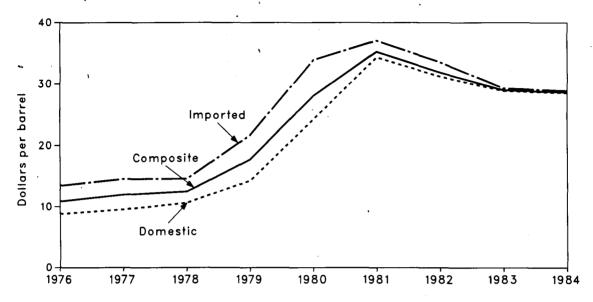
The average retail price of electricity sold by selected privately owned utilities to residential consumers in May 1985 was 7.98 cents per kilowatthour, an increase of 3.2 percent from the April 1985 price and 5.1 percent above the May 1984 price. The average price of electricity sold to commercial consumers was 7.55 cents per kilowatthour in May 1985, a 1.5-percent increase from the previous month's price and up 3.4 percent from the May 1984 price. The average electricity price to industrial users during May 1985 was 5.08 cents per kilowatthour, a decrease of 0.2 percent from the previous month's price but 3.3 percent more than during May 1984.

## Part 9

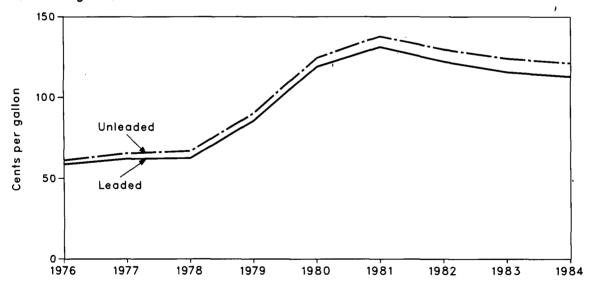
### Price

Price
Selected Petroleum Series

### Refiner Aquisition Cost of Crude Oil



### Regular Motor Gasoline Prices (Including Tax)



**Price** 

### **Crude Oil Price Summary**

		Actual Domestic Average	Average FOB Cost of Crude	Average Landed Cost of Crude	Refiner Acquisition Cost of Crude Oil			
		Wellhead Price	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	
	February	26.41	27.79	29.08	29.16	30.76	29.49	
	March	26.08	26.88	27.84	28.69	28.43	28.64	
	April	25.85 26.08	27.18	28.24	28.45	27.95	28.33	
	May	25.98	27.36	28.55 29.00	28.68	28.53	28.64	
	June July	25.86 25.86	27.71 27.84	29.00 28.99	28.67 28.74	29.23 28.76	28.85	
	August	26.03	27.89	29.22	28.58	29.50	28.75 28.88	
	September	26.08	27.88	29.22 29.24	28.69	29.54	28.88	
	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 26.05	27.78	28.89	28.76	28.91	28.81	
	March	20.03	27.70	28.69	28.75	28.95	28.81	
	April	25.93 26.00	27.84	28.91 28.94	28.63	29.11	28.77	
•	May June	26.00 26.09	27.87 27.78	28.94 28.89	28.65	29.26 29.19	28.83	
	July	26.09	27.78 27.19	28.32	28.58 28.70	29.19 29.00	28.77 28.79	
	August	26.02	27.19 27.29	28.20	28.59	29.00 28.92	28.79 28.69	
	September	25.97	27.2 <del>9</del> 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	R26.32	R27.14	26.61	27.23	26.77	
	April	24.15	R†26.61	R†27.48	26.79	27.61	27.04	
	May	†24.17	†26.33	†27.17	26.90	27.62	27.11	

¹See Note 1 in the Notes and Sources for this section.
²See Note 2 in the Notes and Sources for this section.
³See Note 3 in the Notes and Sources for this section.
⁴See Note 4 in the Notes and Sources for this section.

†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.

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

		Algeria	Indonesia	Iran	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela
,					Dollars (	per barrel			
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	12.70	13.82	12.45
1979	Average	20.65	19.35	23.71	20.29	21.80	17.63	21.20	17.37
1980	Average	36.57	32.37	(²)	31.11	35.82	28.53	34.58	24.78
1981	•	39.09	35.93	(²) (²)	33.13	38.53	32.48	36.08	28.86
	Average								
1982	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
	Мау	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 28.03	25.15 25.10	29.92 29.59	27.83 27.73	29.88 30.33	21.56
	September	30.33	29.77	28.03	25.10 25.72	29.59 30.23	28.24	30.33 29.73	21.81 23.58
	October	29.98	29.81	26.29 W	25.72 25.76	30.23 29.99	28.22	29.73 29.42	23.17
	November	29.75	30.34	28.30	26.20	29.60	20.22 27.18	29.42 29.05	24.17
	December Average	W 30.06	29.77 <b>29.93</b>	28.25	25.19	29.78	28.03	29.84	21,48
4004	•	27.60	29.89	w	26.22	29.80	27.76	29.29	24.21
1984	January	27.60 28.56	29.09 29.09	W	26.04	29.98	26.72	29.70	23.55
	February March	28.69	29.09 W	NA 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 W	29.67	24.23
	July	27.43	29.21	W	26.62	29.22	ŵ	28.91	24.37
	August	26.97	W .	w	26.71	29.02	ŵ	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	R26.50	27.01	W	26.31	28.20	NA	W	24.93
	April†	R27.47	27.50	w.	26.33	R27.95	NA	R28.09	24.49
	May†	W	27.49	W	26.26	27.77	NA	27.53	24.52
	÷ *								

<sup>&</sup>lt;sup>1</sup>The Free on Board (FOB) cost excludes all costs related to insurance and transportation. See Note 2 in the Notes and Sources for this

<sup>\*</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.

