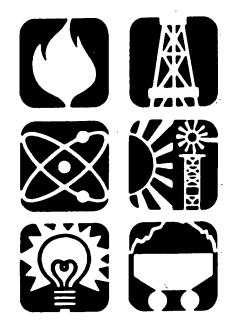
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**Energy Information Administration** Washington, DC

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# Monthly Energy Review

February 1986





### Monthly Energy Review

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

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

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

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

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#### Information

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# Monthly Energy Review

**Energy Information Administration** 

Office of Energy Markets and End Use U.S. Department of Energy Washington, DC 20585 DOE/EIA-0035(86/02)
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February 1986

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

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### **Articles**

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

Changes in 1981 Petroleum Data Series	1981 1981
An Overview of Natural Gas MarketsDecember	1981
The Interstate and Intrastate Natural Gas MarketsJanuary	1982
Natural Gas Drilling and Production Under the Natural Gas Policy Act February	1982
Impacts of Financial Constraints on the Electric Utility IndustryOctober	1982
The Effect of Weather on Energy UseApril	1983
Trends in U.S. Energy Since 1973May	1983
Data Series on Petroleum Use at Electric UtilitiesJuly	1983
Residential Energy Consumption, 1978 Through 1981September	1983
Exploring for Oil and GasNovember	1983
The Influence of Federal Actions on Petroleum Exploration December[2]	1983
Aggregate Statistics: Accurate or Misleading? December[3]	1983
Estimating Well CompletionsMarch	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.

M	U.S. Crude Oil, Natural Gas, and Natural Gas Liquids		
11	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
n			1000
,,	Housing Characteristics	February	1983
	✓ Energy Price and Expenditure Data Report, 1970–1980	•	1983
	Railroad Deregulation: Impact on Coal	•	1983
	✓ Port Deepening and User Fees: Impact on U.S. Coal Exports		1983
m	U.S. Crude Oil, Natural Gas, and Natural Gas Liquids		
<i>//</i> 1	Reserves, 1982 Annual Report	September	1983
	► Annual Energy Review 1983		1984
m			1984
m	Annual France Outlant 1000		1984
///	✓ State Energy Price and Expenditure Report, 1970–1981		1984
	✓ Solar Collector Manufacturing Activity 1983		1984
	✓ Estimates of U.S. Wood Energy Consumption, 1980–1983		1984
-44	✓ International Energy Annual 1983	•	1984
	➤ Energy Conservation Indicators 1983 Annual Report		1984
	✓ Annual Energy Outlook 1984		1984
	Annual Energy Review 1984		1985
	✓ Performance Profiles of Major Energy Producers 1983	February	1985
	✓ State Energy Price and Expenditure Report 1970–1982		1985
	✓ State Energy Data Report, Consumption Estimates, 1960–1983	April	1985
112	✓ Annual Outlook for U.S. Electric Power 1985	June	1985
m	Short-Term Energy Outlook, Volume 1, October 1985	August	1985
/ad	✓Analysis of Growth in Electricity Demand, 1980–1984		1985
	✓ Profiles of Foreign Direct Investment in U.S. Energy 1984		1985
	✓ Performance Profiles of Major Energy Producers 1984	December	1985

#### January through February Summary

The United States produced 0.3 percent more energy during the first 2 months of 1986 than during the same period in 1985, but U.S. consumption was down 3.5 percent. Net imports of all energy were 26.2 percent higher with net imports of petroleum up 25.2 percent, compared with the first 2 months of 1985.

#### **Production**

Energy production during February 1986 totaled 5.2 quadrillion Btu, a 0.3-percent decrease compared with the level of production during February 1985. Natural gas production was down 4.5 percent, while coal production increased 2.9 percent and petroleum production was up 0.7 percent. All other forms of energy production combined were down 0.4 percent from the level of production during February 1985.

#### Consumption

Energy consumption during February 1986 totaled 6.3 quadrillion Btu, 2.0 percent below the level of consumption during February 1985. Natural gas consumption decreased 7.7 percent. Petroleum consumption was up 0.5 percent and coal consumption increased 0.4 percent. Consumption of all other forms of energy combined increased 0.9 percent compared with the level 1 year earlier.

#### **Net Imports**

Net imports of energy during February 1986 totaled 0.6 quadrillion Btu, 26.1 percent above the level of net imports 1 year earlier. Net imports of petroleum increased 23.4 percent, while net imports of natural gas dropped 31.9 percent. Net exports of coal were down 16.4 percent compared with the level in February 1985.

# **Energy Summary** (Quadrillion (1018) Btu)

	February			Cumulative January through February				
	1986	1985	Percent Change <sup>1</sup>	1986	1986 Daily Rate	1985	1985 Dally Rate	Percent Change <sup>1</sup>
Total Production	5.167	5.182	-0.3	10.814	0.183	10.783	0.183	0.3
Petroleum <sup>2</sup>	1.635	1.624	0.7	3.446	0.058	3.424	0.058	0.7
Natural Gas (Dry)	1.399	1.465	-4.5	2.961	0.050	3.075	0.052	-3.7
Coal	1.516	1.473	2.9	3,147	0.053	2.966	0.050	6.1
Other <sup>3</sup>	0.617	0.620	-0.4	1.260	0.021	1.317	0.022	-4.3
Total Consumption	6.278	6.403	-2.0	13.275	0.225	13.760	0.233	-3.5
Petroleum <sup>4</sup>	2.421	2.409	0.5	5.079	0.086	5.103	0.086	-0.5
Natural Gas <sup>5</sup>	1.793	1.942	-7.7	3.829	0.065	4.277	0.072	-10.5
Coal	1.412	1.406	0.4	3.038	0.051	3.006	0.051	1.0
Other <sup>4</sup>	0.652	0.646	0.9	1.329	0.023	1.373	0.023	-3.2
Net imports	0.569	0.451	26.1	1.343	0.023	1.065	0.018	26.2
Petroleum <sup>7</sup>	0.601	0.487	23.4	1,403	0.024	1.121	0.019	25.2
Natural Gas	0.064	0.094	-31.9	0.155	0.003	0.194	0.003	-20.2
Coal®	(0.131)	(0.156)	(-16.4)	(0.283)	(0.005)	(0.306)	(0.005)	(-7.6)
Other	0.034	0.026	32.1	0.069	0.001	0.056	0.001	22.0

Based on daily rates prior to rounding.

Fincludes crude oil, lease condensate, and natural gas plant liquids.

3Other is hydroelectric and nuclear electric power, and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.

Includes petroleum products.
Includes supplemental gaseous fuels.

<sup>\*</sup>Other is hydroelectric and nuclear electric power; electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems; and net imports of electricity and coal coke. Includes crude oil, lease condensate, petroleum products, pentanes plus, unfinished oils, gasoline blending components, and

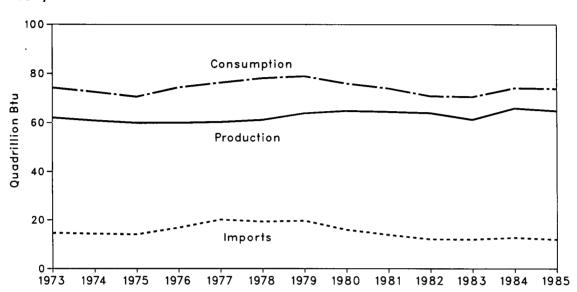
imports of crude oil for the Strategic Petroleum Reserve.

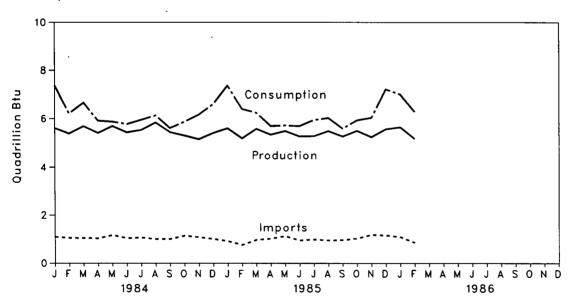
Parentheses indicate exports are greater than imports. Other is net imports of electricity and coal coke.

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

### Overview

### Yearly





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

		Production <sup>2</sup>	Consumption <sup>2</sup>	Imports <sup>2</sup>	Exports	Net Imports
			Qu	adrillion (1015) E	3tu	
1973	Total	62.060	74.282	14.731	2.051	12.680
1974	Total	60.835	72.543	14.412	2.223	12.190
1975	Total	59.860	70.546	14.111	2.359	11.752
1976	Total	59.891	74.362	16.837	2.189	14.648
1977	Total	60.219	76.289	20.090	2.072	18.018
1978	Total	61.103	78.088	19.254	1.931	17.323
1979	Total	63.800	78.898	19.616	2.871	16.745
1980	Total	64.761	75.952	15.971	3.724	12.247
1981	Total	64.422	73.989	13.974	4.329	9.644
1982	Total	63.890	70.840	12.093	4.636	7.457
1983	Total	61.194	70.495	12.024	3.719	8.306
1984	January	5.609	7.364	1.102	0.247	0.854
	February	5.380	6.210	1.053	0.221	0.832
	March	5.686	6.652	1.047	0.315	0.732
	April	5.401	5.912	1.035	0.327	0.708
	May	5.691	5.872	1.170	0.365	0.805
	June	5.427	5.774	1.040	0.367	0 <del>:</del> 673
	July	5.528	5.951	1.065	0.326	0.739
	August	5.837	6.133	1.005	0.359	0.646
	September	5.436	5.610	1.005	0.355	0.651
	October	5.300	5.869	1.144	0.295	0.848
	November	5.149	6.164	1.085	0.271	0.814
	December	5.408	6.597	1.012	0.360	0.652
	Total	65.852	74.108	12.763	3.808	8.955
1985	January	5.601	R7.356	R0.918	0.305	R0.614
	February	5.182	R6.403	R0.756	0.305	R0.451
	March	5.579	R6.245	R0.972	R0.316	R0.656
	April	5.338	R5.698	R1.022	R0.332	R0.690
	May	5.489	R5.722	R1.131	R0.384	R0.746
	June	5.265	R5.697	R0.948	R0.342	R0.606
	July	5.275 5.485	R5.949	R0.989	R0.328	R0.661
	August	5.485 5.260	R6.032 R5.593	R0.948	R0.420	R0.528
	September October	5.496	R5.935	R0.962 R1.029	0.363 R0.364	R0.599 R0.665
	November	5.236	R6.036	R1.186	R0.405	R0.781
	December	R5.566	R7.202	R1.162	R0.367	R0.795
	Total	R64.772	R73.867	R12.022	R4.230	R7.791
4000						
1986	January	R5.647 5.167	R6.997	R1.093	0.318	R0.774
	February		6.278	0.854	0.284	0.569
	Year to Date	10.814	13.275	1.946	0.603	1.343

<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.

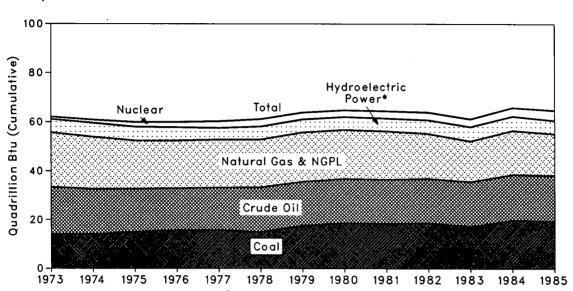
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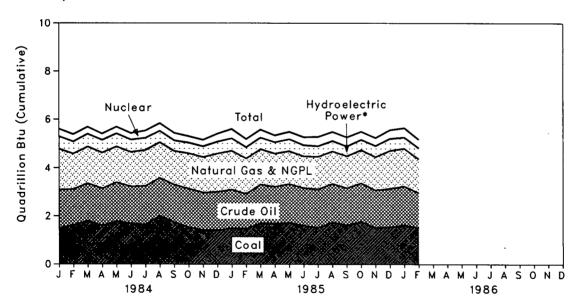
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• Totals may not equal sum of components due to independent rounding.
• Data do not include geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric

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

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

### Yearly





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

		Coal	Crude Oil¹	NGPL <sup>2</sup>	Natural Gas (Dry)	Hydro- electric Power <sup>3</sup>	Nuclear Electric Power	Other	Total	Year to Date
					Qu	adrillion (101	⁵) Btu			
1973	Total	13.993	19.493	2.569	22.187	2.861	0.910	0.046	62.060	
1974	Total	14.074	18.575	2.471	21.210	3.177	1.272	0.056	60.835	
1975	Total	14.990	17.729	2.374	19.640	3.155	1.900	0.072	59.860	
1976	Total	15.654	17.729	2.327	19.480	2.976	2.111	0.072	59.891	
1977	Total	15.755	17.454	2.327	19.565	2.333	2.702	0.081	60.219	
1977	Total	14.910	18.434	2.245	19.485	2.937	3.024	0.068	61.103	
					20.076	2.937 2.931	3.024 2.776	0.089	63.800	
1979	Total	17.539	18.104	2.286						
1980	Total	18.597	18.249	2.254	19.907	2.900	2.739	0.114	64.761	
1981	Total	18.377	18.146	2.307	19.699	2.758	3.008	0.127	64.422	
1982	Total	18.639	18.309	2.191	18.255	3.256	3.131	0.108	63.890	,
1983	Total	17.250	18.392	2.184	16.530	3.502	3.203	0.133	61.194	
1984	January	1.495	1.594	0.186	1.695	0.311	0.317	0.011	5.609	5.609
	February	1.622	1.493	0.181	1.472	0.292	0.307	0.013	5.380	10.989
	March	1.795	1.559	0.189	1.515	0.318	0.295	0.015	5.686	16.675
	April	1.601	1.542	0.185	1.483	0.314	0.262	0.014	5.401	22.076
	May	1.785	1.610	0.191	1.478	0.333	0.279	0.014	5.691	27.766
	June	1.682	1.540	0.184	1.432	0.302	0.273	0.013	5.427	33.193
	July	1.646	1.598	0.193	1.485	0.288	0.305	0.013	5.528	38.721
	August	1.999	1.584	0.193	1.463	0.263	0.319	0.016	5.837	44.559
	September	1.739	1.565	0.190	1.394	0.219	0.315	0.015	5.436	49.995
	October	1.536	1.601	0.195	1.465	0.219	0.268	0.016	5.300	55.295
	November	1.417	1.562	0.192	1.463	0.233	0.265	0.016	5.149	60.444
	December	1.405	1.600	0.195	1.587	0.270	0.333	0.018	5.408	65.852
	Total	19.723	18.848	2.274	17.931	3.363	3.538	0.174	65.852	
1985	January	1.494	1.605	0.194	1.610	0.289	0.391	0.018	5.601	5.601
	February	1.473	<i>{</i> 1.450	0.174	1.465	0.271	0.333	0.016	5.182	10.783
	March	1.706	∖1.605	0.191	1.465	0.258	0.335	0.018	5.579	16.362
	April	1.680	1.539	0.183	1.378	0.256	0.286	0.016	5.338	21.700
	Мау	1.719	1.613	0.190	1.363	0.277	0.310	0.016	5.489	27.188
	June	1.607	1.560	0.185	1.315	0.250	0.333	0.016	5.265	32.454
	July	1.517	1.601	0.188	1.348	0.224	0.380	0.018	5.275	37.729
	August	1.746	1.599	0.191	1.344	0.210	0.376	0.018	5.485	43.214
	September	1.622	1.544	0.181	1.326	0.197	0.373	0.018	5.260	48.474
	October	1.761	1.608	0.190	1.373	0.210	0.337	0.017	5.496	53.970
	November	1.523	1.554	0.192	1.379 B1.570	0.240	0.326	0.021	5.236 R5.566	59.206 R64.772
	December	1.539	1.606	0.199	R1.570	0.265	0.365	0.022		H04.//2
	Total	19.388	18.884	2.258	R16.937	2.948	4.144	0.213	R64.772	
1986	January	1.631	1.608	0.204	R1.562	0.229	0.391	0.023	R5.647	R5.647
	February	1.516	1.452	0.183	1.399	0.244	0.353	0.019	5.167	10.814
	Year to Date	3.147	3.060	0.386	2.961	0.474	0.745	0.042	10.814	

Includes lease condensate.

<sup>\*</sup>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.

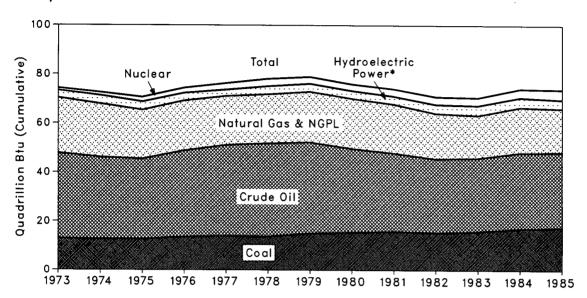
R = Revised data.

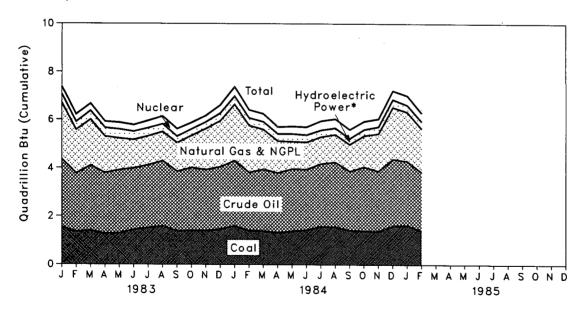
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• Data do not include geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric

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

# Consumption of Energy by Source

### Yearly





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

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

	٠	Coal	Natural Gas¹	Petro- leum	Hydro- electric Power <sup>2</sup>	Nuclear Electric Power	Other <sup>3</sup>	Total	Year to Date
					Quadrillior	n (1015) Btu			
1973	Total	12.971	22.512	34.840	3.010	0.910	0.039	74.282	
1974	Total	12.663	21.732	33.455	3.309	1.272	0.112	72.543	
1975	Total	12.663	19.948	32.731	3.219	1.900	0.086	70.546	
1976	Total	13.584	20.345	35.175	3.066	2.111	0.081	74.362	
1977	Total	13.922	19.931	37.122	2.515	2.702	0.097	76.289	
1978	Total	13.765	20.000	37.965	3.141	3.024	0.193	78.088	
1979	Total	15.039	20.666	37.123	3.141	2.776	0.152	78.898	
1980	Total	15.423	20.391	34.202	3.118	2.739	0.079	75.952	
1981	Total	15.908	19.926	31.931	3.105	3.008	0.111	73.989	
1982	Total	15.322	18.507	30.232	3.561	3.131	0.086	70.840	
1983	Total	15.898	17.352	30.054	3.871	3.203	0.118	70.495	
1984	January	1.552	2.330	2.810	0.344	0.317	0.012	7.364	7.364
,,,,,	February	1.359	1.793	2.415	0.320	0.307	0.015	6.210	13.574
	March	1.403	1.908	2.684	0.348	0.295	0.014	6.652	20.226
	April	1.272	1.501	2.520	0.344	0.262	0.014	5.912	26.138
	May	1.298	1.303	2.612	0.366	0.279	0.013	5.872	32.010
	June	1.439	1.175	2.542	0.333	0.273	0.011	5.774	37.784
	July	1.519	1.197	2.592	0.325	0.305	0.012	5.951	43.736
	August	1.587	1.208	2.695	0.309	0.319	0.014	6.133	49.868
	September	1.384	1.173	2.468	0.256	0.315	0.014	5.610	55.479
	October	1.395	1.322	2.612	0.260	0.268	0.013	5.869	61.347
	November	1.394	1.695	2.529	0.266	0.265	0.014	6.164	67.511
	December	1.470	1.901	2.571	0.303	0.333	0.017	6.597	74.108
	Total	17.074	18.507	31.051	3.774	3.538	0.163	74.108	
1985	January	1.600	2.334	2.695	R0.318	0.391	0.018	R7.356	R7.356
	February	1.406	1.942	2.409	R0.296	0.333	0.017	R6.403	R13.760
	March	1.387	1.651	2.558	R0.296	0.335	0.018	R6.245	R20.004
	April	1.320	1.311	2.479	R0.286	0.286	0.016	R5.698	R25.702
	May	1.385	1.122	2.581	R0.311	0.310	0.013	R5.722	R31.425
	June	1.432	1.119	2.512	R0.287	0.333	0.014	R5.697	R37.121
	July	1.585	1.109	2.590	R0.268	0.380	0.016	R5.949	R43.070
	August	1.563	1.142	2.678 2.442	R0.257	0.376	0.017	R6.032	R49.102 R54.695
	September October	1.425 1.390	1.103 1.289	2.442 2.658	R0.235 R0.245	0.373 0.337	0.015 0.016	R5.593 R5.935	R60.629
	November	1.386	1.542	2.490	R0.274	0.337	0.018	R6.036	R66.665
	December	1.607	R2.148	2.761	R0.299	0.365	0.018	R7.202	R73.867
	Total	17.487	R17.813	30.852	R3.372	4.144	0.200	R73.867	1170.007
1986			R2.036	2.658	0.264	0.391	0.023	R6.997	R6.997
1900	January February	1.626 1.412	1.793	2.658 2.421	0.264	0.353	0.023	6.278	13.275
	-		3.829		0.279 <b>0.543</b>	0.353 <b>0.745</b>	0.019	13.275	13.275
	Year to Date	3.038	3.029	5.079	0.343	Ų./45	0.042	13.2/5	

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

R=Revised data.

N=Hevised data.

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

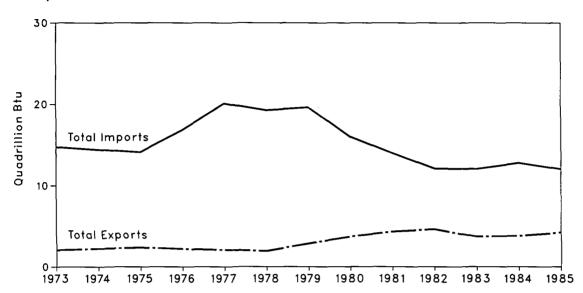
• Totals may not equal sum of components due to independent rounding.

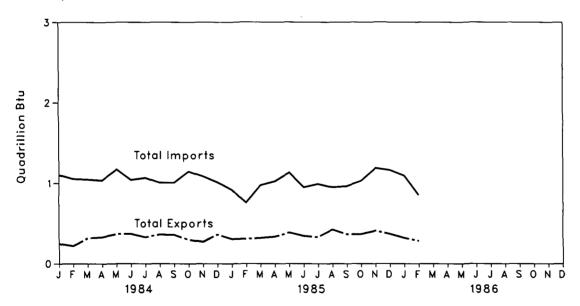
• Data do not include geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric

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

### **Energy Imports and Exports**

### Yearly





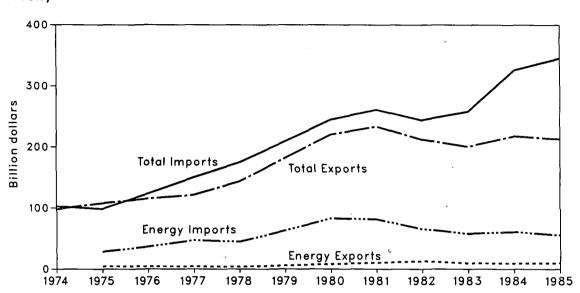
### Net Imports<sup>1</sup> of Energy by Source

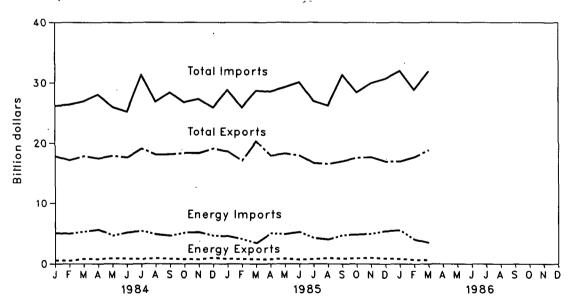
				Petro-					Year
		Cool	Crude Oil <sup>2</sup>	leum Products <sup>3</sup>	Natural Gas	Electric- ity	Coal Coke	Total	to Date
		Coal	Oll-	Products		-		iotai	Date
					Quadrilli	on (1015) Btu			
1973	Total	(1.422)	6.883	6.097	0.981	0.148	(0.007)	12.680	
1974	Total	(1.568)	7.389	5.273	0.907	0.133	0.056	12.190	
1975	Total	(1.738)	8.708	3.800	0.904	0.064	0.014	11.752	
1976	Total	(1.567)	11.221	3.982	0.922	0.089	0.000	14.648	
1977	Total	(1.401)	13.921	4.321	0.981	0.182	0.015	18.018	
1978	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	Total	(2.013)	6.731	2.351	0.883	0.369	(0.016)	8.306	
1984	January	(0.132)	0.524	0.336	0.092	0.032	0.001	0.854	0.854
	February	(0.109)	0.467	0.379	0.064	0.028	0.002	0.832	1.686
	March	(0.152)	0.584	0.209	0.063	0.029	(0.001)	0.732	2.418
	April	(0.199)	0.567	0.244	0.066	0.030	0.000	0.708	3.126
	May	(0.215)	0.672	0.255	0.061	0.032	(0.001)	0.805	3.931
	June	(0.205)	0.581	0.213	0.056	0.031	(0.002)	0.673	4.605
	July	(0.215)	0.639	0.228	0.050	0.037	(0.001)	0.739	5.344
	August	(0.214)	0.552	0.214	0.049	0.046	(0.002)	0.646	5.990
	September	(0.228)	0.556	0.233	0.052	0.037	0.000	0.651	6.640
	October	(0.173)	0.652	0.269	0.062	0.041	(0.003)	0.848	7.489
	November	(0.109)	0.591	0.223	0.079 0.089	0.033 0.033	(0.003)	0.814 0.652	8.303 8.955
	December	(0.169)	0.533	0.167			(0.001)		0.933
	Total	(2.119)	6.918	2.970	0.787	0.411	(0.011)	8.955	
1985	January	(0.150)	0.462	0.172	0.099	R0.030	0.000	R0.614	R0.614
	February	(0.156)	0.311	0.176	0.094	R0.025	0.001	R0.451	R1.065
	March	(0.174)	0.473	0.233	0.085	R0.038	0.000	R0.656	R1.721 R2.411
	April	(0.181)	0.553	0.217	0.070 0.065	R0.030 R0.034	0.001 (0.003)	R0.690 R0.746	R3.157
	May	(0.239) (0.205)	0.627 0.515	0.262 0.203	0.058	R0.034	(0.003)	R0.606	R3.763
	June July	(0.205)	0.515	0.205	0.054	R0.037	(0.002)	R0.661	R4.425
	August	(0.168)	0.548	0.180	0.052	R0.047	(0.002)	R0.528	R4.953
	September	(0.208)	0.529	0.187	0.056	R0.038	(0.003)	R0.599	R5.551
	October	(0.227)	0.578	0.213	0.066	R0.035	(0.001)	R0.665	R6.216
	November	(0.211)	0.667	0.221	0.072	R0.033	(0.003)	R0.781	R6.997
	December	(0.183)	0.622	0.222	0.101	R0.034	(0.001)	R0.795	R7.791
	Total	(2.389)	6.403	2.491	0.876	R0.424	(0.013)	R7.791	
1986	January	(0.152)	0.572	0.230	R0.090	E0.034	0.000	R0.774	R0.774
	February	(0.131)	0.464	0.137	0.064	E0.035	0.000	0.569	1.343
	Year to Date	(0.283)	1.036	0.367	0.155	E0.069	0.000	1.343	

¹Net imports equals imports minus exports. Parentheses indicate exports are greater than imports.
²Includes crude oil, lease condensate, and imports of crude oil for the Strategic Petroleum Reserve.
³Includes petroleum products, unfinished oils, pentanes plus, and gasoline blending components.
R = Revised data. E = Estimated value.
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

### Yearly





### Merchandise Trade Value

		Exports				Imports		Т	Trade Balance		
		Energy	All Other	Total	Energy	All Other	Total	Energy	All Other	Total	<del></del>
					1	Million dolla	ars				
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	-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	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	2/ 52/
	February	502	16,706	17,208	5,006	21,414	26,420	3 544 -4,504 -4,533	-4,708	-9,212	26,571
	March	790	17,116	17,906	5,323	21,625	26,948	3 24 -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	20,073	25,279	-4,334	-3,237	-7,571	
	July	765	18,389	19,154	5,434	25,900	31,334	-4,669	-7,511	-12,180	
	August	878	17,245	18,123	4,886	21,980	26,866	-4,008	-4,735	-8,743	
	September	820	17,390	18,210	4,663	23,746	28,409	-3,843	-6,357	-10,200	
	October	757	17,654	18,411	5,168	21,615	26,783	-4,411	-3,961	-8,372	
	November	712	17,683	18,395	5,207	22,124	27,331	-4,495	-4,442	-8,937	
	December <b>Total</b>	973 <b>9,311</b>	18,169 <b>208,554</b>	19,142 <b>217,865</b>	4,672 <b>60,980</b>	21,261 <b>264,746</b>	25,933 <b>325,726</b>	-3,699 <b>-51,669</b>	-3,092 <b>-56,192</b>	-6,791 <b>-107,861</b>	
4005		804	17.869		•	24,239	28,836		-6,370		
1985	January	786	16,357	18,673 17,143	4,597 4,130	21,811	25,941	-3,793 -3,344 -3,344	-6,370 -5,454	-10,163 -8,798	222-1
	February March	754	19,576	20,330	3,464	25,261	28,725	9847 -3,344	-5,454 -5,685	-8,395	27,356
	April	734 738	17,235	17,973	5,048	23,524	28,572	-4,310	-6,289	-10,599	,
	May	837	17,500	18,337	4,916	24,386	29,302	-4,079	-6,886	-10,965	
	June	708	17,304	18,012	5,278	24,858	30,136	-4,570	-7,554	-12,124	
	July	760	15,967	16,727	4,294	22,706	27,000	-3,534	-6,739	-10,274	
	August	934	15,650	16,584	4,068	22,179	26,247	-3,134	-6,529	-9,663	
	September	868	16,166	17,034	4,753	26,596	31,349	-3,885	-10,430	-14,315	
	October	903	16,715	17,618	4,859	23,570	28,429	-3,956	-6,855	-10,811	
	November	991	16,730	17,721	5,005	25,005	30,010	-4,014	-8,276	-12,290	
	December	888	16,106	16,994	5,431	25,297	30,728	-4,543	-9,191	-13,734	
	Total	9,971	203,175	213,146	55,843	289,433	345,276	-45,872	-86,257	-132,129	
1986	January	812	16,194	17,006	5,563	26,442	32,005	-4,751	-10,248	-14,999	
	February	676	17,059	17,735	4,051	24,844	28,895	-3,375	-7,786	-11,161	
	March	622	18,291	18,913	3,511	28,461	31,972	-2,889	-10,170	-13,059	
	Year to Date	2,109	51,545	53,654	13,125	79,747	92,872	-11,016	-28,202	-39,218	

NA=Not available.

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

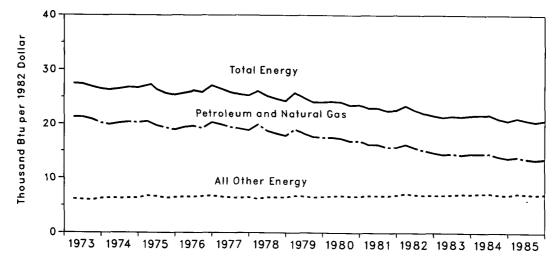
• The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory (which is comprised of the 50 States, the District of Columbia, and Puerto Rico) and the Virgin Islands.

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

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

		Annual Rate		Energy Consumption per Dollar of GNP (Seasonally Adjusted)				
		of Energy Gross National Consumption Product (GNP)		Total Energy	Petroleum and Natural Gas	All Other Energy		
		Quadrillion Btu	Trillion 1982 dollars	· Th	ousand Btu per 1982 dolla	ar		
1973	Year	74.282	2.744	27.1	20.9	6.2		
1974	Year	72.543	2.729	26.6	20.2	6.4		
1975	Year	70.546	2.695	26.2	19.6	6.6		
1976	Year	74.362	2.827	26.3	19.6	6.7		
1977	Year	76.289	2.959	25.8	19.3	6.5		
1978	Year	78.088	3.115	25.1	18.6	6.5		
1979	Year	78.898	3.192	24.7	18.1	6.6		
1980	Year	75.952	3.187	23.8	17.1	6.7		
1981	Year	73.989	3.249	22.8	16.0	6.8		
1982	Year	70.840	3.166	22.4	15.4	7.0		
1983	Year	70.495	3.278	21.5	14.5	7.0		
1984	1st Quarter <sup>1</sup>	74.841	3.449	21.7	14.5	7.2		
	2nd Quarter <sup>1</sup>	75.645	3.493	21.7	14.5	7.2		
	3rd Quarter <sup>1</sup>	73.602	3.510	21.0	14.0	7.0		
	4th Quarter <sup>1</sup>	72.369	3.516	20.6	13.7	6.9		
	Year	74.108	3.492	21.2	14.2	7.0		
1985	1st Quarter <sup>1</sup>	R74.728	3.548	21.1	13.9	7.2		
	2nd Quarter <sup>1</sup>	R73.570	3.557	20.7	13.6	7.1		
	3rd Quarter1	R72.992	3.584	20.4	13.4	7.0		
	4th Quarter <sup>1</sup>	R74.194	3.591	R20.7	13.6	R7.1		
	Year	R73.867	3.570	20.7	13.6	7.1		

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



R=Revised data.

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

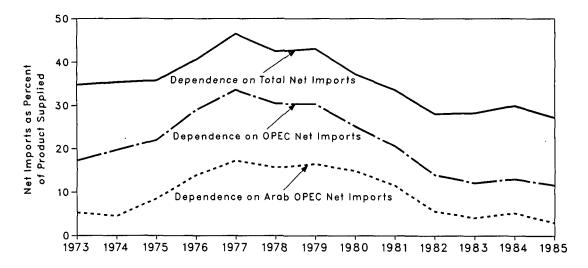
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Yearly data may not equal average of quarters due to seasonality adjustments and independent rounding. Sources: • See the last page of this section.

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

		Net Imports <sup>2</sup>				U.S. Petroleum Products Supplied			
		From Arab OPEC <sup>3</sup> Countries	From All OPEC <sup>4</sup> Countries	From Ali Countries	Petroleum Products Supplied	From Arab OPEC <sup>3</sup> Countries	From All OPEC <sup>4</sup> Countries	From All Countries	
Annua	I Rate		Thousand 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	Average	630	1,843	4,312	15,231	4.1	12.1	28.3	
1984	1st Quarter	769	1,878	4,802	16,110	4.8	11.7	29.8	
	2nd Quarter	907	2,278	4,853	15,632	5.8	14.6	31.0	
	3rd Quarter	877	2,080	4,590	15,625	5.6	13.3	29.4	
	4th Quarter	715	1,912	4,618	15,538	4.6	12.3	29.7	
	Average	817	2,037	4,715	15,726	5.2	13.0	30.0	
1985	1st Quarter	327	1.364	3,564	15,807	2.1	8.6	22.5	
	2nd Quarter	536	1,837	4,567	15,452	3.5	11.9	29.6	
	3rd Quarter	292	1,767	4,116	15,562	1.9	11.4	26.4	
	4th Quarter	733	2,284	4,798	15,965	4.6	14.3	30.1	
	Average	473	1,816	4,264	15,697	3.0	11.6	27.2	
1980	15tax	843	2,038	4,083	16,055	5,3	12.7	25-4	

Net Imports as Percent of

### 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 petroleum 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.

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

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

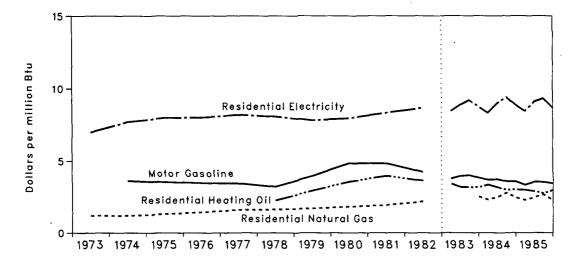
Sources: • See the last page of this section.



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

		Leaded Regular Motor Gasoline		Residential Heating Oil		Residentiai 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	Average	48.6	3.89	45.3	3.27	254.5	2.47	3.01	8.82
1984	1st Quarter	46.1	3.69	46.4	3.35	239.2	2.32	2.85	8.35
	2nd Quarter	46.5	3.72	43.9	3.17	256.1	2.49	3.07	9.00
	3rd Quarter	44.9	3.59	41.6	3.00	286.9	2.79	3.21	9.41
	4th Quarter	44.5	3.56	41.7	3.01	253.5	2.46	3.03	8.88
	Average	45.5	3.64	43.9	3.17	246.5	2.39	3.04	8.91
1985	1st Quarter	41.7	3.33	41.5	2.99	234.9	2.28	2.89	8.47
	2nd Quarter	44.4	3.55	40.2	2.90	255.5	2.48	3.10	9.09
	3rd Quarter	44.2	3.53	38.1	2.75	275.3	2.67	3.18	9.32
	4th Quarter	43.0	3.44	41.2	2.97	234.9	2.28	2.97	8.70
	Average	R43.4	R3.47	41.0	2.96	238.4	2.31	3.03	8.88
1986	1st Qtr	38.7	3,09	37,1	2.67	216.7	2.10	2.81	8,41

### 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 the Conversion Factors section of this report.

R = Revised data. NA = Not available.

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

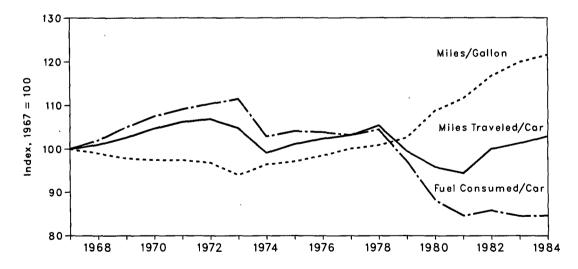
• Annual averages may not equal average of quarters due to independent rounding.

Sources: • See the last page of this section.

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

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

### U.S. Passenger Car Efficiency Index



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

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

		1 through	April 30		Cumulative July 1 through April 30					
Census				Percent Change					Percent Change	
Divisions	Normal <sup>2</sup>	1985	1986	Normal to 1986	1985 to 1986	Normal <sup>2</sup>	1985	1986	Normal to 1986	1985 to 1986
New England CT, ME, MA, NH, RI, VT	571	520	510	-10.7	-1.9	6,215	6,004	6,058	-2.5	0.9
Middle Atlantic NJ, NY, PA	472	399	435	-7.8	9.0	5,600	5,189	5,359	-4.3	3.3
Eastern North Central IL, IN, MI, OH, WI	479	368	407	-15.0	10.6	6,110	5,934	6,090	-0.3	2.6
Western North Central IA, KS, MN, MO, NE, ND, SD	448	351	383	-14.5	9.1	6,424	6,302	6,541	1.8	3.8
South Atlantic DE, FL, GA, MD and DC, NC, SC, VA, WV	175	141	169	-3.4	19.9	2,948	2,726	2,734	-7.3	0.3
Eastern South Central AL, KY, MS, TN	188	147	162	-13.8	10.2	3,483	3,284	3,164	-9.2	-3.7
Western South Central AR, LA, OK, TX	78	56	52	-33.3	-7.1	2,296	2,301	2,027	-11.7	-11.9
<b>Mountain</b> AZ, CO, ID, MT, NV, NM, UT, WY	455	359	415	-8.8	15.6	5,184	5,397	4,988	-3.8	-7.6
Pacific Coast CA, OR, WA	321	236	309	-3.7	30.9	3,013	3,192	2,891	-4.0	-9.4
U.S. Average <sup>3</sup>	347	277	310	-10.7	11.9	4,499	4,364	4,345	-3.4	-0.4

<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.

### Notes and Sources for the Energy Summary Section

#### **Notes**

- 1. Energy Production: Production of energy includes production of coal, crude oil and lease condensate, natural gas plant liquids, natural gas (dry), electric utility and industrial production of hydroelectric power, electricity generated from nuclear power, and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems. The volumetric data are converted to approximate heat contents (Btu values) of these energy sources using the conversion factors provided in the Conversion Factors section of this publication.
- 2. Energy Consumption: Consumption of energy includes consumption of coal, natural gas (including supplemental gaseous fuels), petroleum products supplied, electric utility and industrial production of hydroelectric power, net imports of electricity produced from hydroelectric power, net imports of coal coke, electricity generated from nuclear power, and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems. Approximate heat contents (Btu values) are derived using the conversion factors provided in the Conversion Factors section of this publication.
- 3. Energy Imports: Energy imports include imports of coal, crude oil (including crude oil imported for the Strategic Petroleum Reserve), petroleum products, natural gas, 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, petroleum products, natural gas, electricity produced from hydroelectric power, and coal coke. Approximate heat con-tents (Btu values) are derived using the conversion factors provided in the Conversion Factors section of this publication. For more information on electricity, see the note and sources for imports and exports of electricity in Note 7 of the Notes and Sources for the Consumption Section.
- 5. Merchandise Trade Value: The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory (which includes the 50 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 shipments between the United States and Puerto Rico and the Virgin Islands, between the United States and other U.S. possessions, and between any of these outlying areas. From January 1981 forward, import data presented are on a customs value basis. All other values are on a free alongside ship (f.a.s.) basis. Monthly data are adjusted for seasonal and working-day variation, if present and identifiable; annual data are unadjusted, and 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 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 calcumation 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, "High-lights of U.S. Export and Import Trade," FT990 (January lights of U.S. Export and Import Trade," FT990 (January 1982), Appendix for total imports and exports. Energy imports and exports from U.S. Department of Commerce, Bureau of the Census, "Summary of U.S. Export and Import Merchandise Trade," December issues, plus Bureau of the Census reports EA691 "Exports from the Virgin Islands to Foreign Countries," and IA245V "U.S. Imports for 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 Merchandise Trade," most recent monthly issue.

Gross National Product: • U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business.

Bureau of Economic Analysis, Survey of Current Business. U.S. Dependence on Pétroleum Net Imports: • Imports

and products supplied—Part 3 of this publication.

e Exports—1973 through 1976: Bureau of Mines, *Mineral Industry Surveys*; 1977 through 1980: Energy Information Administration (EIA), *Energy Data Reports*, "Petroleum Statement, Annual"; 1981-1984: EIA, *Petroleum Supply 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. for the Price Section for additional information.
- Residential Natural Gas—EIA, Annual data from Form
   EIA-176, "Annual Report of Natural and Supplemental Gas
   Supply and Disposition." Monthly data from Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries
- · 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.

\* Deflator (The Orban Consumer Price Index)—BLS.

U.S. Passenger Car Efficiency: • Indices 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 February 1986 was 6.3 quadrillion Btu, 2.0 percent below the February 1985 level. Petroleum products accounted for 38.6 percent of the energy consumed in February 1986, while natural gas accounted for 28.6 percent and coal accounted for 22.5 percent. The transportation sector used 60.5 percent of the petroleum products consumed in February 1986 and the industrial sector used 24.7 percent. Of natural gas consumed, the residential and commercial sector used 61.6 percent; the industrial sector, 26.4 percent; and electric utilities, 9.1 percent. Most of the coal used (81.7 percent) was consumed by electric utilities. The residential and commercial sector used 66.2 percent of total electricity sales, while the industrial sector used 33.7 percent.

Residential and commercial sector consumption was 2.7 quadrillion Btu in February 1986, down 7.3 percent from the February 1985 level. This sector consumed 43.8 percent of the February 1986 total, down from its 46.3-percent share in February 1985.

Industrial sector consumption was 2.0 quadrillion Btu in February 1986, up 3.5 percent from the February 1985 level. The industrial sector accounted for 32.0 percent of the February 1986 total consumption, up from the industrial sector's 30.3-percent share of February 1985 total consumption.

Transportation sector consumption of energy was 1.5 quadrillion Btu in February 1986, up 1.6 percent from the the February 1985 level. This sector consumed 24.2 percent of the February 1986 total, up from the sector's 23,4-percent share in February 1985.

The electric utilities consumption of energy was an estimated 2.1 quadrillion Btu in February 1986, 2.3 percent lower than in February 1985. Coal contributed 55.8 percent of the energy consumed by electric utilities in February 1986, while nuclear electric power contributed 17.1 percent; hydroelectric power, 13.4 percent; natural gas, 7.9 percent; petroleum products, 4.9 percent; and geothermal, wood, waste, wind, photovoltaic, and solar thermal energy, 0.9 percent.

Consumption

# Consumption Summary for February 1986 (Quadrillion (1015) Btu)

Energy Source	Residential and Commercial	Industrial	Transportation	Electric Utilities	Total
Coal	0.019	0.240	0.000	1.154	1.412
Natural Gas <sup>1</sup>	1.104	0.473	0.053	0.163	1.793
Petroleum Products	0.257	0.597	1.465	0.101	2.421
Hydroelectric Power	0.000	0.003	0.000	0.277	0.279
Nuclear Electric Power	0.000	0.000	0.000	0.353	0.353
Net Imports of Coal Coke	0.000	(0.000)	0.000	0.000	(0.000)
Other <sup>2</sup>	0.000	0.000	0.000	0.019	0.019
		<del></del>	<del></del>		
Primary Consumption	1.380	1.313	1.518	2.067	6.278
Electricity	0.436	0.222	0.001	(0.659)	
•	· <del></del>				
Net Energy Consumption	1.816	1.535	1.519		4.869
Electrical System Energy Losses	0.931	0.475	0.002	(1.408)	1.408
Total Energy Consumption	2.748	2.010	1.521		6.278

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

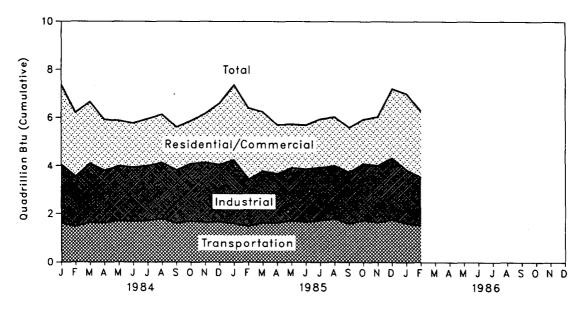
Other is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.

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

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

### Consumption of Energy by End-Use Sector

### Yearly 100 Total 80 Quadrillion Btu (Cumulative) Residential/Commercial 60 40 Industrial Transportation 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984



### Consumption of Energy by End-Use Sector

		Residential and			
		Commercial	Industrial	Transportation	Total
			Quadrillion	n (1015) Btu	
1973	Total	24.142	31.537	18.596	74.282
1974	Total	23.726	30.697	18.113	72.543
1975	Total	23.899	28.407	18.240	70.546
1976	Total	25.018	30.243	19.093	74.362
1977	Total	25.384	31.089	19.808	76.289
1978	Total	26.084	31.414	20.589	78.088
1979	Total	25.808	32.624	20.464	78.898
1980	Total	25.655	30.605	19.693	75.952
1981	Total '	25.241	29.251	19.495	73.989
1982	Total	25.630	26.140	19.066	70.840
1983	Total	25.615	25.746	19.132	70.495
1984	January	3.300	2.451	1.610	7.364
	February	2.652	2.076	1.482	6.210
	March	2.557	2.452	1.644	6.652
	April	2.114	2.180	1.625	5.912
	May	1.882	2.286	1.708	5.872
	June	1.831	2.252	1.689	5.774
	July	1.951	2.280	1.718	5.951
	August	2.007	2.344	1.778	6.133
	September	1.786	2.211	1.614	5.610
	October	1.780	2.392	1.696	5.869 6.164
	November	2.025 2.553	2.491 2.374	1.646 1.669	6.597
	December	2.553 <b>26.438</b>	2.374 <b>27.789</b>	19.878	74,108
	Total				
1985	January	R3.108	R2.646	1.600	R7.356
	February March	R2.964 R2.465	R1.942 R2.153	1.497 1.628	R6.403 R6.245
	April	R2.027	R2.038	1.639	R5.698
	May	R1.808	R2.208	R1.710	R5.722
	June	R1.828	2.206	1.662	R5.697
	July	R2.010	R2.204	1.733	R5.949
	August	R2.028	R2.201	1.802	R6.032
	September	R1.851	R2.152	1.590	R5.593
	October	R1.842	R2.352	1.740	R5.935
	November	R2.024	R2.364	1.648	R6.036
	December	R2.868	R2.570	R1.762	. R7.202
	Total	R26.821	R27.035	R20.009	R73.867
1986	January	R3.158	R2.225	R1.612	R6.997
	February	2.748	2.010	1.521	6.278
	Year to Date	5.906	4.235	3.133	13.275

R=Revised data.

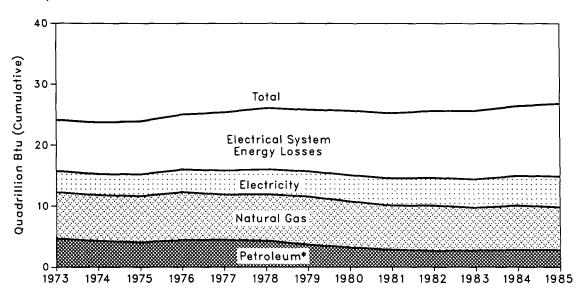
Notes: • Geographic coverage is the 50 States and the District of Columbia.

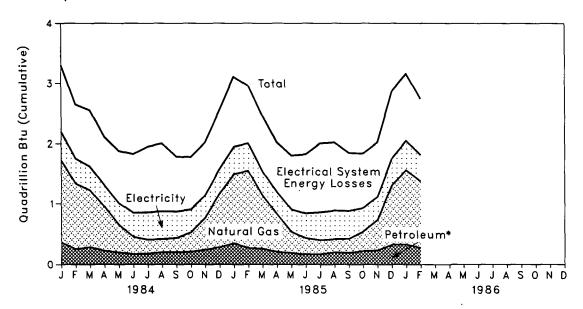
• Totals may not equal sum of components due to independent rounding and the use of preliminary conversion factors after 1981.

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

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

### Yearly





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

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

		Coal	Natural Gas¹	Petroleum	Electricity	Electrical System Energy Losses	Total	Year to Date
				(	Quadrillion (1015)	Btu		
1973	Total	0.254	7.626	4.391	3.495	8.377	24,142	
1974	Total	0.257	7.518	3.996	3.475	8.480	23.726	
1975	Total	0.209	7.581	3.805	3.604	8.700	23.899	
1976	Total	0.203	7.866	4.181	3.747	9.021	25.033	
1976		0.205	7.461	4.206	3.955	9.556	25.384	
	Total						26.084	
1978	Total	0.214	7.624	4.070	4.116	10.061		
1979	Total	0.187	7.891	3.448	4.184	10.100	25.808	
1980	Total	0.145	7.539	3.035	4.355	10.580	25.655	
1981	Total	0.168	7.242	2.634	4.497	10.700	25.241	
1982	Total	0.188	7.433	2.449	4.566	10.993	25.630	
1983	Total	0.196	7.025	2.499	4.680	11.214	25.615	
1984	January	0.024	1.363	0.339	0.476	1.098	3.300	3.300
	February	0.021	1.086	0.230	0.418	0.897	2.652	5.952
	March	0.015	0.943	0.270	0.394	0.935	2.557	8.509
	April	0.022	0.727	0.201	0.360	0.804	2.114	10.624
	May	0.013	0.460	0.182	0.355	0.872	1.882	12.506
	June	0.010	0.286	0.158	0.395	0.981	1.831	14.337
	July	0.016	0.232	0.161	0.449	1.093	1.951	16.288
	August	0.015	0.222	0.181	0.456	1.133	2.007	18.295
	September	0.020	0.235	0.183	0.433	0.915	1.786	20.081
	October	0.016	0.320	0.190	0.377	0.876	1.780	21.861
	November	0.017	0.531	0.225	0.372	0.879	2.025	23.885
	December	0.022	0.886	0.261	0.410	0.975	2.553	26.438
	Total	0.212	7.292	2.582	4.894	11.458	26.438	
1985	January	0.019	1.145	0.332	0.457	R1.155	R3.108	R3.108
	February	0.017	1.281	0.253	0.458	R0.954	R2.964	R6.072
	March	0.012	0.881	0.249	0.400	R0.923	R2.465	R8.537
	April	0.018	0.620	0.189	0.371	R0.829	R2.027	R10.564
	May	0.011	0.353	0.176	0.366	R0.901	R1.808	R12.371
	June	0.008	0.268	0.158	R0.407	R0.986	R1.828 R2.010	R14.199 R16.209
	July	0.012	0.234	0.156 0.187	0.457 R0.470	R1.151 R1.138	R2.028	R18.236
	August	0.011	0.220 0.236	0.187 0.175	0.457	R0.967	R1.851	R20.087
	September	0.015 0.017	0.236	0.175	R0.389	R0.910	R1.842	R21.930
	October November	0.017	0.523	0.213	0.381	R0.909	R2.024	R23.954
	December	0.018	0.984	0.306	R0.445	R1.111	R2.868	R26.821
	Total	0.023	7.049	2.598	R5.057	R11.936	R26.821	/
1986	January	0.022	1.237	0.306	R0.489	R1.105	R3.158	R3.158
. 500	February	0.019	1.104	0.257	0.436	0.931	2.748	5.906
	Year to Date	0.041	2.341	0.563	0.925	2.036	5.906	

Includes supplemental gaseous fuels.

R = Revised data.

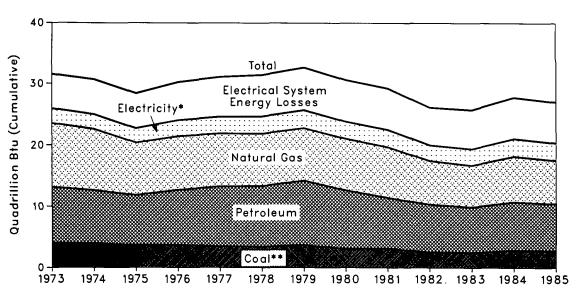
Notes: • Geographic coverage is the 50 States and the District of Columbia.

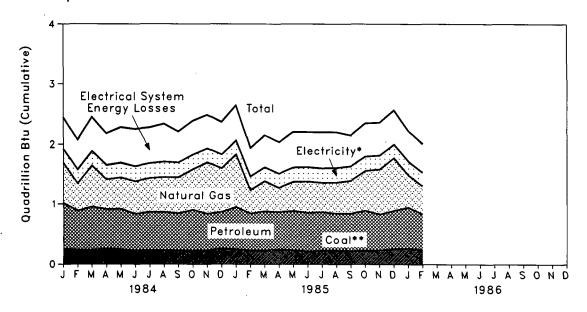
• Totals may not equal sum of components due to independent rounding.

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

### Consumption of Energy by the Industrial Sector

### Yearly





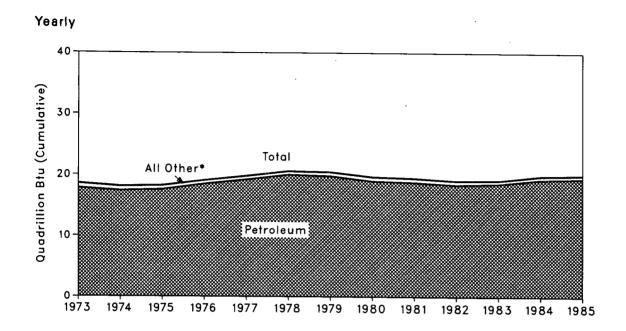
<sup>\*</sup>Includes hydroelectric power.
\*\*Includes net imports of coal coke.

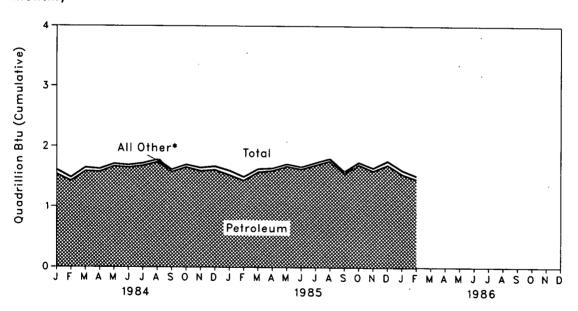
### Consumption of Energy by the Industrial Sector

			Natural	Petro-	Hydro- electric	Net Imports of Coal		Electrical System Energy		Year to
		Coal	Gas¹	leum	Power	Coke	Electricity	Losses	Total	Date
					Q	uadrillion (10	) <sup>15</sup> ) Btu			
1973	Total	4.057	10.388	9.113	0.035	(0.007)	2.341	5.611	31.537	
1974	Total	3.870	10.003	8.698	0.033	0.056	2.337	5.700	30.697	
1975	Total	3.667	8.532	8.151	0.032	0.014	2.346	5.665	28.407	
1976	Total	3.661	8.761	9.018	0.033	0.000	2.573	6.198	30.243	
1977	Total	3.454	8.636	9.786	0.033	0.015	2.682	6.484	31.089	
1978	Total	3.314	8.539	9.890	0.032	0.125	2.761	6.755	31.414	
1979	Total	3.593	8.549	10.576	0.034	0.063	2.873	6.936	32.624	
1980	Total	3.155	8.394	9.524	0.033	(0.035)	2.781	6.752	30.605	
1981	Total	3.157	8.257	8.295	0.033	(0.016)	2.817	6.707	29.251	
1982	Total	2.552	7.116	7.798	0.033	(0.022)	2.542	6.121	26,140	
1983	Total	2.490	6.821	7.421	0.033	(0.016)	2.648	6.349	25.746	
1984	January	0.256	0.675	0.764	0.003	0.001	0.228	0.525	2.451	2.451
	February	0.237	0.460	0.651	0.003	0.002	0.230	0.494	2.076	4.528
	March	0.238	0.694	0.716	0.003	(0.001)	0.238	0.564	2.452	6.979
	April	0.253	0.502	0.660	0.003	0.000	0.236	0.526	2.180	9.159
	May	0.245	0.531	0.673	0.003	(0.001)	0.241	0.593	2.286	11.445
	June	0.225	0.546	0.613	0.003	(0.002)	0.249	0.619	2.252	13.698
	July	0.227	0.570	0.640	0.003	(0.001)	0.245	0.596	2.280	15.978
	August	0.230	0.588	0.638	0.002	(0.002)	0.254	0.632	2.344	18.322
	September	0.223	0.604	0.625	0.002	0.000	0.243	0.514	2.211	20.533
	October	0.222	0.683	0.683	0.002	(0.003)	0.242 0.234	0.562 0.554	2.392 2.491	22.924 25.415
	November	0.232 0.255	0.860 0.734	0.611 0.615	0.002 0.002	(0.003) (0.001)	0.234 0.227	0.554	2.491	25.415 27.789
	December		7.448	7.889	0.002	(0.001) (0.011)	2.868	6.721	27.789	21.105
	Total	2.842				· ·				D0 040
1985	January	0.245	0.884	0.704	0.003	0.000	0.229	R0.580	R2.646	R2.646
	February	0.226	0.394	0.617	0.003	0.001 0.000	0.227 0.230	R0.474 R0.531	R1.942 R2.153	R4.588 R6.740
	March	0.227 0.240	0.506 0.411	0.655 0.627	0.003 0.003	0.000	0.230	R0.523	R2.133	R8.778
	April May	0.232	0.411	0.657	0.003	(0.003)	0.239	R0.588	R2.208	R10.986
	June	0.232	0.526	0.646	0.003	(0.002)	0.239	0.580	2.206	R13.192
	July	0.223	0.495	0.647	0.003	(0.002)	0.238	R0.599	R2.204	R15.395
	August	0.226	0.522	0.619	0.002	(0.001)	R0.244	R0.590	R2.201	R17.596
	September	0.219	0.551	0.630	0.002	(0.003)	R0.241	R0.511	R2.152	R19.748
	October	0.221	0.669	0.674	0.002	(0.001)	0.236	R0.551	R2.352	R22.100
	November	0.231	0.755	0.603	0.002	(0.003)	0.229	R0.547	R2.364	R24.465
	December	0.254	R0.882	0.640	0.002	(0.001)	0.226	R0.565	R2.570	R27.035
	Total	2.757	R7.087	7.718	0.033	(0.013)	R2.813	R6.640	R27.035	
1986	January	0.261	R0.548	0.685	0.003	0.000	R0.224	R0.506	R2.225	R2.225
	February	0.240	0.473	0.597	0.003	0.000	0.222	0.475	2.010	4.235
	Year to Date	0.501	1.021	1.282	0.006	0.000	0.446	0.980	4.235	

¹Includes 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





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

# Consumption of Energy by the Transportation Sector

						Electrical System		Year
		Coal	Natural Gas¹	Datualaum	Flood-laid.	Energy	Total	to Date
		Coai	Gas	Petroleum	Electricity	Losses	Total	Date
				Qua	drillion (1015) Btu			
1973	Total	0.003	0.743	17.821	0.009	0.020	18.596	
1974	Total	0.002	0.685	17.396	0.009	0.022	18.113	
1975	Total	0.001	0.595	17.610	0.010	0.025	18.240	
1976	Total	(²)	0.559	18.499	0.010	0.025	19.093	
1977	Total	(²)	0.543	19.230	0.010	0.025	19.808	,
1978	Total	(²)	0.539	20.019	0.009	0.022	20.589	
1979	Total	(²)	0.612	19.817	0.010	0.025	20.464	
1980	Total	(²)	0.648	19.009	0.011	0.026	19.693	
1981	Total	(²)	0.657	18.800	0.011	0.026	19.495	
1982	Total	(²)	0.613	18.417	0.011	0.026	19.066	
1982	Total		0.504	18.591	0.011	0.026	19.000	
1903	ı otai	<b>(2)</b>	0.504	10.591	0.011	0.026	19.132	
1984	January	(²)	0.069	1.538	0.001	0.002	1.610	1.610
	February	(²)	0.053	1.427	0.001	0.002	1.482	3.093
	March	(2)	0.057	1.584	0.001	0.002	1.644	4.737
	April	(2)	0.044	1.578	0.001	0.002	1.625	6.361
	May	(2)	0.038	1.667	0.001	0.002	1.708	8.070
	June	(2)	0.035	1.650	0.001	0.002	1.689	9.758
	July	(2)	0.035	1.679	0.001	0.002	1.718	11.476
	August	(2)	0.036	1.738	0.001	0.002	1.778	13.254
	September	(2)	0.034 0.039	1.577 1.654	0.001 0.001	0.002 0.002	1.614 1.696	14.867 16.563
	October November	(2) (2)	0.039	1.593	0.001	0.002	1.646	18.209
	December	(²)	0.049	1.610	0.001	0.002	1.669	19.878
	Total	(²)	0.545	19.295	0.001	0.002	19.878	19.070
1985	January	(2)	0.069	1.527	0.001	0.003	1.600	1.600
	February	(2)	0.057	1.438	0.001	0.002	1.497	3.097
	March	(2)	0.048	1.576	0.001	0.002	1.628	4.725
	April	(²)	0.038	1.598	0.001	0.002	1.639	6.363
	May	(2)	0.033 0.033	1.673 1.626	0.001 0.001	0.002 0.002	Ħ1.710 1.662	8.073 9.735
	June July	(²) (²)	0.033	1.626	0.001	0.002	1.733	9.735 11.468
	August	(°) (°2)	0.033	1.764	0.001	0.003	1.802	R13.270
	September	(²)	0.034	1.555	0.001	0.002	1.590	14.859
	October	(²)	0.038	1.699	0.001	0.002	1.740	16.599
	November	(²)	0.045	1.599	0.001	0.002	1.648	18.247
	December	(²)	R0.063	1.696	0.001	R0.003	R1.762	R20.009
	Total	(²)	R0.523	19.445	0.012	0.028	R20.009	
1986	January	(2)	R0.060	1.549	0.001	0.002	R1.612	R1.612
	February	(2)	0.053	1.465	0.001	0.002	1.521	3.133
	Year to Date	(²)	0.112	3.014	0.002	0.004	3.133	22

<sup>&</sup>lt;sup>1</sup>Pipeline fuel only, including supplemental gaseous fuels.

<sup>2</sup>Since 1976, the amount of coal consumed by the transportation sector has been negligible. R = Revised data.

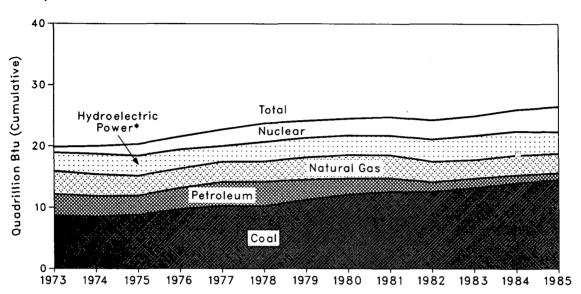
Notes: • Geographic coverage is the 50 States and the District of Columbia.

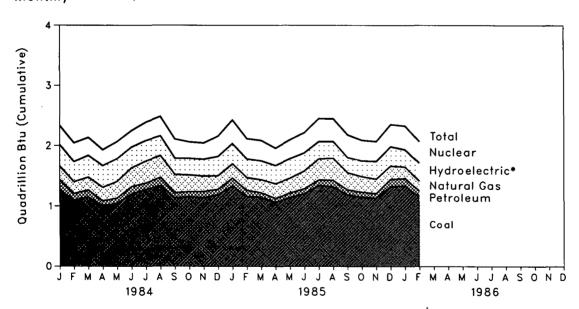
• Totals may not equal sum of components due to independent rounding.

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

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

### Yearly





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

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

		Coal	Natural Gas¹	Petro- leum²	Hydro- electric Power <sup>3</sup>	Nuclear Electric Power	Other <sup>4</sup>	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	0.081	21.574	
1977	Total	10.262	3.284	3.901	2.482	2.702	0.082	22.713	
1978	Total	10.238	3.297	3.987	3.110	3.024	0.068	23.724	
1979	Total	11.260	3.613	3.283	3.107	2.776	0.089	24.128	
1980	Total	12.123	3.810	2.634	3.085	2.779	0.009	24.126	
1981	Total	12.723	3.768	2.202	3.072	3.008	0.114	24.505 24.760	
1982	Total	12.583	3.766						
1982	Total	13.213		1.568	3.528	3.131	0.108	24.259	
	rotai	13.213	2.998	1.544	3.838	3.203	0.133	24.929	
1984	January	1.271	0.223	0.169	0.341	0.317	0.011	2.331	2.331
	February	1.103	0.194	0.108	0.318	0.307	0.013	2.042	4.373
	March	1.151	0.213	0.115	0.345	0.295	0.015	2.134	6.507
	April	1.004	0.228	0.081	0.341	0.262	0.014	1.929	8.436
	May	1.045	0.274	0.090	0.362	0.279	0.014	2.064	10.500
	June	1.202	0.308	0.121	0.330	0.273	0.013	2.247	12.747
	July	1.274	0.361	0.111	0.323	0.305	0.013	2.387	15.135
	August	1.338	0.362	0.137	0.307	0.319	0.016	2.478	17.613
	September	1.140	0.301	0.083	0.254	0.315	0.015	2.108	19.721
	October	1.155	0.279	0.084	0.258 0.264	0.268	0.016	2.060	21.781
	November December	1.144 1.193	0.253 0.225	0.100 0.086	0.264	0.265 0.333	0.016	2.043 2.156	23.824
	Total						0.018		25.980
	lotai	14.020	3.220	1.286	3.741	3.538	0.174	25.980	
1985	January	1.335	0.234	0.132	R0.315	0.391	0.018	R2.425	R2.425
	February	1.164	0.210	0.101	R0.293	0.333	0.016	R2.116	R4.540
	March	1.149	0.215	0.077	R0.293	0.335	0.018	R2.088	R6.628
	April	1.067	0.242	0.066	R0.283	0.286	0.016	R1.959	R8.587
	May	1.145	0.244	0.075	R0.308	0.310	0.016	R2.099	R10.686
	June	1.208	0.292	0.083	R0.284	0.333	0.016	R2.216	R12.902
	July	1.347	0.348	0.090	R0.265	0.380	0.018	R2.448	R15.350
	August	1.323	0.367 0.284	0.107 0.082	R0.254	0.376	0.018	R2.445	R17.796
	September October	1.191 1.153	0.258 0.258	0.082	R0.233 R0.243	0.373 0.337	0.018 0.017	R2.180 R2.090	R19.976
	November	1.139	0.238	0.082	R0.243 R0.271	0.337	0.017	R2.090	R22.065 R24.135
	December	1.329	0.218	0.075	R0.297	0.326	0.021	R2.351	R26.486
	Total	14.549	3.151	1.090	3.340			R26.486	n20.400
						4.144	0.213		
1986	January	1.343	0.190	0.119	0.261	0.391	0.023	2.326	2.326
	February	1.154	0.163	0.101	0.277	0.353	0.019	2.067	4.393
	Year to Date	2.497	0.353	0.220	0.537	0.745	0.042	4.393	

Includes supplemental gaseous fuels.

Includes petroleum products reported as "oil consumed in steam plants" through 1979 and "heavy oil" from 1980 forward, which are assumed to be residual fuel oil; petroleum products reported as "oil consumed in gas turbine and internal combustion engine plants" through 1979 and "light oil" from 1980 forward, which are assumed to be distillate fuel oil and kerosene; and petroleum coke.

Includes net imports of electricity.

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

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), 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 distributions. thermal energy sources connected to electric utility distribution systems. Data do not include geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric utilities.
- 2. Economic Sectors: Energy use is assigned to the major economic sectors according to the following guidelines as closely as possible:
  - Residential and Commercial Sector— private household establishments (which consume energy primarily for space heating, water heating, air conditioning, lighting, refrigeration, cooking, and clothes drying); non-manufacturing business establishments, including hotels, motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises; health, social, and educational institutions; and Federal, State, and local governments. Street lights, pumps, bridges, and public swimming pools are also included.

 Industrial Sector-manufacturing, construction, mining, agriculture, fishing, and forestry establishments.

Transportation Sector—private and public vehicles that move people and commodities. Included are automobiles, trucks, buses, motorcycles, railroads and railways (including streetcars), aircraft, ships, barges, and natural gas pipelines.

Electric Utility Sector-privately and publicly owned establishments that generate electricity primarily for use by the public.

- 3. Conversion Factors: See the Conversion Factors section of this publication.
- 4. Coal: Coal is anthracite, bituminous coal, (including subbituminous coal), and lignite. Sources:

- Sources:
  1973 through September 1977: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), Minerals Yearbook and Minerals Industry Surveys.
  Electric Utilities—October 1977 forward: Energy Information Administration (EIA), EIA. Form 759 (formerly FPC Form 4), "Monthly Power Plant Report."
  Other Industrial—October 1977 through December 1979: EIA, EIA Form 3, "Monthly Fuel Consumption Report Manufacturing Plants"; January 1980 forward: EIA, EIA Form 3, "Quarterly Fuel Consumption Report Manufacturing Plants" and EIA Form 6, "Coal Distribution Report." bution 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 Quarter-Form 5/5A,
- Residential and Commercial—October 1977 through December 1979: EIA, EIA Form 2, "Monthly Coal Report, Retail Dealers and Upper Lake Docks"; January 1980 forward: EIA, EIA Form 6, "Coal Distribution Report."
- 5. Natural Gas: Natural gas consumption by end-use sector is based on data presented in the table titled "Natural Gas Consumption" in Part 4. For the Part 2 consumption section, lease and plant fuel consumption are added to the industrial sector deliveries and pipeline fuel represents the transportation sector's use of natural gas. Values in Btu are derived using the conversion factors provided in the Conversion Factors section of this publication.

- 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
- 1980 through 1984: EIA, Natural Gas Annual.

- 1985 forward: EIA, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers, and EIA computations.
- Electric utilities consumption—1973 through 1976: FPC Form 4, "Monthly Power Plant Report."
- 1977 through 1981: Federal Energy Regulatory Commission (FERC), FPC Form 4, "Monthly Power Plant Propert"
- 1982 forward: EIA, EIA Form 759, "Monthly Power Plant Report.
- American Gas Association, "Monthly Gas Utility Statistical Report.'
- 6. Petroleum: Petroleum consumption by end-use is the sum of all individual petroleum products estimated to be consumed in each end-use sector. First, total consumption by product is determined. Petroleum consumption in this section of the Monthly Energy Review is the series called "petroleum products supplied" in Part 3.

Sources for petroleum products supplied by individual products are:

- 1973 through 1975: DOI, BOM, Mineral Industry Surveys, "Petroleum Statement, Annual."
- 1976 through 1980: EIA, Energy Data Reports, "Petro-leum Statement, Annual."
- 1981 through 1984: EIA, Petroleum Supply Annual.
- 1985 forward: EiA, Petroleum Supply Monthly.

Specific petroleum products' end-use allocation procedures follow:

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

#### Distillate Fuel

#### Electric Utility Sector, All Periods.

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

Sources: 1973 through September 1977—FPC Form 4, "Monthly Power Plant Report;" October 1977 through 1981—FERC, FPC Form 4, "Monthly Power Plant Report;" 1982 forward—EIA, Form EIA-759, "Monthly Power Plant Report."

Non-Electric Utility Sectors, Annual Estimates Through 1984.

The aggregate non-electric utility use of distillate fuel is total distillate fuel supplied minus the electric utility consumption. The non-electric utility annual totals are allocated into the individual non-electric utility sectors in proportion to the 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-821, previously Form EIA-172) as follows:

Residential sector deliveries are directly from the "Deliveries" reports for 1979 through 1984. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares;

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

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

#### 6. Petroleum (continued):

- Distillate Fuel (continued)
  - Non-Electric Utility Sectors, Annual Estimates Through 1984 (cont'd).
    - Commercial sector deliveries are directly from the "Deliveries" reports for 1979 through 1984.
       Prior to 1979, each year's deliveries subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares;
    - Industrial sector deliveries for 1979 through 1984 are the sum of deliveries for industrial, farm, oil company, off-highway, diesel, and all other uses. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category is 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, onhighway diesel, and military uses for all years.

# Non-Electric Utility Sectors, Monthly Estimates Through 1984.

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

- Commercial sector deliveries are directly from the "Deliveries" reports for 1979 through 1984. Deliveries for 1984 are used as estimates for succeeding periods. Prior to 1979, each year's deliveries category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares; and
- Industrial sector deliveries are directly from the "Deliveries" reports for 1979 through 1984. Deliveries for 1984 are used as estimates for succeeding periods. Prior to 1979, each year's deliveries category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares, and this estimated industrial (including farm) portion is added to "all other uses."
- Liquefied Petroleum Gases (LPG) —The annual shares of LPG's total consumption that are estimated to be consumed by each end-use sector are applied to each month's total LPG consumption (i.e., product supplied) to create monthly end-use consumption estimates. The annual end-use shares are calculated in the following manner:
  - the following manner:

     Sales of LPG to the residential and commercial sector are converted from thousand gallons per year to thousand barrels per year and are assumed to be the annual consumption of LPG by the sector:
  - The quantity of LPG sold each year that is consumed in internal combustion engines is allocated between the transportation and industrial sectors according to a 5-year moving average of the percentage of carburetors sold to each end-use category. The proportions range from 31 percent transportation and 69 percent industrial in 1973 to 60 percent transportation and 40 percent industrial in 1984.
  - 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 distribution through the mains; and a portion of the use of LPG as an internal combustion engine fuel.

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

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

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

# Notes and Sources for the Consumption Section (continued)

#### 6. Petroleum (continued):

- Motor Gasoline—Total product supplied monthly is allocated to the major end-use sectors in proportion to aggregations of annual sales categories formed from the U.S. Department of Transportation, Federal 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 unclassified use:
  - Industrial sales are the sum of sales for agriculture, construction, and industrial and commercial use as classified in the Highway Statistics; and
  - Transportation sales are the sum of sales for highway use (minus the sales of special fuels, which are primarily diesel fuel and are accounted for in the transportation sector of distillate fuel) and sales for marine use.
- Petroleum Coke—The portion consumed by the 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 January 1980, electric utility consumption of residual fuel is assumed to be the petroleum products reported as "heavy oil" consumed at utilities. 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 1984.