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

1976   Average   13.81   13.57   13.82   12.82   NA   13.80   13.04   NA   11.81   1977   Average   15.20   14.21   14.63   13.80   13.75   15.25   13.61   NA   13.11   1978   Average   14.91   14.50   14.64   13.88   13.54   14.86   13.92   NA   12.8   1979   Average   21.90   20.43   20.69   25.02   20.86   22.96   19.15   22.16   18.1   1980   Average   37.90   30.47   33.92   (*)   31.80   37.05   30.02   35.88   25.8   1981   Average   40.49   32.16   37.57   (*)   33.78   39.70   34.19   37.24   22.86   1981   Average   35.28   26.92   36.75   32.40   28.64   36.17   35.00   34.28   24.8   1983   January   33.20   27.62   36.12   W   27.50   W   W   33.48   23.2   February   32.17   26.19   35.07   W   26.15   32.24   W   33.33   23.33   23.3   23.3   23.3   23.3   23.4   24.88   31.14   W   24.65   30.63   W   30.48   24.32   June   30.88   24.88   31.40   29.10   24.81   30.56   W   30.00   21.2   July   31.36   25.45   31.46   30.06   25.34   30.91   29.53   30.86   23.4   31.85   25.45   31.46   29.57   25.80   31.21   29.39   30.83   22.8   September   31.78   25.71   31.27   29.31   25.66   30.70   29.53   31.99   23.1   October   30.97   26.01   31.14   29.73   26.44   31.16   29.98   30.37   24.7   November   30.96   25.83   31.30   W   26.29   31.02   29.88   30.33   24.6   December   30.23   26.69   31.12   28.57   26.88   30.57   28.83   30.07   22.5   Average   31.26   25.63   31.57   29.81   25.78   30.84   29.96   30.97   24.7   November   30.96   25.83   31.57   29.81   25.78   30.84   29.97   30.98   24.7   April   29.81   26.01   31.14   29.73   26.40   31.16   29.99   30.20   29.88   30.37   24.5   April   29.81   26.01   31.12   28.57   26.88   30.57   28.83   30.07   29.53   30.98   24.7   April   29.81   26.01   30.81   NA   26.92   30.93   30.20   30.98   24.7   April   29.81   26.01   30.81   NA   26.92   30.93   30.20   30.98   24.7   April   29.81   26.60   31.21   NA   27.24   31.05   29.90   30.43   25.2   April   29.81   26.03   30.05   W   26.89   30.07   29.53   30.96   29.			Algeria	Canada	Indonesia	Iran	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela
1976   Average   13.81   13.57   13.82   12.82   NA   13.80   13.04   NA   11.81   1977   Average   15.20   14.21   14.63   13.80   13.75   15.25   13.61   NA   13.11   1978   Average   14.91   14.50   14.64   13.88   13.54   14.86   13.92   NA   12.8   1979   Average   21.90   20.43   20.69   25.02   20.86   22.96   19.15   22.16   18.1   1980   Average   37.90   30.47   33.92   (*)   31.80   37.05   30.02   35.88   25.8   1981   Average   40.49   32.16   37.57   (*)   33.78   39.70   34.19   37.24   22.86   1981   Average   35.28   26.92   36.75   32.40   28.64   36.17   35.00   34.28   24.8   1983   January   33.20   27.62   36.12   W   27.50   W   W   33.48   23.2   February   32.17   26.19   35.07   W   26.15   32.24   W   33.33   23.33   23.3   23.3   23.3   23.3   23.4   24.88   31.14   W   24.65   30.63   W   30.48   24.32   June   30.88   24.88   31.40   29.10   24.81   30.56   W   30.00   21.2   July   31.36   25.45   31.46   30.06   25.34   30.91   29.53   30.86   23.4   31.85   25.45   31.46   29.57   25.80   31.21   29.39   30.83   22.8   September   31.78   25.71   31.27   29.31   25.66   30.70   29.53   31.99   23.1   October   30.97   26.01   31.14   29.73   26.44   31.16   29.98   30.37   24.7   November   30.96   25.83   31.30   W   26.29   31.02   29.88   30.33   24.6   December   30.23   26.69   31.12   28.57   26.88   30.57   28.83   30.07   22.5   Average   31.26   25.63   31.57   29.81   25.78   30.84   29.96   30.97   24.7   November   30.96   25.83   31.57   29.81   25.78   30.84   29.97   30.98   24.7   April   29.81   26.01   31.14   29.73   26.40   31.16   29.99   30.20   29.88   30.37   24.5   April   29.81   26.01   31.12   28.57   26.88   30.57   28.83   30.07   29.53   30.98   24.7   April   29.81   26.01   30.81   NA   26.92   30.93   30.20   30.98   24.7   April   29.81   26.01   30.81   NA   26.92   30.93   30.20   30.98   24.7   April   29.81   26.60   31.21   NA   27.24   31.05   29.90   30.43   25.2   April   29.81   26.03   30.05   W   26.89   30.07   29.53   30.96   29.							ollars per ba	rrel			
1977 Average 15.20 14.21 14.63 13.80 13.75 15.25 13.61 NA 13.1 1978 Average 14.91 14.50 14.64 13.86 13.92 NA 12.6 1979 Average 21.90 20.43 20.69 25.02 20.86 22.96 19.15 22.16 18.1 1980 Average 37.90 30.47 33.92 (°) 31.80 37.05 30.02 35.88 25.8 1981 Average 40.49 32.16 37.57 (°) 33.78 39.70 34.19 37.24 29.8 1982 Average 35.28 26.92 36.75 32.40 28.64 36.17 35.00 34.28 24.8 1983 January 33.20 27.62 36.12 W 27.50 W W 33.48 23.2 February 32.17 26.19 35.07 W 26.15 32.24 W 33.33 23.3 March 31.24 24.78 31.17 W 25.06 30.49 31.63 29.92 21.4 April 30.55 24.35 31.14 W 24.65 30.63 W 30.64 21.4 May 30.48 24.82 30.82 W 25.17 30.75 W 30.60 21.2 June 30.88 24.88 31.40 29.10 24.81 30.56 W 30.02 22.0 July 31.36 25.45 31.46 30.06 25.34 30.91 29.53 30.86 21.3 August 31.85 25.45 31.66 29.57 25.80 31.21 29.39 30.83 22.8 September 31.78 25.71 31.27 29.31 25.66 30.70 29.53 31.39 23.1 October 30.97 26.01 31.14 29.73 26.44 31.16 29.98 30.79 24.7 November 30.96 25.83 31.30 W 26.29 31.02 29.88 30.39 24.7 November 30.96 25.83 31.30 W 26.29 31.02 29.88 30.39 24.7 November 30.96 25.83 31.30 W 26.29 31.02 29.88 30.39 24.7 November 30.96 25.83 31.30 W 26.29 31.02 29.88 30.79 24.7 November 30.96 25.83 31.30 W 26.29 31.02 29.88 30.79 24.7 November 29.73 26.40 30.91 W 26.73 31.29 28.38 30.77 25.2 November 29.73 26.40 30.91 W 26.73 31.29 28.38 30.77 25.2 November 29.73 26.40 30.91 W 26.73 31.29 28.38 30.77 25.2 November 29.73 26.40 30.91 W 26.73 31.29 28.38 30.77 25.2 November 29.96 27.12 30.80 W 26.99 30.99 W 29.99 30.73 24.9 November 29.96 27.12 30.80 W 26.99 30.99 W 29.99 30.73 24.9 November 29.96 27.12 30.80 W 26.99 30.99 W 29.99 30.75 24.9 July 28.63 27.16 30.26 W 26.99 30.07 W 29.54 25.2 November 27.94 27.03 30.08 W 26.99 30.99 W 26.99 30.75 24.9 July 28.63 27.16 30.26 W 26.98 30.07 W 29.54 25.2 November 27.94 27.03 30.05 W 26.86 29.97 30.07 29.50 25.50 20.50 29.50	1975	Average	12.72	12.72	13.79	12.21	NA	12.62	12.30	NA	11.65
1977   Average   15.20   14.21   14.63   13.80   13.75   15.25   13.61   NA   13.1978   Average   14.91   14.50   14.64   13.88   13.54   14.86   13.92   NA   12.81979   Average   21.90   20.43   20.69   25.02   20.86   22.96   19.15   22.16   18.1980   22.96   22.96   19.15   22.16   18.1980   Average   40.49   32.16   37.57   (*)   33.78   39.70   34.19   37.24   25.81982   Average   35.28   26.92   36.75   32.40   28.64   36.17   35.00   34.28   24.88   25.88   25.88   25.88   25.88   25.88   25.88   25.89	1976	Average	13.81	13.57	13.82	12.82	NA	13.80	13.04	NA	11.80
1978   Average   14.91   14.50   14.64   13.88   13.54   14.86   13.92   NA   12.88   1979   Average   21.90   20.43   20.69   25.02   20.86   22.96   19.15   22.16   18.1   1980   Average   37.90   30.47   33.92   (?)   31.80   37.05   30.02   35.88   25.8   1981   Average   40.49   32.16   37.57   (?)   33.78   39.70   34.19   37.24   29.8   1982   Average   35.28   26.92   36.75   32.40   28.64   36.17   35.00   34.28   24.8	1977	Average	15.20	14.21	14.63	13.80	13.75	15.25		NA	13.13
1979   Average   21.90   20.43   20.69   25.02   20.86   22.96   19.15   22.16   18.1     1980   Average   37.90   30.47   33.92   (*)   31.80   37.05   30.02   35.88   25.8     1981   Average   35.28   26.92   36.75   32.40   28.64   36.17   35.00   34.28   24.8     1982   Average   35.28   26.92   36.75   32.40   28.64   36.17   35.00   34.28   24.8     1983   January   33.20   27.62   36.12   W   27.50   W   W   33.48   23.2     February   32.17   26.19   35.07   W   25.05   30.49   31.63   29.92   21.4     April   30.55   24.35   31.14   W   24.65   30.63   W   30.84   21.4     April   30.55   24.35   31.14   W   24.65   30.63   W   30.84   21.4     May   30.48   24.32   30.82   W   25.17   30.75   W   30.60   21.2     June   30.88   24.88   31.40   29.10   24.81   30.56   W   30.02   22.0     July   31.36   25.45   31.65   29.57   25.80   30.91   29.53   30.86   21.3     August   31.85   25.45   31.65   29.57   25.80   30.70   29.53   30.89   23.1     October   30.97   26.01   31.14   29.73   26.44   31.16   29.98   30.79   24.7     November   30.96   25.83   31.30   W   26.29   31.02   29.88   30.33   24.6     December   30.23   26.69   31.12   28.57   26.88   30.57   28.83   30.00   24.9     Average   31.26   25.63   31.12   28.57   26.88   30.57   28.83   30.00   24.9     April   29.81   26.10   30.81   NA   26.92   30.98   28.75   30.87   22.5     March   30.31   26.01   30.81   NA   26.92   30.98   28.95   30.73   24.6     April   29.81   26.10   30.81   NA   26.92   30.96   28.95   30.73   24.6     April   29.81   26.10   30.26   W   26.86   30.07   W   29.54   25.2     August   28.63   27.16   30.26   W   26.86   30.07   W   29.54   25.2     August   28.63   27.16   30.26   W   26.86   30.07   W   29.54   25.2     August   28.63   27.16   30.26   W   26.86   30.07   W   29.54   25.2     August   28.63   27.16   30.26   W   26.86   30.07   W   29.54   25.2     August   28.63   27.16   30.26   W   26.86   30.07   W   29.54   25.2     August   28.63   27.16   30.26   W   26.86   30.60   29.75   28.81	1978	•					-				12.83
1980   Average   37.90   30.47   33.92   (*)   31.80   37.05   30.02   35.88   25.8   1981   Average   40.49   32.16   37.57   (*)   33.78   39.70   34.19   37.24   29.8   1982   Average   35.28   26.92   36.75   32.40   28.64   36.17   35.00   34.28   24.8   24.8   24.8   24.8   24.8   24.8   36.17   35.00   34.28   24.8   31.17   W   25.06   30.49   31.63   29.92   21.4   24.78   30.85   24.35   31.14   W   24.65   30.63   W   30.84   21.4   24.78   30.82   W   25.17   30.75   W   30.60   21.2   24.8   24.8   24.8   24.8   31.40   29.10   24.81   30.56   W   30.02   22.0   24.8   24.9   24.8   31.40   29.10   24.8   30.56   W   30.02   22.0   24.8   24.9   24.8		_									18.18
1981 Average 40.49 32.16 37.57 (°) 33.78 39.70 34.19 37.24 29.8 1982 Average 35.28 26.92 36.75 32.40 28.64 36.17 35.00 34.28 24.8 24.8 31.00 27.62 36.12 W 27.50 W W 33.48 23.2 February 32.17 26.19 35.07 W 26.15 32.24 W 33.33 29.32 April 30.55 24.35 31.17 W 25.06 30.49 31.63 29.92 21.4 April 30.55 24.35 31.14 W 24.65 30.63 W 30.84 21.4 April 30.55 24.35 31.14 W 25.17 30.75 W 30.60 21.2 June 30.88 24.88 31.40 29.10 24.81 30.56 W 30.02 22.0 July 31.36 25.45 31.66 29.57 25.80 31.21 29.39 30.83 22.8 September 31.78 25.71 31.27 29.31 25.66 30.70 29.53 31.39 23.1 October 30.97 26.01 31.14 29.73 26.44 31.16 29.98 30.79 24.7 November 30.96 25.83 31.30 W 26.29 31.02 29.88 30.33 24.6 December 30.23 26.69 31.12 28.57 26.88 30.57 28.83 30.00 24.9 Average 31.26 25.63 31.57 29.81 25.78 30.84 29.76 30.87 22.9 June 29.62 26.00 31.21 28.99 30.30 30.90 24.9 Average 31.26 25.63 31.57 29.81 25.78 30.84 29.76 30.87 22.9 June 29.62 26.00 31.21 28.63 30.90 29.88 30.79 24.7 April 29.19 26.44 31.22 W 26.85 30.84 29.76 30.87 22.9 June 29.62 26.00 31.21 NA 26.92 30.93 30.20 30.98 24.7 April 29.81 26.10 30.81 NA 26.92 30.93 30.20 30.98 24.7 April 29.81 26.10 30.81 NA 26.92 30.93 30.20 30.98 24.7 April 29.81 26.10 30.81 NA 26.92 30.93 30.20 30.98 24.7 April 29.81 26.10 30.80 W 26.99 30.99 W 28.93 24.9 June 29.62 26.00 31.21 NA 27.24 31.05 29.90 30.43 25.2 July 28.63 27.16 30.26 W 26.99 29.99 W 28.93 24.9 September 27.94 27.03 30.05 W 26.68 31.08 29.95 30.73 24.8 November 28.12 26.83 30.03 W 26.89 29.99 W 28.93 24.9 November 28.12 26.83 30.03 W 26.86 29.32 NA 28.57 29.81 25.78 November 28.12 26.83 30.03 W 26.89 29.99 W 28.93 24.5 November 28.12 26.83 30.03 W 26.86 29.32 NA 28.55 25.2 November 27.94 27.03 30.05 W 26.68 29.92 NA 28.55 25.2 November 28.12 26.83 30.03 W 26.78 29.47 28.57 29.27 25.4 November 28.12 26.83 30.03 W 26.78 29.47 28.57 29.27 25.4 November 28.12 26.83 30.03 W 26.78 29.47 28.57 29.27 25.4 November 28.42 26.82 30.11 W 26.80 29.47 28.57 29.27 25.4 November 28.42 26.82 30.11 W 26.80 29.47 28.57 29.27 25.4 November 28.42 26.8		-									25.86
1982         Average         35.28         26.92         36.75         32.40         28.64         36.17         35.00         34.28         24.88           1983         January         33.20         27.62         36.12         W         27.50         W         W         33.48         23.2           February         32.17         26.19         35.07         W         26.15         32.24         W         33.33         23.3           March         31.24         24.78         31.17         W         25.06         30.49         31.63         29.92         21.4           April         30.55         24.35         31.14         W         24.65         30.63         W         30.84         21.4           June         30.88         24.88         31.40         29.10         24.81         30.56         W         30.02         22.0           July         31.36         25.45         31.46         30.06         25.34         30.91         29.53         30.86         21.3           August         31.78         25.71         31.27         29.31         25.66         30.70         29.53         31.39         23.1         25.66         30.70         <											29.87
1983   January   33.20   27.62   36.12   W   27.50   W   W   33.48   23.24		_									24.82
February 32.17 26.19 35.07 W 26.15 32.24 W 33.33 23.3 March 31.24 24.78 31.17 W 25.06 30.49 31.63 29.92 21.4 April 30.55 24.35 31.14 W 24.65 30.63 W 30.84 21.4 May 30.48 24.32 30.82 W 25.17 30.75 W 30.60 21.2 June 30.88 24.88 31.40 29.10 24.81 30.56 W 30.02 22.0 July 31.36 25.45 31.46 30.06 25.34 30.91 29.53 30.86 21.3 August 31.85 25.45 31.66 29.57 25.80 31.21 29.39 30.83 22.8 September 31.78 25.71 31.27 29.31 25.66 30.70 29.53 31.39 23.1 October 30.97 26.01 31.14 29.73 26.44 31.16 29.98 30.79 24.7 November 30.96 25.83 31.30 W 26.29 31.02 29.88 30.33 24.6 December 30.23 26.69 31.12 28.57 26.88 30.57 28.83 30.00 24.9 Average 31.26 25.63 31.57 29.81 25.78 30.84 29.76 30.87 22.9 March 30.31 26.01 30.81 NA 26.92 30.93 30.20 30.98 24.7 April 29.81 26.10 31.02 W 26.85 30.93 30.20 30.98 24.7 April 29.81 26.10 31.02 W 26.88 31.08 29.95 30.73 24.8 May 29.96 27.12 30.80 W 26.99 30.90 29.99 W 28.93 June 29.62 26.00 31.21 NA 26.92 30.99 30.20 30.98 24.7 April 29.81 26.10 31.02 W 26.68 31.08 29.95 30.73 24.8 May 29.96 27.12 30.80 W 26.99 30.90 29.99 W 28.93 24.9 June 29.62 26.00 31.21 NA 27.24 31.05 29.90 30.43 25.2 July 28.63 27.16 30.26 W 26.99 30.90 W 26.99 29.99 W 28.93 24.9 September 27.94 27.03 30.05 W 26.69 30.00 29.75 28.81 25.76 November 28.12 26.33 30.03 W 26.78 29.45 NA 28.39 25.3 November 28.12 26.33 30.03 W 26.78 29.45 NA 28.39 25.3 November 28.12 26.33 30.03 W 26.78 29.45 NA 28.39 25.3 November 28.12 26.33 30.03 W 26.78 29.45 NA 28.35 25.2 Average 29.08 26.59 30.64 28.67 26.87 30.50 29	1083	-						w			23.20
March         31.24         24.78         31.17         W         25.06         30.49         31.63         29.92         21.4           April         30.55         24.35         31.14         W         24.65         30.63         W         30.84         21.4           May         30.48         24.32         30.82         W         25.17         30.75         W         30.60         21.2           June         30.88         24.88         31.40         29.10         24.81         30.56         W         30.02         22.0           July         31.36         25.45         31.66         30.06         25.34         30.91         29.53         30.86         21.3           August         31.85         25.45         31.65         29.57         25.80         31.21         29.39         30.83         22.8           September         30.97         26.01         31.14         29.73         26.44         31.16         29.98         30.79         24.7           November         30.96         25.83         31.30         W         26.29         31.02         29.88         30.33         24.6           December         30.23         26.69	1303										23.36
April         30.55         24.35         31.14         W         24.65         30.63         W         30.84         21.4           May         30.48         24.32         30.82         W         25.17         30.75         W         30.60         21.2           June         30.88         24.88         31.40         29.10         24.81         30.56         W         30.60         21.3           July         31.36         25.45         31.46         30.06         25.34         30.91         29.53         30.86         21.3           August         31.85         25.45         31.65         29.57         25.80         31.21         29.39         30.83         22.8           September         31.78         25.71         31.27         29.31         25.66         30.70         29.53         31.39         22.8           November         30.96         25.83         31.30         W         26.29         31.02         29.88         30.33         24.6           December         30.23         26.69         31.12         28.57         26.88         30.57         28.83         30.00         24.9           Average         31.26         25.63 <td></td> <td>21.48</td>											21.48
May         30.48         24.32         30.82         W         25.17         30.75         W         30.60         21.2           June         30.88         24.88         31.40         29.10         24.81         30.56         W         30.02         22.0           July         31.36         25.45         31.40         29.10         24.81         30.56         W         30.02         22.0           August         31.36         25.45         31.65         29.57         25.80         31.21         29.39         30.83         22.8           September         31.78         25.71         31.27         29.31         25.66         30.70         29.53         31.39         23.1           October         30.97         26.01         31.14         29.73         26.44         31.16         29.98         30.79         24.7           November         30.96         25.83         31.30         W         26.29         31.02         29.88         30.33         24.6           December         30.23         26.69         31.12         28.57         26.88         30.57         28.83         30.00         24.9           Average         31.26         25											21.45
June         30.88         24.88         31.40         29.10         24.81         30.56         W         30.02         22.0           July         31.36         25.45         31.46         30.06         25.34         30.91         29.53         30.86         21.3           August         31.85         25.45         31.65         29.57         25.80         31.21         29.39         30.83         22.8           September         31.78         25.71         31.27         29.31         25.66         30.70         29.53         31.39         23.1           October         30.97         26.01         31.14         29.73         26.44         31.16         29.98         30.79         24.7           November         30.96         25.83         31.30         W         26.29         31.02         29.88         30.33         24.6           December         30.23         26.69         31.12         28.57         26.88         30.57         28.83         30.00         24.9           Average         31.26         25.63         31.22         W         26.85         30.62         29.67         30.87         22.9           1984         January											21.24