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

- Commercial sector deliveries are directly from the "Deliveries" reports for 1979 through 1984. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category is split into commercial and industrial in proportion to the 1979 shares;
- Industrial sector deliveries for 1979 through 1984 are the sum of deliveries for industrial, oil company, and all other uses. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category is split into commercial and industrial in proportion to the 1979 shares; and this estimated industrial portion is added to oil company and all other uses; and
- Transportation sector deliveries are the sum of deliveries for railroad, vessel bunkering, and military uses for all years.

Non-Electric Utility Sectors, Monthly Estimates Through 1984.

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 fuel oil as reported in the "Monthly Report of Heating Oil Sales" by the Ethyl Corporation for 1973 through 1980, the American Petroleum Institute for 1981 and 1982, and the Form EIA-782A, "Refiners/Gas Plant Operators' Monthly

- Petroleum Product Sales Report," for 1983 and
- Transportation sector monthly estimates are made by evenly distributing the annual sector estimate over the months, adjusted for the number of days per month.
- Industrial sector monthly estimates are made by subtracting the commercial, transportation, and electric utility sector estimates from each month's total residual fuel supplied.
- Non-Electric Utility Sectors, 1985 Forward.
  Each month's non-electric utility consumption subtotal is disaggregated into the major end-use sectors in proportion to the shares each sector held of the non-electric utility subtotal in the same month in 1984.
- Road Oil—All product supplied is assigned to the industrial sector.
- All Other Petroleum Products—The product supplied of all remaining petroleum products is assigned to the industrial sector.
- 7. Hydroelectric Power: Includes electricity generated by hydroelectric power at electric utilities, small amounts in the industrial sector, and net imports of electricity, which are assumed to be generated by hydroelectric power and are included in the hydroelectricity in the electric utilities sector.

  Sources for electric utilities sector:

• 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report.

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

Sources for industrial sector:

1973 through 1978: FPC Forms 4 and 12-C.
1979: FPC Form 4 and EIA estimates.
1980 forward: EIA estimates.
Note: For 1977 forward, monthly data are not available from above sources and were estimated by seasonalizing the annual numbers in proportion to each month's hydroelectricity generation in the electric utility sector.

Note for imports and exports of electricity:

Monthly electricity imports and exports estimates for 1982 forward were revised in the May 1984 Monthly Energy Review. The revisions do not cause discontinuity in the annual data series: the data continue to come from the same source. The monthly data series, however, are discontinuous because monthly data 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 lanuary 1982. Monthly analyses on either side of that 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.

- 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 and Geothermal, Wood, Waste, Wind, Photovoltaic, and Solar Thermal Energy Sources Connected to Electric Utility Distribution Systems:

Sources:

- 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report.
- 1977 through 1981: FERC, FPC Form 4, "Monthly Power Plant Report.
- 1982 forward: EIA, EIA Form 759, "Monthly Power Plant Report."
- 9. Net Imports of Coal Coke: Net imports means imports minus exports, and the parentheses indicate that exports are greater than imports.

- 1973 through 1975: DOI, BOM, *Minerals Yearbook*, "Coke and Coal Chemicals," chapter.
- 1976 through 1980: EIA, Energy Data Report, "Coke and Coal Chemicals," annual.
- 1981: EIA, Energy Data Report, "Coke Plant Report," quarterly
- 1982 forward: EIA, Quarterly Coal Report.
- 10. Electricity: Sales of electricity represent consumption. From the sources cited below the following electricity sales categories are available: residential, commercial, industrial, and other. For the end-use estimates in this section, the "other" category (which is primarily sales for use in government buildings) is added to the commercial sector except for approximately 4 percent, which represents the transportation sector use of electricity, primarily by railroads and railways. Sales of electricity are converted into Btu at the rate of 3,412 Btu per kilowatthour.

Sources of sales data:

- 1973 through 1976: FPC, Form 5, "Monthly Statement of Electric Operating Revenue and Income.
- 1977 through February 1980: EIA, FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income.
- March 1980 through December 1982: EIA, FERC Form 5, "Electric Utility Company Monthly Statement."
  January 1983 forward: EIA, EIA Form 826, "Electric Utility Company Monthly Statement."
- 11. Electrical System Energy Losses: Electrical system energy losses are calculated as the difference between total energy input at electric utilities and the total energy content of electricity sold to end-use consumers. Most of these losses occur at steam-electric power plants (conventional and nuclear) in the conversion of heat energy into mechanical energy to turn electric generators. This loss is a thermo-dynamically 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 losses other losses include 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 April 1986 was estimated to be 8.8 million barrels per day, 1.4 percent lower than the March 1986 rate, and 0.3 percent lower than the April 1985 rate.

Total petroleum imports averaged 5.4 million barrels per day in April 1986, 16.7 percent more than the March 1986 rate and 3.1 percent more than the April 1985 rate.

In April 1986, 16.0 million barrels per day of petroleum products were supplied for domestic use, 1.1 percent below the level in March 1986 but 4.3 percent above the level of the previous April. Motor gasoline accounted for 45.0 percent of the total; distillate fuel oil, 17.8 percent; and residual fuel oil, 7.6 percent.

Motor gasoline supplied during April 1986 averaged 7.2 million barrels per day, 3.3 percent above the rate in March 1986 and 3.9 percent above the rate of the previous April. Stocks of motor gasoline totaled 206 million

barrels at the end of April 1986, 14 million barrels below the level at the end of March 1986 and 11 million barrels below the stocks level 1 year earlier.

In April 1986, 2.9 million barrels of distillate fuel oil were supplied per day, 9.9 percent lower than the March 1986 rate but 3.1 percent higher than the April 1985 rate. Distillate fuel oil ending stocks for April 1986 were 96 million barrels, 3 million barrels lower than the stocks level in the previous month and 1 million barrels lower than the April 1985 ending stocks level.

Residual fuel oil supplied in April 1986 averaged 1.2 million barrels per day, 13.2 percent lower than the March 1986 rate but 6.7 percent higher than the April 1985 rate. Residual fuel oil stocks measured 35 million barrels at the end of April 1986, 4 million barrels lower than the level in the previous month and 12 million barrels lower than the stocks level 1 year earlier.

etroleur

<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 January 1986. The total import data above include imports into the Strategic Petroleum Reserve.

#### Crude Oll¹ and Petroleum Products Overview

		Fic	eld Product	tion	Stock '	Withdrawal <sup>2</sup>		Ending Stocks <sup>3</sup>
		Total Domestic	Crude Oil	Natural Gas Plant Liquids	Crude Oil <sup>5</sup>	Petroleum Products	Petroleum Products Supplied	Crude Oil <sup>s</sup> and Petroleum Products
				Thousand	barrels per c	iay		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	8-1 <b>7</b>	8-145	16,322	1,133
1976	Average	9,774	8,132	1,603	-39	96	17,461	1,112
1977	Average	9,913	8,245	1,618	-170	-378	18,431 ≀	1,312
1978	Average	10,328	8,707	1.567	-78	172	18,847	1,278
1979	Average	10,179	8,552	1,584	-148	-25	18,513	1,341
1980	Average	10,214	8,597	1,573	-98	-42	17,056	*1,392
1981	Average	10,230	8,572	1,609	8-290	*130	16,058	1,484
1982	Average	10,252	8,649	1,550	-136	283	15,296	*1,430
1983	•	10,292	-	•	*-214	*234	•	•
1903	Average	10,299	8,688	1,559	°-214	*234	15,231	1,454
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 8,993	1,637 1,660	250 260	252 -769	16,116	1,498
	September October	10,692 10,608	8,906	1,649	-759	-769 -246	15,247 15,616	1,513 1,544
	November	10,689	8,979	1,649	-739 -236	-246 -177	15,627	1,544 1,556
	December	10,578	8,897	1,649	-290	293	15,375	1,556
	Average	10,554	8,879	1,630	-199	<b>-81</b>	15,726	1,550
	•						-	
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 Mav	10,481 10,619	8,842 8,969	`1,600 1,607	-534 -696	46 -386	15,345 15,460	1,474 1,508
	June	10,622	8,965	1,614	296	-378	15,551	1,510
	July	10,537	8,904	1,591	300	-449	15,517	1,515
	August	10,597	8,895	1,612	170	542	16,039	1,493
	September	10,520	8,874	1,584	-33	-211	15,115	1,500
	October	10,610	8,943	1,605	71	170	15,923	1,492
	November	10,694	8,932	1,681	-246	-750	15,411	1,522
	December	10,683	8,930	1,680	-31`	219	16,541	1,516
	Average	10,597	8,920	1,622	-49	155	15,697	
1986	January	10,716	8,942	1,721	-461	-228	15,923	1,538
	February	10,686	8,940	1,710	-35	847	16,056	1,515
	March	10,596	8,939	1,617	R-338	R1,178	R16,188	R1,489
	April†	· NA	8,815	NA	<i>33</i>	<i>270</i>	16,003	1,470
	Average	. NA	8,909	NA	-206	511	16,042	

Includes lease condensate.

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

Stocks are totals as of end of period.

Includes crude oil, natural gas plant liquids, other hydrocarbons, and alcohol.

Includes stocks located in the Strategic Petroleum Reserve.

Includes crude oil for storage in the Strategic Petroleum Reserve.

Thet imports equals imports minus exports.

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

Footnotes continued on following page.

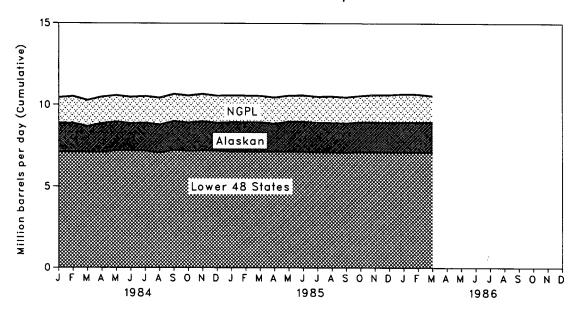
#### Crude Oil<sup>1</sup> and Petroleum Products Overview (continued)

		Imports		-				
		Total	Crude Oil <sup>s</sup>	Petroleum Products	Total	Crude Oil	Petroleum Products	Net Imports <sup>7</sup>
					Thousand 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	Average	5,051	3,329	1,722	739	164	575	4,312
1984	January	5,430	3,055	2,375	575	153	422	4,855
	February	5,693	2,950	2,743	582	185	397	5,111
	March	5,301	3,470	1,832	840	236	605	4,461
	April	5,372	3,417	1,955	655	172	483	4,717
	May	5,979	3,942	2,036	766	219	548	5,212
	June	5,482	3,546	1,936	864	222	642	4,618
	July	5,407	3,646	1,761	536	108	429	4,871
	August	5,044	3,248	1,796	732	190	542 500	4,312
	September	5,252	3,342	1,909	664 599	162 141	502 458	4,588 5,179
	October	5,779	3,751 3,583	2,028 2,004	599 854	202	456 652	4,733
	November December	5,587 4,933	3,563 3,136	1,796	986	185	801	3,947
	Average	5,437	3,426	2,011	722	181	541	4,715
1985	January	4,376	2,700	1,676	792	144	647	3,584
	February	3,921	2,126	1,795	857	221	636	3,064
	March	4,689	2,808	1,881	694	189	505	3,996
	April	5,252	3,401	1,851	764	236	528	4,488
	Мау	5,718	3,724	1,994	705	250	455	5,012
	June	4,877	3,175	1,702	692	226	467	4,185
	July	4,921	3,189	1,732	675	154	521	4,246
	August	4,682	3,110	1,572	749	241	508	3,934
	September	4,977	3,213	1,764	806 690	188 123	618 567	4,171 4,463
	October	5,153	3,325	1,828	1,036	286	750	5,180
	November December	6,216 5,689	4,105 3,640	2,111 2.049	925	197	730 728	4,763
	Average	5,045	3,216	1,830	7 <b>81</b>	204	577	4,264
1986	January	5,386	3,329	2,057	853	159	694	4,533
	February	4,622	3,005	1,617	866	162	704	3,756
	March	R4,638	R3,000	R1,637	710	212	498	3,927
	April†	5,414	3,798	1,616	NA	NA	NA	NA
	Average	5,021	3,286	1,736	NA	NA	NA	NA

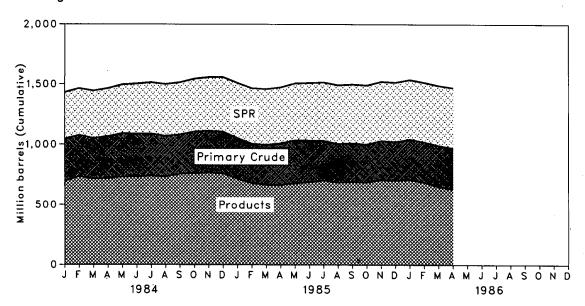
Footnotes continued.
†Italics denote estimates based upon preliminary data. R=Revised data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

#### Overview

# Production of Crude Oil and Natural Gas Plant Liquids

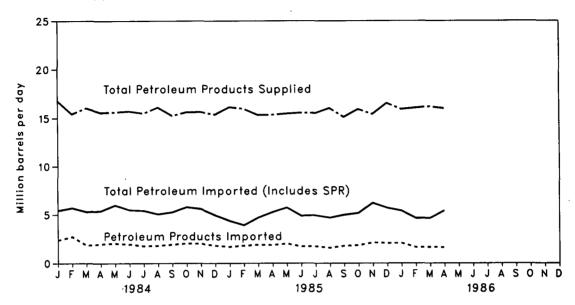


#### **Ending Stocks**

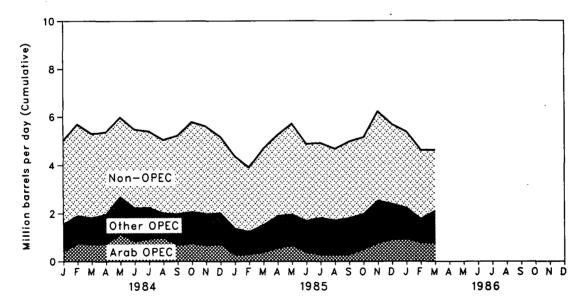


#### Overview

#### **Products Supplied and Imports**



#### Petroleum Imports by Source



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

Supply

		Supply				Supply			<del></del>
		Field Pro	oduction		Imports		Stock V	/ithdrawal <sup>3</sup>	Unaccounted
		Total Domestic	Alaskan	Total	SPR'	Other	SPR'	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	-37 -11
1980		8,597	1,617	5,263	44	5,219	-45	-52	34
	Average	•	•		256		-45 -336	-52 46	
1981	Average	8,572	1,609	4,396		4,141			83
1982	Average	8,649	1,696	3,488	165	3,323	-174	38	71
1983	Average	8,688	1,714	3,329	234	3,096	-234	<b>620</b>	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	8,906	1,732	3,751	187	3,565	-186	-573	291
	November	8,979	1,781	3,583	219	3,364	-207	-29	47
	December	8,897	1,720	3,136	229	2,907	-241	-50	262
	Average	8,879	1,722	3,426	197	3,229	-195	-4	185
1985	January		40 1,788 1647	2,700	223	2,478	-223	241	23
	February	.8,928 <b>90</b> 2	5 1,787 1817	2,126	98	2,028	-97	378	346
	March		95 1,786 1866	2,808	48	2,760	-48	-117	92 .
	April	8,842	1,699	3,401	108	3,293	-111	-423	411
	May	8,969	1,827	3,724	222	3,501	-225	-471	457
	June	8,965	1,828	3,175	155	3,020	-155	451 505	202
	July	8,904 8,895	1,802 1,801	3,189 3,110	226 116	2,963 2,995	-225 -116	525 286	295 195
	August September	8,874	1,801	3,110	71	2,995 3,142	-116 -71	266 38	126
	October	8.943	1,822	3,325	20	3,305	-71	91	48
	November	8,932	1,821	4,105	53	4,053	-53	-193	-35
	December	8,930	1,821	3,640	74	3,565	-60	28	298
	Average	8,920	1,799	3,216	118	3,098	-117	68	204
1986	January	8,942	1,822	3,329	51	3,277	-35	-426	788
.500	February	8,940	1.823	3.005	24	2.981	-35	(s)	241
	March	8,939	1,824	R3,000	R59	R2,941	R-49	R-289	316
	April†	8,815	1,862	3,798	64	3.734	-64	97	NA
	Average	8,909	1,833	3,286	50	3,235	-46	-160	NA
	_	•	-			•			

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

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

		Supply		Dispos	sition		Ending Stocks <sup>2</sup>		
		Crude Used Directly <sup>5</sup>	Crude Losses	Refinery Inputs	Exports	Product Supplied <sup>s</sup>	Total	SPR1	Other Primary
			Thousan	d barrels per	day		1	Million barr	els
1973	A	-19	13	12,431	2		242		242
	Average	-1 <del>5</del> -15	13	12,133	3		265		265
1974	Average			•	6		271		271
1975	Average	-17	13	12,442					
1976	Average	-18	15	13,416	8		285	-	285
1977	Average	-14	16	14,602	50		348	7	340
1978	Average	-14	16	14,739	158		376	67	309
1979	Average	-13	16	14,648	235		430	91	339
1980	Average	-13	15	13,481	287		°466	108	435 <b>8</b>
1981	Average	-58	5	12,470	228		594	230	363
1982	Average	-59	3	11,774	236		644	294	350
1983	Average	NA NA	2	11,685	164	66	723	379	344
1984	January	NA	1	11,587	153	64	733	384	349
1304	February	NA NA	i	12,157	185	65	727	387	340
	March	NA	ż	11,926	236	62	728	392	336
	April	NA	1	11,891	172	64	742	397	346
	May	NA NA	ż	12,247	219	62	763	404	359
	June	NA NA	2	12,255	222	61	767	414	353
	July	NA NA	2	12,028	108	60	772	424	348
	August	NA	1	12,346	190	63	764	429	335
	September	NA	3	12,271	162	66	756	431	325
	October	NA	ī	11,978	141	69	780	437	343
	November	NA	(s)	12,108	202	62	787	443	344
	December	NA	(s)	11,755	185	64	796	451	345
	Average	NA	2	12,044	181	64			
1985	January	NA	1	11,456	144	69	793	457	336
,,,,,	February	NA	1	11,393	221	66	786	460	325
	March	NA	1	11,404	189	69	791	462	329
	April	NA	(s)	11,817	236	67	807	465	342
	May	NA	ìi	12,141	250	62	828	472	356
	June	NA	1	12,355	226	56	819	477	343
	July	NA	1	12,477	154	55	810	484	327
	August	NA	(s)	12,073	. 241	55	805	487	318
	September	NA	(s)	11,937	188	55	806	489	317
	October	NA	(s)	12,209	123	55	804	490	314
	November	NA	`í	12,411	286	59	811	491	320
	December	NA	1	12,575	197	63	812	493	319
	Average	NA	1	12,025	204	61			
1986	January	NA	3	12,375	159	62	826	494	332
	February	NA	(s)	11,921	162	68	827	495	332
	March	NA	`1	R11,648	212	56	838	497	341
	April†	NA	NA	12,400	NA	NA	<i>837</i>	499	338
	Average	NA	NA	12,087	NA	NA			

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>

		imports from OPEC Sources.										
		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	_	311	319	1,129	81	366	0	620	406	90	3,323	1,848
1982	Average	170	26	552	92	248	35	514	412	97	3,323 2,146	1,040 854
1983	Average	240	0	337	30	338	48	302	422	144	2, 146 1,862	
	Average	240									1,002	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 82	384	0 0	204	539	242	2,241	946
	August	404	0 0	438 159	82 113	281 333	17	114 160	475 715	216	2,009	993
	September October	359 333	0	287	114	333 421	0	208	585	147 115	2,002 2,062	688 754
	November	298	ŏ	183	124	424	24	163	564	173	1,954	668
	December	204	ő	224	211	314	12	166	459	174	1,765	723
	Average	323	1	325	117	343	10	216	548	166	2,049	819
1985	January	95	0	106	60	274	0	262	481	89	1,367	289
	February	174	0	108	0	232	0	131	524	64	1,233	307
	March	252	0	85	52	283	0	180	575	84	1,512	390
	April	286	. 8	186	70	313	0	280	669	86	1,899	561
	May	281	0	49	128	211	0	381	549	354	1,953	669
	June	178	5	26	81	439	0	357	444	152	1,682	379
	July	136	10	44	13	389	42	376	559	248	1,817	298
	August	135	0	46	17	377	85	194	563	290	1,707	280
	September	147	0	27	57	206	43	263	820	243	1,805	302
•	October	177	20	251 430	17 34	278 356	41	282	712	196	1,973	520 770
	November December	185 232	11 0	642	34 15	305	114 0	308 421	783 625	300 149	2,522 2,389	773 913
				167			_		608			
	Average	190	4		45	306	27	287		189	1,825	475
1986	January	183	0	664	11	285	0	241	629	216	2,229	944
	February	161	0	600	0	277	(s)	199	464	64	1,766	788
	March	260	0	482	0	163	0	328	762	117	2,112	798
	Average	203	0	582	4	241	(s)	258	623	135	2,045	845

<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 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										
		Bahamas	Canada	Mexico	Nether- lands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico	Virgin Islands	Other Non- OPEC	Total Non- OPEC	Total Imports
						Thousa	nd barrels p	er day				
1973	Average	174	1,325	16	585	255	15	99	329	465	3,263	6,256
1974	Average	164	1,070	8	511	251	. 8	90	391	340	2,832	6,112
1975	Average	152	846	71	332	242	14	90	406	300	2,454	6,056
1976	Average	118	599	87	275	274	31	88	422	353	2,247	7,313
1977	Average	171	517	179	211	289	126	105	466	550	2,614	8,807
1978	Average	160	467	318	229	253	180	94	429	484	2,613	8,363
1979	Average	147	538	439	231	190	202	92	431	548	2,819	8,456
1980	Average	78	455	533	225	176	176	88	388	491	2,609	6,909
1981	Average	74	447	522	197	133	375	62	327	534	2,672	5,996
1982	Average	65	482	685	175	112	456	50	316	627	2,968	5,113
1983	Average	125	547	826	189	96	382	40	282	701	3,189	5,051
	Average											
1984	January	159	635	710	279	54	382	53	390	804	3,465	5,430
	February	156	620	748	289	77 00	344 434	58 34	418 248	1,087 1,013	3,797 3,490	5,693 5,301
	March	90	694	716	169	93 91	282	34 37	246 257	869	3,450	5,372
	April	95	705 722	869 676	207 192	91 57	429	37 38	336	819	3,302	5,979
	May	31 52	722 506	754	234	104	345	53	268	939	3,255	5,482
	June	52 14	50 <del>0</del> 577	734 740	99	120	362	27	292	934	3,166	5,407
	July 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 1.088	3,353 3,765	5,252 5,718
	May	66	796	959	22	126	419 481	37 23	252 271	848	3,765	5,716 4.877
	June	21	716	712 813	30 26	92 133	323	23 14	236	912	3,193	4,921
	July	36 19	610 679	859	18	121	336	28	241	673	2,975	4,682
	August September	30	807	852	29	134	311	26	173	811	3,173	4,977
	October	14	836	744	5	92	372	21	260	834	3,180	5,153
	November	11	757	899	30	100	387	26	325	1,159	3,695	6,216
	December	45	893	644	29	96	273	12	314	994	3,300	5,689
	Average	34	768	815	35	114	314	28	247	866	3,221	5,045
1986	January	66	826	680	58	108	348	21	326	724	3,157	5,386
	February	15	688	571	11	85	218	20	309	939	2,855	4,622
	March	13	741	616	27	79	178	25	186	661	2,526	4,638
	Average	32	754	624	33	91	249	22	273	769	2,846	4,890

Footnotes continued.

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

(s) = Less than 500 barrels per day.

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

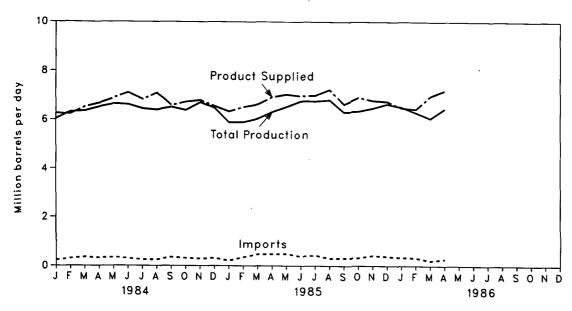
• Totals may not equal sum of components due to independent rounding.

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

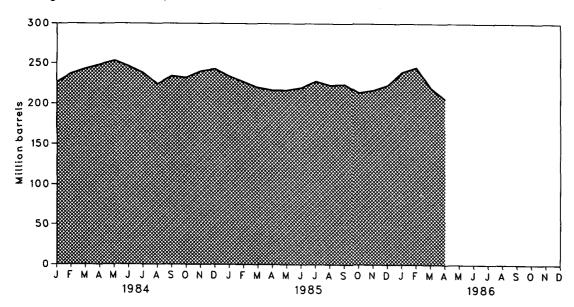
Sources: • See the last page of this section.

# Finished Motor Gasoline Supply and Disposition

# **Products Supplied, Total Production, and Imports**



#### **Ending Stocks**



# Finished Motor Gasoline Supply and Disposition

		Supply				Dis		Ending Stocks <sup>1</sup>		
						P	roduct Suppl	ied	Total Motor	Finished Motor
•		Total Production	Imports <sup>2</sup>	Stock Withdrawai <sup>2 3</sup>	Exports	Total	Unleaded <sup>4</sup>	Unleaded Percent	Gasoline <sup>5</sup>	Gasoline
				Thousand	d barrels 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			4218	
1975	Average	6,520	184	6-28	2	6,675			235	
1976	Average	6,841	131	10	3	6,978			231	
1977	Average	7,033	217	-72	2	7,177	1,976	27.5	258	
	•	•	190	54	1	7,412	2,521	34.0	238	
1978	Average	7,169		2	(s)	7,034	2,798	39.8	237	
1979	Average	6,852	181			6,579	3,067	46.6	4261	
1980	Average	6,506	140	-66	1		•		253	
1981	Average <sup>7</sup>	6,405	157	°28	2	6,588	3,264	49.5		
1982	Average	6,338	197	25	20	6,539	3,409	52.1	<sup>6</sup> 235	400
1983	Average	6,340	247	⁴ <b>4</b> 5	10	6,622	3,647	55.1	222	186
1984	January	6,036	231	-1	1	6,265	3,605	57.5	226	186
	February	6,317	299	-383	2	6,231	3,585	57.5	237	197
	March	6,359	355	-176	9	6,528	3,750	57.4	243	202
	April	6,525	319	-167	(s)	6,676	3,857	57.8	248	207
	May	6,650	346	-105	(s)	6,890	4,004	58.1	253	210
	June	6,619	296	209	17	7,107	4,214	59.3	246	204
	July	6,450	247	142	9	6,830	4,057	59.4	238	200
	August	6,405	242	447	1	7,093	4,283	60.4	224	186
	September	6,516	349	-275	2	6,588	3,973	60.3	234	194
	October	6,388	308	34	. 1	6,729	4,093	60.8	232	193
	November	6,709	286	-183	11	6,800	4,245	62.4	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	6,766	384	-168	7	6,975	4,456	63.9	220 228	186 192
	July	6,763	426	-174	18	6,997	4,536	64.8	228	188
	August	6,810	302	129	4	7,236	4,753 4,374	65.7 65.9	223 224	187
	September	6,315	313	16 261	6 19	6,639 6,914	4,374 4,488	65.9 64.9	214	179
	October	6,350 6,476	323	-88	17	6,790	4,466	66.1	217	182
	November	6,476 6,649	418 379	-00 -259	18	6,752	4,548	67.4	223	190
	December Average	6,404	379 <b>378</b>	-259 <b>43</b>	10	6,815	4,395	64.5	220	100
4000	•	•	341	-376	0	6,487	4.404	67.9	239	201
1986	January	6,522 6,307	341	-376 -185	0	6,438	4,404	67. <del>9</del> 67.4	245	207
	February March	6,297 R6,060	325 R211	R699	0	R6,970	4,706	67.5	R220	R185
	April†	6,464	275	462	NA	7,201	NA NA	NA	206	173
	Apriiț Average	6,336	2/3 287	462 156	NA NA	6,779	NA	NA	200	
	~ tolugo	0,000				-,				

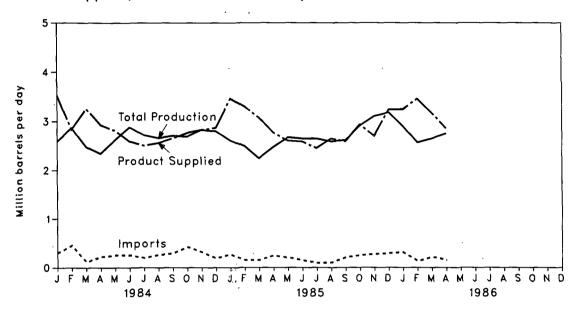
¹Stocks are totals as of end of period.
²Beginning in 1981, excludes blending components.
³A negative number indicates an increase in stocks and a positive number indicates a decrease.

Includes gasohol.

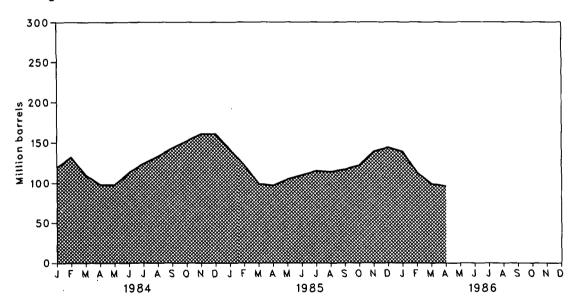
<sup>\*</sup>Includes gasohol.
\*Includes motor gasoline blending components.
\*Includes motor gasoline blending components.
\*In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Note 5 on the last page of this section.
\*Beginning in January 1981, survey forms were modified. See Note 2 on the last page of this section.
†Italics denote estimates based upon preliminary data. 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

						Disposition		Ending	
			Sup	ply		Dispo	sition	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	4200	
1975	Average	2,654	155	440	2	1	2,851	209	
1976	Average	2,924	146	62	1	1	3,133	186	
1977	•	3,278	250	-176	i	i	3,352	250	
1977	Average	3,167	173	93	i	3	3,432	216	
	Average	3, 167 3.153	193	-34	i	3	3,311	229	
1979	Average	• • • • •	142	-34 64	i	3	2,866	4205	
1980	Average	2,662	-	438	10	5	2,829	192	
1981	Average <sup>5</sup>	2,613	173	35	10	74	2,671	179	
1982	Average	2,606	93			64	2,690	140	
1983	Average	2,456	174	1124	NA	04	2,090		
1984	January	2,591	299	676	NA	40	3,525	119	
	February	2,867	454	-446	NA	41	2,834	132	
	March	2,479	115	731	, NA	66	3,259	110	
	April	2,342	220	396	NA	32	2,926	98	
	May	2,624	253	-15	NA	48	2,814	98	
	June	2,880	256	-490	NA	53	2,593	113	
	July	2,719	199	-373	NA	- 40	2,504	124 133	
	August	2,661	259	-287	NA	74	2,559	143	
	September	2,707	291	-321	NA NA	22 47	2,654 2.765	152	
	October	2,691	421 316	-300 -291	NA NA	24	2,765	161	
	November	2,826	190	-291	NA NA	120	2.865	161	
	December	2,798	272	-57	NA NA	51	2,845	101	
	Average	2,681					•	440	
1985	January	2,608	271	624	NA NA	41 64	3,462	142 122	
	February	2,491	148	724 715	NA NA	44	3,299 3,069	99	
	March	2,244	153 244	715 75	NA NA	27	2,767	97	
	April	2,474 2,670	203	-243	NA NA	31	2,600	105	
	May June	2,645	147	-177	NA NA	30	2,584	110	
	July	2,644	95	-177	NA NA	112	2,450	115	
	August	2,587	101	58	NA	100	2,646	114	
	September	2,614	208	-115	NA	121	2,586	117	
	October	2,902	247	-149	NA	67	2,932	122	
	November	3,101	272	-585	NA	92	2,696	139	
	December	3,176	291	-150	NA	81	3,236	144	
	Average	2,681	199	47	NA	67	2,859		
1986	January	2,899	312	157	NA	126	3,243	139	
	February	2,563	129	938	NA	176	3,455	113	
	March	R2,647	R217	R436	NA	131	R3,168	R99	
	April†	<i>2,752</i>	154	<i>95</i>	NA	NA	<i>2,853</i>	<i>96</i>	
	Average	2,719	205	396	NA	NA	3,176		

Stocks are totals as of end of period.

<sup>&</sup>lt;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.

this section.

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

Beginning in January 1981, survey forms were modified. See Note 2 on the last page of this section.

Italics denote estimates based upon preliminary data. R = Revised data. NA = Not available.

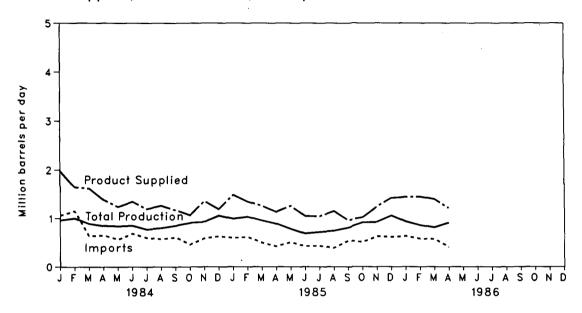
Notes: • Geographic coverage is the 50 States and the District of Columbia.

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

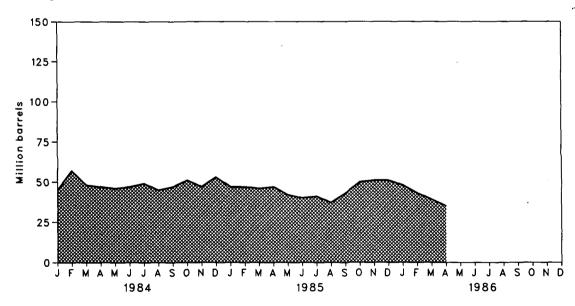
Sources: • See the last page of this section.

# 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	42	15	15	2,462	74	
1976	Average	1,377	1,413	5	. 17	12	2,801	72	
1977	•	1,754	1,359	-48	13	6	3,071	90	
	Average	• •	1,355	-1	13	13	3,023	90	
1978	Average	1,667	•	-15	13	9	2,826	96	
1979	Average	1,687	1,151	10	12	33	2,508	•92	
1980	Average	1,580	939	10 437	12 48	118	2,088	78	
1981	Average <sup>5</sup>	1,321	800		48 48	209		76 466	
1982	Average	1,070	776	32		185	1,716	49	
1983	Average	852	699	<b>•</b> 55	NA	185	1,421	49	
1984	January	961	1,059	110	NA	151	1,979	45	
	February	1,003	1,151	-416	NA	87	1,651	57	
	March	889	636	298	NA	204	1,619	48	
	April	847	651	15	NA	130	1,384	47	
	May	840	565	32	NA	200	1,237	46	
	June	849	685	-15 -70	NA	176	1,344	47	
	July	770	597	-76	NA	99 260	1,192	49 45	
	August	800	572	149 -74	NA NA	214	1,261 1,168	45 47	
	September	850 907	606 461	-74 -127	NA NA	174	1,066	51	
	October November	928	585	125	NA NA	286	1,352	47	
	December	1,053	627	-193	NA	299	1,189	53	
	Average	891	681	-12	NA	190	1,369		
1985	January	991	594	208	NA	312	1,481	47	
	February	1,031	614	-7	NA	295	1,343	47	
	March	954	496	22	NA	216	1,256	46	
	April	888	422	-11	NA	167	1,133	47	
	May	780	505	156	NA	185	1,255	42	
	June	686	426	53	NA	118	1,047	40	
	July	714	431	-20	NA	83	1,042	41	
	August	741	386	125	NA	106	1,146 961	37 43	
	September	804	537	-193 -221	.NA	188 184	961 1,017	43 50	
	October	912 922	509 623	-221 -33	NA NA	275	1,017	50 51	
	November December	1.055	613	-33 -2	NA NA	273 250	1,416	51	
	Average	873	512	7	NA NA	197	1,194	<b>3</b> ,	
1986	January	933	629	83	NA	211	1,435	48	
	February	856	577	193	NA	183	1,443	43	
	March	R810	R571	R125	NA	113	R1,393	R39	
	April†	909	409	91	NA	NA	1,209	<i>35</i>	
	Average	877	547	121	NA	NA	1,369		

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

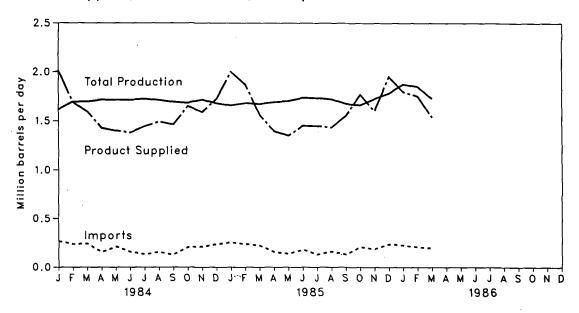
<sup>2</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.

<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

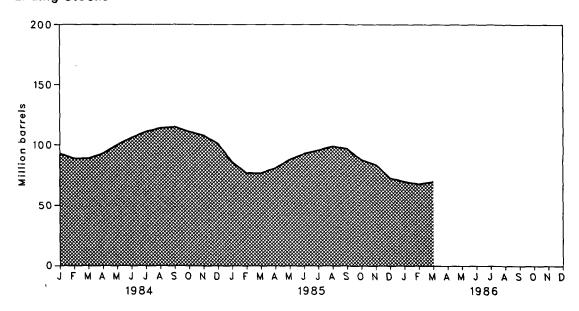
<sup>\*</sup>Beginning in January 1963, product supplied for residual field of december 1964 and 1964 and 1965 and

# Liquefied Petroleum Gases Supply and Disposition

# Product Supplied, Total Production, and Imports



#### **Ending Stocks**



# Liquefied Petroleum Gases¹ 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	1.600	132	-35	220	27	1,449	99
1974	Average	1,565	123	-38	220	25	1,406	4113
1975	Average	1,527	112	4-35	246	26	1,333	125
1976	Average	1,535	130	24	260	25	1,404	116
1977	•	1,566	161	-55	233	18	1,422	136
	Average	•	123	12	239	20	1,413	132
1978	Average	1,537		70	236	15	1,592	111
1979	Average	1,556	217	· -		21		<b>1120</b>
1980	Average	1,535	216	-27	233		1,469	135
1981	Average	1,571	244	4-18	289	42	1,466	
1982	Average	1,528	226	111	300	65	1,499	194
1983	Average	1,642	190	4	253	73	1,509	<b>•101</b>
1984	January	1,615	269	4494	340	23	2.015	93
1304	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	1,490	114
	September	1,693	128	-50	283	26	1,462	115
	October	1,684	207	138	322	56	1,650	111
	November	1,716	212	89	376	52	1,588	108
	December	1,679	237	239	349	82	1,724	101
	Average	1,697	195	19	291	48	1,572	
1985	January	1,658	255	466	309	70	2,001	86
	February	1,682	237	338	313	72	1,872	77
	March	1,672	223	-13	270	52	1,560	77
	April	1,691	156	-115	260	78 40	1,394	81
	May	1,703	138	-217	235	40	1,349	88 93
	June	1,736	181	-173	244	51 60	1,449 1,447	95 96
	July	1,733	131	-107	243	68 80	•	99
	August	1,721	161	-103 84	267 311	29	1,432 1,551	97
	September	1,675	132 209	270	322	47	1,770	88
	October	1,661	188	135	360	88	1,600	84
	November December	1,727 1,783	239	374	367	75	1,953	73
		1,704	187	77	292	62	1,614	, ,
	Average	-					•	70
1986	January	1,874	277	75	382	47 75	1,797	70 68
	February	1,850	208	98	330	75	1,752	70
	March	1,726	199	-90	252	47 50	1,536	70
	Average	1,816	229	25	321	56	1,693	

Ending

Includes ethane, propane, normal butane, and isobutane.

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.

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

		Supply				Disposition	ı	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	<b>1218</b>	
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	225	
1979	Average	4,153	195	-37	352	209	3,749	238	
1980	Average	3,956	210	-23	311	198	3,634	<b>1247</b>	
1981	•	3,739	226	446	723	199		282	
	Average						3,088		
1982	Average	3,453	334	80	787	211	2,869	1253	
1983	Average	3,460	411	<b>16</b>	712	242	2,923	1256	
1984	January	3,376	517	4-163	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	
	July	3,998	649	31	910	241	3,525	260	
	August	4,078	622 574	335 -1	1,292	218	3,523	250	
	September	3,874 3,800		-1 9	846 867	274	3,323	250	
	October November	3,800 3,815	541 610	9 -177	939	250 277	3,234 3,029	249 255	
	December	3,663	527	253	1,020	2// 305	3,029 3,121	255 247	
	Average	3,708	554	-19	851	240	3,153	247	
4000	•	•							
1986	January	3,805	498	-165	925	311	2,899	252	
	February	3,759	377	-197	768	270	2,901	258	
	March	3,646	440	7	822	208	3,066	257	
	Average	3,736	440	-116	841	263	2,957		

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 s. 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 have been:

- Crude Oil: 1982—645 (Total) and 351 (Other Primary).
- Crude Oil and Petroleum Products: 1974-1,121; 1980-1.420: and 1982-1.462.
- -225: 1980-263: 1982-244 (To- Motor Gasoline: 1974 tal) and 203 (Finished).

  • Distillate Fuel Oil: 1974—224; 1980—205; and 1982—
- 186.
- Residual Fuel Oil: 1974—75; 1980—91; and 1982—68.
- Liquefied Petroleum Gases: 1974—113;1980—128; and 1982-103
- Other Petroleum Products: 1974—220; 1980—249; and 1982-259.
- Stock withdrawal calculations beginning in 1975, 1981, and 1983, were made using new basis stock levels.

In January 1984, changes were made in the reporting of natural gas liquids. As a result, unfractionated stream, which was formerly included in "Other Petroleum Products Supply 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 withdraw-als in each table. Under new basis, end-of-year 1983 stocks, in million barrels would have been:

- Liquefied Petroleum Gases: 1983—108.
  Other Petroleum Products: 1983—248.
- 6. Stocks of Alaskan crude oil in transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock withdrawal calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Other Primary).

#### Sources

- 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual.
- 1977 through 1980: Energy Information Administration (EIA), Energy Data Reports, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual" and unleaded gasoline data from Monthly Petroleum Statistics Report.
- January 1981 through December 1984: EIA, Petroleum Supply Annual
- January 1985 through March 1986: Detailed statistics in appropriate issues of the Petroleum Supply Monthly (except domestic crude oil production).
- April 1986: Estimates based on EIA weekly data (except domestic crude oil production).
- January 1985 through April 1986: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey.

Total dry natural gas production in the United States during March 1986 was an estimated 1.4 trillion cubic feet, 1.7 percent more than in March 1985. Dry natural gas production during the first quarter of 1986 was 4.3 trillion cubic feet, 2.0 percent lower than during the first quarter of 1985.

Consumption of natural and supplemental gas in March 1986 was an estimated 1.6 trillion cubic feet, 0.2 percent lower than in March 1985. Consumption of natural and supplemental gas during the first quarter of 1986 was an estimated 5.3 trillion cubic feet, 7.6 percent lower than the first quarter of 1985.

Deliveries to residential consumers during February 1986 (latest data available) were 714 billion cubic feet, 14.6 percent lower than in February 1985. Total deliveries to industrial consumers during February 1986 were an estimated 375 billion cubic feet. This was 27.6 percent higher than in February 1985.

Natural Ga

Imports of natural gas in March 1986 were an estimated 61 billion cubic feet, 31.5 percent lower than in the previous March. There were no imports of Algerian liquefied natural gas (LNG) during March 1986. Imports of natural gas during the first quarter of 1986 were an estimated 225 billion cubic feet, 22.7 percent lower than imports during the first quarter of 1985.

Stocks of working gas\* in underground natural gas storage reservoirs at the end of March 1986 totaled 1,759 billion cubic feet. This was 0.9 percent above stocks available a year earlier. Net withdrawals from storage during March 1986 were 117 billion cubic feet, 0.9 percent more than during the previous March.

<sup>\*</sup>Gas available for withdrawal.

#### **Production Summary**

		Gross Wet Gas Withdrawals <sup>1</sup>	Used for Repressuring <sup>2</sup>	Nonhydro- carbon Gas Removed³	Vented and Flared	Marketed Production (Wet) <sup>4</sup>	Extraction Loss <sup>3</sup>	Total Dry Gas Production <sup>s</sup>
					Billion cubic fe	et		
1973	Total	24,067	1,171	NA	248	°22,648	917	<b>621,731</b>
1974	Total	22,850	1,080	NA	169	°21,601	887	°20,713
1975	Total	21,104	861	NA	134	°20,109	872	°19,236
1976	Total	20,944	859	NA	132	°19,952	854	°19,098
1977	Total	21,097	935	NA.	137	°20,025	863	419,163
1978	Total	21,309	1,181	NA	153	°19,974	852	*19,122
1979	Total	21,883	1,245	NA.	167	°20,471	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	Total	18,597	1,458	222	95	16,822	790	16,033
		•	•			•		
1984	January	1,887	135	21	9	1,723	79	1,644
	February	1,650	127	17	8	1,497	69	1,428
	March	1,693	125	19	9	1,540	71	1,469
	April	1,666	132	18	9	1,507	69	1,438
	May June	1,668 1,619	138 135	19 18	9 9	1,503	69 67	1,434
	July .	1,676	137	20	10	1,456	67 69	1,389
	August	1,653	137	19	9	1,509 1,487	68	1,440 1,419
	September	1,574	. 132	16	9	1,417	65	1,352
	October	1,661	143	19	9	1,490	69	1,421
	November	1,656	142	17	10	1,487	68	1,419
	December	1,789	146	21	8	1,613	74	1,539
	Total	20,192	1,630	224	108	18,230	838	17,392
1985	January	1,788	124	20	7	1,637	75	1,562
_	February	1,635	122	18	6	1,489	68	1,421
_	March	1,651	137	19	6	1,490	69	1,421
	April	1,563	137	18	6	1,401	64	1,337
	May	1,545	133	19	7	1,386	64	1,322
	June	1,487 1,531	126	17	6	1,336	61	1,275
	July August	1,531	133 127	20 19	7 7	1,370	63 63	1,307
	September	1,503	133	17	6	1,367 1,348	62	1,304 1,286
	October	1,553	132	19	6	1,396	64	1,332
	November	1,565	136	20	7	1,402	64	1,338
	December	R1,770	R144	R23	R6	R1,596	R73	R1,523
	Total	R19,111	R1,584	R229	R77	R17,218	R790	R16,428
1986	January	R1,759	R144	R20	R6	R1,588	R73	R1,515
	February	R1,578	R131	19	6	R1,422	R65	R1,357
	March	1,682	140	21	6	1,515	70	1,445
	Year to Date	5,019	415	60	18	4,525	208	4,317

<sup>&#</sup>x27;Gas withdrawn from gas and oil wells.

<sup>&</sup>lt;sup>1</sup>Gas withdrawn from gas and oil wells.

<sup>2</sup>Gas returned to formations for repressuring, pressure maintenance, and cycling.

<sup>3</sup>For definitions and further explanations, see Notes on the last two pages of this section.

<sup>4</sup>Equal to gross withdrawals minus volumes used for repressuring, volumes of nonhydrocarbon gases removed, and volumes vented and flared. See Note 2 on the last two pages of this section for further explanation.

<sup>5</sup>Equal to marketed production (wet) minus extraction loss.

<sup>6</sup>May include unknown quantities of nonhydrocarbon gases.

R=Revised data. NA=Not available.

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

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

• Italics denote estimated data. Data for 1973 through 1984 are final. All other data are preliminary unless otherwise indicated.

Sources: • See the last page of this section.

#### Supply and Disposition of Natural Gas

		Supply					Disposition			
	•	Total Dry Gas Production	With- drawals from Storage <sup>1</sup>	Supple- mental Gaseous Fuels <sup>2</sup>	Imports <sup>2</sup>	Total Supply/ Disposition <sup>3</sup>	Additions to Storage <sup>1</sup>	Exports <sup>2</sup>	Consump- tion <sup>2</sup>	Un- accounted for <sup>s</sup>
					E	Billion cubic fee	t			
1973	Total	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	19,163	1,750	NA	1,011	21,924	2,307	56	19,521	41
1978	Total	19,122	2,158	NA NA	966	22,245	2,278	53	19,627	287
1979	Total	•	2,130	NA NA	1,253	22,964	2,275	56	20,241	372
		19,663	•		•			49	•	
1980	Total	19,403	1,972	155	985	22,515	1,949		19,877	640
1981	Total	19,181	1,930	176	904	22,191	2,228	59	19,404	501
1982	Total	17,758	2,164	145	933	21,000	2,472	52	18,001	475
1983	Total	16,033	2,270	132	920	19,354	1,822	55	16,835	⁵642
1984	January	1,644	580	13	97	2,334	55	5	2,260	14
	February	1,428	310	10	69	1,817	61	5	1,739	12
	March	1,469	371	10	69	1,919	49	6	1,851	13
	April	1,438	102	8	71	1,619	147	5	1,456	11
	May	1,434	31	7	66	1,538	259	5	1,264	10
	June	1,389	28	7	59	1,483	329	3	1,140	11
	July	1,440	29	7	55	1,531	353	5	1,161	12
	August	1,419	31	8	54	1,512	324	5	1,172	11
	September	1,352	31	8	57	1,448	295	5	1,138	10
	October	1,421	48	8	67	1,544	247	5	1,282	10
	November	1,419	231	11	84 94	1,745	85 94	5 5	1,644	11 12 ·
	December <b>Total</b>	1,539 <b>17,392</b>	309 <b>2,098</b>	13 <b>110</b>	94 <b>843</b>	1,955 <b>20,443</b>	2,2 <b>9</b> 5	55	1,844 <b>17,951</b>	5143
			•			•				
1985	January	1,562	659	16	104 98	2,341	35 48	5 4	2,264 1,884	37 34
	February	1,421	437 213	14 13	98 89	1,970 1,736	46 97	4	1,604	34
	March	1,421	213 94	10	75	1,736	207	5	1,272	32
	April	1,337 1,322	94 25	8	75 70	1,425	300	5	1,272	32
	May June	1,275	33	10	63	1,381	260	5	1,085	31
	July	1,307	45	10	60	1,422	309	6	1,076	31
	August	1,304	50	10	57	1,421	277	5	1,108	31
	September	1,286	20	9	60	1,375	270	4	1,070	31
	October	1,332	69	12	70	1,483	197	4	1,250	32
	November	1,338	201	10	76	1,625	93	4	1,496	32
	December	R1,523	526	12	105	R2,167	43	4	R2,083	R37
	Total	R16,428	2,373	134	927	R19,862	2,135	55	R17,277	R394
1986	January	R1,515	447	R11	R95	R2,068	52	5	R1,975	R36
	February	R1,357	400	R10	R69	R1,836	59	5	R1,739	R33
	March	1,445	237	14	61	1,757	120	5	1,597	35
	Year to Date	4,317	1,084	35	225	5,661	231	15	5,311	104

<sup>\*</sup>Monthly and annual data for 1980 through 1984 include underground storage and liquefied natural gas storage. All other data include underground storage only. Computation procedures are discussed in Note 8 on the last two pages of this section.

\*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 1984 are final. All other data are preliminary unless otherwise indicated.

Sources: • See the last page of this section.

#### Natural Gas¹ Consumption

#### **Delivered to Consumers**

			Delivered to Collabiliers		ilici 3							
		Lease and Plant Fuel	Pipeline Fuel	Residential	Commercial <sup>2</sup>	Industrial	Electric Utilities	Total	Total Consumption			
		<b>V</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	17,329	19,627			
1979	Total	1,499	601	-			•	•	•			
1980		•		4,965	2,786	6,899	3,491	18,141	20,241			
	Total	1,026	635	4,752	2,611	7,172	3,682	18,216	19,877			
1981	Total	928	642	4,546	2,520	7,128	3,640	17,834	19,404			
1982	Total	1,109	596	4,633	2,606	5,831	3,226	16,295	18,001			
1983	Total	978	490	4,381	2,433	5,643	2,911	15,367	16,835			
1984	January	102	67	886	437	553	215	2,091	2,260			
	February	88	51	700	354	359	187	1,600	1,739			
	March ,	91	55	605	311	583	206	1,705	1,851			
	April	89	43	463	243	398	220	1,324	1,456			
	Мау	89	37	287	160	426	265	1,138	1,264			
	June	86	34	170	108	444	298	1,020	1,140			
	July	89	34	128	97	464	349	1,038	1,161			
	August	88	35	118	98	483	350	1,049	1,172			
	September	84	33	127	101	502	291	1,021	1,138			
	October	88	. 38	183	128	575	270	1,156	1,282			
	November	88	48	323	193	747	245	1,508	1,644			
	December	95	54	566	294	618	217	1,695	1,844			
	Total	1,077	529	4,555	2,524	6,153	3,111	16,345	17,951			
1985	January	97	67	742	370	762	226	2,100	2,264			
	February	88	55	836	408	294	203	1,741	1,884			
	March	88	47	566	289	404	207	1,466	1,601			
	April	83	37	397	205	316	234	1,152	1,272			
	May	82	32	213	130	395	236	974	1,088			
	June	79	32	157	103	432	282	974	1,085			
	July	81 81	32 33	130 119	97 05	R399	337	963	1,076			
	August September	80	33 31	129	95 100	425	355	994 959	1,108			
	October	83	37	189	125	455 566	275 250	1,130	1,070			
	November	83	44	306	183	650	230	1,130	1,250 1,496			
	December	R94	R61	627	328	R763	230 210	R1,928	1,496 R2,083			
	Total	R1,019	<b>507</b>	4,412	2,432	R5,861	3,044	R15,750	R17,277			
1986	January	R94	R58	804	397	R438	184	R1,823	R1,975			
	February	84	51	714	358	375	157	1,604	1,739			
	<u> </u>							•	3,714			
	Year to Date	178	109	1,518	755	813	341	3,427				

¹Includes supplemental gaseous fuels. ²Includes deliveries to local, State, and Federal agencies engaged in nonmanufacturing activities.

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

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

Natural Gas in **Underground Storage** at End of Pariod

Change in Working Gas from Same Period

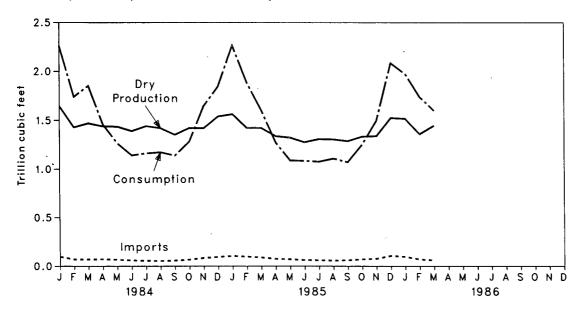
Changes Ashiriba

		at End of Period			Previou	us Year	Storage Activity		
		Base Gas	Working Gas	Total <sup>1</sup>	Volume	Percent	Injections	Withdrawals	Net²
			,	Volumes in b	oillion cubic feet	t ,			
1973	Total	2,864	2,034	4,898	305	17.6	1,974	1,533	441
1974	Total	2,912	2,050	4,962	16	0.8	1,784	1,701	83
1975	Total	3,162	2,212	5,374	162	7.9	2,104	1,760	344
1976	Total	3,323	1,926	5,250	-286	-12.9	1,756	1,921	-165
1977	Total	3,391	2,475	5.866	549	28.5	2,307	1,750	557
1978	Total	3,473	2,547	6,020	72	2.9	2,278	2,158	120
1979	Total	3,553	2,753	6,306	207	8.1	2,295	2,047	248
1980	Total	3,642	2,655	6,297	-99	-3.6	1,896	1,910	-14
1981	Total	3,752	2,817	6.569	162	6.1	2,180	1,887	293
1982	Total	3,808	3,071	6,879	255	9.0	2,399	2,094	306
1983	Total	3,847	2,595	6,442	-476	-15.5	1,700	2,142	-442
1984	January	3.847	2,091	5,937	-553	-20.9	54	571	-517
1504	February	3,828	1,876	5,704	-480	-20.4	60	305	-244
	March	3,824	1,572	5,396	-575	-26.8	48	365	-317
	April	3,822	1,620	5,442	-454	-21.9	144	100	44
	May	3,827	1,843	5,670	-379	-17.1	254	30	244
	June	3,828	2,141	5,969	-313	-12.7	323	27	296
	July	3,829	2,456	6,285	-239	-8.9	346	28	317
	August	3,829	2,740	6,569	-168	-5.8	318	30	288
	September	3,829	2,996	6,825	-144	-4.6	289	30	259
	October	3,837	3,175	7,011	-95	-2.9	242	47	195
	November	3,900	3,015	6,915	-160	-5.0	83	227	-145
	December	3,830	2,876	6,7,06	281	10.8	92	304	-213
	Total						2,252	2,064	188
1985	January	3,841	2,242	6,083	151	7.2	35	659	-623
	February	3,841	1,853	5,694	-23	-1.2	48	437	-389
	March	3,835	1,743	5,578	171	10.8	97	213	-116
	April	3,831	1,859	5,691	239	14.8	207	94	113
	May	3,837	2,129	5,965	286	15.5	300	25	275
	June	3,839	2,351	6,191	211	9.8 6.1	260 309	33 45	227 264
	July	3,849 3,849	2,605 2,832	6,454 6,681	149 92	3.4	309 277	45 50	264 227
	August	3,849 3,849	2,632 3,082	6,931	92 85	3.4 2.9	277	20	250
	September October	3,851	3,207	7,059	33	1.0	197	69	128
	November	3,847	3,087	6,934	72	2.4	93	201	-108
	December	3,847	2,609	6,451	-267	-9.3	43	526	-483
	Total	0,072	2,000	3, 10 1	20.	0.0	2,135	2,373	-238
1986	January	3,842	2,213	6,055	-29	-1.3	52	447	-395
	February	3,842	1,872	5,714	18	1.0	59	400	-341
	March	3,838	1,759	5,597	16	0.9	120	237	-117

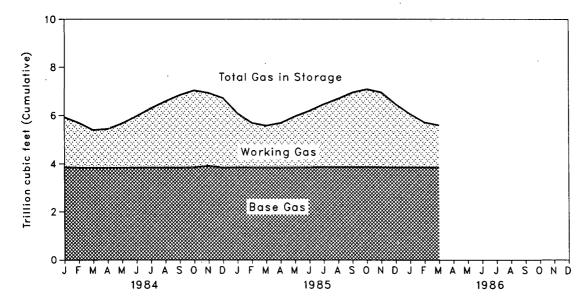
¹Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1978—6,890; 1979—6,929; 1980—7,434; 1981—7,805; 1982—7,915; 1983—7,985; 1984—8,043; and 1985—8,087. Current total capacity is 8,086. ²Positive numbers indicate injections are greater than withdrawals. Negative 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 1984 are final. All other data are preliminary unless otherwise indicated. Sources: • See the last page of this section.

#### Overview

#### Consumption, Dry Production, and Imports



#### Gas in Storage at End of Period



#### Notes and Sources for the Natural Gas Section

#### Notes

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

Monthly data are reported by two States and computed for seven States. All monthly data are considered 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 1984.

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

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 Angust. Gas Annual.

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

3. Extraction Loss: Extraction loss is the reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

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

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

Monthly data are revised and considered final after the

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

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

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

All monthly data are considered preliminary until after the publication of the EIA Natural Gas Annual for that year. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the monthly sum of these three elements to compute a monthy supplemental gaseous fuels figure.

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

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

All final data are from the EIA, Natural Gas Annual. All monthly data are considered preliminary until after 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 the following: (1) quantities lost; (2) the net result of flow data metered at varying temperature and pressure conditions and converted to a standard temperature and pressure base; (3) metering inaccuracies; (4) differences between billing cycle and calendar period time frames; (5) the effect of variations in company accounting and billing practices; and (6) imbalances from EIA's merger of data reporting systems which vary in scope, format, definitions, and type of respondents. The increase of almost 0.2 trillion cubic feet (Tcf) in the "Unaccounted for" category in 1983 followed by a decline of 0.5 trillion cubic feet in 1984 reflected unusually large differences resulting from the use of the annual billing cycle (essentially December 15, through the following December 14) consumption data in conjunction with calendar year supply data. Record cold tempera-tures during the last half of December 1983 resulted in a reported 0.3 Tcf increase in net withdrawals from underreported 0.3 fcf increase in het withdrawais from under-ground storage for peak shaving as compared with the same period in 1982, but the effect of this cold weather was reflected primarily in 1984 consumption data. For under-ground storage data, see Table F2 in the May 1985 Natural Gas Monthly, which was published in July 1985.
- 8. Natural Gas Storage: Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals from the quantity in storage at the end of the previous period. This difference is due to changes in the quantity of native gas included in the base gas and/or losses in base gas due to migration from storage reservoirs.

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

The final monthly and annual storage and withdrawal data for 1980 through 1984 include both underground and data for 1984 include both underground and liquefied natural gas (LNG) storage. Underground storage data are taken from the FPC-8/EIA-191 survey in the following manner. Annual data on LNG additions and withdrawals are taken from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground the state of the stat ground 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 1984: Energy Information Administration (EIA), *Natural Gas Annual 1984*; January 1985 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 1984: EIA, *Natural Gas Annual 1984*; January 1985 forward: EIA computations

1985 forward: EIA computations.

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

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

putations.

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

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

• Electric utility data—EIA, Form 759, "Monthly Power Plant Report" (formerly Form FPC-4).

Underground Storage: 1973 and 1974: American Gas Association, Gas Facts; 1975 through 1979: EIA, Form FPC-8 and Form EIA-191, and the Natural Gas Annual; 1980 forward: EIA, Form FPC-8, Form EIA-191, and Form 176, "Manual Report of Natural Case Standard Conference of Natural Case Standard Case "Annual Report of Natural and Supplemental Gas Supply and Disposition."

# Oil and Gas Resource Development

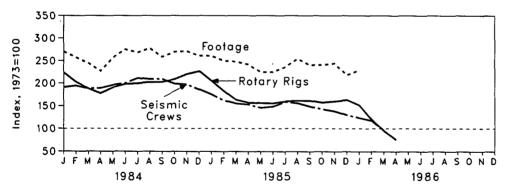
In March 1986, the 240 crews engaged in seismic exploration were 38.1 percent fewer than those in March 1985. The number of crews in March declined 55 from the number during the previous month, which is the largest month-to-month decrease reported since the survey began in May 1974. The last time the number of crews working dropped to 240 was in March 1976. The 28 marine vessels in March 1986 were 41.7 percent fewer and the 212 land crews were 37.6 percent fewer than those in March 1985.

The April 1986 rotary rig count of 906 was 51.7 percent less than the count in April 1985. It was the lowest monthly count since May 1971 when 892 rigs were working. The 112 rigs operating offshore in

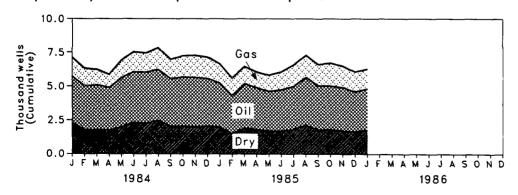
April 1986 were 46.7 percent fewer and the 794 rigs onshore were 52.4 percent fewer than those operating in April 1985.

Exploratory and development well completions during January 1986 were an estimated 6,280, 5.4 percent less than the 6,640 completions estimated in January 1985. Oil well completions were an estimated 3,040, 6.2 percent lower than the 3,240 oil well completions in the previous January. The 1,460 gas well completions were 2.1 percent higher than the January 1985 number of 1,430. Total footage drilled in January 1986 was 27.2 million feet, a decrease of 12.0 percent compared with the 30.9 million feet drilled in January 1985.

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



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



Monthly Energy Review February 1986 Energy Information Administration

# Oil and Gas Resource Development

# **Seismic Crews and Rotary Rigs**

Crews Engaged in Seismic Exploration

Rotary Rice in Operations

		Sei	Seismic Exploration			Rotary Rigs in Operation <sup>1</sup>			
		Offshore	Onshore	Total	Offshore	Onshore	Total		
		Monthly average			Weekly average				
1973	Average	23	227	250	84	1,110	1,194		
1974	Average	31	274	305	94	1,378	1,472		
1975	Average	30	254	284	106	1,554	1,660		
1976	Average	25	237	262	129	1,529	1,658		
1977	Average	27	281	308	167	1,834	2,001		
1978	Average	25	327	352	185	2,074	2,259		
1979	Average	30	370	400	207	1,970	2,177		
1980	Average	37	493	530	231	2,678	2,909		
1981	Average	44	637	681	256	3,714	3,970		
1982	_	57	531	588	243	•	•		
	Average					2,862	3,105		
1983	Average	47	426	473	199	2,033	2,232		
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	455	500	205	2,158	2,363		
	July	47	482	529	206	2,180	2,386		
	August	53	470	523	216	2,201	2,417		
	September	52	472	524	214	2,206	2,420		
	October	48	449	497	223	2,269	2,492		
	November	49	444	493	232	2,397	2,629		
	December	52	414	466	242	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	47	350	397	194	1,715	1,909		
	August	49	341	390	197	1,734	1,931		
	September	49 45	323 312	372 357	197	1,733	1,930		
	October November	45	305	346	195 187	1,684 1,725	1,879		
	December	39	287	326	190	1,760	1,912 1,950		
	Average	45	333	378	206	1,774	1,980		
1986	January	39	271	310	175	1,635	1,810		
	February	39	256	295	164	1,280	1,444		
	March	28	212	240	132	1,007	1,139		
	April	NA	NA	NA	112	794	906		
	Average <sup>2</sup>	35	246	282	145	1,169	1,314		

<sup>&</sup>lt;sup>1</sup>Monthly data are averages of 4- or 5-week reporting periods and are not calendar months. <sup>2</sup>Average of available data.

NA = Not available.

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

Sources: • See the last page of this section.

# **Oil and Gas Resource Development**

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

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

		Oil	Gas	Dry	Total	Total Footage <sup>1</sup>				
			Thousand wells							
1973	Total	10.25	6.97	10.47	27.69	139.42				
1974	Total	13.66	7.17	12.20	33.03	153.79				
1975	Total	16.98	8.17	13.74	38.89	181.05				
1976	Total	17.70	9.44	13.80	40.94	187.29				
1977	Total	18.70	12.12	15.04	45.86	215.70				
1978	Total	19.06	14.40	16.59	50.05	238.39				
1979	Total	20.70	15.17	16.04	51.91	243.69				
1980	Total	32.24	17.19	20.30	69.73	312.03				
1981	Total	42.91	19.97	27.25	90.13	409.13				
1982	Total	38.82	18.80	25.97	83.59	375.77				
1983	Total	36.70	14.34	R23.30	R74.35	R312.90				
1984	January	R3.44	R1.39	R2.29	R7.12	R31.97				
	February	3.24	1.31	1.78	6.33	28.50				
	March	3.31	1.14	1.78	6.23	28.98				
	April	3.14	0.98	1.75	5.87	26.03				
	May	3.63	1.31	1.99	6.93	30.41				
	June	3.73	1.47	2.32	7.52	31.53				
	July	3.78 3.76	1.41 1.59	2.26 2.46	7.45 7.81	31.79 32.87				
	August September	3.76 3.52	1.59	2.46 2.05	7.81 6.99	32.87 29.64				
	October	3.52 3.61	1.42	2.05	7.23	29.64 31.93				
	November	3.65	1.63	1.99	7.23 7.27	31.93				
	December	3.51	1.57	2.07	7.15	30.94				
	Total	R42.32	R16.79	R24.80	R83.91	R365.66				
1985	January	R3.24	R1.43	R1.98	R6.64	R30.88				
	February	2.78	1.31	1.52	5.61	26.79				
	March	3.27	1.28	1.91	6.46	29.38				
	April	3.08	1.17	1.82	6.07	27.75				
	May	2.91	1.21	1.70	5.82	26.59				
	June	3.04	1.33	1.70	6.07	. 25.79				
	July	R3.17	R1.59	R1.83	R6.60	R27.97				
	August	3.53	1.62	2.13	7.28	30.15				
	September	3.24	1.57	1.81	6.62	27.60				
	October November	3.21 3.20	1.70 1.58	1.81	6.72	28.54				
	December	3.20 2.92	1.58	1.72 1.67	6.50 6.07	27.99 25.84				
	Total									
4000		R37.58	R17.26	R21.59	R76.43	R334.35				
1986	January	3.04	1.46	1.78	6.28	27.17				

R=Revised data.

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

H=Hevised data.

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

• Totals and averages may not equal sum of components due to subsequent revisions and independent rounding.

• Due to the method of estimation, data shown on this page are frequently revised. See the last page of this section for further explanation.

Source: • See the last page of this section.

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

#### **Notes**

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

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

The EIA estimates are calculated using an adjustment process that imputes total well counts and footage by type and class based on partial counts of well completions available from the reported data. That is, based on statistical analysis of the incomplete reported data, the process imputes the missing portions to determine values for total well completions and footage. Estimates for a given month are first published in the MER for that month, that is, estimates for June 1984 are first published in the June 1984

MER. Revisions to the estimates are scheduled for the 6th, 12th, and 24th months following initial publication, as newly reported data refine the accuracy of the estimate. 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 are oil, gas, and dry. By convention, wells with both oil and gas zones are categorized as oil. Well classes are either development or exploratory; wells in any other class have been deleted. Exploratory well categories considered are new field wildcat, new pool wildcat, deeper pool test, shallower pool test, or extension (American Association of Petroleum Geologists well classification codes 1 through 5).

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

#### Sources

- Crews Engaged: Society of Exploration Geophysicists, "Monthly Seismic Crew Count" and annual reports published in their bulletins, Geophysics and Leading Edge.
- ished in their bulletins, *Geophysics* and *Leading Edge*.

   Rotary Rigs: Hughes Tool Company, "Rotary Rigs Running—by State."

   Wells and Footage Drilled: EIA computations based on
- Wells and Footage Drilled: EIA computations based on well reports submitted to the American Petroleum Institute by Petroleum Information Corporation.

#### Coal

Coal production in March 1986 totaled 74.2 million short tons, 3.7 million short tons (4.8 percent) below the amount produced in March 1985. Production for the first quarter 1986 was 218.1 million short tons, 2.1 percent more than the 213.6 million short tons produced in the comparable period in 1985.

Electric utility coal consumption in February 1986 totaled 55.0 million short tons, 0.8 percent less than the 55.5 million short tons for February 1985.

Electric utility coal stocks of 151.2 million short tons at the end of February 1986 were 11.4 million short tons (7.0 percent) less than the level 1 year earlier.

Exports of coal in February 1986 totaled 5.2 million short tons, 14.5 percent less than the 6.0 million short tons exported during February 1985. Most of the coal exported went to Europe (62.8 percent) and Japan (21.0 percent). Coal imports of 209,000 short tons in February 1986 were more than double the 101,000 short tons imported in February 1985.

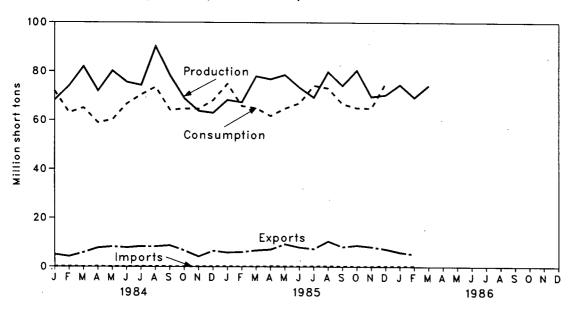
# Part 6

# Coal

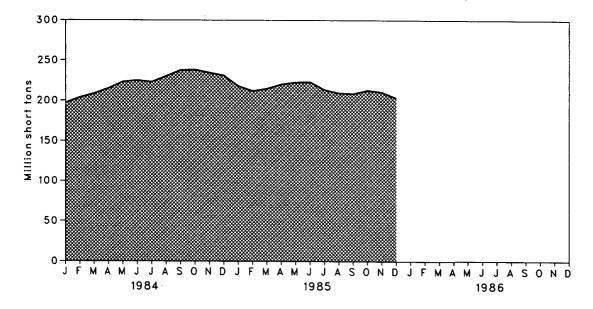
# Coal

#### 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
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	•	•	•	•	NA NA
		670,164	625,225	2,953	40,714	
1979	Total	781,134	680,524	2,059	66,042	202,472
1980	Total	829,700	702,729	1,194	91,742	228,407
1981	Total	823,775	732,627	1,043	112,541	209,423
1982	Total	838,112	706,911	742	106,277	232,038
1983	Total	782,091	736,672	1,271	77,772	202,584
1984	January	67,921	71,919	81	5,062	196,985
	February	73,670	62,994	140	4,251	203,771
	March	81,524	65,028	55	5,813	208,548
	April	72,751	58,946	148	7,688	215,023
	May	81,073	60,164	72	8,221	223,262
	June	76,402	66,707	49	7,828	224,905
	July	74,785	70,422	193	8,318	223,118
	August	90,823	73,558	147	8,235	230,224
	September	78,984	64,133	95	8,710	237,720
	October	69,785	64,664	104	6,641	238,350
	November	64,388	64,613	68	4,190	234,702
	December	63,815	68,147	134	6,526	231,300
	Total	895,921	791,296	1,286	81,483	
1985	January	†68,259	74,852	126	5,817	218,119
	February	†67,319	65,780	101	6,030	212,011
	March	†77,989	64,861	103	6,696	214,788
	April	<del>†</del> 76,783	61,741	203	7,065	220,205
	May	†78,574	R64,783	159	9,231	222,787
	June	†73,436	66,967	138	7,913	223,211
	July	†69,348	74,163	177	7,314	213,602
	August	†79,818	73,103	264	10,422	209,555
	September	†74,134	66,674	182	8,095	208,828
	October	†80,488	65,024	128	8,744	212,931
	November	†69,608	64,856	111	8,134	210,678
	December	†70,338	75,191	260	7,220	203,398
	Total	†886,096	817,993	1,952	92,680	
1986	January†	74,524	NA	154	5,935	NA
	February†	69,295	NA	209	5,158	NA
	March†	74,243	NA	NA	NA	NA
	Year to Date <sup>4</sup>	218,062	NA	363	11,093	NA

Includes Puerto Rico.

\*\*Excludes shipments of anthracite to U.S. Armed Forces overseas (revised from 347,000 to 218,000 short tons in 1982, 341,000 short tons in 1983, 298,000 short tons in 1984, and 240,000 short tons in 1985).

\*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.

\*Total of available data.

\*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.