July         31.36         25.45         31.46         30.06         25.34         30.91         29.53         30.86         21.3           August         31.85         25.45         31.65         29.57         25.80         31.21         29.39         30.83         22.8           September         31.78         25.71         31.27         29.31         25.66         30.70         29.53         31.39         23.1           October         30.97         26.01         31.14         29.73         26.44         31.16         29.98         30.79         24.7           November         30.96         25.83         31.30         W         26.29         31.02         29.88         30.33         24.6           December         30.23         26.69         31.12         28.57         26.88         30.57         28.83         30.00         24.9           Average         31.26         25.63         31.57         29.81         25.78         30.84         29.76         30.87         22.9           1984         January         29.19         26.44         31.22         W         26.85         30.62         29.67         30.09         25.2           February<											22.07
September October         31.78         25.71         31.27         29.31         25.66         30.70         29.53         31.39         23.1           October October         30.97         26.01         31.14         29.73         26.44         31.16         29.98         30.79         24.7           November October         30.96         25.83         31.30         W         26.29         31.02         29.88         30.33         24.6           December October         30.23         26.69         31.12         28.57         26.88         30.57         28.83         30.00         24.9           Average Average         31.26         25.63         31.57         29.81         25.78         30.84         29.76         30.87         22.9           1984 January January         29.19         26.44         31.22         W         26.85         30.62         29.67         30.09         25.2           March Agril Pebruary January Janua				25.45	31.46		25.34	30.91	29.53		21.30
October         30.97         26.01         31.14         29.73         26.44         31.16         29.98         30.79         24.7           November         30.96         25.83         31.30         W         26.29         31.02         29.88         30.33         24.6           December         30.23         26.69         31.12         28.57         26.88         30.57         28.83         30.00         24.9           Average         31.26         25.63         31.57         29.81         25.78         30.84         29.76         30.87         22.9           1984         January         29.19         26.44         31.22         W         26.85         30.62         29.67         30.09         25.2           February         29.73         26.40         30.91         W         26.73         31.29         28.38         30.77         25.2           March         30.31         26.10         31.02         W         26.68         31.08         29.95         30.73         24.8           May         29.96         27.12         30.80         W         26.92         30.93         30.20         30.93         30.73         24.8           J		August	31.85	25.45	31.65	29.57	25.80	31.21	29.39	30.83	22.82
November December         30.96         25.83         31.30         W         26.29         31.02         29.88         30.33         24.66           Average         31.26         25.63         31.57         29.81         25.78         30.84         29.76         30.87         22.9           1984         January         29.19         26.44         31.22         W         26.85         30.62         29.67         30.09         25.2           February         29.73         26.40         30.91         W         26.73         31.29         28.38         30.77         25.2           March         30.31         26.01         30.81         NA         26.92         30.93         30.20         30.98         24.7           April         29.81         26.10         31.02         W         26.68         31.08         29.95         30.73         24.8           May         29.96         27.12         30.80         W         26.92         30.96         28.95         30.73         24.8           June         29.62         26.00         31.21         NA         27.24         31.05         29.90         30.43         25.2           July         28.6		September	31.78	25.71	31.27	29.31	25.66	30.70	29.53	31.39	23.12
December Average         30.23         26.69         31.12         28.57         26.88         30.57         28.83         30.00         24.99           Average         31.26         25.63         31.57         29.81         25.78         30.84         29.76         30.87         22.9           1984         January         29.19         26.44         31.22         W         26.85         30.62         29.67         30.09         25.2           February         29.73         26.40         30.91         W         26.73         31.29         28.38         30.77         25.2           March         30.31         26.01         30.81         NA         26.92         30.93         30.20         30.98         24.7           April         29.81         26.10         31.02         W         26.68         31.08         29.95         30.73         24.8           May         29.96         27.12         30.80         W         26.92         30.96         28.95         30.75         24.9           June         29.62         26.00         31.21         NA         27.24         31.05         29.90         30.43         25.2           July         2		October		26.01			26.44				24.75
Average         31.26         25.63         31.57         29.81         25.78         30.84         29.76         30.87         22.9           1984         January         29.19         26.44         31.22         W         26.85         30.62         29.67         30.09         25.2           February         29.73         26.40         30.91         W         26.73         31.29         28.38         30.77         25.2           March         30.31         26.01         30.81         NA         26.92         30.93         30.20         30.98         24.7           April         29.81         26.10         31.02         W         26.68         31.08         29.95         30.73         24.8           May         29.96         27.12         30.80         W         26.92         30.96         28.95         30.75         24.9           June         29.62         26.00         31.21         NA         27.24         31.05         29.90         30.43         25.2           August         28.63         27.16         30.26         W         26.98         30.07         W         28.52         26.22           August         28.16											24.68
1984         January         29.19         26.44         31.22         W         26.85         30.62         29.67         30.09         25.2           February         29.73         26.40         30.91         W         26.73         31.29         28.38         30.77         25.2           March         30.31         26.01         30.81         NA         26.92         30.93         30.20         30.98         24.7           April         29.81         26.10         31.02         W         26.68         31.08         29.95         30.73         24.8           May         29.96         27.12         30.80         W         26.92         30.96         28.95         30.75         24.9           June         29.62         26.00         31.21         NA         27.24         31.05         29.90         30.43         25.2           July         28.63         27.16         30.26         W         26.98         30.07         W         29.54         25.2           August         28.16         26.95         30.59         W         26.99         29.99         W         28.93         24.9           September         27.94         27.		December									24.91
February 29.73 26.40 30.91 W 26.73 31.29 28.38 30.77 25.2 March 30.31 26.01 30.81 NA 26.92 30.93 30.20 30.98 24.7 April 29.81 26.10 31.02 W 26.68 31.08 29.95 30.73 24.8 May 29.96 27.12 30.80 W 26.92 30.96 28.95 30.75 24.9 June 29.62 26.00 31.21 NA 27.24 31.05 29.90 30.43 25.2 July 28.63 27.16 30.26 W 26.98 30.07 W 29.54 25.2 Average 29.08 26.92 30.11 W 26.80 29.47 28.57 29.27 25.4 November 27.94 27.03 30.05 W 26.96 30.60 29.75 28.81 25.2 October 28.42 26.82 30.11 W 26.80 29.47 28.57 29.27 25.4 November 27.07 26.50 30.12 NA 26.86 29.32 NA 28.39 25.3 December 27.07 26.50 30.12 NA 26.86 29.32 NA 28.55 25.2 Average 29.08 26.59 30.64 28.67 26.87 30.50 29.50 29.60 25.1 1985 January 26.28 24.99 29.26 NA 26.46 28.70 W W 25.1 February 26.06 24.00 28.73 NA 26.37 28.55 W W 25.3		Average	31.26	25.63	31.57	29.81	25.78	30.84	29.76	30.87	22.94
March         30.31         26.01         30.81         NA         26.92         30.93         30.20         30.98         24.7           April         29.81         26.10         31.02         W         26.68         31.08         29.95         30.73         24.8           May         29.96         27.12         30.80         W         26.92         30.96         28.95         30.75         24.9           June         29.62         26.00         31.21         NA         27.24         31.05         29.90         30.43         25.2           July         28.63         27.16         30.26         W         26.98         30.07         W         29.54         25.2           August         28.16         26.95         30.59         W         26.99         29.99         W         28.93         24.9           September         27.94         27.03         30.05         W         26.66         30.60         29.75         28.81         25.2           October         28.42         26.82         30.11         W         26.80         29.47         28.57         29.27         25.4           November         28.12         26.33         30	1984	January	29.19	26.44	31.22	W	26.85	30.62	29.67	30.09	25.28
April 29.81 26.10 31.02 W 26.68 31.08 29.95 30.73 24.68 May 29.96 27.12 30.80 W 26.92 30.96 28.95 30.75 24.99 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 25.29 August 28.16 26.95 30.59 W 26.99 29.99 W 28.93 24.99 September 27.94 27.03 30.05 W 26.66 30.60 29.75 28.81 25.29 October 28.42 26.82 30.11 W 26.80 29.47 28.57 29.27 25.49 November 28.12 26.33 30.03 W 26.78 29.45 NA 28.39 25.39 December 27.07 26.50 30.12 NA 26.86 29.32 NA 28.55 25.29 Average 29.08 26.59 30.64 28.67 26.87 30.50 29.50 29.60 25.11 1985 January 26.28 24.99 29.26 NA 26.46 28.70 W W 25.11 February 26.06 24.00 28.73 NA 26.37 28.55 W W 26.37		February				W					25.21
May         29.96         27.12         30.80         W         26.92         30.96         28.95         30.75         24.9           June         29.62         26.00         31.21         NA         27.24         31.05         29.90         30.43         25.2           July         28.63         27.16         30.26         W         26.98         30.07         W         29.54         25.2           August         28.16         26.95         30.59         W         26.99         29.99         W         28.93         24.9           September         27.94         27.03         30.05         W         26.66         30.60         29.75         28.81         25.2           October         28.42         26.82         30.11         W         26.80         29.47         28.57         29.27         25.4           November         28.12         26.33         30.03         W         26.78         29.45         NA         28.39         25.3           December         27.07         26.50         30.12         NA         26.86         29.32         NA         28.55         25.2           Average         29.08         26.59         30.		March									24.75
June         29.62         26.00         31.21         NA         27.24         31.05         29.90         30.43         25.2           July         28.63         27.16         30.26         W         26.98         30.07         W         29.54         25.2           August         28.16         26.95         30.59         W         26.99         29.99         W         28.93         24.9           September         27.94         27.03         30.05         W         26.66         30.60         29.75         28.81         25.2           October         28.42         26.82         30.11         W         26.80         29.47         28.57         29.27         25.4           November         28.12         26.33         30.03         W         26.78         29.45         NA         28.39         25.3           December         27.07         26.50         30.12         NA         26.86         29.32         NA         28.55         25.2           Average         29.08         26.59         30.64         28.67         26.87         30.50         29.50         29.60         25.1           1985         January         26.28		April									24.86
July       28.63       27.16       30.26       W       26.98       30.07       W       29.54       25.2         August       28.16       26.95       30.59       W       26.99       29.99       W       28.93       24.9         September       27.94       27.03       30.05       W       26.66       30.60       29.75       28.81       25.2         October       28.42       26.82       30.11       W       26.80       29.47       28.57       29.27       25.4         November       28.12       26.33       30.03       W       26.78       29.45       NA       28.39       25.3         December       27.07       26.50       30.12       NA       26.86       29.32       NA       28.55       25.2         Average       29.08       26.59       30.64       28.67       26.87       30.50       29.50       29.60       25.1         1985       January       26.28       24.99       29.26       NA       26.46       28.70       W       W       25.3         February       26.06       24.00       28.73       NA       26.37       28.55       W       W       25.3											24.93
August       28.16       26.95       30.59       W       26.99       29.99       W       28.93       24.9         September       27.94       27.03       30.05       W       26.66       30.60       29.75       28.81       25.2         October       28.42       26.82       30.11       W       26.80       29.47       28.57       29.27       25.4         November       28.12       26.33       30.03       W       26.78       29.45       NA       28.39       25.3         December       27.07       26.50       30.12       NA       26.86       29.32       NA       28.55       25.2         Average       29.08       26.59       30.64       28.67       26.87       30.50       29.50       29.60       25.1         1985       January       26.28       24.99       29.26       NA       26.46       28.70       W       W       25.3         February       26.06       24.00       28.73       NA       26.37       28.55       W       W       25.3											25.29
September         27.94         27.03         30.05         W         26.66         30.60         29.75         28.81         25.2           October         28.42         26.82         30.11         W         26.80         29.47         28.57         29.27         25.4           November         28.12         26.33         30.03         W         26.78         29.45         NA         28.39         25.3           December         27.07         26.50         30.12         NA         26.86         29.32         NA         28.55         25.2           Average         29.08         26.59         30.64         28.67         26.87         30.50         29.50         29.60         25.1           1985         January         26.28         24.99         29.26         NA         26.46         28.70         W         W         25.1           February         26.06         24.00         28.73         NA         26.37         28.55         W         W         25.3											25.24
October         28.42         26.82         30.11         W         26.80         29.47         28.57         29.27         25.4           November         28.12         26.33         30.03         W         26.78         29.45         NA         28.39         25.3           December         27.07         26.50         30.12         NA         26.86         29.32         NA         28.55         25.2           Average         29.08         26.59         30.64         28.67         26.87         30.50         29.50         29.60         25.1           1985         January         26.28         24.99         29.26         NA         26.46         28.70         W         W         25.1           February         26.06         24.00         28.73         NA         26.37         28.55         W         W         25.3											24.95
November         28.12         26.33         30.03         W         26.78         29.45         NA         28.39         25.3           December         27.07         26.50         30.12         NA         26.86         29.32         NA         28.55         25.2           Average         29.08         26.59         30.64         28.67         26.87         30.50         29.50         29.60         25.1           1985         January         26.28         24.99         29.26         NA         26.46         28.70         W         W         25.1           February         26.06         24.00         28.73         NA         26.37         28.55         W         W         25.3											
December         27.07         26.50         30.12         NA         26.86         29.32         NA         28.55         25.2           Average         29.08         26.59         30.64         28.67         26.87         30.50         29.50         29.60         25.1           1985         January         26.28         24.99         29.26         NA         26.46         28.70         W         W         25.1           February         26.06         24.00         28.73         NA         26.37         28.55         W         W         25.3											
Average         29.08         26.59         30.64         28.67         26.87         30.50         29.50         29.60         25.1           1985         January         26.28         24.99         29.26         NA         26.46         28.70         W         W         25.1           February         26.06         24.00         28.73         NA         26.37         28.55         W         W         25.3											
1985 January 26.28 24.99 29.26 NA 26.46 28.70 W W 25.1 February 26.06 24.00 28.73 NA 26.37 28.55 W W 25.3											
February 26.06 24.00 28.73 NA 26.37 28.55 W W 25.3		Average		26.59			26.87				
	1985	•								• • •	25.18
March D2700 2512 2940 W 2660 2042 MA W D256											25.37
······································		March	R27.09	25.13	28.40	W	26.60	29.42	NA	W	R25.69
The state of the s											R25.44
May† W 26.39 28.98 W 26.56 28.71 NA 28.06 25.2		May†	W	26.39	28.98	W	26.56	28.71	NA	28.06	25.26