• 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>

			Ind	lustrial		
		Electric Utilities	Coke Plants	Other Industrial Including Transportation	Residential and Commercial	Total
				Thousand short ton	s	
1973	Total	389,212	94,101	68,154	11,117	562,584
1974	Total	391,811	90,191	64,983	11,417	558,402
1975	Total	405,962	83,598	63,670	9,410	562,641
1976	Total	448,371	84,704	61,799	8,916	603,790
1977	Total	477,126	77,739	61,472	8,954	625,291
1978	Total	481,235	71,394	63,085	9,511	625,225
1979	Total	527,051	77,368	67,717	8,388	680,524
1980	Total	569,274	66,657	60,347	6,451	702,729
1981	Total	596,797	61,014	67,395	7,421	732,627
	• • • • • • • • • • • • • • • • • • • •	593,666	40,908	64,097	8,240	706,911
1982	Total	•	37,033	65,980	8,448	736,672
1983	Total	625,211	•	•	•	•
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 59,046
	April	47,565	4,180	6,273	928 560	58,946 60,164
	May	49,507	4,100	5,997 5,729	443	66,707
	June	56,971	3,564 3,639	5,729 5,730	694	70,422
	July	60,359 63,396	3,639	5,886	656	73,558
	August	54.045	3,557	5,659	872	64,133
	September October	54,753	3,317	5,902	692	64,664
	November	54,229	3,346	6,305	733	64,613
	December	56,560	3,473	7,176	938	68,147
	Total	664,399	44,022	73,745	9,130	791,296
1985	January	63,645	3,463	6,914	830	74,852
	February	55,491	3,282	6,281	726	65,780
	March	54,784	3,511	6,048	518	64,861
	April	50,903	3,851	6,223	764	61,741
	May	54,595	3,778	5,950	461	64,783
	June	57,634	3,284	5,684	365 500	66,967 74,163
	July	64,252	3,437	5,951	523 494	73,103
	August	63,076	3,420	6,113 5,977	656	66,674
	September	56,780	3,361	5,877 6,174	716	65,024
	October	54,969 54,311	3,165 3,192	6,595	758	64,856
	November	63,402	3,314	7,506	969	75,191
	December <b>Total</b>	693,841	41,056	75,317	7,779	817,993
4000		64,032	NA	NA	NA	NA
1986	January†	55.049	NA NA	NA NA	NA	NA
	February†	110.090	NA.	NΔ	NΔ	NA

NA

Year to Date

119,080

NA

NA

NA

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

### Consumer

	_						
		Electric Utilities	Coke Plants	Other Industrial	Total <sup>1</sup>	Producers and Distributors	Total¹
				Thousand s	hort tons		
1973	Year	86,967	6,998	10,370	104,335	NA	NA
1974	Year	83,509	6,209	6,605	96,323	NA	NA
1975	Year	110,724	8,797	8,529	128,050	NA	NA
1976	Year	117,436	9,902	7,100	134,438	NA	NA
1977	Year	133,219	12,816	11,063	157,098	NA	NA
1978	Year	128,225	8,278	9,048	145,551	NA	NA
1979	Year	159,714	10,155	11,777	181,646	20,826	202,472
1980	Year	183,010	9,067	11,951	204,028	24,379	228,407
1981	Year	168,893	6,475	9,906	185,274	24,149	209,423
1982	Year	181,132	4.642	9,479	195,254	36,784	232,038
1983	Year	155,598	4,346	8,710	168,654	33,931	202,584
1984	January	149,403	4,947	8.593	162,943	34,042	196,985
	February	155,593	5,548	8,476	169,617	34,154	203,771
	March	159,775	6,149	8,359	174,283	34,265	208,548
	April	165,592	7,171	9,137	181,900	33,123	215,023
	May	173,171	8,194	9,915	191,280	31,982	223,262
	June	174,155	9,217	10,693	194,065	30,841	224,905
	July	171,095	9,658	11,904	192,657	30,461	223,118
	August	176,928	10,099	13,116	200,143	30,081	230,224
	September	183,151	10,541	14,327	208,019	29,701	237,720
	October	184,779	9,083	13,324	207,186	31,164	238,350
	November	182,130	7,625	12,320	202,075	32,627	234,702
	December	179,727	6,166	11,317	197,211	34,090	231,300
1985	January	167,592	5,583	10,427	183,602	34,517	218,119
	February	162,531	4,999	9,537	177,067	34,944	212,011
	March	166,355	4,415	8,647	179,417	35,371	214,788
	April	171,695	4,472	8,725	184,892	35,313	220,205
	May	174,198	4,530	8,804	187,532	35,255	222,787
	June	174,545	4,587	8,882	188,013	35,197	223,211
	July	165,903	4,171	9,186	179,260	34,342	213,602
	August	162,825	3,754	9,489	176,068	33,487	209,555
	September	163,065	3,338	9,793	176,196	32,632	208,828
	October	166,749	3,365	10,018	180,132	32,799	212,931
	November	164,075	3,393	10,244	177,712	32,966	210,678
	December	156,376	3,420	10,469	170,265	33,133	203,398
1986	January†	152,078	NA	NA	NA	NA	NA
	February†	151,157	NA	NA	NA	NA	NA

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

### Notes and Sources for the Coal Section

### Notes

1. Production: Preliminary monthly estimates of national coal production are the sum of weekly estimates developed by the Energy Information Administration (EIA) and 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 average coal tonnage per railcar loaded is not available for a specific railroad, the national average is used. To derive 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 the seasonal variations in production are preserved.

When preliminary quarterly data become available, the

When preliminary quarterly data become available, the monthly and weekly estimates are adjusted to conform to the quarterly figure. The adjustment procedure uses State-level production data and is explained in the *Quarterly Coal* Report. Initial estimates of annual production published in January of the following year are based on preliminary production data covering the first 9 months (three quarters) and weekly/monthly estimates for the fourth quarter. The fourth quarter estimates may or may not be revised when preliminary data become available in March of the following year, depending on the magnitude of the difference be-tween 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 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

tion 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 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 proportionring reported quarterly data using the ratios of monthly to quarterly consumption in 1979, the last year in which monthly data were reported on Form EIA-2. During 1981 and 1982, the estimates were also modified to reflect air temper-

ature degree-days. Quarterly consumption is taken directly from reported data and is defined as distribution to the residential and commercial sector as reported by coal producers and distributors on Form EIA-6.

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

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

Prior to 1980, monthly and quarterly stock data for the

residential and commercial sector were taken directly from reported data. Monthly and quarterly stock data are not available for the residential and commercial sector after December 1979.

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

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

Additional information concerning coal production, 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 EIA759 (formerly FPC Form 4), "Monthly Power Plant Report."
   Coke Plants—October 1977 through December 1980: EIA,
  Form EIA-5/5A, "Coke and Coal Chemicals—
  Monthly/Annual"; January 1981 forward: EIA, Form EIA5/5A, "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- Residential and Commercial Consumption and Stocks—1973 through 1976: Bureau of Mines, Minerals Yearbook;
   January 1977 through September 1977: Bureau of Mines,
   Form 6-1400-M, "Monthly Coal Report, Retail Dealers—Upper Lake Docks"; October 1977 through December 1979:
   EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers—Upper Lake Docks"; January 1980 forward: EIA, Form EIA-6, "Coal Distribution Report," (stock data are not collected).
   Producers and Distributors Stocks—January 1980 forward:
   EIA Form EIA-6, "Coal Distribution Report" 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 February 1986, electric utilities generated 192.4 billion kilowatthours of electricity, 2.9 percent below the February 1985 generation level. Coal-fired generation totaled 111.0 billion kilowatthours, 0.9 percent below the February 1985 level. Nuclear generation totaled 32.7 billion kilowatthours, 6.2 percent above the February 1985 level. Hydroelectric generation was 23.3 billion kilowatthours in February 1986, 10.0 percent below the February 1985 level. Natural gas-fired generation was 14.9 billion kilowatthours, 23.1 percent below the level 1 year earlier. Petroleum-fired generation totaled 9.5 billion kilowatthours, 2.6 percent above the February 1985 level.

Sales of electricity to all ultimate consumers in the United States in February 1986 were 193.2 billion kilowatthours, 3.9 percent below February 1985 sales. Sales to residential consumers during February 1986 were 70.8 billion kilowatthours, 9.2 percent below the level of sales during the same month in 1985. Commercial sales were 50.4 billion kilowatthours, 2.0 percent more than the amount sold to commercial consumers in February 1985.

Sales to industrial consumers totaled 65.1 billion kilowatthours in February 1986, 2.2 percent less than the 1985 figure. In February 1986, other sales totaled 6.9 billion kilowatthours, 2.7 percent below the February 1985 level.

Electric utility petroleum consumption (excluding petroleum coke) during February 1986 was 16.1 million barrels, 0.1 percent above the February 1985 level. Coal consumption during February 1986 was 55.0 million short tons, 0.8 percent below the February 1985 rate. During February 1986, electric utilities consumed 157.1 billion cubic feet of natural gas, 22.5 percent below the February 1985 consumption level.

On February 28, 1986, utility stocks of anthracite, bituminous coal, and lignite totaled 151.2 million short tons. These stockpiles were 7.0 percent below the level of February 28, 1985. Petroleum stocks (excluding petroleum coke) on February 28, 1986, totaled 73.0 million barrels, 9.0 percent below the level on the same date in 1985.

### Part 7

## **Electric Utilities**

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

		Coal	Petroleum¹	Natural Gas²	Nuclear Electric Power	Hydro- electric Power	Other <sup>3</sup>	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	2,247,372
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	6,054	2,294,812
1982	Total	1,192,004	146,797	305,260	282.773	309,213	5,164	
1983	Total	1,259,424	144,499	274,098	293,677	332,130	5, 164 6,456	2,241,211 2,310,285
			•	•	-	•	·	-
1984	January	120,850	15,939	20,245	29,313	29,737	547	216,632
	February March	104,706	10,053	17,827	28,436	27,900	643	189,564
	April	111,158 97,542	10,806 7,450	19,645	27,345	30,435	719	200,107
	Mav	100,139	7,430 8.422	21,197 25,304	24,231 25,867	29,970	695	181,084
	June	115,426	11,152	28,345	25,867 25,299	31,814 28,773	673 654	192,217
	July	121,094	10,397	33,327	28,284	27,495	648	209,648 221,245
	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	129,092	12,077	22,051	36,186	27,543	906	227,856
	February	112,037	9,270	19,417	30,812	25,902	803	198,242
	March	111,391	7,120	19,848	31,041	24,640	930	194,970
	April	104,790	6,017	22,425	26,458	24,403	783	184,740
	May	111,515	6,859	22,481	28,697	26,421	816	196,790
	June	115,583	7,576	26,740	30,837	23,839	788	205,363
	July	128,880	8,289	32,191	35,184	21,293	885	226,722
	August September	126,550	9,858	33,915	34,812	19,981	934	226,050
	October	114,630 111,053	7,435 7,514	26,273 24,120	34,508	18,767	887	202,499
	November	108,815	7,514	24,120 22,453	31,205 30,166	20,048 22,954	849	194,789
	December	127,792	11,177	20,031	30,166	22,954 25,359	1,031 1,113	192,427
	Total	1,402,128	100,202	291,946	383,691	281,149	10,724	219,255 <b>2,469,841</b>
4000			•	•	·	•		
1986	January	130,017	11,088	17,473	36,219	21,815	1,123	217,735
	February	110,999	9,513	14,925	32,721	23,319	956	192,433

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	on kilowatthours	<b>;</b>	
1973	Total	579,231	388,266	686,085	59,328	1,712,910
1974	Total	578,184	384,826	684,875	58,039	1,705,924
1975	Total	588,140	403,049	687,680	68,222	1,747,091
1976	Total	606,452	425,094	754,069	69,631	1,855,246
1977	Total	645,239	446,514	786,037	70,571	1,948,361
1978	Total	674,466	461,163	809,078	73,215	2,017,922
1979	Total	682,819	473,307	841,903	73,070	2,071,099
1980	Total	717,495	488,156	815,067	73,732	2,094,449
1981	Total	722,265	514,338	825.742	84,756	2,147,101
1982	Total	729,519	526,397	744,949	85,575	2,086,440
		,	• • • •		80,219	2,150,955
1983	Total	750,948	543,788	775,999	00,219	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	45,232	69,684	6,902	185,475
	April	56,373	43,052	69,048	6,339	174,813
	May	53,519	44,150	70,774	6,559	175,003
	June	59,955	49,454	73,037	6,714	189,160
	July	71,020	53,922	71,843	7,006	203,791
	August	73,138	53,603	74,534	7,089	208,364
	September	67,456	52,854	71,275	6,780	198,365
	October	55,965	48,061	70,945	6,732	181,702
	November	56,543	45,937	68,688	6,840	178,008
	December	66,915	46,481	66,606	6,908	186,910
	Total	777,654	578,281	840,588	81,849	2,278,372
1985	January	77,242	49,634	R67,219	7,270	R201,364
	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	R70,112	R7,142	R177,807
	June	R60,652	R51,521	R70,091	R7,308	R189,572
	July	R70,967	R56,128	R69,760	R7,135	R203,990
	August	R73,693	R57,041	R71,402	R7,277	R209,414
	September	71,064	55,960	R70,744	R7,263	R205,030
	October	57,515	R49,978	69,158	R6,903	R183,554
	November	56,794	47,843	R67,164	7,264	R179,065
	December	72,192	51,289	66,383	R7,243	R197,107
	Total	R790,978	R608,968	R824,495	R85,774	R2,310,215
1986³	January	R82,956	R53,376	R65,548	R7,222	R209,102
	February†	70,820	50,371	65,116	6,856	193,162
	Year to Date	153,776	103,747	130,663	14,078	402,264

<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.

<sup>3</sup>Beginning with January 1986, monthly electricity sales estimates are based on a new sample and new expansion factors from data reported on Form EIA 861, "Annual Electric Utility Report."

†Initial estimates. R = Revised data.

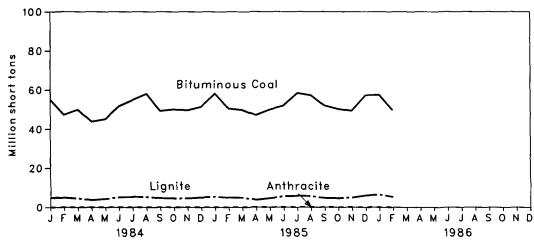
Notes: • Geographic coverage is the 50 States and the District of Columbia.

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

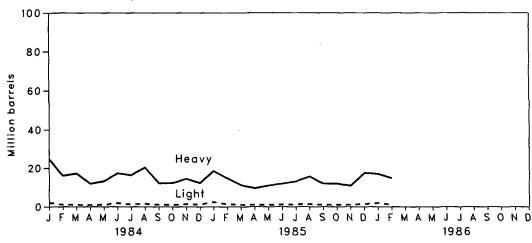
Sources: Energy Information Administration (EIA), • 1973 through February 1980: FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; • March 1980 through December 1982: FERC Form 5, "Electric Utility Company Monthly Statement"; • January 1983 forward: Form EIA 826, "Electric Utility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

### Primary Energy Consumed to Produce Electricity

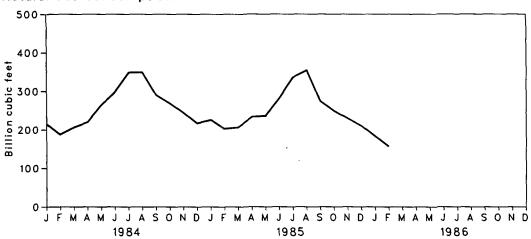
### **Coal Consumption**



### **Petroleum Consumption**



### Natural Gas Consumption



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

tal Petroleum iids Coke	
Thousand short tons	Million cubic feet
248 507	3,660,172
	3,443,428
	3,157,669
	3,080,868
	3,191,200
	3,188,363
	3,490,523
	•
	3,681,595
	3,640,154
	3,225,518
497 261	2,910,767
921 24	215,027
	187,259
	206,171
	220,005
	264,522
-	297,560
	348,848
	349,878
	290,595
	269,629 244,637
	244,637 217,210
	R3,111,342
056 18	226,276
	202,546
303 16	206,286
471 16	233,819
	236,220
	281,939
	336,535
	354,653
	274,868
	249,579
	229,943
	210,417
414 231	3,044,083
	184,025 157,070
5,5,5,5,6,7,3,2,4,9,7,1,3,3,5,3,4,1,6,2,0,2,3,4,7,2,3,1,9,3,8,	Thousand short tons  0,248 507 6,274 625 6,128 70 5,920 68 6,705 98 5,839 398 6,297 268 0,214 179 1,111 139 0,771 149 5,497 261 6,921 24 7,108 21 6,921 24 7,108 21 6,921 22 1,337 23 1,280 22 1,337 23 1,280 22 1,337 23 1,280 18 2,802 22 1,337 23 1,280 18 2,802 22 1,337 23 1,280 18 2,802 22 1,337 23 1,280 18 2,802 22 1,337 23 1,280 18 2,802 22 1,337 23 1,241 22 1,859 23 1,741 16 2,008 13 3,116 21 1,056 18 6,062 17 2,303 16 0,471 16 2,008 13 3,116 21 1,4347 20 7,067 19 2,972 24 3,029 23 1,946 23 9,035 20 3,414 231 8,942 15

. .. . .

¹Includes 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.

R=Revised data.

n=rtevised data.

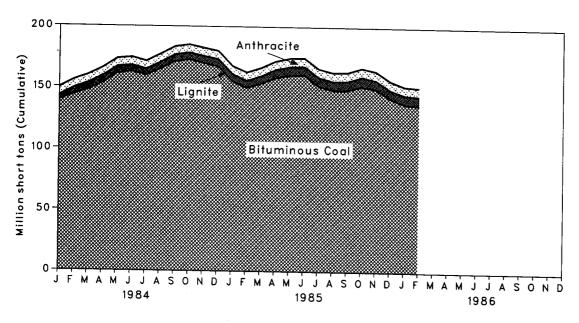
Notes: • Geographic coverage is the 50 States and the District of Columbia.

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

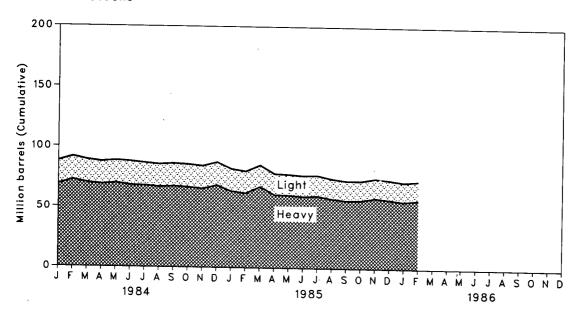
Sources: • 1973 through September 1977: Federal Power Commission, Form 4, "Monthly Power Plant Report"; • October 1977 through 1981: Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report"; • 1982 forward: Energy Information Administration Form 759, "Monthly Power Plant Report."

### Coal and Petroleum Stocks at End of Period

### Coal Stocks



### Petroleum Stocks



### Coal and Petroleum Stocks at End of Period

Coal

			Coal				Petroleum			
		Anthracite	Bituminous Coal	Lignite	Total	Heavy	Light²	Total Liquids	Petroleum Coke	
			Thousand sh	ort tons		Th	ousand barre	ls	Thousand short tons	
1973	Year	1,066	84,941	961	86,967	(³)	(°)	89,216	312	
1974	Year	930	81,712	867	83,509	(³)	(³)	112,917	35	
1975	Year	982	107,927	1,815	110,724	(³)	(³)	125,257	31	
1976	Year	1,000	114,130	2,306	117,436	(3)	(a)	121,696	32	
1977	Year	2,321	128,210	2,688	133,219	(3)	(³)	144,031	44	
1978	Year	2,178	123,020	3,027	128,225	(³)	(°)	118,788	198	
		•	•	3,459	•	(°) (³)		•	183	
1979	Year	3,274	152,981		159,714		(³)	131,422		
1980	Year	4,741	174,154	4,115	183,010	105,351	30,023	135,374	52	
1981	Year	5,537	158,258	5,098	168,893	102,042	26,094	128,136	42	
1982	Year	6,080	170,480	4,573	181,132	95,515	23,369	118,884	41	
1983	Year	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	6,583	164,987	5,358	176,928	66,836	18,795	85,632	47	
	September	6,628	170,987	5,536	183,151	67,370	18,921	86,291	49	
	October	6,674	172,553	5,552	184,779	66,717	18,965	85,682	49	
	November	6,715	169,788	5,627	182,130	65,548	18,875	84,423	43	
	December	6,710	167,118	5,899	179,727	68,503	19,116	87,619	50	
1985	January	6,719	155,067	5,806	167,592	63,546	18,518	82,064	57	
	February	6,736	150,077	5,717	162,531	62,094	18,088	80,182	50	
	March	6,782	153,739	5,834	166,355	62,558	17,837	80,395	43	
	April	6,836	158,218	6,641	171,695	60,889	17,398	78,286	31	
	May	6,905	160,326	6,967	174,198	60,530	17,236	77,765	33	
	June	6,991	160,595	6,959	174,545	59,629	17,218	76,846	33	
	July	7,045	151,809	7,049	165,903	60,116	17,034	77,151	43	
	August	7,109	148,698	7,018	162,825	57,820	16,699	74,519	42	
	September	7,185	148,637	7,243	163,065	56,487	16,442	72,930	40	
	October	7,258	151,999	7,492	166,749	56,676	16,292	72,968	43	
	November	7,223	149,579	7,272	164,075	58,720	16,250	74,970	47	
	December	7,189	142,144	7,043	156,376	57,304	16,386	73,689	49	
1986	January	7,182	137,699	7,196	152,078	55,757	16,254	72,011	52	
	February	7,172	136,487	7,498	151,157	57,143	15,834	72,976	50	

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

		Peti	oleum Consum	ption	Petroleum Stocks at End of Period				
		Steam Plants	GT/IC <sup>1</sup>	Total Liquids	Steam Plants	GT/IC <sup>1</sup>	Total Liquids		
				Thousar	nd barrels				
1973	Total	513,190	47,058	560,248	79,121	10,095	89,216		
1974	Total	483,146	53,128	536,274	97,718	15,199	112,917		
1975	Total	467,221	38,907	506,128	108,825	16,432	125,257		
1976	Total	514,077	41,843	555,920	106,993	14,703	121,696		
977	Total	574,869	48,837	623,705	124,750	19,281	144,031		
978	Total	588,319	47,520	635,839	102,402		•		
979	Total	492,606	30,691	•	·	16,386	118,788		
980	Total	401,863		523,297	111,121	20,301	131,422		
981			18,351	420,214	117,227	18,147	135,374		
-	Total	339,680	11,431	351,111	112,380	15,756	128,136		
982	Total	243,537	6,234	249,771	105,287	13,597	118,884		
983	Total	237,845	7,652	245,497	78,285	11,090	89,375		
984	January	25,838	1,082	26,921	76,756	11,292	88,048		
	February	16,662	447	17,108	80,404	11,163	91,566		
	March	17,881	410	18,290	78,014	11,028	89,042		
	April	12,495	306	12,802	76,721	10,899	87,620		
	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					
985	January	19,846	1,210	21,056	71,528	10,536	82,064		
	February	15,595	467	16,062	70,088	10,094	80,182		
	March	11,966	337	12,303	70,385	10,010	80,395		
	April	10,133	338	10,471	68,651	9,636	78,286		
	May	11,604	403	12,008	68,249	9,516	77,765		
	June	12,516	601	13,116	67,529	9,317	76,846		
	July	13,840	507	14,347	67,816	9,334	77,151		
	August	16,272	795	17,067	65,307	9,212	74,519		
	September	12,485	488	12,972	63,701	9,229	72,930		
	October	12,646	383	13,029	63,908	9,059	72,968		
	November	11,584	362	11,946	66,103	8,867	74,970		
	December	18,355	680	19,035	64,704	8,985	73,689		
	Total	166,842	6,572	173,414					
986	January	17,915	1,027	18,942	63,224	8,787	72,011		
	February	15,536	541	16,077	64,313	8,663	72,976		

<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 February 1986, U.S. nuclear power plants generated a total of 32.7 billion net kilowatthours of electricity while achieving an average capacity factor of 60.4 percent. This generation represents an increase of 6.2 percent compared with February 1985 generation. Nuclear power supplied 17.0 percent of the electricity generated in February 1986 compared with 15.5 percent in February 1985.

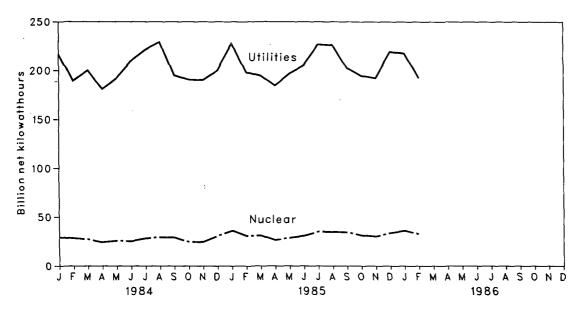
Limerick-1. a 1,065-net-megawatt-electric boiling-water reactor operated by the Philadelphia Electric Company, was declared commercially operable on February 1, 1986. A fullpower amendment to the operating license for Limerick-1 had been issued by the Nuclear Regulatory Commission in August 1985. Limerick-1 had received an operating license in October 1984. On February 19, 1986, Palo 1.304-net-megawatt-electric Verde-1. pressurized-water reactor operated by the Arizona Public Service Project, also was declared commercially operable. A full-power amendment to the operating license for Palo Verde-1 had been issued in June 1985. Palo Verdi-1 had received an operating license in December 1984. On February 24, 1986, an operating license was issued for Catawba-2 authorizing fuel-loading and low-power testing. Catawba-2 is a 1,132-net-megawattelectric pressurized-water reactor that is operated in South Carolina by the Duke Power Company.

There were 96 operable U.S. nuclear power generating units as of February 28, 1986, with a collective net generating capability of 80.7 million net kilowatts. Of the 96 operable units, 4 were in power ascension (Diablo Canyon-2, Fermi-2, Millstone-3, and River Bend-1), and 23 units generated no electricity or operated substantially below capacity (Browns Ferry-1, Browns Ferry-2, Browns Ferry-3, Brunswick-2, Connecticut Yankee, Crystal River-3, Davis Besse, Dresden-3, Fort Saint Vrain, Ginna, Hatch-1, Indian Point-2, LaSalle-1, Palo Verde-1, Peach Bottom-3, Quad Cities-1, Rancho Seco, Robinson-2, San Onofre-1, Seguovah-1, Seguovah-2, Turkey Point-4, and Vermont Yankee). Three units had licenses from the Nuclear Regulatory Commission authorizing fuel-loading and low-power testing (Catawba-2, Palo Verde-2 and Shoreham).

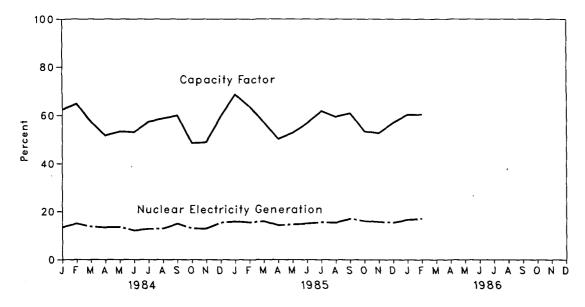
As of February 28, 1986, there were 130 domestic nuclear power generating units in all stages of planning, construction, or operation, with an aggregate design capacity of 121 million net kilowatts.

### **Nuclear Power Plant Operations**

### Electricity Generated by Utilities and by Nuclear Power Plants



### Nuclear Portion of Electricity Generation and Capacity Factor



### **Nuclear Power Plant Operations**

		Operable Reactors¹ ²	Nuclear-Based Electricity Generation	Nuclear Portion of Domestic Electricity Generation	Net Summer Capability of Operable Reactors <sup>1 3</sup>	Capacity Factor
			Million net kilowatthours	Percent	Million net kilowatts	Percent
1973	Year	39	83,479	4.5	22,615	53.7
1974	Year	48	113,976	6.1	31.803	47.9
1975	Year	54	172,505	9.0	37.161	56.0
1976	Year	61	191,104	9.4	43.657	54.9
1977	Year	65	250,883	11.8	46.202	63.4
1978	Year	70	276,403	12.5	50,709	64.7
1979	Year	68	255,155	11.4	49.630	58.5
1980	Year	70	251,116	11.0	51.668	56.4
1981	Year	74	272,674	11.9	55.914	58.4
1982	Year	77	282,773	12.6	59.927	56.7
1983	Year	80	293,677	12.7	63.009	54.4
1984	January	80	29,313	13.5	63.009	62.5
	February	80	28,436	15.0	63.009	64.8
	March	81	27,345	13.7	64.057	57.4
	April	82	24,231	13.4	65.157	51.7
	May	82	25,867	13.5	65.157	53.4
	June	83	25,299	12.1	66.207	53.1
	July	83	28,284	12.8	66.207	57.4 50.0
	August	84 84	29,493	12.9	67.446 67.446	58.8 60.0
	September	84 85	29,146	14.9 13.0	67.446 68.566	48.6
	October November	86	24,774 24,575	12.9	69.652	49.0
	December	86	30,872	15.4	69.652	59.6
	Year	86	327,634	13.6	69.652	56.3
1985	January	87	36,186	15.9	70.784	68.7
	February	88	30,812	15.5	71.904	63.8
	March	89	31,041	15.9	72.994	57.2
	April	89	26,458	14.3	72.994	50.3
	Мау	89	28,697	14.6	72.994	52.8
	June	91	30,837	15.0	75.390	56.8
	July	92	35,184	15.5	76.469	61.8
	August	94	34,812	15.4	78.590	59.5
	September	94 94	34,508	17.0 16.0	78.590 78.590	61.0 53.4
	October	94 95	31,205	15.7	78.590 79.509	53.4 52.7
	November December	95 95	30,166 33,782	15.7	79.509 79.509	52.7 57.1
	Year	95 95	•	15.4	79.509 79.509	57.1 57.9
1000			383,691			57. <del>5</del> 60.4
1986	January	96 96	36,219	16.6 17.0	80.652 80.652	60.4 60.4
	February	90	32,721	17.0	00.032	00.4

The "Maximum Dependable Capacity" data series previously shown in this table has been replaced by a new data series entitled "Net Summer Capability." The "Capacity Factor" column has been revised to reflect the change. See the explanation on page 86 for additional information regarding the data series change.

<sup>&#</sup>x27;Monthly data are the status as of the last day of the month. Yearly data are the status as of December 31 of each year.

<sup>&</sup>lt;sup>1</sup>Monthly data are the status as of the last day of the month. Yearly data are the status as of December 31 of each year.

<sup>2</sup>See Note 1 on the last page of this section for the definition.

<sup>3</sup>When possible, net summer capability is used. When a reactor has not operated long enough to permit determination of a net summer capability, an estimation is made based on the net design electrical rating. For the definitions of net summer capability and net design electrical rating, see Note 3 on the last page of this section.

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

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>

		Licensed for Operation		Constr Pern					Total Design
		Operable <sup>2</sup>	In Startup <sup>3</sup>	Granted	Pending	On Order	Announced	Total	Design Capacity
									Million net kilowatts
1973	Year	39	3	51	58	48	20	219	212
1974	Year	48	5	58	80	28	16	235	234
1975	Year	54	2	69	73	19	19	236	236
1976	Year	R61	R0	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	Ō	91	21	3	Ö	183	179
1980	Year	70	2	82	12	3	Ö	169	163
1981	Year	74	ō	75	11	3	Ö	163	157
1982	Year	77	2	60	3	2	ő	144	135
1983	Year	80	3	53	Ŏ	2	0	138	
					-		U	130	129
1984	January	80	3	51	0 .	2	0	136	128
	February	80	3	51	0	2	0	136	128
	March	81	3	50	0	2 2 2	0	136	128
	April	82	3	49	0	2	0	136	128
	May	82	3	49	0	2	0	136	128
	June July	83 83	3 3	48 48	0 0	2	0	136	128
	August	84	2	48 44	0	2	0	136	128
	September	84	2	44	0	2 2	0 0	132 132	123
	October	85	3	42	Ö	2	0	132	123 123
	November	86	2	42	ŏ	2	Ö	132	123
	December	86	6	38	ŏ	2	Ö	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 2	0	132	123
	April May	89 89	6 6	35 35	0 0	. 2	0 0	R130	123
	June	91	4	35 35	0	2 2	0	R130 R130	123 123
	July	92	3	33	0	2	0	130	123
	August	94	2	32	ő	2	ŏ	130	121
	September	94	2	32	ŏ	2	ő	130	121
	October	94	2	32	ŏ	2	ŏ	130	121
	November	95	2	31	Ö	2	Ŏ	130	121
	December	95	3	30	0	2	0	130	121
1986	January	96	2	30	0	2	0	130	
1300	February	96	3	29	Ö	2 2	0	130	121 121
	Columny	30	3	23	U	۷	U	130	121

<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 were canceled prior to being assigned a net summer capability. See Note 3 on the last page of this section.

R = Revised data.

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

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: For 1973 through 1979, units are defined as operable based upon the date they first produced electricity. For 1980 and following, operable units are defined as those units that have received operating licenses, completed low-power testing, and received full power amendments from the Nuclear Regulatory Commission (NRC). This distinction arises because the full power amendment date has no direct analogue for full years prior to 1980. Fermi-2 (net summer capability of 1,079 MWe), is included, although currently the unit is restricted by the NRC from providing electric power to the grid. The Hanford-N reactor, operated by the Department of Energy (DOE), with a net summer capability of 850 megawatts electric (MWe) is included as an operable reactor, although it is not licensed to the the MDC because lectricity and the second from the electric transfer of the second from the second from the electric transfer of the second from the electric transfer of the second from the electric transfer of transfer of the electric transfer of the el by the NRC, because electricity produced from its output steam is distributed commercially. Similarly, the Shipping-port reactor (net summer capability of 55 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 summer capability of 36 MWe) and Indian Point-1 (net summer capability of 253 MWe), both out of service since November 1974; Humboldt Bay (net summer capability of 60 MWe), down since August 1976 for major seismic modifications and subsequently officially retired; Dresden-1 (net summer capability of 189 MWe), out of service since January 1979 for major modifications and officially retired in August 1984; and Three Mile Island-2 (net summer capability of 890 MWe), whose core was severely damaged by a loss-of-coolant accident in March 1979.
- 2. In Startup: Units that have received Operating Licenses authorizing fuel loading and low-power testing but have not received a Full Power Amendment from the NRC. Without the amendment, these units cannot distribute electricity commercially.
- 3. Capacity: Nuclear power plants may have more than one type of net capacity rating including:

  (a) Net Summer Capability—The steady hourly output
- that generating equipment is expected to supply to system load exclusive of auxiliary power, as demonstrated by test at the time of summer peak demand. Auxiliary power of a typical nuclear power plant is about 5 percent of gross generation.

- (b) Net Maximum Dependable Capacity (MDC)—The steady hourly output that generating equipment is expected to supply to system load exclusive of auxiliary power, as demonstrated by test at the time of peak demand during the most restrictive seasonal conditions (usually summer).

  (c) Net Design Capacity or Net Design Electrical Rating
- (DER)—The nominal net electrical output of the unit, specified by the utility and used for plant design.
- 4. Monthly Capacity Factors: The monthly capacity factors are computed as the actual monthly generation divided by the maximum possible generation for that month. The maximum possible generation is the number of hours in the month multiplied by the monthly net summer capability. 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 Re-

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

- 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."

Net Summer Capability: Energy Information Administration, Form EIA-860, "Annual Electric Generator 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 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 Nuregulatory Commission Report NUREG-0020, "Licensed Nuregulatory Commission Report NUREG-0020, "Licensed Nuregulatory Regulatory Nuregulatory Nuregulatory

Operating Reactors," and various trade journals.

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

### **Explanation of Changes in Nuclear Data Series**

Beginning with this issue, capacity data for nuclear generating units published in the "nuclear power plant operations" table will be the "net summer capability" ratings collected on Form EIA-860, "Annual Electric Generator Report." (See Note 3 on the Notes and Sources page for the definition of net summer capability.) "Maximum dependable capacity," previously shown in the table, is similar to net summer capability, except that net summer capability is measured during the summer season,

when a unit's output potential is usually lowest because the cooling water is at its maximum temperature. Also the revised data series will not reflect self-imposed or Nuclear Regulatory Commission capability restrictions, as did the previous series, because capability restrictions are not reported on Form EIA-860. A table comparing the two data series is shown below. The "capacity factor" column of the table has been revised to reflect the change in capacity definition.

### **Current Series**

### **Previous Series**

					501105
		Net Summer Capability of Operable Reactors	Capacity Factor	Maximum Dependable Capacity of Operable Reactors	Capacity Factor
		Million net		Million net	_
		kilowatts	Percent	kilowatts	Percent
1973	Year	22.615	53.7	22.900	52.9
1974	Year	31.803	47.9	31.710	48.3
1975	Year	37.161	56.0	33.312	59.7
1976	Year	43.657	54.9	43.277	57.8
1977	Year	46.202	63.4	46.046	64.1
1978	Year	50.709	64.7	49.629	65.7
1979	Year	49.630	58.5	49.326	58.7
1980	Year	51.668	56.4	51.059	57.1
1981	Year	55.914	58.4	55.534	58.4
1982	Year	59.927	56.7	59.552	57.2
1983	Year	63.009	54.4	62.809	54.8
					54.6
1984	January	63.009	62.5	62.772	62.8
	February	63.009	64.8	62.942	64.9
	March	64.057	57.4	64.036	57.4
	April	65.157	51.7	65.049	51.8
	May	65.157	53.4	64.986	53.5
	June	66.207	53.1	66.091	53.2
	July	66.207	57.4	66.091	57.5
	August	67.446	58.8	67.341	58.9
	September	67.446	60.0	67.066	60.4
	October	68.566	48.6	68.497	48.5
	November December	69.652 69.652	49.0	69.534	49.1
			59.6	69.522	59.7
	Year	69.652	56.3	69.522	56.5
1985	January	70.784	68.7	70.667	68.8
	February	71.904	63.8	71.841	63.8
	March	72.994	57.2	72.931	57.2
	April	72.994	50.3	72.911	50.4
	May	72.994	52.8	72.920	52.9
	June	75.390	56.8	75.262	56.9
	July	76.469	61.8	75.180	62.9
	August	78.590	59.5	76.897	60.8
	September	78.590	61.0	76.955	62.3
	October	78.590	53.4	76.877	54.6
	November	79.509	52.7	78.067	53.7
	December	79.509	57.1	78.087	58.1
	Year	79.509	57.9	78.087	58.5

### **Price**

### Crude Oil

The average price of domestic crude oil purchased at the wellhead was \$18.24 per barrel in February 1986, 22.0 percent below the previous month's level and 22.8 percent below the level in February 1985.

During February 1986, the composite refiner acquisition cost of crude oil was \$19.81 per barrel, 25.3 percent below the February 1985 average of \$26.53. The cost of imported crude oil decreased \$6.95 per barrel from the January 1986 level to \$17.97 per barrel in February. This was 33.6 percent below the February 1985 average. The cost of domestic crude oil in February 1986 was \$20.44, a decrease of 22.5 percent from the February 1985 average.

### **Motor Gasoline**

The national city average retail price of leaded regular gasoline at all types of stations was \$.89 per gallon in March 1986, 13.5 percent lower than the price in February 1986. The price of unleaded regular gasoline was \$.98 per gallon in March, 12.4 percent lower than the price in the previous month. The price of unleaded premium gasoline averaged \$1.16 per gallon in March, 9.5 percent lower than during February 1986.

### Residual Fuel Oil

The average price, excluding taxes, of residual fuel oil sold to end users in February 1986 was \$0.46 per gallon, 19.8 percent below the previous month's price and 33.3 percent below the February 1985 average. The average price, excluding taxes, of residual fuel oil sold for resale in February 1986 was \$0.39 per gallon, 25.1 percent below the January 1986 average and 40.5 percent below the February 1985 average.

### **Aviation Fuel**

The average price, excluding taxes, of aviation gasoline sold to end users in February 1986 was \$1.17 per gallon, 0.9 percent above the price in the previous month but 3.2 percent below the price in February 1985. The average price, excluding taxes, of kerosenetype jet fuel sold to end users in February 1986 was \$0.78 per gallon, down 3.6 percent

from the previous month's price and down 4.1 percent from the price 1 year earlier.

### No. 2 Distillate Fuel Oil

The national average price of heating oil sold to residential customers in February 1986 was \$.96 per gallon. This was 10.1 percent below the price in January 1986 and 9.1 percent below the February 1985 price. The average price for resale was \$0.56 per gallon in February 1986, 23.7 percent below the price in the previous month, and 25.3 percent below the price in February 1985.

### **Natural Gas**

In January 1986 the average wellhead price of marketed natural gas production was \$2.28 per thousand cubic feet, \$0.34 (13.0 percent) below the January 1985 price. The average price of natural gas delivered to electric utility plants was \$3.26 per thousand cubic feet in January 1986, \$0.53 (14.0 percent) below the January 1985 price. The average price of natural gas used by residential consumers in February 1986 was \$5.65 per thousand cubic feet, \$0.22 (3.7 percent) less than the February 1985 price.

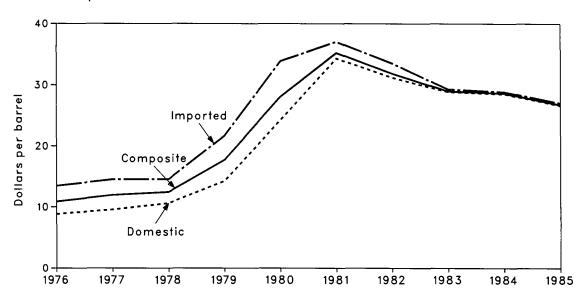
### **Electricity**

Beginning with January 1986, there are new series of national average price estimates based on a statistically derived sample of both publicly and privately owned electric utilities. Prior to that time, average price estimates were derived from selected privately owned electric utilities and were not national averages.

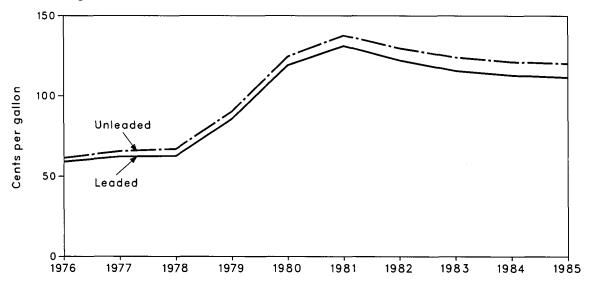
The national retail price of electricity to residential consumers in February 1986 was 7.12 cents per kilowatthour, 1.4 percent above January 1986 price. The average price of electricity sold to commercial consumers was 7.16 cents per kilowatthour in February 1986, 1.6 percent above the previous month's price. The average electricity price to industrial users during February 1986 was 4.94 cents per kilowatthour, a 0.6-percent decrease from the previous month's price. The February national retail price of electricity to other consumers was 6.72 cents per kilowatthour, 5.3 percent above the January 1986 price.

### Price Selected Petroleum Series

### Refiner Acquisition Cost of Crude Oil



### Regular Motor Gasoline Prices (Including Tax)



**Price Crude Oil Price Summary** 

		Actual Domestic	Average FOB	Average Landed	Refiner Ac	quisition Cost of	Crude Oil <sup>4</sup>
		Average Wellhead Price <sup>1</sup>	Cost of Crude Oil Imports <sup>2</sup>	Cost of Crude Oil Imports <sup>3</sup>	Domestic	Imported	Composite
				Dollars per l	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	•	31.77	35.10	36.52	34.33	37.05	35.24
	Average						
1982	Average	28.52	32.11	33.18	31.22	33.55	31.87
1983	Average	26.19	27.73	28.93	28.87	29.30	28.99
1984	January	25.93	27.56	28.49	28.62	28.80	28.67
	February	26.06	27.78	28.89	28.76	28.91	28.81
	March	26.05	27.70	28.69	28.75	28.95	28.81
	April	25.93	27.84	28.91	28.63	29.11	28.77
	May	26.00	27.87	28.94	28.65	29.26	28.83
	June	26.09	27.78	28.89	28.58	29.19	28.77
	July	26.11	27.19	28.32	28.70	29.00	28.79
	August	26.02	27.29	28.20	28.59	28.92	28.69
	September	25.97	27.14	28.14	28.56	28.70	28.60
	October	25.92	27.15	28.18	28.46	28.79	28.56
	November	25.44	26.91	27.88	28.10	28.74	28.30
	December	25.05	26.69	27.69	27.95	28.02	27.97
	Average	25.88	27.44	28.46	28.53	28.88	28.63
1985	January	24.28	26.10	26.95	26.89	27.51	27.02
	February	23.63	25.90	26.82	26.39	27.05	26.53
	March	23.88	26.32	27.14	26.61	27.23	26.77
	April	24.15	26.58	27.47	26.79	27.61	27.04
	May	24.18	26.25	27.13	26.90	27.62	27.11
	June	24.03	25.69	26.47	26.50	27.27	26.69
	July	24.00	25.41	26.20	26.67	26.46	26.61
	August	23.92	25.48	26.22	26.45	26.62	26.50
	September	23.93	25.43	26.46	26.39	26.59	26.44
	October	24.06	25.76	26.73	26.59	26.80	26.65
	November	24.31	25.66	26.63	26.72	27.12	26.85
	December	24.53	R24.03	R25.11	26.91	26.60	26.82
	Average	24.08	R25.77	R26.60	26.65	27.03	26.76
1986	January	23.38	R†21.67	R†23.02	25.94	R24.92	R25.64
	February†	18.24	15.87	16.94	20.44	17.97	19.81

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

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

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

See 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	Average	39.09	35.93	(²)	33.13	38.53	32.48	36.08	28.86
1982	Average	34.23	35.27	30.93	28.07	35.13	33.50	33.46	23.77
1983	Average	30.06	29.93	28.25	25.19	29.78	28.03		
	Average							29.84	21.48
1984	January	27.60	29.89	W	26.22	29.80	27.76	29.29	24.21
	February	28.56	29.09	W	26.04	29.98	26.72	29.70	23.55
	March	28.69	W	NA	26.30	29.89	28.39	29.95	23.86
	April	28.90	29.50	W	26.07	29.93	28.17	29.85	23.93
	May	28.98	29.44	W	26.36	29.67	27.43	29.93	24.07
	June	28.52	29.35	NA	26.58	29.34	W	29.67	24.23
	July	27.43	29.21	W	26.62	29.22	W	28.91	24.37
	August	26.97	W	W	26.71	29.02	W	28.13	23.91
	September	26.90	28.83	NA	26.34	29.24	27.99	27.99	24.57
	October	27.42	28.93	NA	26.44	28.40	W	28.50	24.43
	November December	26.50	28.68	NA NA	26.53	28.32	NA	27.61	24.24
		25.13	28.03		26.43	28.11	NA	27.85	24.32
	Average	28.04	29.10	26.93	26.37	29.39	27.60	28.90	24.16
1985	January	25.47	27.43	NA	26.10	27.22	W	W	24.02
	February	W	27.62	NA	26.00	27.41	W	W	24.36
	March	26.50	27.01	W	26.31	28.20	NA	W	24.93
	April	27.47	27.50	W	26.33	27.95	NA	28.09	24.49
	May	W	27.44	W	26.24	27.77	NA	27.41	24.52
	June	W W	27.06 27.44	W W	24.75	27.09	NA	26.65	24.32
	July	NA NA	27.44 26.60	W	24.25 24.69	27.95	NA	26.58	23.13
	August September	W	25.29	W	24.59 24.59	27.82 27.97	NA W	26.98	22.58
	October	w	26.95	W	24.59 24.78	28.30	w	27.67 28.22	22.49 22.81
	November	w	27.24	w	24.76	28.67	w	26.22 28.65	23.06
	December	w	R27.49	w	R23.22	29.19	R18.48	28.04	22.78
	Average	26.71	R27.11	w	25.17	28.03	R22.04	27.66	23.61
1000	•		R26.70						
1986	January†	W W	H26.70 W	NA NA	R19.81	R26.55	12.60	25.15 19.25	21.40
	February†	vv	vv	NΑ	14.24	W	NA	18.35	12.72

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

<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 Oll Imports from Selected Countries<sup>1</sup>

		Algeria	Canada	Indonesia	Iran	Mexico	Nigeria	Saudi Arabla	United Kingdom	Venezuela
					D	ollars per ba	rrel			
1975	Average	12.72	12.72	13.79	12.21	NA	12.62	12.30	NA	11.65
1976	Average	13.81	13.57	13.82	12.82	NA	13.80	13.04	NA	11.80
1977	Average	15.20	14.21	14.63	13.80	13.75	15.25	13.61	NA	13.13
1978	Average	14.91	14.50	14.64	13.88	13.54	14.86	13.92	NA	12.83
1979	Average	21.90	20.43	20.69	25.02	20.86	22.96	19.15	22.16	18.18
1980	Average	37.90	30.47	33.92	(²)	31.80	37.05	30.02	35.88	25.86
1981	Average	40.49	32.16	37.57	(²)	33.78	39.70	34.19	37.24	29.87
1982	Average	35.28	26.92	36.75	32.40	28.64	36.17	35.00	34.28	24.82
1983	Average	31.26	25.63	31.57	29.81	25.78	30.84	29.76	30.87	22.94
1984	January	29.19	26.44	31.22	w	26.85	30.62	29.67	30.09	25.28
1504	February	29.73	26.40	30.91	W	26.73	31.29	28.38	30.77	25.21
	March	30.31	26.01	30.81	NA	26.92	30.93	30.20	30.98	24.75
	April	29.81	26.10	31.02	W	26.68	31.08	29.95	30.73	24.86
	May	29.96	27.12	30.80	W	26.92	30.96	28.95	30.75	24.93
	June	29.62	26.00	31.21	NA	27.24	31.05	29.90	30.43	25.29
	July	28.63	27.16	30.26	W	26.98	30.07	W	29.54	25.24
	August	28.16	26.95	30.59	W	26.99	29.99	W	28.93	24.95
	September	27.94	27.03	30.05	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	25.35
	December	27.07	26.50	30.12	NA	26.86	29.32	NA	28.55	25.24
	Average	29.08	26.59	30.64	28.67	26.87	30.50	29.50	29.60	25.15
1985	January	26.28	24.99	29.26	NA	26.46	28.70	W	W	25.18
	February	26.06	24.00	28.73	NA	26.37	28.55	W	W	25.37
	March	27.09	25.13	28.40	W	26.60	29.42	NA	W	25.69
	April	28.28	26.16	29.02	W	26.60	28.99	W	28.57	25.44
	May	W	26.33	28.98	W	26.56	28.69	NA	27.98	25.26
	June	W	26.34	28.73	24.55	25.16	27.81	NA	27.42	25.13
	July	27.35	25.96	28.95	W	24.54	28.56	W	27.28	23.81
	August	w	26.05	28.01	25.70	24.85	28.54	NA	27.69 28.22	23.45 23.29
	September	w	25.88	26.79	26.47	24.92	28.75	W	28.22 29.00	
	October	w	25.82	28.47	26.59	25.12	29.06	26.69 24.72	29.00 29.39	23.55 23.78
	November	W	25.74	29.00	W	24.70 R23.58	29.61 30.38	24.72 R21.07	29.39 28.75	23.76
	December	W	25.48	R28.82	W					
	Average	27.35	25.68	R28.65	25.73	25.50	28.95	R24.63	28.34	24.42
1986	January†	W	R23.91	R28.44	NA	R20.17	27.82	14.44	R25.31	22.21
	February†	W	17.43	W	NA	14.58	21.06	W	19.19	13.48

<sup>&</sup>lt;sup>1</sup>See Note 3 in the Notes and Sources for this section.

<sup>2</sup>No crude oil was imported.

<sup>4</sup>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
1975	Average	56.7	NA	NA	NA
1976	Average	59.0	61.4	NA	NA
1977	Average	62.2	65.6	NA	· NA
1978	Average	62.6	67.0	NA	65.2
1979	Average	85.7	90.3	NA	88.2
1980	Average	119.1	124.5	NA	122.1
1981	Average <sup>3</sup>	131.1	137.8	147.0	135.3
1982	Average	122.2	129.6	141.5	128.1
1983	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 July	115.3 115.4	124.1 124.2	137.1 136.7	123.3 123.3
	August	114.3	122.9	135.9	123.3
	September	112.9	121.6	134.9	120.9
	October	111.7	120.4	134.2	119.8
	November	112.3	120.7	133.9	120.1
	December	112.3	120.8	134.4	120.3
	Average	111.5	120.2	134.0	119.6
1986	January	110.7	119.4	133.6	119.0
	February	103.4	112.0	128.2	111.9
	March	89.4	98.1	116.0	98.3

¹See Note 5 in the Notes and Sources for this section.
²Also includes types of gasoline not shown separately.
³Beginning 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

Sales for Resale   Sales to Resale   Sales for Resale   Sales to Resale   Sales for Resale   Sales to Resale   Sales for Sales for Sales   Sales for Sales			Sulfur Co	ntent Less al to 1 Percent	Sulfur	il Fuel Oil Content an 1 Percent	Average	
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         64.8         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         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         61.9         64.7         64.5         68.5           July         66.8         73.2         66.1         68.9         67								
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         69.5         74.7         57.2         61.1         61.2         67.6           1983         Average         69.5         74.7         57.2         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         61.9         64.7         66.5         66.2         69.1           May         68.3         72.7         65.0         67.4         66.0         69.5         9.5           June         69.8         73.2         66.1         68.9         67.2         71.0           July         66.8         71.5         64.0         66.7         65.0					Cents per gallo	on, excluding tax		
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         Average         64.3         69.5         79.1         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	1978	Average	29.3	31.4	24.5	27.5	26.3	29.8
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           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 <td>1979</td> <td>Average</td> <td>45.0</td> <td>46.8</td> <td>36.6</td> <td>38.9</td> <td>39.9</td> <td>43.6</td>	1979	Average	45.0	46.8	36.6	38.9	39.9	43.6
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         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         61.9         64.7         64.5         68.5           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         63.6         67.1           September         65.9         70.0         63.8         64.9         65.5         67.5	1980	Average	60.8	67.5	47.9	52.3	52.8	60.7
1982         Average         69.5         74.7         57.2         61.1         61.2         67.6           1983         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 <td>1981</td> <td>Average</td> <td>74.8</td> <td></td> <td>62.2</td> <td>67.3</td> <td>66.3</td> <td>75.6</td>	1981	Average	74.8		62.2	67.3	66.3	75.6
1983   Average   64.3   69.5   59.1   61.1   60.9   65.1	1982	•	69.5		57.2	61.1	61.2	
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 61.9 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 69.5 62.7 65.0 63.6 67.1 September 65.9 70.0 63.8 64.9 64.5 67.5 00.0 Cotober 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 11.1 63.3 66.5 64.6 67.7 Average 68.5 72.0 63.9 65.9 65.4 68.7 11.1 63.3 66.5 64.7 68.4 68.7 11.1 63.3 66.5 64.7 68.4 68.7 11.1 63.3 66.5 64.7 68.4 68.7 11.1 63.3 66.5 64.7 68.4 68.7 11.1 63.3 66.5 64.7 68.4 68.7 11.1 63.3 66.5 64.7 68.4 68.7 11.1 63.3 66.5 64.7 68.4 68.7 11.1 63.3 66.5 64.7 68.4 68.7 11.1 63.3 66.5 64.7 68.4 68.7 11.1 63.3 66.5 64.7 68.4 68.7 11.1 63.0 65.0 62.4 67.2 63.4 66.3 65.0 62.4 67.2 63.4 66.3 65.0 62.4 67.2 63.4 66.3 65.0 62.4 67.2 63.4 66.3 65.0 62.4 67.2 63.4 66.3 65.0 62.4 67.2 63.4 66.3 65.0 62.4 67.2 63.4 66.3 65.0 62.4 67.2 63.4 66.3 65.0 62.4 67.2 63.4 66.3 65.0 62.4 67.2 63.4 66.3 65.0 62.4 67.2 63.4 66.5 65.0 62.4 67.2 63.4 66.0 65.0 62.4 67.2 65.0 65.1 66.2 65.5 65.0 65.8 52.8 52.4 55.6 56.4 65.0 54.9 59.5 59.9 50.6 52.8 52.8 52.4 55.6 56.4 65.0 54.9 59.5 59.9 50.6 52.8 52.8 52.4 55.6 56.4 60.1 62.8 53.1 54.8 56.1 58.6 60.1 63.6 52.3 53.8 54.9 58.3 November 60.1 62.8 53.1 54.8 56.1 58.6 60.1 58.6 60.1 63.6 52.2 54.4 55.0 58.2 60.9 64.5 55.9 54.4 55.0 58.2 60.9 64.5 55.9 54.4 55.0 58.2 60.9 64.5 55.9 54.4 55.0 58.2 60.9 64.5 55.9 54.4 55.0 58.2 60.9 64.5 55.9 55.9 58.4 57.6 61.1 1986 January 57.1 62.0 49.5 55.9 58.4 57.6 61.1 1986 January 57.1 62.0 49.5 55.9 58.4 57.6 57.1 57.1 57.1 1986 January 57.1 62.0 49.5 55.9 58.4 57.6 61.1 1986 January 57.1 62.0 49.5 55.9 58.4 57.6 57.1 57.1 57.1 57.1 57.1 57.1 57.1 57.1	1983	•						
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 <td>1984</td> <td>January</td> <td>71.0</td> <td>73.6</td> <td>62.3</td> <td>64.6</td> <td>64.8</td> <td>69.0</td>	1984	January	71.0	73.6	62.3	64.6	64.8	69.0
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         71.1         63.4		February						
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								
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         70.4         63.6         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         67.9           Average         68.5         72.0         63.9         65.9         65.4         68.7           1985         January         67.6         71.1         63.3         66.5         64.7         68.4           February         67.6         71.2         63.4         66.3         65.0         68.7           March         66.2         70.1         60.8         65.0         62.4         67.2           April         63.0         67.5         58								
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         67.9           December         68.5         72.0         63.9         65.9         65.4         68.7           Average         68.5         72.0         63.9         65.9         65.4         68.7           1985         January         67.6         71.1         63.3         66.5         64.7         68.4           February         67.6         71.2         63.4         66.3         65.0         68.7           March         66.2         70.1         60.8         65.0         62.4         67.2           April         63.0         67.5 <t< th=""><td></td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		•						
August         65.6         69.5         62.7         65.0         63.6         67.1           September         65.9         70.0         63.8         64.9         64.5         67.5           October         66.8         70.8         64.3         65.8         65.1         67.8           November         66.8         70.4         63.6         65.8         64.6         67.9           December         67.5         70.5         63.3         65.6         64.6         67.7           Average         68.5         72.0         63.9         65.9         65.4         68.7           1985         January         67.6         71.1         63.3         66.5         64.7         68.4           February         67.6         71.2         63.4         66.3         65.0         68.7           March         66.2         70.1         60.8         65.0         62.4         67.2           April         63.0         67.5         58.7         61.9         60.2         64.1           May         58.1         61.2         53.4         58.0         54.9         59.5           June         54.9         59.9         50.								
September October         65.9         70.0         63.8         64.9         64.5         67.5           October October         66.8         70.8         64.3         65.8         65.1         67.8           November October         66.8         70.4         63.6         65.8         64.6         67.8           December October         67.5         70.5         63.3         65.6         64.6         67.7           Average         68.5         72.0         63.9         65.9         65.4         68.7           1985         January         67.6         71.1         63.3         66.5         64.7         68.4           February         67.6         71.2         63.4         66.3         65.0         68.7           March         66.2         70.1         60.8         65.0         62.4         67.2           April         63.0         67.5         58.7         61.9         60.2         64.1           May         58.1         61.2         53.4         58.0         54.9         59.5           June         54.9         59.9         50.6         52.8         52.4         55.6           July         56.4								
October         66.8         70.8         64.3         65.8         65.1         67.8           November         66.8         70.4         63.6         65.8         64.6         67.9           December         67.5         70.5         63.3         65.6         64.6         67.7           Average         68.5         72.0         63.9         65.9         65.4         68.7           1985         January         67.6         71.1         63.3         66.5         64.7         68.4           February         67.6         71.2         63.4         66.3         65.0         68.7           March         66.2         70.1         60.8         65.0         62.4         67.2           April         63.0         67.5         58.7         61.9         60.2         64.1           May         58.1         61.2         53.4         58.0         54.9         59.5           June         54.9         59.9         50.6         52.8         52.4         55.6           July         56.4         58.9         52.8         54.6         53.9         56.4           August         55.1         57.7         52.1 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
November December         66.8         70.4         63.6         65.8         64.6         67.9           Average         68.5         72.0         63.9         65.9         65.4         68.7           1985         January         67.6         71.1         63.3         66.5         64.7         68.4           February         67.6         71.2         63.4         66.3         65.0         68.7           March         66.2         70.1         60.8         65.0         62.4         67.2           April         63.0         67.5         58.7         61.9         60.2         64.1           May         58.1         61.2         53.4         58.0         54.9         59.5           June         54.9         59.9         50.6         52.8         52.4         55.6           August         55.1         57.7         52.1         53.7         53.2         55.8           September         60.1         62.8         53.1         54.8         56.1         58.6           October         60.1         63.6         52.3         53.8         54.9         58.3           November         57.8         61.7								
December         67.5         70.5         63.3         65.6         64.6         67.7           Average         68.5         72.0         63.9         65.9         65.4         68.7           1985         January         67.6         71.1         63.3         66.5         64.7         68.4           February         67.6         71.2         63.4         66.3         65.0         68.7           March         66.2         70.1         60.8         65.0         62.4         67.2           April         63.0         67.5         58.7         61.9         60.2         64.1           May         58.1         61.2         53.4         58.0         54.9         59.5           June         54.9         59.9         50.6         52.8         52.4         55.6           July         56.4         58.9         52.8         54.6         53.9         56.4           August         55.1         57.7         52.1         53.7         53.2         55.8           September         60.1         62.8         53.1         54.8         56.1         58.6           October         60.1         63.6         52.3 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Average         68.5         72.0         63.9         65.9         65.4         68.7           1985         January         67.6         71.1         63.3         66.5         64.7         68.4           February         67.6         71.2         63.4         66.3         65.0         68.7           March         66.2         70.1         60.8         65.0         62.4         67.2           April         63.0         67.5         58.7         61.9         60.2         64.1           May         58.1         61.2         53.4         58.0         54.9         59.5           June         54.9         59.9         50.6         52.8         52.4         55.6           July         56.4         58.9         52.8         54.6         53.9         56.4           August         55.1         57.7         52.1         53.7         53.2         55.8           September         60.1         62.8         53.1         54.8         56.1         58.6           October         60.1         63.6         52.3         53.8         54.9         58.3           November         57.8         61.7         50.7 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
1985         January         67.6         71.1         63.3         66.5         64.7         68.4           February         67.6         71.2         63.4         66.3         65.0         68.7           March         66.2         70.1         60.8         65.0         62.4         67.2           April         63.0         67.5         58.7         61.9         60.2         64.1           May         58.1         61.2         53.4         58.0         54.9         59.5           June         54.9         59.9         50.6         52.8         52.4         55.6           July         56.4         58.9         52.8         54.6         53.9         56.4           August         55.1         57.7         52.1         53.7         53.2         55.8           September         60.1         62.8         53.1         54.8         56.1         58.6           October         60.1         63.6         52.3         53.8         54.9         58.3           November         57.8         61.7         50.7         52.8         53.6         56.8           December         60.7         62.6         52.2 </th <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
February 67.6 71.2 63.4 66.3 65.0 68.7 March 66.2 70.1 60.8 65.0 62.4 67.2 April 63.0 67.5 58.7 61.9 60.2 64.1 May 58.1 61.2 53.4 58.0 54.9 59.5 June 54.9 59.9 50.6 52.8 52.4 55.6 July 56.4 58.9 52.8 54.6 53.9 56.4 August 55.1 57.7 52.1 53.7 53.2 55.8 September 60.1 62.8 53.1 54.8 56.1 58.6 October 60.1 63.6 52.3 53.8 54.9 58.3 November 57.8 61.7 50.7 52.2 54.4 55.0 58.2 Average 60.9 64.5 55.9 58.4 57.6 61.1		•						
March       66.2       70.1       60.8       65.0       62.4       67.2         April       63.0       67.5       58.7       61.9       60.2       64.1         May       58.1       61.2       53.4       58.0       54.9       59.5         June       54.9       59.9       50.6       52.8       52.4       55.6         July       56.4       58.9       52.8       54.6       53.9       56.4         August       55.1       57.7       52.1       53.7       53.2       55.8         September       60.1       62.8       53.1       54.8       56.1       58.6         October       60.1       63.6       52.3       53.8       54.9       58.3         November       57.8       61.7       50.7       52.8       53.6       56.8         December       60.7       62.6       52.2       54.4       55.0       58.2         Average       60.9       64.5       55.9       58.4       57.6       61.1         1986       January       57.1       62.0       49.5       R52.9       R51.7       57.1	1985							
April       63.0       67.5       58.7       61.9       60.2       64.1         May       58.1       61.2       53.4       58.0       54.9       59.5         June       54.9       59.9       50.6       52.8       52.4       55.6         July       56.4       58.9       52.8       54.6       53.9       56.4         August       55.1       57.7       52.1       53.7       53.2       55.8         September       60.1       62.8       53.1       54.8       56.1       58.6         October       60.1       63.6       52.3       53.8       54.9       58.3         November       57.8       61.7       50.7       52.8       53.6       56.8         December       60.7       62.6       52.2       54.4       55.0       58.2         Average       60.9       64.5       55.9       58.4       57.6       61.1         1986       January       57.1       62.0       49.5       R52.9       R51.7       57.1								
May         58.1         61.2         53.4         58.0         54.9         59.5           June         54.9         59.9         50.6         52.8         52.4         55.6           July         56.4         58.9         52.8         54.6         53.9         56.4           August         55.1         57.7         52.1         53.7         53.2         55.8           September         60.1         62.8         53.1         54.8         56.1         58.6           October         60.1         63.6         52.3         53.8         54.9         58.3           November         57.8         61.7         50.7         52.8         53.6         56.8           December         60.7         62.6         52.2         54.4         55.0         58.2           Average         60.9         64.5         55.9         58.4         57.6         61.1           1986         January         57.1         62.0         49.5         R52.9         R51.7         57.1								
June     54.9     59.9     50.6     52.8     52.4     55.6       July     56.4     58.9     52.8     54.6     53.9     56.4       August     55.1     57.7     52.1     53.7     53.2     55.8       September     60.1     62.8     53.1     54.8     56.1     58.6       October     60.1     63.6     52.3     53.8     54.9     58.3       November     57.8     61.7     50.7     52.8     53.6     56.8       December     60.7     62.6     52.2     54.4     55.0     58.2       Average     60.9     64.5     55.9     58.4     57.6     61.1       1986     January     57.1     62.0     49.5     R52.9     R51.7     57.1								
July     56.4     58.9     52.8     54.6     53.9     56.4       August     55.1     57.7     52.1     53.7     53.2     55.8       September     60.1     62.8     53.1     54.8     56.1     58.6       October     60.1     63.6     52.3     53.8     54.9     58.3       November     57.8     61.7     50.7     52.8     53.6     56.8       December     60.7     62.6     52.2     54.4     55.0     58.2       Average     60.9     64.5     55.9     58.4     57.6     61.1       1986     January     57.1     62.0     49.5     R52.9     R51.7     57.1								
August       55.1       57.7       52.1       53.7       53.2       55.8         September       60.1       62.8       53.1       54.8       56.1       58.6         October       60.1       63.6       52.3       53.8       54.9       58.3         November       57.8       61.7       50.7       52.8       53.6       56.8         December       60.7       62.6       52.2       54.4       55.0       58.2         Average       60.9       64.5       55.9       58.4       57.6       61.1         1986       January       57.1       62.0       49.5       R52.9       R51.7       57.1								
September         60.1         62.8         53.1         54.8         56.1         58.6           October         60.1         63.6         52.3         53.8         54.9         58.3           November         57.8         61.7         50.7         52.8         53.6         56.8           December         60.7         62.6         52.2         54.4         55.0         58.2           Average         60.9         64.5         55.9         58.4         57.6         61.1           1986         January         57.1         62.0         49.5         R52.9         R51.7         57.1		•						
October         60.1         63.6         52.3         53.8         54.9         58.3           November         57.8         61.7         50.7         52.8         53.6         56.8           December         60.7         62.6         52.2         54.4         55.0         58.2           Average         60.9         64.5         55.9         58.4         57.6         61.1           1986         January         57.1         62.0         49.5         R52.9         R51.7         57.1								
November         57.8         61.7         50.7         52.8         53.6         56.8           December         60.7         62.6         52.2         54.4         55.0         58.2           Average         60.9         64.5         55.9         58.4         57.6         61.1           1986         January         57.1         62.0         49.5         R52.9         R51.7         57.1		•						
December 60.7 62.6 52.2 54.4 55.0 58.2 Average 60.9 64.5 55.9 58.4 57.6 61.1 1986 January 57.1 62.0 49.5 R52.9 R51.7 57.1								
Average         60.9         64.5         55.9         58.4         57.6         61.1           1986         January         57.1         62.0         49.5         R52.9         R51.7         57.1								
· · · · · · · · · · · · · · · · · · ·		Average						
February† 43.9 49.0 36.3 42.7 38.7 45.8	1986	January						
		February†	43.9	49.0	36.3	42.7	38.7	45.8

Residual Fuel Oil

Sales for Resale are those made to purchasers who are other-than-ultimate consumers, that is, wholesale sales. Sales to End Users are <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.

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

**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 Oll	No. 2 Diesel Fuel	Propane (Consumer Grade)
				Cents p	er gallon, excludir	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	Average	88.2	117.8	85.4	89.2	81.5	80.8	48.4
1984	January	83.2	116.7	86.4	95.9	87.5	82.6	47.7
	February	83.8	116.5	86.5	100.4	89.2	84.5	47.4
	March	84.7	117.1	84.6	91.5	81.3	81.0	45.3
	April	86.9	116.8	84.2	90.7	82.8	80.8	44.6
	May	86.6	117.1	84.3	90.9	83.2	81.9	44.4
	June	84.5	116.8	84.2	88.1	82.4	81.9	44.1
	July	81.7	117.2	82.8	87.6	79.4	79.3	42.3
	August	81.1	116.7	81.0	86.0	77.8	77.7	43.2
	September	82.8	116.8	81.7	88.8	80.0	78.4	44.8
	October	83.6	116.4	82.9	88.9	80.8	80.0	46.1
	November	81.9	114.8	81.4	88.0	79.4	79.0	45.6
	December	78.0	114.0	80.1	86.4	77.1	77.0	43.0
	Average	83.2	116.5	83.0	91.6	82.1	80.3	45.0
1985	January	75.2	114.5	79.5	85.8	75.7	74.9	40.0
	February	76.3	114.0	79.3	86.5	75.2	74.1	39.4
	March	81.0	113.6	78.6	85.7	76.4	75.6	38.0
	April	86.0	112.6	79.5	84.7	79.3	79.1	37.9
	May	87.5	113.2	78.1	80.4	76.5	78.9	38.1
	June	87.7	113.7	76.0	75.9	72.9	75.5	37.1
	July	87.3	113.6	75.2	76.9	70.3	72.3	36.3
	August	85.0	113.3	76.8	79.7	72.0	72.5	36.5
	September	83.2	113.0	79.2	85.9	77.0	76.3	37.6
	October	83.1	113.0	81.5	90.1	81.7	80.5	39.7
	November	84.7	112.6 108.1	83.6	93.6 92.7	84.9	84.3	43.0
	December	83.0		83.1		83.2	82.1	46.9
	Average	83.5	112.9	79.4	87.4	77.6	77.2	39.7
1986	January	R76.7	109.8	R77.0	83.8	R73.7	R73.3	R43.9
	February†	65.1	108.9	68.0	67.2	56.2	56.2	35.4

<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.

<sup>\*</sup>See Note 5 in the Notes and Sources for this section. †Preliminary data. R=Revised data.

Notes: • Geographic coverage is the 50 States and the District of Columbia.
•Prices prior to January 1983 are Energy Information Administration estimates. See Note 8 in the Notes and Sources for this section for additional information.

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

**Price** Refiner and Gas Plant Operator Sales Prices of Petroleum Products to End Users<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 (	per gallon, excludi	ng 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	Average	95.4	125.5	87.8	96.1	91.6	82.6	70.9
1903	Average	95.4	125.5	07.0	90.1	91.0	02.0	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	<sub>.</sub> 76.3
	March	90.7	123.8	85.6	111.3	94.7	83.2	76.4
	April	92.9	124.4	85.1	105.8	91.9	82.4	76.5
	May	93.4	123.9	85.2	102.4	90.9	83.2	70.4
	June	92.5	124.6	84.5	94.3	86.9	84.0	70.6
	July	90.4	124.3	84.1	90.6	84.3	81.3	69.6
	August	89.2	123.2	83.4	92.8	82.8	79.7	71.9
	September	89.7	123.7	83.1	99.2	84.3	80.2	73.4
	October	90.5	123.3	83.2	102.7	87.3	81.6	74.1
	November	89.9	119.3	82.4	106.1	87.7	80.7	73.8
	December	88.0	121.9	82.2	101.4	88.1	79.4	70.0
	Average	90.7	123.4	84.2	103.6	91.6	82.3	73.7
1985	January	84.6	121.7	81.4	106.0	87.0	77.6	78.8
	February	83.6	121.1	80.9	103.7	86.1	76.7	76.1
	March	87.1	121.4	80.4	103.1	86.0	77.0	74.6
	April	92.4	121.2	80.1	101.0	85.8	79.9	75.7
	May	94.4	121.9	79.5	94.1	82.2	79.7	70.5
	June	95.2	121.7	78.6	88.2	77.8	77.2	66.8
	July	95.4	120.2	78.2	86.0	72.4	74.5	62.9
	August	94.0	118.9	77.7	89.9	74.4	73.8	62.9
	September	91.9	119.5	78.1	96.0	81.1	78.1	63.8
	October	90.8	118.9	78.8	100.4	85.2	81.6	69.7
	November	91.7	118.3	80.1	106.7	91.3	85.4	72.2
	December	91.9	117.0	80.9	111.5	92.3	85.6	75.2
	Average	91.2	120.1	79.5	103.0	84.8	78.9	71.6
1986	January	89.1	116.2	R80.5	R105.4	R87.1	R78.1	R77.8
	February†	80.3	117.2	77.6	93.4	69.9	61.5	71.4

<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.

<sup>2</sup>See Note 5 in the Notes and Sources for this section.

†Preliminary data. R=Revised data.