¹See Note 3 in the Notes and Sources for this section.
²No 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.

### **Price**

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

		Leaded Regular	Unleaded Regular	Unleaded Premium	Average for All Types²
			Cents per gallo	on, including tax	
1974	Average	53.2	NA	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 NA	88.2
1980	Average	119.1	124.5	NA NA	122.1
1981	Average <sup>3</sup>	131.1	137.8	147.0	135.3
1982	Average	122.2	129.6	141.5	128.1
	Average				
1983	January	114.6	122.8	137.6	121.3
	February	109.9	118.7	133.8	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	114.7	122.9	137.7	121.4
	July	112.9	121.2	137.0	119.7
	August	111.6	119.6	135.5	118.4
	September	112.0	120.3	136.0	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

<sup>&</sup>lt;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.

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

		Residual Fuel Oil Sulfur Content Less Than or Equal to 1 Percent		Sulfur	l 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	
1982	Average	69.5	74.7	57.2	61.1	61.2	67.6	
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	55.9	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	R67.5	58.7	61.9	60.2	R64.1	
	May†	58.1	61.2	53.4	58.0	54.9	59.5	

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

<sup>&</sup>lt;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.
†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.

**Price** 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, excludin	ng 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	46.6
1982	Average	97.3	122.8	95.3	101.8	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	78.9	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	80.9	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	R86.0	112.6	R79.5	84.7	79.3	R79.1	37.9
	May†	87.5	113.1	78.0	80.4	76.5	78.9	38.1

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.

\*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.

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

		Finished Motor Gasoline²	Finished Aviation Gasoline	Kerosene- - Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
		•		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
	May	96.6	125.4	87.8	93.8	89.5	81.8	72.2
	June	97.8	125.6	86.3	90.0	87.3	81.5	67.3
	July	98.8	125.1	85.6	89.0	85.1	82.0	66.4
	August	98.4	125.9	85.5	90.8	86.1	83.0	68.9
	September	96.9	. 124.2	86.1	92.7	88.0	84.8	74.9
	October	95.4	124.7	86.0	98.9	89.0	84.2	69.6
	November	93.9	124.5	85.8	100.0	90.1	83.5	72.8
	December	92.4	124.4	85.5	96.6	92.1	82.2	76.4
	Average	95.4	125.5	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	R85.8	79.9	. R75.7
	May†	94.4	121.9	79.5	94.1	82.1	79.7	70.5

<sup>&</sup>lt;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.

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.

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

	,	. <b>С</b> Т	ME	: MA	NH	, RI	VT	. DE	DC	MD	NJ	NY	PA	VA
			., •			C	Cents 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 :		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
. •	May	- 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
6.02	June	104.3	102.6	105.9		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	107.9	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	7,103.3	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 <b>.6</b> .	108.4	111.4	111.9	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
20	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.	R107.0	R101.5	R106.6	R102.2	106.9	R106.4	105.1	R113.9	109.7	R105.2	110.7	100.9	R103.8
$\Gamma$	Mayt	106.2	99.5	104.5	99.9	106.6	105.3	101.9	112.4	108.2	100.5	109.6	99.8	103.9

<sup>&</sup>lt;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.

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

		wv	IL	IN	, MI	MN ·	ОН	WI	ID	AK	OR	WA	U.S. Average
						Cent	s per gal	lon, exclu	ding tax				
1978 1979 1980 1981	Average Average Average Average	46.2 65.1 92.2 115.0	46.5 68.8 95.8 114.9	48.5 72.7 99.6 118.5	47.9 70.9 97.8 118.3	72.4 99.9 118.4	47.4 68.6 91.9 113.2	44.7 67.3 91.5 109.1	43.6 62.1 91.6 110.4	53.2 68.2 97.8 118.0	45.8 68.0 97.3 111.4	48.6 69.7 100.8 116.5	49.0 70.4 97.4 119.4
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 February March April May June July August September October November December	105.6 104.7 99.2 97.5 96.1 97.3 94.9 96.1 100.7 100.6 100.5	103.8 99.5 96.6 97.7 100.3 100.2 99.6 100.7 101.0 100.8 99.6 100.4	105.7 102.8 95.7 96.8 98.2 98.2 99.4 98.9 101.4 101.5 100.7	110.6 108.5 103.7 102.5 102.7 110.7 105.3 102.2 103.9 105.8 105.4 106.8	107.8 101.6 96.5, 100.5 101.9 102.4 102.6 104.4 103.7 104.8 104.2 104.1	107.9 104.4 98.2 95.8 96.5 96.1 97.3 95.2 101.2 100.2 101.0 102.1 101.3	108.5 104.5 96.8 97.1 98.7 99.2 100.7 101.8 100.4 100.5 101.2	109.1 104.8 99.6 99.0 99.2 98.7 99.3 98.1 98.9 99.5 100.3 <b>101.8</b>	114.6 NA 110.7 106.6 106.0 105.0 105.8 105.1 106.2 106.1 105.5 105.5 108.8	113.6 107.8 101.4 99.1 99.0 99.4 97.8 98.7 100.5 101.4 102.1 101.8 103.6	117.7 114.3 109.0 106.0 105.5 105.4 105.2 104.0 105.6 106.3 106.4 106.1 109.0	115.0 111.6 105.1 103.5 104.8 106.0 105.0 104.9 105.7 106.0 106.0
1984	Average January	101.0 108.5	100.4	106.0	107.3	106.6	101.3	101.2	100.1	104.1	100.5	103.6	<b>107.8</b> 112.0
	February March April May June July August September October November December Average	109.9 104.9 101.6 98.9 99.5 96.2 96.6 96.9 98.3 99.6 99.2	105.9 102.3 100.3 102.3 101.6 99.4 98.9 98.6 97.1 95.8 94.4 100.1	107.3 100.6 103.4 102.4	108.0 105.6 104.8 105.2 103.3 102.6 101.8 103.2 103.0 103.5 103.2	102.8 105.1 103.9 105.3 104.2 105.1 104.5 103.5 103.0 103.1 102.8	105.7 101.7 101.9 103.1 101.7 101.8 99.5 100.1 101.2 100.8 99.3 102.1	102.8	101.3 97.2 96.2 98.1 93.8 93.1 97.4 98.4 99.4 97.9	106.5 107.3 107.2 107.8 107.2 107.3 105.0 107.8 107.8 107.5 106.9	100.9 100.9 100.6 99.5 98.2 97.1 94.9 95.9 96.5 97.6 97.4 <b>99.3</b>	103.8 104.6 105.0 104.2 103.3 100.4 99.7 100.4 100.9 101.3 100.5 <b>102.6</b>	116.9 111.3 109.8 108.4 107.2 104.8 103.3 103.6 104.9 105.3 104.8 <b>109.1</b>
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
1	February March April May†	98.3 98.1 R96.4 94.9	94.4 94.5 R96.7 96.2	97.8 96.3 R98.6 97.0	101.0 101.3 98.2 NA	99.8 101.0 R101.4 104.1	98.7 97.9 R99.9 100.4	96.1 96.4 R97.6 98.3	96.9 96.6 96.1 97.0	107.6 · 112.8 · NA 106.2	96.6 95.7 R96.5 96.7	99.8 100.3 99.2 98.1	105.3 105.0 R105.0 103.1

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.

**Price** 

### 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	Purchased by Electric Plants <sup>1</sup> <sup>2</sup>	Residential Price <sup>1 3</sup>
				Dollars per thousa	nd cubic feet4		
1973	Average	0.22	NA	NA	NA	0.35	1.29
1974	Average	0.30	NA	NA	NA	0.49	1.43
1975	Average	0.45	NA	NA	NA	0.77	1.71
1976	Average	0.58	NA	NA	NA	1.06	1.98
1977	Average	0.79	NA	NA 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	
1980	•	1.18	4.42	1.63			2.98
	Average				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	<b>5.17</b> <sub>,</sub> ,
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	2.58	3.93	2.90	4.23	3.75	6.18
	September	2.67	4.02	2.87	4.08	3.70	6.19
	October	2.58	4.03	2.86	4.22	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	2.65	4.40	2.80	4.25	3.55	5.98
	February	2.70	4.37	2.82	3.97	3.61	6.01
	March	2.61	4.40	2.80	4.18	3.52	5.98
	April	2.59	4.23	2.95	4.11	3.57	6.00
	Мау	2.61	4.15	2.86	4.17	3.75	. 6.19
	June	2.64	4.25	2.89	4.06	3.76	6.13
.,	July	2.62	4.15	2.95	4.04	3.89	6.17
	August	2.63	4.12	2.95	4.07	3.80	6.20
	September	2.56	4.34	2.84	4.10	3.83	6.26
	October	,2.57	4.19	2.96	4.06	3.75	6.25
	November	2.56	3.43	3.13	4.26	3.72	6.12
	December	2.51	3.34	2.95	4.22	3.69	6.09
	Average	2.60	4.08	2.91	4.13	3.72	6.06
1985	January	R⁵2.63	3.21	2.89	4.19	3.77	6.19
	February	R2.70	3.08	2.87	. 4.15	3.72	6.12
	March	R2.68	3.29	2.90	R4.00	3.79	6.16
	April	2.67	3.37	2.86	3.96	3.76	6.14

### 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.

<sup>&</sup>lt;sup>1</sup>Includes supplemental gaseous fuels.

<sup>&</sup>lt;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.

Monthly residential prices are Energy Information Administration calculations. See Note 6 in the Notes and Sources for this section for

estimation procedures.

Prices shown on this page are intended to include all taxes. See Note 9 in the Notes and Sources for this section.

The increase from the previous month was primarily the result of the expiration of large, long-term, low-priced intrastate contracts in

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

• Data for 1973 through December 1983 are final. All other data are preliminary unless otherwise indicated. Sources: • See the Notes and Sources for this section.

**Price** 

### National Average Natural Gas Prices—Current Series

### **Major Interstate Pipeline Companies**

### Delivered to Consumers<sup>1</sup>

			ripeiiii	e Companies			Denvered	to Consum	ers.	
,		Wellhead	Imports	Purchases from Producers	City Gate	Residential	Commercial	Industrial	Electric Utilities <sup>2</sup>	Average
				D	ollars per	thousand cubic	c feet³			
1973	Average	0.22	NA	NA	NA	1.29	0.94	0.50	R0.38	0.73
1974	Average	0.30	NA	NA	NA	1.43	1.07	0.67	R0.51	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	NA	2.35	2.04	1.50	R1.32	1.78
1978	Average	0.73	2.21	0.83	NA	2.56	2.23	1.70	1.48	1.98
1979	Average	1.18	2.60	1.22	NA NA	2.98	2.23	1.70	R1.81	2.34
1980	. •									
	Average	1.59	4.42	1.63	NA	3.68	3.39	2.56	R2.27	2.91
1981	Average	1.98	4.84	2.15	NA	4.29	4.00	3.14	R2.89	3.51
1982	Average	2.46	4.94	2.72	NA	5.17	4.82	3.87	R3.48	4.32
1983	January	2.66	5.03	3.06	NA	NA	NA	NA	3.57	NA
	February	2.66	5.09	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	NA	NA	3.70	NA
	October	2.58	4.03	2.86	3.97	6.70	5.62	NA	3.62	NA
	November	2.60	4.26	2.84	3.91	6.30	5.67	NA	3.54	NA
	December	2.61	4.33	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
1984	January	2.65	4.40	2.80	3.91	5.79	5.50	NA	3.55	NA
,	February	2.70	4.37	2.82	3.99	5.84	5.56	NA	3.61	NA
	March	2.61	4.40	2.80	3.89	5.91	5.69	NA	3.52	NA
	April	2.59	4.23	2.95	3.93	5.95	5.53	NA	3.57	NA
	May	2.61	4.15	2.86	3.97	6.26	5.60	NA	3.75	NA
	June	2.64	4.25	2.89	3.97	6.76	5.66	NA	3.76	NA
	July	2.62	4.15	2.95	3.99	7.10	5.63	NA	3.89	NA
	August	2.63	4.12	2.95	43.64	7.23	5.48	NA	3.80	NA
	September	2.56	4.34	2.84	3.96	7.17	5.56	NA	3.83	NA
	October	2.57	4.19	2.96	3.92	6.79	5.56	NA	3.75	NA
•	November	2.56	3.43	3.13	3.89	6.30	5.56	NA	3.72	NA
	December	2.51	3.34 <b>4.08</b>	2.95	3.95	6.04	5.58	NA	3.69	NA
	Average	2.60		2.91	3.92	6.12	5.57	NA	3.72	NA
1985	January	R*2.63	3.21	2.89	3.86	5.97	5.61	NA	3.77	NA
	February	R2.70	3.08	2.87	3.90	5.85	5.53	NA	3.72	NA
	March	R2.68	3.29	2.90	3.93	5.96	5.59	NA	3.79	NA
	April	2.67	3.37	2.86	3.89	6.08	5.63	NA	3.76	NA
	Мау	NA	NA	NA	3.85	6.49	5.56	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. Electric utility prices for 1973 through 1982 are being revised to reflect a review of the original data sources and to conform with data in other Energy Information Administration publications. See the last page of this section for a listing of the sources for all data series.

¹Includes supplemental gaseous fuels.
²Data 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.
²Prices 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.

The increase from the previous month was primarily the result of the expiration of large, long-term, low-priced intrastate contracts in Texas.

R = Revised data. NA = Not available.

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

• Data for 1973 through December 1983 are final. All other data are preliminary unless otherwise indicated.