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

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

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

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

		СТ	ME	MA	NH	RI	VT	DE	DC	MD	ИJ	NY	PA	VA
						(	Cents per	gallon, e	cluding	tax				
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	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	103.3	113.1	108.8	111.7	115.1	111.1	122.6	116.2	113.5	117.0	110.9	112.6
	April	113.4	103.3	112.4	107.7	110.7	113.3	109.9	119.9	115.6	110.6	116.0	107.8	110.8
	May	112.5	102.7	112.5	108.8	111.4	112.2	109.0	119.5	113.0	109.1	114.5	105.8	111.1
	June	110.6	103.7	110.5	104.5	110.8	112.8	107.2	116.3	109.9	107.1	115.0	103.3	108.7
	July	107.4	102.5	107.3	101.9	109.3	108.6	103.7	116.5	109.0	104.9	112.8	99.7	107.2
	August	104.7	98.0	105.5	98.6	106.0	108.0	103.7	109.8	105.2	103.6	110.2	99.6	105.2
	September	105.4	99.1	106.0	101.0	105.9	106.9	102.1	109.9	106.7	104.3	109.3	100.9	105.9
	October	106.2	101.9	106.9	102.2	107.4	108.0	103.5	111.8	107.5	105.7	111.9	101.5	106.7
	November	107.2	100.6	107.2	102.7	106.5	107.5	103.3	111.9	108.2	105.2	111.7	102.9	107.1
	December	106.4	97.9	107.0	103.1	107.1	106.4	102.8	112.9	107.1	104.9	111.3	103.2	107.7
	Average	112.1	103.9	111.6	108.4	111.4	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
	March	106.8	100.6	107.3	103.3	106.2	107.9	104.6	115.9	108.3	105.1	111.3	102.1	105.8
	April	107.0	101.5	106.6	102.2	106.9	106.4	105.1	113.9	109.7	105.2	110.7	100.9	103.8
	May	106.2	99.4	104.5	99.9	102.1	105.4	100.7	112.4	108.1	103.4	109.7	99.8	103.9
	June	103.5	95.4	101.1	94.4	98.6	103.7	96.4	107.1	104.4	99.6	108.1	95.0	104.4
	July	100.2	91.4	98.3	90.9	97.5	101.6	96.2	107.3	101.2	97.4	105.0	92.1	99.6
	August	99.5	91.0	96.1	91.7	95.9	101.5	97.5	105.5	98.9	97.3	105.0	92.5	99.2
	September	100.5	94.0	100.7	97.5	101.0	104.9	98.8	107.1	103.2	101.4	104.5	96.6	102.2
	October	106.4	99.4	104.7	102.3	104.4	106.9	102.7	109.9	106.3	103.4	107.0	98.6	105.8
	November	111.4	103.7	110.5	107.7	111.6	111.2	107.1	114.5	111.8	109.3	114.3	105.7	107.5
	December	114.3	105.6	110.7	109.1	111.1	113.1	110.7	117.0	112.6	111.9	115.0	108.9	110.1
	Average	108.0	99.7	106.9	102.5	106.7	107.8	104.7	114.2	108.7	105.9	111.2	102.2	106.1
1986	January	R111.6	101.1	105.9	R103.2	R101.9	R109.0		116.3	R112.2	107.7	R111.4	R104.7	107.0
	February†	99.5	90.9	90.1	88.2	93.5	100.2	94.0	105.4	99.6	98.3	102.6	95.2	98.2

¹The 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	МІ	MN	ОН	WI	ID	AK	OR	WA	U.S. Average
						Cent	s per gall	on, exclu	ding tax				-
1978	Average	46.2	46.5	48.5	47.9	47.8	47.4	44.7	43.6	53.2	45.8	48.6	49.0
1979	Average	65.1	68.8	72.7	70.9	72.4	68.6	67.3	62.1	68.2	68.0	69.7	70.4
1980	Average	92.2	95.8	99.6	97.8	99.9	91.9	91.5	91.6	97.8	97.3	100.8	97.4
1981	Average	115.0	114.9	118.5	118.3	118.4	113.2	109.1	110.4	118.0	111.4	116.5	119.4
1982	Average	109.3	110.9	114.3	113.9	115.1	110.2	107.8	110.4	117.4	111.6	117.6	116.0
1983	Average	101.0	100.4	100.7	106.4	103.1	101.3	101.2	101.8	108.8	103.6	109.0	107.8
1984	January	108.5	104.7	106.0	107.3	106.6	104.6	101.5	100.1	104.1	100.5	103.6	112.0
	February	109.9	105.9	107.3	108.0	102.8	105.7	102.8	101.3	106.5	100.9	103.8	116.9
	March	104.9	102.3	100.6	105.6	105.1	101.7	101.7	97.2	107.3	100.9	104.6	111.3
	April	101.6	100.3	103.4	104.8	103.9	101.9	101.4	96.2	107.3	100.6	105.0	109.8
	May	98.9	102.3	102.4	105.2	105.3	103.1	101.0	98.1	107.2	99.5	104.2	108.4
	June	99.5	101.6	105.9	103.3	104.2	101.7	100.5	93.8	107.8	98.2	103.3	107.2
	July	96.2	99.4 98.9	101.4	102.6	105.1	101.8 99.5	100.5 100.0	93.1 97.4	107.2 107.3	97.1 94.9	100.4 99.7	104.8 103.3
	August	96.6 96.9	98.9 98.6	100.3 100.7	101.8 103.2	104.5 103.5	100.1	98.8	97.4	107.3	94.9 95.9	100.4	103.3
	September October	98.3	97.1	100.7	103.2	103.5	100.1	100.7	99.4	103.0	96.5	100.4	103.0
	November	99.6	95.8	100.3	103.5	103.0	100.8	101.0	97.9	107.8	97.6	101.3	105.3
	December	99.2	94.4	100.9	103.2	102.8	99.3	99.0	98.8	107.5	97.4	100.5	104.8
	Average	102.1	100.1	103.1	105.0	104.1	102.1	101.0	98.5	106.9	99.3	102.6	109.1
1985	January	98.6	95.2	98.6	102.1	99.5	98.3	97.3	96.8	108.6	96.1	100.6	104.9
	February	98.3	94.4	97.8	101.0	99.8	98.7	96.1	96.9	107.6	96.6	99.8	105.3
	March	98.1	94.5	96.3	101.3	101.0	97.9	96.4	96.6	112.8	95.7	100.3	105.0
	April	96.4	96.7	98.6	98.2	101.4	99.9	97.6	96.1	NA	96.5	99.2	105.0
	May	93.8	96.4	101.5	96.8	103.8	99.9	99.6	96.8	106.8	96.7	98.1	103.5
	June	90.7	92.1	97.5	98.2	104.3	97.1	94.2	95.9	107.4	95.5	99.1	100.8
	July	90.2	90.0	93.2	99.4	100.5	92.9	93.0	94.9	108.1	95.3	97.5	98.0
	August	88.6	90.8	93.1	96.8	101.0	91.8	93.0	94.5	107.1	93.0	97.1	97.2
	September	96.2	95.6	95.4	99.2	98.6	95.8	94.9	94.3	109.2	93.9	97.6	99.7
	October	98.7 105.0	100.1 104.0	101.1 105.2	101.7 103.5	101.1 105.6	98.0 104.4	99.1 102.0	97.2 98.0	108.8 106.2	94.1 99.1	100.0 104.4	103.0 108.6
	November	105.0	104.0	105.2	103.5	105.6	104.4	102.0	98.8	106.2	102.4	104.4	110.4
	December Average	98.1	97.5	99.3	107.3	103.2 102.0	99.8	98.3	97.1	108.7	97.0	101.1	105.3
1986	January	100.1	R97.6	99.8	102.6	R100.5	100.7	R96.4	R97.1	R106.8	100.1	104.5	106.4
	February†	88.4	83.1	84.7	92.3	86.1	91.9	83.9	90.4	105.1	84.9	90.1	95.7

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 Companies¹	Purchased by Electric Plants <sup>1</sup> <sup>2</sup>	Residential Price <sup>1 3</sup>
				Dollars per thousa	nd cubic feet <sup>4</sup>		
1973	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	1.33	2.35
1978	Average	0.91	2.21	0.83	1.54	1.48	2.56
1979	Average	1.18	2.60	1.22	2.01	1.80	2.98
1980	Average	1.59	4.42	1.63	2.53	2.28	3.68
1981	Average	1.98	4.84	2.15	3.11	2.23	4.29
1982	Average	2.46	4.94	2.72	3.73		
1983	Average	2.59	4.51	2.72	3.73 4.26	3.49	5.17
	•					3.58	6.06
1984	January	2.67	4.40	2.80	4.25	3.55	5.98
	February	2.71	4.37	2.82	3.97	3.61	6.01
	March	2.67	4.40	2.80	4.18	3.52	5.98
	April	2.64	4.23	2.95	. 4.11	3.57	6.00
	May	2.67	4.15	2.86	4.17	3.75	6.19
	June	2.70	4.25	2.89	4.06	3.76	6.13
	July	2.68	4.15	2.95	4.04	3.89	6.17
	August	2.69	4.12	2.95	4.07	3.80	6.20
	September	2.62	4.34	2.84	4.10	3.83	6.26
	October	2.63	4.19	2.96	4.06	3.75	6.25
	November	2.61	3.43	3.13	4.26	3.72	6.12
	December	2.57	3.34	2.95	4.22	3.69	6.09
	Average	2.66	4.08	2.91	4.13	3.72	6.06
1985	January	2.62	3.21	2.89	4.19	R3.79	6.19
	February	2.66	3.08	2.87	3.82	R3.73	6.12
	March	2.56	3.29	2.90	4.00	R3.80	6.16
	April	2.58	3.39	2.86	3.96	3.76	6.14
	May	2.48	3.32	2.89	3.84	R3.61	NA
	June	2.52	3.40	3.00	3.86	3.60	NA
	July	2.46	3.41	2.82	3.83	R3.60	NA
	August	2.42	3.28	2.69	3.75	3.49	NA
	September	2.37	3.28	2.76	3.80	R3.43	NA
	October	2.35	3.16	2.68	3.99	R3.41	NA
	November	2.35	2.88	2.62	3.92	3.43	. NA
	December	2.34	2.79	2.67	3.91	3.35	NA
	Average	2.48	3.18	2.81	3.91	R3.58	NA
1986	January	2.28	2.81	2.64	3.95	3.26	NA

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

Includes supplemental gaseous fuels.

<sup>\*</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.

<sup>4</sup>Prices shown on this page are intended to include all taxes. See Note 9 in the Notes and Sources for this section.
R = Revised data. NA = Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Data for 1973 through December 1984 are final. All other data are preliminary unless otherwise indicated.
Sources: • See the Notes and Sources for this section.

**Price** 

### National Average Natural Gas Prices—Current Series

Major Interstate **Pipeline Companies** 

Delivered to Consumers<sup>1</sup>

			Pipeline Companies			Delivered to Consumers					
		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	0.38	0.73	
1974	Average	0.30	NA	NA	NA	1.43	1.07	0.67	0.51	0.89	
1975	Average	0.45	NA	NA	NA	1.71	1.35	0.96	0.77	1.19	
1976	Average	0.58	NA	NA	NA	1.98	1.64	1.24	1.06	1.47	
1977	Average	0.79	NA	NA	NA	2.35	2.04	1.50	1.32	1.78	
1978	Average	0.91	2.21	0.83	NA	2.56	2.23	1.70	1.48	1.98	
1979	Average	1.18	2.60	1.22	NA	2.98	2.73	1.70	1.81	2.34	
1980	•	1.18	4.42	1.63		2. <del>9</del> 8 3.68					
	Average				NA		3.39	2.56	2.27	2.91	
1981	Average	1.98	4.84	2.15	NA	4.29	4.00	3.14	2.89	3.51	
1982	Average	2.46	4.94	2.72	NA	5.17	4.82	3.87	3.48	4.32	
1983	Average	2.59	4.51	2.93	NA	6.06	5.59	4.18	3.58	4.82	
1984	January	2.67	4.40	2.80	3.94	5.78	5.49	NA	3.55	NA	
	February	2.71	4.37	2.82	4.02	5.84	5.54	NA	3.61	NA	
	March	2.67	4.40	2.80	3.91	5.92	5.57	NA	3.52	NA	
	April	2.64	4.23	2.95	3.97	5.96	5.52	NA	3.57	NA	
	May	2.67	4.15	2.86	3.99	6.27	5.60	NA	3.75	NA	
	June	2.70	4.25	2.89	4.04	6.76	5.67	NA	3.76	NA	
	July	2.68	4.15	2.95	4.07	7.11	5.62	NA	3.89	NA	
	August	2.69	4.12	2.95	43.69	7.23	5.48	NA	3.80	NA	
	September	2.62	4.34	2.84	4.04	7.17	5.53	NA	3.83	NA	
	October	2.63	4.19	2.96	3.98	6.80	5.54	NA	3.75	NA	
	November	2.61	3.43	3.13	3.92	6.30	5.55	NA	3.72	NA	
	December	2.57	3.34	2.95	3.98	6.05	5.60	NA	3.69	NA	
	Average	2.66	4.08	2.91	3.96	6.12	5.55	4.22	3.72	4.86	
1985	January	2.62	3.21	2.89	3.90	5.98	5.63	NA	R3.79	NA	
	February	2.66	3.08	2.87	3.94	5.87	5.54	NA	R3.73	NA	
	March	2.56	3.29	2.90	3.98	5.99	5.59	NA	R3.80	NA	
	April	2.58	3.39	2.86	3.91	6.11	5.64	NA	3.76	NA	
	May	2.48	3.32	2.89	3.91	6.58	5.55	NA	R3.61	NA	
	June	2.52	3.40	3.00	3.90	6.96	5.59	NA	3.60	NA	
	July	2.46	3.41	2.82	3.75	7.07	5.42	NA	R3.60	NA	
	August	2.42	3.28	2.69	3.75	7.21	5.39	NA	3.49	NA	
	September	2.37	3.28	2.76	3.71	7.06	5.36	NA	R3.43	NA	
	October	2.35	3.16	2.68	3.60	6.51	5.29	NA	R3.41	NA	
	November	2.35	2.88	2.62	3.48	6.13	5.35	NA	3.43	NA	
	December	2.34	2.79	2.67	3.47	5.72	5.23	NA	3.35	NA	
	Average	2.48	3.18	2.81	3.77	6.13	5.49	NA	R3.58	NA	
1986	January	2.28	2.81	2.64	3.55	5.63	5.30	NA	3.26	NA	
	February	NA	NA	NA	3.54	5.65	5.27	NA	NA	NA	

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

Includes supplemental gaseous fuels.

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.

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

The decline from the previous month was primarily the result of refunds in the form of reduced charges.

R=Revised data. NA=Not available.

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

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

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

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

		Resid	lential	Comn	nercial	indu	strial	Ot	her	То	tal³
		Old Series <sup>2</sup>	New Series	Old Series²	New Series	Old Series²	New Series	Old Series <sup>2</sup>	New Series	Old Series <sup>2</sup>	New Series
					Cent	s per kilowa	tthour				
1973	Average	2.54		2.41		1.25		2.10		1.96	
1974	Average	3.10		3.04		1.69		2.75		2.49	
1975	Average	3.51		3.45		2.07		3.08		2.92	
1976	Average	3.73		3.69		2.21		3.27		3.09	
1977	Average	4.05		4.09		2.50		3.51		3.42	
1978	Average	4.31		4.36		2.79		3.62		3.69	
1979	Average	4.64		4.68		3.05		3.96		3.99	
1980	Average	5.36		5.48		3.69		4.76		4.73	
1981	Average	6.20		6.29		4.29		5.28		5.46	
1982	Average	6.86		6.86		4.95		5.92		6.13	
1983	Average	7.18		7.02		4.96		6.38		6.30	
1984	January	6.76		6.79		4.86		6.34		6.13	
	February	6.96		6.99		4.85		6.53		6.19	
	March	7.16		7.12		4.88		6.69		6.26	
	April	7.32		7.23		4.87		6.74		6.30	
	May	7.58		7.28		4.92		6.86		6.39	
	June	7.89		7.48		5.10		6.79		6.66	
	July	7.99		7.51		5.22		6.99		6.83	
	August	8.05		7.51		5.16		6.77		6.83	
	September October	8.05 7.95		7.64 7.63		5.26 5.14		7.07		6.89	
	November	7.95 7.61		7.63 7.42		5.14 5.06		6.88 7.00		6.71	
	December	7.33		7.42		5.06		6.72		6.53 6.47	
	Average	7.54		7.28 7.33		5.07 5.04		6.7 <b>2</b>		6.47 <b>6.52</b>	
1985	January	7.28		7.25		5.12		6.80		6.52	
	February	7.19		7.21		5.12		6.77		6.47	
	March	7.48		7.36		5.13		7.01		6.55	
	April	7.73		7.44		5.09		6.95		6.58	
	May	7.98		7.55		5.08		7.09		6.66	
	June	8.15		7.60		5.24		7.07		6.86	
	July	8.24		7.64		5.36		7.13		7.02	
	August	8.18		7.55		5.20		7.01		6.92	
	September	8.18		7.62		5.24		7.08		6.95	
	October	8.05		7.65		5.19		6.98		6.80	
	November	7.73		7.49		5.10		6.91		6.63	
	December	7.44		7.29		5.10		6.73		6.56	
	Average	7.79		7.48		5.17		6.96		6.72	
19864	January	7.34	R7.02	7.29	R7.05	5.16	R4.97	R7.00	R6.38	6.60	R6.34
	February†	7.54	7.12	7.41	7.16	5.12	4.94	7.05	6.72	6.64	6.36

Beginning with January 1986, national average price estimates are based on a statistically derived sample of both publicly and privately owned electric utilities. Prior to that time, national average price estimates were based on a sample of only privately owned electric utilities. Data are shown for both the old and the new series. Publication of both series will continue until sufficient information exists to estimate historical data based on the new series.

Prices are calculated by dividing revenues by sales. Revenues may not correspond to sales for a particular month because of utility billing

<sup>&</sup>lt;sup>1</sup>Prices are calculated by dividing revenues by sales. Hevenues may not correspond to sales for a particular month because of utility billing and accounting procedures. This could result in uncharacteristic increases or decreases in the monthly prices.

<sup>2</sup>Data through 1979 cover privately owned electric utilities in Classes A and B. Data for 1980 forward cover selected privately owned electric utilities in Class A whose electric operating revenues were \$100 million or more during the previous year.

<sup>3</sup>Average price for total sales to ultimate consumers.

<sup>4</sup>See Note 9 in the Notes and Sources for this section.

†Initial estimates. Reprised data.

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

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

**Price** Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants<sup>1</sup>

•					Ali
			Heavy		Fossil
		Coal	Oil <sup>2</sup>	Natural Gas <sup>3</sup>	Fuels <sup>2</sup>
			Cents pe	er million Btu	
1973	Average	40.5	78.5	33.8	47.6
1974	Average	70.9	189.0	48.2	91.4
1975	Average	81.4	200.5	75.2	104.4
1976	Average	84.8	195.2	103.4	111.9
1977	Average	94.7	219.8	129.1	129.7
1978	Average	111.6	212.5	142.2	141.1
1979	Average	122.4	298.8	174.9	163.9
1980	Average	135.1	426.7	219.9	192.8
1981	Average	153.2	533.4	280.5	225.6
1982	•	164.7	483.2	337.6	224.9
1983	Average	165.6	457.8		
1903	Average	105.0	457.8	347.4	220.6
1984	January	161.6	488.9	343.7	221.0
	February	164.9	496.3	347.5	217.4
	March	163.4	484.0	339.8	208.4
	April	165.7	494.1	344.4	210.6
	May	168.6	486.9	360.4	220.3
	June	169.1	488.3	360.9	223.2
	July	168.2	474.6	373.1	231.3
	August	167.2	459.6	365.6	223.5
	September	167.4 168.7	472.5 474.1	368.0	217.5
	October November	166.6	474.1 470.6	361.4 357.2	218.8 216.8
	December	165.0	480.4	357.2 355.4	218.7
	Average	166.4	481.2	358.3	219.2
	Average	100.4	401.2	336.3	213.2
1985	January	164.0	472.7	364.2	218.8
	February	167.3	482.4	358.1	218.4
	March	167.5	458.9	365.1	210.2
	April	167.7	453.0	361.7	210.7
	May	166.8	405.2	346.2	206.2
	June	165.1	384.8	345.0	208.1
	July	164.2	391.9	344.2	217.2
	August	164.0 163.0	380.5	335.0	211.1
	September October	163.4	419.0	328.7	204.7 204.4
	November	163.7	415.9 397.2	330.4 329.4	204.4 204.5
	December	161.7	424.3	329.4 320.8	203.6
	Average	164.9	424.6	343.2	209.7
	Arci age				
1986	January	159.5	392.6	313.5	194.7

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.

See Note 10 in the Notes and Sources for this section.

<sup>\*</sup>Includes supplemental gaseous fuels.

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

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

### Notes and Sources for the Price Section

### **Notes**

- 1. The actual domestic average price represents the average price at which all domestic crude oil is purchased. Prior to February 1976, the domestic crude oil wellhead price represented an estimate of the average of posted prices; after February 1976, the wellhead price represents an average of first sale prices.
- 2. FOB literally means "Free on Board." It denotes a transaction whereby the seller makes the product available with an agreement on a given port at a given price; it is the responsibility of the buyer to arrange for the transportation and insurance.
- 3. The landed cost of imported crude oil from selected countries does not represent the total cost of all imported crude. Prior to March 1975, imported crude costs to U.S. company-owned refineries in the Caribbean were not included in the landed cost, and costs of crude oil from countries that export only small amounts to the United States were also excluded. Beginning in March 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.
- 4. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on EIA Form 14, the "Refiners' Monthly Cost Report." These prices were previously published from data collected on ERA Form 49, the "Domestic Crude Oil Entitlements Program Refiners Monthly Report." The ERA Form 49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for EIA Form 14 in accordance with conventions used for ERA Form 49. Also, the respondents for the two forms are essentially the same. However, due to possible different interpretations of the filing requirements and a different method for handling prior period adjustments, care must be taken in comparing the data collected on the two forms.

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

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

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

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

- 6. The monthly national average price of residential natural gas is based on data from the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U) for natural gas (piped) and on data from Form EIA-176. Initial monthly estimates are obtained by multiplying the annual average price of residential natural gas collected on Form EIA-176 by the ratio of monthly values of the natural gas CPI-U for consecutive months. When a subsequent year's annual average price becomes available, the initial monthly estimates are adjusted to this annual average.
- 7. Starting in January 1983, Form EIA-782, "Monthly Petroleum Product Sales Report," replaced 10 previous surveys. Every attempt was made to continue the most important price series. However, prices published through December 1982 and those published since January 1983 do not necessarily form continuous data series due to changes in survey forms, definitions, instructions, populations, samples, processing systems, and statistical procedures. To provide historical data, continuous annual data series have been generated for 1978–1980, and monthly series for 1981 and 1982, by estimating the prices that would have been published had the EIA-782 survey and system been in operation at that time. This form of estimation was performed after detailed adjustment for product and sales type matching, and for discontinuity due to other factors. An important difference between the previous and present prices is the distinction between wholesale and resale, and between retail and end user. The resale category continues to include sales among resellers. However, bulk sales to utility, industrial, and commercial accounts previously included in the wholesale category are now counted as made to end users. The end user category continues to include retail sales through company owned and operated outlets but also includes the bulk utility, industrial, and commercial sales. Additional information may be found in "Estimated Historic Time Series for the EIA-782," a feature article reprinted from the December 1983 [3] *Petroleum Marketing Monthly* published by the Energy Information Administration.
- 8. Respondents to Form EIA-826, "Electric Utility Company Monthly Statement," consist of a sample of 187 electric utilities that were statistically chosen using stratification techniques. The respondents were chosen from more than 3,000 electric utilities reporting on Form EIA-861, "Annual Electric Utility Report." This schema differs from the cut-off sample used prior to January 1986.
- 9. Heavy fuel oil prices include fuel oils No. 4, No. 5, and No. 6, and topped crude fuel oil prices. The weighted average for all fossil fuels includes both residual fuel oil prices and light oil (No. 2 fuel oil, kerosene, and jet fuel) prices
- 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 December 1982: ERA Form 182, "Domestic Crude Oil First Purchase Report."; January 1983 forward: EIA Form 182, "Domestic Crude Oil First Purchase Report."

• Crude Oil imports costs—Energy Information Administra-

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.'

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• 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

U.S. City average retail motor gasoline prices—Bureau of

Labor Statistics

- No. 2 Distillate to Residences—January 1983 forward, EIA
   Form-782A, "Refiners/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Resellers/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
- 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.

information on the estimated data.

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

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

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

Electric plant data—EIA, FPC Form 423, "Monthly Report

of Cost and Quality of Fuels for Electric Plants.

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

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 basis of values reported by State agencies in Mississippi New Maxico 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 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.

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### International

### **Crude Oil Production**

World crude oil production in February 1986 was 55.2 million barrels per day, up 0.1 million from the level in the previous month.

Organization of Petroleum Exporting Countries (OPEC) production during February 1986 averaged 17.9 million barrels per day, up 0.5 million from the level during the previous month. Production by the Arab members of OPEC during February 1986 averaged 10.8 million barrels per day, up 0.2 million from the January 1986 level. During February 1986. production increased in Saudi Arabia by 200,000 barrels per day and in Iraq and Kuwait each by 50,000 barrels per day. Production increased in the United Arab Emirates by 35,000 and in Qatar by 10,000 barrels per day. Production decreased in Libya during February 1986 by 100,000 barrels per day. while production in Algeria remained the same. Among non-Arab OPEC countries during the month, production increased in Nigeria and Indonesia by 200,000 and 30,000 barrels per day, respectively, while production in Iran and Venezuela remained the same as in the previous month.

Of the non-OPEC nations during February 1986, production decreased in the United Kingdom and Mexico by 166,000 and 160,000 barrels per day, respectively. The level of production decreased in Canada and the United States by 65,000 and 2,000 barrels per day, respectively, during the month.

### **Petroleum Consumption**

In January 1986 consumption in all OECD countries was down by 3.2 percent compared with the level in January 1985. Consumption was down in Canada by 2.1 percent and in the United States by 1.4 percent compared with levels 1 year earlier. Consumption in Japan was 10.2 percent higher than the level in January 1985. Consumption in all European OECD countries combined in January 1986 was down by 10.1 percent compared with the level 1 year earlier. Consumption was down in the United Kingdom by 30.6 percent, in France by 18.5 percent, and in Italy by 7.0 percent. Consumption in West Germany was

up 4.8 percent compared with the level in January 1985.

### Petroleum Stocks

For all OECD countries, petroleum stocks at the end of January 1986 were 1.1 percent higher than at the end of January 1985. January 1986 ending stocks in the United States and Japan were each 1.9 percent higher than the levels 1 year earlier, while stock levels in Canada were 9.4 percent lower. Ending stock levels in all European OECD countries for January 1986 were 1.5 percent higher than in January 1985. Stocks were higher in Italy by 7.5 percent and in the United Kingdom by 3.5 percent than levels 1 year earlier. Stocks were down in West Germany by 3.3 percent and in France by 1.4 percent compared with levels 1 year earlier.

### **Nuclear Electricity Production**

In February 1986, the 20 non-Communist nations with nuclear power capacity generated 112.1 gross terawatthours (billion kilowatthours) of nuclear-based electricity. This generation represents an increase of 11.5 percent compared with February 1985 generation. The United States accounted for 34.0 gross terawatthours (30.3 percent) of total nuclear generation in February 1986.

In France, Superphenix-1 at Creys-Malville, a 1,240-gross-megawatt-electric liquid metal fast breeder reactor, was connected to France's electrical grid on January 13, 1986. A breeder reactor has the design capability to extract a greater amount of effective energy from uranium fuel than other types of reactors. Superphenix-1 is operated by Electricite de France and owned by Nersa. Nersa is a consortium consisting of utilities from France, Italy, and West Germany.

There were 304 operable nuclear power generating units in the non-Communist countries as of February 28, 1986, with a collective gross generating capacity of 233.0 gigawatts. In February 1986, the 96 operable U.S. units accounted for 86.0 gross gigawatts (36.9 percent) of total non-Communist nuclear generating capacity.

### International

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

		Algeria	iraq	Kuwait¹	Libya	Qatar	Saudi Arabia¹	United Arab Emirates	Arab Members of OPEC <sup>2</sup>	Indo- nesia	Iran
					Thous	sand barre	els per day				
1973	Average	1,097	2,018	3,020	2,175	570	7,596	1,533	18,009	1,339	5,861
1974	Average	1,009	1,971	2,546	1,521	518	8,480	1,679	17,724	1,375	6,022
1975	Average	983	2,262	2,084	1,480	438	7,075	1,664	15,986	1,307	5,350
1976	Average	1,075	2,415	2,145	1,933	497	8,577	1,936	18,578	1,504	5,883
1977	Average	1,152	2,348	1,969	2,063	445	9,245	1,999	19,221	1,686	5,663
1978	Average	1,161	2,563	2,131	1,983	487	8,301	1,831	18,457	1,635	5,242
1979	Average	1,154	3,477	2,500	2,092	508	9,532	1,831	21,094	1,591	3,168
1980	Average	1,012	2,514	1,656	1,787	472	9,900	1,709	19,050	1,577	1,662
1981	Average	805	1,000	1,125	1,140	405	9,815	1,474	15,764	1,605	1,380
1982	Average	710	1,012	823	1,150	330	6,483	1,250	11,758	1,339	2,214
1983	Average	660	1,005	1,064	1,105	295	5,086	1,149	10,364	1,343	2,440
1984	January	650	1,100	1,080	1,100	. 445	5,130	1,200	10,705	1,470	2,200
	February	600	1,000	1,240	1,100	315	5,040	1,200	10,495	1,575	2,300
	March	600	1,200	1,293	1,100	440	4,843	1,205	10,681	1,560	2,400
	April	600	1,200	1,250	1,200	400	5,150	1,205	11,005	1,570	2,200
	May	650 700	1,200	1,200	1,200	400	5,000	1,200	10,850	1,470	1,700
	June July	700 650	1,200 1,200	1,200 1,110	1,250 1,100	500 - 430	5,450 5,010	1,225 1,090	11,525 10,590	1,520 1,390	2,200 2,400
	August	650	1,300	1,110	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	1,250	1,110	1,000	270	3,510	1,100	8,890	1,310	1,900
	February	650	1,250	1,125	1,000	290	4,025	1,160	9,500	1,330	2,100
	March	690	1,200	1,085	1,000	315	3,835	1,215	9,340	1,300	2,200
	April Mav	650 650	1,370 1,300	970 940	1,000 1,100	260 290	3,470 2,590	1,215 1,160	8,935 8,030	1,300 1,200	2,300 2,000
	June	600	1,370	920	980	300	2,420	1,100	7,690	1,050	2,200
	July	600	1,450	940	910	320	2,740	1,155	8,115	1,300	2,200
	August	600	1,400	940	910	320	2,340	1,200	7,710	1,300	2,400
	September	650	1,600	980	1,100	295	2,980	1,285	8,890	1,200	2,200
	October	650	. 1,650	1,055	1,200	320	3,910	1,255	10,040	1,260	2,300
	November	680	1,700	1,050	1,200	300	4,200	1,250	10,380	1,300	2,200
	December	650	1,650	1,080	1,300	335	4,680	1,225	10,920	1,250	2,400
	Average	639	1,433	1,016	1,059	301	3,388	1,193	9,034	1,258	2,201
1986	January	650	1,650	1,100	1,100	360	4,450	1,215	10,525	1,420	2,100
	February	650	1,700	1,150	1,000	370	4,650	1,250	10,770	1,450	2,100
	Average	650	1,674	1,124	1,053	365	4,545	1,232	10,641	1,434	2,100

¹Includes about one-half of the production in the former Kuwait-Saudi Arabia Neutral Zone. In February 1986, total production in this region amounted to approximately 300,000 barrels per day. 
²Arab members of the Organization of Petroleum Exporting Countries (OPEC) include Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates. 
³OPEC total includes production in Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, United Arab Emirates, Indonesia, Iran, Nigeria, Venezuela, Ecuador, and Gabon. 
Footnotes continued on following page.

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

		Nigeria	Vene- zuela	Total	Canada	Mexico	United Kingdom	United States	China	USSR	Other•	World
		, , , goila	200.0	0. 20			barrels pe		•	000	01.101	
							•					
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	Average	2,055	2,168	26,891	1,435	1,936	1,622	8,597	2,114	11,773	5,170	59,538
1981	Average	1,433	2,102	22,646	1,285	2,313	1,811	8,572	2,012	11,907	5,355	55,901
1982	Average	1,295	1,895	18,868	1,271	2,748	2,065	8,649	2,045	11,967	5,639	53,252
1983	Average	1,241	1,801	17,583	1,356	2,689	2,291	8,688	2,120	12,027	6,239	52,993
1984	January	1,365	1,840	17,980	1,365	2,670	2,525	8,868	2,200	11,950	6,643	54,201
	February	1,565	1,815	18,140	1,445	2,755	2,600	8,874	2,200	11,950	6,629	54,593
	March	1,560	1,815	18,416	1,475	2,710	2,480	8,672	2,200	11,800	6,563	54,316
	April	1,300	1,815	18,300	1,430	2,770	2,475	8,862	2,225	11,800	6,649	54,511
	May	1,300	1,840	17,570	1,415	2,800	2,439	8,955	2,225	11,950	6,724	54,078
	June	1,400	1,805	18,870	1,470	2,820	2,350	8,852	2,225	11,950	6,834	55,371
	July	1,200	1,860	17,860	1,515	2,845	2,470	8,885	2,305	11,920	6,838	54,638
	August	1,150	1,820	16,670	1,435 1,330	2,680	2,300	8,809 8,993	2,305	11,920	6,846	52,965
	September October	1,400 1,600	1,850 1,800	16,826 16,893	1,450	2,705 2,675	2,435 2,615	8,906	2,335 2,335	11,840 11,840	6,957 7,118	53,421 53,832
	November	1,600	1,725	16,760	1,460	2,745	2,605	8,979	2,335	11,800	7,110	53,854
	December	1,600	1,770	16,685	1,445	2,830	2,645	8,897	2,335	11,800	7,170	53,848
	Average	1,419	1,813	17,576	1,436	2,750	2,495	8,879	2,269	11,878	6,847	54,130
1985	January	1,400	1,670	15,580	1,450	2,635	2,780	8,929	2,450	11,700	7,214	52,678
	February	1,690	1,670	16,710	1,450	2,685	2,650	8,928	2,450	11,700	7,254	53,827
	March	1,700	1,680	16,650	1,500	2,810	2,600	8,927	2,450	11,700	7,327	53,964
	April	1,600	1,670	16,235	1,465	2,825	2,635	8,842	2,480	11,700	7,404	53,586
	May	1,450	1,675	14,785	1,475	2,790	2,545	8,969	2,480	11,750	7,368	52,162
	June	1,100 1,000	1,670 1,670	14,110 14,715	1,450 1,430	2,555 2,620	2,450 2,385	8,965 8,904	2,480 2,490	11,680 11,820	7,134	50,824
	July August	1,000	1,670	14,710	1,450	2,795	2,365 2,215	8,895	2,490	11,860	7,465 7,456	51,829 51,871
	September	1,450	1,670	15,860	1,450	2,795	2,600	8,874	2,490	11,920	7,548	53,557
	October	1,700	1,670	17,420	1,450	2,750	2,670	8,943	2,500	11,960	7,545	55,238
	November	1,760	1,670	17,760	1,450	2,795	2,680	8,932	2,500	11,970	7,607	55,694
	December	1,620	1,670	18,310	1,553	2,733	2,440	8,930	2,500	11,960	7,591	56,017
	Average	1,471	1,671	16,066	1,465	2,734	2,553	8,920	2,480	11,811	7,411	53,434
1986	January	1,200	1,670	17,365	1,540	2,510	2,666	8,942	2,500	11,960	R7,639	R55,122
	February	1,400	1,670	17,850	1,475	2,350	2,500	8,940	2,500	11,960	7,663	55,238
	Average	1,295	1,670	17,595	1,509	2,434	2,587	8,941	2,500	11,960	7,650	55,177

Footnotes continued.

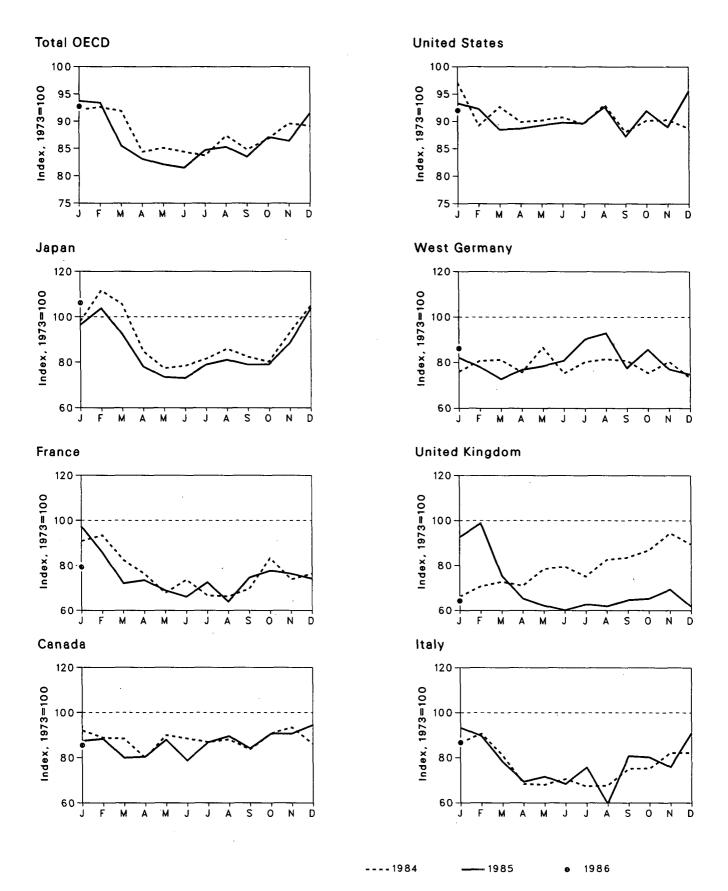
\*Other is a calculated total derived from the difference between world production and the nations represented above.