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

### **Price**

### **Electricity**

Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants<sup>2</sup>

Average Retail Electricity Prices<sup>1</sup> for Selected Privately Owned Utilities<sup>3</sup>

								atory ournea	0	
		Coal	Heavy Oil <sup>4</sup>	Natural Gas <sup>3</sup>	All Fossil Fuels¹	Residential	Commercial	Industrial	Other	Total <sup>e</sup>
			Cents per	million Btu			Cents pe	er kilowatthou	•	
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	<sup>2</sup> 166.8	²448.9	²347.1	²216.7	6.65	6.78	5.03	5.91	6.13
	February	167.8	441.4	331.9	213.9	6.73	6.86	4.96	5.97	6.12
	March	168:1	426.0	336.1	215.5	6.93	6.93	5.07	6.16	6.23
	April	168.5	431.6	326.1	215.8	6.91	6.86	4.92	6.15	6.12
	Мау	165.0	446.6	344.3	216.6	7.20	7.04	4.89	6.60	6.21
	June	167.3	453.6	347.2	220.9	7.41	7.13	4.96	6.62	6.35
	July .	165.3	467.0	361.1	237.4	7.50	7.13	5.11	6.24	6.53
	August	164.3	470.4	363.2	230.1	7.52	7.06	5.01	6.37	6.51
	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	6.40	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	6.77	6.81	4.86	6.33	6.14
	February	164.9	496.3	347.5	217.4	6.97	7.01	4.86	6.51	6.19
	March	163.4	484.0	339.8	208.4	7.18	7.14	4.88	6.68	6.27
	April	165.7	494.1	344.4	210.6	7.33	7.25	4.88	6.73	6.30
	May	168.6 169.1	486.9 488.3	360.4 360.9	220.3 223.2	7.59 7.90	7.30	4.92	6.85	6.40
	June July	168.2	488.3 474.6	360.9 373.1	223.2 231.3	8.00	7.48 7.51	5.09 5.21	6.78 6.97	6.65
	August	167.2	474.6 459.6	365.6	223.5	8.06	7.51 7.51	5.21 5.15	6.75	6.83 6.82
	September	167.2	472.5	368.0	217.5	8.06	7.64	5.15	7.05	6.88
	October	168.7	474.1	361.4	218.8	7.95	7.63	5.13	6.86	6.71
	November	166.6	470.6	357.2	216.8	7.62	7.43	5.06	6.99	6.54
	December	165.0	480.4	355.4	218.7	7.34	7.30	5.07	6.70	6.48
	Average	166.4	481.2	358.3	219.2	7.56	7.33	5.03	6.76	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	6.55
	April	167.7	453.0	361.7	210.7	7.73	7.44	5.09	6.95	6.58
	May†	NA	NA	NA·	NA	7.98	7.55	5.08	7.09	6.66

¹Prices 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.
²Data 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.
³Data 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.
⁴See Note 7 in the Notes and Sources for this section.
²Includes supplemental gaseous fuels.
⁴Average price for total sales to ultimate consumers.
†Initial estimates. NA = Not available.
Note: • Geographic coverage is the 50 States and the the District of Columbia.
Sources: • See the Notes and Sources for this section.

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 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. the Caribbean. Landed costs do not include supplemental
- 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 by 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 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 course all in the control of the control of the course and the course are control of the control of the course and the course of the cours

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.

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 ished 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)
- 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 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 proviously included in 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 Administration (ERA), January 1976: FEA Form 90, "Crude Petroleum Production Monthly Report"; February 1976 through September 1979: FEA Form P124, "Domestic Crude Oil Purchaser's (Monthly) Report"; October 1979 through Decémber 1982: ERA Form 182, "Domestic Crude Oil First Purchase Report."; January 1983 forward: EIA Form 182, "Domestic Crude Oil First Purchase Report." "Domestic Crude Oil First Purchase Report.

"Domestic Crude Oil First Purchase Report."

• Crude oil imports costs—Energy Information Administration (EIA), 1975 through January 1979: FEA Form F701-M-0, "Transfer Pricing Report"; February 1979 through September 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 Report"

Report."

• 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 labor Statistics

Labor Statistics.

 No. 2 Distillate to Residences—January 1983 forward, EIA • NO. 2 DISTILIATE TO HESIGENCES—JANUARY 1983 forward, EIA Form-782A, "Refiners/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Reselers/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 Supply/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

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

Natural Gas—Previous Series: • Average wellhead price—

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

• 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

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 Report" and the U.S. Minerals Management Service.

Monthly data are estimated primarily on the basic of values of values. 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 Consumers.

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

• 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" Utility Company Monthly Statement.

### International

### **Crude Oil Production**

World crude oil production during May 1985, was 52.0 million barrels per day, down 1.4 million from the level in the previous month.

Organization of Petroleum Exporting Countries (OPEC) production during May 1985 averaged 14.8 million barrels per day, down 1.4 million from the level during the previous month. Production by the Arab members of OPEC during May 1985 averaged 8.0 million barrels per day, down 0.9 million from the April 1985 level. During the same period, production decreased in Saudi Arabia by 880,000 barrels per day, in the United Arab Emirates by 55,000, in Iraq by 50,000, and in Kuwait by 30,000 barrels per day. Production levels remained the same as during the previous month in Algeria, while production increased in Libya by 100,000 barrels per day, and in Qatar by 30,000 barrels per day. Among non-Arab OPEC countries during the month, production decreased in Iran by 300,000 barrels per day, in Nigeria by 150,000 barrels per day, and in Indonesia by 100,000 barrels per day, while production in Venezuela remained the same as during the previous month.

Of the non-OPEC nations during May 1985, production decreased in the United Kingdom and Mexico by 90,000 and 35,000 barrels per day, respectively. Production in the United States increased by 127,000 barrels per day, while production in Canada remained the same as during the previous month.

### **Petroleum Consumption**

Preliminary petroleum consumption data for May 1985 were available for France, Italy, and the United States. Consumption in France and Italy decreased by 120,000 and 85,000 barrels per day, respectively,

compared with levels 1 year earlier, while consumption in the United States decreased by 160,000 barrels per day compared with the May 1984 level.

### **Petroleum Stocks**

Preliminary data for May 1985 indicate that petroleum stock levels were lower compared with May 1984 levels in three of the six countries reporting. Petroleum stocks were down in Italy by 11.5 percent, in Canada by 6.0 percent, and in West Germany by 4.2 percent. Japan reported an increase in petroleum stocks of 2.9 percent, while the United Kingdom and the United States each reported increases in petroleum stocks of 0.8 percent.

Petroleum stocks for all Organization for Economic Cooperation and Development members were 3,345 million barrels on December 31, 1984 (latest data available), an increase of 87 million barrels (2.7 percent) compared with stocks held on December 31, 1983.

### **Nuclear Electricity Production**

In May 1985, the 20 non-Communist nations with significant nuclear power capacity generated 90.2 gross terawatthours (billion kilowatthours) of nuclear-based electricity. This generation represents an increase of 11.5 percent compared with May 1984 generation. The United States accounted for 27.7 gross terawatthours (30.7 percent) of total generation in May 1985.

There were 283 operable reactors in the non-Communist countries as of May 31, 1985, with a collective gross generating capacity of 208.9 gigawatts (million kilowatts). In May 1985, the 89 operable U.S. units accounted for 77.7 gross gigawatts (37.2 percent) of the total non-Communist capacity.

### International

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

									United	Arab,		
			Algeria	Iraq	Kuwait¹	Libya	Qatar	Saudi Arabia¹	Arab Emirates	Members of OPEC <sup>2</sup>	Indo- nesia	Iran
	•		3			-				0. 0. 20	· · · · · · · · · · · · · · · · · · ·	
							sand barre	els per day				
1973	Average	10	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	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		700	850	780	1,100	255	4,950	1,060	9,695	1,225	2,700
	February		600	850	895	900	200	3,510	1,060	8,015	1,015	2,400
	March		600	900	965	900	170	3,910	1,035	8,480	1,180	2,200
	April		700	950	880 ,	1,000	260	3,930	1,145	8,865	1,400	2,000
	May		600	1,000	1,030	1,100	275	4,725	1,175	9,905	1,400	2,300
	June		700	1,000	920	1,100	300	4,620	1,180	9,820	1,400	2,500
	July		700	1,050	1,086	1,100	300	5,536	1,175	10,947	1,490	2,800
	August		700	1,100	1,181	1,100	265	5,931	1,185	11,462	1,490	2,500
	September		700	1,050	1,376	1,150	310	6,026	1,185	11,797	1,470	2,700
. *	October November		700 700	1,100 1,150	1,305 1,265	1,150 1,150	320 460	6,005 5,915	1,165	11,745	1,520	2,400
	December		700	1,150	1,205	1,150	420	5,825	1,195 1,195	11,835 11,415	1,560	2,300
	Average		675	1,005	1,064	1,076	295	5,025 <b>5,086</b>	1,147	10,348	1,440 <b>1,385</b>	2,300
				•	•	•		•		•	•	2,426
1984	January		650	1,100	1,080	1,100	445	5,130	1,200	10,705	1,470	2,200
••;	February March		600 600	1,000 1,200	1,240 1,293	1,100	315	5,040	1,200	10,495	1,575	2,300
	April		600	1,200	1,293	1,100 1,200	440 400	4,843 5,150	1,205 1,205	10,681 11,005	1,560	2,400
	May		650	1,200	1,200	1,200	400	5,000	1,200	10,850	1,570 1,470	2,200 1,700
	June		700	1,200	1,200	1,250	500	5,450	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		650	1,300	1,125	1,000	290	4,025	1,160	9,550	1,330	2,100
	March		690	1,250	1,085	1,000	315	3,835	1,215	9,390	1,300	2,200
	April		650 650	1,350	970	1,000	260	3,470	1,215	8,915	R1,300	2,300
	. May		650	1,300	940	1,100	290	2,590	1,160	8,030	1,200	2,000
	Average		648	1,300	1,045	1,021	285	3,475	1,170	8,943	1,287	2,099

Footnotes continued on following page.

Includes about one-half of the production in the former Kuwait-Saudi Arabia Neutral Zone. In May 1985, total production in this region amounted to approximately 280,000 barrels per day.

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.

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

		Nigeria	Vene- zuela	Total OPEC <sup>3</sup>	Canada	Mexico	United Kingdom	United States	China	USSR	Other•	World
				÷			l barrels pe					
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	1,684	571	2	8,774	1,315	9,000	3,777	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	4,517	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		2,302 2,055	2,168	26,891	1,435	1,936	1,622	8,597	2,114	11,773	•	
	Average	·•		•	•	•	•		•	•	5,170	59,538
1981 1982	Average	1,433	2,102	22,646	1,285	2,313	1,811	8,572	2,012	11,909	5,352	55,900
1902	Average	1,295	1,895	18,868	1,372	2,748	2,065	8,649	2,045	12,080	5,631	53,458
1983	January	880	2,060	16,952	1,288	2,980	2,135	8,697	2,085	12,410	5,913	52,460
	February	675	1,758	14,250	1,425	2,295	2,315	8,758	2,110	12,410	6,014	49,577
•	March	905	2,055	15,192	1,461	2,415	2,265	8,700	2,110	12,410	5,949	50,502
	April	1,150	1,694	15,506	1,320	2,670	2,170	8,776	2,120	12,000	6,110	50,672
	May June	1,625 1,535	1,664 1,669	17,266 17,326	1,383 1,577	2,795 2,775	2,235 2,045	8,631 8,667	2,120 2,120	11,900	6,095	52,425 52,605
	July	1,710	1,674	19,033	1,551	2,775	2,045	8,636	2,120	11,900 11,900	6,195 6,187	54,392
	August	1,300	1,709	18,878	1,488	2,775	2,290	8,679	2,120	11,900	6,092	54,232
	September	1,220	1,704	19,278	1,504	2,735	2,385	8,784	2,130	11,900	6,157	54,873
	October	1,290	1,718	19,075	1,456	2,660	2,355	8,771	2,130	11,900	6,266	54,613
	November	1,245	. 1,748	19,075	1,483	2,730	2,490	8,770	2,130	11,900	6,386	54,964
	December	1,310	1,753	18,620	1,467	2,690	2,530	8,397	2,130	11,900	6,421	54,155
· ,	Average	1,241	1,768	17,562	1,450	2,686	2,291	8,688	2,120	12,034	6,150	52,981
1984	January	1,365	1,840	17,980	1,365	2,670	2,525	8,868	2,200	11,900	6,656	54,164
•	February	1,565	1,815	18,140	1,445	2,755	2,600	8,874	2,200	11,900	6,642	54,556
	March	1,560	1,815	18,416	1,475	2,710	2,480	8,672	2,200	11,750	6,576	54,279
:	April	1,300	1,815	18,300	1,430	2,770	2,475	8,862	2,225	11,750	6,662	54,474
,	May	1,300	1,840	17,570	1,415	2,800	2,439	8,955	2,225	11,900	6,737	54,041
	June	1,400	1,805	18,870	1,470	2,820	2,350	8,852	2,225	11,900	6,847	55,334
	July	1,200 1,150	1,860 1,820	17,860 16,670	1,515 1,435	2,845 2,680	2,470 2,300	8,885 8,809	2,305 2,305	11,870	6,851 6,859	54,601 52,928
	August September	1,400	1,850	16,826	1,330	2,705	2,300 2,435	8,993	2,305	11,870 11,790	6,970	52,926 53,384
	October	1,600	1,800	16,893	1,450	2,703	2,435 2,615	8,906	2,335	11,790	7,131	53,795
•	November	1,600	1,725	16,760	1,460	2,745	2,605	8,979	2,335	11,750	7,183	53,817
	December	1,600	1,770	16,685	1,445	2,830	2,645	8,897	2,335	11,750	7,224	53,811
	Average	1,419	1,813	17,577	1,436	2,750	2,495	8,879	2,269	11,827	6,862	54,094
1985	January	1,400	1,670	15,580	1,450	2,635	2,780	8,929	2,390	11,700	7,214	52,678
3 -	February	1,690	1,680	16,770	1,450	2,685	2,650	8,928	2,390	11,700	7,253	53,826
	March	1,700	1,670	16,690	1,500	2,810	2,600	8,927	2,390	11,700	R7,327	R53,944
	April	1,600	1,670	R16,215	R1,450	2,825	2,635	8,842	2,390	1,1,700	R7,349	R53,406
	May	1,450	1,670	14,780	1,450	2,790	2,545	8,969	2,400	11,750	7,314	51,998
	Average	1,565	1,672	15,990	1,460	2,750	2,642	8,919	2,392	11,710	7,292	53,156

Footnotes continued.

Other is a calculated total derived from the difference between world production and the nations represented above.

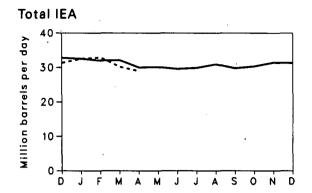
R=Revised data.

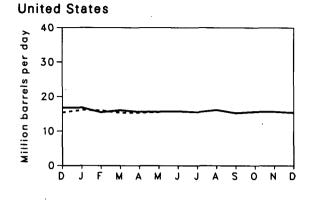
Notes: • U.S. geographic coverage is the 50 States and the District of Columbia.

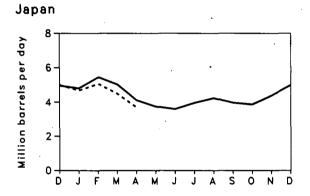
• Monthly data are often preliminary figures and may not average to the annual totals because of rounding or because updates to the preliminary monthly data are not available.

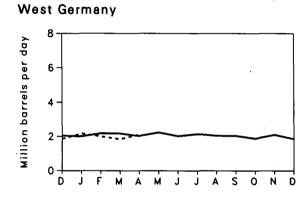
Sources: • See the last page of this section.

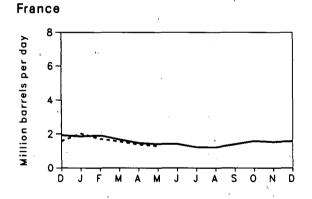
# Petroleum Consumption for Major Non-Communist Industrialized Countries

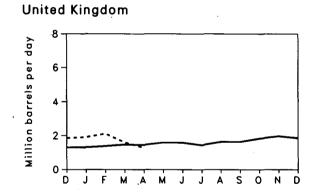


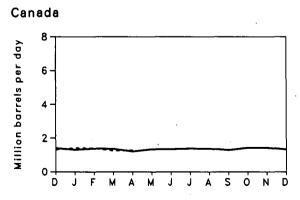


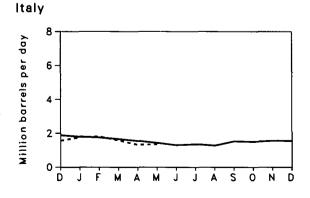












#### Petroleum Consumption for Major Non-Communist Industrialized Countries<sup>1</sup>

		Canada	France <sup>2</sup>	ltaly³	Japan⁴	United Kingdom	United States	West Germany	Other IEA <sup>s</sup>	Total IEA <sup>e</sup>
			•		Thou	sand barrels p	er 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 1981	Average Average Average	1,730 1,730 1,615	1,965 1,745	1,607 1,602 1,705	4,680 4,445	1,420 1,325	17,056 16,058	2,360 2,120	4,467 4,152 4,032	33,000 31,300
1982	Average	1,450	1,645	1,614	4,196	1,323	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	1,380	1,415	1,590	4,040	1,300	15,506	2,040	4,144	30,000
	October	1,360	1,495	1,625	3,900	1,280	14,962	2,090	4,083	29,300
	November December	1,460 1,400	1,800 1,930	1,840 1,880	4,290 4,960	1,340 1,300	15,500 16,726	2,050 2,055 2,050	4,215 4,484	30,700 32,800
	Average	1,345	1,600	1,590	4,185	1,290	15,231	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	1,200	1,475	1,550	4,110	1,450	15,568	2,030	4,092	30,000
	May	1,329	1,410	1,435	3,740	1,590	15,620	2,230	4,156	30,100
	June	1,330	1,420	1,295	3,590	1,585	15,709	2,020	4,071	29,600
	July	1,370	1,225	1,350	3,950	1,440	15,498	2,140	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	2,040	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	<b>30,800</b>
1985	January February March	1,390 R1,390 R1,245 1,270	2,025 1,710 R1,560 R1,390	1,765 1,810 1,575 R1,370	4,670 5,060 R4,480 3,700	1,905 2,110 1,600 1,280	16,142 15,975 15,321 15,345	2,165 2,005 1,840 2,110	4,463 R4,550 R4,139 3,925	32,500 32,900 R30,200 29,000
	April May <b>Average</b> <sup>7</sup>	1,270 NA <b>1,323</b>	1,290 <b>1,594</b>	1,350 1, <b>571</b>	3,700 NA <b>4,469</b>	1,280 NA 1,718	15,460 <b>15,644</b>	2,110 NA <b>2,030</b>	3,925 NA <b>4,265</b>	29,000 NA <b>31,124</b>

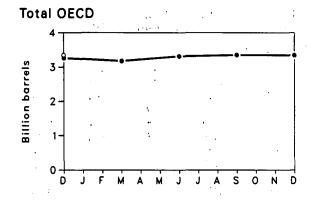
¹These data represent inland consumption, i.e., sales of petroleum products excluding refinery fuel, refinery losses, and ocean bunkers except for the United States, where it represents domestic products supplied.
²Not a member of the International Energy Agency (IEA).
²Principal products only prior to 1981.
⁴Excludes liquefied petroleum gases and condensate.
⁵Other is a calculated total derived from the difference between total IEA consumption and the IEA nations represented above.
⁴The 21 signatory nations of the IEA are listed in Note 1 on the last page of this section.
²Average of available data.

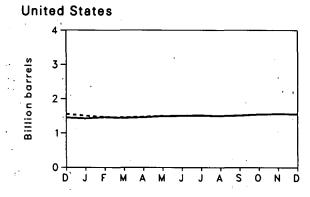
R—Revised data. NA—Not available

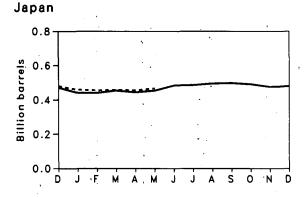
R=Revised data. NA=Not available.

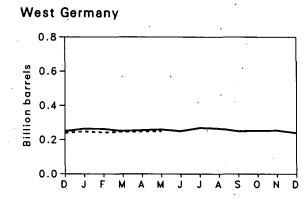
Notes: • U.S. geographic coverage is the 50 States and the District of Columbia.
• Data for 1983 through 1985 are preliminary.
Sources: • See the last page of this section.

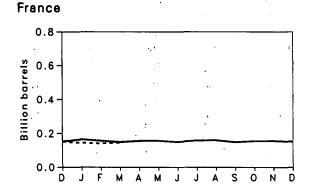
# Petroleum Stocks for Major Non-Communist Industrialized Countries at End of Period

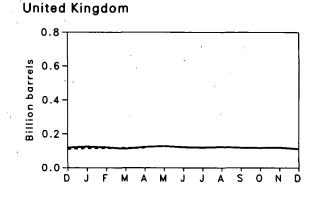


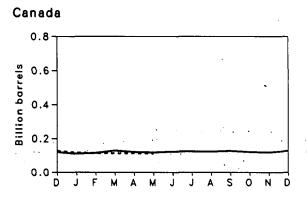


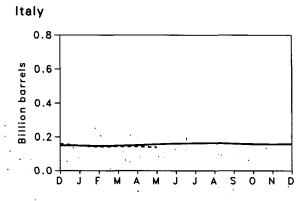












International

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

		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	240	169	370	161	1,074	215	NA	NA .
1975	Year	167	239	143	375	164	1,133	190	NA	NA NA
1976	Year	` 156	231	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	123	158	151	422	120 \	1,374	255	NA	NA
	May	125	164	152	437	123	1,394	274	NA	NA
	June July	113 110	158 174	159 151	460 436	116 119	1,405	261 270	531	3,203
	August	110	183	161	438	121	1,426 1,460	270 274	NA NA	NA NA
	September	125	165	160	453 452	125	1,460	263	549	3,324
	October	111	170	157	441	129	1,508	267	NA	3,324 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
400	March	128	149	148	454	112	1,444	251 ·	489	3,174
	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	150	161 163	484	122	1,503	250	519	3,310
	August	123	159 160	165	486 495	120 123	1,513 1,498	269 265	NA NA	NA NA
	September	126	149	161	495 498	119	1,496	250 250	532	3,348
	October	120	155	158	490	118	1,513	250 252	NA	3,346 NA
	November	117	156	157	476	120	1,556	254	NA	NA
	December	127	152	159	480	112	1,556	240	519	3,345
1985	January	117	145	149	459	115	1,510	248	NA	NA -
	February	112	141	142	456	117	1,467	242	NA	NA :
	March	112	146	144	458	117	1,459	246 .	NA	NA
	April	112	NA	143	456	118	1,474	248	- NA	NA
	May	110	√NA	139	467	129	1,508	249	NΑ	NA

R=Revised data. NA=Not available.

<sup>&</sup>lt;sup>1</sup>Petroleum stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined 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.

The members of OECD are listed in Note 2 on the last page of this section.

Notes: • U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>•</sup> 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- tina	Belgium	Brazil	Canada	Finland	France	India	Italy	Japan	Nether- lands	Paki- stan
						Billion gre	oss kilowat	tthours				
1973	Total	0	0	Ō	18.3	0	11.6	1.9	3.1	9.4	1.1	0.5
1974	Total	1.0	0.1	0	15.4	0	14.7	2.5	3.4	18.1	3.3	0.6
1975	Total	2.5	6.8	0	13.2	0 .	18.3	2.5	3.8	22.2	3.3	0.5
1976	Total	2.6	10.0	0	18.0	0	15.8	3.2	3.8	36.7	3.9	0.5
1977	Total	1.6	11.9	0	26.8	2.7	17.9	2.8	3.4	28.1	3.7	0.3
1978	Total	2.9	12.5	0	32.9	3.3	30.5	2.3	4.4	53.2	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	(s)
1980	Total	2.3	12.5	Ō	40.4	7.0	61.2	2.9	2.2	82.8	4.2	0.1
1981	Total	2.8	12.8	Ö	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
1983	January	0.2	1.9	0	4.3	1.7	13.8	0.2	0.2	8.0	0.4	(s)
	February	0.2	1.4	0	4.5	1.5	10.9	0.1	0.1	6.8	(s)	(s)
	March	0.2	0.7	(s)	4.6	1.6	11.3	0.2	0.1	7.9	(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	0	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	0
	August September	0.3 0.5	2.4 2.2	0 0	3.8	1.6	12.1	0.3	0.5	10.5	0.4	(s)
	October	0.3	2.2	0	4.4 4.7	1.5	12.4	0.3	0.6	10.1	0.4	(s)
	November	0.3	2.2	(s)	4.7	1.4 1.5	13.0 13.4	0.3 0.2	0.6	10.3	0.4	(s)
	December	0.4	2.1	0.1	5.0	1.7	16.8	0.2	0.7 0.7	9.1 <sup>.</sup> 10.1	0.4 0.4	(s)
	Total	3.4	24.1	0.2	53.0	17.4	144.2	2.9	5.8	109.1	3.6	(s) <b>0.2</b>
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	Ŏ
	April	0.5	2.4	(s)	4.3	1.6	15.4	0.4	0.3	8.9	0.2	(s)
	May	0.5	2.0	0.1	3.6	1.2	14.2	0.5 .	0.3	10.5	0.4	(s)
	June	0.4	2.6	0.0	3.7	1.3	13.1	0.4	0.3	9.9	0.4	(s)
	July	0.4	2.4	0.0	4.4	1.4	13.1	0.5	0.3	10.6	0.2	(s)
	August	0.3	1.9	(s)	4.7	1.4	13.2	0.4	0.8	11.0	0.3	(s)
	September October	0.4	1.9	0.3	3.9	1.5	14.7	0.2	0.8	11.4	0.4	(s)
	November	0.1 0	2.5 2.6	0.5 0.4	4.5	1.8	16.0	0.4	0.8	11.6	0.4	(s)
	December	0.1	2.6	0.4	4.7 5.1	, 1.7 1.7	17.8 20.9	0.3	0.8	11.8	0.4	(s)
	Total	4.5	27.7	2.0	54.0	18.5	20.9 <b>191.2</b>	0.2 <b>4.1</b>	0.8 <b>6.9</b>	12.5 <b>126.5</b>	0.4 <b>3.7</b>	(s) <b>0.3</b>
1985	January	0.2	2.5	0.4	5.7	1.7	21.9	0.2	0.8	11.9	0.4	(s)
	February	0.4	1.7	0.3	5.0	1.6	19.2	0.2	0.7	10.1	0.4	(s)
	March	0.5	2.0	0.3	5.9	1.8	20.6	0.4	0.8	11.3	0.2	0.0
	April	0.4	2.2	0.1	R5.2	1.6	17.7	0.6	0.7	10.7	(s)	0.0
	May	0.4	2.8	0.2	2.4	1.2	15.9	0.5	0.7	11.8	0.2	0.0
	Year to Date	1.9	11.1	1.3	24.3	7.9	95.3	1.9	3.7	55.9	1.2	0.1

<sup>&</sup>lt;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>2</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.

# Nuclear Electricity Generation by Non-Communist Countries¹ (continued)

										Non- Communist World		Total Non-
		South Africa	South Korea	Spain	Sweden	Switzer- land	Taiwan	United Kingdom <sup>2</sup>	West Germany	Excluding U.S.		Communist
		,	110100	Opum	Oweden				Germany	0.5.	States	World
						Billion gr	oss kilow	vatthours				
1973	Total	. 0	0	6.5	2.1	6.2	0	28.0	11.9	100.7	88.0	188.7
1974	Total	0.	0	7.2	1.6	7.0	0	34.0	12.0	121.1	104.5	225.6
1975	Total	0	0	7.5	12.0	7.7	0	30.5	21.7	152.7	181.7	334.4
1976	Total	0	0	7.6	16.0	7.9	0	36.8	24.5	187.3	201.8	389.1
1977	Total	0	0.1	6.5	19.9	8.1	0.1	38.1	35.8	207.8	263.3	471.0
1978	Total	0	2.3	7.6	23.8	8.3	2.7	36.7	35.9	263.6	292.7	556.3
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	354.4	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	25.0	71.7
	April	0 0	0.4 0.2	0.8	3.3	1.5	1.7	4.3	4.0 .	43.1	23.4	66.5
	May June	0	0.2	0.4 0.6	2.4 2.4	1.2 0.5	2.0 2.0	3.4	2.9	40.6	23.9	64.5
	July	Ö	0.7	0.6	1.6	1.2	1.6	3.9 3.4	4.2 5.1	42.4 44.9	25.7 27.3	67.8
	August	ŏ	1.1	1.0	2.7	1.0	1.4	3.7	4.6	44.9 47.3	27.3	72.2 75.4
	September	Ö	1.1	1.0	3.0	1.4	1.2	4.4	6.0	50.2	26.4	75.4 76.7
	October	0	0.8	1.1	3.6	1.5	1.6	3.7	7.6	53.0	27.6	80.8
	November	0	1.2	1.1	4.5	1.4	1.6	3.9	7.1	52.8	26.6	79.3
	December	0	1.3	1.4	5.0	1.5	1.7	5.5	6.2	59.8	28.6	88.6
	Total	Ò	9.0	10.7	40.4	15.5	18.9	50.0	65.8	573.9	313.6	887.5
1984	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	7.4	59.7	29.4	89.1
	March	0 0.1	1.0	1.4	5.4	1.5	2.0	4.8	7.1	60.6	28.6	89.2
	April Mav	0.1	0.9 0.8	1.3 1.9	4.5 3.3	1.5	1.8	4.2	6.4	54.5	24.7	79.2
	June	0.1	0.7	2.2	3.3 2.8	1.3 0.6	1.4 1.8	4.3 4.7	7.2 7.1	53.6	27.3	80.9
	July	0.5	0.7	2.5	2.4	1.3	2.4	3.7	6.2	· 52.3 53.2	26.4 29.3	78.7 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	8.2	61.0	30.3	91.2
	October	0.7	1.3	1.8	5.0	1.5	2.0	4.1	8.6	63.6	26.8	90.4
	November	0.4	1.3	1.9	4.5	1.5	1.8	4.4	9.8	66.1	25.5	91.5
	December	0.5	0.9	2.2	5.4	1.9	2.3	6.3	10.4	74.7	31.3	105.9
	Total	4.0	11.8	23.0	51.3	16.3	24.6	54.1	92.4	716.9	342.3	1,059.2
1985	January	0.3	1.0	2.2	5.4	2.2	2.4	5.7	10.8	75.8	37.0	112.8
	February	0.0	1.1	1.9	5.0	2.0	2.1	5.6	10.1	67.6	31.3	98.9
	March	0.0	1.4	2.8	5.6	2.2	2.5	6.6	11.7	76.6	31.0	107.6
•	April May	0.0 0.0	1.2	2.4	4.5	2.2	2.7	5.1	10.6	R67.8	26.3	R94.1
	Year to Date	0.0 0.3	1.4 <b>6.1</b>	2.3 11.7	3.9	1.9	2.8	4.7	9.3	62.5	27.7	90.2
	i cai to Date	<b>U.</b> 3	0.1	11.7	24.5	10.6	12.4	27.7	52.6	350.2	153.4	503.6