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 OECD Countries



### Petroleum Consumption for OECD Countries<sup>1</sup>—New Series

						United	United	West	Total OECD	Other	Total
		Canada	France	Italy	Japan	Kingdom	States	Germany	Europe <sup>2</sup>	OECD <sup>3</sup>	OECD:
						Thousand b	arrels per d	lay			
1973	Average	1,707	2,422	2,147	5,071	2,301	17,308	2,915	14,521	975	39,582
1974	Average	1,740	2,260	2,090	4,960	2,138	16,653	2,612	13,708	1,017	38,078
1975	Average	1,694	2,136	1,583	4,502	1,872	16,322	2,515	12,656	915	36,089
1976	Average	1,743	2,280	1,801	4,771	1,856	17,461	2,708	13,509	1,024	38,508
1977	Average	1,751	2,235	1,973	5,231	1,880	18,431	2,837	13,847	1,079	40,339
1978	Average	1,737	2,169	2,176	5,142	1,850	18,847	3,048	14,017	1,070	40,813
1979	Average	1,857	2,385	2,003	5,480	1,930	18,513	3,073	14,723	1,045	41,618
1980	Average	1,947	2,256	1,876	4,960	1,725	17,056	2,707	13,511	1,126	38,600
1981	Average	1,836	2,023	1,906	4,848	. 1,590	16,058	2,449	R12,473	1,087	36,302
1982	Average	1,616	1,940	1,782	4,554	1,587	15,296	2,324	12,092	1,132	34,690
1983	Average	1,490	1,911	1,730	4,368	1,520	15,231	2,290	11,808	1,008	33,906
1984	January	1,571	2,199	1,865	4,976	1,522	16,801	2,215	12,130	972	36,449
	February	1,517	2,262	1,945	5,662	1,630	15,437	2,352	12,935	1,101	36,651
	March	1,510	1,999	1,742	5,356	1,674	16,050	2,367	12,409	1,066	36,390
	April	1,366	1,848	1,468	4,300	1,635	15,568	2,203	11,295	861	33,390
	May	1,535	1,642	1,462	3,918	1,807	15,620	2,525	11,605	1,021	33,699
	June	1,511	1,785	1,514	3,975	1,828	15,709	2,191	11,293	937	33,425
	July	1,483	1,615	1,448	4,130	1,731	15,498 16,116	2,337 2,377	11,014	1,024 1,200	33,150 34,599
	August	1,505 1,427	1,607 1,688	1,454 1,612	4,355 4,171	1,900 1,924	15,247	2,377 2,354	11,423 11,660	1,200	33,554
	September October	1,427	2,018	1,617	4.069	1,996	15,616	2,334	12,001	1,126	34,362
	November	1,594	1,788	1,763	4,722	2,173	15,627	2,134	12,327	1,179	35,449
	December	1,470	1,851	1,766	5,324	2,057	15,375	2,133	11,960	1,162	35,291
	Average	1,503	1,857	1,637	4,577	1,824	15,726	2,300	11,834	1,058	34,698
1985	January	1,491	R2,357	2.001	4,887	2,130	16,142	2,393	R13,518	1,031	R37,070
	February	1,508	R2,079	1,923	5,262	2,274	15,975	2,274	R13,150	1,078	R36,974
	March	1,364	R1,746	1,682	4,680	1,738	15,321	2,120	R11,397	1,069	R33,832
	April	1,372	1,781	1,487	3,962	1,505	15,345	2,238	11,072	1,146	32,897
	Мау	1,501	1,668	1,537	3,721	1,431	15,460	2,284	10,708	1,094	32,484
	June	1,344	1,601	1,469	3,701	1,383	15,551	2,356	10,614	1,058	32,268
	July	1,483	1,755	1,627	4,003	1,445	15,517	2,630	11,450	1,091	33,544
	August	1,527	1,549	1,281	4,109	1,425	16,039	2,708	11,064	1,015	33,755
	September	1,435	1,806 1,882	1,733 1,723	4,002 4,008	1,487 1,503	15,115 15,923	2,259 2,499	11,412 12,040	1,082 971	33,047 34,488
	October November	1,546 1,546	1,847	1,629	4,008 4,487	1,503	15,923	2,499 2,245	11,674	1,088	34,466
	December	1,546 R1,614	1,798	1,951	R5,259	R1,423	16,541	2,245 2,176	R11,738	R1,072	R36,224
	Average	R1,478	1,821	1,669	R4,336	R1,608	15,697	2,350	R11,646	R1,066	R34,223
	•	•			•	•	•	•	•	•	•
1986	January	1,459	1,922	1,861	5,387	1,478	15,923	2,509	12,159	954	35,882

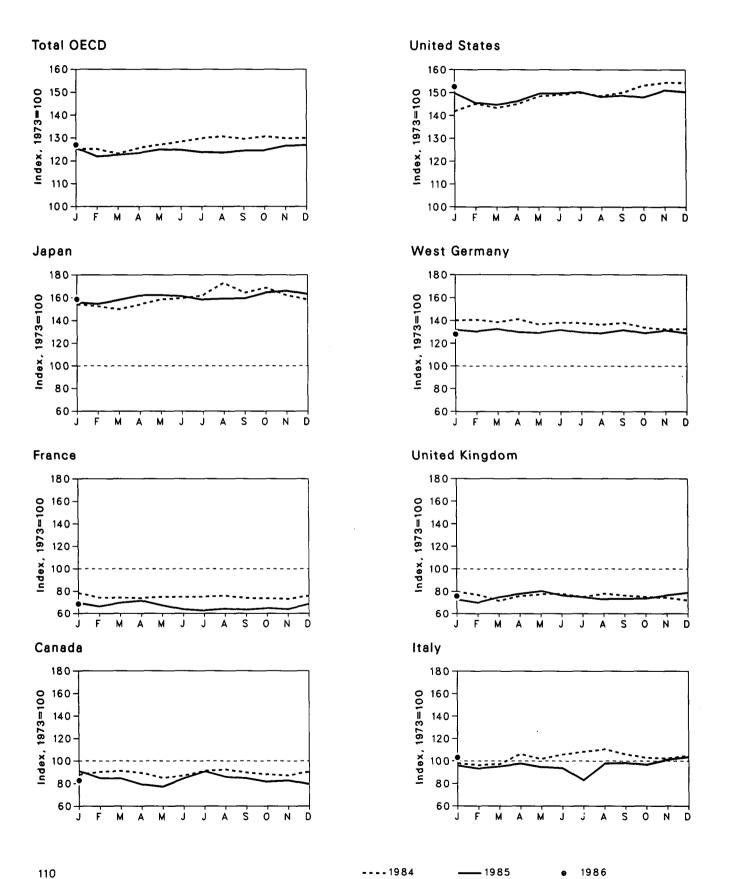
The consumption data series shown on this page include inland consumption plus international marine bunkers and refinery fuel. They replace the previous inland consumption series shown on page 114. In addition, IEA totals previously shown on this page have been replaced with OECD totals.

¹Organization for Economic Cooperation and Development (OECD) includes Canada, Japan, and the United States; as well as "Total OECD Europe" and "Other OECD." 2"Total OECD Europe" includes France, Italy, the United Kingdom, and West Germany; as well as Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey. 3"Other OECD" includes Australia, New Zealand, and the U.S. Territories.

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 OECD Countries at End of Period



### Petroleum Stocks1 for OECD Countries2 at End of Period

		Occado	F	lA-lo.		United	United	West	Total OECD	Other OECD <sup>4</sup>	Total OECD <sup>2</sup>
		Canada	France	italy	Japan	Kingdom	States	Germany	Europe <sup>3</sup>	OECD.	OECD-
						Million	barreis				
1973	Year	140	201	152	303	156	1,008	181	1,070	67	2,588
1974	Year	145	249	167	370	161	1,074	213	1,227	64	2,880
1975	Year	174	225	143	375	165	1,133	187	1,154	67	2,903
1976	Year	153	234	143	380	165	1,112	208	1,205	68	2,918
1977	Year	167	239	161	409	148	1,312	225	1,268	68	3,224
1978	Year	144	201	154	413	157	1,278	238	1,219	68	3,122
1979	Year	150	226	163	460	169	1,341	272	1,353	75	3,379
1980	Year	164	243	170	495	168	1,392	319	1,464	72	3,587
1981	Year	161	214	167	482	143	1,484	297	1,337	67	3,531
1982	Year	136	193	179	484	125	-1,430	272	1,258	68	3,376
1983	Year	120	153	149	471	119	1,454	250	1,145	68	3,258
1984	January	123	158	149	467	124	1,429	254	1,150	68	3,237
	February	127	149	147	462	120	1,463	255	1,119	69	3,240
	March	128	149	148	454	112	1,444	251	1,092	68	3,185
	April	125	148	161	467	118	1,462	256	1,130	67	3,251
	May	119	151	155	480	121	1,496	247	1,129	65	3,289
	June	122	151	161	484	122	1,503	250	1,149	66	3,324
	July	128	151	164	491	117	1,513	249	1,161	69	3,362
	August	130	153	168	524	122	1,498	247	1,163	68	3,383
	September	126	149	161	498	119	1,513	250	1,150	68	3,355
	October November	124 122	148 147	156 155	511 492	117 116	1,544 1,556	242 239	1,137 1,126	67 65	3,382 3.362
	December	127	153	159	480	113	1,556	239 240	1,132	69	3,364
							•		•		-
1985	January	128	R140	146	472	114	1,510	239	R1,071	70	R3,251
	February	119	133	142	468 479	109	1,467	236	1,030	71 65	3,156
	March	118 111	140 144	145 148	479 491	117 121	1,459 1,474	240 235	1,051 1,051	65 67	3,172 3,193
	April May	108	135	146	491	125	1,508	233	1,062	65	3,193
	June	119	128	142	489	119	1,510	239	1,048	64	3,230
	July	127	126	126	480	117	1,515	234	1,021	62	3,204
	August	120	129	149	482	114	1,493	233	1,041	62	3,198
	September	119	128	149	483	115	1,500	238	1,056	63	3,220
	October	114	130	147	498	115	1,492	233	1,055	65	3,225
	November	116	128	154	503	119	1,522	237	1,071	65	3,277
	December	R111	138	157	R495	123	1,516	233	R1,092	R67	R3,282
1986	January	116	138	157	481	118	1,538	231	1,087	66	3,288

A new data series showing Total OECD Europe stocks has been added to this page. The other data series are the same as previously shown and reflect the availability of new data from OECD and a comprehensive review of the EIA international petroleum stock data base.

R = Revised data. NA = Not available.

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

Sources: • See the last page of this section.

¹Petroleum 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.

²Organization for Economic Cooperation and Development (OECD) includes Canada, Japan, and the United States; as well as "Total OECD Europe" and "Other OECD."

³"Total OECD Europe" includes France, Italy, the United Kingdom, and West Germany; as well as Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey.

4"Other OECD" includes Australia, New Zealand, and the U.S. Territories.

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

### 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	thours				
1973	Total	. 0	0	0	15.3	0	14.7	2.5	3.1	9.4	1.1	0.5
1974	Total	1.0	0.1	0	15.4	0	14.7	1.9	3.4	18.9	3.3	0.6
1975	Total	2.5	6.8	0	13.2	0	18.3	2.5	3.8	21.3	3.3	0.5
1976	Total	2.6	10.0	0	18.0	0	15.8	3.2	3.8	36.6	3.9	0.5
1977	Total	1.6	11.9	0	26.6	2.7	17.9	2.8	3.4	28.2	3.7	0.3
1978	Total	2.9	12.5	0	33.0	3.3	30.6	2.3	4.5	53.1	4.1	0.2
1979	Total	2.7	11.4	0	38.4	6.7	39.9	3.2	2.6	62.0	3.5	(s)
1980	Total	2.3	12.5	0	40.4	7.0	61.2	2.9	2.2	82.8	4.2	0.1
1981	Total	2.8	12.8	0	43.3	14.5	105.2	3.1	2.7	86.0	3.7	0.2
1982	Total	1.9	15.6	0.1	42.6	16.5	108.9	2.2	6.8	104.5	3.9	0.1
1983	Total	3.4	24.1	0.2	53.0	17.4	144.2	2.9	5.8	109.1	3.6	0.2
1984	January	0.7	2.7	(s)	5.0	1.7	18.0	0.3	0.4	10.1	0.3	(s)
	February	0.4	2.3	ò.ź	4.6	1.6	17.1	0.4	0.6	9.2	0.4	°ó
	March	0.6	1.9	0.1	5.1	1.7	17.8	0.3	0.7	8.8	0.2	0
	April	0.5	2.4	(s)	4.3	1.6	15.4	0.3	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	3.7	1.3	13.1	0.4	0.3	9.9	0.4	(s)
	July	0.4	2.4	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	0.4	1.9	0.3	3.9	1.5	14.7	0.2	0.8	11.4	0.4	(s)
	October	0.1	2.5	0.5	4.5	1.8	16.0	0.4	0.8	11.6	0.4	(s)
	November December	(s) 0.1	2.6 2.6	0.4 0.4	4.7 5.1	1.7 1.7	17.8 20.9	0.3 0.2	0.8	11.9	0.4	(s)
	Total	4.5	2.6 <b>27.7</b>	0.4 <b>2.1</b>		18.5		-	0.8	13.2	0.4	(s)
4000					53.8		191.2	4.1	6.9	127.2	3.8	0.3
1985	January	0.2	2.5	0.4 0.3	5.7	1.7	21.9	0.2	0.8	12.2	0.4	(s)
	February March	0.4 0.5	1.7 2.0	0.3	5.0 5.9	1.6 1.8	19.2 20.6	0.2 0.4	0.7 0.8	10.7	0.3 0.2	(s)
	April	0.5	2.2	0.3	5. <del>9</del> 5.2	1.6	17.7	0.4	0.8	12.0 11.8	(s)	0
	May	0.4	2.8	0.7	2.4	1.2	15.9	0.5	0.7	13.1	0.2	Ö
	June	0.4	2.8	0.4	4.2	1.2	13.6	0.4	0.6	12.6	0.4	(s)
	July	0.5	2.5	0.3	5.7	1.4	16.1	0.4	0.6	12.5	0.4	0.1
	August	0.5	3.2	0.1	6.0	1.5	15.4	0.2	0.5	12.9	0.4	(s)
	September	0.5	3.3	0.3	5.4	1.6	17.2	0.3	0.3	12.8	0.4	ò
	October	0.6	3.9	0.4	5.1	1.7	20.0	0.4	0.3	13.9	0.4	(s)
	November	R0.7	3.9	0.3	5.8	1.7	22.1	0.4	0.3	13.1	0.4	0.1
	December	R0.7	3.9	0.3	6.5	1.7	24.4	0.4	0.6	14.7	0.4	0.1
	Total	R5.8	34.5	3.4	62.9	18.8	224.0	4.5	7.0	152.0	3.9	0.3
1986	January	R0.6	R3.8	(s)	6.4	1.9	25.6	0.5	0.9	15.0	0.4	(s)
	February	0.6	2.8	0	4.8	1.6	22.8	0.4	0.5	13.5	0.1	(s)
	Year to Date	1.2	6.6	(8)	11.0	3.4	48.4	0.9	1.4	28.5	0.5	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 Countries<sup>1</sup> (continued)

										Non- Communist		
										World		Total Non-
		South	South			Switzer-		United	West	Excluding	United	Communist
		Africa	Korea	Spain	Sweden		Taiwan	Kingdom <sup>2</sup>		U.S.	States	World
						Rillion or	nee kilov	vatthours				
						-						
1973	Total	0	0	6.5	2.1	6.2	0	28.2	11.9	101.4	87.8	189.3
1974	Total	0	0	7.2	2.3	7.0	0	33.8	12.0	121.7	124.3	246.0
1975	Total	0	0	7.5	12.0	7.7	0	30.5	21.7	151.8	182.3	334.1
1976	Total	0	0	7.6	16.0	7.9	0	36.8	24.5	187.1	201.8	388.9
1977	Total	0	0.1	6.5	19.9	8.1	0.1	38.1	36.0	207.8	264.2	472.0
1978	Total	0	2.3	7.6	23.8	8.3	2.7	36.6	35.7	263.5	292.4	555.9
1979	Total	0	3.2	6.7	21.0	11.8	6.3	38.5	42.2	300.1	270.6	570.7
1980	Total	0	3.5	5.2	26.7	14.3	8.2	37.2	43.7	354.3	265.4	619.8
1981	Total	0	2.9	9.4	37.7	15.2	10.7	38.9	53.4	442.4	288.5	730.9
1982	Total	0	3.8	8.8	38.8	15.0	13.1	44.1	63.4	489.9	298.6	788.5
1983	Total	0	9.0	10.7	40.4	15.5	18.9	49.6	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	6.8	59.1	29.4	88.5
	March	0	1.0	1.4	5.4	1.5	2.0	4.8	7.1	60.6	28.6	89.2
	April	0.1	0.9	1.3	4.5	1.5	1.8	4.2	7.7	55.8	24.7	80.5
	May	0.1	0.8	1.9	3.3	1.3	1.4	4.3	7.2	53.6	27.3	80.9
	June	0.3	0.7	2.2	2.8	0.6	1.8	4.7	7.1	52.3	26.4	78.8
	July	0.5	0.7 0.9	2.5 2.3	2.4 3.5	1.3 1.0	2.7 2.4	3.7 3.6	6.2 6.3	53.2 54.7	29.4 31.8	82.6 86.5
	August September	0.7 0.7	0.9	2.5	3.5 4.2	1.4	2.6	4.9	8.1	60.8	30.3	91.1
	October	0.7	1.3	1.8	5.0	1.5	2.0	4.1	8.5	63.5	26.8	90.3
	November	0.5	1.3	1.9	4.5	1.5	1.8	4.4	9.9	66.3	26.2	92.4
	December	0.6	0.9	2.2	5.4	1.9	2.3	6.3	10.8	75.9	32.0	107.9
	Total	4.2	11.8	23.1	51.3	16.3	24.3	54.1	92.6	717.7	343.8	1,061.5
1985	January	0.3	1.1	2.2	5.4	2.2	2.4	5.7	10.8	76.1	38.0	114.1
	February	0	1.2	1.9	5.0	2.0	2.1	5.6	10.1	68.2	32.4	100.5
	March	0	1.5	2.8	5.6	2.2	2.5	6.6	11.7	77.4	32.5	109.9
	April	0	1.3	2.4	4.5	2.2	2.7	5.1	10.6	69.0	28.3	97.3
	May	0	1.5	2.3	3.9	1.9	2.8	4.7	9.3	63.8	31.8	95.6
	June	0.1	1.2	3.1	2.6	1.2	2.6	5.1	9.6	62.0	31.0	93.0
	July	0.8	1.1 1.2	2.2 2.1	3.1 4.3	1.3 1.0	2.2 2.2	4.1 3.8	8.4 9.5	63.7 65.5	36.4 36.8	100,2 102,3
	August September	0.8 1.0	1.2	2.1	4.3 4.7	1.7	2.2	3.6 4.9	10.3	70.7	35.9	102.3
	October	1.1	1.4	2.1	5.4	2.2	2.6	4.3	11.3	77.2	32.1	109,3
	November	0.8	1.7	2.1	7.0	2.2	1.7	3.7	11.7	R79.6	31.7	111,3
	December	0.9	1.9	2.6	6.9	2.2	2.5	6.0	12.3	R89.0	35.7	R124.6
	Total	5.7	R16.5	28.0	58.6	22.4	28.7	59.6	125.7	R862.2	402.6	R1,264.8
1986	January	0.9	2.0	3.1	6.8	2.3	2.9	4.6	12.0	R89.7	38.0	R127,7
	February	0.6	1.7	2.5	6.4	2.1	2.1	5.1	10.4	78.1	34.0	112.1
	Year to Date	1.6	3.7	5.7	13.2	4.4	4.9	9.7	22.4	167.8	72.0	239.8

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.

### Petroleum Consumption for Major Non-Communist Industrialized Countries¹—Previous Series

		Canada	France <sup>2</sup>	Italy³	Japan⁴	United Kingdom	United States	West Germany	Other IEA <sup>5</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	Average	1,730	1,965	1,602	4,680	1,420	17,056	2,360	4,152	33,000
1981	Average	1,615	1,745	1,705	4,445	1,325	16,058	2,120	4,032	31,300
1982	Average	1,450	1,645	1,614	4,196	1,337	15,296	2,045	3,962	29,900
1983	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	30,800
1985	January	1,390	2,025	1,765	4,670	1,905	16,142	2,165	4,463	32,500
	February	1,390	1,710	1,810	5,060	2,110	15,975	2,005	4,550	32,900
	March	1,245	1,560	1,575	4,480	1,600	15,321	1,840	4,139	30,200
	April	1,270	1,390	1,370	3,755	1,280	15,345	2,110	4,070	29,200
	May	1,380	1,290	1,255	3,450	1,190	15,460	1,985	3,980	28,700
	June July	1,270 1,350	1,340 1,300	1,205 1,400	3,485 3,815	1,150 1,190	15,551 15,517	2,105 2,345	3,934 4,083	28,700 29,700
	August	1,380	1,300	1,300	3,935	1,190	16,039	2,345 2,415	4,083 4,241	30,500
	September	1,340	1,160	1,550	3,755	1,190	15,115	1,955	4,241	29,000
	October	NA NA	1.564	1,554	3,860	1,300	15,113	2,230	NA	25,000 NA
	November	NA	1,596	1,644	NA	1,361	15,411	1,909	NA	NA
	December .	NA	NA	NA	NA	NA	16,188	1,150	NA	NA
	Average <sup>7</sup>	1,335	1,489	1,491	4,020	1,410	15,666	2,018	4,160	30,138

The consumption data series shown on this page represent inland consumption and do not include international marine bunkers or refinery fuel. They have been replaced by the new data series shown on page 109.

<sup>&#</sup>x27;These data represent inland consumption, i.e., sales of petroleum products excluding refinery fuel, refinery losses, and ocean bunkers except for the United States, where it represents domestic products supplied.
Not a member of the International Energy Agency (IEA).

<sup>\*</sup>Principal products only prior to 1981.

\*Excludes liquefied petroleum gases and condensate.

\*Other is a calculated total derived from the difference between total IEA consumption and the IEA nations represented above.

\*The 21 signatory nations of the IEA are listed in Note 1 on the last page of this section.

\*Average of available data.

NA = Not available.

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.

### Notes and Sources for the International Section

### **Notes**

- 1. The 21 signatory nations of the International Energy Agency (IEA) are Australia, Austria, Belgium, Canada, Denmark, 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 incorconsumption 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: • 1973-1984 annual data (except the United States): Energy Information Administration (EIA), International Energy Annual 1984.

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

Supply Monthly.
• 1983-1985 monthly data (except United States 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.

New Petroleum Consumption and Stocks Series: •U.S. data: EIA, Petroleum Supply Monthly.
•OECD data: OECD, Quarterly Oil Statistics, Monthly Oil

Statistics.

Previous Petroleum Consumption Series: • Central Intelligence Agency, "International Energy Statistical Review" (except the United States).

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

 International Energy Agency totals for latest months are EIA estimates.

Previous Petroleum Stocks Series: • U.S. data: EIA, Petroleum Supply Monthly.

Other OECD data: OECD, Quarterly Oil Statistics; Comite

Professionnel du Petrole, *Bulletin Mensuel.*Total OECD data: Sum of data for all OECD member

countries using above sources.

Nuclear Electricity Gene

Nucleonics Week. Generation Capacities: and

### **Conversion Factors**

### **Units of Measure**

### Weight

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

1 short ton contains 2,000 pounds

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

42 gallons 1 barrel contains

0.136 metric tons (0.150 short tons) 1 harrel contains 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>8</sub>) contains 0.769 metric tons of uranium 0.613 metric tons of uranium 1 short ton (UF<sub>6</sub>) contains 1 metric ton (UF<sub>6</sub>) contains 0.676 metric tons of uranium

### **Price Indices**

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

‡=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.

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

	Million Btu per Barrel
Asphalt	6.636
Aviation gasoline	5.048
Butane	4.326
Butane-propane mixture <sup>1</sup>	4.130
Distillate fuel oil	5.825
Ethane	
Ethane-propane mixture <sup>2</sup>	3.308
Isobutane	3.974
Jet fuel—kerosene type	
Jet fuel-naphtha type	
Kerosene	
Lubricants	
Motor gasoline	
Natural gasoline	
Pentanes Plus	4.620
Petrochemical feedstocks	
Naphtha 400° F or less	
Other oils over 400° F	
Still gas	6.000
Petroleum coke	
Plant condensate	
Propane	
Residual fuel oil	
Road oil	
Special naphtha	
Still gas	
Unfinished oils	
Unfractionated stream	
Wax	
Miscellaneous	5.796

# Conversion **Factors**

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

### **Conversion Factors (continued)**

### **Approximate Heat Content of Fuels, 1973–1979**

	Units	1973	1974	1975	1976	1977	1978	1979
Coal								
Production	Million Btu/short ton	23.376	23.072	22.897	22.855	22.597	22,248	22,454
Consumption	Million Btu/short ton	23.057	22.677	22.506	22.498	22.265	22.017	22.100
Non-electric utility users	Million Btu/short ton	24.878	24.783	24,745	24.861	24.701	24.496	24.626
Electric utilities	Million Btu/short ton	22.246	21.781	21,642	21.679	21.508	21.275	21.364
Imports	Million Btu/short ton	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Exports	Million Btu/short ton	26.596	26.700	26.562	26.601	26.548	26.478	26.548
Anthroeita								
Anthracite	Million Day Johant Ann	00.400	04.744	04 500	00.045	00.004		
Production	Million Btu/short ton	22.132	21.711	21.582	22.045	22.661	23.079	23.170
Consumption	Million Btu/short ton	21.464	20.919	20.762	21.254	22.066	22.398	22.069
Non-electric utility users	Million Btu/short ton	22.674	22.330	. 22.272	22.618	24.101	24.388	24.272
Electric utilities	Million Btu/short ton	17.920	17.200	17.064	17.526	17.244	17.104	17.454
Imports and exports	Million Btu/short ton	25.400	25.400	25.400	25.400	25.400	25.400	25.400
Bituminous coal and lignite								
Production	Million Btu/short ton	23.391	23.087	22.910	22.863	22.597	22.242	22.449
Consumption	Million Btu/short ton	23.073	22.694	22.522	22.509	22.266	22.014	22.100
Residential and commercial	Million Btu/short ton	22.887	22.523	22.258	22.819	22.594	22.078	21.884
Coke plants	Million Btu/short ton	26.800	26.800	26.800	26.800	26.800	26.800	26.800
Other industrial & transportation	Million Btu/short ton	22.585	22.420	22.439	22.528	22.290	22.175	22.436
Electric utilities	Million Btu/short ton	22.262	21.799	21.659	21.692	21.521	21.284	21.372
Imports	Million Btu/short ton	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Exports	Million Btu/short ton	26.612	26.716	26.573	26.613	26.561	26.501	26.570
Coal coke, imports and exports	Million Btu/short ton	24.800	24.800	24.800	24.800	24.800	24.800	24.800
Crude oil <sup>1</sup>								
Production	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800	5.800
Imports	Million Btu/barrel	5.817	5.827	5.821	5.808	5.810	5.802	5.810
Exports	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800	5.800
Crude oil and petroleum products								
	Million Btu/barrel	5.897	5.884	E 050	E 0E6	E 004	E 000	E 010
Imports	Million Btu/barrel	5.752	5.774	5.858 5.748	5.856	5.834	5.839	5.810
Exports	Willion Blu/barrer	5.752	5.774	5.746	5.745	5.797	5.808	5.832
Petroleum products <sup>2</sup>								
Consumption	Million Btu/barrel	5.515	5.504	5.494	5.504	5.518	5.519	5.494
Residential and commercial	Million Btu/barrel	5.387	5.377	5.358	5.383	5.389	5.382	5.471
Industrial	Million Btu/barrel	5.565	5.537	5.527	5.535	5.552	5.546	5.416
Transportation	Million Btu/barrel	5.397	5.394	5.392	5.396	5.402	5.407	5.430
Electric utilities	Million Btu/barrel	6.245	6.238	6.250	6.251	6.249	6.251	6.258
Imports	Million Btu/barrel	5.983	5.959	5.935	5.980	5.908	5.955	5.811
Exports	Million Btu/barrel	5.752	5.773	5.747	5.743	5.796	5.814	5.864
LPG consumption	Million Btu/barrel	3.746	3.730	3.715	3.711	3.677	3.669	3.680
	,	0.7 10	0.700	0.7 10	0	0.077	0.000	0.000
Natural gas plant liquids								
Production	Million Btu/barrel	4.049	4.011	3.984	3.964	3.941	3.925	3.955
Alexander of the second								
Natural gas	Day / auchia da -4	4 004	4 00 4	4 004	4 000	4 004	4 0 4 0	
Production, dry	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021
Production, wet	Btu/cubic foot	1,093	1,097	1,095	1,093	1,093	1,088	1,092
Consumption	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021
Non-electric utility users		1,020	1,024	1,020	1,019	1,019	1,016	1,018
Electric utilities	Btu/cubic foot	1,024	1,022	1,026	1,023	1,029	1,034	1,035
Imports		1,026	1,027	1,026	1,025	1,026	1,030	1,037
Exports	Btu/cubic foot	1,023	1,016	1,014	1,013	1,013	1,013	1,013
Approximate Heat Rates for Electr	icity							
Fossil fuel steam-electric power plant generation3		10,389	10,442	10,406	10,373	10,435	10,361	10,353
Nuclear power plant generation	Btu/kilowatthour	10,903	11,161	11,013	11,047	10,769	10,941	10,879
Geothermal energy power plant generation	Btu/kilowatthour	21,674	21,674	21,611	21,611	21,611	21,611	21,545
Electricity consumption	Btu/kilowatthour	3,412	3,412	3,412	3,412	3,412	3,412	3,412

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

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 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.

### **Conversion Factors (continued)**

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

	Units	1980	1981	1982	1983	1984	1985-86‡
Coal							
Production	Million Btu/short ton	22.415	22.309	22.240	22.056	22.014	21.880
Consumption		21.947	21.714	21.675	21.581	21.577	21,378
Non-electric utility users		24.731	24,477	24.194	24.093	24.069	23.647
Electric utilities		21.295	21.085	21.194	21.133	21.101	20.968
Imports		25.000	25.000	25.000	25.000	25.000	25.000
Exports	Million Btu/short ton	26.384	26.160	26.223	26.291	26.402	26.307
Anthracite							
Production	Million Btu/short ton	22.869	23.291	23.289	22.734	23.107	22.846
Consumption	Million Btu/short ton	21.405	22.080	22.485	21.583	22.322	21.781
Non-electric utility users		22.719	23.749	24.530	24.536	25,128	24,421
Electric utilities		17.652	18.168	18.160	16.516	17.018	17.018
Imports and exports		25.400	25.400	25.400	25.400	25.400	25.400
Bituminous coal and lignite							
Production		22.411	22.302	22.234	22.053	22.009	21.876
Consumption		21.950	21.712	21.671	21.581	21.574	21.376
Residential and commercial		22.488	22.191	22.373	22.934	22.880	23.056
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	22.690	22.572	22.694	22.679	22.524	21.978
Electric utilities	Million Btu/short ton	21.301	21.091	21.200	21.141	21.108	20.974
Imports	Million Btu/short ton	25.000	25.000	25.000	25.000	25.000	25.000
Exports	Million Btu/short ton	26.404	26.176	26.231	26.300	26,410	26.320
Coal coke, imports and exports	Million Btu/short ton	24.800	24.800	24.800	24.800	24.800	24.800
On the city				•			
Crude oil <sup>1</sup>	Millian Day /housel	E 000	F 000	F 000	F 200	5 000	5 000
Production		5.800	5.800	5.800	5.800	5.800	5.800
Imports		5.812	5.818	5.826	5.825	5.823	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	5.796	5.775	5.775	5.774	5.745	5.729
Exports		5.820	5.821	5.820	5.800	5.850	5.814
Patroloum productos							
Petroleum products <sup>2</sup>	Million Day/housel	5.479	C 440	5 445	£ 400	E 00E	E 00E
Consumption			5.448	5.415	5.406	5.395	5.385
Residential and commercial		5.468	5.409	5.392	5.286	5.261	5.252
Industrial		5.376	5.310	5.262	5.273	5.256	5.246
Transportation		5.440	5.434	5.423	5.416	5.243	5.218
Electric utilities		6.254	6.258	6.258	6.255	6.251	6.247
Imports		5.748	5.659	5.664	5.677	5.613	5.565
Exports		5.841	5.837	5.829	5.800	5.867	5.819
LPG consumption	Million Btu/barrel	3.674	3.643	3.615	3.614	3.599	3.615
Natural gas plant liquids							
Production	Million Btu/barrel	3.914	3.930	3.872	3.839	3.812	3.815
Natural gas							
Production, dry	Btu/cubic foot	1,026	1,027	1,028	1,031	1,031	1,031
Production, wet		1,028	1,103	1,107	1,115	1,109	1,109
Consumption		1,026	1,027	1,028	1,031	1,031	1,031
		1,024		-			•
Non-electric utility users			1,025	1,026	1,031	1,030	1,030
Electric utilites		1,035	1,035	1,036	1,030	1,035	1,035
Imports		1,022	1,014	1,018	1,024	1,005	1,005
Exports	Btu/cubic foot	1,013	1,011	1,011	1,010	1,010	1,010
Approximate Heat Rates for Election	ricity						
Fossil fuel steam-electric power plant generation3		10,388	10,453	10,423	10,445	10,369	10,369
Nuclear power plant generation		10,908	11,030	11,073	10,905	10,800	10,800
Geothermal energy power plant generation		21,639	21,639	21,629	21,290	21,303	21,303
Electricity consumption		3,412	3,412	3,412	3,412	3,412	3,412
.,		•	-			•	

¹ Includes lease condensate.
³ Weighted averages of the products included in each category are calculated using heat content values shown on the first page of this section.
³ 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.

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

### **Approximate Heat Content of 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 in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Petrochemical Feedstock, Oils Over 400 Degrees 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 in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

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

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

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

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

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

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

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

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

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

### Petroleum

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

Crude Oil, Imports. • 1973 forward: Calculated annually by EIA by weighting the thermal conversion factor of each type of crude oil imported by the quantity imported. Thermal conversion factors for each type were calculated on a foreign country basis, by determining the average American Petroleum Institute (API) gravity of crude imported from each foreign country from Form ERA-60 in 1977 and converting average API gravity to average Btu content using National Bureau of Standards, Miscellaneous

Publication No. 97, *Thermal Properties of Petroleum Products*. 1933.

Crude Oil and Lease Condensate, Production.

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

Crude Oil and Petroleum Products, Exports.

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

Crude Oil and Petroleum Products, Imports.

• 1973 forward: Calculated annually by EIA as the

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

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

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

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

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

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

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

• 1985 forward: Estimated by EIA.

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

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

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

### **Natural Gas**

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

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

Natural Gas, Consumption by Non-Electric Utility Users. • 1973 forward: Calculated annually by EIA by dividing the heat content of natural gas consumed by non-electric utility consumers by the quantity of 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 Production, Dry.** • 1973 forward: Assumed by EIA to be equal to the thermal conversion factor for the consumption of dry natural gas. See "Natural Gas, Consumption."

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

### Coal and Coal Coke

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

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

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

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

Anthracite, Production. • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of freshly mined anthracite (estimated to have an average heat content of 25.400 million Btu per short ton) and the heat content of anthracite recovered from culm banks and river dredging (estimated to have an average heat content of 17.500 million Btu per short ton) by the total quantity of anthracite production.

Bituminous Coal and Lignite, Consumption.

• 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite consumed by electric utilities, coal coke plants, other industrial plants, the residential and commercial sector, and the transportation sector by the sum of their respective tonnages.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Geothermal Energy Power Plant Generation.

• 1973–1981: Calculated annually by EIA by weighting the average annual heat rates of operating geothermal units by the installed nameplate capacities as reported on Form FPC-12.

• 1982 forward: Estimated annually by EIA based on an informal survey of relevant plants.

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

# Glossar

### Glossary

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

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

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

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

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

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

**Butylene.** A normally gaseous, olefinic hydrocarbon (C<sub>4</sub>H<sub>8</sub>) recovered from refinery processes. Quantities are included with "normal butane" data.

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

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

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

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

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

**Crude Oil Stocks.** Stocks of crude oil and lease condensate held at refineries, in pipelines, at pipeline terminals, and on leases.

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

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

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

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

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

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

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

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

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

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

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

**Electricity Sales.** The gross electricity output measured at the generator terminals, minus power plant

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

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

Ethane. A normally gaseous, paraffinic hydrocarbon (C<sub>2</sub>H<sub>e</sub>) extracted from natural gas or refinery gas streams. It is used primarily as petrochemical feed-stock for eventual production of chemicals and plastic materials.

Ethylene. A normally gaseous, olefinic hydrocarbon (C<sub>2</sub>H<sub>4</sub>) recovered from refinery processes. Quantities are included with "ethane" data.

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

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

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

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

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

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

turbines at electric utilities that drive generators to produce electricity.

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

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

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

Isobutane. See "Butane."

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

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

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

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

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

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

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

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

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

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

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

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

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

Natural Gas Plant 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 Processors Association and are classified as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

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

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

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

Normal Butane. See "Butane."

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

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

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

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

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

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

**Petroleum Products.** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include

unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400 °F end-point, other oils over 400 °F end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

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

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

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

**Propane.** A normally gaseous, paraffinic, hydrocarbon ( $C_3H_8$ ). It is extracted from natural gas or refinery gas streams and includes all products covered by Gas Processors Association Specifications for commercial propane and HD-5 propane and ASTM Specification D1835. Propane is used primarily for residential and commercial heating and cooling, and also as a fuel for transportation. Industrial uses of propane include use as a petrochemical feedstock.

**Propylene.** A normally gaseous, olefinic hydrocarbon (C₃H₅) recovered from refinery processes. Quantities are included with "propane" data.

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

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

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

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

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

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

**Synthetic Natural Gas (SNG).** A product resulting from the manufacture, conversion, or reforming of hydrocarbons that may be easily substituted for, or interchanged with, pipeline-quality natural gas.

Unaccounted for Crude 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 input of crude oil, exports of crude oil, crude oil burned as fuel, and crude oil losses.

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

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

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

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

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

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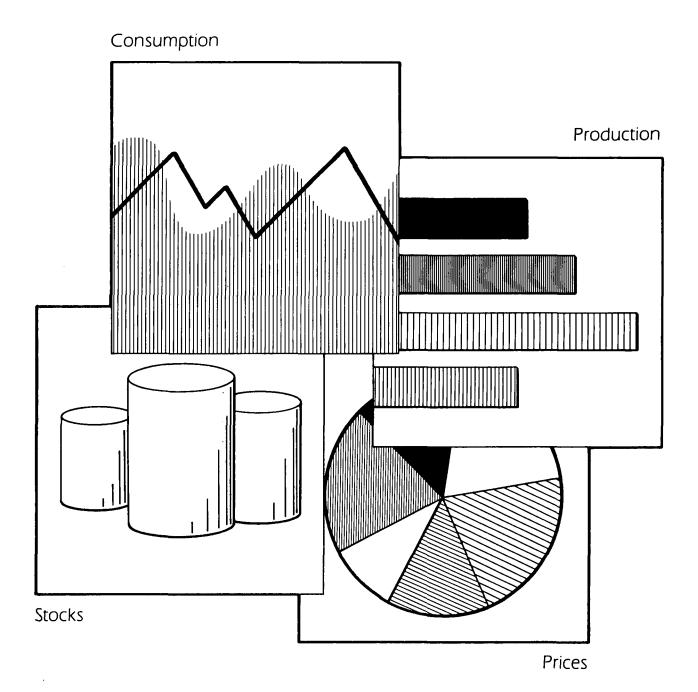


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