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, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, 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, consumption data for these two countries have been incorporated into the IEA total for all years.
- 2. The members of the Organization for Economic Cooperation and Development (OECD) are Australia, Austria, Belgium, Canada, Denmark, Finland, France, West Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, 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: • 1973–1983 annual data (except the United States): Energy Information Administration (EIA), 1983 International Energy Annual.

1973–1985 U.S. annual and monthly data: EIA, Petroleum

1973-1985 d.G. armad d.G. Supply Monthly.
 1983-1985 monthly data (except U.S. and World): Central 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

• 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

Other OECD data: OECD, Quarterly Oil Statistics; Comite

Total OECD data: Sum of data for all OECD member countries using above sources.
 Nuclear Electricity Generation and Capacities:
 Avecagation Model.

· Nucleonics Week.

#### **Conversion Factors**

#### **Units of Measure**

#### Weight

1 metric ton	contains	1,000 kilograms or 2,202	1.62 pour	nds
1 long ton	contains	2,240 pounds	•	
1 short ton	contains	2,000 pounds	٠.	

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

		,			
1 barrel	contains		42 gallons		
1 barrel	contains		0.136 metric tons (0.150	) shor	t 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>6</sub> ) 1 short ton (UF <sub>6</sub> )	contains contains	0.769 metric tons of uranium
1 metric ton (UF <sub>6</sub> )	contains	0.676 metric tons of uranium

#### Price Indexes, 1972 = 100.0

	Gross National Product Implicit Price Deflator	Consumer Price Index, All Urban Consumers, All Items
1972	100.00	100.0
1973	105.75	106.2
1974	115.08	117.9
1975	125.79	128.7
1976	132.34	136.1
1977	140.05	' 144.9
1978	150.42	155.9
1979	163.42	173.5
1980	178.42	197.0
1981	195.60	217.4
1982	207.38	230.7
1983	215.34	<b>` 238.1</b>
1984‡	223.43	248.3

‡=Preliminary data.
Sources: • Gross National Product Implicit Price Deflator—U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*.
• 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.

Million Btu

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

	per	Barre
Asphalt	. 6	.636
Aviation gasoline	. 5	.048
Butane	. 4	.326
Butane-propane mixture'		.130
Distillate fuel oil	. 5	.825
Ethane		.082
Ethane-propane mixture <sup>2</sup>		.308
Isobutane		.974
Jet fuel—kerosene type		.670
Jet fuel—naphtha type		.355
Kerosene		.670
Lubricants		.065
Motor gasoline		.253
Natural gasoline	. 4	,620
Petrochemical feedstocks	_	
Naphtha 400° F or less		.248
Other oils over 400° F		.825
Still gas		.000
Petroleum coke		.024
Plant condensate		.418
Propane	. 3	.836
Residual fuel oil	. 6	.287
Road oil		.636
Special naphtha		.248
Still gas		000.
Unfinished oils		.825
Unfractionated stream		.418 .537
Miscellaneous		.796
Miscalia iaous	. э	./90

<sup>160</sup> percent butane and 40 percent propane.

<sup>&</sup>lt;sup>2</sup> 70 percent ethane and 30 percent propane.

# **Conversion Factors (continued)**

#### Approximate Heat Content of Fuels, 1973-1978

	Units	1973	1974	1975	1976	1977	1978
Coal							
Production	Million Btu/short ton	23.389	23.081	22.907	22.862	22.602	22.252
Consumption	Million Btu/short ton	23.071	22.685	22.510	22.499	22.268	22.022
Non-electric utility users	Million Btu/short ton	24.919	24.823	24.777	24.890	24.721	24.512
Electric utilities		22.246	21.781	21.642	21.679	21.508	21.275
Imports	Million Btu/short ton	25.00	25.00	25.00	25.00	25.00	25.00
Exports	Million Btu/short ton	26.60	26.70	26.56	26.60	26.55	26.48
				•			
Anthracite							
Production	Million Btu/short ton	23.17	22.56	22.39	22.77	23.18	23.52
Consumption	Million Btu/short ton	22,71	21.95	21.74	22.15	22.69	22.97
Non-electric utility users	Million Btu/short ton	24.34	23.75	23.65	23.84	24.99	25.17
Electric utilities	Million Btu/short ton	17.92	17.20	17.06	17.55	11.24	17.10
Imports and exports	Million Btu/short ton	25.40	25.40	25.40	25.40	25.40	25.40
Bituminous coal and lignite							
Production	Million Btu/short ton	23.391	23.087	22.911	22.863	22.597	22.242
Consumption	Million Btu/short ton	. 23.073	22.694	22.522	22.509	22.266	22.014
Residential and commercial	Million Btu/short ton	22.887	22.523	22.258	22.819	22.594	22.078
Coke plants	Million Btu/short ton	26.800	26.800	26.800	26.800	26.800	26.800
Other industrial & transportation	Million Btu/short ton	22.585	22.420	22.439	22.528	22.290	22.175
Electric utilities	Million Btu/short ton	22.262	21.799	21.659	21.692	21.521	21.284
Imports	Million Btu/short ton	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
•	Millian Dtu/short ton	24.80		24.80			
Coal coke, imports and exports	Million Btu/short ton	24.60	24.80	24.00	24.80	24.80	24.80
Crude oil <sup>1</sup>							
Production	Million Btu/barrel	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
Exports	Million Btu/barrel	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
Exports	Million Btu/barrel	5.752	5.774	5.748	5.745	5.797	5.808
Petroleum products <sup>2</sup>							
Consumption	Million Btu/barrel	5.515	5.504	5.494	5.504	5.518	- 5.519
Residential and commercial	Million Btu/barrel	5.387	5.377	5.358	5.383	5.389	5.382
Industrial	Million Btu/barrel	5.565	5.537	5.527	5.535	5.552	5.546
Transportation	Million Btu/barrel	5.397	5.394	5.392	5.396	5.402	5.407
Electric utilities		6.245	6.238	6.250	6.251	6.249	6.251
Imports	Million Btu/barrel	5.983	5.959	5.935	5.980	5.908	5.955
Exports	Million Btu/barrel	5.752	5.773	5.747	5.743	5.796	5.814
LPG consumption average³	Million Btu/barrel	3.746	3.730	3.715	3.711	3.677	3.669
Natural gas plant liquids							
Production	Million Btu/barrel	4.049	4.011	3.984	3.964	3.941	3.925
Notice of the second							
Natural gas	Dhu faultia fant	4 004	1.004	4.004	4 000	4004	4.040
Production, dry		1,021	1,024	1,021	1,020	1,021	1,019
Production, wet		1,093	1,097	1,095	1,093	1,093	1,088
Consumption		1,021	1,024	1,021	1,020	1,021	1,019
Non-electric utility users		1,020	1,024	1,020	1,019	1,019	1,016
Electric utilities		1,024	1,022	1,026	1,023	1,029	1,034
Imports		1,026	1,027	1,026	1,025	1,026	1,030
Exports	Btu/cubic foot	1,023	1,016	1,014	1,013	1,013	1,013
Approximate Heat Rates for Electr	ricity						
Approximate meat mates for Electi							
Fossil fuel steam-electric power plant generation		10,389	10,442	10,406	10,373	10,435	10,361
Nuclear power plant generation		10,903	11,161	11,013	11,047	10,769	10,941
Geothermal energy power plant generation		21,674	21,674	21,611	21,611	21,611	21,611
Electricity consumption	Btu/kilowatthour	3,412	3,412	3,412	3,412	3,412	3,412

<sup>&</sup>lt;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

section.

3 LPG consumption average is the annual weighted average of the LPG product supplied components: ethane, propane, butane, butane-propane mixture, ethane-propane mixture, and isobutane. It is obtained by using heat content values shown on the first page of this section.

<sup>\*</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, 1979-1985**

	Units	1979	1980	1981	1982	1983	1984-1985‡
Coal				•			
Production	Million Btu/short ton	22.466	22.418	22.312	22.242	22.059	22,127
Consumption	Million Btu/short ton	22.103	21,946	21,712	21.669	21.574	21.694
Non-electric utility users	Million Btu/short ton	24.640	24.751	24.506	24.211	24.110	24.230
Electric utilities	Million Btu/short ton	21.364	21.295	21.085	21.194	21.133	21.213
Imports	Million Btu/short ton	25.00	25.00	25.00	25.00	25.00	25.00
Exports	Million Btu/short ton	26.55	26.38	26.16	26.22	26.29	26.44
Laports	Willion Blu/ short ton	20.55	20.56	20.10	20.22	20.29	20.44
Anthracite							
Production	Million Btu/short ton	23.59	23.35	23.69	23.69	23.24	23.24
Consumption	Million Btu/short ton	22.70	22.16	22.10	23.00	22.41	22.54
Non-electric utility users	Million Btu/short ton	25.20	23.74	25.12	25.37	25.59	25.41
Electric utilities	Million Btu/short ton	17,45	17.65	18.17	18.16	16.52	17.28
Imports and exports	Million Btu/short ton	25.40	25.40	25.40	25.40	25.40	25.40
·							
Bituminous coal and lignite							
Production	Million Btu/short ton	22.459	22.411	22.302	22.234	22.053	22.122
Consumption	Million Btu/short ton	22.100	21.950	21.712	21.671	21.581	21.698
Residential and commercial	Million Btu/short ton	21.884	22.488	22.191	22.373	22.934	22.902
Coke plants	Million Btu/short ton	26.800	26.800	26.800	26.800	26.800	26.800
Other industrial & transportation	Million Btu/short ton	22,436	22.690	22.572	22.694	22.679	22.763
Electric utilities	Million Btu/short ton	21.372	21.301	21.091	21.200	21.141	21.219
Imports	Million Btu/short ton	25.000	25.000	25.000	25.000	25.000	25.000
Exports	Million Btu/short ton	26.570	26.404	26,176	26.231	26.300	26.445
·		20.070	20.404		20.201	20.000	20.443
Coal coke, imports and exports	Million Btu/short ton	24.80	24.80	24.80	24.80	24.80	24.80
Crude oil <sup>1</sup>			۰				
Production	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800
Imports	Million Btu/barrel	5.810	5.812	5.818	5.826	5.825	5.823
Exports	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800
	•						
Crude oil and petroleum products							
Imports	Million Btu/barrel	5.810	5.796	5.775	5.775	5.774	5.763
Exports	Million Btu/barrel	5.832	5.820	5.821	5.820	5.800	5.853
Petroleum products <sup>2</sup>				•			
Consumption	Million Btu/barrel	5.494	5.479	5.448	5.415	5.406	5.409
Residential and commercial	Million Btu/barrel	5,471	5.468	5.409	5.392	5.363	5.267
Industrial	Million Btu/barrel	5.416	5.376	5.310	5.262	5.279	5.305
Transportation	Million Btu/barrel	5.430	5.440	5.434	5.423	5.416	5.424
Electric utilities	Million Btu/barrel	6.258	6.254	6.258	6.258	6.255	6.251
Imports	Million Btu/barrel	5.811	5.748	5.659	5.664	5.677	
							5.659
Exports	Million Btu/barrel	5.864	5.841	5.837	5.829	5.800	5.871
LPG consumption average <sup>3</sup>	Million Btu/barrel	3.680	3.674	3.643	3.615	3.614	3.599
Natural gas plant liquids							
Production	Million Btu/barrel	3.955	3.914	3.930	3.872	3.839	3.960
				•			
Natural gas							
Production, dry	Btu/cubic foot	1,021	1,026	1,027	1,028	1,031	1,031
Production, wet	Btu/cubic foot	1,092	1,098	1,103	1,107	1,115	1,115
Consumption		1,021	1,026	1,027	1,028	1,031	1,031
Non-electric utility users	Btu/cubic foot	1,018	1,024	1,025	1,026	1,031	1,031
Electric utilites	Btu/cubic foot	1,035	1,035	1,035	1,036	1,030	1,030
Imports	Btu/cubic foot	1,037	1,022	1,014	1,018	1,024	1,024
Exports		1,013	1,013	1,011	1,011	1,010	1,010
Approximate Heat Rates for Electr	icity						
Fossil fuel steam-electric power plant generations	Btu/kilowatthour	10,353	10,388	10,453	10,423	10,445‡	10,445
Nuclear power plant generation	Btu/kilowatthour			11,030			
Geothermal energy power plant generation		10,879	10,908		11,073	10,905‡	10,905
		21,545	21,639	21,639	21,629‡	21,290‡	21,303
Electricity consumption	Btu/kilowatthour	3,412	3,412	3,412	3,412	3,412	3,412

¹ Includes lease condensate.
² Weighted averages of the products included in each category are calculated using heat content values shown on the first page of this section.
³ LPG consumption average is the annual weighted average of the LPG product supplied components: ethane, propane, butane, butane-propane mixture, ethane-propane mixture, and isobutane. It is obtained by using heat content values shown on the first page of this section.

<sup>•</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. ‡=Preliminary data.

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

#### **Thermal Conversion Factor Source Documentation**

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

**Asphalt.** • 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 by the Gas Processors Suppliers Association/Gas Processors Association in the *Engineering Data Book*, Ninth Edition, 1972.

**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 by the Gas Processors Suppliers Association/Gas Processors Association in the *Engineering Data Book*, Ninth Edition, 1972.

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 by the Gas Processors Suppliers Association/Gas Processors Association in the *Engineering Data Book*, Ninth Edition, 1972.

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.* 

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 Fahrenheit. • 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 by the Gas Processors Suppliers Association/Gas Processors Association in the *Engineering Data Book*, Ninth Edition, 1972.

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 natural gasoline (see "Natural Gasoline") 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**

#### Coal and Coal Coke

Anthracite, Consumption. • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of anthracite production and the heat content of anthracite imports less the heat content of anthracite exports, including shipments to U.S. Armed Forces overseas, and dividing this total heat content by the total anthracite consumed, adjusted for the quantity of anthracite, stock changes and unaccounted for.

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 subtracting the total heat content of anthracite

received at electric utilities from the total heat content of all anthracite consumed and dividing the resulting amount by the quantity of anthracite consumed by non-electric utility users.

Anthracite, Imports and Exports. • 1973 forward: EIA assumed the anthracite imports and exports to be freshly mined anthracite having an estimated heat content of 25.40 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 thermal content of 25.40 million Btu per short ton) and the heat content of anthracite recovered from culm banks (estimated to have a thermal content of 19.00 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 26.80 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 by EIA assuming that the bituminous coal and lignite delivered to other industrial 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 other industrial users from each coal-producing 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 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 coalproducing district was applied to the volume of deliveries to residential and commercial users from each coal-producing district, and the sum 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 27.00 million Btu per short ton) and the heat content of exported steam coal (estimated to have an average thermal content of 25.00 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 25.00 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 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 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 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 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 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 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 24.80 million Btu per short ton.

#### **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 consumed at electric utilities by the quantity consumed at electric utilities. The heat contents and the quantities consumed are from Form EIA-759 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 non-electric 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 (Dry), Production. • 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 (Wet), Production. • 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.

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**

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."

**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. • 1973-1983: 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.* • 1984 forward: Estimated by EIA.

Petroleum Products, Consumption by Industrial Users. • 1973–1983: 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. • 1984 forward: Estimated by EIA.

Petroleum Products, Consumption by Residential and Commercial Users. • 1973–1983: 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 docu-

mented in the State Energy Data Report. • 1984 forward: Estimated by EIA.

Petroleum Products, Consumption for Transportation Use. • 1973-1983: 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.
• 1984 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.

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

Fossil Fuel Steam-Electric Power Plant Generation. • 1973–1983: This is the weighted average heat rate of 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.* • 1984 forward: Estimated to be the same as 1983.

**Geothermal Energy (Consumed by Electric Utilities).** • 1973–1981: Calculated 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 by EIA.

Hydroelectric Power. There is no generally accepted practice for measuring hydroelectric power thermal conversion rates. EIA has selected a rate that is equal to the prevailing heat rate factor at fossil fuel steam-electric power plants. By using the heat rate factor, it is possible to evaluate fossil fuel requirements for replacing hydroelectric power production during periods of drought. Furthermore, it allows for better comparisons with certain other countries such as Norway where hydroelectric power is the principal

means for producing electricity. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is 3,412 Btu per kilowatthour.

• 1973 forward: Assumed by EIA to be the fossil fuel steam-electric power plant factor.

**Nuclear Power.** • 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.

Photovoltaic and Solar Thermal Energy (Consumed by Electric Utilities). • 1984 forward: Assumed by EIA to be the fossil fuel steam-electric power plant factor.

Wind Energy (Consumed by Electric Utilities).
1983 forward: Assumed by EIA to be the fossil fuel steam-electric power plant factor.

Wood and Waste Energy (Consumed by Electric Utilities). • 1973 forward: Assumed by EIA to be the fossil fuel steam-electric power plant factor.

# Glossary

Anthracite. A hard, jet black, high-luster coal containing a high percentage of fixed carbon and a low percentage of volatile matter and having an ignition temperature of about 900 degrees Fahrenheit. Domestic anthracite is mined almost exclusively in northeastern Pennsylvania and is often referred to as hard coal. It is used for generating electricity and for space heating. It includes meta-anthracite and semianthracite and conforms to ASTM Specification D388 for anthracite.

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

Bituminous Coal. A dense, black coal that often has well-defined bands of bright and dull material. It has a volatility greater than anthracite and a calorific value greater than lignite. In the United States, it is often referred to as soft coal and is used for electricity generation, coke production, and space heating. It includes subbituminous coal and conforms to ASTM Specification D388 for bituminous coal and subbituminous coal.

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 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, colorless, paraffinic hydrocarbon ( $C_4H_{10}$ ) extracted from natural gas and refinery gas streams. Included are isobutane, a branch-chain configuration of ( $CH_3$ ) $_3CH$  with a boiling point of 10.9  $^{\circ}F$  and normal butane, a straight-chain configuration of  $C_4H_{10}$  with a boiling point of 31.1  $^{\circ}F$ . Butane is used primarily for blending into motor gasoline, for residential and commercial heating, and for industrial uses, especially the manufacture of chemicals and synthetic rubber.

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

**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 degreedays 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. Degree-day 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

# Glossary

#### Glossary (continued)

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.

**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 that conform to either ASTM Specification D396 or D975. 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.

**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.

Ethane. A normally gaseous, colorless, paraffinic, straight-chain hydrocarbon (C<sub>2</sub>H<sub>6</sub>) with a boiling point of -127.48 °F extracted from natural gas and refinery gas streams. Ethane is used primarily as petrochemical feedstock for production of chemicals and plastic materials.

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

Imports. Receipts into the 50 States and the District of Columbia of foreign goods (including goods from U.S. territories and U.S. Foreign Trade Zones) that are classified by customs officials as "imports for consumption" or "withdrawals from bonded warehouses for consumption," including withdrawals from bonded warehouses for military offshore use and for bunkering of vessels or aircraft engaged in international commerce. Included are imports for the Strategic Petroleum Reserve. Excluded are receipts into bonded warehouses and into U.S. territories and U.S. Foreign Trade Zones.

Isobutane. See "Butane."

Landed Cost of Imported Crude Oil. Includes the purchase price at the foreign port (or U.S. land border), transportation and insurance costs, wharfage and demurrage, brokerage fees, import fees and duties, and license (ticket) fees. Averages are based on major importers, which account for an estimated 90 to 95 percent total crude oil imports. Coverage includes the United States and its territories.

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 with a high moisture content. It is also referred to as brown coal. Domestic lignite is mined in North Dakota, Montana, and Texas and is used mainly for electric power generation. It conforms to ASTM Specification D388 for lignite.

Liquefied Petroleum Gases. Ethane, ethylene, propane, propylene, normal butane, butylene, 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 until blending has been completed and excludes alcohol that is to be used in the blending of gasohol.

**Motor Gasoline, Premium Grade.** Finished motor gasoline that has an antiknock designation of 3 or more for unleaded motor gasoline and 4 or more for leaded motor gasoline.

Motor Gasoline, Regular Grade. Motor gasoline that has an antiknock designation of 2 or less for unleaded motor gasoline and 3 or less for leaded motor gasoline.

Motor Gasoline, Total. This includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

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

Natural Gas Plant Liquids. 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

### Glossary (continued)

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 such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Normal Butane. See "Butane."

**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, refined petroleum products, natural gas plant liquids, and nonhydrocarbon compounds blended into finished petroleum products.

**Petroleum Coke.** A 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 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 endpoint, other oils over 400 °F end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

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.

**Propane.** A normally gaseous, colorless, paraffinic, straight-chain hydrocarbon  $(C_3H_8)$  with a boiling point

of -43.67 °F. It is extracted from natural gas and refinery gas streams. Propane is used primarily for residential and commercial heating and cooling, and also as a fuel for transportation and industrial uses, including petrochemical feedstocks.

Refined Petroleum Product Supplied. Total refined petroleum product supplied is the sum of all refined petroleum products supplied. For each product, the amount supplied is calculated by adding production, imports, and crude oil burned directly; and subtracting exports and changes in primary stocks (net withdrawals is a plus quantity and net additions is a minus quantity).

**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 products known as No. 5 and No. 6 fuel oils that conform to ASTM Specification D396 and Navy Special Fuel Oil specifications, as well as Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include imported crude oil burned as fuel.

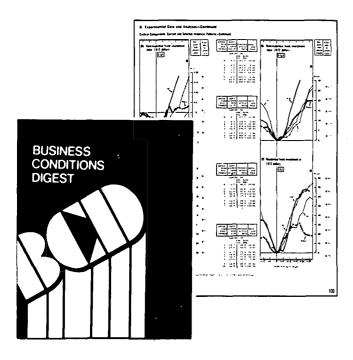
Rotary Rig. A machine, used for drilling wells, that employs a rotating tube attached to a bit for boring holes through rock.

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

Supplemental Gaseous Fuels. Mainly synthetic natural gas, propane-air, and refinery 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 Oil. 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 crude oil input, exports of crude oil, crude oil burned as fuel, and crude oil losses.



#### BUSINESS CONDITIONS DIGEST (BCD)

... a monthly report that helps you analyze the current economy and future trends.

BCD has "a plethora of charts that . . . provide more information and perspective per minute of reading time than anything else you can find," according to Edgar R. Fiedler, former president of the National Association of Business Economists. (Across the Board, February 1984.)

#### **BCD** contains:

- Charts providing a 25-year perspective for about 300 economic time series that cover all major aspects of the economy. Expansions and contractions in the U.S. economy are clearly marked so that the leading, coincident, and lagging characteristics of the series are easy to observe.
- Tables listing current data for all 300 series.
- Appendixes providing historical data, cyclical turning points, cyclical comparisons, and seasonal adjustment factors.



# HANDBOOK OF CYCLICAL INDICATORS

WILLIAM TOTAL CAME

... a statistical and technical supplement that helps you make maximum use of the monthly Business Conditions Digest.

The HANDBOOK contains:

- Descriptions of all **BCD** series, providing definitions, methods of compilation, coverage, and sources.
- Historical data for 1947-82 for all BCD series.
- Composite index methodology explaining the construction of the indexes in step-by-step detail.
- Reference materials including—

Scores for cyclical indicators

Average leads or lags for cyclical indicators

Measures of variability

Business cycle turning dates

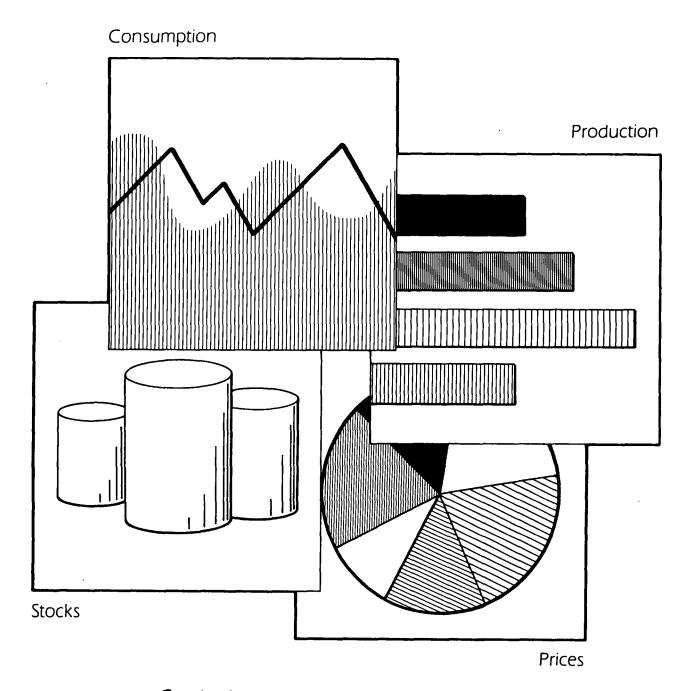
Bibliography

Addresses of data sources.

Order Form Mail 1		Credit Card Orders Only Total charges \$	Customer's Telephon	e No.'s
Enclosed is \$ □ check	master cara arra	Fill in the boxes below.	Area Home Area Office	
in money order, or charge to my Deposit Account No.	VISA accepted.	Credit Control Control	Code Code	
Deposit Account No.		Card No.		
Order No.	Master Card	Expiration Date Month/Year	Charge orders may be telephoned to the GPO ordesk at (202)783-3238 from 8:00 a.m. to 4:00 p	
Business Conditions Digest Annual subscription: \$44.00 domestic, \$55.00 foreign. Single copy: \$4.00 domestic, \$5.00 foreign.			eastern time, Monday-Friday (except holidays). For Office Use Only	
Handbook of Cyclical Indicator Company or Personal Name	<b>3</b> \$5,50		Quantity	Charges
			Publications	
Additional address/attention line		Subscriptions		
			Special Shipping Charges	
treet address			International Handling	
	<del></del>		Special Charges	
City State ZIP Code		OPNR		
			UPNS	
or Country)			Balance Due	
			Discount	91
PLEASE PRINT OR TYPE			Refund	GPO 896-91

# Looking for Energy Information?

The Energy Information Administration has Data and Projections on:



# **Contact:**

Energy Information Administration National Energy Information Center Forrestal Building, 1F-048 1000 Independence Avenue, S.W. Washington, D.C. 20585 (202) 252-8800 Energy Information Administration Forrestal Building Washington, D.C. 20585

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



FIRST—CLASS MAIL POSTAGE & FEES PAID U.S. DEPT. OF ENERGY PERMIT NO. G 20

# FIRST CLASS MAIL